Cembre

CERTIFIED ISO 9001
Certified Quality Management System

CERTIFIED ISO 14001
Certified Environmental Management System

CERTIFIED OHSAS 18001
Certified Occupational Health&Safety Management System

GENERAL CATALOGUE

QUALITY POLICY AND OBJECTIVES

This catalogue illustrates the range of our standard products.
For each product family we indicate the principal features, and sometimes the most frequent applications and the necessary guidelines for a correct application. Our sales personnel are at your disposal to supply more detailed information and our design and development engineers are available to study new solutions to particular applications.

RoHS COMPLIANT 2011/65/EU

All Cembre products comply with Directive 2011/65/EU of the European Parliament and Council dated 8 June 2011 (and subsequent amendment).

On 14th December 1990 **Cembre SpA Quality Management System** was certified by **Lloyd's Register of Quality Assurance (LRQA) according to ISO 9002-1987 EN 29002 - 1987 BS 5750: Part 2: 1987** for the manufacture of insulated and uninsulated copper crimping connectors.
Then on 22nd December 1992 Cembre SpA was certified ISO 9001 for the design and manufacture of cable accessories, electrical connectors and associated tools.
The activities of the main premises in Brescia, the Italian regional officies and the subsidiary companies in Great Britain, France, Spain, Germany and USA are governed by a single Quality System, **assessed by Lloyd's Register of Quality as conforming to the ISO 9001:2015 norm, for the design, manufacture and sales of electrical connectors and associated tools, cable accessories, marking systems, toolings and products for railway applications. Tools for pressed joints for water, gas, steam, waste and HVAC and related accessories. In house repair, refurbishment and calibration of toolings.**
This guarantees a homoge-neous and high quality level of the products and services that Cembre offers to its customers.

Cembre S.p.A. has recently recognised the need to align its Environmental Management System with the spirit and content of UNI EN ISO 14001 as fundamental to future development.
To achieve this aim the Company undertook a demanding project to assess and evaluate all company functions and processes; from the development and design stage, to raw material selection and finally, the production process itself.
We have reached a new phase in this project as Cembre Ltd, a subsidiary company based in Great Britain, and the second production site of the Cembre Group, have recently achieved certification of their **Environmental Management System according to ISO 14001:2015**.

Cembre S.p.A. has recently enhanced its business processes with **the certification by Lloyd's Register of Quality Assurance, of its Management System for the Health and Safety of Workers, in accordance with the standard OHSAS18001:2012 (Occupational Health and Safety Management System).**
The project, launched in early 2011, was strategically designed to facilitate the active participation of all employees at every level in the application of systems management, in order to optimise compliance of risk management capability with regard to laws and regulations concerning the health and safety of workers. All employees have received exhaustive training and are involved, by exercising their individual responsibility and competence, as key players in the identification of residual risk situations and the proposal of corrective solutions.
For Cembre then, this certification is not only the proper recognition of the quality of work performed, but also an incentive to maintain a determined competitive advantage in increasingly difficult and aggressive international markets.

Cembre S.p.A. *factory in Brescia (ITALY)*
covers an area of approximately 121.000 sqm

Production Units

Cembre Ltd.
factory in Curdworth (Birmingham)

INDEX

ELECTRICAL CONNECTORS

TERMINAL BLOCKS

CABLE GLANDS AND ACCESSORIES

MECHANICAL AND PNEUMATIC TOOLS

BENCH PRESS TOOLS

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CORDLESS HYDRAULIC TOOLS

HYDRAULIC PUMPS AND UNITS

DIE SELECTOR CHART

APPENDIX

ELECTRICAL CONNECTORS

symbol description

electrical connectors

Insulation sleeve in Polyvinylchloride

Insulation sleeve in Polycarbonate

Insulation sleeve in Nylon PA6.6

Insulation sleeve in Polypropylene

Insulation sleeve in Polyethylene High Density

Heat shrinkable

Insulation sleeve form to allow easy "introduction" of the conductor

Manufactured from electrolytic Copper strip

Manufactured from Brass strip

Manufactured from electrolytic Copper tube

Manufactured from electrolytic Copper wire

Brazed seam

Brass connectors

Bimetallic connectors, Aluminium and Copper.

Aluminium connectors

Aldrey connectors

Zinc Plated Steel connectors

Internal surface is filled with special grease so as to avoid oxidation of the connector

Connector provided with central stop

Colour coded connectors

Facilitated introduction of the conductor

Inspection hole for checking the correct introduction of the conductor

Contained palm connectors

Annealed material

Electrolytically tin plated to avoid oxidation; min 3µm

Lugs angled

symbol description

electrical connectors

Zinc Plated Steel screws

Zinc Plated Steel nuts

Hexagonal crimp

Radial crimp

Indent crimp

Indent crimp

"W" crimp

Oval crimp

Trapezium crimp

Circular crimp

Semicircular crimp

Indent crimp

Operating temperature range

Degree of protection

UL LISTING Marking valid in USA & CANADA

UL LISTING Marking valid in USA & CANADA

In accordance with DIN 46235

Halogen free

VP RP BP GP

HALOGEN FREE INSULATED TERMINALS

P range funnel entry - for Copper conductors

PC | Cu-ETP | EASY ENTRY | ANNEALED | 3µm TIN PLATED | -20°C +115°C | RADIAL

The "P" range of terminals has been designed, to meet the increasing demands for improved safety and reliability of electrical connectors.
The Polycarbonate insulation, is a Halogen free, self extinguishing thermoplastic material class V0 (UL 94).
The unique funnel shaped entry of the insulation sleeve, guarantees total insertion of the conductor strands into the terminal barrel, creating a secure and reliable, electrical and mechanical connection.

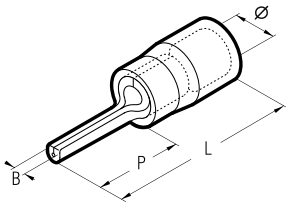
The operating temperature range is – 20 to + 115°C (Surge + 130°C).
Recommended crimping tools are shown on pages 108 to 129, 168.

HF HALOGEN FREE

c UL us File no. E125401

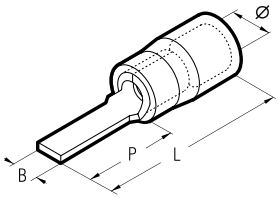
Certified according to EN 45545-2:2013

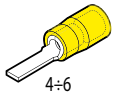
pin terminals



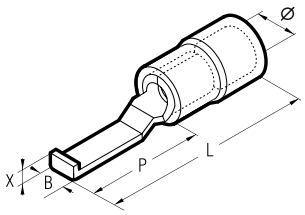
Conductor Size sqmm (AWG)	Type	Dimensions mm Ø	B	P	L	Quantity Box/Bag
 0,2÷0,5 (24÷20)	VP-P10	3,0	1,0	9,8	20,2	4.000/100
 0,25÷1,5 (22÷16)	RP-P8	4,0	1,6	7,8	17,9	3.000/100
	RP-P10	4,0	1,6	9,8	19,9	3.000/100
	RP-P12	4,0	1,6	12,0	22,1	3.000/100
 1,5÷2,5 (16÷14)	BP-P8	4,9	1,7	7,8	17,9	3.000/100
	BP-P10	4,9	1,8	9,8	19,9	3.000/100
	BP-P12	4,9	1,8	11,8	21,9	2.500/100
 4÷6 (12÷10)	GP-P10	6,6	2,2	10,4	24,5	1.000/100
	GP-P12	6,6	2,2	12,6	26,7	1.000/100
	GP-P14	6,6	2,2	14,6	28,7	1.000/100

blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm Ø	B	P	L	Quantity Box/Bag
 0,2÷0,5 (24÷20)	VP-PP12/19	3,0	1,9	12,4	22,4	4.000/100
 0,25÷1,5 (22÷16)	RP-PP12	4,0	3,0	12,8	22,9	3.000/100
	RP-PP12/1	4,0	3,0	11,3	21,4	3.000/100
	RP-PP12/19	4,0	1,9	13,2	23,3	3.000/100
	RP-PP12/23	4,0	2,3	13,2	23,3	2.500/100
	RP-PP14	4,0	3,0	14,8	24,9	2.500/100
	RP-PP16/23	4,0	2,3	17,2	27,3	2.500/100
 1,5÷2,5 (16÷14)	BP-PP12	4,9	3,5	12,8	22,9	2.500/100
	BP-PP12/25	4,9	2,5	13,3	23,4	2.000/100
	BP-PP12/29	4,9	2,9	13,3	23,4	2.500/100
	BP-PP16/25	4,9	2,5	17,2	27,3	2.500/100
 4÷6 (12÷10)	GP-PP12	6,6	4,0	13,3	27,4	1.000/100
	GP-PP17	6,6	2,9	19,1	33,2	1.000/100

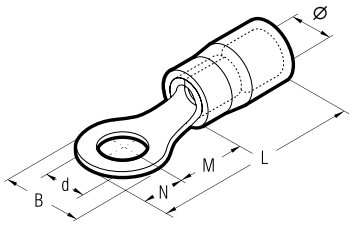
hooked blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm Ø	B	P	L	X	Quantity Box/Bag
 0,25÷1,5 (22÷16)	RP-PPL30♦	4,0	3,0	17,5	28,3	1,7	3.000/100
	RP-PPL46♦	4,0	4,6	17,5	28,3	1,7	3.000/100
 1,5÷2,5 (16÷14)	BP-PPL30♦	4,9	3,0	17,5	28,3	1,7	2.500/100
	BP-PPL46♦	4,9	4,6	17,5	28,8	1,7	2.500/100
 4÷6 (12÷10)	GP-PPL46♦	6,6	4,6	17,5	32,6	1,9	1.000/100

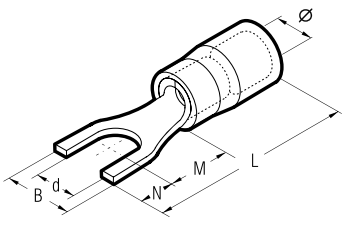
♦*Not UL approved*

ring terminals



Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm Ø	B	M	N	L	d	Quantity Box/Bag
0,2÷0,5 (24÷20)	2	VP-M2*	3,0	5,6	4,5	2,8	17,5	2,2	4.000/100
	3	VP-M3	3,0	5,6	4,5	2,8	17,5	3,2	4.000/100
	3,5	VP-M3.5	3,0	5,6	4,5	2,8	17,5	3,7	4.000/100
	4	VP-M4	3,0	7,0	6,5	3,5	20,2	4,3	4.000/100
	5	VP-M5	3,0	7,8	7,1	3,9	21,2	5,3	4.000/100
	6	VP-M6*	3,0	9,4	8,1	4,7	23,0	6,4	4.000/100
0,25÷1,5 (22÷16)	2	RP-M2*	4,0	5,6	4,5	2,8	17,4	2,2	3.000/100
	3	RP-M3	4,0	5,6	4,5	2,8	17,4	3,2	3.000/100
	3,5	RP-M3.5	4,0	5,6	4,5	2,8	17,4	3,7	3.000/100
	3,5	RP-M3.5/1	4,0	6,2	7,1	3,1	20,2	3,7	3.000/100
	4	RP-M4	4,0	7,0	6,5	3,5	20,1	4,3	3.000/100
	4	RP-M4/3	4,0	7,8	7,1	3,9	21,1	4,3	3.000/100
	5	RP-M5	4,0	7,8	7,1	3,9	21,1	5,3	3.000/100
	6	RP-M6	4,0	9,4	8,1	4,7	22,9	6,4	2.500/100
	6	RP-M6/1	4,0	12,0	10,3	6,0	26,4	6,4	2.000/100
	7	RP-M7	4,0	9,4	8,1	4,7	22,9	7,2	2.500/100
	8	RP-M8	4,0	12,0	10,3	6,0	26,4	8,4	2.500/100
	10	RP-M10	4,0	15,5	13,0	7,7	30,9	10,5	2.000/100
	12	RP-M12	4,0	18,0	15,5	9,0	34,6	13,0	2.000/100
1,5÷2,5 (16÷14)	2	BP-M2*	4,9	5,6	5,0	2,8	17,9	2,2	2.500/100
	3	BP-M3	4,9	5,6	5,0	2,8	17,9	3,2	2.500/100
	3,5	BP-M3.5	4,9	5,6	5,0	2,8	17,9	3,7	3.000/100
	3,5	BP-M3.5/1	4,9	6,2	6,5	3,1	19,7	3,7	2.500/100
	4	BP-M4	4,9	8,0	6,5	4,0	20,6	4,3	2.500/100
	5	BP-M5	4,9	8,0	7,5	4,0	21,6	5,3	2.500/100
	6	BP-M6	4,9	9,4	8,6	4,7	23,4	6,4	2.000/100
	6	BP-M6/1	4,9	12,0	10,3	6,0	26,4	6,4	2.500/100
	6	BP-M6/2*	4,9	8,4	5,4	4,2	19,7	6,4	2.500/100
	7	BP-M7	4,9	10,0	7,8	5,0	22,9	7,2	2.500/100
	8	BP-M8	4,9	12,0	10,3	6,0	26,4	8,4	1.500/100
	10	BP-M10	4,9	15,5	13,0	7,7	30,9	10,5	1.500/100
	12	BP-M12	4,9	18,0	15,5	9,0	34,6	13,0	1.500/100
4÷6 (12÷10)	3	GP-M3	6,6	8,0	8,1	4,0	26,2	3,2	1.000/100
	3,5	GP-M3.5	6,6	8,0	8,1	4,0	26,2	3,7	1.500/100
	4	GP-M4	6,6	9,0	8,1	4,5	26,7	4,3	1.000/100
	5	GP-M5	6,6	9,0	8,1	4,5	26,7	5,3	1.000/100
	6	GP-M6	6,6	11,0	11,1	5,5	30,7	6,4	1.000/100
	6	GP-M6/1	6,6	11,0	8,1	5,5	27,7	6,4	1.000/100
	7	GP-M7	6,6	11,0	11,1	5,5	30,7	7,2	1.000/100
	8	GP-M8	6,6	13,6	12,1	6,8	33,0	8,4	1.000/100
	8	GP-M8/1*	6,6	11,0	8,1	5,5	27,7	8,4	1.000/100
	10	GP-M10	6,6	13,6	12,1	6,8	33,0	10,5	1.000/100
	10	GP-M10/1	6,6	15,5	13,8	7,7	35,7	10,5	1.000/100
	12	GP-M12	6,6	19,0	15,1	9,5	38,7	13,0	500/100
	14	GP-M14	6,6	21,0	16,1	10,5	40,7	15,0	500/100
	16	GP-M16	6,6	24,0	17,1	12,0	43,2	17,0	500/100

fork/spade terminals



Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm Ø	B	M	N	L	d	Quantity Box/Bag
0,2÷0,5 (24÷20)	3	VP-U3	3,0	5,5	5,5	4,0	18,7	3,2	4.000/100
	3,5	VP-U3.5	3,0	6,0	6,5	3,8	19,5	3,7	4.000/100
	4	VP-U4	3,0	6,5	7,5	3,7	20,4	4,3	4.000/100
0,25÷1,5 (22÷16)	3	RP-U3	4,0	5,5	5,5	4,0	19,6	3,2	3.000/100
	3,5	RP-U3.5	4,0	6,0	6,5	3,8	20,4	3,7	3.000/100
	3,5	RP-U3.5/2	4,0	6,4	6,5	3,8	20,4	3,7	3.000/100
	4	RP-U4	4,0	6,5	7,5	3,7	21,3	4,3	3.000/100
	4	RP-U4/1	4,0	8,5	7,5	3,7	21,3	4,3	3.000/100
	4	RP-U4/2	4,0	7,5	7,5	3,7	21,3	4,3	3.500/100
	5	RP-U5	4,0	8,5	7,5	3,7	21,3	5,3	3.000/100
	5	RP-U5/1*	4,0	9,4	7,5	3,7	21,3	5,3	3.000/100
	6	RP-U6	4,0	9,4	8,1	4,7	22,9	6,4	2.000/100
	6	RP-U6/1	4,0	12,0	9,2	7,1	26,4	6,4	2.000/100
	8	RP-U8	4,0	14,0	10,0	6,3	26,4	8,4	2.000/100
	10	RP-U10	4,0	17,5	13,0	7,7	30,9	10,5	1.500/100
	12	RP-U12	4,0	20,0	15,5	9,0	34,6	13,0	1.500/100
1,5÷2,5 (16÷14)	3	BP-U3	4,9	5,5	5,5	4,0	19,6	3,2	2.500/100
	3,5	BP-U3.5	4,9	6,4	6,5	3,8	20,4	3,7	2.500/100
	3,5	BP-U3.5/1*	4,9	7,2	6,5	3,8	20,4	3,7	2.500/100
	4	BP-U4	4,9	6,5	7,5	3,7	21,3	4,3	2.500/100
	4	BP-U4/1	4,9	8,5	7,5	3,7	21,3	4,3	3.000/100
	4	BP-U4/2	4,9	7,5	7,5	3,7	21,3	4,3	2.000/100
	5	BP-U5	4,9	8,5	7,5	3,7	21,3	5,3	2.000/100
	6	BP-U6	4,9	9,4	8,1	4,7	22,9	6,4	2.000/100
	6	BP-U6/1	4,9	12,0	9,2	7,1	26,4	6,4	2.000/100
	8	BP-U8	4,9	14,0	10,0	6,3	26,4	8,4	1.500/100
	10	BP-U10	4,9	17,5	13,0	7,7	30,9	10,5	2.000/100
	12	BP-U12	4,9	20	15,5	9,0	34,6	13,0	1.500/100
4÷6 (12÷10)	3,5	GP-U3.5	6,6	7,5	8,5	3,9	26,5	3,7	1.000/100
	4	GP-U4	6,6	7,5	8,0	4,4	26,5	4,3	1.000/100
	5	GP-U5	6,6	9,5	8,0	4,4	26,5	5,3	1.000/100
	6	GP-U6	6,6	10,0	11,0	5,5	30,6	6,4	1.000/100
	8	GP-U8	6,6	13,5	12,0	8,0	34,1	8,4	1.000/100
	10	GP-U10	6,6	15,5	13,0	8,0	35,1	10,5	1.000/100
	10	GP-U10/1	6,6	17,5	13,8	7,7	35,7	10,5	1.000/100
	12	GP-U12	6,6	21,0	15,1	9,5	38,7	13,0	500/100
	14	GP-U14	6,6	23,0	16,1	10,5	40,7	15,0	500/100
	16	GP-U16	6,6	26,0	17,1	11,5	42,7	17,0	500/100

*Made to order

CRP CBP CGP

INSULATED CHAIN TERMINALS

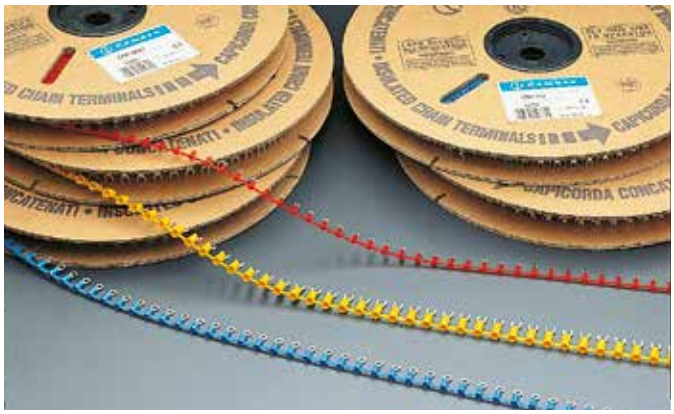
CP range with easy entry - for Copper conductors

The "CP" range of terminals has been designed to meet the increasing demands for improved safety and reliability of electrical connectors. Developed for use with production equipment, to give a quick and reliable crimped joint, the Polycarbonate insulation is a Halogen free, self extinguishing thermoplastic material class V0 (UL 94).
The unique funnel shaped entry of the insulation sleeve guarantees total insertion of the conductor strands into the terminal barrel, creating a secure and reliable, electrical and mechanical connection.
The operating temperature range is – 20 to + 115°C (Surge + 130°C).

PC · Cu-ETP · EASY ENTRY · ANNEALED · 3µm TIN PLATED · -20°C +115°C · RADIAL

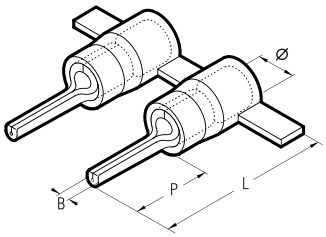
HF HALOGEN FREE

Certified according to EN 45545-2:2013



pin terminals

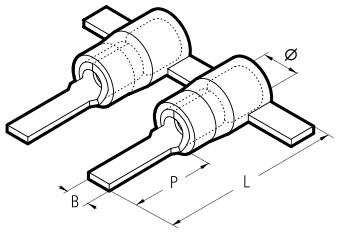
c UL us File no. E125401



Conductor Size sqmm (AWG))	Type	Dimensions mm Ø	B	P	L	Quantity
0,25÷1,5 (22÷16)	CRP-P8	4,0	1,6	8,0	17,9	2.000
	CRP-P10	4,0	1,6	10,0	19,9	2.000
	CRP-P12	4,0	1,6	12,0	22,1	2.000
1,5÷2,5 (16÷14)	CBP-P8	4,9	1,8	8,0	17,9	1.750
	CBP-P10	4,9	1,8	10,0	19,9	1.750
	CBP-P12	4,9	1,8	12,0	21,9	1.750
4÷6 (12÷10)	CGP-P10	6,6	2,2	10,0	24,5	1.250
	CGP-P12	6,6	2,2	12,0	26,7	1.250
	CGP-P14	6,6	2,2	14,0	28,7	1.250

blade terminals

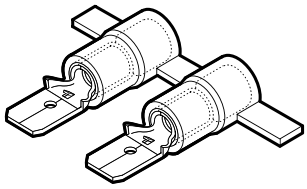
c UL us File no. E125401



Conductor Size sqmm (AWG)	Type	Dimensions mm Ø	B	P	L	Quantity
0,25÷1,5 (22÷16)	CRP-PP12	4,0	3,0	12,8	22,9	2.000
	CRP-PP12/1*	4,0	3,0	11,3	21,4	2.000
	CRP-PP12/23*	4,0	2,3	13,2	23,3	2.000
	CRP-PP14	4,0	3,0	14,8	24,9	2.000
1,5÷2,5 (16÷14)	CBP-PP12	4,9	3,5	12,8	22,9	1.750
	CBP-PP12/25*	4,9	2,5	13,3	23,4	1.750
4÷6 (12÷10)	CGP-PP12	6,6	4,0	13,3	27,4	1.250
	CGP-PP17*	6,6	2,9	19,1	33,2	1.250

male disconnect terminals

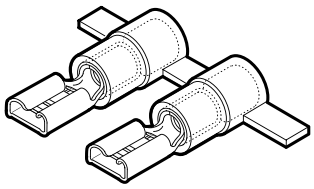
c UL us File no. E212000



Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity
0,25÷1,5 (22÷16)	CRP-M608	6,35 x 0,8	2.000
1,5÷2,5 (16÷14)	CBP-M608	6,35 x 0,8	1.750
4÷6 (12÷10)	CGP-M608	6,35 x 0,8	1.250

female disconnect terminals

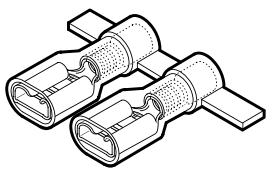
c UL us File no. E212000



Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity
0,25÷1,5 (22÷16)	CRP-F305	2,8 x 0,5	2.000
	CRP-F308	2,8 x 0,8	2.000
	CRP-F405	4,8 x 0,5	2.000
	CRP-F408	4,8 x 0,8	2.000
	CRP-F608	6,35 x 0,8	2.000
1,5÷2,5 (16÷14)	CBP-F405	4,8 x 0,5	1.750
	CBP-F408	4,8 x 0,8	1.750
	CBP-F608	6,35 x 0,8	1.750
4÷6 (12÷10)	CGP-F608	6,35 x 0,8	1.250

female disconnect terminals fully insulated

c UL us File no. E212000



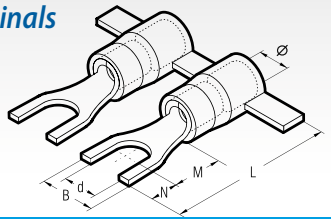
Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity
0,25÷1,5 (22÷16)	CRP-F405P♦	4,8 x 0,5	2.000
	CRP-F408P♦	4,8 x 0,8	2.000
	CRP-F608P	6,35 x 0,8	1.500
1,5÷2,5 (16÷14)	CBP-F408P♦	4,8 x 0,8	1.500
	CBP-F608P	6,35 x 0,8	1.500
4÷6 (12÷10)	CGP-F608P	6,35 x 0,8	1.250

♦*Not UL approved* **Made to order*

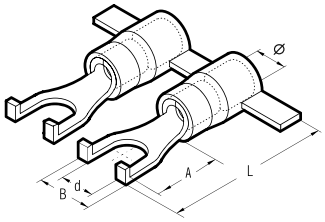
INSULATED CHAIN TERMINALS

CP range with easy entry - for Copper conductors

fork/spade terminals

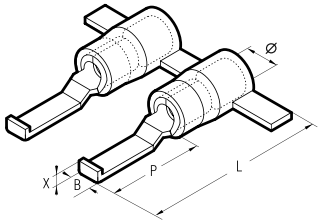


Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm Ø	B	M	N	L	d	Quantity
0,25÷1,5 (22÷16)	3	CRP-U3	4,0	5,5	5,5	4,0	19,6	3,2	2.000
	3,5	CRP-U3.5	4,0	6,0	6,5	3,8	20,4	3,7	2.000
	3,5	CRP-U3.5/2*	4,0	6,4	6,5	3,8	20,4	3,7	2.000
	4	CRP-U4	4,0	6,5	7,5	3,7	21,3	4,3	2.000
	4	CRP-U4/1*	4,0	8,5	7,5	3,7	21,3	4,3	2.000
	4	CRP-U4/2*	4,0	7,5	7,5	3,7	21,3	4,3	2.000
	5	CRP-U5	4,0	8,5	7,5	3,7	21,3	5,3	2.000
	6	CRP-U6	4,0	9,4	8,1	4,7	22,9	6,4	2.000
	6	CRP-U6/1*	4,0	12,0	9,2	7,1	26,4	6,4	2.000
	8	CRP-U8*	4,0	14,0	10,0	6,3	26,4	8,4	2.000
1,5÷2,5 (16÷14)	3	CBP-U3	4,9	5,5	5,5	4,0	19,6	3,2	1.750
	3,5	CBP-U3.5	4,9	6,4	6,5	3,8	20,4	3,7	1.750
	4	CBP-U4	4,9	6,5	7,5	3,7	21,3	4,3	1.750
	4	CBP-U4/1*	4,9	8,5	7,5	3,7	21,3	4,3	1.750
	4	CBP-U4/2*	4,9	7,5	7,5	3,7	21,3	4,3	1.750
	5	CBP-U5	4,9	8,5	7,5	3,7	21,3	5,3	1.750
	6	CBP-U6	4,9	9,4	8,1	4,7	22,9	6,4	1.750
4÷6 (12÷10)	3,5	CGP-U3.5*	6,6	7,5	8,5	3,9	26,5	3,7	1.250
	4	CGP-U4*	6,6	7,5	8,0	4,4	26,5	4,3	1.250
	5	CGP-U5	6,6	9,5	8,0	4,4	26,5	5,3	1.250
	6	CGP-U6	6,6	10,0	11,0	5,5	30,6	6,4	1.250



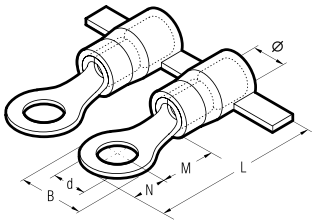
Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm Ø	B	A	L	d	Quantity
1,5÷2,5 (16÷14)	4	CBP-U 4/3L♦	4,9	6,5	9,5	14,5	4,3	1.750

hooked blade terminals



Cond. Size sqmm (AWG)	Type	Dimensions mm Ø	B	P	L	X	Quantity
0,25÷1,5 (22÷16)	CRP-PPL30♦	4,0	3,0	17,5	28,8	1,7	2.000
1,5÷2,5 (16÷14)	CBP-PPL30♦	4,9	3,0	17,5	28,8	1,7	1.750

ring terminals



Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm Ø	B	M	N	L	d	Quantity
0,25÷1,5 (22÷16)	3	CRP-M 3	4,0	5,6	4,5	2,8	17,4	3,2	2.000
	3,5	CRP-M 3.5*	4,0	5,6	4,5	2,8	17,4	3,7	2.000
	3,5	CRP-M 3.5/1	4,0	6,2	7,1	3,1	20,2	3,7	2.000
	4	CRP-M 4	4,0	7,0	6,5	3,5	20,1	4,3	2.000
	4	CRP-M 4/3*	4,0	7,8	7,1	3,9	21,1	4,3	2.000
	5	CRP-M 5	4,0	7,8	7,1	3,9	21,1	5,3	2.000
	6	CRP-M 6	4,0	9,4	8,1	4,7	22,9	6,4	2.000
	6	CRP-M 6/1*	4,0	12,0	10,3	6,0	26,4	6,4	2.000
	7	CRP-M 7	4,0	9,4	8,1	4,7	22,9	7,2	2.000
	8	CRP-M 8	4,0	12,0	10,3	6,0	26,4	8,4	2.000
1,5÷2,5 (16÷14)	3	CBP-M 3	4,9	5,6	5,0	2,8	17,9	3,2	1.750
	3,5	CBP-M 3.5	4,9	5,6	5,0	2,8	17,9	3,7	1.750
	3,5	CBP-M 3.5/1*	4,9	6,2	6,5	3,1	19,6	3,7	1.750
	4	CBP-M 4	4,9	8,0	6,5	4,0	20,6	4,3	1.750
	5	CBP-M 5	4,9	8,0	7,5	4,0	21,6	5,3	1.750
	6	CBP-M 6	4,9	9,4	8,6	4,7	23,4	6,4	1.750
	6	CBP-M 6/1*	4,9	12,0	10,3	6,0	26,4	6,4	1.750
	7	CBP-M 7	4,9	10,0	7,8	5,0	22,9	7,2	1.750
	8	CBP-M 8	4,9	12,0	10,3	6,0	26,4	8,4	1.750
4÷6 (12÷10)	3	CGP-M 3	6,6	8,0	8,1	4,0	26,2	3,2	1.250
	3,5	CGP-M 3.5	6,6	8,0	8,1	4,0	26,2	3,7	1.250
	4	CGP-M 4	6,6	9,0	8,1	4,5	26,7	4,3	1.250
	5	CGP-M 5	6,6	9,0	8,1	4,5	26,7	5,3	1.250
	6	CGP-M 6	6,6	11,0	11,1	5,5	30,7	6,4	1.250
	6	CGP-M 6/1*	6,6	11,0	8,1	5,5	27,7	6,4	1.250
	7	CGP-M 7	6,6	11,0	11,1	5,5	30,7	7,2	1.000
	8	CGP-M 8	6,6	13,6	12,1	6,8	33,0	8,4	1.250
	8	CGP-M 8/1*	6,6	11,0	8,1	5,5	27,7	8,4	1.250

Interchangeable application heads are available for crimping these terminals with the bench press ELB-3 (see page 132).

♦*Not UL approved* **Made to order*

RF BF GF

PVC INSULATED CRIMP TERMINALS

F range funnel entry - for Copper conductors

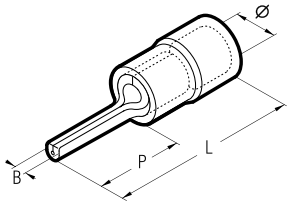
PVC | Cu-ETP | EASY ENTRY | ANNEALED | 3µm TIN PLATED | -20°C +80°C | RADIAL

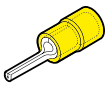
The unique funnel shaped PVC sleeve guarantees total insertion of the conductor strands into the terminal barrel, creating a secure and reliable, electrical and mechanical connection.
The internal surface of the barrel is rifled to improve contact with conductor strands when crimped and to increase tensile strength.
The "F" range of terminals offers a wide selection of rings, forks, pins and blades, designed to meet the ever changing end user requirements.

The operating temperature range is – 20 to + 80°C (Surge + 90°C).
Recommended crimping tools are shown on pages 108 to 129, 168.

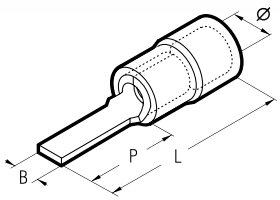
c UL us File no. E125401

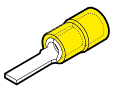
pin terminals



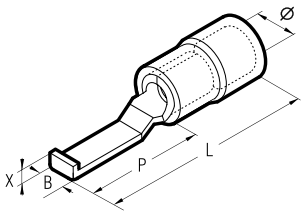
Conductor Size sqmm (AWG)	Type	Dimensions mm Ø	B	P	L	Quantity Box/Bag
 0,25÷1,5 (22÷16)	RF-P8	3,9	1,6	8,0	17,9	3.000/100
	RF-P10	3,9	1,6	10,0	19,9	3.000/100
	RF-P12	3,9	1,6	12,0	22,1	3.000/100
 1,5÷2,5 (16÷14)	BF-P8	4,9	1,7	8,0	17,9	2.500/100
	BF-P10	4,9	1,8	10,0	19,9	2.500/100
	BF-P12	4,9	1,8	12,0	21,9	2.500/100
 4÷6 (12÷10)	GF-P10	6,7	2,2	10,0	24,6	1.000/100
	GF-P12	6,7	2,2	12,0	26,8	1.000/100
	GF-P14	6,7	2,2	14,0	28,8	1.000/100

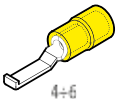
blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm Ø	B	P	L	Quantity Box/Bag
 0,25÷1,5 (22÷16)	RF-PP12	3,9	3,0	12,8	22,9	3.000/100
	RF-PP12/1	3,9	3,0	11,3	21,4	3.000/100
	RF-PP12/19	3,9	1,9	13,2	23,3	3.000/100
	RF-PP12/23	3,9	2,3	13,2	23,3	2.500/100
	RF-PP14	3,9	3,0	14,8	24,9	2.500/100
	RF-PP16/23	3,9	2,3	17,2	27,3	2.500/100
 1,5÷2,5 (16÷14)	BF-PP12	4,9	3,5	12,8	22,9	2.500/100
	BF-PP12/25	4,9	2,5	13,3	23,4	2.000/100
	BF-PP12/29♦	4,9	2,9	13,3	23,4	2.500/100
	BF-PP16/25	4,9	2,5	17,2	27,3	2.500/100
 4÷6 (12÷10)	GF-PP12	6,7	4,0	13,3	27,5	1.000/100
	GF-PP17	6,7	2,9	19,2	33,4	1.000/100

hooked blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm Ø	B	P	L	X	Quantity Box/Bag
 0,25÷1,5 (22÷16)	RF-PPL30♦	3,9	3,0	17,5	28,4	1,7	2.500/100
	RF-PPL46♦	3,9	4,6	17,5	28,4	1,7	2.500/100
 1,5÷2,5 (16÷14)	BF-PPL30♦	4,9	3,0	17,5	28,4	1,7	2.000/100
	BF-PPL46♦	4,9	4,6	17,5	28,4	1,7	2.000/100
 4÷6 (12÷10)	GF-PPL46♦	6,7	4,6	17,5	32,7	1,9	1.000/100

♦*Not UL approved*

PVC INSULATED CRIMP TERMINALS

F range funnel entry - for Copper conductors

c UL us File no. E125401

VALSTAR-V3-F

Robust plastic case with compartments, containing:

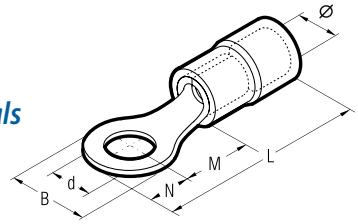
- An assortment of PVC insulated crimp terminals for conductor sizes 0,25 to 6 mm² (22÷10 AWG).
- Tool Crimpstar® HP 3.

Connectors included:

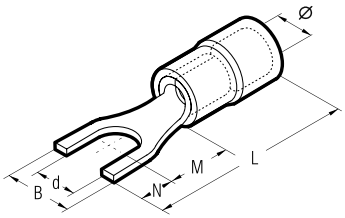
- Qty 50 terminals RF-U4
- Qty 50 terminals RF-U5
- Qty 50 terminals RF-P10
- Qty 50 terminals BF-U4
- Qty 50 terminals BF-U5
- Qty 50 terminals BF-P10
- Qty 25 terminals GF-U5
- Qty 25 terminals GF-U6
- Qty 25 terminals GF-P12
- Qty 25 connectors PL06-M
- Qty 25 connectors PL1-M

PVC · Cu-ETP · EASY ENTRY · ANNEALED · 3µm TIN PLATED · -20°C +80°C · RADIAL

ring terminals



fork/spade terminals



Conductor Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm Ø	B	M	N	L	d	Quantity Box/Bag
0,25÷1,5 (22÷16)	2	RF-M2*♦	3,9	5,6	4,5	2,8	17,4	2,2	3.000/100
	3	RF-M3	3,9	5,6	4,5	2,8	17,4	3,2	3.000/100
	3,5	RF-M3.5	3,9	5,6	4,5	2,8	17,4	3,7	3.000/100
	3,5	RF-M3.5/1	3,9	6,2	7,1	3,1	20,3	3,7	3.000/100
	4	RF-M4	3,9	7,0	6,5	3,5	20,1	4,3	3.000/100
	4	RF-M4/3♦	3,9	7,8	7,1	3,9	21,1	4,3	3.000/100
	5	RF-M5	3,9	7,8	7,1	3,9	21,1	5,3	2.500/100
	6	RF-M6	3,9	9,4	8,1	4,7	22,9	6,4	2.500/100
	6	RF-M6/1	3,9	12,0	10,3	6,0	26,4	6,4	2.000/100
	7	RF-M7	3,9	9,4	8,1	4,7	22,9	7,2	2.500/100
	8	RF-M8	3,9	12,0	10,3	6,0	26,4	8,4	2.000/100
	10	RF-M10	3,9	15,5	13,0	7,7	30,9	10,5	1.500/100
	12	RF-M12	3,9	18,0	15,5	9,0	34,6	13,0	1.500/100
1,5÷2,5 (16÷14)	2	BF-M2*♦	4,9	5,6	5,0	2,8	17,9	2,2	3.000/100
	3	BF-M3	4,9	5,6	5,0	2,8	17,9	3,2	2.500/100
	3,5	BF-M3.5	4,9	5,6	5,0	2,8	17,9	3,7	2.500/100
	3,5	BF-M3.5/1	4,9	6,2	6,5	3,1	19,7	3,7	2.500/100
	4	BF-M4	4,9	8,0	6,5	4,0	20,6	4,3	2.500/100
	5	BF-M5	4,9	8,0	7,5	4,0	21,6	5,3	2.000/100
	6	BF-M6	4,9	9,4	8,6	4,7	23,4	6,4	2.000/100
	6	BF-M6/1	4,9	12,0	10,3	6,0	26,4	6,4	2.000/100
	6	BF-M6/2*♦	4,9	8,4	5,4	4,2	19,7	6,4	2.500/100
	7	BF-M7	4,9	10,0	7,8	5,0	22,9	7,2	2.000/100
	8	BF-M8	4,9	12,0	10,3	6,0	26,4	8,4	1.500/100
	10	BF-M10	4,9	15,5	13,0	7,7	30,9	10,5	1.500/100
	12	BF-M12	4,9	18	15,5	9,0	34,6	13,0	1.000/100
4÷6 (12÷10)	3	GF-M3	6,7	8,0	8,1	4,0	26,3	3,2	1.000/100
	3,5	GF-M3.5	6,7	8,0	8,1	4,0	26,3	3,7	1.000/100
	4	GF-M4	6,7	9,0	8,1	4,5	26,8	4,3	1.000/100
	5	GF-M5	6,7	9,0	8,1	4,5	26,8	5,3	1.000/100
	6	GF-M6	6,7	11,0	11,1	5,5	30,8	6,4	1.000/100
	6	GF-M6/1	6,7	11,0	8,1	5,5	27,8	6,4	1.000/100
	7	GF-M7	6,7	11,0	11,1	5,5	30,8	7,2	1.000/100
	8	GF-M8	6,7	13,6	12,1	6,8	33,1	8,4	800/100
	8	GF-M8/1*♦	6,7	11,0	8,1	5,5	27,8	8,4	1.000/100
	10	GF-M10	6,7	13,6	12,1	6,8	33,1	10,5	1.000/100
	10	GF-M10/1	6,7	15,5	13,8	7,7	35,8	10,5	1.000/100
	12	GF-M12	6,7	19,0	15,1	9,5	38,8	13,0	500/100
	14	GF-M14	6,7	21,0	16,1	10,5	40,8	15,0	500/100
	16	GF-M16	6,7	24,0	17,1	12,0	43,3	17,0	500/100

Conductor Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm Ø	B	M	N	L	d	Quantity Box/Bag
0,25÷1,5 (22÷16)	3	RF-U3	3,9	5,5	5,5	4,0	19,6	3,2	3.000/100
	3,5	RF-U3.5	3,9	6,0	6,5	3,8	20,4	3,7	3.000/100
	3,5	RF-U3.5/1	3,9	7,2	6,5	3,8	20,4	3,7	3.000/100
	3,5	RF-U3.5/2♦	3,9	6,4	6,5	3,8	20,4	3,7	3.000/100
	4	RF-U4	3,9	6,5	7,5	3,7	21,3	4,3	3.000/100
	4	RF-U4/1	3,9	8,5	7,5	3,7	21,3	4,3	3.000/100
	4	RF-U4/2	3,9	7,5	7,5	3,7	21,3	4,3	3.000/100
	5	RF-U5	3,9	8,5	7,5	3,7	21,3	5,3	2.500/100
	5	RF-U5/1*♦	3,9	9,4	7,5	3,7	21,3	5,3	3.000/100
	6	RF-U6	3,9	9,4	8,1	4,7	22,9	6,4	2.000/100
	6	RF-U6/1	3,9	12,0	9,2	7,1	26,4	6,4	2.500/100
	8	RF-U8	3,9	14,0	10,0	6,3	26,4	8,4	2.000/100
	10	RF-U10	3,9	17,5	13,0	7,7	30,9	10,5	1.500/100
	12	RF-U12	3,9	20,0	15,5	9,0	34,6	13,0	1.500/100
1,5÷2,5 (16÷14)	3	BF-U3	4,9	5,5	5,5	4,0	19,6	3,2	2.500/100
	3,5	BF-U3.5	4,9	6,4	6,5	3,8	20,4	3,7	2.500/100
	3,5	BF-U3.5/1*	4,9	7,2	6,5	3,8	20,4	3,7	3.000/100
	4	BF-U4	4,9	6,5	7,5	3,7	21,3	4,3	2.500/100
	4	BF-U4/1	4,9	8,5	7,5	3,7	21,3	4,3	2.000/100
	4	BF-U4/2	4,9	7,5	7,5	3,7	21,3	4,3	2.000/100
	5	BF-U5	4,9	8,5	7,5	3,7	21,3	5,3	2.000/100
	5	BF-U5/2♦	4,9	12,0	11,3	5,0	26,3	5,3	1.500/100
	6	BF-U6	4,9	9,4	8,1	4,7	22,9	6,4	2.000/100
	6	BF-U6/1	4,9	12,0	9,2	7,1	26,4	6,4	2.000/100
	8	BF-U8	4,9	14,0	10,0	6,3	26,4	8,4	1.500/100
	10	BF-U10	4,9	17,5	13,0	7,7	30,9	10,5	1.000/100
	12	BF-U12	4,9	20,0	15,5	9,0	34,6	13,0	1.500/100
4÷6 (12÷10)	3,5	GF-U3.5	6,7	7,5	8,5	3,9	26,6	3,7	1.000/100
	4	GF-U4	6,7	7,5	8,0	4,4	26,6	4,3	1.000/100
	5	GF-U5	6,7	9,5	8,0	4,4	26,6	5,3	1.000/100
	6	GF-U6	6,7	10,0	11,0	5,5	30,7	6,4	1.000/100
	8	GF-U8	6,7	13,5	12,0	8,0	34,2	8,4	1.000/100
	10	GF-U10	6,7	15,5	13,0	8,0	35,2	10,5	1.000/100
	10	GF-U10/1	6,7	17,5	13,8	7,7	35,8	10,5	1.000/100
	12	GF-U12	6,7	21,0	15,1	9,5	38,8	13,0	500/100
	14	GF-U14	6,7	23,0	16,1	10,5	40,8	15,0	500/100
	16	GF-U16	6,7	26,0	17,1	11,5	42,8	17,0	500/100

♦*Not UL approved* **Made to order*

RKY BKY GKY

REINFORCED PA 6.6 INSULATED TERMINALS

KY range - for Copper conductors

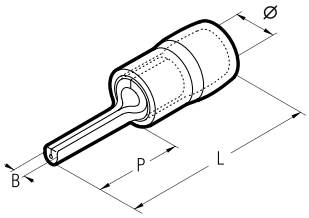
PA6.6 | Cu-ETP | EASY ENTRY | ANNEALED | 3µm TIN PLATED | -20°C +115°C | RADIAL

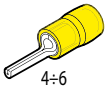
'KY' type terminals are designed to offer improved mechanical and electrical integrity under heavy-duty application.
This is achieved via a Copper sleeve located between the Copper barrel and Polyamide insulation of the terminal. Then, during crimping, the insulation of the conductor is integrated into the crimp due to the Copper sleeve being deformed around it to maintain the level of 'grip' required in applications subject to continuous mechanical vibrations (e.g: mobile plant, vehicles, moving components).

The operating temperature range is – 20 to + 115°C (Surge + 130°C).
Recommended crimping tools are shown on pages 108 to 129, 168.

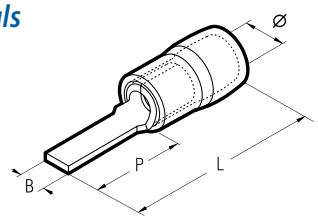
HF HALOGEN FREE

pin terminals



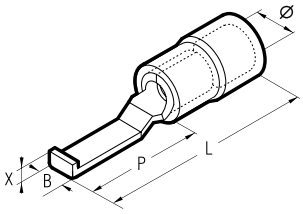
Conductor Size sqmm (AWG)	Type	Dimensions mm Ø	B	P	L	Quantity Box/Bag
 0,25÷1,5 (22÷16)	RKY-P8	4,5	1,9	9,0	19,8	3.000/100
	RKY-P10	4,5	1,9	10,0	20,8	3.500/100
	RKY-P12	4,5	1,9	12,0	22,8	3.000/100
 1,5÷2,5 (16÷14)	BKY-P8	5,2	1,9	9,0	19,8	3.000/100
	BKY-P10	5,2	1,9	10,0	20,8	3.000/100
	BKY-P12	5,2	1,9	12,0	22,8	3.000/100
 4÷6 (12÷10)	GKY-P14	7,0	2,8	14,0	27,0	1.000/100

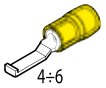
blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm Ø	B	P	L	Quantity Box/Bag
 0,25÷1,5 (22÷16)	RKY-PP12	4,5	3,0	13,0	23,8	3.000/100
	RKY-PP12/19	4,5	2,0	18,0	28,8	3.000/100
	RKY-PP16/23	4,5	2,2	18,0	28,8	2.500/100
 1,5÷2,5 (16÷14)	BKY-PP12	5,2	3,0	13,0	23,8	2.500/100
	BKY-PP12/25	5,2	2,4	13,0	23,8	2.000/100
	BKY-PP16/23	5,2	2,2	18,0	28,8	2.500/100
 4÷6 (12÷10)	GKY-PP12	7,0	4,0	14,0	27,0	1.000/100
	GKY-PP17	7,0	2,0	18,0	31,0	1.000/100

hooked blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm Ø	B	P	L	X	Quantity Box/Bag
 0,25÷1,5 (22÷16)	RKY-PPL30	4,5	3,0	16,8	28,2	2,1	3.000/100
	RKY-PPL46	4,5	4,6	16,8	28,2	2,1	3.000/100
 1,5÷2,5 (16÷14)	BKY-PPL30	5,2	3,0	16,8	28,2	2,1	2.500/100
	BKY-PPL46	5,2	4,6	16,8	28,2	2,1	2.500/100
 4÷6 (12÷10)	GKY-PPL46	7,0	4,6	17,2	30,2	2,4	1.000/100

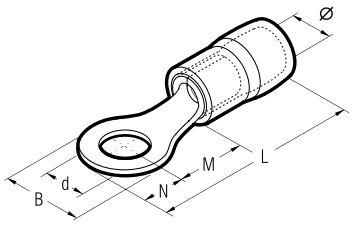
Consult Cembre for a wider range of pin and blade dimensions.

REINFORCED PA 6.6 INSULATED TERMINALS

KY range - for Copper conductors

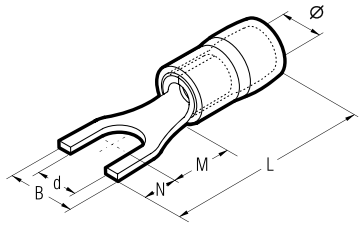
RKY BKY GKY

ring terminals



Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag
			Ø	B	M	N	L	d	
0,25÷1,5 (22÷16)	3	RKY-M3	4,5	5,5	5,0	2,5	18,5	3,2	3.000/100
	3,5	RKY-M3.5	4,5	5,5	5,0	2,5	18,5	3,7	3.000/100
	3,5	RKY-M3.5/1	4,5	6,6	6,3	3,1	20,4	3,7	3.000/100
	4	RKY-M4	4,5	6,6	6,3	3,1	20,4	4,3	3.000/100
	5	RKY-M5	4,5	8,0	7,0	3,8	21,8	5,3	2.500/100
	6	RKY-M6/1	4,5	11,6	11,0	5,8	27,8	6,4	2.000/100
	8	RKY-M8	4,5	11,6	11,0	5,8	27,8	8,4	2.500/100
	10	RKY-M10	4,5	13,6	13,9	6,6	31,5	10,5	1.500/100
	12	RKY-M12	4,5	19,6	16,0	9,4	36,4	13,0	1.500/100
1,5÷2,5 (16÷14)	3	BKY-M3	5,2	6,6	4,8	3,0	18,8	3,2	2.500/100
	3,5	BKY-M3.5	5,2	6,6	4,8	3,0	18,8	3,7	2.500/100
	3,5	BKY-M3.5/1	5,2	6,6	6,3	3,1	20,4	3,7	2.500/100
	4	BKY-M4	5,2	8,5	7,8	4,0	22,8	4,3	2.500/100
	5	BKY-M5	5,2	8,5	7,8	4,0	22,8	5,3	2.500/100
	6	BKY-M6/1	5,2	12,0	11,0	5,8	27,8	6,4	2.500/100
	8	BKY-M8	5,2	12,0	11,0	5,8	27,8	8,4	1.500/100
	10	BKY-M10	5,2	13,6	13,9	6,6	31,5	10,5	1.500/100
	12	BKY-M12	5,2	19,2	16,0	9,4	36,4	13,0	1.000/100
4÷6 (12÷10)	3,5	GKY-M3.5	7,0	7,2	6,1	3,6	22,7	3,7	1.000/100
	4	GKY-M4	7,0	9,5	9,1	4,5	26,6	4,3	1.000/100
	5	GKY-M5	7,0	9,5	9,1	4,5	26,6	5,3	1.000/100
	6	GKY-M6	7,0	12,0	10,5	6,0	29,5	6,4	1.000/100
	8	GKY-M8	7,0	15,0	13,5	7,5	34,0	8,4	1.000/100
	10	GKY-M10	7,0	15,0	13,5	7,5	34,0	10,5	1.000/100
	12	GKY-M12	7,0	19,2	16,0	9,6	38,6	13,0	1.000/100
	14	GKY-M14	7,0	32,0	25,2	16,0	54,2	15,0	500/100
	16	GKY-M16	7,0	32,0	25,2	16,0	54,2	17,0	500/100

fork/spade terminals



Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag
			Ø	B	M	N	L	d	
0,25÷1,5 (22÷16)	3	RKY-U3	4,5	5,7	6,5	4,5	22,0	3,2	2.500/100
	3,5	RKY-U3.5	4,5	5,7	6,5	4,5	22,0	3,7	2.500/100
	4	RKY-U4	4,5	6,4	6,5	4,5	22,0	4,3	3.000/100
	5	RKY-U5	4,5	8,1	6,5	4,5	22,0	5,3	3.000/100
	6	RKY-U6	4,5	9,5	6,5	4,5	22,0	6,4	2.000/100
	6	RKY-U6/1	4,5	12,0	11,0	6,0	28,0	6,4	2.000/100
1,5÷2,5 (16÷14)	3	BKY-U3	5,2	5,7	6,5	4,5	22,0	3,2	2.500/100
	3,5	BKY-U3.5	5,2	6,0	6,5	4,5	22,0	3,7	2.500/100
	4	BKY-U4	5,2	6,4	6,5	4,5	22,0	4,3	2.500/100
	5	BKY-U5	5,2	7,9	6,5	4,5	22,0	5,3	2.500/100
	6	BKY-U6	5,2	9,3	6,5	4,5	22,0	6,4	2.000/100
	6	BKY-U6/1	5,2	12,0	11,0	6,0	28,0	6,4	2.000/100
4÷6 (12÷10)	3,5	GKY-U3.5	7,0	7,2	7,5	3,9	24,4	3,7	1.500/100
	4	GKY-U4	7,0	7,2	7,5	3,9	24,4	4,3	1.000/100
	5	GKY-U5	7,0	9,0	7,0	5,5	25,5	5,3	1.000/100
	6	GKY-U6	7,0	12,0	12,0	6,5	31,5	6,4	1.000/100
	8	GKY-U8	7,0	14,0	10,5	7,0	30,5	8,4	1.000/100

Consult Cembre for a wider range of pin and blade dimensions.

RF-F BF-F GF-F

PC | Brass | EASY ENTRY | 3µm TIN PLATED | -20°C +115°C | RADIAL

FEMALE DISCONNECT TERMINALS

for Copper conductors

Recommended crimping tools are shown on pages 108 to 129, 168.

Certified according to EN 45545-2:2013

HF HALOGEN FREE

c UL us File no. E212000

Polycarbonate insulated terminals partially reinforced with Copper sleeve

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RF-F305	2,8 x 0,5	3.000/100
	RF-F308♦	2,8 x 0,8	3.000/100
	RF-F405	4,8 x 0,5	2.500/100
	RF-F408	4,8 x 0,8	2.500/100
	RF-F608	6,35 x 0,8	2.500/100
1,5÷2,5 (16÷14)	BF-F405	4,8 x 0,5	2.500/100
	BF-F408	4,8 x 0,8	2.500/100
	BF-F608	6,35 x 0,8	1.500/100
4÷6 (12÷10)	GF-F608	6,35 x 0,8	1.000/100

Polycarbonate fully insulated terminals partially reinforced with Copper sleeve

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RF-F305P	2,8 x 0,5	2.000/100
	RF-F308P♦	2,8 x 0,8	2.000/100
	RF-F405P	4,8 x 0,5	1.500/100
	RF-F408P	4,8 x 0,8	1.500/100
	RF-F608P	6,35 x 0,8	1.000/100
1,5÷2,5 (16÷14)	BF-F405P	4,8 x 0,5	1.500/100
	BF-F408P	4,8 x 0,8	1.500/100
	BF-F608P	6,35 x 0,8	1.000/100
4÷6 (12÷10)	GF-F608P	6,35 x 0,8	800/100

RF-M BF-M GF-M

PC | Brass | EASY ENTRY | 3µm TIN PLATED | -20°C +115°C | RADIAL

MALE DISCONNECT TERMINALS

for Copper conductors

Recommended crimping tools are shown on pages 108 to 129, 168.

Certified according to EN 45545-2:2013

HF HALOGEN FREE

c UL us File no. E212000

Polycarbonate insulated terminals partially reinforced with Copper sleeve

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RF-M608	6,35 x 0,8	3.000/100
1,5÷2,5 (16÷14)	BF-M608	6,35 x 0,8	2.000/100
4÷6 (12÷10)	GF-M608	6,35 x 0,8	1.000/100

Polycarbonate fully insulated terminals partially reinforced with Copper sleeve

Conductor Size sqmm (AWG)	Type	Tab Size	Quantity Box/Bag
0,25÷1,5 (22÷16)	RF-M608P	6,35 x 0,8	1.000/100
1,5÷2,5 (16÷14)	BF-M608P	6,35 x 0,8	1.000/100

RF-FM BF-FM RF-B BF-B

PC | Brass | EASY ENTRY | 3µm TIN PLATED | -20°C +115°C | RADIAL

MALE/FEMALE

for Copper conductors

Recommended crimping tools are shown on pages 108 to 129, 168.

Polycarbonate insulated terminals partially reinforced with Copper sleeve

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RF-FM608	6,35 x 0,8	1.000/100
1,5÷2,5 (16÷14)	BF-FM608	6,35 x 0,8	1.000/100

BULLET AND SOCKET

for Copper conductors

Certified according to EN 45545-2:2013

HF HALOGEN FREE

c UL us File no. E212000

Polycarbonate insulated terminals partially reinforced with Copper sleeve

Conductor Size sqmm (AWG)	Type	Ø mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RF-BM4♦	4	2.500/100
	RF-BF4♦	4	800/100
1,5÷2,5 (16÷14)	BF-BM5♦	5	2.000/100
	BF-BF5♦	5	800/100

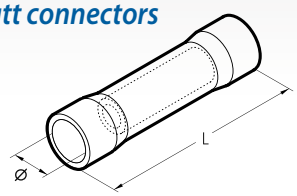
♦*Not UL approved*

BUTT AND PARALLEL CONNECTORS

for Copper conductors

PL

PVC insulated



butt connectors

parallel connectors

Recommended crimping tools are shown on pages 108 to 129, 168.

Conductor Size sqmm (AWG)	Type	Ø mm	L mm	Quantity Box/Bag
0,2÷0,5 (24÷20)	PL01-M♦	3,0	25,0	3.000/100
0,25÷1,5 (22÷16)	PL03-M	4,0	25,0	1.000/100
1,5÷2,5 (16÷14)	PL06-M	5,0	25,0	1.500/100
4÷6 (12÷10)	PL1-M	6,5	32,0	500/100
0,25÷1,5 (22÷16)	PL03-P♦	4,0	20,0	3.000/100
1,5÷2,5 (16÷14)	PL06-P♦	5,0	16,0	2.000/100

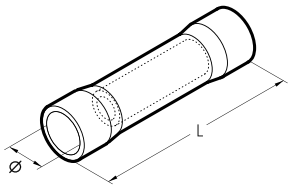
BUTT CONNECTORS

for Copper conductors

NL-M

Polyamide PA6.6 insulated

Recommended crimping tools are shown on pages 108 to 129, 168.



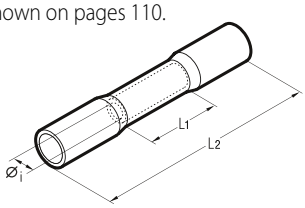
Conductor Size sqmm (AWG)	Type	Ø mm	L mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	NL03-M	4,0	25,0	1.000/100
1,5÷2,5 (16÷14)	NL06-M	5,4	25,5	1.500/100
4÷6 (12÷10)	NL1-M	7,6	32,0	500/100
10 (8÷7)	NL2-M	8,0	43,0	500/100
16 (6÷5)	NL3-M	9,2	44,0	500/100

WL-M

PE HD insulated, heat shrinkable

HF HALOGEN FREE

Recommended crimping tools are shown on pages 110.



Conductor Size sqmm (AWG)	Type	Ø mm	L1 mm	L2 mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	WL03-M	1,7	15,0	36,0	1.500/100
1,5÷2,5 (16÷14)	WL06-M	2,3	15,0	36,5	1.000/100
4÷6 (12÷10)	WL1-M	3,4	15,0	41,0	500/100

- Max operating voltage: 600 V
- Shrink temperature: 150 °C
- Protection: IP68

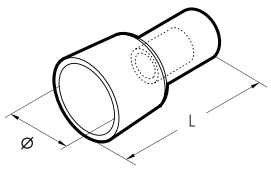
CLOSE END CONNECTORS

for Copper conductors

NL-P

Polyamide PA6.6 insulated

Recommended crimping tools are shown on pages 108 to 129, 168.



Conductor Size sqmm (AWG)	Type	Ø mm	L mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	NL03-P	7,9	21,0	1.000/100
1,5÷2,5 (16÷14)	NL06-P	7,9	19,9	1.000/100
4÷6 (12÷10)	NL06-PB	6,5	13,6	1.500/100
10 (8÷7)	NL1-P	10,5	21,5	500/100
16 (6÷5)	NL1-PG	9,0	17,8	1.000/100

♦Not UL approved

RKF-F BKF-F GK-F

REINFORCED DISCONNECT TERMINALS

for Copper conductors

PA6.6 | Brass | EASY ENTRY | 3µm TIN PLATED | -20°C +115°C | RADIAL

Recommended crimping tools are shown on pages 108 to 129, 168.

HF HALOGEN FREE

female connectors, fully reinforced with Copper sleeve

PA6.6 insulated terminals

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RKF-F305	2,8 x 0,5	3.000/100
	RKF-F308	2,8 x 0,8	3.000/100
	RKF-F405	4,8 x 0,5	2.500/100
	RKF-F408	4,8 x 0,8	2.500/100
	RKF-F608	6,35 x 0,8	2.500/100
1,5÷2,5 (16÷14)	BKF-F405	4,8 x 0,5	3.000/100
	BKF-F408	4,8 x 0,8	3.000/100
	BKF-F608	6,35 x 0,8	2.000/100
4÷6 (12÷10)	GK-F608	6,35 x 0,8	1.500/100

PA6.6 fully insulated terminals

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RKF-F405P	4,8 x 0,5	1.500/100
	RKF-F408P	4,8 x 0,8	2.000/100
	RKF-F608P	6,35 x 0,8	1.000/100
1,5÷2,5 (16÷14)	BKF-F405P	4,8 x 0,5	2.000/100
	BKF-F408P	4,8 x 0,8	2.000/100
	BKF-F608P	6,35 x 0,8	1.000/100
4÷6 (12÷10)	GK-F608P	6,35 x 0,8	1.000/100

RKF BKF GKF

REINFORCED DISCONNECT TERMINALS

for Copper conductors

PA6.6 | Brass | EASY ENTRY | 3µm TIN PLATED | -20°C +115°C | RADIAL

male connectors, fully reinforced with Copper sleeve - PA6.6 insulated terminals

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RKF-M608	6,35 x 0,8	3.000/100
1,5÷2,5 (16÷14)	BKF-M608	6,35 x 0,8	2.500/100
4÷6 (12÷10)	GKF-M608	6,35 x 0,8	1.000/100

Recommended crimping tools are shown on pages 108 to 129, 168.

HF HALOGEN FREE

male/female connectors, fully reinforced with Copper sleeve PA6.6 insulated terminals

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RKF-FM608P	6,35 x 0,8	1.500/100
1,5÷2,5 (16÷14)	BKF-FM608P	6,35 x 0,8	1.500/100

bullet and socket connectors fully reinforced with Copper sleeve PA6.6 insulated terminals

Conductor Size sqmm (AWG)	Type	Ø mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RKF-BM4	4	2.500/100
	RKF-BF4	4	1.000/100
1,5÷2,5 (16÷14)	BKF-BM4	5	2.000/100
	BKF-BF4	5	800/100

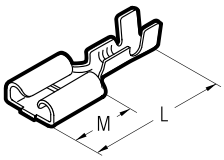
RN-FA BN-FA

FEMALE CONNECTORS

for Copper conductors

Brass | -40°C +125°C | INDENT

Recommended crimping tools are shown on pages 108 to 129, 168.



Conductor Size sqmm (AWG)	Type	Tab Size mm	M mm	L mm	Quantity Box/Bag
0,5÷1 (20÷17)	RN-FA305	2,8 x 0,5	6,3	15,0	6.000/100
	RN-FA405	4,8 x 0,5	6,3	15,0	5.000/100
	RN-FA608	6,3 x 0,8	7,7	19,0	3.000/100
1÷2,5 (17÷14)	BN-FA608	6,3 x 0,8	7,7	19,0	2.000/100
	BN-FAB608*	6,3 x 0,8	7,7	15,5	1.000/100
	BN-FAR608**	6,3 x 0,8	7,7	19,0	3.000/100

*flag type **with retainer

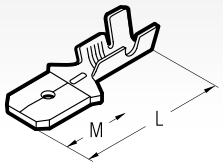
MALE CONNECTORS

open barrel - for Copper conductors

RN-MA
BN-MA

Conductor Size sqmm (AWG)	Type	Tab Size mm	M mm	L mm	Quantity Box/Bag
0,5÷1 (20÷17)	RN-MA305	2,8 x 0,5	5,8	13,0	6.000/100
	RN-MA405	4,8 x 0,5	6,3	17,3	5.000/100
	RN-MA608	6,3 x 0,8	7,9	19,7	4.000/100
1÷2,5 (17÷14)	BN-MA608	6,3 x 0,8	7,9	20,0	4.000/100

Recommended crimping tools are shown on pages 114.



Brass | -40°C +125°C | INDENT

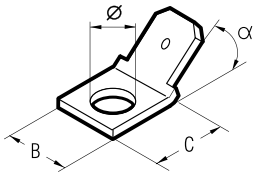
MALE TABS

for board mounting - for Copper conductors

MP
MPD

Type	Tab Size mm	Ø Stud mm	B mm	C mm	α	Quantity Box/Bag
MP608	6,3 x 0,8	4,0	8,0	8,5	0°	5.000/100
MP608/45	6,3 x 0,8	4,0	8,0	8,5	45°	6.000/100
MP608/90	6,3 x 0,8	4,0	8,0	8,5	90°	5.000/100
MP608D*	6,3 x 0,8	5,0	8,0	14,0	0°	5.000/100

*double tab

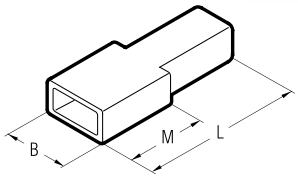


Brass | -40°C +125°C | INDENT

CONNECTOR SLEEVES

CFA
CMA

Type	Connector	B mm	M mm	L mm	Material	Quantity Box/Bag
CFA300	Female 2,8	5,5	7	18	Polyethylene	3.000/100
CFA400*	Female 4,8	7,5	9	20	Polyethylene	2.000/100
CFA600*	Female 6,3	9,0	11	24	Polyethylene	1.000/100
CFA2600**	Female 6,3	9,0	9	22	Polyethylene	1.500/100
CFAR600	Female 6,3 with retainer	9,0	12	25	Polyamide 6.6	500/100
CFAB600	Female 6,3 flag	10,0	–	18	Polyamide 6.6	1.000/100
CMA600*	Male 6,3	12,0	11	22	Polyethylene	1.000/100



-40°C +125°C

*For a single cable.
Colours available:
Transparent: no suffix
Red: add suffix R
Black: add suffix N

**For twin cables.
Colours available:
Transparent: no suffix
Red: add suffix R
Black: add suffix N
Green: add suffix V
Blue: add suffix B
Yellow: add suffix G

PKE

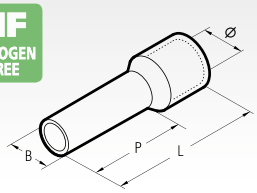
POLYPROPYLENE INSULATED END SLEEVES

for flexible Copper conductors

PP · Cu · ANNEALED · 3µm TIN PLATED · -20°C +115°C · TRAPEZIUM · SQUARE

The PKE, PKC, CPKD range of end sleeves is manufactured from Tin plated electrolytic Copper.
Designed and developed to reinforce fine wire strands when terminating a cable into a connector block.
The operating temperature range is – 20 to + 105°C (Surge + 110°C).
Recommended crimping tools are shown on pages 108 to 132, 137-138, 168, 170-171.

HF HALOGEN FREE



Conductor Size sqmm	Type	Dimensions mm Ø	B	P	L	Insulation Colour	Quantity Box/Bag
0,1÷0,3	PKE308	1,9	1,1	8,0	12,4	yellow	25.000/500
0,3÷0,5	PKE508	2,6	1,3	8,0	14,0	white	10.000/500
0,75	PKE7508	3,4	1,6	8,2	14,6	blue	10.000/500
1	PKE108	3,4	1,8	8,2	14,6	red	10.000/500
1,5	PKE1508	3,8	2,1	8,2	14,6	black	10.000/500
	PKE1510	3,8	2,1	18,0	24,4		5.000/500
	PKE1518	4,4	2,6	8,2	15,2		7.500/500
2,5	PKE2508	4,4	2,6	18,0	25,0	grey	5.000/500
	PKE2512	4,8	3,2	9,0	16,0		5.000/200
	PKE2518	4,8	3,2	18,0	25,0		3.000/200
4	PKE410	5,8	3,9	12,0	20,0	orange	2.500/100
	PKE412	5,8	3,9	18,0	26,0		2.000/100
	PKE418	7,4	4,8	12,0	21,5		1.500/100
6	PKE612	7,4	4,8	18,0	27,5	green	1.500/100
	PKE618	9,3	5,9	12,0	22,7		1.000/100
10	PKE1012	9,3	5,9	18,0	28,6	brown	1.000/100
	PKE1018	10,0	7,9	16,0	29,0		500/50
16	PKE1612	10,0	7,9	22,0	35,0	ivory	500/50
	PKE1618	8,8	6,2	18,0	29,0		1.000/100
25	PKE25016	11,2	7,9	16,0	30,0	black	500/50
	PKE25022	11,2	7,9	22,0	36,0		500/50

VALSTAR-ND2/PKE
Comprising:
- a selection of end sleeves PKE conductor size 1÷6 sqmm
- tool ND2

VALSTAR-ND2/PKC
Comprising:
- a selection of end sleeves PKC conductor size 1÷6 sqmm
- tool ND2

VALSTAR-ND2/PKD
Comprising:
- a selection of end sleeves PKD conductor size 1÷6 sqmm
- tool ND2

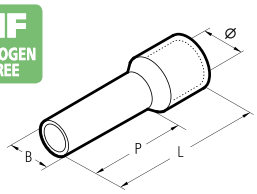
PKC

POLYPROPYLENE INSULATED END SLEEVES

for flexible Copper conductors

PP · Cu · ANNEALED · 3µm TIN PLATED · -20°C +115°C · TRAPEZIUM · SQUARE

HF HALOGEN FREE



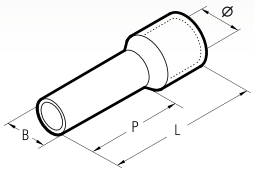
Conductor Size sqmm	Type	Dimensions mm Ø	B	P	L	Insulation Colour	Quantity Box/Bag
0,1÷0,3	PKC306	1,9	1,1	6,0	10,4	light blue	25.000/500
	PKC308	1,9	1,1	8,0	12,4		25.000/500
0,3÷0,5	PKC508	2,6	1,3	8,0	14,0	orange	10.000/500
	PKC510	2,6	1,3	10,0	16,0		10.000/500
0,75	PKC7508	3,4	1,6	8,2	14,6	white	10.000/500
	PKC7512	3,4	1,6	12,0	18,4		10.000/500
1	PKC108	3,4	1,8	8,2	14,6	yellow	10.000/500
	PKC112	3,4	1,8	12,0	18,4		10.000/500
1,5	PKC1508	3,8	2,1	8,2	14,6	red	10.000/500
	PKC1510	3,8	2,1	18,0	24,4		5.000/500
	PKC1518	3,9	2,6	8,2	15,2		7.500/500
2,5	PKC2508	3,9	2,6	18,0	25,0	blue	5.000/500
	PKC2512	4,8	3,2	9,0	16,0		5.000/200
	PKC2518	4,8	3,2	18,0	25,0		3.000/200
4	PKC410	5,8	3,9	12,0	20,0	grey	2.500/100
	PKC412	5,8	3,9	18,0	26,0		2.000/100
	PKC418	7,4	4,8	12,0	21,5		1.500/100
6	PKC612	7,4	4,8	18,0	27,5	black	1.500/100
	PKC618	9,3	5,9	12,0	22,7		1.000/100
10	PKC1012	9,3	5,9	18,0	28,6	ivory	1.000/100
	PKC1018	10,0	7,9	16,0	29,0		500/50
16	PKC1612	10,0	7,9	22,0	35,0	green	500/50
	PKC1618	12,0	8,9	16,0	30,0		500/50
25	PKC25016	12,0	8,9	25,0	39,0	brown	400/50
	PKC25022	13,8	11,0	20,0	36,0		300/50
35	PKC35016	13,8	11,0	30,0	46,0	beige	250/50
	PKC35025	16,0	14,3	22,0	38,0		100/25
50	PKC50020	18,0	15,7	25,0	44,0	olive	100/25
	PKC50025	21,0	17,5	27,0	48,0		100/25
70	PKC70022	16,0	14,3	22,0	38,0	yellow	100/25
95	PKC95025	18,0	15,7	25,0	44,0	red	100/25
120	PKC120027	21,0	17,5	27,0	48,0	blue	100/25

PA6 INSULATED END SLEEVES

PKD

for flexible Copper conductors

Conductor Size sqmm	Type	Dimensions mm Ø	B	P	L	Insulation Colour	Quantity Box/Bag
0,3÷0,5	PKD506	2,6	1,4	6,0	12,0	white	10.000/500
	PKD508	2,6	1,4	8,0	14,0		10.000/500
	PKD510	2,6	1,4	10,0	16,0		10.000/500
0,75	PKD7506	2,8	1,6	6,0	12,0	grey	10.000/500
	PKD7508	2,8	1,6	8,0	14,0		10.000/500
	PKD7510	2,8	1,6	10,0	16,0		10.000/500
	PKD7512	2,8	1,6	12,0	18,0		10.000/500
1	PKD106	3,0	1,8	6,0	12,0	red	10.000/500
	PKD108	3,0	1,8	8,0	14,0		10.000/500
	PKD110	3,0	1,8	10,0	16,0		10.000/500
	PKD112	3,0	1,8	12,0	18,0		10.000/500
1,5	PKD1508	3,5	2,1	8,0	14,0	black	5.000/500
	PKD1510	3,5	2,1	10,0	16,0		5.000/500
	PKD1512	3,5	2,1	12,0	18,0		5.000/500
	PKD1518	3,5	2,1	18,0	24,0		5.000/500
2,5	PKD2508	4,2	2,6	8,0	14,0	blue	5.000/500
	PKD2512	4,2	2,6	12,0	18,0		4.000/500
	PKD2518	4,2	2,6	18,0	24,0		5.000/500
4	PKD410	4,8	3,3	10,0	18,0	grey	3.000/200
	PKD412	4,8	3,3	12,0	20,0		3.000/200
	PKD418	4,8	3,3	18,0	26,0		3.000/200
6	PKD612	6,3	4,0	12,0	20,0	yellow	1.500/100
	PKD618	6,3	4,0	18,0	26,0		2.000/100
10	PKD1012	7,6	5,0	12,0	22,0	red	1.000/100
	PKD1018	7,6	5,0	18,0	28,0		1.000/100
16	PKD1612	8,8	6,4	12,0	24,0	blue	800/100
	PKD1618	8,8	6,4	18,0	28,0		1.000/100
25	PKD25016	11,2	7,9	16,0	30,0	yellow	500/50
	PKD25022	11,2	7,9	22,0	36,0		500/50
35	PKD35016	12,7	8,9	16,0	30,0	red	400/50
	PKD35025	12,7	8,9	25,0	39,0		400/50
50	PKD50020	15,0	11,0	20,0	36,0	blue	200/50
	PKD50025	15,0	11,0	25,0	41,0		200/50



PA6.6 · Cu · ANNEALED · 3µm TIN PLATED · -20°C +115°C · TRAPEZIUM · SQUARE

The PKD series of insulated end sleeves comply with DIN standard 46228/4.

POLYPROPYLENE INSULATED CHAIN END SLEEVES

CPKD

for flexible Copper conductors

Conductor Size sqmm	Type	Dimensions mm Ø	B	P	L	Insulation Colour	Quantity Box/Bag
0,3÷0,5	CPKD508	2,6	1,3	8,0	14,0	white	5.000
0,75	CPKD7508	2,8	1,5	8,0	14,0	grey	5.000
1	CPKD108	3,0	1,7	8,0	14,0	red	5.000
1,5	CPKD1508	3,5	2,0	8,0	14,0	black	5.000
2,5	CPKD2508	4,2	2,5	8,0	14,0	blue	3.000

PP · Cu · ANNEALED · 3µm TIN PLATED · -20°C +115°C · TRAPEZIUM

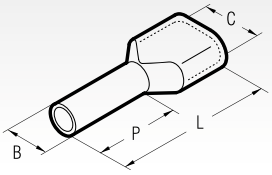
Conforms to DIN standard 46228/4.

Interchangeable application heads are available for crimping these terminals with the bench press ELB-3 (see page 132).

PKET
PKCT

"TWIN" POLYPROPYLENE INSULATED END SLEEVES

for fine stranded conductors



HF HALOGEN FREE

PP · Cu · ANNEALED · 3µm TIN PLATED · -20°C +115°C · TRAPEZIUM · SQUARE

Type PKET, PKCT ranges of twin end sleeves are manufactured from Tin plated electrolytic Copper.
Designed to accomodate two cables terminating in the same sleeve they are ideal for looping conductors.
The operating temperature range is – 20 to + 105°C (Surge + 110°C).

Recommended crimping tools are shown on pages 108 to 132, 137-138, 168, 170-171.

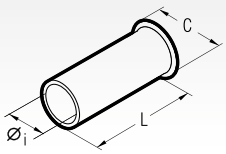
Conductor Size sqmm	Type	Dimensions mm				Insulation Colour	ND1,ND2,ND3, ND4 and HNKE 50 Compression Aperture	Quantity *Box/Bag*
		C	B	P	L			
2 x 0,5	**PKET508**	4,6x2,6	1,5	8,0	15,0	white	1	*500*
2 x 0,75	**PKET7508**	5,2x2,6	2,1	8,0	15,0	grey	1,5	*500*
	PKET7512	5,2x2,6	2,1	12,0	19,0			*500*
2 x 1	**PKET108**	5,8x3,2	2,6	8,0	16,0	red	2,5	*500*
	PKET112	5,8x3,2	2,6	12,0	20,0			*500*
2 x 1,5	**PKET1508**	6,5x3,6	2,6	8,0	16,0	black	2,5	*500*
	PKET1512	6,5x3,6	2,6	12,0	20,0		2,4	*500*
2 x 2,5	**PKET2510**	7,5x4,3	3,2	10,0	18,0	blue	4	*250*
	PKET2512	7,5x4,3	3,2	12,0	21,0			*250*
2 x 4	**PKET412**	9,0x5,2	4,2	12,0	23,0	grey	6	*100*
2 x 6	**PKET614**	10,0x7,2	5,3	14,0	26,0	yellow	10	*100*
2 x 10	**PKET1014**	13,0x7,2	7,0	14,0	26,0	red	16	*100*
2 x 16	**PKET1616**	18,0x9,5	8,8	16,0	30,0	blue	35	*100*

Conductor Size sqmm	Type	Dimensions mm				Insulation Colour	ND1,ND2,ND3, ND4 and HNKE 50 Compression Aperture	Quantity *Box/Bag*
		C	B	P	L			
2 x 0,5	**PKCT508**	4,6x2,6	1,5	8,0	15,0	orange	1	*500*
2 x 0,75	**PKCT7508**	5,2x2,6	2,1	8,0	15,0	white	1,5	*500*
	PKCT7512	5,2x2,6	2,1	12,0	19,0			*500*
2 x 1	**PKCT108**	5,8x3,2	2,6	8,0	16,0	yellow	2,5	*500*
	PKCT112	5,8x3,2	2,6	12,0	20,0			*500*
2 x 1,5	**PKCT1508**	6,5x3,6	2,6	8,0	16,0	red	2,5	*500*
	PKCT1512	6,5x3,6	2,6	12,0	20,0		2,4	*500*
2 x 2,5	**PKCT2510**	7,5x4,3	3,2	10,0	18,0	blue	4	*250*
	PKCT2512	7,5x4,3	3,2	12,0	21,0			*250*
2 x 4	**PKCT412**	9,0x5,2	4,2	12,0	23,0	grey	6	*100*
2 x 6	**PKCT614**	10,0x7,2	5,3	14,0	26,0	black	10	*100*
2 x 10	**PKCT1014**	13,0x7,2	7,0	14,0	26,0	ivory	16	*100*
2 x 16	**PKCT1616**	18,0x9,5	8,8	16,0	30,0	green	35	*100*

UNINSULATED END SLEEVES

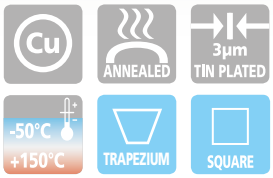
KE

for flexible Copper conductors



Conductor Size sqmm	Type	Dimensions mm			Quantity Box/Bag
		Ø	L	C	
0,5	KE506ST*	1,0	6,0	1,9	50.000/500
	KE508ST	1,0	8,0	1,9	50.000/500
0,75	KE7506ST*	1,2	6,0	2,2	40.000/500
	KE7508ST	1,2	8,0	2,2	50.000/500
1	KE106ST*	1,4	6,0	2,4	25.000/500
	KE110ST*	1,4	10,0	2,4	25.000/500
1,5	KE1508ST	1,7	8,0	2,8	25.000/500
	KE1510ST*	1,7	10,0	2,8	25.000/500
2,5	KE2508ST	2,2	8,0	3,4	25.000/500
	KE2510ST*	2,2	10,0	3,4	15.000/500
4	KE410ST	2,8	10,0	4,0	12.500/500
	KE412ST*	2,8	12,0	4,0	10.000/500
6	KE610ST*	3,5	10,0	4,7	10.000/500
	KE612ST*	3,5	12,0	4,7	7.500/500
	KE616ST*	3,5	15,0	4,7	5.000/500
10	KE1016ST*	4,5	15,0	5,8	4.000/250
16	KE1616ST*	5,8	15,0	7,5	3.000/250
25	KE25015ST	7,3	15,0	9,5	1.500/100
	KE25018ST*	7,3	18,0	9,5	1.500/100
35	KE35012ST	8,3	12,0	10,5	1.500/100
	KE35015ST	8,3	16,0	10,5	1.500/100
	KE35018ST*	8,3	18,0	10,5	1.000/100

**to DIN standard 46 228/1*



KE series end sleeves are manufactured from Tin plated electrolytic Copper.
Designed and developed for use with flexible cables.

Recommended crimping tools are shown on pages 108 to 132, 137-138, 168, 170-171.

UNINSULATED TERMINALS

S range - brazed seam - for Copper conductors

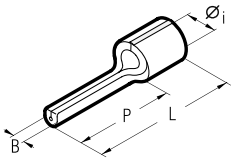
Cu-ETP | Brazed SEAM | ANNEALED | 3µm TIN PLATED | -50°C +150°C | INDENT

S range terminals are manufactured from electrolytic Copper strip and Tin plated. The seam is brazed to provide uniform mechanical strength.

The terminal barrel is rifled to enhance electrical contact and to improve mechanical strength.

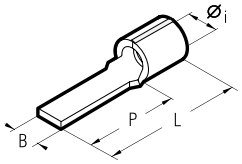
Recommended crimping tools are shown on pages 108 to 129, 168.

pin terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity Box/Bag
		Øi	B	P	L	
0,25÷1,5 [22÷16]	**S1.5-P8**	1,8	1,6	8,0	12,0	*8.000/100*
	S1.5-P10	1,8	1,6	10,0	14,0	*8.000/100*
	S1.5-P12	1,8	1,6	12,0	16,2	*8.000/100*
1,5÷2,5 [16÷14]	**S2.5-P8**	2,4	1,7	8,0	12,0	*7.000/100*
	S2.5-P10	2,4	1,8	10,0	14,0	*7.000/100*
	S2.5-P12	2,4	1,8	12,0	16,0	*7.000/100*
4÷6 [12÷10]	**S6-P10**	3,6	2,2	10,0	16,8	*4.000/100*
	S6-P12	3,6	2,2	12,0	19,0	*4.000/100*
	S6-P14	3,6	2,2	14,0	21,0	*3.500/100*

blade terminals

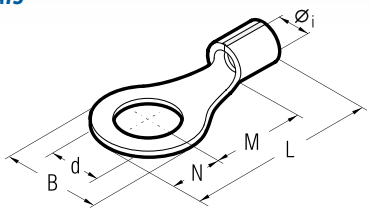


Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity Box/Bag
		Øi	B	P	L	
0,25÷1,5 [22÷16]	**S1.5-PP12**	1,8	3,0	12,8	17,0	*8.000/100*
	S1.5-PP12/1*	1,8	3,0	11,3	15,5	*8.000/100*
	S1.5-PP12/19	1,8	1,9	13,2	17,4	*8.000/100*
	S1.5-PP14	1,8	3,0	14,8	19,0	*8.000/100*
1,5÷2,5 [16÷14]	**S2.5-PP12**	2,4	3,5	12,8	17,0	*7.000/100*
	S2.5-PP12/25	2,4	2,5	13,3	17,5	*7.000/100*
	S2.5-PP16/25	2,4	2,5	17,2	21,4	*7.000/100*
4÷6 [12÷10]	**S6-PP12**	3,6	4,0	13,3	19,7	*4.000/100*
	S6-PP17	3,6	2,9	19,1	25,5	*4.000/100*

**Made to order*

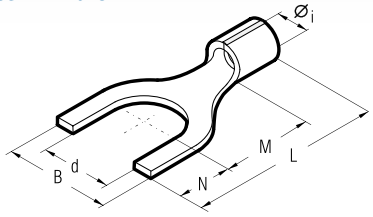
S range - brazed seam - for Copper conductors

ring terminals



Conductor Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag
			Øi	B	M	N	L	d	
0,25÷1,5 [22÷16]	2	S1.5-M2*	1,8	5,6	4,5	2,8	11,5	2,2	7.000/100
	3	S1.5-M3	1,8	5,6	4,5	2,8	11,5	3,2	7.000/100
	3,5	S1.5-M3.5	1,8	5,6	4,5	2,8	11,5	3,7	7.000/100
	3,5	S1.5-M3.5/1*	1,8	6,2	7,1	3,1	14,4	3,7	7.000/100
	4	S1.5-M4	1,8	7,0	6,5	3,5	14,2	4,3	7.000/100
	4	S1.5-M4/3*	1,8	7,8	7,1	3,9	15,2	4,3	7.000/100
	5	S1.5-M5	1,8	7,8	7,1	3,9	15,2	5,3	7.000/100
	6	S1.5-M6	1,8	9,4	8,1	4,7	17,0	6,4	6.000/100
	6	S1.5-M6/1	1,8	12,0	10,3	6,0	20,5	6,4	5.000/100
	7	S1.5-M7	1,8	9,4	8,1	4,7	17,0	7,2	6.000/100
	8	S1.5-M8	1,8	12,0	10,3	6,0	20,5	8,4	4.000/100
	10	S1.5-M10	1,8	15,5	13,0	7,7	25,0	10,5	3.000/100
	12	S1.5-M12	1,8	18,0	15,5	9,0	28,7	13,0	2.000/100
1,5÷2,5 [16÷14]	3	S2.5-M3	2,4	5,6	5,0	2,8	12,0	3,2	6.000/100
	3,5	S2.5-M3.5	2,4	5,6	5,0	2,8	12,0	3,7	6.000/100
	3,5	S2.5-M3.5/1*	2,4	6,2	6,5	3,1	13,8	3,7	5.000/100
	4	S2.5-M4	2,4	8,0	6,5	4,0	14,7	4,3	5.000/100
	5	S2.5-M5	2,4	8,0	7,5	4,0	15,7	5,3	5.000/100
	6	S2.5-M6	2,4	9,4	8,6	4,7	17,5	6,4	5.000/100
	6	S2.5-M6/1	2,4	12,0	10,3	6,0	20,5	6,4	5.000/100
	7	S2.5-M7	2,4	10,0	7,8	5,0	17,0	7,2	5.000/100
	8	S2.5-M8	2,4	12,0	10,3	6,0	20,5	8,4	4.000/100
	10	S2.5-M10	2,4	15,5	13,0	7,7	25,0	10,5	2.500/100
	12	S2.5-M12	2,4	18,0	15,5	9,0	28,7	13,0	2.000/100
4÷6 [12÷10]	3	S6-M3	3,6	8,0	8,1	4,0	18,5	3,2	3.000/100
	3,5	S6-M3.5	3,6	8,0	8,1	4,0	18,5	3,7	3.000/100
	4	S6-M4	3,6	9,0	8,1	4,5	19,0	4,3	3.000/100
	5	S6-M5	3,6	9,0	8,1	4,5	19,0	5,3	2.500/100
	6	S6-M6	3,6	11,0	11,1	5,5	23,0	6,4	2.500/100
	6	S6-M6/1*	3,6	11,0	8,1	5,5	20,0	6,4	2.500/100
	7	S6-M7	3,6	11,0	11,1	5,5	23,0	7,2	2.500/100
	8	S6-M8	3,6	13,6	12,1	6,8	25,3	8,4	2.000/100
	8	S6-M8/1*	3,6	11,0	8,1	5,5	20,0	8,4	2.500/100
	10	S6-M10	3,6	13,6	12,1	6,8	25,3	10,5	2.000/100
	10	S6-M10/1	3,6	15,5	13,8	7,7	28,0	10,5	2.000/100
	12	S6-M12	3,6	19,0	15,1	9,5	31,0	13,0	1.000/100
	14	S6-M14	3,6	21,0	16,1	10,5	33,0	15,0	1.000/100
	16	S6-M16	3,6	24,0	17,1	12,0	35,5	17,0	1.000/100
10 (8)	4	S10-M4	4,8	11,5	9,0	5,8	23,8	4,3	2.000/100
	5	S10-M5	4,8	11,5	9,0	5,8	23,8	5,3	2.000/100
	6	S10-M6	4,8	11,5	9,0	5,8	23,8	6,4	2.000/100
	7	S10-M7	4,8	11,5	9,0	5,8	23,8	7,2	1.500/100

fork/spade terminals



Conductor Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag
			Øi	B	M	N	L	d	
0,25÷1,5 [22÷16]	3	S1.5-U3	1,8	5,5	5,5	4,0	13,7	3,2	7.000/100
	3,5	S1.5-U3.5	1,8	6,0	6,5	3,8	14,5	3,7	7.000/100
	3,5	S1.5-U3.5/2*	1,8	6,4	6,5	3,8	14,5	3,7	7.000/100
	4	S1.5-U4	1,8	6,5	7,5	3,7	15,4	4,3	7.000/100
	4	S1.5-U4/1*	1,8	8,5	7,5	3,7	15,4	4,3	7.000/100
	4	S1.5-U4/2	1,8	7,5	7,5	3,7	15,4	4,3	7.000/100
	5	S1.5-U5	1,8	8,5	7,5	3,7	15,4	5,3	7.000/100
	5	S1.5-U5/1	1,8	9,4	7,5	3,7	15,4	5,3	7.000/100
	6	S1.5-U6	1,8	9,4	8,1	4,7	17,0	6,4	6.000/100
	6	S1.5-U6/1*	1,8	12,0	9,2	7,1	20,5	6,4	6.000/100
	8	S1.5-U8	1,8	14,0	10,0	6,3	20,5	8,4	3.000/100
	10	S1.5-U10	1,8	17,5	13,0	7,7	25,0	10,5	2.500/100
	12	S1.5-U12	1,8	20,0	15,5	9,0	28,7	13,0	2.000/100
1,5÷2,5 [16÷14]	3	S2.5-U3	2,4	5,5	5,5	4,0	13,7	3,2	6.000/100
	3,5	S2.5-U3.5	2,4	6,4	6,5	3,8	14,5	3,7	6.000/100
	3,5	S2.5-U3.5/1*	2,4	7,2	6,5	3,8	14,5	3,7	6.000/100
	4	S2.5-U4	2,4	6,5	7,5	3,7	15,4	4,3	5.000/100
	4	S2.5-U4/1*	2,4	8,5	7,5	3,7	15,4	4,3	6.000/100
	4	S2.5-U4/2*	2,4	7,5	7,5	3,7	15,4	4,3	6.000/100
	5	S2.5-U5	2,4	8,5	7,5	3,7	15,4	5,3	6.000/100
	6	S2.5-U6	2,4	9,4	8,1	4,7	17,0	6,4	5.000/100
	6	S2.5-U6/1*	2,4	12,0	9,2	7,1	20,5	6,4	4.000/100
	8	S2.5-U8	2,4	14,0	10,0	6,3	20,5	8,4	2.500/100
	10	S2.5-U10	2,4	17,5	13,0	7,7	25,0	10,5	2.000/100
	12	S2.5-U12	2,4	20,0	15,5	9,0	28,7	13,0	2.000/100
4÷6 [12÷10]	3,5	S6-U3.5	3,6	7,5	8,5	3,9	18,8	3,7	3.000/100
	4	S6-U4	3,6	7,5	8,0	4,4	18,8	4,3	3.000/100
	5	S6-U5	3,6	9,5	8,0	4,4	18,8	5,3	2.500/100
	6	S6-U6	3,6	10,0	11,0	5,5	22,9	6,4	2.500/100
	8	S6-U8	3,6	13,5	12,0	8,0	26,4	8,4	2.000/100
	10	S6-U10	3,6	15,5	13,0	8,0	27,4	10,5	2.000/100
	10	S6-U10/1*	3,6	17,5	13,8	7,7	28,0	10,5	2.000/100
	12	S6-U12	3,6	21,0	15,1	9,5	31,0	13,0	1.000/100
	14	S6-U14	3,6	23,0	16,1	10,5	33,0	15,0	1.000/100
	16	S6-U16*	3,6	26,0	17,1	11,5	35,0	17,0	1.000/100

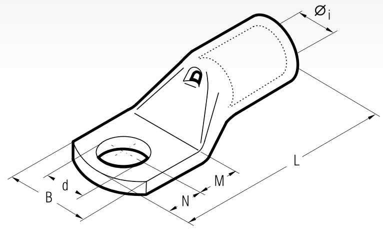
*Made to order

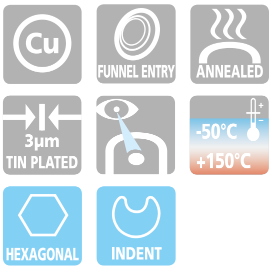
A-M

COPPER TUBE CRIMPING LUGS

for Copper conductors

c UL us File no. E125401





A-M series lugs are manufactured from electrolytic Copper tube.
The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.
Cembre lugs are annealed to guarantee optimum ductility which is an absolute necessity for connectors which will have to withstand the severe deformation arising when compressed and any bending of the palm during installation.
In applications subject to vibration, lugs still have to provide a reliable connection and annealing plays a vital role in avoiding cracking or breaks between the barrel and palm.
The presence of an inspection hole facilitates full insertion of the conductor, whilst the barrel length has been designed to allow easy and accurate positioning of the dies during the crimping operation.
Lugs are electrolytically tin plated to avoid oxidation. A-M series lugs form an important part of Cembre crimping systems for power carrying conductors, details of the appropriate crimping tools and dies are shown opposite and in detail on pages 206 to 207.
Our technicians are always available to provide any technical advice which may be required.
The enclosed table is only indicative of the range and many variations in stud fixing and palm lengths are also available.

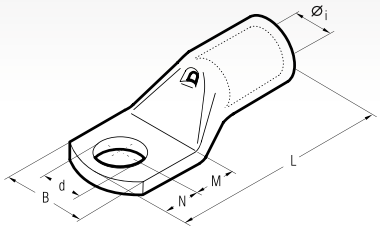
Crimping lugs with two or more holes can be supplied on request.

Conductor Size sqmm Low Str.	Conductor Size sqmm Flex*	Ø Stud mm	Type	Dimensions mm Øi	B	M	N	L	d	Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
0,25÷1,5		3	A03-M3♦	1,8	6,0	4,5	3,5	16,0	3,2	5.000/100	HN1	B15MDE
		3,5	A03-M3.5♦	1,8	6,5	4,5	3,5	16,0	3,7	5.000/100		
		4	A03-M4♦	1,8	6,5	5,0	4,0	17,0	4,3	5.000/100		
		5	A03-M5♦	1,8	7,5	5,5	4,5	18,0	5,3	5.000/100		
		6	A03-M6♦	1,8	9,0	6,0	5,0	19,0	6,4	5.000/100		
1,5÷2,5		3	A06-M3♦	2,4	6,0	4,5	3,5	17,0	3,2	4.000/100	HN1	B15MDE
		3,5	A06-M3.5♦	2,4	6,5	4,5	3,5	17,0	3,7	4.000/100		
		4	A06-M4♦	2,4	7,5	5,0	4,0	18,0	4,3	4.000/100		
		5	A06-M5♦	2,4	8,5	5,5	4,5	19,0	5,3	4.000/100		
		6	A06-M6♦	2,4	9,0	6,0	5,0	20,0	6,4	4.000/100		
		8	A06-M8♦	2,4	12,0	9,0	8,0	26,0	8,4	2.500/100		
4÷6		3	A1-M3	3,6	7,5	4,5	3,5	20,5	3,2	2.000/100	HN1, TN70SE	B15MDE, HT45-E B450ND-BVE, HT51 RH50 B500E B500NDE B550E
		3,5	A1-M3.5	3,6	7,5	4,5	3,5	20,5	3,7	2.000/100		
		4	A1-M4	3,6	8,0	5,0	4,0	21,5	4,3	2.000/100		
		5	A1-M5	3,6	9,0	6,5	6,0	25,0	5,3	2.000/100		
		6	A1-M6	3,6	11,0	7,0	6,0	25,5	6,4	2.000/100		
		8	A1-M8	3,6	14,0	9,0	8,0	29,5	8,4	1.500/100		
		10	A1-M10	3,6	16,5	11,0	10,0	33,5	10,5	1.000/100		
10		4	A2-M4	4,6	10,0	5,0	4,0	22,5	4,3	1.500/100	HN1, HN5, HN-A25, TN70SE, TN120SE	B15MDE, HT45-E B450ND-BVE, HT51 RH50 B500E B500NDE B550E, HT81-U RHU81, HT120 and tools and heads with 130 kN crimping force, ECW-H3D, RHU520
		5	A2-M5	4,6	10,0	6,5	6,0	26,0	5,3	1.500/100		
		6	A2-M6	4,6	11,0	7,0	6,0	26,5	6,4	1.500/100		
		8	A2-M8	4,6	15,0	9,0	8,0	30,5	8,4	1.000/100		
		10	A2-M10	4,6	18,0	11,0	10,0	34,5	10,5	1.000/100		
		12	A2-M12	4,6	19,0	14,0	12,0	39,5	13,2	500/100		
16		4	A3-M4	5,8	11,5	5,0	4,0	25,5	4,3	1.000/100	HN5, HN-A25, TN70SE, TN120SE	B15MDE, HT45-E B450ND-BVE, HT51 RH50 B500E B500NDE B550E, HT81-U RHU81, HT120 and tools and heads with 130 kN crimping force, ECW-H3D, RHU520
		5	A3-M5	5,8	11,5	6,5	6,0	29,0	5,3	1.000/100		
		6	A3-M6	5,8	11,5	7,0	6,0	29,5	6,4	1.000/100		
		8	A3-M8	5,8	15,0	9,0	8,0	33,5	8,4	500/100		
		10	A3-M10	5,8	18,0	11,0	10,0	37,5	10,5	500/100		
		12	A3-M12	5,8	20,0	14,0	12,0	44,0	13,2	500/100		
25		4	A5-M4	7,0	14,0	5,0	4,0	28,0	4,3	1.000/100	HN-A25, TN70SE, TN120SE	HT45-E B450ND-BVE, HT51 RH50 B500E B500NDE B550E, HT81-U RHU81, HT120 and tools and heads with 130 kN crimping force, ECW-H3D, RHU520
		5	A5-M5	7,0	14,0	6,5	6,0	31,5	5,3	500/100		
		6	A5-M6	7,0	14,0	7,0	6,0	32,0	6,4	500/100		
		8	A5-M8	7,0	15,0	9,0	8,0	36,0	8,4	500/100		
		10	A5-M10	7,0	18,0	11,0	10,0	40,0	10,5	500/100		
		12	A5-M12	7,0	21,0	14,0	12,0	45,0	13,2	500/100		
35	25 35	5	A7-M5	8,9	17,0	6,5	6,0	34,0	5,3	500/100	TN70SE, TN120SE	HT45-E B450ND-BVE, HT51 RH50 B500E B500NDE B550E, HT81-U RHU81, HT120 and tools and heads with 130 kN crimping force, ECW-H3D, RHU520
		6	A7-M6	8,9	17,0	7,0	6,0	34,5	6,4	500/100		
		8	A7-M8	8,9	17,0	9,0	8,0	38,5	8,4	400/100		
		10	A7-M10	8,9	19,0	11,0	10,0	42,5	10,5	400/100		
		12	A7-M12	8,9	21,0	14,0	12,0	47,5	13,2	300/50		
50	35 50	6	A10-M6	10,0	19,0	8,0	7,0	38,5	6,4	200/50	TN70SE, TN120SE	HT45-E B450ND-BVE, HT51 RH50 B500E B500NDE B550E, HT81-U RHU81, HT120 and tools and heads with 130 kN crimping force, ECW-H3D, RHU520
		8	A10-M8	10,0	19,0	9,0	8,0	40,5	8,4	200/50		
		10	A10-M10	10,0	20,0	11,5	9,5	44,5	10,5	200/50		
		12	A10-M12	10,0	21,0	12,0	12,0	47,5	13,2	200/50		
		14	A10-M14	10,0	25,0	16,0	14,0	55,5	15,0	200/50		
		16	A10-M16	10,0	26,0	18,0	16,0	59,5	17,0	200/50		
70	50 70	6	A14-M6	11,3	21,0	8,0	7,0	44,0	6,4	200/50	TN70SE, TN120SE	HT45-E B450ND-BVE, HT51 RH50 B500E B500NDE B550E, HT81-U RHU81, HT120 and tools and heads with 130 kN crimping force, ECW-H3D, RHU520
		8	A14-M8	11,3	21,0	9,0	8,0	46,0	8,4	200/50		
		10	A14-M10	11,3	21,0	11,0	10,0	50,0	10,5	200/50		
		12	A14-M12	11,3	22,0	14,0	12,0	55,0	13,2	150/50		
		14	A14-M14	11,3	25,0	16,0	14,0	59,0	15,0	100/50		
		16	A14-M16	11,3	26,0	18,0	16,0	63,0	17,0	100/50		

♦Not UL approved

COPPER TUBE CRIMPING LUGS

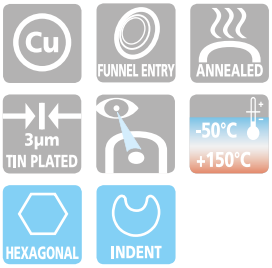
for Copper conductors



Conductor Size sqmm		Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools	Hydraulic Tools								
Low Str.	Flex*			Øi	B	M	N	L	d		TN120SE**	HT45-E	B450ND-BVE	HT51	B550E	RH50	B500E	B500NDE	HT81-U	RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
		6	A19-M6	13,5	25,0	8,0	7,0	50,5	6,4	100/25													
		8	A19-M8	13,5	25,0	9,0	8,0	52,5	8,4	100/25													
	70	10	A19-M10	13,5	25,0	11,0	10,0	56,5	10,5	100/25													
95	95	12	A19-M12	13,5	25,0	14,0	12,0	61,5	13,2	100/25													
		14	A19-M14	13,5	25,0	16,0	14,0	65,5	15,0	100/25													
		16	A19-M16	13,5	27,0	18,0	16,0	69,5	17,0	100/25													
		20	A19-M20	13,5	29,5	22,0	20,0	77,5	21,0	50/25													
		8	A24-M8	15,2	28,5	9,0	8,0	54,0	8,4	100/25													
		10	A24-M10	15,2	28,5	11,0	10,0	58,0	10,5	100/25													
120	95	12	A24-M12	15,2	28,5	14,0	12,0	63,0	13,2	100/25													
	120	14	A24-M14	15,2	28,5	16,0	14,0	67,0	15,0	50/25													
		16	A24-M16	15,2	28,5	18,0	16,0	71,0	17,0	50/25													
		20	A24-M20	15,2	30,0	22,0	20,0	79,0	21,0	50/25													
		8	A30-M8	16,7	31,5	13,0	11,0	69,0	8,4	50/25													
		10	A30-M10	16,7	31,5	13,0	11,0	69,0	10,5	50/25													
150	120	12	A30-M12	16,7	31,5	16,0	14,0	75,0	13,2	50/25													
	150	14	A30-M14	16,7	31,5	18,0	16,0	79,0	15,0	50/25													
		16	A30-M16	16,7	31,5	19,0	17,0	81,0	17,0	50/25													
		20	A30-M20	16,7	31,5	22,0	20,0	87,0	21,0	50/25													
		8	A37-M8	19,2	35,5	13,0	11,0	76,0	8,4	50/25													
		10	A37-M10	19,2	35,5	13,0	11,0	76,0	10,5	40/20													
185	150	12	A37-M12	19,2	35,5	16,0	14,0	82,0	13,2	40/20													
	185	14	A37-M14	19,2	35,5	18,0	16,0	86,0	15,0	30/15													
		16	A37-M16	19,2	35,5	19,0	17,0	88,0	17,0	30/15													
		20	A37-M20	19,2	35,5	22,0	20,0	94,0	21,0	30/15													
		8	A48-M8	21,1	39,0	13,0	11,0	77,5	8,4	30/15													
		10	A48-M10	21,1	39,0	13,0	11,0	77,5	10,5	30/15													
240	185	12	A48-M12	21,1	39,0	14,0	12,0	79,5	13,2	30/15													
	240	14	A48-M14	21,1	39,0	18,0	16,0	92,0	15,0	30/15													
		16	A48-M16	21,1	39,0	19,0	17,0	94,0	17,0	30/15													
		20	A48-M20	21,1	39,0	22,0	20,0	100,0	21,0	30/15													
		10	A60-M10	23,7	44,0	20,0	11,0	96,0	10,5	20/10													
		12	A60-M12	23,7	44,0	20,0	14,0	99,0	13,2	20/10													
300	240	14	A60-M14	23,7	44,0	22,0	16,0	103,0	15,0	20/10													
	300	16	A60-M16	23,7	44,0	22,0	19,0	106,0	17,0	20/10													
		20	A60-M20	23,7	44,0	24,0	23,0	112,0	21,0	20/10													
		12	A80-M12	27,0	51,0	22,0	19,0	113,0	13,2	20/5													
400	300	14	A80-M14	27,0	51,0	22,0	19,0	113,0	15,0	15/5													
	400	16	A80-M16	27,0	51,0	22,0	19,0	113,0	17,0	15/5													
		20	A80-M20	27,0	51,0	24,0	23,0	119,0	21,0	15/5													
500	400	16	A100-M16	30,3	56,5	22,0	19,0	117,0	17,0	15/1													
	500	20	A100-M20	30,3	56,5	24,0	23,0	123,0	21,0	15/1													
630	500	16	A120-M16♦	33,4	61,6	22,0	19,0	128,0	17,0	12/1													
	630	20	A120-M20♦	33,4	61,6	24,0	23,0	134,0	21,0	10/1													
800	630	16	A160-M16♦	38,0	72,0	24,0	19,0	141,0	17,0	6/1													
		20	A160-M20♦	38,0	72,0	24,0	23,0	145,0	21,0	6/1													
1000	800	16	A200-M16♦	44,0	80,0	24,0	19,0	158,0	17,0	6/1													
		20	A200-M20♦	44,0	80,0	24,0	23,0	162,0	21,0	6/1													

*Actual conductor section may require a larger lug eg for 120mm² size use A30-... lug.

**See page 121

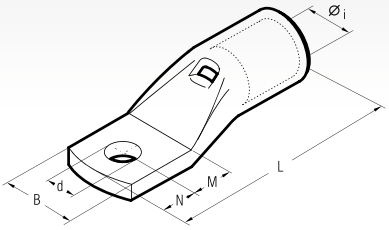


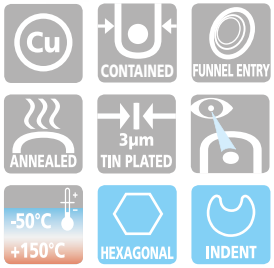
Isolated covers made of PVC for subsequent isolation of the uninsulated connectors, see page 35.

♦Not UL approved

RING TONGUE TERMINALS WITH CONTAINED PALM

for L.V. circuit breakers - for Copper conductors





Cond. Size Flexible sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools			Hydraulic Tools									
			Øi	B	M	N	L	d		HNS	HN-A25	TN70SE	TN120SE	B15MDE	HT45-E B450ND-BVE	HT51 B550E	RH50 B500E B500NDE	HT81-U RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D		
10	5	**A2-M5/9**	4,6	9,0	6,5	6,0	26,0	5,3	*1.000/100*													
16	5	**A3-M5/9**	5,8	9,0	6,5	6,0	29,0	5,3	*1.000/100*													
25	5	**A5-M5/9**	7,0	9,0	6,5	6,0	31,5	5,3	*500/100*													
35	6	**A7B-M6/11.5***	8,9	11,5	8,0	7,0	36,5	6,4	*400/100*													
50	6	**A10B-M6/11.5***	10,0	11,5	8,0	7,0	40,5	6,4	*200/50*													
70	6	**A14B-M6/11.5***	11,3	11,5	8,0	7,0	44,0	6,4	*200/50*													
95	8	**A19B-M8/15.5***	13,5	15,5	9,0	8,0	52,5	8,4	*100/25*													
120	8	**A24B-M8/19***	15,2	19,0	14,0	9,0	60,0	8,4	*100/25*													
	10	**A24B-M10/19***	15,2	19,0	14,0	9,0	60,0	10,5	*100/25*													
150	8	**A30B-M8/19***	16,7	19,0	18,0	9,0	70,0	8,4	*50/25*													
	10	**A30B-M10/19***	16,7	19,0	18,0	9,0	70,0	10,5	*50/25*													
185	10	**A37B-M10/24.5***	19,2	24,5	18,0	9,0	77,0	10,5	*50/25*													
240	10	**A48-M10/31**	21,1	31,0	13,0	9,0	80,0	10,5	*30/15*													
	12	**A48-M12/31**	21,1	31,0	16,0	12,0	86,0	13,2	*30/15*													
	16	**A48-M16/31**	21,1	31,0	19,0	17,0	94,0	17,0	*30/15*													
300	10	**A60B-M10/31**	23,7	31,0	16,0	12,0	95,0	10,5	*20/10*													
	12	**A60B-M12/31**	23,7	31,0	16,0	12,0	95,0	13,2	*20/10*													

**Without inspection hole*

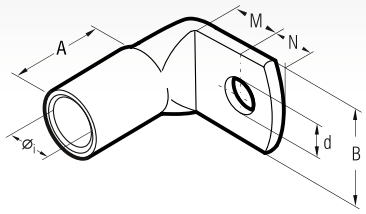
This range of terminals features contained palm width and has been specifically developed for application on L.V. circuit breakers with reduced space terminal blocks.
The contained palm width allows an immediate and easier installation.
Cembre terminals are manufactured from electrolytic Copper tube.
The specifically designed section of the barrel and the choice of principal dimensions are optimising the best combination of mechanical strength and electrical conductivity.
These terminals are annealed to guarantee optimum ductility and are electrolytically Tin plated to avoid oxidation.

The barrel is provided with an internal taper to ease the introduction of the conductor; furthermore, its length grants a comfortable and correct positioning between dies, during crimping operations.
Each palm is marked with the Cembre logo and part number.

Details of the appropriate crimping tools and dies are shown on pages 206 to 207.

COPPER TUBE CRIMPING LUGS ANGLED 90°

for Copper conductors



Conductor Size sqmm		Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools				Hydraulic Tools											
Low Str.	Flex*			Øi	B	M	N	A	d		HN1	HN5	HN-A25	TN70SE	TN120SE**	B15MDE	HT45-E B450ND-BVE	HT51 B550E	RH50 B500E B500NDE	HT81-U RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
6		6	**A1-L6♦**	3,6	11,0	7,0	6,0	9,5	6,4	*2.000/100*															
10		5	**A2-L5**	4,6	10,0	6,5	6,0	10,5	5,3	*1.500/100*															
		6	**A2-L6**	4,6	11,0	7,0	6,0	10,5	6,4	*1.500/100*															
		8	**A2-L8**	4,6	15,0	9,0	8,0	10,5	8,4	*500/100*															
16		5	**A3-L5**	5,8	11,5	6,5	6,0	11,5	5,3	*1.000/100*															
		6	**A3-L6**	5,8	11,5	7,0	6,0	11,5	6,4	*1.000/100*															
		8	**A3-L8**	5,8	15,0	9,0	8,0	11,5	8,4	*1.000/100*															
		10	**A3-L10**	5,8	18,0	11,0	10,0	11,5	10,5	*500/100*															
25		6	**A5-L6**	7,0	14,0	7,0	6,0	13,0	6,4	*500/100*															
		8	**A5-L8**	7,0	15,0	9,0	8,0	13,0	8,4	*500/100*															
		10	**A5-L10**	7,0	18,0	11,0	10,0	13,0	10,5	*500/100*															
35	25	6	**A7-L6**	8,9	17,0	7.0	6,0	15,5	6,4	*500/100*															
		8	**A7-L8**	8,9	17,0	9,0	8,0	15,5	8,4	*300/100*															
	35	10	**A7-L10**	8,9	19,0	11,0	10,0	15,5	10,5	*400/100*															
		12	**A7-L12**	8,9	21,0	14,0	12,0	15,5	13,2	*300/100*															
50	35	6	**A10-L6**	10,0	19,0	8,0	7,0	16,5	6,4	*300/100*															
		8	**A10-L8**	10,0	19,0	9,0	8,0	16,5	8,4	*300/100*															
	50	10	**A10-L10**	10,0	20,0	11,5	9,5	16,5	10,5	*200/50*															
		12	**A10-L12**	10,0	21,0	12,0	12,0	16,5	13,2	*200/50*															
70	50	8	**A14-L8**	11,3	21,0	9,0	8,0	20,0	8,4	*200/50*															
		10	**A14-L10**	11,3	21,0	11,0	10,0	20,0	10,5	*200/50*															
	70	12	**A14-L12**	11,3	22,0	14,0	12,0	20,0	13,2	*150/50*															
		16	**A14-L16**	11,3	26,0	18,0	16,0	20,0	17,0	*150/50*															
95	70	8	**A19-L8**	13,5	25,0	9,0	8,0	24,5	8,4	*100/25*															
		10	**A19-L10**	13,5	25,0	11,0	10,0	24,5	10,5	*100/25*															
	95	12	**A19-L12**	13,5	25,0	14,0	12,0	24,5	13,2	*100/25*															
120	95	10	**A24-L10**	15,2	28,5	11,0	10,0	25,5	10,5	*50/25*															
	120	12	**A24-L12**	15,2	28,5	14,0	12,0	25,5	13,2	*50/25*															
150	120	10	**A30-L10**	16,7	31,5	13,0	11,0	28,5	10,5	*50/25*															
	150	12	**A30-L12**	16,7	31,5	16,0	14,0	28,5	13,2	*50/25*															
185	150	10	**A37-L10**	19,2	31,5	13,0	11,0	31,5	10,5	*50/25*															
	185	12	**A37-L12**	19,2	31,5	16,0	14,0	31,5	13,2	*50/25*															
240	185	10	**A48-L10**	21,1	39,0	13,0	11,0	33,0	10,5	*30/15*															
	240	12	**A48-L12**	21,1	39,0	16,0	14,0	33,0	13,2	*30/15*															
300	240 300	12	**A60-L12**	23,7	44,0	20,0	14,0	42,0	13,2	*20/10*															

**Actual conductor section may require a larger lug eg for 120mm² size use A30-... lug.*

***See page 121*

A-L series lugs angled 90° are manufactured from electrolytic Copper tube.
The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.
Cembre lugs are annealed to guarantee optimum ductility which is an absolute necessity for connectors which will have to withstand the severe deformation arising when compressed and any bending of the palm during installation.
In applications subject to vibration, terminals still have to perform a reliable connection, annealing plays a vital role in avoiding cracking or breaks between the barrel and palm.
The presence of an inspection hole facilitates full insertion of the conductor, whilst the barrel length has been designed to allow easy and accurate positioning of the dies during the crimping operation.
Lugs are electrolytically Tin plated to avoid oxidation.

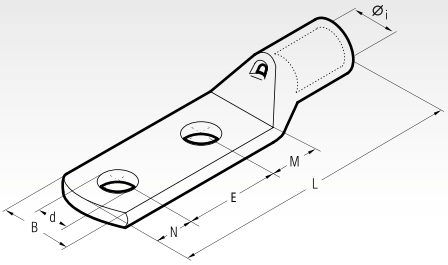
Details of the appropriate crimping tools and dies are shown on pages 206 to 207.

♦Not UL approved

A-2M

COPPER TUBE CRIMPING LUGS

double hole fixing for Copper conductors



Cu · FUNNEL ENTRY · ANNEALED · 3µm TIN PLATED · -50°C +150°C · HEXAGONAL · INDENT

A-2M.. series lugs are manufactured from electrolytic Copper tube conforming to EN13600.
The tube dimensions are designed to optimise electrical conductivity and mechanical strength.
Palms feature double stud holes at standard 44.5mm centres.
Other configurations are available upon request.
Lugs are annealed to ensure ductility and satisfactory performance when subjected to deformation and vibration.
Inspection holes facilitate verification of full conductor insertion, while the barrel length has been determined to allow easy and accurate positioning of the crimping dies.

Lugs are electrolytically Tin plated to avoid oxidation.

Details of the appropriate crimping tools and dies are shown on pages 206 to 207.

Cond. Size sqmm	Ø Stud mm	Ref.	Dimensions mm							Quantity Box	Mechanical Tools	Hydraulic Tools										
			Øi	B	M	N	E	L	d		TN70SE	TN120SE*	HT45-E	B450ND-BVE	HT51	B550E	RH50	B500E	HT 81-U	RHU 81	HT 120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
35	8	A7-2M8◆	8,9	21,0	13,0	11,0	44,5	90,0	8,4	100	●	●	●	●	●	●	●	●	●	●	●	●	●
	10	A7-2M10◆	8,9	19,0	11,0	10,0	44,5	87,0	10,5	100													
	12	A7-2M12◆	8,9	21,0	16,0	14,0	44,5	96,0	13,2	100													
50	8	A10-2M8◆	10,0	19,0	11,0	11,0	44,5	92,0	8,4	50													
	10	A10-2M10◆	10,0	20,0	13,0	11,0	44,5	94,0	10,5	50													
	12	A10-2M12	10,0	21,0	16,0	14,0	44,5	100,0	13,2	50													
70	8	A14-2M8◆	11,3	21,0	11,0	11,0	44,5	95,5	8,4	50													
	10	A14-2M10◆	11,3	21,0	13,0	11,0	44,5	97,5	10,5	50													
	12	A14-2M12◆	11,3	22,0	16,0	14,0	44,5	103,5	13,2	50													
	14	A14-2M14◆	11,3	25,0	18,0	16,0	44,5	107,5	15,0	50													
95	10	A19-2M10◆	13,5	25,0	13,0	11,0	44,5	104,0	10,5	25													
	12	A19-2M12◆	13,5	25,0	16,0	14,0	44,5	110,0	13,2	25													
	14	A19-2M14◆	13,5	25,0	18,0	16,0	44,5	114,0	15,0	25													
	16	A19-2M16◆	13,5	25,0	19,0	17,0	44,5	116,0	17,0	25													
120	10	A24-2M10	15,2	28,5	13,0	11,0	44,5	105,5	10,5	25													
	12	A24-2M12◆	15,2	28,5	16,0	14,0	44,5	113,0	13,2	25													
	14	A24-2M14	15,2	28,5	18,0	16,0	44,5	116,5	15,0	25													
	16	A24-2M16	15,2	28,5	19,0	17,0	44,5	119,0	17,0	25													
150	10	A30-2M10◆	16,7	31,5	13,0	11,0	44,5	113,5	10,5	25													
	12	A30-2M12◆	16,7	31,5	16,0	14,0	44,5	119,5	13,2	25													
	14	A30-2M14	16,7	31,5	18,0	16,0	44,5	123,5	15,0	25													
	16	A30-2M16◆	16,7	31,5	19,0	17,0	44,5	125,5	17,0	25													
185	10	A37-2M10◆	19,2	35,5	13,0	11,0	44,5	120,5	10,5	15													
	12	A37-2M12	19,2	35,5	16,0	14,0	44,5	126,5	13,2	15													
	14	A37-2M14	19,2	35,5	18,0	16,0	44,5	130,5	15,0	15													
	16	A37-2M16◆	19,2	35,5	19,0	17,0	44,5	132,5	17,0	15													
240	10	A48-2M10◆	21,1	39,0	13,0	11,0	44,5	126,5	10,5	15													
	12	A48-2M12	21,1	39,0	16,0	14,0	44,5	132,5	13,2	15													
	14	A48-2M14	21,1	39,0	18,0	16,0	44,5	136,5	15,0	15													
	16	A48-2M16◆	21,1	39,0	19,0	17,0	44,5	138,5	17,0	15													
300	10	A60-2M10◆	23,7	44,0	13,0	11,0	44,5	133,5	10,5	5													
	12	A60-2M12	23,7	44,0	20,0	14,0	44,5	143,5	13,2	5													
	14	A60-2M14	23,7	44,0	22,0	16,0	44,5	147,5	15,0	5													
	16	A60-2M16	23,7	44,0	22,0	17,0	44,5	148,5	17,0	5													
	16	A60-2M16/36◆	23,7	36,0	22,0	17,0	44,5	148,5	17,0	5													
400	12	A80-2M12◆	27,0	51,0	22,0	14,0	44,5	152,5	13,2	5													
	14	A80-2M14◆	27,0	51,0	22,0	16,0	44,5	154,5	15,0	5													
	16	A80-2M16◆	27,0	51,0	22,0	19,0	44,5	157,5	17,0	5													
	16	A80-2M16/41◆	27,0	41,0	22,0	19,0	44,5	157,5	17,0	5													
500	12	A100-2M12◆	30,3	56,5	17,0	14,0	44,5	151,5	13,2	5													
	16	A100-2M16◆	30,3	56,5	19,0	19,0	44,5	158,5	17,0	5													
630	12	A120-2M12◆	33,4	61,6	22,0	14,0	44,5	167,5	13,2	1													
	16	A120-2M16◆	33,4	61,6	22,0	19,0	44,5	172,5	17,0	1													
800	12	A160-2M12◆	38,0	72,0	20,0	14,0	44,5	176,5	13,2	1													
	16	A160-2M16◆	38,0	72,0	22,0	19,0	44,5	183,5	17,0	1													

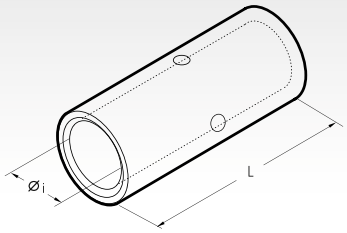
*See page 121

◆Not UL approved

THROUGH CONNECTORS

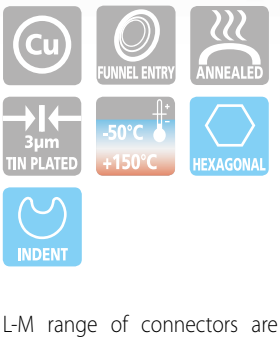
L-M

for Copper conductors



Conductor Size sqmm Low Stranded	Conductor Size sqmm Flexible	Type	Dimensions mm Øi	Dimensions mm L	Quantity Box/Bag	Mechanical Tools: HN1	HN5	HN-A25	TN70SE	TN120 SE*	Hydraulic Tools: B15MDE	HT45-E B450ND-BVE	HT51 B550E	RH50 B500E B500NDE	HT81-U RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
0,25÷1,5	0,25÷1,5	**L03-M♦**	1,8	15	*6.000/100*	●					●							
1,5÷2,5	1,5÷2,5	**L06-M♦**	2,4	15	*4.000/100*	●					●							
4÷6	4÷6	**L1-M♦**	3,6	22	*2.000/100*	●			●		●	●	●	●	●			
10	10	**L2-M**	4,6	25	*1.000/100*	●	●	●	●		●	●	●	●	●			
16	16	**L3-M**	5,8	27	*1.000/100*		●	●	●		●	●	●	●	●			
25	25	**L5-M**	7,0	29	*500/100*			●	●		●	●	●	●	●			
35	25÷35	**L7-M**	8,9	33	*400/100*				●		●	●	●	●	●			
50	35÷50	**L10-M**	10,0	37	*200/50*				●		●	●	●	●	●			
70	50÷70	**L14-M**	11,3	39	*200/50*				●		●	●	●	●	●			
95	70÷95	**L19-M**	13,5	43	*100/25*					●	●	●	●	●	●			
120	95÷120	**L24-M**	15,2	47	*100/25*					●	●	●	●	●	●			
150	120÷150	**L30-M**	16,7	58	*50/25*					●	●	●	●	●	●			
185	150÷185	**L37-M**	19,2	64	*50/25*						●	●	●	●	●			
240	185÷240	**L48-M**	21,1	75	*30/15*						●	●	●	●	●			
300	240÷300	**L60-M**	23,7	90	*20/10*						●	●	●	●	●			
400	300÷400	**L80-M**	27,0	94	*15/5*						●	●	●	●	●	●		
500	400÷500	**L100-M**	30,3	98	*12/1*						●	●	●	●	●	●	●	
630	500÷630	**L120-M♦**	33,4	105	*12/1*						●	●	●	●	●	●	●	
800	600	**L160-M♦**	38,0	112	*9/1*						●	●	●	●	●	●	●	
1000	800	**L200-M♦**	44,0	120	*6/1*						●	●	●	●	●	●	●	

*See page 121

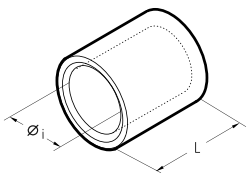


L-M range of connectors are designed for jointing low voltage conductors.
Made of electrolytic Copper tube having the same dimension as A-M series lugs: L-M connectors are annealed and electrolytically Tin plated. They feature an internal taper at both ends to ease the introduction of the conductor and a central stop to ensure correct positioning.
Details of the appropriate crimping tools and dies are shown on pages 206 to 207.

PARALLEL CONNECTORS

L-P

for Copper conductors



Total Conductor Size sqmm Low Stranded	Total Conductor Size sqmm Flexible	Type	Dimensions mm Øi	Dimensions mm L	Quantity Box/Bag	Mechanical Tools: HN1	HN5	HN-A25	TN70SE	TN120 SE*	Hydraulic Tools: B15MDE	HT45-E B450ND-BVE	HT51 B550E	RH50 B500E B500NDE	HT81-U RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
0,25÷1,5	0,25÷1,5	**L03-P**	1,8	6,0	*10.000/100*	●					●							
1,5÷2,5	1,5÷2,5	**L06-P**	2,4	6,0	*5.000/100*	●					●							
4÷6	4÷6	**L1-P**	3,6	9,0	*3.000/100*	●			●		●	●	●	●	●			
10	10	**L2-P**	4,6	10,5	*3.000/100*	●	●	●	●		●	●	●	●	●			
16	16	**L3-P**	5,8	11,5	*2.000/100*		●	●	●		●	●	●	●	●			
25	25	**L5-P**	7,0	13,0	*1.500/100*			●	●		●	●	●	●	●			
35	25÷35	**L7-P**	8,9	14,0	*500/100*				●		●	●	●	●	●			
50	35÷50	**L10-P**	10,0	16,0	*500/100*				●		●	●	●	●	●			
70	50÷70	**L14-P**	11,3	18,0	*500/100*				●		●	●	●	●	●			
95	70÷95	**L19-P**	13,5	19,0	*300/50*					●	●	●	●	●	●			
120	95÷120	**L24-P**	15,2	22,0	*200/50*					●	●	●	●	●	●			
150	120÷150	**L30-P**	16,7	26,5	*100/50*					●	●	●	●	●	●			
185	150÷185	**L37-P**	19,2	26,5	*100/50*						●	●	●	●	●			
240	185÷240	**L48-P**	21,1	34,0	*60/15*						●	●	●	●	●			
300	240÷300	**L60-P**	23,7	43,0	*50/25*						●	●	●	●	●			

*See page 121

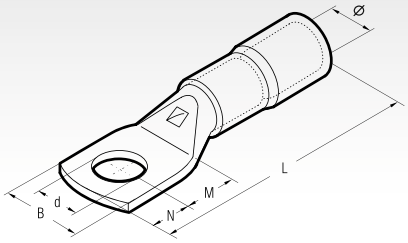
Made of electrolytic Copper tube, having the same dimensions as A-M series lugs, L-P connectors are annealed and electrolytically Tin plated. They feature an internal taper to ease the introduction of the conductor.
Details of the appropriate crimping tools and dies are shown on pages 206 to 207.

♦*Not UL approved*

ANE-M

POLYAMIDE PA6.6 INSULATED COPPER TUBE LUGS

for Copper conductors



PA6.6 | Cu | EASY ENTRY | ANNEALED | 3µm TIN PLATED | -20°C +115°C | INDENT | RADIAL

ANE-M series lugs are manufactured from electrolytic Copper tube annealed and Tin plated.
The interior of the PA6.6 insulated sleeve is funnel shaped so as to ensure complete and easy introduction of the conductor strands.
It also eliminates the need to insulate the terminal using either tape or heat shrinkable tubing.
Furthermore the PA6.6 sleeve avoids the possibility of conductor breakage at the barrel entrance.
The operating temperature range is – 20 to + 115°C (Surge + 130°C).
In order to achieve the best electrical and mechanical performance it is suggested that they are crimped using dies and tools specifically developed for this purpose by Cembre.

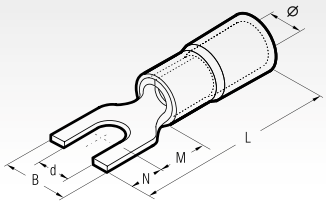
Details of the appropriate crimping tools and dies are shown on pages 210 to 211.

Cond. Size Flexible sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools				Hydraulic Tools								
			Ø	B	M	N	L	d		HNN3	HNN4	TNN70	TNN120	B15MDE	HT51	RH50	B500E	B500NDE	B550E	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
10	4	ANE2-M4	8,0	10,0	5,0	4,0	34,1	4,3	500/100	●	●	●	●	●	●	●	●	●	●	●	●
	5	ANE2-M5	8,0	10,0	6,5	6,0	37,6	5,3	500/100	●	●	●	●	●	●	●	●	●	●	●	●
	6	ANE2-M6	8,0	11,0	7,0	6,0	38,1	6,4	500/100	●	●	●	●	●	●	●	●	●	●	●	●
	8	ANE2-M8	8,0	15,0	9,0	8,0	42,1	8,4	500/100	●	●	●	●	●	●	●	●	●	●	●	●
	10	ANE2-M10	8,0	18,0	11,0	10,0	46,1	10,5	500/100	●	●	●	●	●	●	●	●	●	●	●	●
	12	ANE2-M12	8,0	19,0	14,0	12,0	51,1	13,2	500/100	●	●	●	●	●	●	●	●	●	●	●	●
16	4	ANE3-M4	9,2	11,5	5,0	4,0	38,6	4,3	500/100		●	●	●	●	●	●	●	●	●	●	●
	5	ANE3-M5	9,2	11,5	6,5	6,0	42,1	5,3	500/100		●	●	●	●	●	●	●	●	●	●	●
	6	ANE3-M6	9,2	11,5	7,0	6,0	42,6	6,4	500/100		●	●	●	●	●	●	●	●	●	●	●
	8	ANE3-M8	9,2	15,0	9,0	8,0	46,6	8,4	500/100		●	●	●	●	●	●	●	●	●	●	●
	10	ANE3-M10	9,2	18,0	11,0	10,0	50,6	10,5	400/100		●	●	●	●	●	●	●	●	●	●	●
	12	ANE3-M12	9,2	20,0	14,0	12,0	55,6	13,2	300/100		●	●	●	●	●	●	●	●	●	●	●
25	4	ANE5-M4	11,1	14,0	5,0	4,0	41,0	4,3	300/100			●	●		●	●	●	●	●	●	●
	5	ANE5-M5	11,1	14,0	6,5	6,0	44,5	5,3	300/100			●	●		●	●	●	●	●	●	●
	6	ANE5-M6	11,1	14,0	7,0	6,0	45,0	6,4	300/100			●	●		●	●	●	●	●	●	●
	8	ANE5-M8	11,1	15,0	9,0	8,0	49,0	8,4	300/100			●	●		●	●	●	●	●	●	●
	10	ANE5-M10	11,1	18,0	11,0	10,0	53,0	10,5	300/100			●	●		●	●	●	●	●	●	●
	12	ANE5-M12	11,1	21,0	14,0	12,0	58,0	13,2	250/50			●	●		●	●	●	●	●	●	●
35	6	ANE7-M6	13,6	17,0	7,0	6,0	50,0	6,4	200/50			●	●		●	●	●	●	●	●	●
	8	ANE7-M8	13,6	17,0	9,0	8,0	54,0	8,4	200/50			●	●		●	●	●	●	●	●	●
	10	ANE7-M10	13,6	19,0	11,0	10,0	58,0	10,5	200/50			●	●		●	●	●	●	●	●	●
	12	ANE7-M12	13,6	21,0	14,0	12,0	63,0	13,2	150/50			●	●		●	●	●	●	●	●	●
50	6	ANE10-M6	13,8	19,0	8,0	7,0	53,0	6,4	200/50			●	●		●	●	●	●	●	●	●
	8	ANE10-M8	13,8	19,0	9,0	8,0	55,0	8,4	150/50			●	●		●	●	●	●	●	●	●
	10	ANE10-M10	13,8	20,0	11,5	9,5	59,0	10,5	150/50			●	●		●	●	●	●	●	●	●
	12	ANE10-M12	13,8	21,0	12,0	12,0	62,0	13,2	150/50			●	●		●	●	●	●	●	●	●
70	6	ANE14-M6	15,8	21,0	8,0	7,0	61,0	6,4	100/25			●	●		●	●	●	●	●	●	●
	8	ANE14-M8	15,8	21,0	9,0	8,0	63,0	8,0	100/25			●	●		●	●	●	●	●	●	●
	10	ANE14-M10	15,8	21,0	11,0	10,0	67,0	10,5	100/25			●	●		●	●	●	●	●	●	●
	12	ANE14-M12	15,8	22,0	14,0	12,0	72,0	13,2	100/25			●	●		●	●	●	●	●	●	●
	14	ANE14-M14	15,8	25,0	16,0	14,0	76,0	15,0	100/25			●	●		●	●	●	●	●	●	●
95	8	ANE19-M8	18,0	25,0	9,0	8,0	73,0	8,4	50/25				●		●	●	●	●	●	●	●
	10	ANE19-M10	18,0	25,0	11,0	10,0	77,0	10,5	50/25				●		●	●	●	●	●	●	●
	12	ANE19-M12	18,0	25,0	14,0	12,0	82,0	13,2	50/25				●		●	●	●	●	●	●	●
	14	ANE19-M14	18,0	25,0	16,0	14,0	86,0	15,0	50/25				●		●	●	●	●	●	●	●
	16	ANE19-M16	18,0	27,0	18,0	16,0	80,0	17,0	50/25				●		●	●	●	●	●	●	●
120	10	ANE24-M10	20,0	28,5	11,0	10,0	77,7	10,5	50/25				●		●	●	●	●	●	●	●
	12	ANE24-M12	20,0	28,5	14,0	12,0	86,5	13,2	50/25				●		●	●	●	●	●	●	●
	14	ANE24-M14	20,0	28,5	16,0	14,0	88,5	15,0	50/25				●		●	●	●	●	●	●	●
	16	ANE24-M16	20,0	28,5	18,0	16,0	90,5	17,0	50/25				●		●	●	●	●	●	●	●
150	12	ANE30-M12	23,0	31,5	16,0	14,0	101,0	13,2	30/15				●							●	●
	14	ANE30-M14	23,0	31,5	18,0	16,0	105,0	15,0	30/15				●							●	●
	16	ANE30-M16	23,0	31,5	19,0	17,0	107,0	17,0	30/15				●							●	●
	20	ANE30-M20	23,0	31,5	22,0	20,0	113,0	21,0	30/15				●							●	●

POLYAMIDE PA6.6 INSULATED FORK TERMINALS

ANE-U

for Copper conductors



Conductor Size Flexible sqmm	Ø Stud mm	Type	Dimensions mm Ø	B	M	N	L	d	Quantity Box/Bag	Mechanical Tools HNN3	HNN4	TNN70	TNN120	Hydraulic Tools B15MDE	HT51 RH50 B500E B500NDE B550E	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
10	4	ANE2-U4	8,0	9,8	7,5	7,0	35,1	4,3	500/100								
	5	ANE2-U5	8,0	11,5	7,5	7,0	35,1	5,3	500/100								
16	4	ANE3-U4	9,2	10,0	10,0	8,0	41,1	4,3	500/100								
	5	ANE3-U5	9,2	11,5	10,0	8,0	41,1	5,3	500/100								

PA6.6 · Cu-ETP · Brazed SEAM · EASY ENTRY · ANNEALED · 3µm TIN PLATED · -20°C +115°C · INDENT · RADIAL

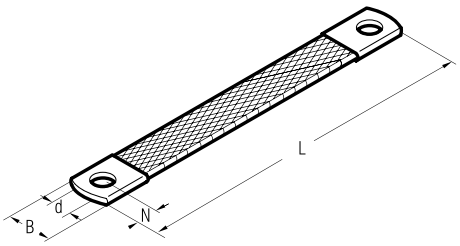
ANE-U series terminals are made from electrolytic Copper, rolled, Tin plated and brazed.
The interior of the PA6.6 insulated sleeve is funnel shaped so as to ensure complete and easy introduction of the conductor strands.
The operating temperature range is – 20 to + 115°C (Surge + 130°C).

In order to achieve the best electrical and mechanical performance it is suggested that they are crimped using dies and tools specifically developed for this purpose by Cembre.

Details of the appropriate crimping tools and dies are shown on pages 210 to 211.

FLEXIBLE BRAIDS

FL



Size sqmm	Ø Stud mm	Type	Dimensions mm B	N	L	d	Quantity
10	8	FL10-150	17	10	150	8,5	50
	8	FL10-200	17	10	200	8,5	50
	8	FL10-250	17	10	250	8,5	50
16	8	FL16-150	17	10	150	8,5	50
	8	FL16-200	17	10	200	8,5	50
	8	FL16-250	17	10	250	8,5	50
	8	FL16-320	17	10	320	8,5	50
	8	FL16-350	17	10	350	8,5	50
	8	FL16-420	17	10	420	8,5	25
	8	FL16-570	17	10	570	8,5	25
	8	FL16-660	17	10	660	8,5	25
25	8	FL25-150	21	10	150	8,5	50
	8	FL25-200	21	10	200	8,5	50
	8	FL25-250	21	10	250	8,5	50
	8	FL25-300	21	10	300	8,5	50

Cu-ETP · ANNEALED · 3µm TIN PLATED · -50°C +150°C

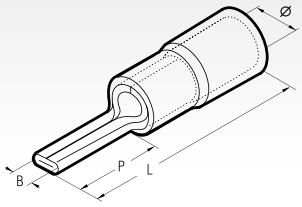
Flexible braids are manufactured from electrolytic Copper wire.
Braids of different conductor sizes or lengths are available on request.
Standard finish - bright Copper.
Flexible braids can be supplied Tin plated, in this case add the suffix "ST" to reference.

E.g.:
- FL 10-150 (Bright Copper)
- FL 10-150-ST (Tin plated)

ANE-P

POLYAMIDE PA6.6 INSULATED PIN TERMINALS

for Copper conductors



PA6.6 · Cu-ETP · Brazed SEAM · EASY ENTRY · ANNEALED · 3µm TIN PLATED · -20°C +115°C · INDENT · RADIAL

Conductor Size Flexible sqmm	Type	Dimensions mm Ø	B	P	L	Quantity Box/Bag	Mechanical Tools HNN3	HNN4	TNN70	TNN120	Hydraulic Tools B15MDE	HT51 RH50 B500E B500NDE B550E	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
10	**ANE2-P12**	8,0	4,3	14,5	35,1	*500/100*								
16	**ANE3-P14**	9,2	5,5	18,0	41,1	*500/100*								
25	**ANE5-P16**	11,1	7,0	20,3	45,0	*300/100*								
35	**ANE7-P20**	13,6	8,0	24,5	55,0	*200/50*								

ANE-P series terminals are made from electrolytic Copper, rolled, Tin plated and brazed.
The interior of the PA6.6 insulated sleeve is funnel shaped so as to ensure complete and easy introduction of the conductor strands.

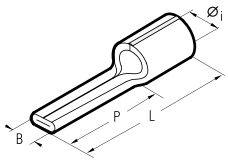
The operating temperature range is – 20 to + 115°C (Surge + 130°C).
In order to achieve the best electrical and mechanical performance it is suggested that they are crimped using dies and tools specifically developed for this purpose by Cembre.

Details of the appropriate crimping tools and dies are shown on pages 210 to 211.

A-P

UNINSULATED PIN CONNECTORS

for Copper conductors



Cu-ETP · Brazed SEAM · ANNEALED · 3µm TIN PLATED · -50°C +150°C · INDENT

Conductor Size sqmm Low Stranded	Flex	Type	Dimensions mm Øi	B	P	L	Quantity Box/Bag	Mechanical Tools HN1	HN5	HN-A25	TN70SE	TN120SE	Hydraulic Tools B15MDE	B450ND-BVE	B500E B550E	HT45-E	HT51 RH50 B500NDE	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
10	10	**A2-P12**	4,8	4,3	14,5	23,5	*1.000/100*												
16	16	**A3-P14**	5,9	5,5	18,0	28,0	*1.500/100*												
25	25	**A5-P16**	7,0	7,0	20,3	32,0	*1.000/100*												
35	25÷35	**A7-P20**	8,9	8,0	24,5	39,0	*500/100*												
50	35÷50	**A10-P25**	10,0	9,5	26,0	45,0	*250/50*												
70	50÷70	**A14-P30**	11,5	11,0	31,0	55,0	*200/50*												

A-P series pin connectors are designed to terminate conductors into contact blocks.
They are manufactured from Copper strip, rolled, brazed and Tin plated.

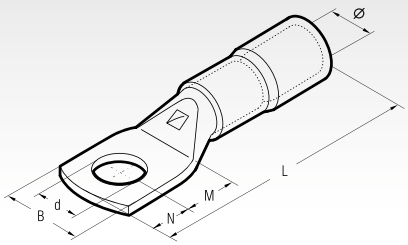
Details of the appropriate crimping tools and dies are shown on pages 206 to 207.

POLYAMIDE PA6.6 INSULATED COPPER TUBE LUGS

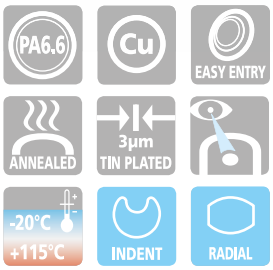
ANE-M

for extra flexible Copper conductors

for fine stranded SPECIAL flexible conductors



Conductor Size Extra Flexible sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools		Hydraulic Tools			
			Ø	B	M	N	L	d		TNN70	TNN120	HT51 RH50 B500E	B500NDE	B550E	HT120 and tools and heads with 130 kN crimping force ECW-H3D
35	6	ANE9-M6/15*	13,6	15,0	8,0	7,0	54,0	6,4	200/50						
	8	ANE9-M8	13,6	17,0	9,0	8,0	56,0	8,4	200/50						
	10	ANE9-M10	13,6	18,5	11,0	10.0	60,0	10,5	150/50						
	12	ANE9-M12	13,6	21,0	14,0	12,0	65,0	13,2	150/50						
50	6	ANE12-M6/15*	15,7	15,0	8,0	7,0	59,5	6,4	100/25						
	8	ANE12-M8	15,7	19,8	9,0	8,0	61,5	8,4	100/25						
	10	ANE12-M10	15,7	19,8	11,0	10,0	65,5	10,5	100/25						
	10	ANE12-M10/19*	15,7	19,0	11,0	10,0	65,5	10,5	100/25						
	12	ANE12-M12	15,7	22,0	14,0	12,0	70,5	13,2	100/25						
70	6	ANE17-M6	17,9	23,0	8,0	7,0	63,8	6,4	100/25						
	8	ANE17-M8	17,9	23,0	9,0	8,0	65,8	8,4	100/25						
	10	ANE17-M10	17,9	23,0	11,0	10,0	69,8	10,5	50/25						
	10	ANE17-M10/19*	17,9	19,0	11,0	10,0	69,8	10,5	100/25						
	12	ANE17-M12	17,9	23,0	14,0	12,0	74,8	13,2	50/25						
	14	ANE17-M14	17,9	25,0	15,5	12,0	76,3	15,0	50/25						
	16	ANE17-M16	17,9	27,0	16,5	13,5	78,8	17,0	50/25						
95	8	ANE20-M8	20,0	27,0	9,0	8,0	70,6	8,4	50/25						
	10	ANE20-M10	20,0	27,0	11,0	10,0	74,6	10,5	50/25						
	12	ANE20-M12	20,0	27,0	14,0	12,0	79,6	13,2	50/25						
	14	ANE20-M14	20,0	27,0	15,5	12,0	81,1	15,0	50/25						
	16	ANE20-M16	20,0	27,0	16,5	13,5	83,6	17,0	50/25						
120	10	ANE29-M10	22,4	30,0	11,0	10,0	81,5	10,5	50/25						
	12	ANE29-M12	22,4	30,0	14,0	12,0	86,5	13,2	50/25						
	14	ANE29-M14	22,4	30,0	15,5	12,0	88,5	15,0	50/25						
	16	ANE29-M16	22,4	30,0	16,5	13,5	90,5	17,0	50/25						
	20	ANE29-M20	22,4	30.0	22,0	20,0	102,5	21,0	40/20						
150	12	ANE35-M12	25,0	34,2	16,0	14,0	95,0	13,2	30/15						
	14	ANE35-M14	25,0	34,2	18,0	16,0	99,0	15,0	30/15						
	16	ANE35-M16	25,0	34,2	19,0	17,0	101,0	17,0	30/15						
	20	ANE35-M20	25,0	34,2	22,0	20,0	107,0	21,0	30/15						

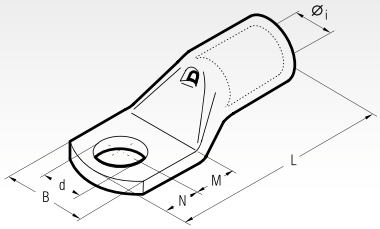


These lugs are particularly recommended for use with extra flexible conductors on for instance, welding machines.
ANE-M series lugs are manufactured from electrolytic Copper tube annealed and Tin plated.
The interior of the PA6.6 insulated sleeve is funnel shaped so as to ensure complete and easy introduction of the conductor strands.
It also eliminates the need to insulate the terminal using either tape or heat shrinkable tubing.
Furthermore the PA6.6 sleeve avoids the possibility of conductor breakage at the barrel entrance.
The operating temperature range is – 20 to + 115°C (Surge + 130°C).
In order to achieve the best electrical and mechanical performance it is suggested that they are crimped using dies and tools specifically developed for this purpose by Cembre.

Details of the appropriate crimping tools and dies are shown on pages 210 to 211.

COPPER TUBE CRIMPING LUGS

for extra flexible Copper conductors



for fine stranded SPECIAL flexible conductors

Cu · FUNNEL ENTRY · ANNEALED · 3µm TIN PLATED · -50°C +150°C · HEXAGONAL · INDENT

These lugs are particularly recommended for use with extra flexible conductors on for instance, welding machines.
A-M series lugs are designed to suit panel applications.
The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.
Cembre lugs are annealed to guarantee optimum ductility and electrolytically Tin plated to avoid oxidation.
The presence of an inspection hole facilitates full insertion of the conductor.

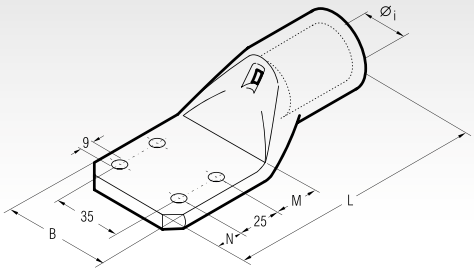
Details of the appropriate crimping tools and dies are shown on pages 206 to 207.

Conductor Size Extra Flexible sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools		Hydraulic Tools											
			Øi	B	M	N	L	d		TN70SE	TN120SE	HT45-E	B450ND-BVE	HT51	RH50	B500E	B500NDE	B550E	HT81-U	RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
35	6	A9-M6/15	9,3	15,0	8,0	7,0	38,5	6,4	400/100														
	8	A9-M8	9,3	17,0	9,0	8,0	40,5	8,4	400/100														
	10	A9-M10	9,3	18,5	11,0	10,0	44,5	10,5	400/100														
	12	A9-M12	9,3	21,0	14,0	12,0	49,5	13,2	300/50														
50	6	A12-M6/15	11,0	15,0	8,0	7,0	40,5	6,4	200/50														
	8	A12-M8	11,0	19,3	9,0	8,0	42,5	8,4	200/50														
	10	A12-M10	11,0	19,3	11,0	10,0	46,5	10,5	200/50														
	10	A12-M10/19	11,0	19,0	11,0	10,0	46,5	10,5	200/50														
	12	A12-M12	11,0	22,0	14,0	12,0	51,5	13,2	200/50														
70	6	A17-M6	13,0	23,0	8,0	7,0	45,0	6,4	200/50														
	8	A17-M8	13,0	23,0	9,0	8,0	47,0	8,4	150/50														
	10	A17-M10	13,0	23,0	11,0	10,0	51,0	10,5	150/50														
	10	A17-M10/19	13,0	19,0	11,0	10,0	51,0	10,5	200/50														
	12	A17-M12	13,0	23,0	14,0	12,0	56,0	13,2	150/50														
	14	A17-M14	13,0	25,0	15,5	12,0	57,5	15,0	150/25														
	16	A17-M16	13,0	27,0	16,5	13,5	60,0	17,0	150/25														
95	8	A20-M8	15,0	27,0	9,0	8,0	50,0	8,4	100/25														
	10	A20-M10	15,0	27,0	11,0	10,0	54,0	10,5	100/25														
	12	A20-M12	15,0	27,0	14,0	12,0	59,0	13,2	100/25														
	14	A20-M14	15,0	27,0	15,5	12,0	60,5	15,0	100/25														
	16	A20-M16	15,0	27,0	16,5	13,5	63,0	17,0	100/25														
120	8	A29-M8	16,5	30,0	9,0	8,0	53,5	8,4	100/25														
	10	A29-M10	16,5	30,0	11,0	10,0	57,5	10,5	100/25														
	12	A29-M12	16,5	30,0	14,0	12,0	62,5	13,2	100/25														
	14	A29-M14	16,5	30,0	15,5	12,0	64,0	15,0	100/25														
	16	A29-M16	16,5	30,0	16,5	13,5	66,5	17,0	100/25														
	20	A29-M20	16,5	30,0	22,0	20,0	78,5	21,0	75/25														
150	10	A35-M10	19,2	34,2	13,0	11,0	65,5	10,5	50/25														
	12	A35-M12	19,2	34,2	16,0	14,0	71,5	13,2	50/25														
	14	A35-M14	19,2	34,2	18,0	16,0	75,5	15,0	50/25														
	16	A35-M16	19,2	34,2	19,0	17,0	77,5	17,0	50/25														
	20	A35-M20	19,2	34,2	22,0	20,0	83,5	21,0	50/25														
185	10	A40-M10	21,0	37,5	13,0	11,0	73,0	10,5	30/15														
	12	A40-M12	21,0	37,5	16,0	14,0	79,0	13,2	30/15														
	14	A40-M14	21,0	37,5	18,0	16,0	83,0	15,0	30/15														
	16	A40-M16	21,0	37,5	19,0	17,0	85,0	17,0	30/15														
	20	A40-M20	21,0	37,5	22,0	20,0	91,0	21,0	30/15														

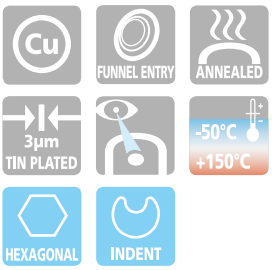
COPPER TUBE LUGS 4-ESI FIXING

A-4ESI

for Copper conductors



Conductor Size sqmm	Type	Dimensions mm Ø	B	M	N	L	Quantity Box/Bag	Hydraulic Tools HT51 B550E	B500E B500NDE	RH 50	HT81-U RHU81	HT 120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
185	A 37-4ESI	19,2	61,0	20	15	124	20/10							
240	A 48-4ESI	21,1	61,0	20	15	128	20/10							
300	A 60-4ESI	23,7	61,0	20	15	133	15/5							
400	A 80-4ESI	27,0	61,0	20	15	134	15/5							
500	A 100-4ESI	30,3	61,0	20	15	139	10/5							
630	A 120-4ESI	33,4	61,6	20	15	144	10/5							
800	A 160-4ESI	38,0	61,0	20	15	158	8/1							

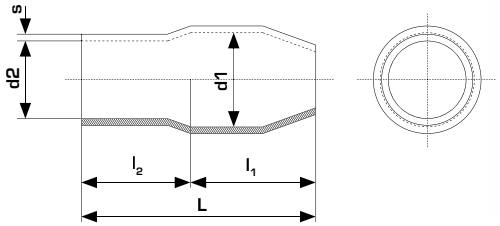


A-4ESI series lugs are made from high purity electrolytic Copper tube, annealed and Tin plated.
The four hole stud fixing in accordance with E.A. specifications ensures compatibility with most transformer fixing arrangements.
Details of the appropriate crimping tools and dies are shown on pages 206 to 207.

INSULATED COVERS

ES

For uninsulated connectors



Type	Connectors A-M *	d1 Ø	d2 Ø	l1 ±1	l2 ±1	L ± 2	s ± 0.2	Quantity	Minimum Order Qty
ES03-..	A03	3.3	3.1	7.0	8.0	15.0	0.6	100	3.000
ES06-..	A06	4.5	3.7	8.0	8.0	16.0	0.7	100	
ES1-..	A1	5.7	4.1	9.0	9.0	18.0	0.8	100	
ES2-..	A2	7.2	6.2	11.0	10.0	21.0	1.0	100	
ES3-..	A3	10.0	8.0	15.0	13.0	28.0	1.1	100	1.000
ES5-..	A5	12.0	9.5	15.0	14.0	29.0	1.2	100	
ES10-..	A7, A9, A10	14.0	11.8	17.0	17.0	34.0	1.4	100	
ES14-..	A12, A14	17.0	13.9	22.0	20.0	42.0	1.5	100	500
ES19-..	A17, A19	19.0	16.0	25.0	21.0	46.0	1.5	50	
ES24-..	A20, A24	22.0	18.0	31.0	24.0	55.0	1.7	50	200
ES30-..	A29, A30	24.0	20.0	32.0	28.0	60.0	1.8	50	
ES37-..	A35, A37	26.0	22.0	34.0	31.0	65.0	1.8	50	
ES40-..	A40	32.2	24.0	38.0	31.0	69.0	2.0	50	
ES48-..	A48	36.5	27.2	42.0	33.0	75.0	2.0	50	100
ES80-..	A60, A80	36.7	30.0	42.0	33.0	75.0	2.0	25	

Add the suffix corresponding to the selected colour to the reference:

-BU blue, -GY grey, -BR brown, -BK black, -RE red, -YE yellow,

Insulated covers in PVC for general use with Cembre A-M copper tube lugs characterised by environmental tolerance, flexibility, not inflammability & stable performance. Widely used for the insulation and protection of connections and electrical terminations.

General features:

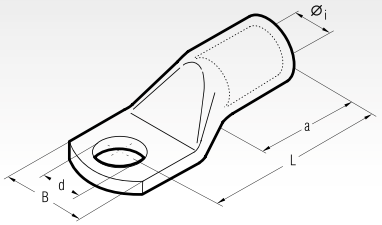
- Material: PVC
- Self extinguishing (UL94): V0
- Working temperature: 85 °C
- Colours: red, yellow, blue, black, grey, brown.

** See A-M type copper tube lugs on pages 24-25, 34*
*** Depending on the diameter of the insulated cable*

DR

COPPER TUBE CRIMPING LUGS ACCORDING TO DIN 46235

for Copper conductors



Cu · FUNNEL ENTRY · ANNEALED · 3µm TIN PLATED · DIN 46235 · -50°C +150°C · HEXAGONAL

DR series lugs are manufactured from electrolytic Copper tube and designed to obtain high electrical conductivity combined with the mechanical strength required to resist vibration and pull out.
Cembre lugs are annealed and Tin plated for improved surface protection.
The annealing process optimises the structural features of the material allowing easier crimping and greater resistance to mechanical stresses.
Dimensions are according to DIN 46235.
The barrel entrance of the lug is chamfered to allow easy conductor insertion, while its length facilitates precise positioning in the crimping die.

Each lug is marked with:
- Cembre logo and part code.
- conductor type and csa (mm²).
- stud Ø (mm).
- crimping die code

Details of the appropriate crimping tools and dies are shown on page 217.

Consult us for special requirements

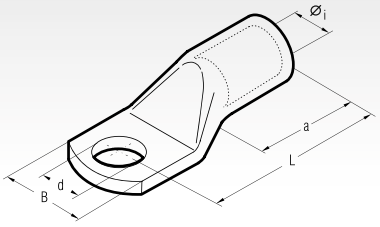
Conductor Size sqmm	Ø Stud mm	Type	Code	Dimensions mm					Quantity Box/Bag	Mechanical Tools			Hydraulic Tools											
				Øi	d	L	B	a		HN-D25	TND 6-70	TND 10-120	B15MDE	HT45-E	B450ND-BVE	HT51	RH50	B500E	B500NDE	B550E	HT81-U	RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
6	5	DR6-5	5	3,8	5,3	24,0	8,5	10,0	800/100																
	6	DR6-6	5	3,8	6,4	24,0	9,0	10,0	800/100																
	8	DR6-8*	5	3,8	8,4	26,0	13,0	10,0	800/100																
10	5	DR10-5	6	4,5	5,3	27,5	10,0	10,0	800/100																
	6	DR10-6	6	4,5	6,4	27,0	10,0	10,0	800/100																
	8	DR10-8*	6	4,5	8,4	28,0	13,0	10,0	800/100																
	10	DR10-10*	6	4,5	10,5	28,5	15,0	10,0	800/100																
16	5	DR16-5*	8	5,5	5,3	36,0	13,0	20,0	400/100																
	6	DR16-6	8	5,5	6,4	36,0	13,0	20,0	400/100																
	8	DR16-8	8	5,5	8,4	37,0	13,0	20,0	400/100																
	10	DR16-10	8	5,5	10,5	40,0	17,0	20,0	400/100																
	12	DR16-12*	8	5,5	13,0	41,0	19,0	20,0	400/100																
25	6	DR25-6	10	7,0	6,4	39,0	14,6	20,0	400/100																
	8	DR25-8	10	7,0	8,4	39,5	16,0	20,0	400/100																
	10	DR25-10	10	7,0	10,5	40,0	17,0	20,0	200/100																
	12	DR25-12	10	7,0	13,0	40,5	19,0	20,0	200/100																
35	6	DR35-6*	12	8,2	6,4	42,5	17,5	20,0	200/100																
	8	DR35-8	12	8,2	8,4	42,0	17,0	20,0	200/100																
	10	DR35-10	12	8,2	10,5	43,0	19,0	20,0	200/100																
	12	DR35-12	12	8,2	13,0	43,0	21,0	20,0	200/100																
	16	DR35-16*	12	8,2	17,0	44,0	28,0	20,0	200/100																
50	6	DR50-6*	14	10,0	6,4	52,0	20,0	28,0	100/25																
	8	DR50-8	14	10,0	8,4	52,0	20,0	28,0	100/25																
	10	DR50-10	14	10,0	10,5	53,0	22,0	28,0	100/25																
	12	DR50-12	14	10,0	13,0	53,0	24,0	28,0	100/25																
	16	DR50-16	14	10,0	17,0	57,0	28,0	28,0	100/25																
70	8	DR70-8	16	11,5	8,4	56,0	24,0	28,0	50/25																
	10	DR70-10	16	11,5	10,5	56,0	24,0	28,0	50/25																
	12	DR70-12	16	11,5	13,0	56,0	24,0	28,0	50/25																
	16	DR70-16	16	11,5	17,0	60,0	30,0	28,0	50/25																
	20	DR70-20*	16	11,5	21,0	84,5	30,0	28,0	50/25																
95	8	DR95-8*	18	13,5	8,4	65,0	28,0	35,0	50/25																
	10	DR95-10	18	13,5	10,5	66,0	28,0	35,0	50/25																
	12	DR95-12	18	13,5	13,0	66,0	28,0	35,0	50/25																
	16	DR95-16	18	13,5	17,0	65,5	32,0	35,0	50/25																
	20	DR95-20*	18	13,5	21,0	71,0	33,0	35,0	50/25																
120	8	DR120-8*	20	15,5	8,4	70,0	31,0	35,0	50/25																
	10	DR120-10	20	15,5	10,5	70,0	32,0	35,0	50/25																
	12	DR120-12	20	15,5	13,0	70,5	32,0	35,0	50/25																
	16	DR120-16	20	15,5	17,0	70,0	32,0	35,0	50/25																
	20	DR120-20	20	15,5	21,0	72,0	36,0	35,0	50/25																
150	10	DR150-10	22	17,0	10,5	79,0	34,0	35,0	50/25																
	12	DR150-12	22	17,0	13,0	78,5	34,0	35,0	50/25																
	16	DR150-16	22	17,0	17,0	78,0	34,0	35,0	50/25																
	20	DR150-20	22	17,0	21,0	78,0	40,0	35,0	50/25																
185	10	DR185-10	25	19,0	10,5	83,0	37,0	40,0	25/25																
	12	DR185-12	25	19,0	13,0	82,5	37,0	40,0	25/25																
	16	DR185-16	25	19,0	17,0	82,0	37,0	40,0	25/25																
	20	DR185-20	25	19,0	21,0	83,0	40,0	40,0	25/25																
240	10	DR240-10*	28	21,5	10,5	92,0	42,0	40,0	20/10																
	12	DR240-12	28	21,5	13,0	92,0	42,5	40,0	20/10																
	16	DR240-16	28	21,5	17,0	92,0	42,5	40,0	20/10																
	20	DR240-20	28	21,5	21,0	92,0	45,0	40,0	20/10																

** Dimensions of the tube according to DIN 46235; Stud hole not included within the standard.*

COPPER TUBE CRIMPING LUGS ACCORDING TO DIN 46235

DR

for Copper conductors



Cu · FUNNEL ENTRY · ANNEALED · 3µm TIN PLATED · DIN 46235 · -50°C +150°C · HEXAGONAL

Conductor Size sqmm	Ø Stud mm	Type	Code	Dimensions mm Øi	d	L	B	a	Quantity Box/Bag	Hydraulic Tools: RH50 B500E B500NDE B550E	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
300	12	DR300-12*	32	24,5	13,0	104,0	47,0	50,0	10/5				
	16	DR300-16	32	24,5	17,0	100,0	48,0	50,0	10/5				
	20	DR300-20	32	24,5	21,0	100,0	47,0	50,0	10/5				
400	12	DR400-12*	38	27,5	13,0	117,0	55,0	70,0	5/5				
	16	DR400-16	38	27,5	17,0	117,0	55,0	70,0	5/5				
	20	DR400-20	38	27,5	21,0	117,0	55,0	70,0	5/5				
500	12	DR500-12*	42	31,0	13,0	130,0	60,0	70,0	5/5				
	16	DR500-16*	42	31,0	17,0	130,0	60,0	70,0	5/5				
	20	DR500-20	42	31,0	21,0	130,0	60,0	70,0	5/5				
625	20	DR625-20	44	34,5	21,0	135,0	63,0	80,0	5/5				
800	20	DR800-20	52	40,0	21,0	166,0	75,0	100,0	5/5				
1.000	20	DR1000-20	58	44,0	21,0	166,0	85,0	100,0	5/5				

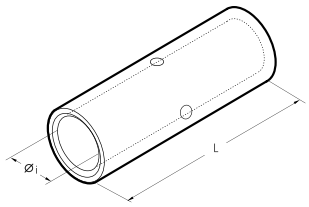
** Dimensions of the tube according to DIN 46235; Stud hole not included within the standard.*

Consult us for special requirements

CRIMPING THROUGH CONNECTORS ACCORDING TO DIN 46267 T.1

DSV

for Copper conductors



Cu · FUNNEL ENTRY · ANNEALED · 3µm TIN PLATED · DIN 46267T.1 · -50°C +150°C · HEXAGONAL

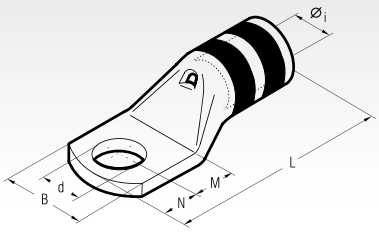
Conductor Size sqmm	Type	Code	Dimensions mm Øi	L	Quantity Box/Bag	Mechanical Tools: HN-D25	TND6-70	TND10-120	Hydraulic Tools: B15MDE	HT45-E B450ND-BVE	HT51	RH50 B500E B500NDE B550E	HT81-U RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
6	DSV6	5	3,7	30	1.200/100											
10	DSV10	6	4,4	30	1.200/100											
16	DSV16	8	5,5	50	400/100											
25	DSV25	10	7,0	50	200/100											
35	DSV35	12	8,2	50	200/100											
50	DSV50	14	10,0	56	200/50											
70	DSV70	16	11,5	56	100/50											
95	DSV95	18	13,5	70	100/50											
120	DSV120	20	15,5	70	50/25											
150	DSV150	22	17,0	80	50/25											
185	DSV185	25	19,0	85	25/25											
240	DSV240	28	21,5	90	15/15											
300	DSV300	32	24,5	100	10/5											
400	DSV400	38	27,5	150	10/5											
500	DSV500	42	31,0	160	5/5											
625	DSV625	44	34,5	160	5/5											
800	DSV800	52	40,0	200	5/5											
1.000	DSV1000	58	44,0	200	5/5											

DSV series through connectors are manufactured from electrolytic Copper tube, annealed and surface protected by Tin plating.
Internal and external dimensions match those of DR series lugs.
Chamfered ends and a central stop provide easy and correct insertion of the conductor.
Details of the appropriate crimping tools and dies are shown on page 217.

Consult us for special requirements

COLOUR CODED COPPER CRIMPING LUGS

for Copper conductors



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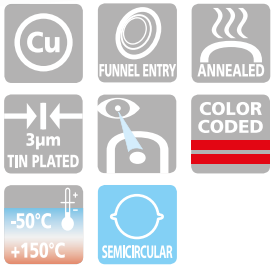


C series lugs are manufactured from electrolytic Copper tube.
The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.
Cembre lugs are annealed to guarantee optimum ductility, an absolute necessity for connectors which will have to withstand the severe deformation arising when compressed and any bending of the palm during installation.
In applications subject to vibration, terminals have to perform a reliable connection, the annealing process plays a vital role in avoiding cracking or breaks between the barrel and palm.
The presence of an inspection hole facilitates full insertion of the conductor. The barrel length has been designed to allow easy and accurate positioning of the dies during the crimping operation.
Lugs are electrolytically Tin plated to avoid oxidation.
The tongue is clearly marked with wire size and die index for Cembre tools.
UL listed for US and Canada per UL486A up to 35 KV.
C series lugs are an important part of Cembre crimping systems for power carrying conductors.

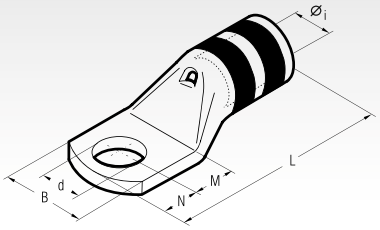
Details of the appropriate crimping tools and dies are shown on page 216.

Cembre technicians are available to provide technical advice as required. Please consult Cembre for products not listed.

Cond. Size sqmm	Conductor AWG Size	Conductor AWG Navy	Ø Stud mm	Type	Dimensions mm Øi	B	M	N	L	d	Colour Code	Quantity Box/Bag	Mechanical Tools TN70SE	Mechanical Tools TN120SE	Hydraulic Tools B15MDE	Hydraulic Tools HT51 RH50 B500E B500NDE HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
10	8	23	4	C8-8	4,6	10,0	5,0	4,0	22,5	4,3	RED	600/50	●	●	●	●
			5	C8-10	4,6	10,0	6,5	6,0	26,0	5,3		600/50	●	●	●	●
			6	C8-14	4,6	11,0	7,0	6,0	26,5	6,4		600/50	●	●	●	●
			8	C8-516	4,6	15,0	9,0	8,0	30,5	8,4		600/50	●	●	●	●
			10	C8-38	4,6	18,0	11,0	10,0	34,5	10,5		600/50	●	●	●	●
			12	C8-12	4,6	19,0	14,0	12,0	39,5	13,2		600/50	●	●	●	●
16	6		4	C6-8	5,8	11,5	5,0	4,0	25,5	4,3	BLUE	600/50	●	●	●	●
			5	C6-10	5,8	11,5	6,5	6,0	29,0	5,3		600/50	●	●	●	●
			6	C6-14	5,8	11,5	7,0	6,0	29,5	6,4		600/50	●	●	●	●
			8	C6-516	5,8	15,0	9,0	8,0	33,5	8,4		600/50	●	●	●	●
			10	C6-38	5,8	18,0	11,0	10,0	37,5	10,5		600/50	●	●	●	●
			12	C6-12	5,8	20,0	14,0	12,0	43,5	13,2		400/50	●	●	●	●
25	4	40	4	C4-8	6,2	12,5	5,0	4,0	25,5	4,3	GREY	600/50	●	●		●
			5	C4-10	6,2	12,5	6,5	6,0	29,0	5,3		600/50	●	●		●
			6	C4-14	6,2	12,5	7,0	6,0	29,5	6,4		600/50	●	●		●
			8	C4-516	6,2	15,0	9,0	8,0	33,5	8,4		600/50	●	●		●
			10	C4-38	6,2	18,0	11,0	10,0	37,5	10,5		400/50	●	●		●
			12	C4-12	6,2	20,0	14,0	12,0	42,5	13,2		400/50	●	●		●
	3	50	4	C3-8	7,0	14,0	5,0	4,0	28,0	4,3	WHITE	600/50	●	●		●
			5	C3-10	7,0	14,0	6,5	6,0	31,5	5,3		600/50	●	●		●
			6	C3-14	7,0	14,0	7,0	6,0	32,0	6,4		600/50	●	●		●
			8	C3-516	7,0	15,0	9,0	8,0	36,0	8,4		600/50	●	●		●
			10	C3-38	7,0	18,0	11,0	10,0	40,0	10,5		400/50	●	●		●
			12	C3-12	7,0	21,0	14,0	12,0	45,0	13,2		400/50	●	●		●
35	2	60	5	C2-10	7,6	17,0	6,5	6,0	33,0	5,3	BROWN	400/50	●	●		●
			6	C2-14	7,6	17,0	7,0	6,0	33,5	6,4		400/50	●	●		●
			8	C2-516	7,6	17,0	9,0	8,0	37,5	8,4		400/50	●	●		●
			10	C2-38	7,6	19,0	11,0	10,0	41,5	10,5		400/50	●	●		●
			12	C2-12	7,6	21,0	14,0	12,0	46,5	13,2		200/50	●	●		●
	1	75	6	C1-14	8,9	17,0	7,0	6,0	34,5	6,4	GREEN	400/50	●	●		●
			8	C1-516	8,9	17,0	9,0	8,0	38,5	8,4		400/50	●	●		●
			10	C1-38	8,9	19,0	11,0	10,0	42,5	10,5		200/50	●	●		●
			12	C1-12	8,9	21,0	14,0	12,0	47,5	13,2		200/50	●	●		●
50	1/0	100	6	C1/0-14	10,0	19,0	8,0	7,0	40,5	6,4	PINK	200/25	●	●		●
			8	C1/0-516	10,0	19,0	9,0	8,0	42,5	8,4		200/25	●	●		●
			10	C1/0-38	10,0	20,0	11,0	10,0	46,5	10,5		200/25	●	●		●
			12	C1/0-12	10,0	21,0	14,0	12,0	51,5	13,2		200/25	●	●		●
			14	C1/0-916	10,0	25,0	16,0	14,0	55,5	15,0		200/25	●	●		●
			16	C1/0-58	10,0	26,0	18,0	16,0	59,5	17,0		200/25	●	●		●
70	2/0	125	6	C2/0-14	11,3	21,0	8,0	7,0	44,0	6,4	BLACK	200/25	●	●		●
			8	C2/0-516	11,3	21,0	9,0	8,0	46,0	8,4		200/25	●	●		●
			10	C2/0-38	11,3	21,0	11,0	10,0	50,0	10,5		200/25	●	●		●
			12	C2/0-12	11,3	22,0	14,0	12,0	55,0	13,2		200/25	●	●		●
			14	C2/0-916	11,3	25,0	16,0	14,0	59,0	15,0		100/25	●	●		●
			16	C2/0-58	11,3	26,0	18,0	16,0	63,0	17,0		100/25	●	●		●
			20	C2/0-34	11,3	29,5	22,0	20,0	75,0	21,0		100/25	●	●		●
95	3/0	150	6	C3/0-14	12,4	23,0	8,0	7,0	45,0	6,4	ORANGE	200/25		●		●
			8	C3/0-516	12,4	23,0	9,0	8,0	47,0	8,4		100/25		●		●
			10	C3/0-38	12,4	23,0	11,0	10,0	51,0	10,5		100/25		●		●
			12	C3/0-12	12,4	24,0	14,0	12,0	56,0	13,2		100/25		●		●
			14	C3/0-916	12,4	27,0	16,0	14,0	60,0	15,0		100/25		●		●
			16	C3/0-58	12,4	28,0	18,0	16,0	64,0	17,0		100/25		●		●
			20	C3/0-34	12,4	31,5	22,0	20,0	72,0	21,0		100/25		●		●

COLOUR CODED COPPER CRIMPING LUGS

for Copper conductors



Cond. Size sqmm	Sez. Cond. AWG Size	Sez. Cond. AWG Navy	Ø Stud mm	Type	Dimensions mm Øi	B	M	N	L	d	Colour Code	Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
			6	C4/0-14	13,5	25,0	8,0	7,0	50,5	6,4		100/25		
			8	C4/0-516	13,5	25,0	9,0	8,0	52,5	8,4		100/25		
			10	C4/0-38	13,5	25,0	11,0	10,0	56,5	10,5		100/25		
			12	C4/0-12	13,5	25,0	14,0	12,0	61,5	13,2		100/25		
	4/0	200	14	C4/0-916	13,5	25,0	16,0	14,0	65,5	15,0	PURPLE	100/25		
			16	C4/0-58	13,5	27,0	18,0	16,0	69,5	17,0		50/25		
			20	C4/0-34	13,5	29,5	22,0	20,0	77,5	21,0		50/25		
			6	C250-14	15,2	28,5	8,0	7,0	52,0	6,4		100/25		
			8	C250-516	15,2	28,5	9,0	8,0	54,0	8,4		100/25		
			10	C250-38	15,2	28,5	11,0	10,0	58,0	10,5		100/25		
120	250 MCM	250	12	C250-12	15,2	28,5	14,0	12,0	63,0	13,2		50/25		
			14	C250-916	15,2	28,5	16,0	14,0	67,0	15,0	YELLOW	50/25		
			16	C250-58	15,2	28,5	18,0	16,0	71,0	17,0		50/25		
			20	C250-34	15,2	30,0	22,0	20,0	79,0	21,0		50/25		
			22	C250-78	15,2	32,0	24,0	23,0	84,0	23,0		50/25		
			8	C300-516	16,7	31,5	13,0	11,0	69,0	8,4		40/10		
			10	C300-38	16,7	31,5	13,0	11,0	69,0	10,5		40/10		
			12	C300-12	16,7	31,5	16,0	14,0	75,0	13,2		40/10		
150	300 MCM	300	14	C300-916	16,7	31,5	18,0	16,0	79,0	15,0	WHITE	40/10		
			16	C300-58	16,7	31,5	19,0	17,0	81,0	17,0		40/10		
			20	C300-34	16,7	31,5	22,0	20,0	87,0	21,0		40/10		
			22	C300-78	16,7	31,5	24,0	23,0	92,0	23,0		40/10		
			10	C350-38	17,6	33,0	13,0	11,0	70,5	10,5		40/20		
			12	C350-12	17,6	33,0	16,0	14,0	76,5	13,2		40/20		
			14	C350-916	17,6	33,0	18,0	16,0	80,5	15,0		40/20		
185	350 MCM	350	16	C350-58	17,6	33,0	19,0	17,0	82,5	17,0	RED	40/20		
			20	C350-34	17,6	33,0	22,0	20,0	88,5	21,0		40/20		
			22	C350-78	17,6	37,0	24,0	23,0	93,5	23,0		30/15		
			10	C400-38	19,2	35,5	13,0	11,0	76,0	10,5		40/20		
			12	C400-12	19,2	35,5	16,0	14,0	82,0	13,2		40/20		
	400 MCM	400	14	C400-916	19,2	35,5	18,0	16,0	86,0	15,0		40/20		
			16	C400-58	19,2	35,5	19,0	17,0	88,0	17,0	BLUE	40/20		
			20	C400-34	19,2	35,5	22,0	20,0	94,0	21,0		40/20		
			22	C400-78	19,2	35,5	24,0	23,0	99,0	23,0		40/20		
			10	C500-38	21,1	39,0	13,0	11,0	82,0	10,5		30/15		
			12	C500-12	21,1	39,0	16,0	14,0	88,0	13,2		30/15		
240	500 MCM		14	C500-916	21,1	39,0	18,0	16,0	92,0	15,0		30/15		
			16	C500-58	21,1	39,0	19,0	17,0	94,0	17,0	BROWN	30/15		
			20	C500-34	21,1	39,0	22,0	20,0	100,0	21,0		20/10		
			22	C500-78	21,1	39,0	24,0	23,0	105,0	23,0		20/10		
			12	C600-12	23,7	44,0	20,0	14,0	99,0	13,2		20/10		
			14	C600-916	23,7	44,0	22,0	16,0	103,0	15,0		20/10		
300	600 MCM		16	C600-58	23,7	44,0	22,0	19,0	106,0	17,0	GREEN	20/10		
			20	C600-34	23,7	44,0	24,0	23,0	112	21,0		10/5		
			22	C600-78	23,7	44,0	24,0	23,0	112,0	23,0		10/5		
			12	C750-12	26,0	48,0	22,0	19,0	113,0	13,2		10/5		
	750 MCM		16	C750-58	26,0	48,0	22,0	19,0	113,0	17,0		10/5		
			20	C750-34	26,0	48,0	24,0	23,0	119,0	21,0		10/5		
			22	C750-78	26,0	48,0	24,0	23,0	119,0	23,0	BLACK	10/5		

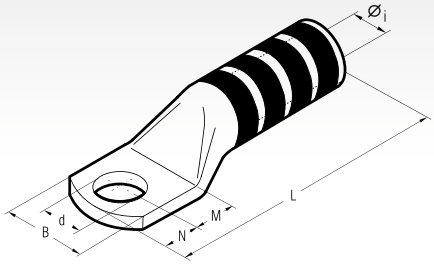
TN120SE

HT51 RH50 B50OE B50ONDE HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520

Cu · FUNNEL ENTRY · ANNEALED · 3µm TIN PLATED · COLOR CODED · -50°C +150°C · SEMICIRCULAR

COLOUR CODED COPPER CRIMPING LUGS

one hole long barrel - for Copper conductors



Cu · FUNNEL ENTRY · ANNEALED · 3µm TIN PLATED · COLOR CODED · -50°C +150°C · SEMICIRCULAR

Cond. Size sqmm	Conductor AWG Size	Conductor AWG Navy	Ø Stud mm	Type	Dimensions mm Øi	B	M	N	L	d	Colour Code	Quantity Box/Bag	Mechanical Tools TN70SE	Mechanical Tools TN120SE	Hydraulic Tools B15MDE	Hydraulic Tools HT51 RH50 B500E B500NDE HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
10	8	23	5	**CL8-10**	4,6	10,0	6,5	6,0	37,5	5,3	RED	400/50				
			6	**CL8-14**	4,6	11,0	7,0	6,0	38,0	6,4		400/50				
			10	**CL8-38**	4,6	18,0	11,0	10,0	46,0	10,5		400/50				
16	6		5	**CL6-10**	5,8	11,5	6,5	6,0	40,0	5,3	BLUE	400/50				
			6	**CL6-14**	5,8	11,5	7,0	6,0	40,5	6,4		400/50				
			12	**CL6-12**	5,8	20,0	14,0	12,0	53,5	13,2		400/50				
25	4	40	5	**CL4-10**	6,2	12,5	6,5	6,0	47,0	5,3	GREY	400/50				
			6	**CL4-14**	6,2	12,5	7,0	6,0	47,5	6,4		400/50				
			10	**CL4-38**	6,2	18,0	11,0	10,0	55,5	10,5		400/50				
			12	**CL4-12**	6,2	20,0	14,0	12,0	60,5	13,2		400/50				
	3	50	6	**CL3-14**	7,0	14,0	7,0	6,0	47,5	6,4	WHITE	200/100				
			8	**CL3-516**	7,0	15,0	9,0	8,0	51,5	8,4		200/100				
			10	**CL3-38**	7,0	18,0	11,0	10,0	55,5	10,5		200/100				
			12	**CL3-12**	7,0	21,0	14,0	12,0	60,5	13,2		200/100				
35	2	60	5	**CL2-10**	7,6	17,0	6,5	6,0	46,0	5,3	BROWN	200/50				
			6	**CL2-14**	7,6	17,0	7,0	6,0	46,5	6,4		200/50				
			8	**CL2-516**	7,6	17,0	9,0	8,0	50,5	8,4		200/50				
			12	**CL2-12**	7,6	21,0	14,0	12,0	59,5	13,2		200/50				
	1	75	5	**CL1-10**	8,9	17,0	6,5	6,0	48,0	5,3	GREEN	200/50				
			8	**CL1-516**	8,9	17,0	9,0	8,0	52,5	8,4		200/50				
			12	**CL1-12**	8,9	21,0	14,0	12,0	61,5	13,2		200/50				
50	1/0	100	5	**CL1/0-10**	10,0	19,0	8,0	7,0	53,5	5,3	PINK	100/50				
			8	**CL1/0-516**	10,0	19,0	9,0	8,0	55,5	8,4		100/50				
			10	**CL1/0-38**	10,0	20,0	11,0	10,0	59,5	10,5		100/50				
			12	**CL1/0-12**	10,0	21,0	14,0	12,0	64,5	13,2		100/50				
70	2/0	125	10	**CL2/0-38**	11,3	21,0	11,0	10,0	67,5	10,5	BLACK	100/50				
			12	**CL2/0-12**	11,3	22,0	14,0	12,0	72,5	13,2		100/50				
95	3/0	150	12	**CL3/0-12**	12,4	24,0	14,0	12,0	71,5	13,2	ORANGE	100/50				
	4/0	200	10	**CL4/0-38**	13,5	25,0	11,0	10,0	73,5	10,5	PURPLE	60/30				
			12	**CL4/0-12**	13,5	25,0	14,0	12,0	78,5	13,2		60/30				
120	250 MCM	250	12	**CL250-12**	15,2	28,5	14,0	12,0	84,0	13,2	YELLOW	50/25				
150	300 MCM	300	12	**CL300-12**	16,7	31,5	16,0	14,0	98,0	13,2	WHITE	30/15				
185	350 MCM	350	12	**CL350-12**	17,6	33,0	16,0	14,0	98,0	13,2	RED	30/15				
	400 MCM	400	12	**CL400-12**	19,2	35,5	16,0	14,0	107,0	13,2	BLUE	20/10				
			16	**CL400-58**	19,2	35,5	19,0	17,0	113,0	17,0		20/10				
240	500 MCM		12	**CL500-12**	21,1	39,0	16,0	14,0	108,0	13,2	BROWN	20/10				
			16	**CL500-58**	21,1	39,0	19,0	17,0	114,0	17,0		20/10				
300	600 MCM		12	**CL600-12**	23,7	44,0	20,0	14,0	128,5	13,2	GREEN	10/5				
			16	**CL600-58**	23,7	44,0	22,0	19,0	135,5	17,0		10/5				
	750 MCM		12	**CL750-12**	26,0	48,0	22,0	19,0	140,5	13,2	BLACK	10/5				
			16	**CL750-58**	26,0	48,0	22,0	19,0	140,5	17,0		10/5				

CL series lugs are manufactured from electrolytic Copper tube for use in heavy duty applications.
The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.
Cembre lugs are annealed to guarantee optimum ductility which is an absolute necessity for connectors which will have to withstand the severe deformation arising when compressed and any bending of the palm during installation.
In applications subject to vibration, terminals have to perform a reliable connection, the annealing process plays a vital role in avoiding cracking or breaks between the barrel and palm.
The long barrel provides better mechanical pull-out strenght.
Lugs are electrolytically Tin plated to avoid oxidation.
The tongue is clearly marked with wire size and die index for Cembre tools.
UL listed for US and Canada per UL486A up to 35 KV.
CL series lugs are an important part of Cembre crimping systems for power carrying conductors.

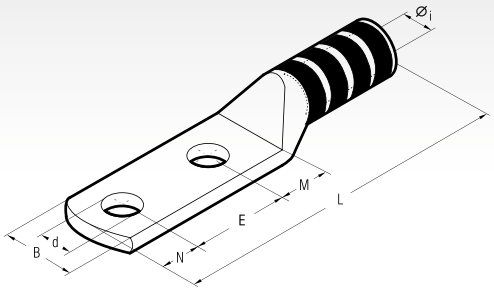
Details of the appropriate crimping tools and dies are shown on page 216.

Cembre technicians are available to provide technical advice as required. Please consult Cembre for products not listed.

Also available with inspection hole.
In case of order, add suffix IH to the part number.
E.g.: CL250IH-12

COLOUR CODED COPPER CRIMPING LUGS

double hole long barrel - for Copper conductors



Cond. Size sqmm	Conductor AWG Size	Conductor AWG Navy	Ø Stud mm	Type	Dimensions mm Øi	B	M	E	N	L	d	Colour Code	Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
10	8	23	6	CL8-D14	4,6	11,0	7,0	16,0	6,0	53,0	6,4	RED	400/50	TN70SE TN120SE	B15MDE
			6	CL8-D141	4,6	11,0	7,0	19,0	6,0	56,0	6,4		400/50		
			10	CL8-D38	4,6	18,0	11,0	25,5	10,0	70,5	10,5		400/50		
16	6		6	CL6-D14	5,8	11,5	7,0	16,0	6,0	54,5	6,4	BLUE	400/50		
			6	CL6-D141	5,8	11,5	7,0	19,0	6,0	57,5	6,4		400/50		
			10	CL6-D38	5,8	18,0	11,0	25,5	10,0	72,0	10,5		400/50		
			12	CL6-DN	5,8	20,0	14,0	44,5	12,0	96,0	13,2		400/50		
25	4	40	6	CL4-D14	6,2	12,5	7,0	16,0	6,0	62,0	6,4	GREY	200/50		
			6	CL4-D141	6,2	12,5	7,0	19,0	6,0	65,0	6,4		200/50		
			10	CL4-D38	6,2	18,0	11,0	25,5	10,0	79,5	10,5		200/50		
			12	CL4-DN	6,2	20,0	14,0	44,5	12,0	103,5	13,2		200/50		
	3	50	10	CL3-D38	7,0	18,0	11,0	25,5	10,0	79,5	10,5	WHITE	200/50		
			12	CL3-DN	7,0	21,0	14,0	44,5	12,0	103,5	13,2		200/50		
35	2	60	6	CL2-D14	7,6	17,0	7,0	16,0	6,0	61,0	6,4	BROWN	200/50		
			6	CL2-D141	7,6	17,0	7,0	19,0	6,0	64,0	6,4		200/50		
			10	CL2-D38	7,6	19,0	11,0	25,5	10,0	78,5	10,5		100/50		
			10	CL2-DN38	7,6	19,0	11,0	44,5	10,0	97,5	10,5		100/50		
			12	CL2-DN	7,6	21,0	14,0	44,5	12,0	102,5	13,2		100/50		
	1	75	6	CL1-D14	8,9	17,0	7,0	16,0	6,0	63,0	6,4	GREEN	200/50		
			6	CL1-D141	8,9	17,0	7,0	19,0	6,0	66,0	6,4		200/50		
			10	CL1-D38	8,9	19,0	11,0	25,5	10,0	80,5	10,5		100/25		
			12	CL1-DN	8,9	21,0	14,0	44,5	12,0	104,5	13,2		100/25		
50	1/0	100	6	CL1/0-D14	10,0	19,0	7,9	16,0	7,0	68,0	6,4	PINK	100/25		
			6	CL1/0-D141	10,0	19,0	7,9	19,0	7,0	71,0	6,4		100/25		
			10	CL1/0-D38	10,0	20,0	10,9	25,5	10,0	83,5	10,5		100/25		
			12	CL1/0-DN	10,0	21,0	14,0	44,5	12,0	107,5	13,2		100/25		
70	2/0	125	6	CL2/0-D14	11,3	21,0	7,8	16,0	7,0	76,0	6,4	BLACK	60/30		
			6	CL2/0-D141	11,3	21,0	7,8	19,0	7,0	79,0	6,4		60/30		
			10	CL2/0-D38	11,3	21,0	11,0	25,5	10,0	91,5	10,5		60/30		
			12	CL2/0-DN	11,3	22,0	14,0	44,5	12,0	115,5	13,2		60/30		
95	3/0	150	6	CL3/0-D141	12,4	23,3	8,0	19,0	7,0	82,0	6,4	ORANGE	60/30		
			10	CL3/0-D38	12,4	23,3	11,0	25,5	10,0	94,5	10,5		60/30		
			12	CL3/0-DN	12,4	24,0	14,0	44,5	12,0	118,5	13,2		60/30		
	4/0	200	6	CL4/0-D141	13,5	25,0	13,0	19,0	11,0	94,0	6,4	PURPLE	50/25		
			10	CL4/0-D38	13,5	25,0	11,0	25,5	10,0	97,5	10,5		50/25		
			10	CL4/0-DN38	13,5	25,0	11,0	44,5	10,0	116,5	10,5		50/25		
			12	CL4/0-DN	13,5	25,0	14,0	44,5	12,0	121,5	13,2		50/25		
120	250 MCM	250	10	CL250-D38	15,2	28,5	11,0	25,5	10,0	103,0	10,5	YELLOW	40/20		
			12	CL250-DN	15,2	28,5	14,0	44,5	12,0	127,0	13,2		40/20		
150	300 MCM	300	10	CL300-D38	16,7	31,5	13,0	25,5	11,0	116,0	10,5	WHITE	30/15		
			12	CL300-DN	16,7	31,5	16,0	44,5	14,0	141,0	13,2		30/15		
185	350 MCM	350	6	CL350-D141	17,6	33,0	13,0	19,0	11,0	109,5	6,4	RED	30/15		
			10	CL350-D38	17,6	33,0	13,0	25,5	11,0	116,0	10,5		30/15		
			12	CL350-DN	17,6	33,0	16,0	44,5	14,0	141,0	13,2		30/15		
	400 MCM	400	6	CL400-D141	19,2	35,5	13,0	19,0	11,0	118,5	6,4	BLUE	20/10		
			10	CL400-D38	19,2	35,5	13,0	25,5	11,0	125,0	10,5		20/10		
			12	CL400-DN	19,2	35,5	16,0	44,5	14,0	150,0	13,2		20/10		
240	500 MCM		6	CL500-D141	21,1	39,0	13,0	19,0	11,0	119,5	6,4	BROWN	20/10		
			10	CL500-D38	21,1	39,0	13,0	25,5	11,0	126,0	10,5		10/5		
			12	CL500-DN	21,1	39,0	16,0	44,5	14,0	151,0	13,2		10/5		
300	600 MCM		10	CL600-D38	23,7	44,0	20,0	25,5	11,0	149,5	10,5	GREEN	20/5		
			12	CL600-DN	23,7	44,0	20,0	44,5	14,0	171,5	13,2		20/5		
	750 MCM		10	CL750-DN38	26,0	48,0	20,0	44,5	11,0	173,5	10,5	BLACK	15/5		
			10	CL750-D38	26,0	48,0	20,0	25,5	11,0	154,5	10,5		15/5		
			12	CL750-DN	26,0	48,0	20,0	44,5	14,0	176,5	13,2		15/5		

HT51 RH50 B500E B500NDE HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520

Cu · FUNNEL ENTRY · ANNEALED · 3µm TIN PLATED · COLOR CODED · -50°C +150°C · SEMICIRCULAR

CL series lugs are manufactured from electrolytic Copper tube.
The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.
Cembre lugs are annealed to guarantee optimum ductility, an absolute necessity for connectors which will have to withstand the severe deformation arising when compressed and any bending of the palm during installation.
In applications subject to vibration, terminals have to perform a reliable connection, the annealing process plays a vital role in avoiding cracking or breaks between the barrel and palm.
The barrel length has been designed to allow easy and accurate positioning of the dies during the crimping operation.
Lugs are electrolytically Tin plated to avoid oxidation.
The tongue is clearly marked with wire size and die index for Cembre tools.
UL listed for US and Canada per UL486A up to 35 KV.
CL series lugs are an important part of Cembre crimping systems for power carrying conductors.

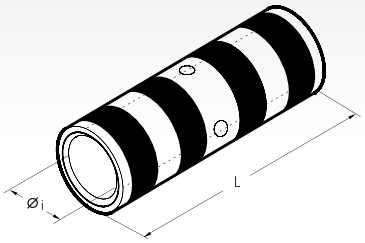
Details of the appropriate crimping tools and dies are shown on page 216.

Cembre technicians are available to provide technical advice as required. Please consult Cembre for products not listed.

BSCL

COLOUR CODED SPLICES

long barrel - for Copper conductors



Cu · FUNNEL ENTRY · ANNEALED · 3µm TIN PLATED · COLOR CODED · -50°C +150°C · SEMICIRCULAR

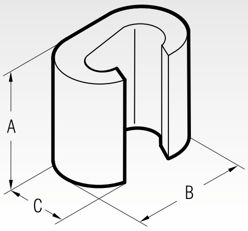
BSCL range of connectors are designed for jointing low voltage conductors in heavy duty applications.
Made of electrolytic Copper tube having the same dimension as C and CL series lugs, BSCL connectors are annealed and electrolytically Tin plated.
They feature an internal taper at both ends to ease the introduction of the conductor and a central stop to ensure correct positioning.
UL listed for US and Canada per UL486A up to 35 KV.

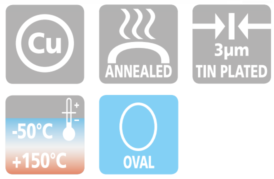
Appropriate crimping tools and dies are shown in details on page 216.

Conductor Size sqmm (AWG)	Conductor Size AWG	Type	Dimensions mm Øi	Dimensions mm L	Colour Code	Quantity *Box/Bag*	Mechanical Tools: HN1	HN5	TN70	TN120S	Hydraulic Tools: B15MDE	HT51 RH50 B500E B500NDE	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
10	8	**BSCL8**	4,6	50,5	RED	*600/150*									
16	6	**BSCL6**	5,8	50,5	BLUE	*400/100*									
25	4	**BSCL4**	6,2	60,5	GREY	*200/100*									
	3	**BSCL3**	7,0	60,5	WHITE	*200/50*									
35	2	**BSCL2**	7,6	60,5	BROWN	*200/50*									
	1	**BSCL1**	8,9	65,5	GREEN	*200/50*									
50	1/0	**BSCL1/0**	10,0	73,0	PINK	*200/50*									
70	2/0	**BSCL2/0**	11,3	79,0	BLACK	*100/50*									
95	3/0	**BSCL3/0**	12,4	79,0	ORANGE	*80/40*									
	4/0	**BSCL4/0**	13,5	85,5	PURPLE	*50/25*									
120	250 MCM	**BSCL250**	15,2	85,5	YELLOW	*50/25*									
150	300 MCM	**BSCL300**	16,7	104,5	WHITE	*40/20*									
185	350 MCM	**BSCL350**	17,6	104,5	RED	*40/20*									
	400 MCM	**BSCL400**	19,2	111,0	BLUE	*20/10*									
240	500 MCM	**BSCL500**	21,1	117,0	BROWN	*20/10*									
300	600 MCM	**BSCL600**	23,7	139,5	GREEN	*20/10*									
	750 MCM	**BSCL750**	26,0	149,0	BLACK	*10/10*									

SLEEVE CONNECTORS

for Copper conductors





tin plated version

Conductor Size sqmm Run	Conductor Size sqmm Tap	Type	Dimensions mm A	Dimensions mm B	Dimensions mm C	Quantity Box/Bag	Mechanical Tools	Hydraulic Tools				
6÷2,5	6÷1,5	C6-C6ST*	9,0	9,8	6,4	1.000/100	HP4-C10	HT45-E B450ND-BVE	HT51 RH50 B500E B500NDE	HT81-U RHU81		
10	10÷1,5	C10-C10ST*	12,0	12,6	8,4	500/100					HT120 and tools and heads with 130 kN crimping force	ECW-H3D
16	16÷1,5	C16-C16ST	17,0	19,4	12,0	500/100						
25÷16	10÷1,5	C25-C10ST	17,0	19,8	13,0	400/50						
25	25÷16	C25-C25ST	17,0	21,4	13,0	300/50						
40÷35	16÷1,5	C35-C16ST	21,0	24,6	15,4	200/25						
40÷35 50	40÷25 25÷10	C35-C35ST	21,0	26,6	15,6	200/25						
70÷63	25÷1,5	C70-C25NST	21,0	26,4	17,5	200/25						
50	25÷4	C50-C25ST	25,0	32,9	21,0	100/25						
50	50÷35	C50-C50ST	26,0	33,0	21,0	100/25						
70÷50	40÷4	C70-C35ST	28,0	33,0	21,0	100/25						
70÷50	70÷35	C70-C70ST	28,0	34,0	21,0	100/25						
100÷95	40÷4	C95-C35ST	29,0	40,6	26,0	50/25						
100÷95	70÷40	C95-C70ST	29,0	41,0	26,0	50/25						
100÷95	100÷63	C95-C95ST	29,0	41,0	26,0	50/25						
125÷110	125÷25	C120-C120ST	30,0	45,0	28,0	50/25						
160÷150 125	125÷25 125	C150-C120ST	31,0	45,0	28,0	50/25						
150 125	150÷63 125	C150-C150ST	30,0	45,0	28,0	50/25						
185	100÷16	C185-C95ST	31,0	45,0	28,0	50/25						
185÷120	185÷120	C185-C185ST	22,6	68,0	34,0	30/15						
240÷150	120÷95	C240-C120ST	22,6	68,0	34,0	30/15						

**Given the small size, on these connectors, only the type is engraved*

bright surface version

Conductor Size sqmm Run	Conductor Size sqmm Tap	Type	Dimensions mm A	Dimensions mm B	Dimensions mm C	Quantity Box/Bag	Mechanical Tools	Hydraulic Tools				
6÷2,5	6÷1,5	C6-C6*	9,0	9,8	6,4	1.000/100	HP4-C10	HT45-E B450ND-BVE	HT51 RH50 B500E B500NDE	HT81-U RHU81		
10	10÷1,5	C10-C10*	12,0	12,6	8,4	500/100					HT120 and tools and heads with 130 kN crimping force	ECW-H3D
16	16÷1,5	C16-C16	17,0	19,4	12,0	500/100						
25÷16	10÷1,5	C25-C10	17,0	19,8	13,0	400/50						
25	25÷16	C25-C25	17,0	21,4	13,0	300/50						
40÷35	16÷1,5	C35-C16	21,0	24,6	15,4	200/25						
40÷35 50	40÷25 25÷10	C35-C35	21,0	26,6	15,6	200/25						
70÷63	25÷1,5	C70-C25N	21,0	26,4	17,5	200/25						
50	25÷4	C50-C25	25,0	32,9	21,0	100/25						
50	50÷35	C50-C50	26,0	33,0	21,0	100/25						
70÷50	40÷4	C70-C35	28,0	33,0	21,0	100/25						
70÷50	70÷35	C70-C70	28,0	34,0	21,0	100/25						
100÷95	40÷4	C95-C35	29,0	40,6	26,0	50/25						
100÷95	70÷40	C95-C70	29,0	41,0	26,0	50/25						
100÷95	100÷63	C95-C95	29,0	41,0	26,0	50/25						
125÷110	125÷25	C120-C120	30,0	45,0	28,0	50/25						
160÷150 125	125÷25 125	C150-C120	31,0	45,0	28,0	50/25						
150 125	150÷63 125	C150-C150	30,0	45,0	28,0	50/25						
185	100÷16	C185-C95	31,0	45,0	28,0	50/25						
185÷120	185÷120	C185-C185	22,6	68,0	34,0	30/15						
240÷150	120÷95	C240-C120	22,6	68,0	34,0	30/15						

**Given the small size, on these connectors, only the type is engraved*

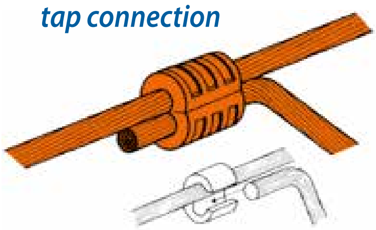
"C" connectors are manufactured from high purity copper profiles and are suitable for a variety of uses either to create an earthing network or tapping off from overhead distribution lines.

Each connector is marked as follows:

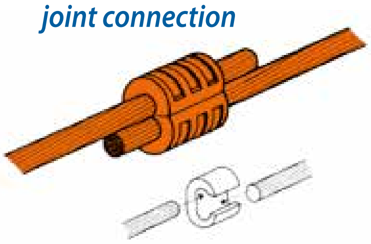
- Cembre trade mark
- Reference number
- Conductor size-Run
- Conductor size-Tap
- Number of crimps
- Die reference.

Details of the appropriate crimping tools and dies are shown on page 212.

Example of tap connection

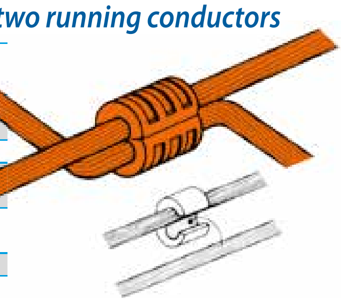


Example of joint connection

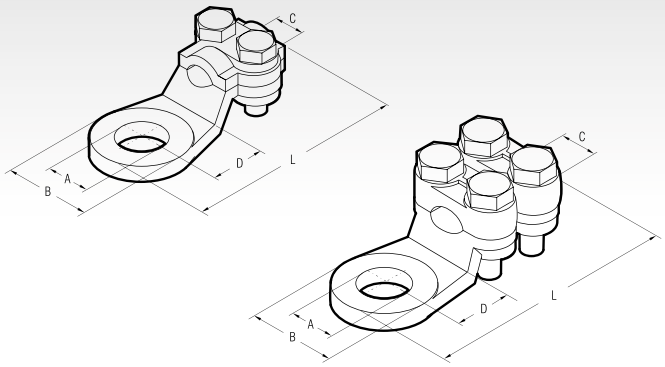


Example of joining two running conductors

Sezione Conduttore mm²	Type
25-25	C35-C16
35-35	C35-C35
50-50	C70-C70
63-63 70-70	C95-C70
95-95 120-120	C150-C120
125-125	C150-C150
120-120 125-125	C185-C95



MECHANICAL FIXING LUGS



BRASS | Steel ZINC PLATED | -50°C +150°C

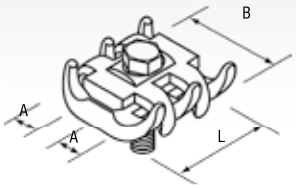
Material:
Brass CB754S EN 1982 Nickel plated.
Zinc plated Steel bolts.

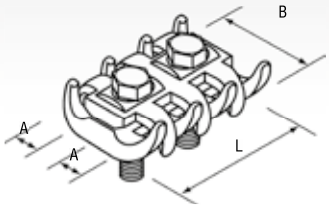
2 bolt fixing lugs

Conductor Size sqmm	Type	A Bolt	Dimensions mm				Quantity
			B	C	D	L	
16	**2155**	**M8**	18,0	4,5	12,5	39	*100*
16	**2171**	**M10**	18,0	4,5	12,5	39	*100*
25	**2156**	**M8**	19,5	6,0	13,0	43	*100*
25	**2172**	**M10**	19,5	6,0	13,0	43	*100*
35	**2157**	**M12**	23,0	7,0	15,0	49	*50*
35	**2173**	**M14**	23,0	7,0	15,0	49	*50*
50	**2174**	**M14**	25,0	8,0	17,0	56	*50*

4 bolt fixing lugs

Conductor Size sqmm	Type	A Bolt	Dimensions mm				Quantity
			B	C	D	L	
50	**2158**	**M12**	23,5	8	16,0	57	*50*
75	**2160**	**M12**	28,0	10	20,0	65	*25*
75	**2176**	**M16**	28,0	10	20,0	65	*25*
100	**2161**	**M12**	31,0	13	17,0	66	*25*
125	**2162**	**M15**	33,0	14	18,0	71	*25*
150	**2163**	**M14**	34,0	16	19,5	75	*25*
175	**2164**	**M15**	36,0	16	21,0	78	*25*





Single bolt fixing

Conductor Size sqmm	Type	A for Cable mm	Dimensions mm B	Dimensions mm L	Quantity
6÷16	**2323**	**3÷ 5**	24	20	*50*
16÷50	**2326**	**5÷ 8**	30	25	*50*
35÷70	**2329**	**7÷12**	40	30	*25*

2 bolt fixing

Conductor Size sqmm	Type	A for Cable mm	Dimensions mm B	Dimensions mm L	Quantity
6÷16	**2333**	**3÷ 5**	24,5	30	*50*
16÷50	**2336**	**5÷ 8**	32,0	40	*50*
35÷70	**2339**	**7÷12**	40,0	44	*25*
50÷95	**2342**	**8÷14**	48,0	48	*10*
70÷150	**2344**	**12÷16**	51,0	53	*10*
150÷300	**2346***	**16÷22**	66,0	66	*5*

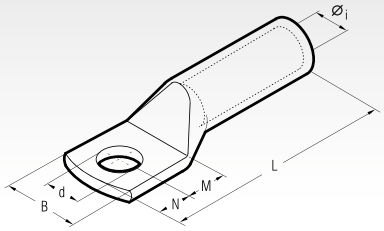
** Stainless Steel bolts*

Material:
Brass CB754S EN 1982 Zinc plated Steel bolts.
Zinc plated Steel nut.

2A-M

HEAVY DUTY COPPER TUBE TERMINALS

for Copper conductors



Cu · FUNNEL ENTRY · ANNEALED · 3µm TIN PLATED · -50°C +150°C · HEXAGONAL · INDENT

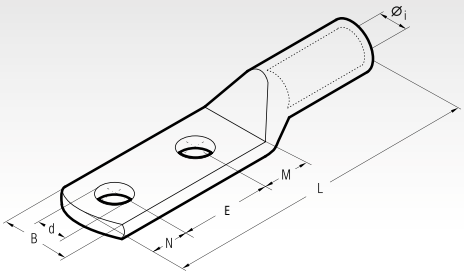
2A-M series terminals are made from high purity Copper tube, and are annealed.
They feature a double length barrel for enhanced electrical and mechanical performance in heavy duty applications.
The absence of an inspection hole prevents the entry of water or moisture into the crimped joint making these terminals suitable for outdoor applications.
The terminals are electrolytically Tin plated to prevent atmospheric corrosion.
Details of the appropriate crimping tools and dies are shown on pages 208 to 209.

Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools			Hydraulic Tools												
			Øi	B	M	N	L	d		HN5	HN-A25	TN70SE	TN120 SE*	B15MDE	HT45-E B450ND-BVE	HT51 B550E	RH50 B500E B500NDE	HT81-U RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520				
16	8	2A3-M8	5,8	15,0	9,0	8,0	43,5	8,4	600/100																
	10	2A3-M10	5,8	18,0	11,0	10,0	47,5	10,5	500/100																
25	8	2A5-M8	7,0	15,0	9,0	8,0	51,0	8,4	400/100																
	10	2A5-M10	7,0	18,0	11,0	10,0	55,0	10,5	300/50																
	12	2A5-M12	7,0	21,0	14,0	12,0	60,0	13,2	300/50																
35	8	2A7-M8	8,9	17,0	9,0	8,0	53,0	8,4	250/50																
	10	2A7-M10	8,9	19,0	11,0	10,0	57,0	10,5	250/50																
	12	2A7-M12	8,9	21,0	14,0	12,0	62,0	13,2	200/50																
50	10	2A10-M10	10,0	20,0	11,0	10,0	63,0	10,5	200/50																
	12	2A10-M12	10,0	21,0	14,0	12,0	68,0	13,2	150/50																
	14	2A10-M14	10,0	25,0	16,0	14,0	72,0	15,0	150/50																
	16	2A10-M16	10,0	26,0	18,0	16,0	76,0	17,0	150/50																
63 70	10	2A14-M10	11,3	21,0	11,0	10,0	70,0	10,5	100/50																
	12	2A14-M12	11,3	22,0	14,0	12,0	75,0	13,2	100/50																
	14	2A14-M14	11,3	25,0	16,0	14,0	79,0	15,0	100/50																
	16	2A14-M16	11,3	26,0	18,0	16,0	83,0	17,0	100/50																
95	10	2A19-M10	13,5	25,0	11,0	10,0	76,5	10,5	75/25																
	12	2A19-M12	13,5	25,0	14,0	12,0	81,5	13,2	75/25																
	14	2A19-M14	13,5	25,0	16,0	14,0	85,5	15,0	75/25																
	16	2A19-M16	13,5	27,0	18,0	16,0	90,5	17,0	75/25																
	20	2A19-M20	13,5	29,5	22,0	20,0	97,5	21,0	75/25																
120 125	10	2A24-M10	15,2	28,5	11,0	10,0	82,0	10,5	50/25																
	12	2A24-M12	15,2	28,5	14,0	12,0	87,0	13,2	50/25																
	14	2A24-M14	15,2	28,5	16,0	14,0	91,0	15,0	50/25																
	16	2A24-M16	15,2	28,5	18,0	16,0	95,0	17,0	50/25																
	20	2A24-M20	15,2	30,0	22,0	20,0	103,0	21,0	50/25																
150	10	2A30-M10	16,7	31,5	13,0	11,0	92,0	10,5	50/25																
	12	2A30-M12	16,7	31,5	16,0	14,0	98,0	13,2	30/15																
	14	2A30-M14	16,7	31,5	18,0	16,0	102,0	15,0	30/15																
	16	2A30-M16	16,7	31,5	19,0	17,0	104,0	17,0	30/15																
	20	2A30-M20	16,7	31,5	22,0	20,0	110,0	21,0	30/15																
185	12	2A37-M12	19,2	35,5	16,0	14,0	108,0	13,2	30/15																
	14	2A37-M14	19,2	35,5	18,0	16,0	112,0	15,0	30/15																
	16	2A37-M16	19,2	35,5	19,0	17,0	114,0	17,0	30/15																
	20	2A37-M20	19,2	35,5	22,0	20,0	120,0	21,0	30/15																
240	12	2A48-M12	21,1	39,0	16,0	14,0	109,0	13,2	20/5																
	14	2A48-M14	21,1	39,0	18,0	16,0	113,0	15,0	20/5																
	16	2A48-M16	21,1	39,0	19,0	17,0	115,0	17,0	20/5																
	20	2A48-M20	21,1	39,0	22,0	20,0	121,0	21,0	25/5																
300	12	2A60-M12	23,7	44,0	20,0	14,0	129,5	13,2	20/5																
	14	2A60-M14	23,7	44,0	22,0	16,0	133,5	15,0	20/5																
	16	2A60-M16	23,7	44,0	22,0	19,0	136,5	17,0	20/5																
	20	2A60-M20	23,7	44,0	24,0	23,0	142,5	21,0	20/5																
400	12	2A80-M12	27,0	51,0	22,0	19,0	140,0	13,2	15/5																
	14	2A80-M14	27,0	51,0	22,0	19,0	140,0	15,0	10/5																
	16	2A80-M16	27,0	51,0	22,0	19,0	140,0	17,0	10/5																
	20	2A80-M20	27,0	51,0	24,0	23,0	146,0	21,0	15/5																
500	16	2A100-M16♦	30,3	56,5	22,0	19,0	147,0	17,0	10/1																
	20	2A100-M20♦	30,3	56,5	24,0	23,0	153,0	21,0	10/1																
630	16	2A120-M16♦	33,4	61,5	22,0	19,0	159,0	17,0	20/1																
	20	2A120-M20♦	33,4	61,5	24,0	23,0	165,0	21,0	20/1																
800	20	2A160-M20♦	38,0	72,0	24,0	23,0	187,0	21,0	12/1																
1000	20	2A200-M20♦	44,0	80,0	24,0	23,0	202,0	21,0	6/1																

*See page 121

♦Not UL approved

two hole fixing



Cond. Size sqmm	Ø Stud mm	Ref.	Dimensions mm							Quantity Box	Mechanical Tools	Hydraulic Tools								
			Øi	B	M	N	E	L	d		TN70SE	TN120SE	B450ND-BVE	HT45-E	B550E	HT51	B500E	RH50	HT81-U	RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
50	12	**2A10-2M12**	10,0	21,0	14,0	12,0	44,5	112,5	13,2	*25*													
70	12	**2A14-2M12**	11,3	22,0	16,0	14,0	44,5	123,5	13,2	*25*													
	14	**2A14-2M14**	11,3	25,0	18,0	16,0	44,5	127,5	15,0	*25*													
95	12	**2A19-2M12**	13,5	25,0	16,0	14,0	44,5	128,0	13,2	*25*													
	14	**2A19-2M14**	13,5	25,0	18,0	16,0	44,5	132,0	15,0	*25*													
120	12	**2A24-2M12**	15,2	28,5	16,0	14,0	44,5	135,5	13,2	*25*													
	14	**2A24-2M14**	15,2	28,5	18,0	16,0	44,5	139,5	15,0	*25*													
	16	**2A24-2M16**	15,2	28,5	18,0	17,0	44,5	140,5	17,0	*25*													
150	12	**2A30-2M12**	16,7	31,5	16,0	14,0	44,5	142,5	13,2	*15*													
	14	**2A30-2M14**	16,7	31,5	18,0	16,0	44,5	146,5	15,0	*15*													
	16	**2A30-2M16♦**	16,7	31,5	19,0	17,0	44,5	148,5	17,0	*15*													
185	12	**2A37-2M12**	19,2	35,5	16,0	14,0	44,5	152,5	13,2	*15*													
	14	**2A37-2M14**	19,2	35,5	18,0	16,0	44,5	156,5	15,0	*15*													
	16	**2A37-2M16**	19,2	35,5	19,0	17,0	44,5	158,5	17,0	*15*													
240	12	**2A48-2M12**	21,1	39,0	16,0	14,0	44,5	153,5	13,2	*5*													
	14	**2A48-2M14**	21,1	39,0	18,0	16,0	44,5	157,5	15,0	*5*													
	16	**2A48-2M16**	21,1	39,0	19,0	17,0	44,5	159,5	17,0	*5*													
300	12	**2A60-2M12**	23,7	44,0	20,0	14,0	44,5	174,0	13,2	*5*													
	14	**2A60-2M14**	23,7	44,0	22,0	16,0	44,5	178,0	15,0	*5*													
	16	**2A60-2M16**	23,7	44,0	19,0	17,0	44,5	176,0	17,0	*5*													
400	12	**2A80-2M12**	27,0	51,0	20,0	14,0	44,5	177,5	13,2	*5*													
	14	**2A80-2M14**	27,0	51,0	22,0	16,0	44,5	181,5	15,0	*5*													
	16	**2A80-2M16**	27,0	51,0	22,0	19,0	44,5	184,5	17,0	*5*													
500	12	**2A100-2M12♦**	30,3	56,5	20,0	14,0	44,5	178,5	13,2	*5*													
	14	**2A100-2M14♦**	30,3	56,5	22,0	16,0	44,5	182,5	15,0	*5*													
	16	**2A100-2M16♦**	30,3	56,5	22,0	19,0	44,5	185,5	17,0	*5*													
630	12	**2A120-2M12♦**	33,4	61,5	20,0	14,0	44,5	196,5	13,2	*5*													
	14	**2A120-2M14♦**	33,4	61,5	22,0	19,0	44,5	200,5	15,0	*5*													
	16	**2A120-2M16♦**	33,4	61,5	22,0	19,0	44,5	203,5	17,0	*5*													
800	12	**2A160-2M12♦**	38,0	72,0	20,0	14,0	44,5	218,5	13,2	*1*													
	14	**2A160-2M14♦**	38,0	72,0	22,0	19,0	44,5	225,5	15,0	*1*													
	16	**2A160-2M16♦**	38,0	72,0	24,0	19,0	44,5	227,5	17,0	*1*													
1000	12	**2A200-2M12♦**	44,0	80,0	20,0	14,0	44,5	233,5	13,2	*1*													
	14	**2A200-2M14♦**	44,0	80,0	22,0	16,0	44,5	237,5	15,0	*1*													
	16	**2A200-2M16♦**	44,0	80,0	22,0	19,0	44,5	240,5	17,0	*1*													
	20	**2A200-2M20♦**	44,0	80,0	24,0	23,0	44,5	246,5	21,0	*1*													

Cu · FUNNEL ENTRY · ANNEALED · 3µm TIN PLATED · -50°C +150°C · HEXAGONAL · INDENT

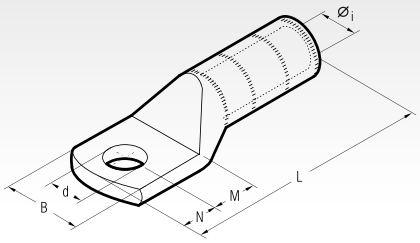
2A-2M.. series lugs are manufactured from electrolytic Copper tube conforming to EN13600.
The tube dimensions are designed to optimise electrical conductivity and mechanical strength.
Double length barrels enhance electrical and mechanical performance in heavy duty applications.
Palms feature double stud holes at standard 44.5mm centres.
Other configurations are available upon request.
Lugs are annealed to ensure ductility and satisfactory performance when subjected to deformation and vibration.
The absence of an inspection hole prevents the ingress of water or moisture into the crimped joint making these terminals suitable for outdoor applications.
Lugs are electrolytically Tin plated to avoid oxidation.

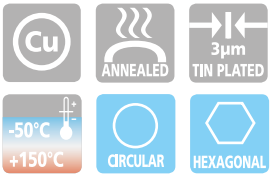
Details of the appropriate crimping tools and dies are shown on pages 208 to 209.

♦*Not UL approved*

CA-M

HIGH VOLTAGE COPPER TERMINALS





Series CA-M terminals are designed for high voltage applications up to 33 kV.
They are manufactured from high purity Copper tube, annealed and Tin plated.
The extended barrel enhances both electrical and mechanical performance.
The absence of an inspection hole prevents moisture entry into the crimped joint and makes these terminals suitable for outdoor applications.
Details of the appropriate crimping tools and dies are shown on page 212.

Conductor Size (sqmm) & Format	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Hydraulic Tools						
			Øi	B	M	N	L	d								
25 R/BR/BS*	8	CA25-M8	6,8	14,0	9,0	8,0	65,0	8,4	300/50	HT45-E	B450ND-BVE					
	10	CA25-M10	6,8	18,0	13,0	11,0	72,0	10,5	200/50							
	12	CA25-M12	6,8	21,0	16,0	14,0	78,0	13,2	200/50							
30 RC/S ÷ 40 S	12	CA40S-M12	8,2	21,0	16,0	14,0	79,0	13,2	150/50							
	16	CA40S-M16	8,2	26,0	19,0	17,0	85,0	17,0	100/50							
35 BR/BS*	10	CA35-M10	8,3	21,0	13,0	11,0	73,0	10,5	150/50							
	12	CA35-M12	8,3	21,0	16,0	14,0	79,0	13,2	150/50							
	16	CA35-M16	8,3	26,0	19,0	17,0	85,0	17,0	150/50							
50 RC	12	CA50R-M12	8,7	20,5	16,0	14,0	79,0	13,2	150/50							
50 S	12	CA50S-M12	9,5	21,0	16,0	14,0	79,0	13,2	150/50							
	16	CA50S-M16	9,5	26,0	19,0	17,0	85,0	17,0	100/50							
50 BR/BS*	10	CA50-M10	9,5	21,0	13,0	11,0	73,0	10,5	150/50							
	12	CA50-M12	9,5	21,0	16,0	14,0	79,0	13,2	150/50							
	14	CA50-M14	9,5	25,0	18,0	16,0	83,0	15,0	100/50							
	16	CA50-M16	9,5	26,0	19,0	17,0	85,0	17,0	100/50							
63 S ÷ 70 S	12	CA70S-M12	11,0	28,0	16,0	14,0	81,2	13,2	50/25			B550E				
	16	CA70S-M16	11,0	30,0	19,0	17,0	87,2	17,0	50/25							
70 BR/BS*	10	CA70S-M10	11,0	26,0	13,0	11,0	75,2	10,5	50/25			B500NDE				
	12	CA70S-M12	11,0	28,0	16,0	14,0	81,2	13,2	50/25							
	14	CA70S-M14	11,0	28,0	18,0	16,0	85,2	15,0	50/25							
	16	CA70S-M16	11,0	30,0	19,0	17,0	87,2	17,0	50/25							
80 S ÷ 95 RC	12	CA95R-M12	12,0	28,0	16,0	14,0	91,0	13,2	50/25			B500E				
	14	CA95R-M14	12,0	29,0	18,0	16,0	95,0	15,0	50/25							
95 S ÷ 100 S	12	CA95S-M12	13,5	28,0	16,0	14,0	91,0	13,2	50/25							
	14	CA95S-M14	13,5	29,0	18,0	16,0	94,5	15,0	50/25							
	16	CA95S-M16	13,5	30,0	20,0	17,0	97,0	17,0	50/25							
95 BR/BS*	10	CA95-M10	13,5	28,0	13,0	11,0	85,0	10,5	50/25							
	12	CA95-M12	13,5	28,0	16,0	14,0	91,0	13,2	50/25							
	16	CA95-M16	13,5	30,0	20,0	17,0	97,0	17,0	50/25							
120 RC/S ÷ 150 RC	12	CA150R-M12	15,0	31,0	16,0	14,0	97,0	13,2	30/15							
	14	CA150R-M14	15,0	31,0	18,0	16,0	101,0	15,0	30/15							
120 BR/BS*	12	CA120-M12	15,0	31,0	16,0	14,0	97,0	13,2	30/15							
	16	CA120-M16	15,0	31,0	19,0	17,0	103,0	17,0	30/15							
150 S ÷ 160 RC	12	CA150S-M12	16,5	32,0	16,0	14,0	97,0	13,2	30/15							
	14	CA150S-M14	16,5	32,0	18,0	16,0	101,0	15,0	30/15							
150 BR/BS*	12	CA150-M12	16,5	32,0	16,0	14,0	97,0	13,2	30/15							
	16	CA150-M16	16,5	32,0	19,0	17,0	103,0	17,0	30/15							
160 S ÷ 200 RC	14	CA200R-M14	17,0	32,5	18,0	16,0	101,0	15,0	30/15							
185 BR/BS*	12	CA185-M12	18,0	33,5	16,0	14,0	97,0	13,2	30/15							
	16	CA185-M16	18,0	33,5	19,0	17,0	103,0	17,0	30/15							
200 S ÷ 240 RC	14	CA240R-M14	19,2	43,0	18,0	16,0	107,0	15,0	15/5							
240 S ÷ 315 RC	14	CA315R-M14	21,5	43,0	18,0	16,0	105,0	15,0	15/5							
240 BR/BS*	12	CA240-M12	20,5	42,0	16,0	14,0	103,0	13,2	15/5							
	16	CA240-M16	20,5	42,0	19,0	17,0	109,0	17,0	15/5							
	20	CA240-M20	20,5	42,0	22,0	20,0	115,0	21,0	15/5							
300 BR/BS*	12	CA300-M12	23,0	43,5	16,0	14,0	109,5	13,2	15/5							
	16	CA300-M16	23,0	43,5	19,0	17,0	115,5	17,0	15/5							
	20	CA300-M20	23,0	43,5	22,0	20,0	121,5	21,0	15/5							
315 S	14	CA315S-M14	23,7	44,0	18,0	16,0	105,0	15,0	15/5							

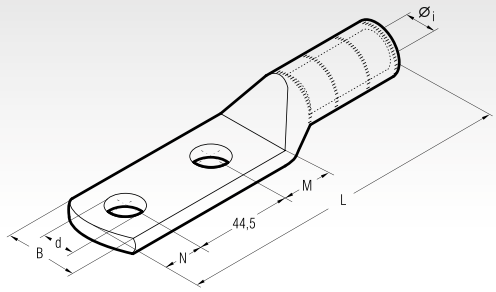
HT51 RH50 B500E B500NDE B550E HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520

Conductor Format: R = Round, RC = Round Compact, S = Sector, BR = IEC228 (BS6360) Round, BS = IEC228 (BS6360) Sector*
** = Pre-rounding required, consult Cembre for appropriate die set*

HIGH VOLTAGE TERMINALS

CA-2M

two hole fixing



Conductor Size (sqmm) & Format	Ø Stud mm	Type	Dimensions mm Øi	B	M	N	L	d	Quantity Box/Bag
25 R	8	**CA25-2M8**	6,8	14,0	10,0	11,0	113,5	8,4	*200/50*
	12	**CA25-2M12**	6,8	21,0	16,0	14,0	122,5	13,2	*150/50*
25 BR/BS*	8	**CA25-2M8**	6,8	14,0	10,0	11,0	113,5	8,4	*200/50*
	10	**CA25-2M10**	6,8	18,0	13,0	11,0	116,5	10,5	*150/50*
	12	**CA25-2M12**	6,8	21,0	16,0	14,0	122,5	13,2	*150/50*
30 RC/S ÷ 40 S	12	**CA40S-2M12**	8,2	21,5	16,0	14,0	123,5	13,2	*100/50*
35 BR/BS*	12	**CA35-2M12**	8,3	21,5	16,0	14,0	123,5	13,2	*100*
50 RC	12	**CA50R-2M12**	8,7	20,5	16,0	14,0	123,5	13,2	*100/50*
50 S	12	**CA50S-2M12**	9,5	21,0	16,0	14,0	123,5	13,2	*100/50*
50 BR/BS*	12	**CA50-2M12**	9,5	21,0	16,0	14,0	123,5	13,2	*90/3*
63 S ÷ 70 S	12	**CA70S-2M12**	11,0	27,0	16,0	14,0	127,7	13,2	*50/25*
70 BR/BS*	12	**CA70S-2M12**	11,0	27,0	16,0	14,0	127,7	13,2	*50/25*
80 S ÷ 95 RC	14	**CA95R-2M14**	12,0	28,0	18,0	16,0	139,5	15,0	*30/15*
95 S ÷ 100 S	14	**CA95S-2M14**	13,5	29,0	18,0	16,0	139,5	15,0	*30/15*
95 BR/BS*	12	**CA95-2M12**	13,5	28,0	16,0	14,0	135,5	13,2	*30/15*
120 RC/S ÷ 150 RC	14	**CA150R-2M14**	15,0	31,0	18,0	16,0	145,5	15,0	*30/15*
120 BR/BS*	12	**CA120-2M12**	15,0	31,0	16,0	14,0	141,5	13,2	*30/15*
150 S ÷ 160 RC	14	**CA150S-2M14**	16,5	32,0	18,0	16,0	145,5	15,0	*30/15*
150 BR/BS*	12	**CA150-2M12**	16,5	32,0	16,0	14,0	141,5	13,2	*30/15*
160 S ÷ 200 RC	14	**CA200R-2M14**	17,0	32,5	18,0	16,0	145,0	15,0	*30/15*
185 BR/BS*	12	**CA185-2M12**	18,0	32,5	16,0	14,0	141,5	13,2	*30/15*
200 S ÷ 240 RC	14	**CA240R-2M14**	19,2	43,0	18,0	16,0	151,5	15,0	*15/5*
240 S ÷ 315 RC	14	**CA315R-2M14**	21,5	43,0	18,0	16,0	149,5	15,0	*20/5*
240 BR/BS*	12	**CA240-2M12**	20,5	43,0	16,0	14,0	147,5	13,2	*15/5*
300 BR/BS*	12	**CA300-2M12**	23,0	43,0	16,0	14,0	145,5	13,2	*15/5*
315 S	14	**CA315S-2M14**	23,7	44,0	18,0	16,0	149,5	15,0	*20/5*

Hydraulic Tools: HT45-E B450ND-BVE; HT51 RH50 B500E B500NDE B550E; HT81-U RHU81; HT120 and tools and heads with 130 kN crimping force; ECW-H3D; RHU520

Conductor Format: R = Round, RC = Round Compact, S = Sector, BR = IEC228 (BS6360) Round, BS = IEC228 (BS6360) Sector*

** = Pre-rounding required, consult Cembre for appropriate die set*

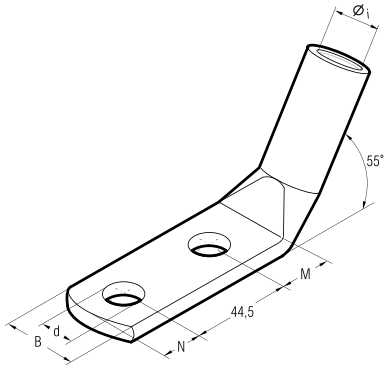
Cu · ANNEALED · 3µm TIN PLATED · -50°C +150°C · CIRCULAR · HEXAGONAL

CA-2M Copper Tube Terminal Lugs are designed for high voltage applications up to 33kV. Manufactured from high purity Copper tube, annealed and Tin plated.
The extended barrel enhances electrical and mechanical performance.
The absence of an inspection hole prevents moisture entry into the crimped joint. Featuring an extended palm with two fixing holes at 44.5 mm centres.
Details of the appropriate crimping tools and dies are shown on page 212.

HIGH VOLTAGE TERMINALS

2A-2M/55°

palm bent at 55° - two hole fixing



Conductor Size (sqmm) & Format	Ø Stud mm	Type	Dimensions mm Øi	B	M	N	d	Quantity Box/Bag
400 R	14	**2A80-2M14/55°**	27,0	51,0	22	16	15	*10/5*
600 R ÷ 630 R	14	**2A120-2M14/55°**	33,4	61,5	22	16	15	*15/3*

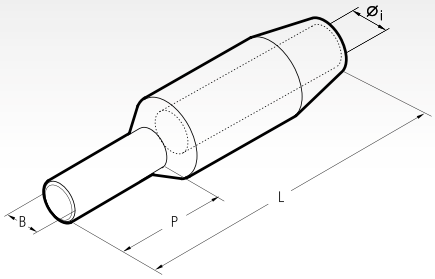
Hydraulic Tools: HT120 and tools and heads with 130 kN crimping force; ECW-H3D; RHU520

R = Round conductors

Cu · ANNEALED · 3µm TIN PLATED · ANGLED 55° · -50°C +150°C · CIRCULAR · HEXAGONAL

The 2A-2M/55° Copper Tube Terminal Lugs have the same characteristics as the CA-2M and 2A-2M ranges, with the additional feature of the palm bent at 55°.
Details of the appropriate crimping tools and dies are shown on page 208-209.

HIGH VOLTAGE STALK CONNECTORS



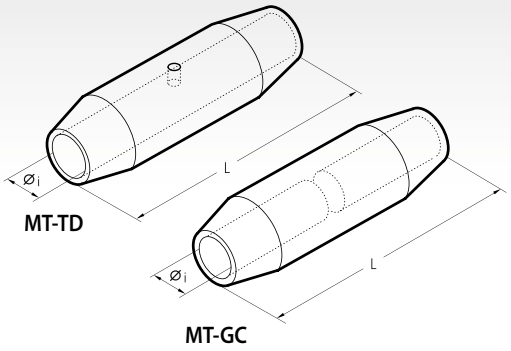
MT-C series connectors are designed for high voltage applications up to 33 kV.
They are manufactured from high purity Copper, annealed and Tin plated.
The extended barrel enhances both electrical and mechanical performance.
The stalk or pin makes these connectors ideal for terminating conductors into contact blocks.
Details of the appropriate crimping tools and dies are shown on page 212.

Conductor Size (sqmm) & Format	Type	Dimensions mm				Quantity Box/Bag	Hydraulic Tools						
		Øi	B	P	L		HT45-E B450ND-BVE	HT51 RH50 B500E B500NDE B550E	HT81-U RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
25 R	MT25-C8	6,8	8,0	35,0	80,0	90/3						
30 RC/S ÷ 40 S	MT40S-C8	8,2	8,0	35,0	80,0	90/3						
	MT40S-C10	8,2	10,0	35,0	80,0	90/3						
	MT40S-C14-80	8,2	14,0	80,0	123,0	30/3						
35 BR/BS*	MT35-C8	8,2	8,0	35,0	80,0	90/3						
	MT35-C10	8,2	10,0	35,0	80,0	90/3						
	MT35-C14-80	8,2	14,0	80,0	123,0	30/3						
50 RC	MT50R-C8	8,8	8,0	35,0	80,0	90/3						
	MT50R-C10	8,8	10,0	35,0	80,0	90/3						
50 S	MT50S-C8	9,5	8,0	35,0	80,0	90/3						
	MT50S-C10	9,5	10,0	35,0	80,0	90/3						
	MT50S-C14-80	9,5	14,0	80,0	123,0	30/3						
50 BR/BS*	MT50-C8	9,5	8,0	35,0	80,0	90/3						
	MT50-C10	9,2	10,0	35,0	80,0	90/3						
	MT50-C14-80	9,5	14,0	80,0	123,0	90/3						
63 S ÷ 70 S	MT70S-C10	11,2	10,0	35,0	90,0	30/3						
70 BR/BS*	MT70-C10	11,2	10,0	35,0	90,0	30/3						
80 S ÷ 95 RC	MT95R-C10	12,0	10,0	45,0	110,0	60/3						
	MT95R-C12	12,0	12,0	45,0	110,0	60/3						
95 S ÷ 100 S	MT95S-C10	13,5	10,0	45,0	110,0	60/3						
	MT95S-C12	13,5	12,0	45,0	110,0	60/3						
	MT95S-C14-80	13,5	14,0	80,0	145,0	60/3						
95 BR/BS*	MT95-C10	13,5	10,0	45,0	110,0	60/3						
	MT95-C12	13,5	12,0	45,0	110,0	60/3						
	MT95-C14-80	13,5	14,0	80,0	145,0	60/3						
120 RC/S ÷ 150 RC	MT150R-C12	15,0	12,0	45,0	110,0	60/3						
	MT150R-C16	15,0	16,0	45,0	110,0	30/3						
120 BR/BS*	MT120-C12	15,0	12,0	45,0	110,0	60/3						
	MT120-C16	15,0	16,0	45,0	110,0	60/3						
150 S ÷ 160 RC	MT150S-C12	16,5	12,0	45,0	110,0	60/3						
	MT150S-C14-80	16,5	14,0	80,0	145,0	45/3						
	MT150S-C16	16,5	16,0	45,0	110,0	60/3						
150 BR/BS*	MT150-C10	16,5	10,0	45,0	110,0	60/3						
	MT150-C12	16,5	12,0	45,0	110,0	60/3						
	MT150-C14-80	16,5	14,0	80,0	145,0	45/3						
	MT150-C16	16,5	16,0	45,0	110,0	60/3						
160 S ÷ 200 RC	MT200R-C10	17,0	10,0	45,0	110,0	30/3						
	MT200R-C16	17,0	16,0	45,0	110,0	30/3						
185 BR/BS*	MT185-C10	18,0	10,0	45,0	110,0	30/3						
	MT185-C16	18,0	16,0	45,0	110,0	30/3						
200 S ÷ 240 RC	MT240R-C12	19,5	12,0	50,0	115,0	30/3						
	MT240R-C16	19,5	16,0	50,0	115,0	30/3						
240 S ÷ 315 RC	MT315R-C16	21,5	16,0	50,0	115,0	30/3						
240 BR/BS*	MT240-C12	20,5	12,0	45,0	110,0	30/3						
	MT240-C16	20,5	16,0	50,0	115,0	30/3						
300 BR/BS*	MT300-C16	23,0	16,0	50,0	115,0	30/3						
315 S	MT315S-C16	24,0	16,0	60,0	130,0	30/3						

Conductor Format: R = Round, RC = Round Compact, S = Sector, BR = IEC228 (BS6360) Round, BS = IEC228 (BS6360) Sector*
** = Pre-rounding required, consult Cembre for appropriate die set*

HIGH VOLTAGE COPPER THROUGH CONNECTORS

MT-TD
MT-GC



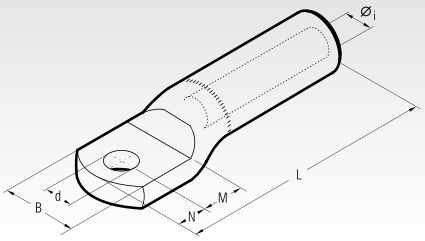
Conductor Size (sqmm) & Format	Type	Type	Dimensions mm		Quantity Box/Bag	Hydraulic Tools								
			Øi	L		HT45-E	B450ND-BVE	B550E	B500NDE	B500E	RH50	HT51	HT81-U	RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
25 R/BR/BS*	MT25-TD	MT25-GC	6,8	60,0	90/3												
30 RC/S ÷ 40 S	MT40S-TD	MT40S-GC	8,2	60,0	90/3												
30 BR/BS*	MT35-TD	MT35-GC	8,2	60,0	90/3												
50 RC	MT50R-TD	MT50R-GC	8,7	60,0	90/3												
50 S	MT50S-TD	MT50S-GC	9,5	60,0	90/3												
50 BR/BS*	MT50-TD	MT50-GC	9,5	60,0	90/3												
63 S ÷ 70 S	MT70S-TD	MT70S-GC	11,0	70,0	30/3												
70 BR/BS*	MT70-TD	MT70-GC	11,0	70,0	30/3												
80 S ÷ 95 RC	MT95R-TD	MT95R-GC	12,0	80,0	30/3												
95 S ÷ 100 S	MT95S-TD	MT95S-GC	13,5	80,0	30/3												
95 BR/BS*	MT95-TD	MT95-GC	13,5	80,0	30/3												
120 RC/S ÷ 150 RC	MT150R-TD	MT150R-GC	15,0	80,0	30/3												
120 BR/BS*	MT120-TD	MT120-GC	15,0	80,0	30/3												
150 S ÷ 160 RC	MT150S-TD	MT150S-GC	16,5	80,0	30/3												
150 BR/BS*	MT150-TD	MT150-GC	16,5	80,0	30/3												
160 S ÷ 200 RC	MT200R-TD	MT200R-GC	17,0	100,0	30/3												
185 BR/BS*	MT185-TD	MT185-GC	18,0	100,0	30/3												
200 S ÷ 240 RC	MT240R-TD	MT240R-GC	19,2	100,0	30/3												
240 S ÷ 315 RC	MT315R-TD	MT315R-GC	21,5	100,0	30/3												
240 BR/BS*	MT240-TD	MT240-GC	20,5	100,0	30/3												
300 BR/BS*	MT300-TD	MT300-GC	23,0	100,0	30/3												
315 S	MT315S-TD	MT315S-GC	23,7	100,0	30/3												
400 BR/BS*	MT400-TD	MT400-GC	27,0	120,0	15/3												
500 R	MT500-TD		30,3	118,0	15/3												
600 R ÷ 630 R	MT630-TD		33,4	130,0	9/3												

Conductor Format: R = Round, RC = Round Compact, S = Sector, BR = IEC228 (BS6360) Round, BS = IEC228 (BS6360) Sector*
** = Pre-rounding required, consult Cembre for appropriate die set*

MT-TD and MT-GC series connectors are designed to join conductors in high voltage applications up to 33 kV.
They are manufactured from high purity Copper, annealed and Tin plated.
MT-GC series feature a solid stop which forms a barrier between the two conductors being joined, this prevents the migration of oils or greases, which may be present, in one cable contaminating the other cable.
MT-TD connectors are unblocked and are suitable for joining cables of the same type.
Details of the appropriate crimping tools and dies are shown on page 212.

AA-M

ALUMINIUM TERMINALS



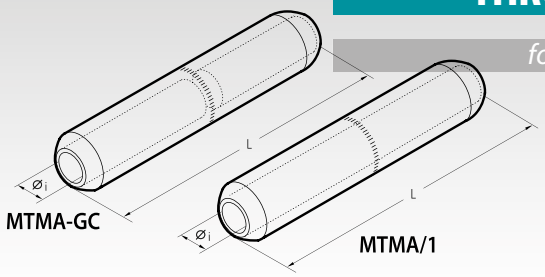
AA-M series terminals are made from Aluminium of a purity equal to or greater than 99,5%.
They are designed to accept a variety of conductor forms especially low stranded compacted conductors.
Non circular conductors may require pre-rounding prior to introduction to the terminal.
Barrels are capped and filled with grease so as to avoid oxidation of the Aluminium.
Details of the appropriate crimping tools and dies are shown on page 213.

Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Hydraulic Tools				
			Øi	B	M	N	L	d						
16	8	**AA16-M8**	5,5	21	13	11	77,0	8,4	*60/3*	HT131-UC RHU131-C B1300-UC				
25	8	**AA25-M8**	6,5	21	13	11	77,0	8,4	*60/3*					
35	8	**AA35-M8**	8,0	23	13	11	77,5	8,4	*60/3*					
	10	**AA35-M10**	8,0	23	13	11	77,5	10,5	*60/3*					
50	12	**AA50-M12**	9,0	26	16	14	91,0	13,2	*60/3*					
	14	**AA50-M14**	9,0	26	18	16	95,0	15,0	*60/3*					
70	12	**AA70-M12**	11,0	27	16	14	91,0	13,2	*45/3*					
	14	**AA70-M14**	11,0	27	18	16	95,0	15,0	*45/3*					
95	12	**AA95-M12**	12,5	27	16	14	91,0	13,2	*45/3*					
	14	**AA95-M14**	12,5	27	18	16	95,0	15,0	*45/3*					
120	12	**AA120-M12**	13,7	35	16	14	115,0	13,2	*30/3*					
	14	**AA120-M14**	13,7	35	18	16	119,0	15,0	*30/3*					
150	12	**AA150-M12**	15,5	34	16	14	115,0	13,2	*30/3*					
	14	**AA150-M14**	15,5	34	18	16	119,0	15,0	*30/3*					
185	12	**AA185-M12**	17,0	42	20	14	122,0	13,2	*18/3*					
	14	**AA185-M14**	17,0	42	22	16	126,0	15,0	*18/3*					
240	12	**AA240-M12**	19,5	44	20	14	122,0	13,2	*15/3*					
	14	**AA240-M14**	19,5	44	22	16	126,0	15,0	*15/3*					
300	12	**AA300-34M12**	22,5	47	22	14	130,0	13,2	*15/3*		HT120 HT131-C RHC131	ECW-H3D		
	14	**AA300-34M14**	22,5	47	22	16	132,0	15,0	*15/3*					
	16	**AA300-34M16**	22,5	47	22	17	133,0	17,0	*15/3*					
	16	**AA300-M16**	23,3	54	19	17	172,0	17,0	*12/3*				RHU 230-630	
400	16	**AA400-M16**	26,0	56	19	17	172,0	17,0	*12/3*					
500	16	**AA500-40M16**	29,1	57	22	19	177,0	17,0	*12/3*					
630	16	**AA630-M16**	32,5	70	22	19	177,0	17,0	*9/3*					

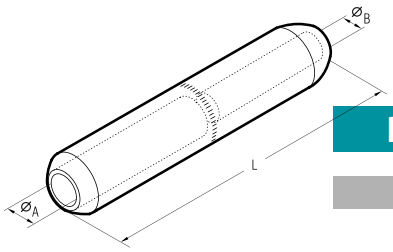
THROUGH CONNECTORS

for Aluminium conductors

MTMA-GC
MTMA/1



Conductor Size sqmm	Type	Type	Dimensions mm Øi	Dimensions mm L	Quantity Box/Bag	Hydraulic Tools				
10	MTMA10-GC		4,3	90,5	60/3	B1300-UC				
16	MTMA16-GC	MTMA16/1	5,5	90,5	60/3					
25	MTMA25-GC	MTMA25/1	6,5	90,5	60/3					
35	MTMA35-GC	MTMA35/1	8,0	90,5	60/3					
	MTMA35-20-GC		8,0	106,5	30/3					
50	MTMA50-GC	MTMA50/1	9,0	106,5	30/3					
70	MTMA70-GC	MTMA70/1	11,0	106,5	30/3					
95	MTMA95-GC		12,5	110,0	30/3	RHU131-C				
		MTMA95/1	12,5	106,5	30/3					
120	MTMA120-GC	MTMA120/1	13,7	133,0	30/3					
150	MTMA150-GC		15,5	135,0	30/3	HT131-UC				
		MTMA150/1	15,5	133,5	30/3					
185	MTMA185-GC	MTMA185/1	17,0	143,5	15/3					
240	MTMA240-GC	MTMA240/1	19,5	143,5	15/3					
300	MTMAD300-GC		22,5	144,5	15/3		HT120 HT131-C RHC131	ECW-H3D		
		MTMAD300/1	22,5	135,0	15/3					
	MTMA300-GC		23,3	218,0	15/3				RHU230-630	
400		MTMA400/1	26,0	218,0	15/3					
500	MTMA500-GC		29,1	218,5	15/3					
		MTMA500-40/1	29,1	218,0	15/3					
630		MTMA630/1	32,5	218,5	12/3					



REDUCER THROUGH CONNECTORS

for Aluminium or Copper conductors

MTMA-GC

Conductor Size sqmm Side A Al	Side B Al/Cu	Type	Dimensions mm ØA	Dimensions mm ØB	Dimensions mm L	Quantity Box/Bag	Hydraulic Tools			
16	10	MTMA 16-10-GC	5,5	4,3	90,5	60/3	B1300-UC			
25	10	MTMA 25-10-GC	6,5	4,3	90,5	60/3				
	16	MTMA 25-16-GC	6,5	5,5	90,5	60/3				
50	25	MTMA 50-25-GC	9,0	6,5	106,5	30/3				
	35	MTMA 50-35-GC	9,0	8,0	106,5	30/3				
70	35	MTMA 70-35-GC	11,0	8,0	106,5	30/3				
	50	MTMA 70-50-GC	11,0	9,0	106,5	30/3				
95	50	MTMA 95-50-GC	12,5	9,0	109,4	30/3				
	70	MTMA 95-70-GC	12,5	11,0	106,5	30/3				
120	70	MTMA 120-70-GC	13,7	11,0	133,0	30/3	RHU131-C			
	95	MTMA 120-95-GC	13,7	12,5	133,0	30/3				
150	70	MTMA 150-70-GC	15,5	11,0	133,0	30/3				
	95	MTMA 150-95-GC	15,5	12,5	134,4	15/3				
	120	MTMA 150-120-GC	15,5	13,7	133,0	15/3	HT131-UC			
185	120	MTMA 185-120-GC	17,0	13,7	143,5	15/3				
	150	MTMA 185-150-GC	17,0	15,5	143,5	15/3				
240	150	MTMA 240-150-GC	19,5	15,5	143,5	15/3				
	185	MTMA 240-185-GC	19,5	17,0	143,5	15/3				
300	95	MTMAD 300-95-GC	22,5	12,5	144,5	15/3		HT120 HT131-C RHC131	ECW-H3D	
	150	MTMAD 300-150-GC	22,5	15,5	144,5	15/3				
	185	MTMAD 300-185-GC	22,5	17,0	144,5	15/3				
	240	MTMAD 300-240-GC	22,5	19,5	144,5	15/3				
400	240	MTMA 400-240-GC	26,0	19,5	218,0	15/3				RHU230-630
	300	MTMA 400-300-GC	26,0	23,3	218,0	15/3				
500	300	MTMA 500-300-GC	29,1	23,3	218,5	12/3				
	400	MTMA 500-400-GC	29,1	26,0	218,5	12/3				

MTMA-GC series through connectors are made from Aluminium of a purity equal to or greater than 99,5%.
They feature a solid stop which creates a barrier between the two sides of conductors to be joined.
Barrels are capped and filled with grease so as to avoid oxidation of the connector. MTMA/1 series through connectors are unblocked and are suitable for joining cables of the same type.
Details of the appropriate crimping tools and dies are shown on pages 214-215.

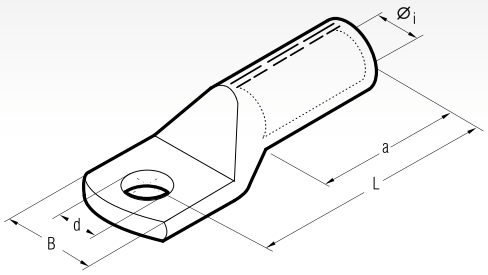
MTMA-GC series reducer through connectors are manufactured to the same specification as MTMA-GC series through connectors.
Details of the appropriate crimping tools and dies are shown on pages 214-215.

AAD-M

ALUMINIUM TERMINALS

for non-tension connections on Aluminium conductors according to DIN EN 50182

Tube dimensions according to DIN 46329



AI · GREASE · -50°C +150°C · DEEP INDENT

Terminals type AAD..-M.. are made from Aluminium tube of a purity equal or greater than 99,5%.
They are suitable for Aluminium conductors according to DIN EN 50182, up to 10 kV.
All terminals are filled with a special grease that avoids Aluminium oxidation after crimping thereby assuring an optimal compression.
Barrel is closed with a cap for storage and transport.
Bright surface finish
The following data is stamped on the terminal:

- Cembre logo
- Terminal description
- Section
- Fixing bolt size
- Number and position of crimps
- Cembre Die reference according to DIN 48083

Details of the appropriate crimping tools and dies are shown on page 218.

Conductor Size sqmm rm sm	Conductor Size sqmm re se	Ø Stud mm	Ref.	Code	Dimensions mm Øi	B	L	d	a	Quantity *Bag*	Hydraulic Tools: HT45-E B450ND-BVE	HT51 RH50 B500E B500NDE	HT 81-U RHU 81	HT 120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU 450	RHU 520
16	25	8	AAD16-M8	12	5,8	18	52	8,5	32	*50*	●	●	●	●	●	●	●
		10	AAD16-M10	12	5,8	18	52	10,5	32	*50*	●	●	●	●	●	●	●
25	35	8	AAD25-M8	12	6,8	19	60	8,5	37	*50*	●	●	●	●	●	●	●
		10	AAD25-M10	12	6,8	19	60	10,5	37	*50*	●	●	●	●	●	●	●
35	50	8	AAD35-M8	14	8,0	21	67	8,5	42	*35*	●	●	●	●	●	●	●
		10	AAD35-M10	14	8,0	21	67	10,5	42	*35*	●	●	●	●	●	●	●
		12	AAD35-M12	14	8,0	21	67	13,0	42	*35*	●	●	●	●	●	●	●
50	70	8	AAD50-M8	16	9,8	25	72	8,5	42	*30*	●	●	●	●	●	●	●
		10	AAD50-M10	16	9,8	25	72	10,5	42	*30*	●	●	●	●	●	●	●
		12	AAD50-M12	16	9,8	25	72	13,0	42	*30*	●	●	●	●	●	●	●
70	95	10	AAD70-M10	18	11,2	28	83	10,5	52	*15*	●	●	●	●	●	●	●
		12	AAD70-M12	18	11,2	28	83	13,0	52	*15*	●	●	●	●	●	●	●
		16	AAD70-M16	18	11,2	28	83	17,0	52	*15*	●	●	●	●	●	●	●
95	120	10	AAD95-M10	22	13,2	32	90	10,5	55	*10*	●	●	●	●	●	●	●
		12	AAD95-M12	22	13,2	32	90	13,0	55	*10*	●	●	●	●	●	●	●
		16	AAD95-M16	22	13,2	34	90	17,0	55	*10*	●	●	●	●	●	●	●
120	150	10	AAD120-M10	22	14,7	32	91	10,5	55	*10*	●	●	●	●	●	●	●
		12	AAD120-M12	22	14,7	32	91	13,0	55	*10*	●	●	●	●	●	●	●
		16	AAD120-M16	22	14,7	34	91	17,0	55	*10*	●	●	●	●	●	●	●
150	185	10	AAD150-M10	25	16,5	35	104	10,5	60	*8*				●	●	●	●
		12	AAD150-M12	25	16,5	35	104	13,0	60	*8*				●	●	●	●
		16	AAD150-M16	25	16,5	35	104	17,0	60	*8*				●	●	●	●
		20	AAD150-M20	25	16,5	41	104	21,0	60	*8*				●	●	●	●
185	240	12	AAD185-M12	28	18,3	40	105	13,0	60	*15*				●	●	●	●
		16	AAD185-M16	28	18,3	40	105	17,0	60	*15*				●	●	●	●
		20	AAD185-M20	28	18,3	40	105	21,0	60	*15*				●	●	●	●
240	300	12	AAD240-M12	32	21,0	45	119	13,0	70	*12*				●	●	●	●
		16	AAD240-M16	32	21,0	45	119	17,0	70	*12*				●	●	●	●
		20	AAD240-M20	32	21,0	45	119	21,0	70	*12*				●	●	●	●
300		12	AAD300-M12	34	23,3	49	125	13,0	70	*9*				●	●	●	●
		16	AAD300-M16	34	23,3	49	125	17,0	70	*9*				●	●	●	●
		20	AAD300-M20	34	23,3	49	125	21,0	70	*9*				●	●	●	●
400		12	AAD400-M12	38	26,0	58	140	13,0	100	*3*					●	●	●
		16	AAD400-M16	38	26,0	58	140	17,0	100	*3*					●	●	●
		20	AAD400-M20	38	26,0	58	140	21,0	100	*3*					●	●	●
500		12	AAD500-M12	44	29,0	63	160	13,0	100	*3*					●	●	●
		16	AAD500-M16	44	29,0	63	160	17,0	100	*3*					●	●	●
		20	AAD500-M20	44	29,0	63	160	21,0	100	*3*					●	●	●

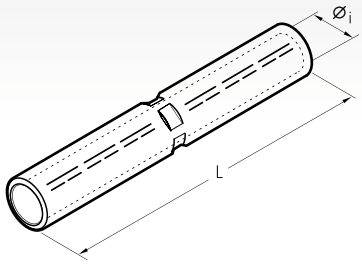
rm = round stranded
sm = sector stranded
re = round solid
se = sector solid

ALUMINIUM THROUGH CONNECTORS

DSVA

for non-tension connections on Aluminium conductors according to DIN EN 50182

Manufactured according to DIN 46267 Part 2



Conductor Size sqmm rm sm	Conductor Size sqmm re se	Code	Ref.	Dimensions mm Øi	Dimensions mm L	Quantity Bag	Hydraulic Tools: HT45-E B450ND-BVE	RH50 B500E	HT51 B500NDE	HT 81-U RHU 81	HT 120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU 450	RHU 520
16	25	12	**DSVA16**	5.8	55	*30*								
25	35	12	**DSVA25**	6.8	70	*25*								
35	50	14	**DSVA35**	8.0	85	*25*								
50	70	16	**DSVA50**	9.8	85	*20*								
70	95	18	**DSVA70**	11.2	105	*20*								
95	120	22	**DSVA95**	13.2	105	*15*								
120	150	22	**DSVA120**	14.7	105	*15*								
150	185	25	**DSVA150**	16.5	125	*10*								
185	240	28	**DSVA185**	18.3	125	*10*								
240	300	32	**DSVA240**	21.0	145	*5*								
300		34	**DSVA300**	23.3	145	*10*								
400		38	**DSVA400**	26.0	210	*3*								
		42	**DSVA401**	28.0	210	*3*								
500		44	**DSVA500**	29.0	210	*3*								
		46	**DSVA501**	31.0	210	*3*								
600		52	**DSVA625**	35.0	330	*4*								
800		58	**DSVA800**	40.0	350	*3*								
1000		60	**DSVA1000**	44.0	350	*3*								

rm = round stranded
sm = sector stranded
re = round solid
se = sector solid

Crimping through connectors type DSVA.. are manufactured according to DIN 46267 part 2.
The aluminum tube has a purity equal to or greater than 99.5%.
The crimping through connectors are suitable for aluminum conductors according to DIN EN 50182, up to 10 kV.
All connectors are filled with a special grease that avoids aluminum oxidation after crimp and thus guarantees an optimal compression.
Barrels are capped for storage and transport.
On the connector following information is shown:

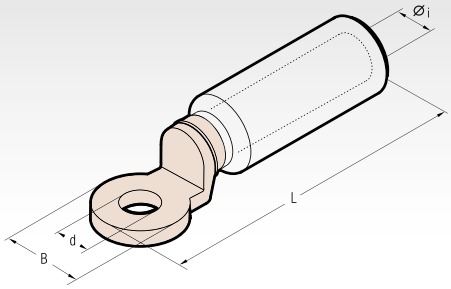
- Cembre logo
- Connector description
- Section
- Number and position of crimps
- Compression code according to DIN 48083

Details of the appropriate crimping tools and dies are shown on page 218.

CAA-M

BIMETALLIC CONNECTORS

Copper palm fixing - Aluminium barrels



Cu Al GREASE -50°C +150°C DEEP INDENT

The barrels of series CAA-M connectors are made from Aluminium of a purity equal to or greater than 99,5%. The barrel is friction welded to the palm thus achieving the best possible transition between the Copper palm and Aluminium barrel.
Barrels are capped and filled with grease so as to avoid oxidation of the Aluminium.
Details of the appropriate crimping tools and dies are shown on pages 213, 215.

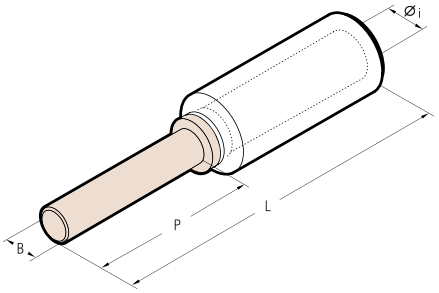
Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm Øi	B	L	d	Quantity Box/Bag	Hydraulic Tools
10	12	**CAA10-M12**	4,3	24,0	87,0	13,0	90/3	HT131-UC, RHU131-C, B1300-UC
16	12	**CAA16-M12**	5,5	24,0	87,0	13,0	90/3	
25	12	**CAA25-M12**	6,5	24,0	87,0	13,0	90/3	
35	12	**CAA35-M12**	8,0	24,0	87,0	13,0	90/3	
	12	**CAA35-20-M12**	8,0	24,0	87,0	13,0	60/3	
50	12	**CAA50-M12**	9,0	24,0	87,0	13,0	60/3	
70	12	**CAA70-M12**	11,0	24,0	87,0	13,0	60/3	
95	12	**CAA95-M12**	12,5	24,0	87,0	13,0	60/3	
120	12	**CAA120-M12**	13,7	31,0	111,0	13,0	30/3	
150	12	**CAA150-M12**	15,5	31,0	111,0	13,0	30/3	
185	12	**CAA185-M12**	17,0	35,0	116,0	13,0	18/3	
240	12	**CAA240-M12**	19,5	35,0	116,0	13,0	18/3	
300	12	**CAA300-34M12**	22,5	35,0	120,0	13,0	15/3	HT120, HT131-C, RHC131
	16	**CAA300-34M16**	22,5	35,0	120,0	17,0	15/3	
	16	**CAA300-M16**	23,3	35,0	152,5	16,5	12/3	ECW-H3D
400	16	**CAA400-M16**	26,0	35,0	152,5	16,5	12/3	
500	16	**CAA500-M16TNBD**	29,1	35,0	152,5	16,5	12/3	
630	8	**CAA630-4M8**	32,5	60,0	200,0	4 x 9,0*	9/3	RHU230-630

** 4 holes with 30 mm between axes*

MTA-C

BIMETALLIC CONNECTORS

Copper pin - Aluminium barrels



Cu Al GREASE -50°C +150°C DEEP INDENT

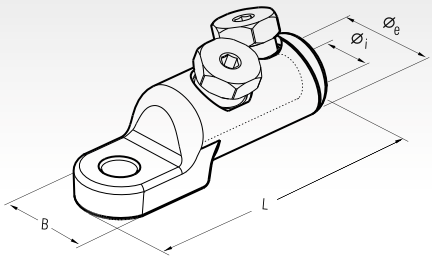
The barrels of series MTA-C connectors are made from Aluminium of a purity equal to or greater than 99,5%. The barrel is friction welded to the pin thus achieving the best possible transition between the Copper pin and Aluminium barrel.
Barrels are capped and filled with grease so as to avoid oxidation of the Aluminium.
Details of the appropriate crimping tools and dies are shown on pages 213, 215.

Conductor Size sqmm	Type	Dimensions mm Øi	B	P	L	Quantity Box/Bag	Hydraulic Tools
16	**MTA16-C**	5,5	8	30	82	90/3	HT131-UC, RHU131-C, B1300-UC
25	**MTA25-C**	6,5	8	30	82	90/3	
35	**MTA35-C**	8,0	8	30	82	90/3	
50	**MTA50-C**	9,0	12	45	97	60/3	
70	**MTA70-C**	11,0	12	45	97	60/3	
95	**MTA95-C**	12,5	12	45	97	60/3	
120	**MTA120-C**	13,7	14	55	125	30/3	
150	**MTA150-C**	15,5	14	55	125	30/3	
185	**MTA185-C**	17,0	14	55	125	24/3	
240	**MTA240-C**	19,5	14	55	125	24/3	

MECHANICAL LUGS

MLA-C

For Low and Medium voltage Al/Cu conductors



Conductor Size sqmm	Type	Ø Stud mm	Dimensions mm				N° of Bolts	Number of centring devices	Quantity *Box/Bag*
			Øe	Øi	B	L			
50-240	**MLA50-240-12C**	12	33	20,5	33	106,5*	2	3	*1/10*

** without centring devices*

Al · GREASE · 12µm TIN PLATED · -50°C +150°C

Cembre range-taking mechanical connectors are intended for use with Copper and Aluminium conductors, for low and medium voltage (up to 52kV) installations, in indoor, outdoor and underground applications.
Mechanical connector bodies (pic.1) are made from Aluminium EN-AW 2011 T6 with cross sectional area and barrel length designed to optimise electrical connectivity. Internal surfaces are protected against oxidation by grease with a very high dropping point, while the Tin plating on external surfaces has a minimum thickness of 12 µm for improved surface protection.
Shear bolts (pic.2) are made from the same material and designed to ensure a reliable electrical connection simply by tightening the bolts with a standard socket until shearing occurs inside the threaded hole without external protrusion.
To minimise voltage stresses, connectors are provided with centring devices (pic.3) to improve the alignment of the different conductor sizes.

Key features:

- Wide range of conductor cross sections
- Suitable for Copper and Aluminium conductors
- Tested according to IEC 61238
- Torque controlled to guarantee a good electrical contact
- Reduces inventory levels
- Easy installation - only requires a standard socket
- Reduced installation time

Pic. 1

Pic. 2

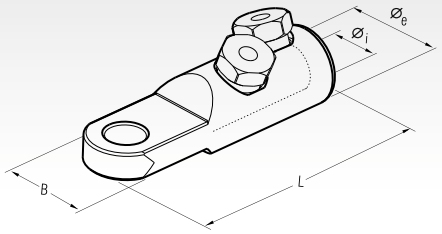
Conductor Size sqmm	Centring device	
	Color	Type
50 - 70 - 95	Red	
120 - 150	Blue	
185	Yellow	
240	Not required	

Pic. 3

ML-C

MECHANICAL LUGS WITH SYMMETRICAL PALM

For Low and Medium voltage Al/Cu conductors



Al · GREASE · 12µm TIN PLATED · -50°C +150°C

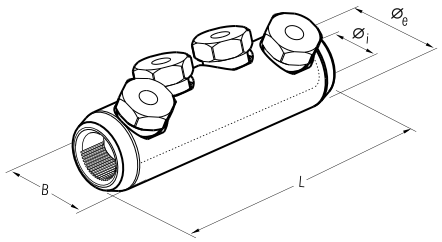
Conductor Size sqmm	Type	Ø Stud mm	Dimensions mm				N° of Bolts	Number of centring devices	Quantity Box/Bag
			Øe	Øi	B	L			
95-240	**ML95-240-12C**	12	35	20,5	35	124*	2	3	1/10
95-240	**ML95-240-16C**	16	35	20,5	35	124*	2	3	1/10
150-240	**ML150-240-12C**	12	35	20,5	35	124*	2	2	1/10
150-240	**ML150-240-16C**	16	35	20,5	35	124*	2	2	1/10

** without centring devices*

MBS-C

MECHANICAL SPLICES

For Low and Medium voltage Al/Cu conductors

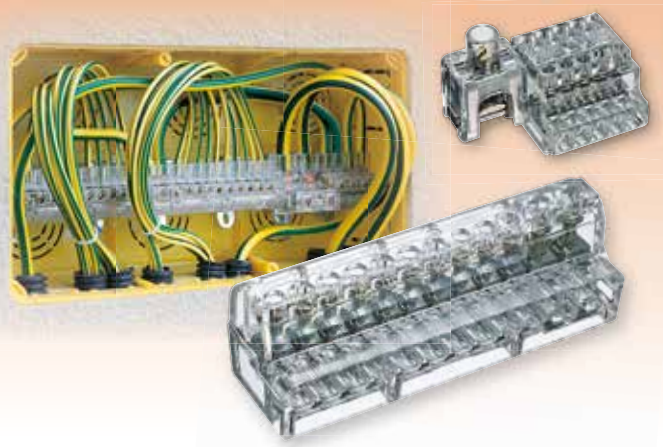


Al · GREASE · 12µm TIN PLATED · -50°C +150°C

Conductor Size sqmm	Type	Dimensions mm				N° of Bolts	Number of centring devices	Quantity Box/Bag
		Øe	Øi	B	L			
50-240	**MBS50-240-C**	35	20,5	35	124*	4	3	1/20
95-240	**MBS95-240-C**	35	20,5	35	124*	4	3	1/20

** without centring devices*

TERMINAL BLOCKS



symbol description

terminal blocks

PC — Polycarbonate body

PA.6 — Polyamide PA6.6 body

PP — Polypropylene body

STEATITE — Steatite body

PVC — Polyvinylchloride insulating sheath

Cu-ETP ELECTROLYTIC — Electrolytically Tin plated Copper interconnections

3µm TIN PLATED — Electrolytically Tin plated to avoid oxidation

450V — Nominal voltage V

IP20 — Degree of Protection IP20

V0 UL94 — Self-extinguishing class V0 UL94

Steel ZINC PLATED — Zinc plated Steel screws

Steel CHROME — Chrome plated Steel screws

MAX +85°C — Operating temperature range

Italian Institute of the Quality Mark type approval

Lloyd's Register of Shipping type approval

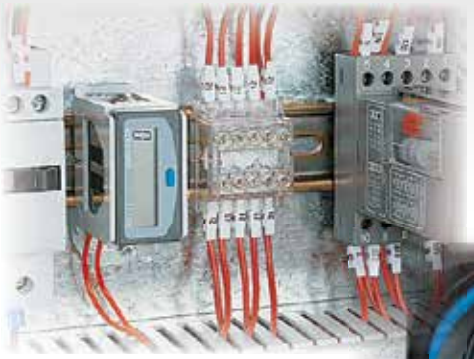
Italian Naval Register type approval

CE — Marking CE

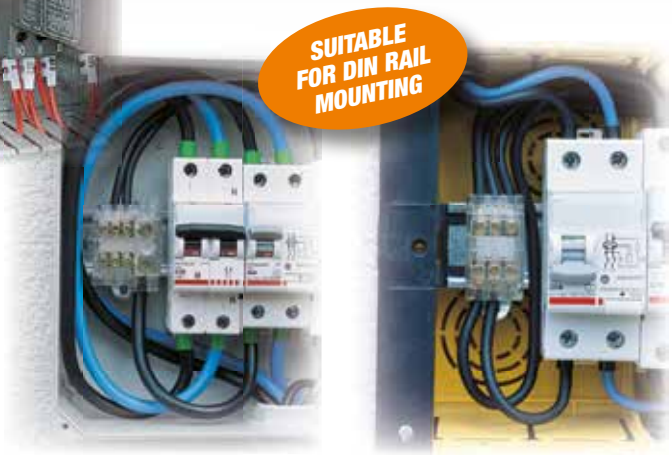
example applications

terminal blocks

type **ZETApiù®**



Z6-10D terminal blocks
used in a control panel.



Z35T-11 uninterrupted,
main earth loop, terminal block.
Used for equipotential bonding

Z16-8D and Z6-6D
mounted on DIN rails.
Used in control panels

type **ZETAmini®**

ZETAmini terminal blocks
used for domestic/commercial
applications.

type **ZETA*block*®**

A typical application of the
Z50-DP12-160 and Z35-DP14B-125
installed in a distribution panel

Z6

SINGLE POLE TERMINAL BLOCKS

indirect clamping - nominal section 6 sqmm

type ZETApiù®

Z6-3 Z6-5 Z6-6 Z6-10

The "Z...D" version has been designed for mounting on DIN rails

PC | Cu-ETP ELECTROLYTIC | 3µm TIN PLATED | 450V | IP20 | V0 UL94 | MAX +85°C

Connecting Capacity sqmm	Type	No. of Ways	Nominal Voltage V	Maximum Operating Temperature °C	Insulation Specification	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
(3 way) 1÷6	Z6-3	3	450	85	IP20	V-0 (UL 94)	23x23xh27,5	15,0	30
	Z6-3D						23x40xh36,5	18,5	10
(5 way) 1÷6	Z6-5	5	450	85	IP20	V-0 (UL 94)	35x23xh27,5	23,0	20
	Z6-5D						35x40xh36,5	26,5	10
(6 way) 1÷6	Z6-6	6	450	85	IP20	V-0 (UL 94)	23x43xh28,5	26,0	15
	Z6-6D						23x53xh33	31,0	10
(10 way) 1÷6	Z6-10	10	450	85	IP20	V-0 (UL 94)	35x43xh28,5	41,0	10
	Z6-10D						35x53xh33	46,0	15

D= Version with clamp for DIN rail

3, 5, 6 and 10 way, single pole terminal blocks for conductor section 1 to 6 sqmm.
Self contained and robust, they are quick and easy to install for both industrial and domestic use.
The indirect clamping of the "ZETApiù" terminal blocks guarantees a low and stable contact resistance.
Indirect clamping eliminates damage to the conductor strands.
The easy-entry receptacles also grant a fast and reliable insertion of the cable.

Technical features:

- **Self-extinguishing Polycarbonate body**
- **Tempered Steel clamps**
- **Electrolytically Tin plated Copper interconnections**

Z16

SINGLE POLE TERMINAL BLOCKS

indirect clamping - nominal section 16 sqmm

type ZETApiù®

Z16-3 Z16-4 Z16-5N Z16-8 Z16-12

PC | Cu-ETP ELECTROLYTIC | 3µm TIN PLATED | 450V | IP20 | V0 UL94 | MAX +85°C

Connecting Capacity sqmm	Type	No. of Ways	Nominal Voltage V	Maximum Operating Temperature °C	Insulation Specification	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
16	Z16-3	3	450	85	IP20	V-0 (UL 94)	38x31,3xh38	52,0	20
	Z16-3D						38x50xh44	55,5	15
16	Z16-4	4	450	85	IP20	V-0 (UL 94)	27x54xh37	50,0	15
	Z16-4D						27x58xh43	54,0	10
16	Z16-5N	5	450	85	IP20	V-0 (UL 94)	61x31,5xh38	64,5	10
	Z16-5ND						61x50xh44	68,0	4
(2 way) 16 + (6 way) 6	Z16-8	8 (2÷6)	450	85	IP20	V-0 (UL 94)	35,5x50xh36,5	50,0	15
	Z16-8D						35,5x57xh42	56,0	10
(2 way) 16 + (10 way) 6	Z16-12	12 (2÷10)	450	85	IP20	V-0 (UL 94)	104,5x32,5xh36,5	115,0	8
	Z16-12D						104,5x50xh42	125,0	5

D= Version with clamp for DIN rail

3, 4, 5, 8 and 12 way, single pole terminal blocks.
Ideal for use as an equipotential bonding connector for both industrial and domestic use.

SINGLE POLE TERMINAL BLOCKS

indirect clamping - nominal section 35 sqmm

type ZETApiù®

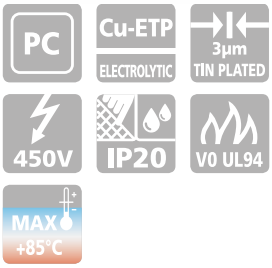
Z35-3

Z35-4

Z35-6

Connecting Capacity sqmm	Type	No. of Ways	Nominal Voltage V	Maximum Operating Temperature °C	Insulation Specification	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
35	**Z35-3**	3	450	85	IP20	V-0 (UL 94)	53x48,5xh42	110	*10*
	Z35-3D						53x50xh48	114	*5*
35	**Z35-4**	4	450	85	IP20	V-0 (UL 94)	37x85xh42	129	*5*
	Z35-4D						37x85xh48	133	*5*
(2 way) 35 + (4 way) 16	**Z35-6**	6 (2÷4)	450	85	IP20	V-0 (UL 94)	83x41xh43	130	*8*
	Z35-6D						83x49xh52	140	*5*

D= Version with clamp for DIN rail



3, 4 and 6 way, single pole terminal blocks. Ideal for use as an equipotential bonding connector for both industrial and domestic use.

SINGLE POLE TERMINAL BLOCKS

Z35
Z50

indirect clamping - for earthing applications ⏚

type ZETApiù®

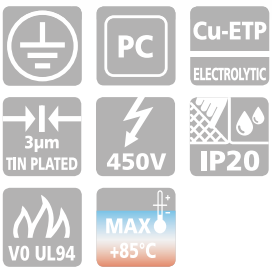
Z50-10D

Z35T-11
Z35T-11D

Z35-26D

Connecting Capacity sqmm	Type	No. of Ways	Maximum Operating Temperature °C	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
(1 way) 35 + (10 way) 6	**Z35T-11**	11 (1+10)	85	V-0 (UL 94)	58x43xh42	70	*10*
	Z35T-11D				58x53xh47	75	*10*
(2 way) 35 + (24 way) 10	**Z35-26D**	26 (2+24)	85	V-0 (UL 94)	151x52xh48	379	*4*
(2 way) 50 + (8 way) 25	**Z50-10D**	10 (2+8)	85	V-0 (UL 94)	77,5x55xh49	320	*6*

D= Version with clamp for DIN rail



10, 11 and 26 way, single pole terminal blocks.
Ideal for use as an equipotential bonding connector for both industrial and domestic use.

CONNECTING CAPACITY OF TERMINAL BLOCKS

indirect clamping

type
ZETApiù®

Type	Nominal Section	No. of Ways x Nominal Section	Connecting Capacity of Each Way* No. of Conductors x Section	Markings
Z6-3 Z6-3D	6□	3 x 6□	1 x 6□ R/F 1 x 4□ R/F 1÷2 x 2,5□ R/F 1÷2 x 1,5□ R/F 1÷4 x 1□ R/F	6 sqmm 450 V T 85°C
Z6-5 Z6-5D	6□	5 x 6□		
Z6-6 Z6-6D	6□	6 x 6□		6 sqmm 450 V T 85°C
Z6-10 Z6-10D	6□	10 x 6□		
Z16-3 Z16-3D	16□	3 x 16□	1 x 16□ R/F 1 x 10□ R/F 1÷2 x 6□ R/F 1÷3 x 4□ R/F 1÷4 x 2,5□ R/F 1÷8 x 1,5□ R/F	16 sqmm 450 V T 85°C
Z16-4 Z16-4D	16□	4 x 16□	1 x 16□ F 1 x 10□ F 1÷2 x 6□ F 1÷3 x 4□ F 1÷4 x 2,5□ F 1÷8 x 1,5□ F	16 sqmm 450 V T 85°C
Z16-5N Z16-5ND	16□	5 x 16□	1 x 16□ R/F 1 x 10□ R/F 1÷2 x 6□ R/F 1÷3 x 4□ R/F 1÷4 x 2,5□ R/F 1÷8 x 1,5□ R/F	16 sqmm 450 V T 85°C
Z16-8 Z16-8D	16□ / 6□	2 x 16□	1 x 16□ R/F 1 x 10□ R/F 1÷2 x 6□ R/F 1÷3 x 4□ R/F 1÷4 x 2,5□ R/F 1÷8 x 1,5□ R/F	16~6 sqmm 450 V T 85°C
		6 x 6□	1 x 6□ R/F 1 x 4□ R/F 1÷2 x 2,5□ R/F 1÷2 x 1,5□ R/F 1÷4 x 1□ R/F	
Z16-12	16□ / 6□	2 x 16□	1 x 16□ F 1 x 10□ F 1÷2 x 6□ F 1÷3 x 4□ F 1÷4 x 2,5□ F	16~6 sqmm 450 V T 85°C
Z16-12D		10 x 6□	1 x 6□ F 1 x 4□ F 1÷2 x 2,5□ F 1÷2 x 1,5□ F 1÷4 x 1□ F	

** A mixture of conductor sizes may be connected to the terminal block provided that the sum of their sections is less than the nominal section.*

R = Rigid conductor F = Flexible conductor

CONNECTING CAPACITY OF TERMINAL BLOCKS

indirect clamping

type
ZETApiù®

Type	Nominal Section	No. of Ways x Nominal Section	Connecting Capacity of Each Way* No. of Conductors x Section	Markings
Z35-3 Z35-3D	35□	3 x 35□	1 x 35□ R/F 1 x 25□ R/F 1÷2 x 16□ R/F 1÷3 x 10□ R/F 1÷5 x 6□ R/F	35 sqmm 450 V T 85°C
Z35-4 Z35-4D	35□	4 x 35□	1 x 35□ F 1 x 25□ F 1÷2 x 16□ F 1÷3 x 10□ F 1÷6 x 6□ F	35 sqmm 450 V T 85°C
Z35-6 Z35-6D	35□ / 16□	2 x 35□	1 x 35□ R/F 1 x 25□ R/F 1÷2 x 16□ R/F 1÷3 x 10□ R/F 1÷6 x 6□ F	35~16 sqmm 450 V T 85°C
		4 x 16□	1 x 16□ R/F 1 x 10□ R/F 1÷2 x 6□ R/F 1÷3 x 4□ R/F 1÷5 x 2,5□ F	
Z35T-11 Z35T-11D	35□ / 16□	1 x 35□	1 x 35□ R/F 1 x 25□ R/F 1 x 16□ R/F 1 x 10□ R/F	35~6 sqmm T 85°C
		10 x 6□	1 x 6□ R/F 1 x 4□ R/F 1÷2 x 2,5□ R/F 1÷2 x 1,5□ R/F 1÷4 x 1□ R/F	
Z35-26D	35□ / 10□	2 x 35□	1 x 35□ R/F 1 x 25□ R/F 1÷2 x 16□ R/F 1÷3 x 10□ R/F 1÷6 x 6□ R/F	35~10 sqmm T 85°C
		24 x 10□	1 x 10□ R/F 1 x 6□ R/F 1÷2 x 4□ R/F 1÷4 x 2,5□ R/F	
Z50-10D	50□ / 25□	2 x 50□	1 x 50□ R/F 1 x 35□ R/F 1÷2 x 25□ R/F 1÷4 x 16□ R/F	** 50~25 sqmm T 85°C
		8 x 25□	1 x 25□ R/F 1÷2 x 16□ R/F 1÷3 x 10□ R/F 1÷6 x 6□ R/F 1÷9 x 4□ R/F	

** A mixture of conductor sizes may be connected to the terminal block provided that the sum of their sections is less than the nominal section.*
R = Rigid conductor F = Flexible conductor

MARKINGS

Conforms to:

Directives 2014/35/UE

Italian Institute of the Quality Mark type approval

EN 60998-1: 2004 and EN 60998-2-1: 2004 Norms

Lloyd's Register of Shipping type approval

Italian Naval Register type approval

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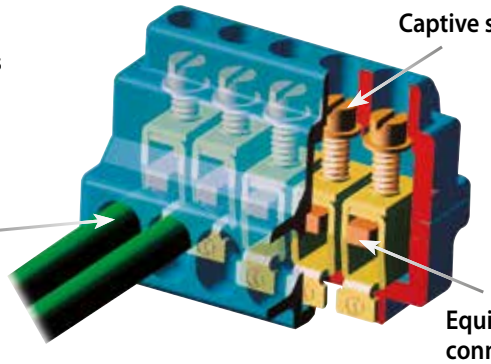
EN60947-1: 2007+A1: 2011: 2014 and EN 60947-7-1: 2002 Norms



Z-DP

POWER DISTRIBUTION BLOCK

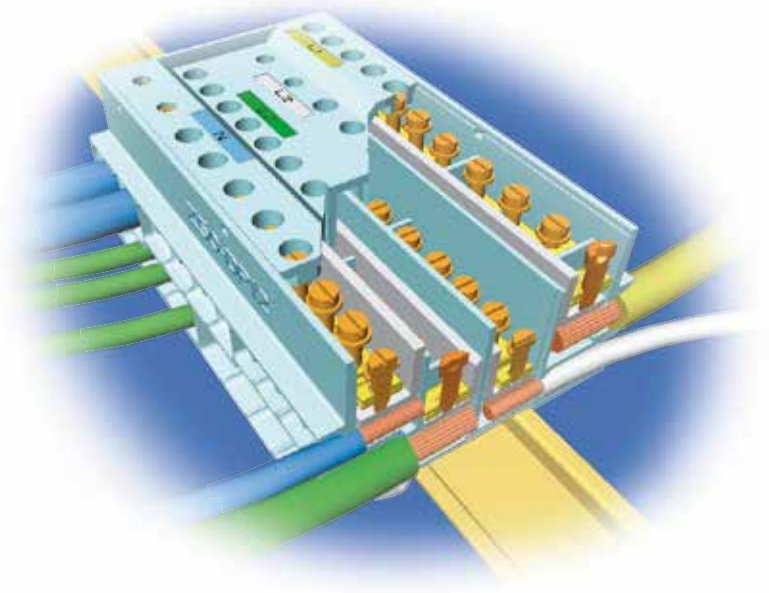
indirect clamping

type ZETA*block*®

PC · Cu-ETP ELECTROLYTIC · 3µm TIN PLATED · Steel ZINC PLATED · V0 UL94 · 800V

Type	No. of poles	No. of Ways per pole	Nominal CSA for each pole sqmm	Maximum operating voltage (Ui)	Impulse voltage (Uimp)	Maximum operating current (In)	Allowable short duration fault current (Icw)	Maximum allowed peak fault current (Ipk)	Self Extinguishing Specification	Dimensions mm	Weight g	Qty
Z25-DP7-100	4	7 (2+5)	(2 way) 25 + (5 way) 6	800 V	8 kV	100 A	3 kA	18 kA	V-0 (UL 94)	70x84xh45	290	*2*
Z35-DP14-125	4	14 (2+2+10)	(2 way) 35 + (2 way) 16 + (10 way) 6	800 V	8 kV	125 A	4,2 kA	18 kA	V-0 (UL 94)	137x83xh46	700	*1*
Z35-DP14B-125	2	14 (2+2+10)	(2 way) 35 + (2 way) 16 + (10 way) 6	800 V	8 kV	125 A	4,2 kA	18 kA	V-0 (UL 94)	137x44xh46	360	*2*
Z50-DP12-160	4	12 (2+4+6)	(2 way) 50 + (4 way) 25 + (6 way) 16	800 V	8 kV	160 A	6 kA	18 kA	V-0 (UL 94)	150x84xh48	780	*1*

100, 125 and 160A, 2–4 pole distribution blocks with 7, 14 and 12 ways per pole respectively.
Accepting a wide cable CSA range (1 - 50 sqmm) and of compact size, Zetablocks are ideal for control cabinets and distribution panels.
The lateral arrangement of terminals on upper and lower faces (Z35-DP14B one face only), simplifies connection and promotes tidy, homogeneous cable routing to assist subsequent wiring operations.
Easy entry apertures provide quick, effective cable insertion while the indirect clamping feature eliminates damage to cable strands and assures a low, stable contact resistance.

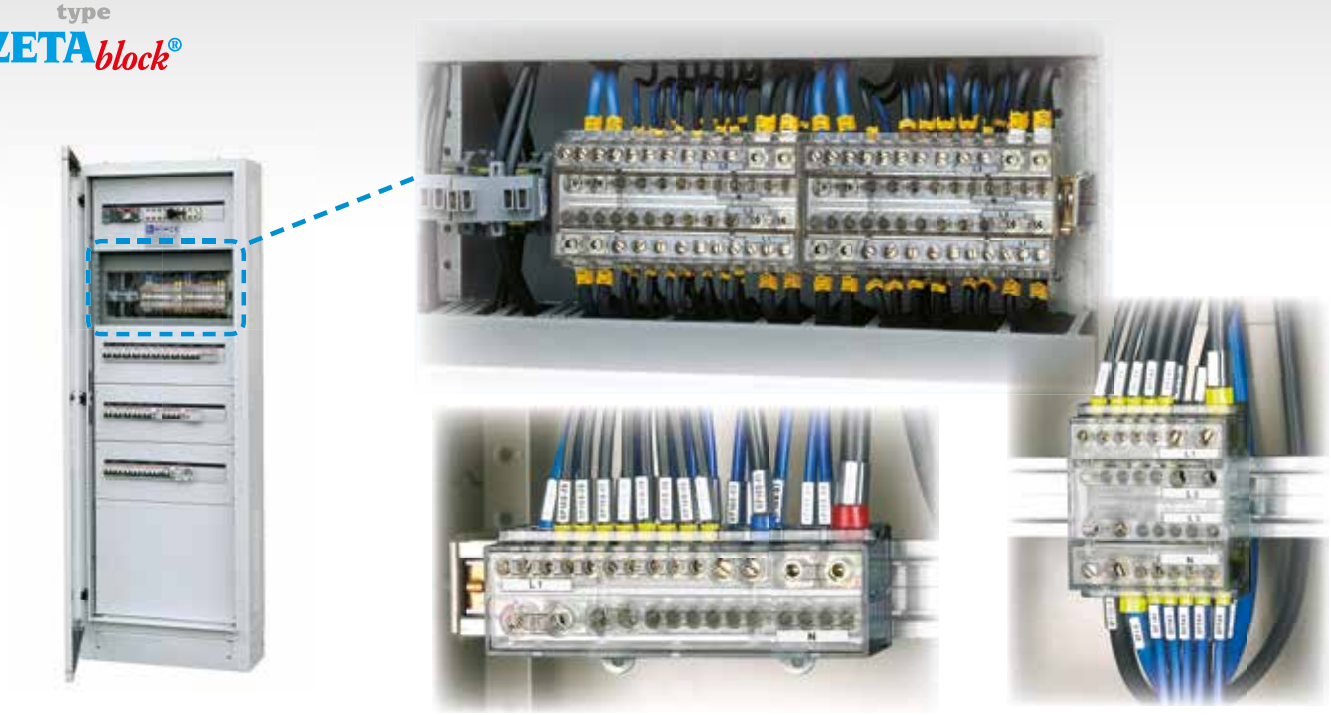


Technical features:
- **Self extinguishing antishock Polycarbonate body**
- **Tempered Steel captive clamping screws and plates**
- **Electrolytically Tin plated Copper interconnectors**

POWER DISTRIBUTION BLOCK

indirect clamping

type
ZETA*block*®



CONNECTING CAPACITY OF POWER DISTRIBUTION BLOCK

indirect clamping

Type	Nominal Section	No. of Ways x Nominal Section	Connecting Capacity of Each Way No. of Conductors x Section	Markings
Z25-DP7-100	25□/6□	2 x 25□	1 x 25□ F 1 x 16□ F 1÷2 x 10□ F	25÷6 sqmm
		5 x 6□	1 x 6□ F 1 x 4□ F 1÷2 x 2,5□ F 1÷2 x 1,5□ F 1÷4 x 1□ F	
Z35-DP14-125 Z35-DP14B-125	35□/16□/6□	2 x 35□	1 x 35□ F 1 x 25□ F 1÷2 x 16□ F 1÷3 x 10□ F	35÷16÷6 sqmm
		2 x 16□	1 x 16□ F 1 x 10□ F 1÷2 x 6□ F 1÷3 x 4□ F 1÷4 x 2,5□ F	
		10 x 6□	1 x 6□ F 1 x 4□ F 1÷2 x 2,5□ F 1÷2 x 1,5□ F 1÷4 x 1□ F	
Z50-DP12-160	50□/25□/16□	2 x 50□	1 x 50□ F 1 x 35□ F 1÷2 x 25□ F	50÷25÷16 sqmm
		4 x 25□	1 x 25□ F 1 x 16□ F 1÷2 x 10□ F	
		6 x 16□	1 x 16□ F 1 x 10□ F 1÷2 x 6□ F	

F = Flexible conductor

MARKINGS

Conforms to:

Directives 2014/35/UE

Italian Institute of the Quality Mark type approval

EN 60947-7-1: 2009 Norms

Z-1

ONE WAY TERMINAL BLOCKS

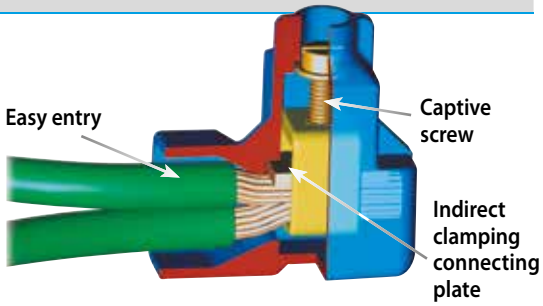
indirect clamping

type **ZETAmini®**

One way, single pole terminal blocks for conductors sections from 0.5 to 35 sqmm.
Self contained and robust, they are ideal for the fast and safe installation for industrial and domestic applications.
The indirect clamping of the "ZETAmini" terminal blocks guarantees a low and stable contact resistance.
The easy-entry receptacle also grants a fast and reliable insertion of the cable.

Connecting Capacity sqmm	Type	Nominal Voltage V	Maximum Operating Temperature °C	Insulation Specification	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
2,5	**Z2.5-1**	450	85	IP20	V-0 (UL 94)	7,6x20xh23,5	3	*500/25*
6	**Z6-1**	450	85	IP20	V-0 (UL 94)	11,5x28xh29	6	*250/25*
10	**Z10-1**	450	85	IP20	V-0 (UL 94)	15,6x32xh32,5	11	*100/10*
16	**Z16-1**	450	85	IP20	V-0 (UL 94)	18x34xh38	15	*100/10*
25	**Z25-1**	450	85	IP20	V-0 (UL 94)	20,8x42,5xh43,5	29	*50/10*
35	**Z35-1**	450	85	IP20	V-0 (UL 94)	25x45xh51,5	37	*40/10*

Technical features:
- **Self-extinguishing Polycarbonate body**
- **Electrolytically Zinc plated, tempered Steel clamp and screw**
- **Electrolytically Tin plated Steel connection plate**



Type	Nominal Section	Connecting Capacity of Each Way* No. of Conductors x Section		Markings
Z2.5-1	2,5□	2 x 2,5□ R/F 2÷3 x 1,5□ R/F 2÷5 x 1,0□ R/F	2÷6 x 0,75□ R/F 2÷10 x 0,5□ R/F 2÷18 x Ø 0,4÷0,6 mm communication type wire	2,5 sqmm 450 V T 85°C IP 20
Z6-1	6□	2 x 6□ R/F 2÷3 x 4□ R/F 2÷4 x 2,5□ R/F 2÷6 x 1,5□ R/F 2÷6 x 1□ R/F	2÷10 x 0,75□ R/F 2÷12 x 0,5□ R/F (1 x 6„ F) + (4 x 1,5□ F) (1 x 6„ F) + (2 x 2,5□ F)	6 sqmm 450 V T 85°C IP 20
Z10-1	10□	2 x 10□ R/F 2÷3 x 6□ R/F 2÷5 x 4□ R/F 2÷8 x 2,5□ R/F	2÷12 x 1,5□ R/F 2÷20 x 1□ R/F 2÷25 x 0,75□ R/F (1 x 6□ F) + (1 x 4□ F) + (2 x 2,5□ F) + (3 x 1,5□ F)	10 sqmm 450 V T 85°C IP 20
Z16-1	16□	2 x 16□ R/F 2÷3 x 10□ R/F 2÷5 x 6□ R/F	2÷8 x 4□ R/F 2÷12 x 2,5□ R/F 2÷18 x 1,5□ R/F	16 sqmm 450 V T 85°C IP 20
Z25-1	25□	2 x 25□ R/F 2÷3 x 16□ R/F 2÷4 x 10□ R/F	2÷8 x 6□ R/F 2÷11 x 4□ R/F 4÷16 x 2,5□ R/F	25 sqmm 450 V T 85°C IP 20
Z35-1	35□	2 x 35□ R/F 2÷3 x 25□ R/F 2÷4 x 16□ R/F 2÷7 x 10□ R/F	2÷11 x 6□ R/F 4÷17 x 4□ R/F 5÷28 x 2,5□ R/F	35 sqmm 450 V T 85°C IP20

**A mixture of conductor sizes may be connected to the terminal block provided that the sum of their sections is less than twice the nominal section.*
R = Rigid conductor F = Flexible conductor

Conforms to:

Directives 2014/35/UE

EN 60998-1: 2004 and
EN 60998-2-1: 2004 Norms

CABLE GLANDS AND ACCESSORIES

symbol description

cable glands and accessories

PA 6.6 — Polyamide PA6.6 body

PA 6 — Polyamide PA6 body

NEOPRENE — Neoprene material

PS — Polystyrene body

BRASS — Brass body

3µm NICKEL PLATED — Protected by Nikel plated to avoid oxidation

STAINLESS STEEL — Stainless steel body

STEEL ZINC PLATED — Galvanized Steel body

NBR — Nitrile-butadiene material

PVC — Polyvinylchloride material

EPDM — EPDM rubber material

ABS — ABS material

-15°C +50°C — Operating temperature range

IP68.5 — Degree of protection

V2 UL94 — V2 UL94 self-extinguishing class

VDE — VDE marking

Ex — ATEX marking

c UL us File no. E220310 — USL-CNL Marking valid in USA & CANADA

c UL us File no. E220310 — USR-CNR Marking valid in USA & CANADA

CE — CE Marking

HF HALOGEN FREE — Halogen Free

MAXIblock®

POLYAMIDE CABLE GLANDS
WITH PROTECTION IP 68

spiralblock®

POLYAMIDE CABLE GLANDS
WITH PROTECTION IP 68

MAXIbrass®

NICKEL PLATED BRASS CABLE GLANDS
WITH PROTECTION IP 68

MAXIinox

STAINLESS STEEL CABLE GLANDS
WITH PROTECTION IP 68

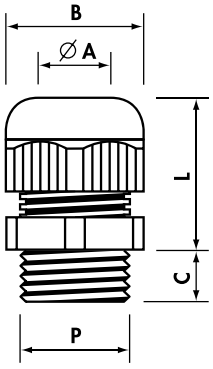
MAXIBLOCK CABLE GLANDS

Polyamide PA6.6

MAXIblock®

PA 6.6 · IP68 · V2 UL94 · -20°C +90°C · VDE · cULus File no. E220310 · cULus File no. E220310 · CE

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Sealing ring: NEOPRENE® 50 sh A
Protection: IP 68
Colour: RAL 7035 light grey,
RAL 9005 black, RAL 7001 dark grey



standard

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
1900.M12	M12x1,5	12,2	3,5- 7	15	8	18-22	100
1900.M16	M16x1,5	16,2	5 -10	19	8	22-27	100
1900.M20	M20x1,5	20,5	7 -13	25	9	24-30	100
1900.M25	M25x1,5	25,4	10 -17	30	10	28-39	50
1900.M32	M32x1,5	32,5	13 -21	36	10	33-44	25
1900.M40	M40x1,5	40,5	19 -28	46	10	36-45	15
1900.M50	M50x1,5	50,5	27 -35	55	12	43-52	10
1900.M63	M63x1,5	64,0	34 -45	66	12	45-55	5

Add to Ref: N for Black, G for Dark Grey

reduced cable entry

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
1910.M12	M12x1,5	12,2	2- 5	15	8	18-22	100
1910.M16	M16x1,5	16,2	3- 7	19	8	22-27	100
1910.M20	M20x1,5	20,5	5-10	25	9	24-30	100
1910.M25	M25x1,5	25,4	7-13	30	10	28-39	50
1910.M32	M32x1,5	32,5	8-14	36	10	33-44	25
1910.M40	M40x1,5	40,5	15-23	46	10	36-45	15
1910.M50	M50x1,5	50,5	20-29	55	12	43-52	10
1910.M63	M63x1,5	64,0	27-39	66	12	45-55	5

Add to Ref: N for Black, G for Dark Grey

extended thread

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
1901.M12	M12x1,5	12,2	3,5- 7	15	15	18-22	100
1901.M16	M16x1,5	16,2	5 -10	19	15	22-27	100
1901.M20	M20x1,5	20,5	7 -13	25	15	24-30	50
1901.M25	M25x1,5	25,4	10 -17	30	15	30-41	50
1901.M32	M32x1,5	32,5	13 -21	36	15	33-44	25
1901.M40	M40x1,5	40,5	19 -28	46	18	36-45	15
1901.M50	M50x1,5	50,5	27 -35	55	18	43-52	10
1901.M63	M63x1,5	64,0	34 -45	66	18	45-55	5

Add to Ref: N for Black, G for Dark Grey

Technical data pages 237 to 240

Polyamide PA6.6

MAXIblock®

standard

Pg thread DIN 40 430

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
1900.07	Pg 7	12,7	3,5- 7	15	8	18-22	100
1900.09	Pg 9	15,5	5 - 8	19	8	22-26	100
1900.11	Pg11	18,8	5 -10	22	8	23-28	100
1900.13	Pg13,5	20,5	7 -12	24	9	24-29	100
1900.16	Pg16	22,6	10 -14	27	10	26-31	50
1900.21	Pg21	28,5	13 -18	33	12	30-35	50
1900.29	Pg29	37,2	18 -25	42	12	33-39	25
1900.36	Pg36	47,2	20 -32	53	14	42-49	10
1900.42	Pg42	54,2	28 -38	60	14	42-50	5
1900.48	Pg48	60,0	37 -45	66	15	45-55	5

Add to Ref: N for Black, G for Dark Grey

reduced cable entry

Pg thread DIN 40 430

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
1910.07	Pg 7	12,7	2- 5	15	8	18-22	100
1910.09♦	Pg 9	15,5	2- 6	19	8	22-26	100
1910.11	Pg11	18,8	4- 7	22	8	23-28	100
1910.13	Pg13,5	20,5	5-10	24	9	24-29	100
1910.16♦	Pg16	22,6	6-12	27	10	26-31	50
1910.21	Pg21	28,5	9-15	33	12	30-35	50
1910.29♦	Pg29	37,2	12-20	42	12	33-39	25
1910.36	Pg36	47,2	18-26	53	14	42-49	10
1910.42	Pg42	54,2	25-31	60	14	42-50	5
1910.48♦	Pg48	60,0	27-39	66	15	45-55	5

Add to Ref: N for Black

extended thread

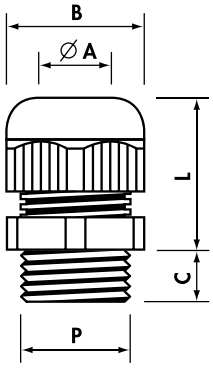
Pg thread DIN 40 430

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
1901.07	Pg 7	12,7	3,5- 7	15	15	18-22	100
1901.09	Pg 9	15,5	5 - 8	19	15	22-26	100
1901.11	Pg11	18,8	5 -10	22	15	23-28	100
1901.13	Pg13,5	20,5	7 -12	24	15	24-29	100
1901.16	Pg16	22,6	10 -14	27	15	26-31	50
1901.21	Pg21	28,5	13 -18	33	15	30-35	50
1901.29	Pg29	37,2	18 -25	42	15	33-39	25
1901.36	Pg36	47,2	20 -32	53	18	42-49	10
1901.42	Pg42	54,2	28 -38	60	18	42-50	5
1901.48	Pg48	60,0	37 -45	66	18	45-55	5

Add to Ref: N for Black

PA 6.6 | IP68 | V2 UL94 | -20°C +90°C | c UL us File no. E220310 | c UL us File no. E220310 | CE

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Sealing ring: NEOPRENE® 50 sh A
Protection: IP 68
Colour: RAL 7035 light grey,
RAL 9005 black, RAL 7001 dark grey



Technical data pages 237 to 240

1900/X

MAXIBLOCK CABLE GLANDS

Polyamide PA6.6

MAXIblock®

PA 6.6 · IP68 · V2 UL94 · -20°C +90°C · CE

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Sealing ring: NEOPRENE® 50 sh A
Protection: IP 68
Colour: RAL 7035 light grey

standard, factory fitted with locknuts with collar

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

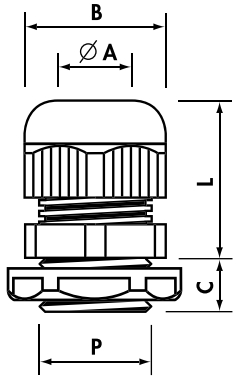
Type	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1900.M12/X	M12x1,5	12,2	3,5- 7	15	8	18-22	*100/10*
1900.M16/X	M16x1,5	16,2	5 -10	19	8	22-27	*100/10*
1900.M20/X	M20x1,5	20,5	7 -13	25	9	24-30	*50/10*
1900.M25/X	M25x1,5	25,4	10 -17	30	10	28-39	*30/10*
1900.M32/X	M32x1,5	32,5	13 -21	36	10	33-44	*20/10*
1900.M40/X	M40x1,5	40,5	19 -28	46	10	36-45	*10/5*
1900.M50/X	M50x1,5	50,5	27 -35	55	12	43-52	*10/5*
1900.M63/X	M63x1,5	64,0	34 -45	66	12	45-55	*5/5*

PA 6.6 · IP68 · V2 UL94 · -20°C +90°C · CE

standard, factory fitted with locknuts with collar

Pg thread DIN 40 430

Type	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1900.07/X	Pg 7	12,7	3,5- 7	15	8	18-22	*100/10*
1900.09/X	Pg 9	15,5	5 - 8	19	8	22-26	*100/10*
1900.11/X	Pg11	18,8	5 -10	22	8	23-28	*100/10*
1900.13/X	Pg13,5	20,5	7 -12	24	9	24-29	*50/10*
1900.16/X	Pg16	22,6	10 -14	27	10	26-31	*30/10*
1900.21/X	Pg21	28,5	13 -18	33	12	30-35	*20/10*
1900.29/X	Pg29	37,2	18 -25	42	12	33-39	*20/10*
1900.36/X	Pg36	47,2	20 -32	53	14	42-49	*10/5*
1900.42/X	Pg42	54,2	28 -38	60	14	42-50	*5/5*
1900.48/X	Pg48	60,0	37 -45	66	15	45-55	*5/5*



Technical data pages 237 to 240

MAXIBLOCK CABLE GLANDS

1900DP

Polyamide PA6.6

MAXIblock®

standard, factory fitted with Polyethylene foam discs

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

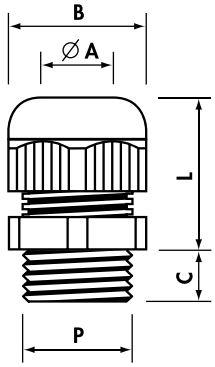
Type	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1900DP.M12	M12x1,5	12,2	3,5- 7	15	8	18-22	100/10
1900DP.M16	M16x1,5	16,2	5 -10	19	8	22-27	100/10
1900DP.M20	M20x1,5	20,5	7 -13	25	9	24-30	50/10
1900DP.M25	M25x1,5	25,4	10 -17	30	10	28-39	30/10
1900DP.M32	M32x1,5	32,5	13 -21	36	10	33-44	20/10
1900DP.M40	M40x1,5	40,5	19 -28	46	10	36-45	10/5
1900DP.M50	M50x1,5	50,5	27 -35	55	12	43-52	10/5
1900DP.M63	M63x1,5	64,0	34 -45	66	12	45-55	5/5

PA 6.6 · IP68 · V2 UL94 · -20°C +90°C · CE

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Sealing ring: NEOPRENE® 50 sh A
Protection: IP 68
Colour: RAL 7035 light grey
Discs: 2 mm thick Polyethylene foam

Pg thread DIN 40 430

Type	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1900DP.07	Pg 7	12,7	3,5- 7	15	8	18-22	100/10
1900DP.09	Pg 9	15,5	5 - 8	19	8	22-26	100/10
1900DP.11	Pg11	18,8	5 -10	22	8	23-28	100/10
1900DP.13	Pg13,5	20,5	7 -12	24	9	24-29	50/10
1900DP.16	Pg16	22,6	10 -14	27	10	26-31	30/10
1900DP.21	Pg21	28,5	13 -18	33	12	30-35	20/10
1900DP.29	Pg29	37,2	18 -25	42	12	33-39	20/10
1900DP.36	Pg36	47,2	20 -32	53	14	42-49	10/5
1900DP.42	Pg42	54,2	28 -38	60	14	42-50	5/5
1900DP.48	Pg48	60,0	37 -45	66	15	45-55	5/5



MAXIBLOCK CABLE GLANDS

1900

Polyamide PA6.6

BSP thread ISO 228/1

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
1900.14	G1/4"	13,5	3- 6,5	15	8	18-22	100
1900.38	G3/8"	17,0	4- 8	19	8	22-26	100
1900.12	G1/2"	21,5	7-12	24	10	24-29	100
1900.34	G3/4"	27,0	13-18	33	12	30-35	50

Add to Ref: N for Black

PA 6.6 · IP68 · V2 UL94 · -20°C +90°C · cULus File no. E220310 · cULus File no. E220310 · CE

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Sealing ring: NEOPRENE® 50 sh A
Protection: IP 68
Colour: RAL 7035 light grey,
RAL 9005 black

Technical data pages 237 to 240

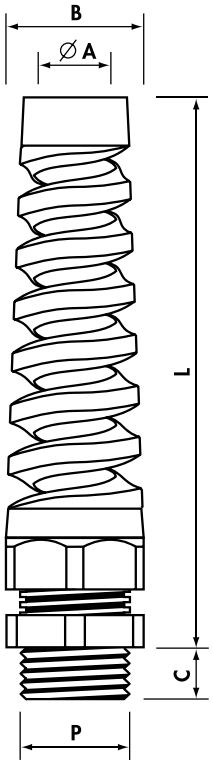
SPIRALBLOCK CABLE GLANDS

Polyamide PA6.6

spiralblock®

PA 6.6 | IP68 | V2 UL94 | -20°C +90°C | c UL us File no. E220310 | c UL us File no. E220310 | CE

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Sealing ring: NEOPRENE® 50 sh A
Protection: IP 68
Colour: RAL 7035 light grey,
RAL 9005 black



Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L max (mm)	Quantity
1500.M12	M12x1,5	12,2	3,5- 7	15	8	57	*100*
1500.M16	M16x1,5	16,2	5 -10	19	8	79	*50*
1500.M20	M20x1,5	20,5	7 -13	25	9	90	*25*
1500.M25	M25x1,5	25,4	10 -17	30	10	120	*20*
1500.M32	M32x1,5	32,5	13 -21	36	10	140	*10*

Add to Ref: N for Black

Pg thread DIN 40 430

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L max (mm)	Quantity
1500.07	Pg 7	12,7	3,5- 7	15	8	57	*100*
1500.09	Pg 9	15,5	5 - 8	19	8	68	*100*
1500.11	Pg11	18,8	5 -10	22	8	80	*50*
1500.13	Pg13,5	20,5	7 -12	24	10	90	*50*
1500.16	Pg16	22,6	10 -14	27	10	100	*25*
1500.21	Pg21	28,5	13 -18	33	12	112	*20*

Add to Ref: N for Black

BSP thread ISO 228/1

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L max (mm)	Quantity
1500.14	G1/4"	13,5	3- 6,5	15	8	57	*100*
1500.38	G3/8"	17,0	4- 8	19	9	68	*100*
1500.12	G1/2"	21,5	7-12	24	10	90	*50*
1500.34	G3/4"	27,0	13-18	33	12	112	*20*

Add to Ref: N for Black

Technical data pages 237 to 240

MAXIBLOCK ATEX CABLE GLANDS

Polyamide PA6.6

MAXIblock®

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
4900.M12	M12x1,5	12,2	3,5- 6,5	15	8	18-22	100
4900.M16	M16x1,5	16,2	6,5-10	19	8	22-27	100
4900.M20	M20x1,5	20,5	9 -13	25	9	24-30	100
4900.M25	M25x1,5	25,4	11 -17	30	10	28-39	50
4900.M32	M32x1,5	32,5	16 -21	36	10	33-44	25
4900.M40	M40x1,5	40,5	21 -28	46	10	36-45	15
4900.M50	M50x1,5	50,5	27 -35	55	12	43-52	10
4900.M63	M63x1,5	64,0	35 -42	66	12	45-55	5

extended thread

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
4901.M12	M12x1,5	12,2	3,5- 6,5	15	15	18-22	100
4901.M16	M16x1,5	16,2	6,5-10	19	15	22-27	100
4901.M20	M20x1,5	20,5	9 -13	25	15	24-30	50
4901.M25	M25x1,5	25,4	11 -17	30	15	30-41	50
4901.M32	M32x1,5	32,5	16 -21	36	15	33-44	25
4901.M40	M40x1,5	40,5	21 -28	46	18	36-45	15
4901.M50	M50x1,5	50,5	27 -35	55	18	43-52	10
4901.M63	M63x1,5	64,0	35 -42	66	18	45-55	5

Pg thread DIN 40 430

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
4900.07	Pg 7	12,7	3,5- 6,5	15	8	18-22	100
4900.09	Pg 9	15,5	6,5- 8	19	8	22-26	100
4900.11	Pg11	18,8	8 -10	22	8	23-28	100
4900.13	Pg13,5	20,5	9 -12	24	9	24-29	100
4900.16	Pg16	22,6	10 -14	27	10	26-31	50
4900.21	Pg21	28,5	14 -18	33	12	30-35	50
4900.29	Pg29	37,2	18 -22	42	12	33-39	25
4900.36	Pg36	47,2	22 -32	53	14	42-49	10
4900.42	Pg42	54,2	28 -38	60	14	42-50	5
4900.48	Pg48	60,0	38 -45	66	15	45-55	5

extended thread

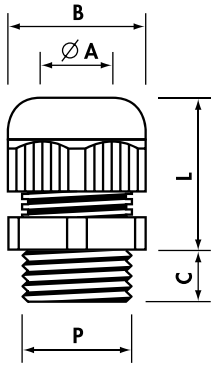
Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
4901.07	Pg 7	12,7	3,5- 6,5	15	15	18-22	100
4901.09	Pg 9	15,5	6,5- 8	19	15	22-26	100
4901.11	Pg11	18,8	8 -10	22	15	23-28	100
4901.13	Pg13,5	20,5	9 -12	24	15	24-29	100
4901.16	Pg16	22,6	10 -14	27	15	26-31	50
4901.21	Pg21	28,5	14 -18	33	15	30-35	50
4901.29	Pg29	37,2	18 -22	42	15	33-39	25
4901.36	Pg36	47,2	22 -32	53	18	42-49	10
4901.42	Pg42	54,2	28 -38	60	18	42-50	5
4901.48	Pg48	60,0	38 -45	66	18	45-55	5

CE 0051 Ex II 2 G D

Certificate No IMQ 10 ATEX 028X

PA 6.6 | IP65 | V2 UL94 | -20°C +75°C | Ex | CE

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Safety level: Ex e IIC/Ex tb IIIC
according to
EN 60079-0 : 2012
EN 60079-7 : 2007
EN 60079-31 : 2014
Areas of utilisation: 1 & 2, 21 & 22
Temperature range:
–20°C to +75°C (continuous)
Sealing ring: NEOPRENE®
Protection: IP 65
Colour: RAL 7035 light grey



Technical data pages 237 to 240

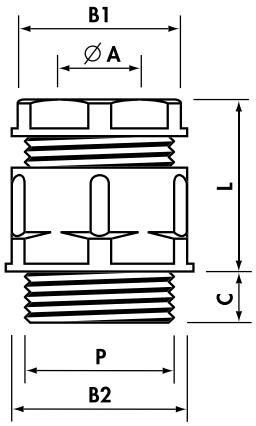
1700
1400

COMPRESSION CABLE GLANDS

Polyamide PA6

PA 6 | IP54 | V2 UL94 | -20°C +90°C

Material: POLYAMIDE PA6
self-extinguishing class V0 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Sealing ring: PVC 50 sh A
Protection: IP 54
Colour: RAL 7035 light grey,
RAL 9005 black



Pg thread DIN 40 430 - Dimensions DIN 46 320

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner Head (mm)	B2 Spanner Body (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1709	Pg 7	12,7	5,5- 7	15	16	8	16-20	*300/100*
***1700**	Pg 9	15,5	6,5- 8,5	17	20	8	19-22	*200/100*
***1701**	Pg11	18,8	8 -10	19	22	8	21-25	*100/100*
***1702**	Pg13,5	20,5	8 -11	21	24	9	22-26	*100/100*
1703	Pg16	22,6	11 -14	23	27	10	24-33	*50/50*
1704	Pg21	28,5	14,5-18	30	33	11	25-32	*50/25*
1705	Pg29	37,2	19 -26	40	42	11	27-32	*20/10*
1706	Pg36	47,2	30 -34	50	53	14	33-42	*10/10*
1707	Pg42	54,2	30 -38	55	60	13	37-48	*5/5*
1708	Pg48	60,0	38 -44	60	65	14,5	37-48	*5/5*

***Add to Ref: N for Black**

BSP thread ISO 228/1

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner Head (mm)	B2 Spanner Body (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1400	G1/4"	13,5	5,5- 7	15	16	8	16-20	*300/100*
***1401**	G3/8"	17,0	6,5- 8,5	17	20	8	19-22	*200/100*
***1401B**	G3/8"	17,0	8 -10	19	22	8	18-24	*100/100*
***1401C**	G3/8"	17,0	10 -12	22	24	9	22-26	*100/100*
***1402**	G1/2"	21,5	8 -11	21	24	9	22-26	*100/100*
1403	G5/8"	23,5	11 -14	23	27	10	24-33	*50/50*
1404	G3/4"	27,0	14,5-18	30	33	11	25-32	*50/25*
1405	G1"	34,0	17 -22	34	38	11,5	27-35	*20/10*
1407	G1"1/2	48,0	30 -34	50	53	14	33-42	*10/10*
1408	G2"	60,0	38 -44	60	65	14,5	37-48	*5/5*

***Add to Ref: N for Black**

Metric thread M 1.5 pitch CEI EN 60423

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner Head (mm)	B2 Spanner Body (mm)	C (mm)	L min-max (mm)	Quantity
1730M20	M20x1,5	20,5	8-11	21	24	9	22-26	*100*

Add to Ref: N for Black

COMPRESSION CABLE GLANDS

1700T

Polyamide PA6

special Internal blanking disc: PVC 50 sh

Pg thread DIN 40 430 - Dimensions DIN 46 320

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner Head (mm)	B2 Spanner Body (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
*1700T	Pg 9	15,5	6,5- 8,5	17	20	8	19-22	200/100
*1701T	Pg11	18,8	8 -10	19	22	8	21-25	100/100
*1702T	Pg13,5	20,5	8 -11	21	24	9	22-26	100/100

*Add to Ref: N for Black

PA 6 | IP54 | V2 UL94 | -20°C +90°C

Material: POLYAMIDE PA6
self-extinguishing class V0 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Protection: IP 54
Colour: RAL 7035 light grey,
RAL 9005 black

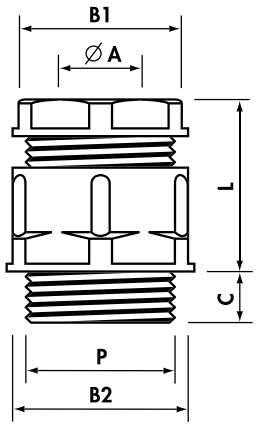
reduced cable entry

Sealing ring: CHLOROPRENE, concentric, multi-sector

Pg thread DIN 40 430 - Dimensions DIN 46 320

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner Head (mm)	B2 Spanner Body (mm)	C (mm)	L min-max (mm)	Quantity
1702CONC	Pg13,5	20,5	5,5-13	21	24	9	22-26	100

Add to Ref: N for Black



POLYSTYRENE CABLE GLANDS

1700P

Polystyrene PS

Sealing ring: PVC 50 sh A - Protection: IP 54

Pg thread DIN 40 430 - Dimensions DIN 46 320

Type Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner Head (mm)	B2 Spanner Body (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1700P	Pg9	15,5	7- 8,5	17	20	8	19-22	200/100
*1701P	Pg11	18,8	8 -10	19	22	8	21-25	100/100
*1702P	Pg13,5	20,5	8 -11	21	24	9	22-26	100/100
1703P	Pg16	22,6	11 -14	23	27	10	24-33	50/50
1704P	Pg21	28,5	14,5-18	30	33	11	25-32	50/25

*Add to Ref: N for Black

PS | -20°C +60°C

Material: POLYSTYRENE PS
Temperature range:
–20°C to +60°C (continuous)
Colour: RAL 7035 light grey,
RAL 9005 black

2900

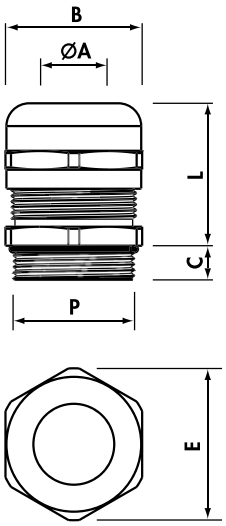
MAXIBRASS CABLE GLANDS

Nickel Plated Brass

MAXIbrass®

BRASS | 3µm NICKEL PLATED | IP68 | -25°C +100°C | DVE | cULus File no. E220310 | cULus File no. E220310 | CE

Material: NICKEL PLATED BRASS
(CuZn 40 Pb 3)
Sealing-ring: NEOPRENE®
Cable grip insert: POLYAMIDE PA6.6
O-Ring: NITRILE 70 sh A (factory fitted)
Protection: IP 68
Temperature range:
-25°C to +100°C (continuous)



standard

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2900.M12N	M12x1,5	12,2	3 - 7	16	18	6,5	16-20	*100*
2900.M16N	M16x1,5	16,2	4,5-10	20	23	7,0	20-25	*100*
2900.M20N	M20x1,5	20,5	7 -13	24	27	8,0	20-27	*50*
2900.M25N	M25x1,5	25,4	10 -17	29	32	8,0	24-30	*50*
2900.M32N	M32x1,5	32,5	11 -21	36	40	9,0	27-34	*25*
2900.M40N	M40x1,5	40,5	19 -28	45	50	9,0	34-42	*10*
2900.M50N	M50x1,5	50,5	26 -35	54	60	10,0	35-43	*8*
2900.M63N	M63x1,5	64,0	34 -45	67	74	15,0	40-52	*5*

reduced cable entry

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2910.M12N	M12x1,5	12,2	1 - 5	16	18	6,5	16-20	*100*
2910.M16N	M16x1,5	16,2	2,5- 7	20	23	7,0	20-25	*100*
2910.M20N	M20x1,5	20,5	5 -10	24	27	8,0	20-27	*50*
2910.M25N	M25x1,5	25,4	6 -13	29	32	8,0	24-30	*50*
2910.M32N	M32x1,5	32,5	7 -14	36	40	9,0	27-34	*25*
2910.M40N	M40x1,5	40,5	13 -23	45	50	9,0	34-42	*10*
2910.M50N	M50x1,5	50,5	20 -29	54	60	10,0	35-43	*8*
2910.M63N	M63x1,5	64,0	27 -39	67	74	15,0	40-52	*5*

Technical data pages 237 to 240

Nickel Plated Brass

MAXIbrass®

BRASS | 3µm NICKEL PLATED | IP68 | -25°C +100°C | DVE | cULus File no. E220310 | cULus File no. E220310 | CE

Material: NICKEL PLATED BRASS (CuZn 40 Pb 3)
Sealing-ring: NEOPRENE®
Cable grip insert: POLYAMIDE PA6.6
O-Ring: NITRILE 70 sh A (factory fitted)
Protection: IP 68
Temperature range:
-25°C to +100°C (continuous)

extended thread

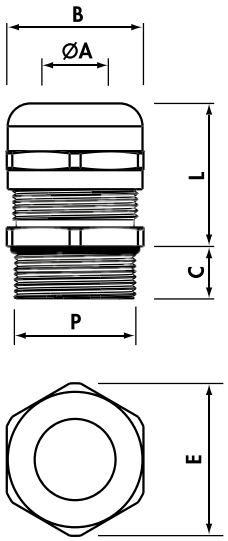
Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2901.M12N	M12x1,5	12,2	3 - 7	16	18	12	16-20	*100*
2901.M16N	M16x1,5	16,2	4,5-10	20	23	12	20-25	*100*
2901.M20N	M20x1,5	20,5	7 -13	24	27	12	20-27	*50*
2901.M25N	M25x1,5	25,4	10 -17	29	32	12	24-30	*50*
2901.M32N	M32x1,5	32,5	11 -21	36	40	15	27-34	*25*
2901.M40N	M40x1,5	40,5	19 -28	45	50	15	34-42	*10*
2901.M50N	M50x1,5	50,5	26 -35	54	60	15	35-43	*8*

extended thread and reduced cable entry

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2911.M12N	M12x1,5	12,2	1 - 5	16	18	12	16-20	*100*
2911.M16N	M16x1,5	16,2	2,5- 7	20	23	12	20-25	*100*
2911.M20N	M20x1,5	20,5	5 -10	24	27	12	20-27	*50*
2911.M25N	M25x1,5	25,4	6 -13	29	32	12	24-30	*50*
2911.M32N	M32x1,5	32,5	7 -14	36	40	15	27-34	*25*
2911.M40N	M40x1,5	40,5	13 -23	45	50	15	34-42	*10*
2911.M50N	M50x1,5	50,5	20 -29	54	60	15	35-43	*8*



Technical data pages 237 to 240

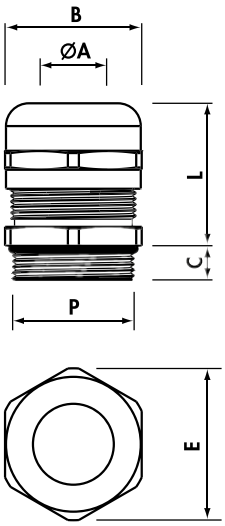
MAXIBRASS CABLE GLANDS

Nickel Plated Brass

MAXIbrass®

BRASS | 3µm NICKEL PLATED | IP68 | -25°C +100°C | cULus File no. E220310 | cULus File no. E220310 | CE

Material: NICKEL PLATED BRASS (CuZn 40 Pb 3)
Sealing-ring: NEOPRENE®
Cable grip insert: POLYAMIDE PA6.6
O-Ring: NITRILE 70 sh A (factory fitted)
Protection: IP 68
Temperature range:
-25°C to +100°C (continuous)



standard

Pg thread DIN 40 430

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2900.07N	Pg 7	12,7	3 - 7	16	18	5,0	16-20	100
2900.09N	Pg 9	15,5	4 - 8	17	19	6,0	17-23	100
2900.11N	Pg11	18,8	4,5-10	20	23	6,0	20-25	100
2900.13N	Pg13,5	20,5	5 -12	22	25	6,5	20-26	50
2900.16N	Pg16	22,6	7 -13	24	27	6,5	20-27	50
2900.21N	Pg21	28,5	10 -17	30	33	7,0	24-30	50
2900.29N	Pg29	37,2	17 -25	40	45	8,0	30-37	25
2900.36N	Pg36	47,2	20 -32	50	55	8,0	38-48	10
2900.42N	Pg42	54,2	28 -38	57	63	10,0	39-48	5
2900.48N	Pg48	60,0	34 -45	67	74	15,0	40-52	5

reduced cable entry

Pg thread DIN 40 430

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2910.07N	Pg 7	12,7	1 - 5	16	18	5,0	16-20	100
2910.09N	Pg 9	15,5	2 - 6	17	19	6,0	17-23	100
2910.11N	Pg11	18,8	2,5- 7	20	23	6,0	20-25	100
2910.13N	Pg13,5	20,5	4 -10	22	25	6,5	20-26	50
2910.16N	Pg16	22,6	5 -10	24	27	6,5	20-27	50
2910.21N	Pg21	28,5	6 -13	30	33	7,0	24-30	50
2910.29N	Pg29	37,2	11 -20	40	45	8,0	30-37	25
2910.36N	Pg36	47,2	18 -26	50	55	8,0	38-48	10
2910.42N	Pg42	54,2	24 -31	57	63	10,0	39-48	5
2910.48N	Pg48	60,0	27 -39	67	74	15,0	40-52	5

extended thread

Pg thread DIN 40 430

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2901.07N	Pg 7	12,7	3 - 7	16	18	12	16-20	100
2901.09N	Pg 9	15,5	4 - 8	17	19	12	17-23	100
2901.11N	Pg11	18,8	4,5-10	20	23	12	20-25	100
2901.13N	Pg13,5	20,5	5 -12	22	25	12	20-26	50
2901.16N	Pg16	22,6	7 -13	24	27	12	20-27	50
2901.21N	Pg21	28,5	10 -17	30	33	12	24-30	50
2901.29N	Pg29	37,2	17 -25	40	45	15	30-37	25
2901.36N	Pg36	47,2	20 -32	50	55	15	38-48	10
2901.42N	Pg42	54,2	28 -38	57	63	15	39-48	5

Technical data pages 237 to 240

MAXIBRASS CABLE GLANDS

2900

Nickel Plated Brass

MAXI*brass*®

extended thread and reduced cable entry

Pg thread DIN 40 430

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2911.07N	Pg 7	12,7	1 - 5	16	18	12	16-20	100
2911.09N	Pg 9	15,5	2 - 6	17	19	12	17-23	100
2911.11N	Pg11	18,8	2,5- 7	20	23	12	20-25	100
2911.13N	Pg13,5	20,5	4 -10	22	25	12	20-26	50
2911.16N	Pg16	22,6	5 -10	24	27	12	20-27	100
2911.21N	Pg21	28,5	6 -13	30	33	12	24-30	50
2911.29N	Pg29	37,2	11 -20	40	45	15	30-37	25
2911.36N	Pg36	47,2	18 -26	50	55	15	38-48	10
2911.42N	Pg42	54,2	24 -31	57	63	15	39-48	5

MAXIBRASS CABLE GLANDS

2900DP

Nickel Plated Brass

standard, factory fitted with Polyethylene foam discs

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2900DP.M12N	M12x1,5	12,2	3 - 7	16	18	6,5	16-20	100
2900DP.M16N	M16x1,5	16,2	4,5-10	20	23	7,0	20-25	100
2900DP.M20N	M20x1,5	20,5	7 -13	24	27	8,0	20-27	50
2900DP.M25N	M25x1,5	25,4	10 -17	29	32	8,0	24-30	50
2900DP.M32N	M32x1,5	32,5	11 -21	36	40	9,0	27-34	25
2900DP.M40N	M40x1,5	40,5	19 -28	45	50	9,0	34-42	10
2900DP.M50N	M50x1,5	50,5	26 -35	54	60	10,0	35-43	8
2900DP.M63N	M63x1,5	64,0	34 -45	67	74	15,0	40-52	5

Pg thread DIN 40 430

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2900DP.07N	Pg 7	12,7	3 - 7	16	18	5,0	16-20	100
2900DP.09N	Pg 9	15,5	4 - 8	17	19	6,0	17-23	100
2900DP.11N	Pg11	18,8	4,5-10	20	23	6,0	20-25	100
2900DP.13N	Pg13,5	20,5	5 -12	22	25	6,5	20-26	50
2900DP.16N	Pg16	22,6	7 -13	24	27	6,5	20-27	50
2900DP.21N	Pg21	28,5	10 -17	30	33	7,0	24-30	50
2900DP.29N	Pg29	37,2	17 -25	40	45	8,0	30-37	25
2900DP.36N	Pg36	47,2	20 -32	50	55	8,0	38-48	10
2900DP.42N	Pg42	54,2	28 -38	57	63	10,0	39-48	5
2900DP.48N	Pg48	60,0	34 -45	67	74	15,0	40-52	5

Material: NICKEL PLATED BRASS (CuZn 40 Pb 3)
Sealing-ring: NEOPRENE®
Cable grip insert: POLYAMIDE PA6.6
O-Ring: NITRILE 70 sh A (factory fitted)
Protection: IP 68
Discs: 2 mm thick Polyethylene foam
Temperature range:
-25°C to +100°C (continuous)

Technical data pages 237 to 240

5900

MAXIBRASS ATEX CABLE GLANDS

Nickel Plated Brass

CE 0051 Ex II 2 G D

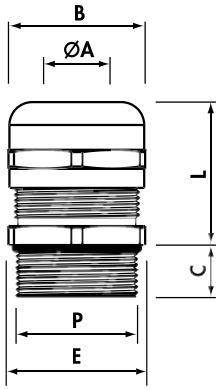
Certificate No IMQ 10 ATEX 028X

Safety level: Ex e IIC/Ex tb IIIC
according to: EN 60079-0 : 2012
EN 60079-7 : 2007
EN 60079-31 : 2014
Areas of utilisation: 1 & 2, 21 & 22

MAXIbrass®

BRASS | 3µm NICKEL PLATED | IP65 | -25°C +75°C | Ex | CE

Material: NICKEL PLATED BRASS
Sealing-ring: NEOPRENE®
Cable grip insert: POLYAMIDE PA6.6
O-Ring: NITRILE 70 sh A (factory fitted)
Temperature range:
-25°C to +75°C (continuous)
Protection: IP 65



Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
5900.M12N	M12x1,5	12,2	3 - 6,5	16	18	6,5	16-20	*100*
5900.M16N	M16x1,5	16,2	6,5 -10	20	23	7,0	20-25	*100*
5900.M20N	M20x1,5	20,5	10 - 13	24	27	8,0	20-27	*50*
5900.M25N	M25x1,5	25,4	11 - 17	29	32	8,0	24-30	*50*
5900.M32N	M32x1,5	32,5	14 - 21	36	40	9,0	27-34	*25*
5900.M40N	M40x1,5	40,5	21 - 27	45	50	9,0	34-42	*10*
5900.M50N	M50x1,5	50,5	26 - 35	54	60	10,0	35-43	*8*
5900.M63N	M63x1,5	64,0	35 - 42	67	74	15,0	40-52	*5*

extended thread

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
5901.M12N	M12x1,5	12,2	3 - 6,5	16	18	12	16-20	*100*
5901.M16N	M16x1,5	16,2	6,5 - 10	20	23	12	20-25	*100*
5901.M20N	M20x1,5	20,5	10 - 13	24	27	12	20-27	*50*
5901.M25N	M25x1,5	25,4	11 - 17	29	32	12	24-30	*50*
5901.M32N	M32x1,5	32,5	14 - 21	36	40	12	27-34	*25*
5901.M40N	M40x1,5	40,5	21 - 27	45	50	12	34-42	*10*
5901.M50N	M50x1,5	50,5	26 - 35	54	60	12	35-43	*8*

20M3

EMC CABLE GLANDS

Nickel Plated Brass

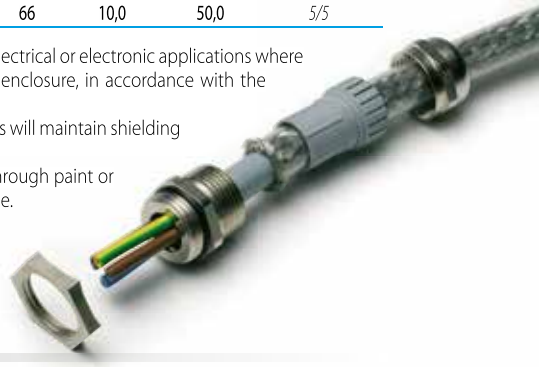
BRASS | 3µm NICKEL PLATED | IP68.5 | -30°C +120°C | CE

Material: NICKEL PLATED BRASS (CuZn 40 Pb 3)
Sealing-ring: Chloroprene (CR)
Cable grip insert: PA6.6
O-Ring: (NBR) (factory fitted)
Protection: IP 68,5
Temperature range:
-30°C to +120°C (continuous)

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L max (mm)	Quantity *Box/Bag*
20M3M1261N	M12x1,5	12,2	3 - 6,5	14	5,0	22,0	*300/100*
20M3M1661N	M16x1,5	16,2	5,5 - 10	17	5,5	24,5	*200/100*
20M3M2061N	M20x1,5	20,5	8 - 13	22	6,0	27,0	*100/50*
20M3M2561N	M25x1,5	25,4	11 - 18	30	7,0	31,0	*50/25*
20M3M3261N	M32x1,5	32,5	15 - 21	34	8,0	33,0	*30/10*
20M3M4061N	M40x1,5	40,5	19 - 27	44	8,0	40,0	*20/10*
20M3M5061N	M50x1,5	50,5	26 - 35	55	9,0	48,0	*10/5*
20M3M6361N	M63x1,5	64,0	39 - 48	66	10,0	50,0	*5/5*

EMC Cable glands and locknuts are designed to work together in electrical or electronic applications where a metallic cable shielding must be equipotential with a metallic enclosure, in accordance with the EMC directive.
Offering IP68 ingress protection at 5 bar pressure, EMC Cable glands will maintain shielding from electromagnetic disturbance in undergound applications.
EMC locknuts have serrated teeth to maintain electrical contact through paint or surface coatings, a feature which also enhances vibration resistance.



COMPRESSION CABLE GLANDS

Nickel Plated Brass

2003
2002
2001

BRASS | 3µm NICKEL PLATED | IP54 | -25°C +100°C

Material: NICKEL PLATED BRASS (CuZn 40 Pb 3)
Protection: IP 54

Sealing ring: RUBBER 55sh A

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

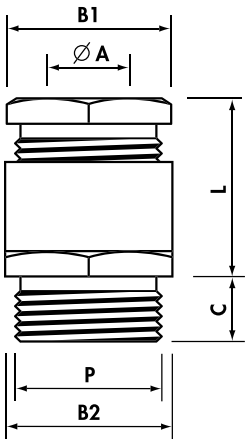
Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner Head (mm)	B2 Spanner Body (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
2003M1221N	M12x1,5	12,2	4 - 6	13	14	5	13-16	500/100
2003M1621N	M16x1,5	16,2	8 -10	15	17	5	14-17	200/100
2003M2021N	M20x1,5	20,5	10 -12	20	22	6	16-19	150/50
2003M2521N	M25x1,5	25,4	17 -19	28	30	7	19-23	50/50
2003M3221N	M32x1,5	32,5	26 -28	37	39	8	21-25	100/50
2003M4021N	M40x1,5	40,5	33 -35	47	50	8	24-30	20/20
2003M5021N	M50x1,5	50,5	39 -41	54	57	9	28-34	10/5
2003M6321N	M63x1,5	64,0	43 -45	60	66/68	10	30-36	10/5

Sealing ring: RUBBER 55sh A

Pg thread DIN 40 430 - Dimensions DIN 46 320

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner Head (mm)	B2 Spanner Body (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
200200721N	Pg 7	12,7	5 - 7	13	14	5	13-16	400/100
200200921N	Pg 9	15,5	8 -10	15	17	6	14-17	300/100
200201121N	Pg11	18,8	8 -10	18	20	6	14-18	200/50
200201321N	Pg13,5	20,5	10 -12	20	22	6,5	16-19	100/50
200201621N	Pg16	22,6	12 -14	22	24	6,5	17-20	50/50
200202121N	Pg21	28,5	17 -19	28	30	7	19-23	50/50
200202921N	Pg29	37,2	26 -28	37	40	8	21-25	15/15
200203621N*	Pg36	47,2	33 -35	47	50	9	24-30	10/10
200204221N	Pg42	54,2	39 -41	54	57	10	28-34	10/10
200204821N*	Pg48	60,0	43 -45	60	64	10	36-45	10/10

* Double sealing ring



Sealing ring: PVC 50 sh A

BSP thread ISO 228/1

Type Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner Head (mm)	B2 Spanner Body (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
200101441N	G1/4"	13,5	5,5 - 7	13	15	6,5	14-17	400/100
207101441N	G1/4"	13,5	5,5 - 7	13	B 15	6,5	14-17	400/100
200103841N	G3/8"	17,0	6,5 - 8,5	17	19	7,5	15-19	200/100
200101241N	G1/2"	21,5	8 -11	21	23	8	17-23	100/100
200105841N	G5/8"	23,5	11 -14	23	25	8,5	20-24	100/50
200103441N	G3/4"	27,0	14,5-17,5	27	29	9	20-26	50/50
200110041N	G1"	34,0	18 -22	34	36	10	23-28	25/25
200111841N	G1"1/8	38,0	21 -26	38	40	10,5	23-28	25/25
200111441N	G1"1/4	42,0	28 -32	42	45	11,5	25-31	20/20
200111241N	G1"1/2	48,0	32 -36	48	50	11,5	28-35	20/20
200120041N	G2"	60,0	38 -42	60	64	13,5	31-37	10/10
• 200121221N*	G2"1/2	76,0	44 -57	80	80	20	32-37	5/5
• 200130021N	G3"	89,0	67 -69	95	95	20	42-52	5/5

• Sealing ring: Chloroprene

* Concentric sealing ring

7900
7900A

MAXIINOX CABLE GLANDS

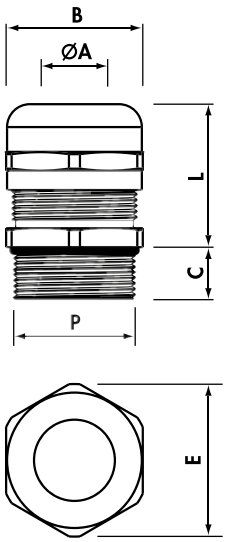
Stainless Steel AISI 303 (X8 CrNiS 18-9)

Stainless Steel AISI 316L (X2 CrNiMo 17-12-2)

MAXI*inox*

STAINLESS STEEL | IP68 | -25°C +100°C | CE

Material:
STAINLESS STEEL AISI 303/316L
Sealing-ring: NEOPRENE®
Cable grip insert: POLYAMIDE PA6.6
O-Ring: NITRILE 70 sh A
(factory fitted)
Protection: IP 68
Temperature range:
-25°C to +100°C (continuous)



Stainless Steel AISI 303

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Stainless Steel AISI 303	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
7900.M12	M12x1,5	12,2	3 - 7	16	18	6,5	16-20	*90/30*
7900.M16	M16x1,5	16,2	4,5-10	20	23	7,0	20-25	*120/30*
7900.M20	M20x1,5	20,5	7 -13	24	27	8,0	20-27	*75/25*
7900.M25	M25x1,5	25,4	10 -17	29	32	8,0	24-30	*40/20*
7900.M32	M32x1,5	32,5	11 -21	36	40	9,0	27-34	*15*
7900.M40	M40x1,5	40,5	19 -28	45	50	9,0	34-42	*15*
7900.M50	M50x1,5	50,5	26 -35	54	60	10,0	35-43	*10*
7900.M63	M63x1,5	64,0	34 -45	67	74	15,0	40-52	*5*

Stainless Steel AISI 316L

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 62444

Stainless Steel AISI 316L	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
7900A.M12	M12x1,5	12,2	3 - 7	16	18	6,5	16-20	*60/20*
7900A.M16	M16x1,5	16,2	4,5-10	20	23	7,0	20-25	*80/20*
7900A.M20	M20x1,5	20,5	7 -13	24	27	8,0	20-27	*60/20*
7900A.M25	M25x1,5	25,4	10 -17	29	32	8,0	24-30	*30/15*
7900A.M32	M32x1,5	32,5	11 -21	36	40	9,0	27-34	*12*
7900A.M40	M40x1,5	40,5	19 -28	45	50	9,0	34-42	*10*
7900A.M50	M50x1,5	50,5	26 -35	54	60	10,0	35-43	*7*
7900A.M63	M63x1,5	64,0	34 -45	67	74	15,0	40-52	*5*

MAXIINOX CABLE GLANDS

Stainless Steel AISI 303 (X8 CrNiS 18-9)

Stainless Steel AISI 316L (X2 CrNiMo 17-12-2)

MAXI*inox*

7900
7900A

STAINLESS STEEL | IP68 | -25°C +100°C | CE

Stainless Steel AISI 303

Pg thread DIN 40 430

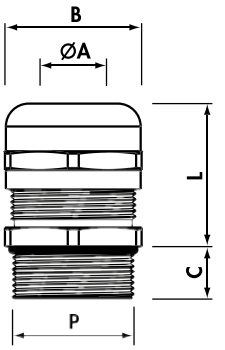
Stainless Steel AISI 303	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
7900.07	Pg 7	12,7	3 - 7	16	18	5,0	16-20	*90/30*
7900.09	Pg 9	15,5	4 - 8	17	19	6,0	17-23	*90/30*
7900.11	Pg11	18,8	4,5-10	20	23	6,0	20-25	*60/30*
7900.13	Pg13,5	20,5	5 -12	22	25	6,5	20-26	*90/30*
7900.16	Pg16	22,6	7 -13	24	27	6,5	20-27	*60/30*
7900.21	Pg21	28,5	10 -17	30	33	7,0	24-30	*40/20*
7900.29	Pg29	37,2	17 -25	40	45	8,0	30-37	*30/15*
7900.36	Pg36	47,2	20 -32	50	55	8,0	38-48	*10*
7900.42	Pg42	54,2	28 -38	57	63	10,0	36-46	*5*
7900.48	Pg48	60,0	34 -45	67	74	15,0	40-52	*5*

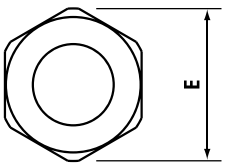
Stainless Steel AISI 316L

Pg thread DIN 40 430

Stainless Steel AISI 316L	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
7900A.07	Pg 7	12,7	3 - 7	16	18	5,0	16-20	*60/20*
7900A.09	Pg 9	15,5	4 - 8	17	19	6,0	17-23	*60/20*
7900A.11	Pg11	18,8	4,5-10	20	23	6,0	20-25	*100/20*
7900A.13	Pg13,5	20,5	5 -12	22	25	6,5	20-26	*100/20*
7900A.16	Pg16	22,6	7 -13	24	27	6,5	20-27	*40/20*
7900A.21	Pg21	28,5	10 -17	30	33	7,0	24-30	*60/15*
7900A.29	Pg29	37,2	17 -25	40	45	8,0	30-37	*20/15*
7900A.36	Pg36	47,2	20 -32	50	55	8,0	38-48	*7*
7900A.42	Pg42	54,2	28 -38	57	63	10,0	36-46	*5*
7900A.48	Pg48	60,0	34 -45	67	74	15,0	40-52	*5*

Material:
STAINLESS STEEL AISI 303/316L
Sealing-ring: NEOPRENE®
Cable grip insert: POLYAMIDE PA6.6
O-Ring: NITRILE 70 sh A
(factory fitted)
Protection: IP 68
Temperature range:
-25°C to +100°C (continuous)





1143
1142
1141

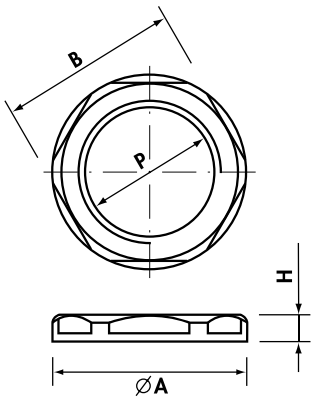
LOCKNUTS WITH COLLAR

Polyamide PA6 or PA6.6

PA 6 | PA 6.6 | V2 UL94

-20°C +90°C

Material: POLYAMIDE PA6 or 6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Colour: RAL 7035 light grey,
RAL 9005 black,
RAL 7001 dark grey



Metric thread M 1.5 pitch CEI EN 60423

Type Light Grey	P	Ø A (mm)	B Spanner (mm)	H (mm)	Quantity Box/Bag
1143M12	M12x1,5	18,5	17	5	*1.000/100*
1143M16	M16x1,5	24,0	22	5	*600/100*
1143M20	M20x1,5	29,0	27	6	*400/100*
1143M25	M25x1,5	35,5	32	6	*100*
1143M32	M32x1,5	45,0	41	7	*50*
1143M40	M40x1,5	55,0	50	7	*30*
1143M50	M50x1,5	65,0	60	8	*30*
1143M63	M63x1,5	82,0	75	8	*15*

Add to Ref: N for Black, G for Dark Grey

Pg thread DIN 40 430 - Dimensions DIN 46 320

Type Light Grey	P	Ø A (mm)	B Spanner (mm)	H (mm)	Quantity Box/Bag
1142007	Pg 7	21	19	5	*100*
1142009	Pg 9	24	22	5	*700/100*
1142011	Pg11	26	24	5	*500/100*
1142013	Pg13,5	29	27	6	*400/100*
1142016	Pg16	33	30	6	*100*
1142021	Pg21	39	36	7	*200/50*
1142029	Pg29	50	46	7	*50*
1142036	Pg36	66	60	8	*30*
1142042	Pg42	73	65	8	*25*
1142048	Pg48	78	70	8	*20*

Add to Ref: N for Black, G for Dark Grey

BSP thread ISO 228/1

Type Light Grey	P	Ø A (mm)	B Spanner (mm)	H (mm)	Quantity Box/Bag
1141012	G1/2"	29	27	6	*400/100*
1141112	G1"1/2	66	60	8	*30*
1141200	G2"	78	70	8	*20*

Add to Ref: N for Black

LOCKNUTS WITHOUT COLLAR

Polyamide PA6 or PA6.6

1112
1710
1410

Metric thread M 1.5 pitch CEI EN 60423

Type Light Grey	P	B Spanner (mm)	H (mm)	Quantity Box/Bag
1112	M12x1,5	17	5	*1.000/100*
1116	M16x1,5	22	5	*700/100*
1120	M20x1,5	27	6	*400/100*
1125	M25x1,5	32	6	*100*
1132	M32x1,5	41	7	*50*
1140	M40x1,5	50	7	*30*
1150	M50x1,5	60	8	*30*
1163	M63x1,5	75	8	*15*

Add to Ref: N for Black

Pg thread DIN 40 430 - Dimensions DIN 46 320

Type Light Grey	P	B Spanner (mm)	H (mm)	Quantity Box/Bag
1719E17*	Pg 7	17	5	*1.000/100*
1719	Pg 7	19	5	*100*
1710	Pg 9	22	5	*700/100*
1711	Pg11	24	5	*500/100*
1712	Pg13,5	27	6	*400/100*
1713	Pg16	30	6	*100*
Δ1714E34*	Pg21	34	7	*200/100*
1714	Pg21	36	7	*200/100*
1715	Pg29	46	7,5	*100/50*

Add to Ref: N for Black
Δ Light Grey only
*** Not DIN 46 320**

BSP thread ISO 228/1

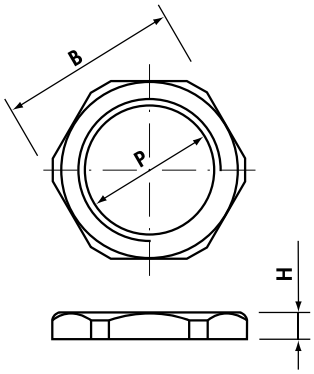
Type Light Grey	P	B Spanner (mm)	H (mm)	Quantity Box/Bag
1410	G1/4"	19	5	*800/100*
1411	G3/8"	23	6	*600/100*
1412	G1/2"	27	6	*400/100*
1413	G5/8"	30	6	*100*
1414	G3/4"	34	7	*200/100*
1415	G1"	40	7	*50*

Add to Ref: N for Black

PA 6 PA 6.6 V2 UL94

-20°C +90°C

Material: POLYAMIDE PA6 or 6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Colour: RAL 7035 light grey,
RAL 9005 black



2033
2032
2031

LOCKNUTS

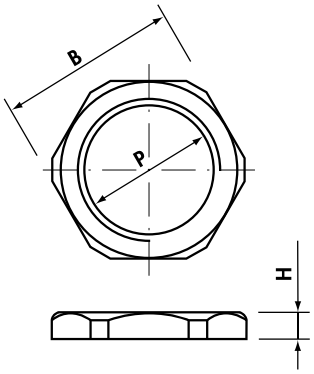
Nickel Plated Brass

BRASS | 3µm NICKEL PLATED | -25°C +100°C

Metric thread M 1.5 pitch CEI EN 60423

Type Nickel Plated Brass	P	B Spanner (mm)	H (mm)	Quantity Box/Bag
2033M12N	M12x1,5	16	2,8	2.000/100
2033M16N	M16x1,5	19	2,8	1.000/100
2033M20N	M20x1,5	24	3,0	600/100
2033M25N	M25x1,5	30	4,0	400/50
2033M32N	M32x1,5	36	4,0	250/25
2033M40N	M40x1,5	45	5,0	150/10
2033M50N	M50x1,5	60	5,0	100/10
2033M63N	M63x1,5	70	5,5	50/5

Pg thread DIN 40 430 - Dimensions DIN 46 320



Type Nickel Plated Brass	P	B Spanner (mm)	H (mm)	Quantity Box/Bag
2032007N	Pg 7	16*	2,8	1.500/100
2032009N	Pg 9	18	2,8	1.500/100
2032011N	Pg11	21	3,0	1.000/100
2032013N	Pg13,5	23	3,0	1.000/100
2032016N	Pg16	26	3,0	600/100
2032021N	Pg21	32	3,5	500/100
2032029N	Pg29	41	4,0	200/50
2032036N	Pg36	51	5,0	100/10
2032042N	Pg42	60	5,0	50/10
2032048N	Pg48	64	5,5	50/10

*Different dimension to DIN 46320

BSP thread ISO 228/1

Type Nickel Plated Brass	P	B Spanner (mm)	H (mm)	Quantity Box/Bag
2031014N	G1/4"	16	3,0	2.400/100
2031038N	G3/8"	19	3,0	1.000/100
2031012N	G1/2"	24	3,5	1.000/100
2031058N	G5/8"	26	4,0	500/50
2031034N	G3/4"	30	4,0	500/50
2031100N	G1"	37	4,0	250/25
2031118N	G1"1/8	41	4,5	100/25
2031114N	G1"1/4	45	4,5	200/20
2031112N	G1"1/2	52	5,5	100/20
2031200N	G2"	64	7,0	50/10
2031212N	G2"1/2	80	7,0	20/5
2031300N	G3"	95	8,0	20/5

EMC LOCKNUTS

20N3

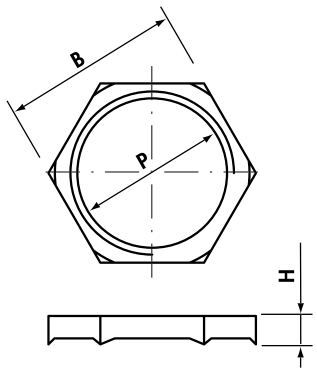
Nickel Plated Brass

With serrated teeth to maintain electrical contact

Metric thread M 1.5 pitch CEI EN 60423

BRASS | 3µm NICKEL PLATED | -25°C +100°C

Type Nickel Plated Brass	P	B Spanner (mm)	H (mm)	Quantity Box/Bag
20N3M12N	M12x1,5	15	3,5	1000/100
20N3M16N	M16x1,5	19	3,5	1000/100
20N3M20N	M20x1,5	24	3,5	500/100
20N3M25N	M25x1,5	30	4,0	400/100
20N3M32N	M32x1,5	36	4,0	200/100
20N3M40N	M40x1,5	46	4,7	100/50
20N3M50N	M50x1,5	60	5,7	50/50
20N3M63N	M63x1,5	70	6,7	50/25



MAXIINOX LOCKNUTS

7032
7033

Stainless Steel AISI 303 (X8 CrNiS 18-9)

Stainless Steel AISI 316L (X2 CrNiMo 17-12-2)

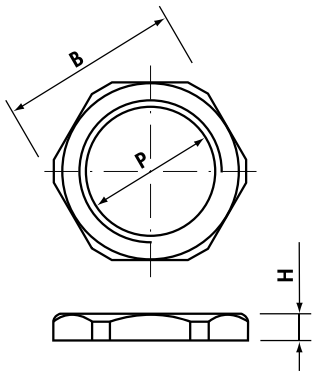
Metric thread M 1.5 pitch CEI EN 60423

STAINLESS STEEL | -25°C +100°C

Stainless Steel AISI 303	Stainless Steel AISI 316L	P	B Spanner (mm)	H (mm)	AISI 303 Quantity Box/Bag	AISI 316L Quantity Box/Bag
7033M12	7033AM12	M12x1,5	16	2,8	450/30	300/20
7033M16	7033AM16	M16x1,5	20	2,8	450/30	300/20
7033M20	7033AM20	M20x1,5	24	3,5	250/25	200/20
7033M25	7033AM25	M25x1,5	29	4,0	160/20	120/15
7033M32	7033AM32	M32x1,5	36	4,0	105/15	84/12
7033M40	7033AM40	M40x1,5	45	5,0	60/15	40/10
7033M50	7033AM50	M50x1,5	57	5,0	40/10	28/7
7033M63	7033AM63	M63x1,5	70	5,5	32/8	20/5

Pg thread DIN 40 430

Stainless Steel AISI 303	Stainless Steel AISI 316L	P	B Spanner (mm)	H (mm)	AISI 303 Quantity Box/Bag	AISI 316L Quantity Box/Bag
7032007	7032A007	Pg 7	16	2,8	450/30	300/20
7032009	7032A009	Pg 9	20	2,8	450/30	300/20
7032011	7032A011	Pg11	22	3,0	300/30	200/20
7032013	7032A013	Pg13,5	22	3,0	300/30	200/20
7032016	7032A016	Pg16	27	3,0	240/30	160/20
7032021	7032A021	Pg21	32	3,5	160/20	150/15
7032029	7032A029	Pg29	41	4,0	60/15	40/10
7032036	7032A036	Pg36	50	5,0	40/10	28/7
7032042	7032A042	Pg42	60	5,0	40/10	20/5
7032048	7032A048	Pg48	64	5,5	32/8	20/5



TCP

INTERNAL PLUGS FOR CABLE GLANDS

Polyamide PA6.6

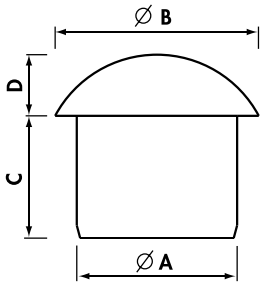
PA 6.6 | IP68 | V2 UL94 | -20°C +90°C

For cable glands type:

MAXIblock®
MAXIbrass®
MAXIinox

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Colour: RAL 9005 black

Application:
Blanking the cable entry of cable glands and maintaining IP 68.



Plugs

Type	Suitable for MAXIblock®	Suitable for MAXIbrass® MAXIinox	Ø A (mm)	Ø B (mm)	C (mm)	D (mm)	Quantity Box/Bag
TCP5	M12R + Pg7R	M12R	4,5	8,5	10,8	4,5	*3.000/100*
TCP10	Pg9R	Pg9R	6,0	12,0	12,0	4,5	*2.000/100*
TCP12	M12 + Pg7	M12 + Pg7	6,8	12,0	12,0	4,5	*1.000/100*
	M16R + Pg11R	M16R + Pg11R					
TCP15	Pg9	Pg9	8,0	11,0	11,5	5,0	*1.500/100*
TCP18	M16 + Pg11	M16 + Pg11	9,5	12,5	13,0	5,0	*800/100*
TCP20	M20R	M20R	10,0	15,0	14,0	6,0	*800/100*
	Pg13,5 + Pg13,5R	Pg13 + Pg13,5R					
	Pg16R	Pg16R					
TCP25	M20 + Pg16	M20 + Pg16	12,5	17,0	15,0	8,0	*400/100*
TCP30	M25R + M32R	M25R + M32R	12,5	22,5	18,0	9,0	*300/100*
	Pg21R	Pg21R					
TCP35	M25 + Pg21	M25 + Pg21	16,0	19,5	18,0	8,0	*300/100*
TCP40	M32	M32	19,0	22,5	19,0	9,0	*150/50*
TCP45	M40R + Pg29 + Pg36R	M40R + Pg29	22,0	30,0	20,0	10,0	*100/50*
TCP50	M40 + M50R + Pg42R	M40 + M50R	27,5	38,0	25,0	12,0	*50/25*
TCP55	Pg36	Pg36	31,5	36,5	23,5	12,0	*50/25*
TCP60	M50	M50	34,5	40,0	23,5	12,0	*50/25*
TCP65	M63R + Pg42 + Pg48R	M63R + Pg42	37,5	48,0	26,5	12,0	*30/15*
TCP70	M63 + Pg48	M63 + Pg48	43,0	48,0	26,5	12,0	*30/15*

R: reduced cable entry

MULTI-ENTRY SEALS FOR CABLE GLANDS

36A
36C

Neoprene® 70 sh A

For cable glands type:

MAXIblock®
MAXIbrass®
MAXIinox

Material: NEOPRENE® 70 sh A
Temperature range:
–40°C to +130°C
Protection: IP 68
Colour: RAL 9005 black

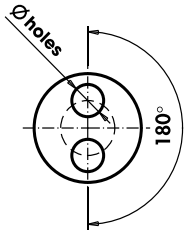
Application:
IP68 sealing of multiple cables entering cable glands.

NEOPRENE | IP68 | -40°C +130°C

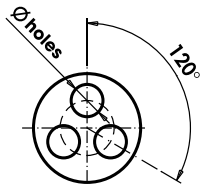
Multi-entry seals

Type	Suitable for MAXIblock®	Suitable for MAXIbrass® MAXIinox	No. entries	Ø entries (mm)	Quantity Box/Bag
36A3M1623	M16 + Pg11	M16 + Pg11	2	3,0	1.500/100
36A3M1624	M16 + Pg11	M16 + Pg11	2	4,0	1.000/100
36A3M16322	M16 + Pg11	M16 + Pg11	3	2,2	1.000/100
36A3M2025	M20 + Pg13,5	M20 + Pg13,5 + Pg16	2	5,0	500/100
36A3M2034	M20 + Pg13,5	M20 + Pg13,5 + Pg16	3	4,0	500/100
36A3M20356	M20 + Pg13,5	M20 + Pg13,5 + Pg16	3	5,6	500/100
36A3M2526	M25	M25 + Pg21	2	6,0	300/50
36A3M2536	M25	M25 + Pg21	3	6,0	300/50
36A3M2537	M25	M25 + Pg21	3	7,0	300/50
36A3M2545	M25	M25 + Pg21	4	5,0	300/50
36A3M2546	M25	M25 + Pg21	4	6,0	300/50
36A3M2554	M25	M25 + Pg21	5	4,0	300/50
36A3M3228	M32	M32	2	8,0	150/50
36A3M3239	M32	M32	3	9,0	150/50
36A3M32465	M32	M32	4	6,5	150/50
36A3M3248	M32	M32	4	8,0	150/50
36A3M4078	M40	M40	7	8,0	100/100
36A3M40106	M40	M40	10	6,0	100/100
36A3M5088	M50 + Pg 36	M50 + Pg 36	8	8,0	50/50
36C201629	Pg16	-	2	3+9	400/50

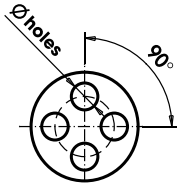
2 ENTRIES



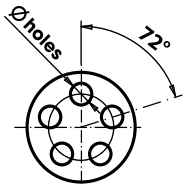
3 ENTRIES



4 ENTRIES



5 ENTRIES



MULTI-ENTRY SEAL PLUGS FOR CABLE GLANDS

TGM

Polyamide PA6.6

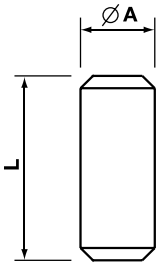
Material: POLYAMIDE PA6.6
Temperature range:
–20°C to +90°C (continuous)
Colour: RAL 7035 light grey

Application:
Plugging unused entries in multi-entry seals and maintaining IP68.

PA 6.6 | IP68 | -20°C +90°C

Multi-entry seal plugs

Type	Suitable for Seal	Ø A (mm)	L (mm)	Quantity Box/Bag
TGM38	36A3M1623	3	10	5.000/100
TGM48	36A3M1624 + 36A3M2034 + 36A3M2554	4	8	5.000/100
TGM58	36A3M2025	5	8	5.000/100
TGM513	36A3M2545	5	13	2.500/50
TGM613	36A3M2526 + 36A3M2536 + 36A3M40106	6	13	2.000/50
TGM713	36A3M2537	7	13	2.000/50
TGM817	36A3M3248 + 36A3M5088 + 36A3M4078	8	17	100



2093
2043
20A4

ENTRY THREAD ADAPTERS

Nickel Plated Brass

BRASS | 3µm NICKEL PLATED | -25°C +100°C

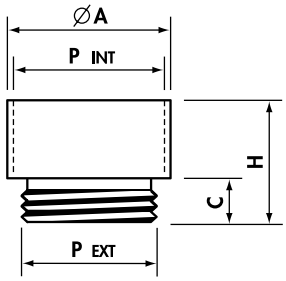


Fig. 1

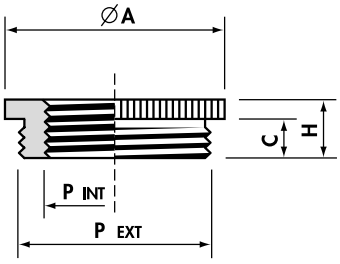


Fig. 2

Entry thread enlargers

Metric thread M 1.5 pitch CEI EN 60423

Type	P EXT	P INT	Ø A (mm)	C (mm)	H (mm)	Quantity Box/Bag
20931216N	M12x1,5	M16x1,5	18	5	15,5	500/100
20931620N	M16x1,5	M20x1,5	22	5	17,5	300/100
20932025N	M20x1,5	M25x1,5	27	6	20,0	150/50
20932532N	M25x1,5	M32x1,5	34	7	22,5	100/50
20932540N	M25x1,5	M40x1,5	42	7	23,5	50/50
20933240N	M32x1,5	M40x1,5	42	8	24,5	50/50
20933250N	M32x1,5	M50x1,5	52	8	27,5	25/25
20934050N	M40x1,5	M50x1,5	52	8	27,5	25/25
20935063N	M50x1,5	M63x1,5	66	9	31,0	20/10

Entry thread reducers

Metric thread M 1.5 pitch CEI EN 60423

Type	P EXT	P INT	Ø A (mm)	C (mm)	H (mm)	Quantity Box/Bag
20431612N	M16x1,5	M12x1,5	18	5	7,5	1.000/100
20432012N	M20x1,5	M12x1,5	22	6	9,0	600/100
20432016N	M20x1,5	M16x1,5	22	6	9,0	500/100
20432512N	M25x1,5	M12x1,5	27	7	10,0	300/50
20432516N	M25x1,5	M16x1,5	27	7	10,0	300/50
20432520N	M25x1,5	M20x1,5	27	7	10,0	300/100
20433220N	M32x1,5	M20x1,5	34	8	11,0	100/25
20433225N	M32x1,5	M25x1,5	34	8	11,0	200/50
20434025N	M40x1,5	M25x1,5	43	8	11,5	100/25
20434032n	M40x1,5	M32x1,5	43	8	11,5	100/25
20435032N	M50x1,5	M32x1,5	53	9	12,5	50/10
20435040N	M50x1,5	M40x1,5	53	9	12,5	50/25
20436340N	M63x1,5	M40x1,5	66	10	14,0	30/10
20436350N	M63x1,5	M50x1,5	66	10	14,0	30/10

Entry thread converters - Metric to Pg

Type	P EXT	P INT	Fig.	Ø A (mm)	C (mm)	H (mm)	Quantity Box/Bag
20A42011N	M20x1,5	Pg11	1	22	6,5	17,5	300/100
20A42016N	M20x1,5	Pg16	1	24	6,5	20,0	200/50
20A42513N	M25x1,5	Pg13,5	2	27	7,0	10,0	300/50
20A42516N	M25x1,5	Pg16	2	27	7,0	10,0	300/50
20A43216N	M32x1,5	Pg16	2	36	8,0	11,5	100/25
20A43221N	M32x1,5	Pg21	2	36	8,0	11,5	100/25

Entry thread converters - Pg to Metric

20A40916N	Pg 9	M16x1,5	1	20	6,0	15,0	400/100
20A41120N	Pg11	M20x1,5	1	22	6,0	16,0	300/100
20A41320N	Pg13,5	M20x1,5	1	24	6,5	16,5	200/50
20A41620N	Pg16	M20x1,5	2	24	6,5	9,5	50/50
20A42120N	Pg21	M20x1,5	2	30	7,0	10,0	100/100
20A42125N	Pg21	M25x1,5	2	30	7,0	10,0	100/100
20A42925N	Pg29	M25x1,5	2	39	8,0	11,5	50/50

ENTRY THREAD ADAPTERS

1800
2042

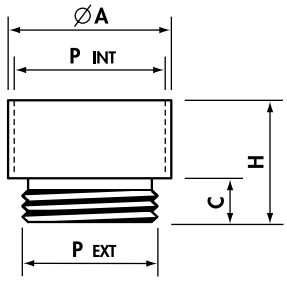
Nickel Plated Brass

Entry thread enlargers

Pg thread DIN 40 430 - Dimensions DIN 46 320-K

Type	P EXT	P INT	Ø A (mm)	C (mm)	H (mm)	Quantity Box/Bag
180709	Pg 7	Pg 9	17	5,0	15,0	600/100
180911	Pg 9	Pg11	20	6,0	16,5	500/100
180913	Pg 9	Pg13,5	22	6,0	17,5	300/100
181113	Pg11	Pg13,5	22	6,0	17,5	300/100
181116	Pg11	Pg16	24	6,0	18,5	100/50
181316	Pg13,5	Pg16	24	6,5	19,0	200/50
181321	Pg13,5	Pg21	30	6,5	21,0	150/50
181621	Pg16	Pg21	30	6,5	21,0	100/25
182129	Pg21	Pg29	39	7,0	23,0	75/25
182936	Pg29	Pg36	50	8,0	27,5	30/10
183642	Pg36	Pg42	57	9,0	31,0	20/10
184248	pg42	pg48	64	10,0	33,0	20/10

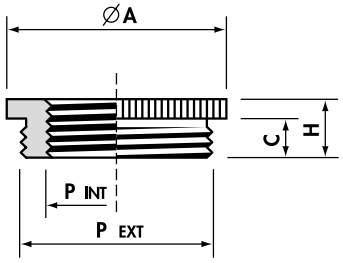
BRASS | 3µm NICKEL PLATED | -25°C +100°C



Entry thread reducers

Pg thread DIN 40 430 - Dimensions DIN 46 320-H

Type	P EXT	P INT	Ø A (mm)	C (mm)	H (mm)	Quantity Box/Bag
20420907N	Pg 9	Pg 7	17	6,0	8,5	800/100
20421107N	Pg11	Pg 7	20	6,0	8,5	600/100
20421109N	Pg11	Pg 9	20	6,0	8,5	600/100
20421307N	Pg13,5	Pg 7	22	6,5	9,0	600/100
20421309N	Pg13,5	Pg 9	22	6,5	9,0	600/100
20421311N	Pg13,5	Pg11	22	6,5	9,0	600/100
20421607N	Pg16	Pg 7	24	6,5	9,5	300/50
20421609N	Pg16	Pg 9	24	6,5	9,5	400/100
20421611N	Pg16	Pg11	24	6,5	9,5	400/100
20421613N	Pg16	Pg13,5	24	6,5	9,5	400/100
20422111N	Pg21	Pg11	30	7,0	10,0	200/50
20422113N	Pg21	Pg13,5	30	7,0	10,0	200/50
20422116N	Pg21	Pg16	30	7,0	10,0	200/50
20422916N	Pg29	Pg16	39	8,0	11,5	100/25
20422921N	Pg29	Pg21	39	8,0	11,5	100/25
20423621N	Pg36	Pg21	50	9,0	12,5	50/25
20423629N	Pg36	Pg29	50	9,0	12,5	50/25
20424236N	Pg42	Pg36	57	10,0	14,0	50/25
20424836N	Pg48	Pg36	64	10,0	14,0	50/25
20424842N	Pg48	Pg42	64	10,0	14,0	50/25

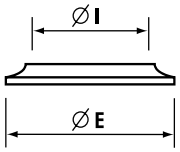


Zinc plated STEEL

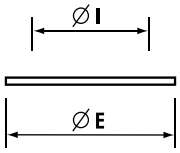
STEEL ZINC PLATED

-25°C +100°C

Material:
Zinc plated STEEL UNI 5961/84



Type A



Type B

Compression washers

Type	Fits thread	Ø E (mm)	Ø I (mm)	Quantity Box/Bag
6010.14	Pg7 + G1/4"	11,0	8,0	*15.000/1.000*
6010.38	Pg9 + G3/8"	14,5	10,0	*5.000/1.000*
6010.11	Pg11 + G3/8"	17,0	12,0	*5.000/1.000*
6010.12	Pg13,5 + G1/2"	18,0	14,0	*4.000/1.000*
6010.58	Pg16 + G5/8"	20,0	15,5	*3.000/1.000*
6010.34	G3/4"	24,0	18,5	*2.500/500*
6010.114	G1"1/4	38,0	33,0	*1.000/500*
6010.21	Pg21 + G3/4"	26,5	20,0	*2.000/500*
6010.01	G1"	30,0	24,5	*1.500/500*
6010.29	Pg29 + G1"1/8	35,0	26,5	*1.000/500*
6010.36	Pg36 + G1"1/2	45,0	38,0	*750/250*
6010.42	Pg42	51,0	42,5	*500/250*
6010.48	Pg48 + G2"	57,0	48,0	*400/100*

Subject to availability, the compression washers could be of type A or B

SEALING RINGS

Butadiene-Nitrile NBR

1880
1890

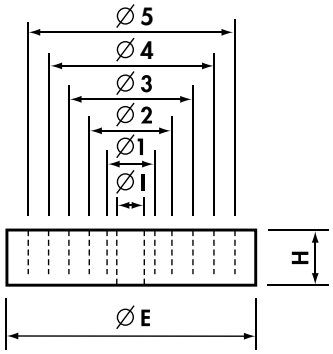
Concentric sealing rings

Type	Suitable for Cable Glands IP54 (1700.., 2001.., 2002.., 2003..)	Ø E (mm)	Ø 5 (mm)	Ø 4 (mm)	Ø 3 (mm)	Ø 2 (mm)	Ø 1 (mm)	Ø I (mm)	Ø H (mm)	Quantity *Box/Bag*
1880	Pg9 + M16	13,3	–	–	–	10,0	7,5	5,0	5,5	*1.500/100*
1881	Pg11	16,5	–	–	–	12,5	10,0	7,5	6,0	*1.000/100*
1882	Pg13,5 + M20 + G1/2"	18,3	–	–	–	12,5	10,0	7,5	6,0	*800/100*
1883	Pg16 + G5/8"	20,4	–	–	15,0	12,5	10,0	7,5	7,0	*600/100*
1884	Pg21 + M25	26,0	–	–	19,0	16,0	13,0	10,0	8,0	*300/100*
1884A	Pg21 + M25	26,0	–	–	20,5	18,0	15,0	10,5	8,0	*300/100*
1885*	Pg29 + M32 + G1"1/8	34,7	–	–	27,0	24,0	21,0	18,0	9,5	*150/50*
1886	Pg36 + G1"1/2 + M40	44,7	–	–	33,0	30,0	27,0	24,0	12,0	*100/50*
1887*	Pg42 + M50	51,7	–	–	39,0	36,0	33,0	30,0	14,0	*50/25*
1888/5	Pg48 + G2" + M63	57,0	45	41	37,0	33,0	29,0	24,0	14,0	*75/25*
1888*	Pg48 + G2" + M63	57,0	–	–	45,0	42,0	39,0	36,0	14,0	*75/25*

***material: RUBBER NR**

NBR -30°C +100°C

Material:
BUTADIENE-NITRILE NBR
with concentric perforations

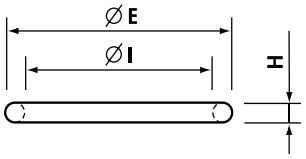


O-rings

Type	Fits thread	Ø E (mm)	Ø I (mm)	H (mm)	Quantity *Box/Bag*
1889	M12	12,81	9,25	1,78	*5.000/1.000*
1890	Pg7 + G1/4"	14,38	10,82	1,78	*5.000/1.000*
1890A	M16 + Pg9 + G3/8"	15,98	12,42	1,78	*5.000/1.000*
1891	Pg11	19,16	15,60	1,78	*5.000/1.000*
1891A	M20	20,73	17,17	1,78	*5.000/1.000*
1892	Pg13,5 + G1/2"	22,33	18,77	1,78	*5.000/1.000*
1892A	Pg16 + G5/8"	23,91	20,35	1,78	*5.000/1.000*
1892B	M25	25,51	21,95	1,78	*5.000/1.000*
1893	Pg21	28,68	25,12	1,78	*3.000/500*
1893A	M32	30,00	26,00	2,00	*2.000/500*
1925.3	G3/4"	30,31	25,07	2,62	*500*
1894	G1"	35,06	29,82	2,62	*2.000/500*
1895	M40 + Pg29 + G1"1/8	39,84	34,60	2,62	*1.000/500*
1896	G1"1/4	43,01	37,77	2,62	*1.000/500*
1897	Pg36 + G1"1/2	49,36	44,12	2,62	*800/100*
1898	Pg42 + G1"3/4	55,71	50,47	2,62	*800/100*
1899	Pg48 + G2"	62,06	56,82	2,62	*100*
1899A	G2"1/2	76,50	69,44	3,53	*100/1*
1899B	G3"	92,60	81,92	5,34	*100/1*

NBR -30°C +100°C

Material:
Butadiene-Nitrile 70 sh



341
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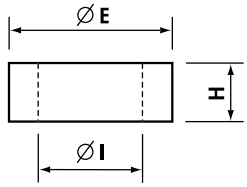
SEALING RINGS

PVC 50 sh A

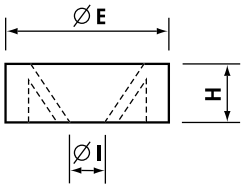
PVC -20°C +90°C

Material: PVC 50 sh A
Colour: Red



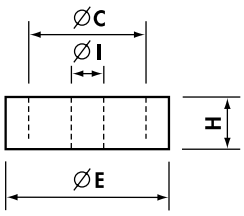
Cylindrical sealing rings

Type	Suitable for Cable Glands IP54 (1700.., 2001.., 2002.., 2003..)	C (mm)	Ø E (mm)	Ø I (mm)	H (mm)	Quantity Box/Bag
3411014	G1/4"	–	10,9	6,7	6,0	*1.500/100*
3411038	G3/8" + M16	–	14,5	8,5	6,0	*1.000/100*
3411012	Pg13,5 + G1/2" + M20	–	18,0	11,0	7,5	*500/100*
3412016	Pg16 + G5/8"	–	20,0	14,0	7,5	*300/100*
3422016	Pg16 + G5/8"	–	20,0	10,0	7,5	*300/100*
3411034	G3/4"	–	23,5	17,5	8,0	*300/100*
3411100	G1"	–	29,0	22,0	10	*200/100*
3412011	Pg11	–	16,5	10,0	7,0	*1.000/100*
3412021	Pg21 + M25	–	26,0	18,0	8,5	*300/100*
3422021	Pg21 + M25	–	26,0	13,0	8,5	*250/50*
3412029	Pg29 + G1"1/8 + M32	–	35,0	26,0	10,0	*200/100*



Membrane sealing rings

Type	Suitable for Cable Glands IP54 (1700.., 2001.., 2002.., 2003..)	C (mm)	Ø E (mm)	Ø I (mm)	H (mm)	Quantity Box/Bag
3431100	G1"	–	29	15	9,5	*200/100*



Double sealing rings

Type	Suitable for Cable Glands IP54 (2001.., 2002.., 2003..)	C (mm)	Ø E (mm)	Ø I (mm)	H (mm)	Quantity Box/Bag
3441012	G1/2" + Pg13,5 + M20	13	18,5	8	6,5	*500/100*
3441034	G3/4"	17	23	12,5	8,5	*300/100*

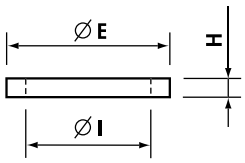
SEALING RINGS

357

Butadiene-Stirene SBR 70shA

Type	Fits thread	ØE (mm)	ØI (mm)	H (mm)	Quantity Box/Bag
3572007	Pg7	16,5	11,5	1,0	*4.000/100*
3572011	Pg11	23,0	17,5	1,0	*2.500/100*
35720131	Pg13,5 + M20X1,5 + G1/2"	27,5	20,5	1,4	*1.000/100*
3572013	Pg13,5	30,0	20,5	2,2	*1.000/100*
3572016	Pg16	29,0	23,0	2,0	*1.000/100*
3572021	Pg21	33,5	27,0	3,0	*500/100*
3573M16	M16x1,5	20,5	16,3	1,0	*3.000/100*
3573M20	M20X1,5 + Pg13,5 + G1/2"	25,5	20,5	1,0	*4.000/100*
3573M25	M25x1,5	30,5	25,5	1,0	*2.000/100*
3573M32	M32x1,5	40,5	32,5	1,0	*1.500/100*

Material:
BUTADIENE-STIRENE SBR 70 sh A
Temperature range: -20°C to +70°C
Colour: RAL 7035 light grey



SEALING RINGS

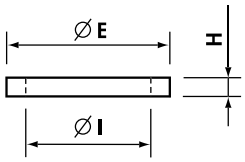
FD

Neoprene® 80 sh A

Type	Fits thread	ØE (mm)	ØI (mm)	H (mm)	Quantity Box/Bag
FD M12	M12	16,0	10,0	1,2	*2.500/50*
FD 7	Pg7 + G1/4"	17,0	11,3	1,2	*3.000/50*
FD 9	Pg9 + M16	20,0	13,9	1,2	*2.000/50*
FD M16	M16* + G3/8"	20,0	15,5	1,2	*2.000/50*
FD 11	Pg11	23,0	17,1	1,2	*2.000/50*
FD M20	M20	24,0	18,0	1,2	*2.000/50*
FD 13,5	Pg13,5 + G1/2"	25,0	19,0	1,2	*2.500/50*
FD 16	Pg16 + G5/8"	27,0	21,0	1,2	*1.500/50*
FD M25	M25	31,0	23,0	1,2	*1.000/20*
FD 21	Pg21 + G3/4"	34,5	27,0	1,5	*1.000/25*
FD M32	M32 + G1"	40,0	30,0	1,5	*600/20*
FD 29	Pg29 + G1"1/8"	45,0	35,2	1,5	*500/25*
FD M40	M40 + G1"1/4	46,0	38,0	1,2	*500/20*
FD 36	Pg36 + G1"1/2"	54,0	45,5	1,2	*250/25*
FD M50	M50	55,0	47,5	1,1	*10*
FD 42	Pg42 + G1"3/4"	62,0	52,0	1,1	*10*
FD 48	Pg48 + G2"	68,0	58,0	1,1	*10*
FD M63	M63	68,0	60,5	1,0	*500/5*

***recommended with set screws**

Material:
NEOPRENE® 80 sh A
Temperature range: -25°C to +100°C
Colour: RAL 9005 black



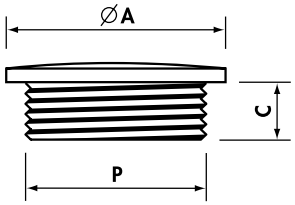
1053
1052

ENTRY PLUGS

Polyamide PA6

PA 6 | IP54 | HB UL94 | -20°C +90°C

Material: POLYAMIDE PA6
reinforced with fibreglass
self-extinguishing class HB (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Protection: IP 54
Colour: RAL 7035 light grey,
RAL 9005 black



Metric thread M 1.5 pitch CEI EN 60423

Type Light Grey	P	Ø A (mm)	C (mm)	Quantity Box/Bag
1053M12	M12x1,5	15	6	*100*
1053M16	M16x1,5	20	6	*100*
1053M20	M20x1,5	25	7	*100*
1053M25	M25x1,5	30	7	*100*
1053M32	M32x1,5	37	9	*50*
1053M40	M40x1,5	47	9	*30*
1053M50	M50x1,5	58	10	*20*
1053M63	M63x1,5	72	12	*10*

Add to Ref: N for Black

Pg thread DIN 40 430 - Dimensions DIN 46 320

Type Light Grey	P	Ø A (mm)	C (mm)	Quantity Box/Bag
1052007	Pg 7	15	6	*100*
1052009	Pg 9	19	6	*100*
1052011	Pg11	22	7	*100*
1052013	Pg13,5	25	7	*100*
1052016	Pg16	27	7	*100*
1052021	Pg21	33	9	*50*
1052029	Pg29	44	9	*100/50*
1052036	Pg36	55	10	*20*
1052042	Pg42	62	10	*10*
1052048	Pg48	69	12	*10*

Add to Ref: N for Black

ENTRY PLUGS

Polystyrene PS

1253
1840

Metric thread M 1.5 pitch CEI EN 60423

Type Light Grey	P	Ø A (mm)	C (mm)	Quantity Box/Bag
1253M12	M12x1,5	15	6	*100*
1253M16	M16x1,5	20	6	*100*
1253M20	M20x1,5	25	7	*100*
1253M25	M25x1,5	30	7	*100*
1253M32	M32x1,5	37	9	*50*
1253M40	M40x1,5	47	9	*30*
1253M50	M50x1,5	58	10	*20*
1253M63	M63x1,5	72	12	*10*

Add to Ref: N for Black

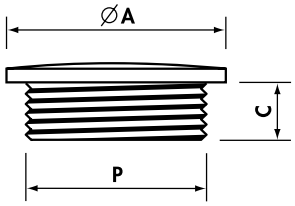
PS -20°C +60°C

Material: POLYSTYRENE PS
Temperature range:
–20°C to +60°C (continuous)
Protection: IP 54
Colour: RAL 7035 light grey,
RAL 9005 black

Pg thread DIN 40 430 - Dimensions DIN 46 320

Type Light Grey	P	Ø A (mm)	C (mm)	Quantity Box/Bag
1840	Pg 7	15	6	*100*
1841	Pg 9	19	6	*100*
1842	Pg11	22	7	*100*
1843	Pg13,5	25	7	*100*
1844	Pg16	27	7	*100*
1845	Pg21	33	9	*50*
1846	Pg29	44	9	*100/50*
1847	Pg36	55	10	*20*
1848	Pg42	62	10	*10*
1849	Pg48	69	12	*10*

Add to Ref: N for Black

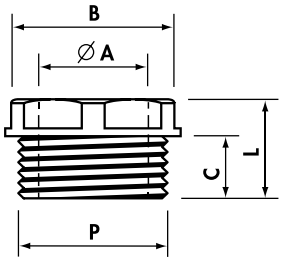


ENTRY BUSHES

Polyamide PA6

PA 6 | V0 UL94 | -20°C +90°C

Material: POLYAMIDE PA6
self-extinguishing class V0 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Colour: RAL 7035 light grey,
RAL 9005 black



Entry bushes

Pg thread DIN 40 430 - Dimensions DIN 46 320

Type Light Grey	P	Ø A (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1700.2*	Pg 9	10,0	16	9,0	14,0	600/100
1701.2*	Pg11	11,5	19	10,0	15,0	300/100
1702.2*	Pg13,5	13,5	21	11,0	16,5	300/100
1703.2	Pg16	16,0	23	12,5	18,5	200/100
1704.2	Pg21	22,0	30	12,0	17,5	100/50
1705.2	Pg29	27,0	40	15,0	22,0	50/50

BSP thread ISO 228/1

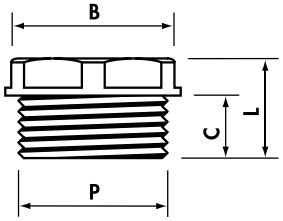
Type Light Grey	P	Ø A (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1830*	G1/4″	8,5	15	8,5	13,5	800/100
1831*	G3/8″	11,5	17	9,0	14,0	300/100
1832*	G1/2″	13,0	21	11,0	16,5	300/100

Metric thread M 1.5 pitch CEI EN 60423

Type Light Grey	P	Ø A (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
Δ 1835G	M16x1,5	11,5	17	9	14,0	100/100
1836*	M20x1,5	13,5	21	11	16,5	300/100

*Add to Ref: N for Black

Δ Dark Grey only



Blind entry bushes

Pg thread DIN 40 430 - Dimensions DIN 46 320

Type Light Grey	P	Ø A (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1702.5*	Pg13,5	–	21	11,0	17,0	300/100
1703.5	Pg16	–	23	12,5	18,5	200/100

BSP thread ISO 228/1

Type Light Grey	P	Ø A (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1861*	G3/8″	–	17	9	14	600/100
1862*	G1/2″	–	21	11	16,5	200/100

Metric thread M 1.5 pitch CEI EN 60423

Type Light Grey	P	Ø A (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1866*	M20x1,5	–	21	11	17	100

*Add to Ref: N for Black

ENTRY PLUGS

Nickel Plated Brass

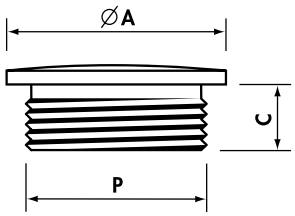
2053
2052

BRASS | 3µm NICKEL PLATED | IP54 | -25°C +100°C

Material: NICKEL PLATED BRASS (CuZn 40 Pb 3)
Protection: IP 54

Metric thread M 1.5 pitch CEI EN 60423

Type Nickel Plated Brass	P	Ø A (mm)	C (mm)	Quantity Box/Bag
2053M12N	M12x1,5	14	5,0	*1.500/100*
2053M16N	M16x1,5	18	5,0	*1.000/100*
2053M20N	M20x1,5	22	6,5	*500/100*
2053M25N	M25x1,5	28	7,0	*200/100*
2053M32N	M32x1,5	35	8,0	*150/25*
2053M40N	M40x1,5	44	8,5	*100/25*
2053M50N	M50x1,5	54	9,0	*50/25*
2053M63N	M63x1,5	67	10,0	*25/25*



Pg thread DIN 40 430 - Dimensions DIN 46 320

Type Nickel Plated Brass	P	Ø A (mm)	C (mm)	Quantity Box/Bag
2052007N	Pg 7	14	5,0	*1.500/100*
2052009N	Pg 9	17	6,0	*1.000/100*
2052011N	Pg11	20	6,0	*500/100*
2052013N	Pg13,5	22	6,5	*500/100*
2052016N	Pg16	24	6,5	*500/100*
2052021N	Pg21	30	7,0	*200/50*
2052029N	Pg29	39	8,0	*100/25*
2052036N	Pg36	50	9,0	*50/25*
2052042N	Pg42	57	10,0	*25/25*
2052048N	Pg48	64	10,0	*25/25*

ENTRY BUSHES

Brass

2021

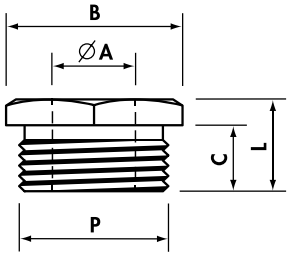
BRASS | -25°C +100°C

Material: PLAIN BRASS

BSP thread ISO 228/1

Type Brass	P	Ø A (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
2021014	G1/4″	10,0	13	6,0	8,5	*1.000/100*
2021038	G3/8″	12,0	17	7,5	10,5	*800/100*
2021012	G1/2″	16,0	21	9,5	13,0	*400/100*
2021058	G5/8″	18,0	23	10,0	13,5	*250/50*
2021034	G3/4″	21,0	27	10,0	14,0	*200/50*
2021100	G1″	26,5	34	11,0	15,5	*100/50*
2021118	G1″1/8	31,0	38	12,0	16,5	*100/25*
2021114	G1″1/4	35,0	42	13,0	18,0	*50/25*
2021112	G1″1/2	41,5	48	13,0	18,5	*50/25*
2021200	G2″	51,5	60	13,5	19,5	*25/25*

Add to Ref: N for NICKEL PLATED BRASS



RS

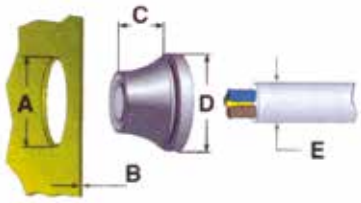
RUTASEAL GROMMETS

Rubber EPDM

HF HALOGEN FREE

EPDM | IP67 | -40°C +110°C

Material: Rubber EPDM halogen-free and chemical resistant
Temperature range: –40°C to +110°C
Protection: IP 67
Colour: RAL 7001 light grey
Application:
IP67 sealing of cables and conduits in Metric and Pg threaded entries through material thickness 0,5-4 mm



Fits Metric thread

Type	Fits Threaded Entry	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Quantity Box/Bag
RS0407.M12	M12	12,5	0,5 - 2	5,6	20,0	4 - 7	2.000/50
RS0509.M16	M16	16,5	1 - 4	11,0	21,0	5 - 9	2.000/50
RS0813.M20	M20/Pg13,5	20,5	1 - 4	13,4	25,5	8 - 13	3.000/50
RS1117.M25	M25	25,5	1 - 4	15,3	30,5	11 - 17	2.000/50
RS1520.M32	M32	32,5	1 - 4	18,6	38,5	15 - 20	1.000/25
RS1928.M40	M40	40,5	1 - 4	21,7	48,5	19 - 28	600/25
RS2735.M50	M50	50,5	1 - 4	25,0	60,5	27 - 35	250/10

Fits Pg thread

Type	Fits Threaded Entry	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Quantity Box/Bag
RS0305.07	Pg 7	12,5	0,5 - 2	5,4	20,0	3 - 5	2.000/50
RS0507.09	Pg 9	16,0	1 - 4	10,3	21,0	5 - 7	2.000/50
RS0710.11	Pg11	19,0	1 - 4	12,7	24,0	7 - 10	3.000/50
RS1014.16	Pg16	23,0	1 - 4	14,7	28,0	10 - 14	2.000/50
RS1420.21	Pg21	29,0	1 - 4	17,6	35,0	14 - 20	1.000/25
RS2026.29	Pg29	38,0	1 - 4	20,0	46,0	20 - 26	600/25
RS2635.36	Pg36	48,0	1 - 4	23,9	58,0	26 - 35	250/10

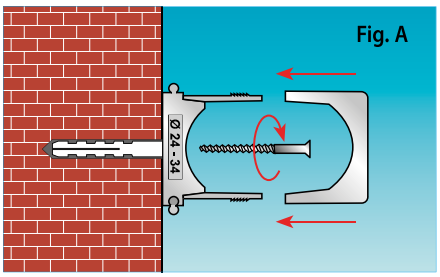
3600

MODULAR RETAINING CLIPS

ABS

SICURclips

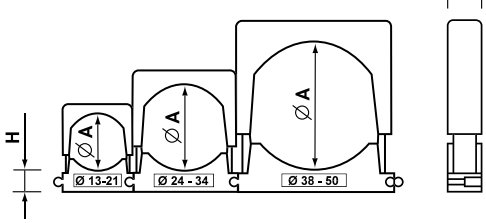
Application: Fix SICURclip base to surface using dia. 5 - 6 mm screw (Ref. Fig. A).
Insert cable, tubing or flexible conduit.
Fit adjustable cover and press to secure.
Modular SICURclips of the same or different size may easily be joined together.



ABS | V2 UL94 | -20°C +80°C

Material: ABS self-extinguishing class V0 (UL94) UV stabilised
Glow wire resistance:
750° C (CEI EN 60695-2-1)
Temperature range:
–20°C to +80°C (continuous)
Colour: RAL 7035 light grey

Type	Ø A min-max (mm)	H (mm)	S (mm)	Quantity
3601	13-21	8,5	16	100
3602	24-34	8,5	16	50
3603	38-50	8,5	16	25



MECHANICAL AND PNEUMATIC TOOLS

symbol description

professional mechanical tools - hydraulic bench press

Can be operated with one hand

Manual pressure release button

Ergonomically designed with a sculptured body for operator comfort

Lightweight and balanced for greater control

Dual-compound plastic handles
Greater safety and comfort in handling, thanks to the rubber inserts

Durable moulded body offering high resistance to wear and damage in all operating conditions

Extremely quiet in operation

Protected against accidental intrusions

Hexagonal crimp

Radial crimp

Indent crimp

Indent crimp

Oval crimp

Trapezium crimp

Rhomboidal crimp

Square crimp

Operating temperature range

Halogen free

USL-CNL Marking valid in USA & CANADA

CE marking

HP1

MECHANICAL TOOLS CRIMPSTAR® RANGE

for insulated terminals and connectors

Crimpstar®

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · RADIAL

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

TECHNICAL FEATURES:

Crimping Range	*PVC, PC and PA6.6 insulated terminals and connectors for conductor sizes 0,2 to 2,5 sqmm*
Dimensions mm	
Length	*234,5*
Width	*73,0*
Height	*18,3*
Weight g	*512*
Package Dimensions	*240 x 81 x 25*

HP3

MECHANICAL TOOLS CRIMPSTAR® RANGE

for insulated terminals and connectors

Crimpstar®

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · RADIAL

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

TECHNICAL FEATURES

Crimping Range	*PVC, PC and PA6.6 insulated terminals and connectors for conductor sizes 0,25 to 6 sqmm*
Dimensions mm	
Length	*234,5*
Width	*73,0*
Height	*18,3*
Weight g	*498*
Package Dimensions	*240 x 81 x 25*

MECHANICAL TOOLS CRIMPSTAR® RANGE

HNN3

for insulated terminals and connectors

Crimpstar®

TECHNICAL FEATURES

Crimping Range	*PA6.6 insulated terminals and connectors for conductor sizes 1,5 to 10 sqmm*
Dimensions mm	
Length	*234,5*
Width	*73,0*
Height	*18,3*
Weight g	*491*
Package Dimensions	*240 x 81 x 25*

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · INDENT

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

MECHANICAL TOOLS CRIMPSTAR® RANGE

HNN4

for insulated terminals and connectors

Crimpstar®

TECHNICAL FEATURES

Crimping Range	*PA6.6 insulated terminals and connectors for conductor sizes 10 and 16 sqmm*
Dimensions mm	
Length	*234,5*
Width	*73,0*
Height	*18,3*
Weight g	*492*
Package Dimensions	*240 x 81 x 25*

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · INDENT

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

HPH1

MECHANICAL TOOLS CRIMPSTAR® RANGE

for through connectors PE HD insulated, heat shrinkable

Crimpstar®

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · RADIAL

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

TECHNICAL FEATURES

Crimping Range	*Through connectors PE HD insulated, heat shrinkable. for conductor sizes 0,5 to 6 sqmm and PA6.6 connectors NL-M, NL-P for conductor sizes 0,25 to 6 sqmm*
Dimensions mm	
Length	*234,5*
Width	*73,0*
Height	*18,3*
Weight g	*512*
Package Dimensions	*240 x 81 x 25*

HNKE4

MECHANICAL TOOLS CRIMPSTAR® RANGE

for end sleeves

Crimpstar®

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · TRAPEZIUM

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

TECHNICAL FEATURES

Crimping Range	*End sleeves for conductor sizes 0,5 to 4 sqmm*
Dimensions mm	
Length	*234,5*
Width	*73,0*
Height	*18,3*
Weight g	*498*
Package Dimensions	*240 x 81 x 25*

MECHANICAL TOOLS CRIMPSTAR® RANGE

HNKE16

for end sleeves

Crimpstar®

TECHNICAL FEATURES

Crimping Range	*End sleeves for conductor sizes 4 to 16 sqmm*
Dimensions mm	
Length	*236*
Width	*73,0*
Height	*18,3*
Weight g	*491*
Package Dimensions	*240 x 81 x 25*

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · TRAPEZIUM

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

MECHANICAL TOOLS CRIMPSTAR® RANGE

HNKE50

for end sleeves

Crimpstar®

TECHNICAL FEATURES

Crimping Range	*End sleeves for conductor sizes 25 - 35 - 50 sqmm*
Dimensions mm	
Length	*234,5*
Width	*73,0*
Height	*18,3*
Weight g	*590*
Package Dimensions	*240 x 81 x 25*

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · TRAPEZIUM

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

HN1

MECHANICAL TOOLS CRIMPSTAR® RANGE

for uninsulated terminals and connectors

Crimpstar®

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · INDENT

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

TECHNICAL FEATURES

Crimping Range	*Uninsulated terminals and connectors for conductor sizes 0,25 to 10 sqmm*
Dimensions mm	
Length	*234,5*
Width	*73,0*
Height	*18,3*
Weight g	*480*
Package Dimensions	*240 x 81 x 25*

HN5

MECHANICAL TOOLS CRIMPSTAR® RANGE

for uninsulated terminals and connectors

Crimpstar®

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · INDENT

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

TECHNICAL FEATURES

Crimping Range	*Uninsulated terminals and connectors for conductor sizes 10 and 16 sqmm*
Dimensions mm	
Length	*234,5*
Width	*73,0*
Height	*18,3*
Weight g	*489*
Package Dimensions	*240 x 81 x 25*

MECHANICAL TOOLS CRIMPSTAR® RANGE

HN-A25

for uninsulated terminals and connectors A-M, L-M and L-P series

Crimpstar®

TECHNICAL FEATURES

Crimping Range	*Uninsulated terminals and connectors A-M, L-M and L-P series for conductor sizes 10 to 25 sqmm*
Dimensions mm	
Length	*229*
Width	*78,6*
Height	*18,3*
Weight g	*500*
Package Dimensions	*240 x 81 x 25*

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · HEXAGONAL

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

MECHANICAL TOOLS CRIMPSTAR® RANGE

HN-D25

for Cu tube lugs DR (DIN 46235) and through connectors DSV (DIN 46267)

Crimpstar®

TECHNICAL FEATURES

Crimping Range	*Cu tube lugs DR (DIN 46235) and through connectors DSV (DIN 46267) for conductor sizes 10 to 25 sqmm*
Dimensions mm	
Length	*229*
Width	*78,6*
Height	*18,3*
Weight g	*500*
Package Dimensions	*240 x 81 x 25*

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · HEXAGONAL

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

HF1

MECHANICAL TOOLS CRIMPSTAR® RANGE

for open barrel brass terminals

Crimpstar®

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · INDENT

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

TECHNICAL FEATURES

Crimping Range	*Open barrel brass terminals for conductors sizes 0,5 to 4 sqmm (not BN-FAB/FAR type)*
Dimensions mm	
Length	*234,5*
Width	*73,0*
Height	*18,3*
Weight g	*509*
Package Dimensions	*240 x 81 x 25*

HF2

MECHANICAL TOOLS CRIMPSTAR® RANGE

for open barrel brass terminals

Crimpstar®

ERGONOMIC · BI-COMPONENT · ONE HAND · MANUAL RELEASE · BALANCED · DURABLE · INDENT

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

TECHNICAL FEATURES

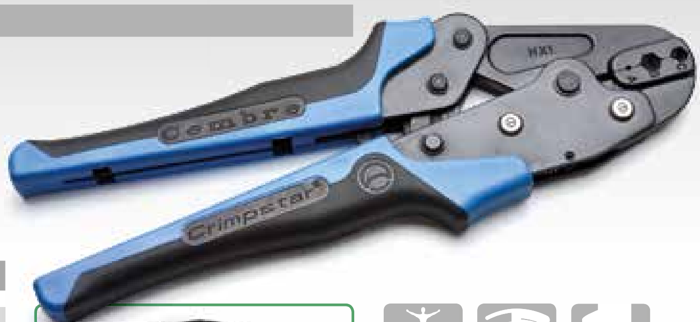
Crimping Range	*Open barrel brass terminals for conductors sizes 0,08 to 1,3 sqmm (28 to 16 AWG)*
Dimensions mm	
Length	*234,5*
Width	*73,0*
Height	*18,3*
Weight g	*497*
Package Dimensions	*240 x 81 x 25*

MECHANICAL TOOLS CRIMPSTAR® RANGE

HX1

for coaxial connectors

Crimpstar®



TECHNICAL FEATURES

Crimping Range	*Coaxial connectors type RG58, RG59, RG62 and RG 71*
Dimensions mm	
Length	*234,5*
Width	*73,0*
Height	*18,3*
Weight g	*481*
Package Dimensions	*240 x 81 x 25*

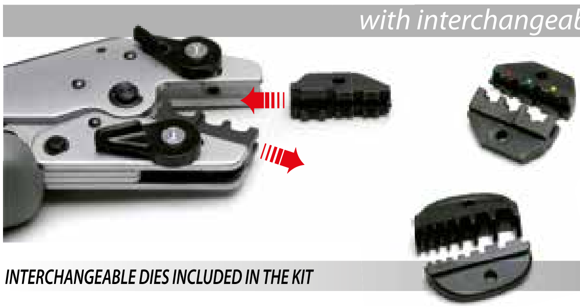
Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

MECHANICAL TOOL HWE1

HWE1

with interchangeable dies



INTERCHANGEABLE DIES INCLUDED IN THE KIT

INSULATED AND UNINSULATED END SLEEVES	
WF16	*Size 0,5 ÷ 16 sqmm*
INSULATED CONNECTORS RED, BLUE AND YELLOW	
IT6	*Size 0,5 ÷ 6 sqmm*

INTERCHANGEABLE DIES TO ORDER SEPARATELY

PHOTOVOLTAIC CONNECTORS (MULTI-CONTACT)	
MC3	*Size 4 ÷ 6 sqmm*
MC4	*Size 4 ÷ 6 sqmm*
INSULATED AND UNINSULATED END SLEEVES	
WF6	*Size 0,5 ÷ 6 sqmm*
WF35	*Size 16 ÷ 35 sqmm*
UNINSULATED CABLE LUGS	
NIT10	*Size 0,5 ÷ 10 sqmm*
OPEN BARREL BRASS CONNECTORS	
OB2.5P	*Size 0,5 and 2,5 sqmm*
SUB-D075	*Size 0,05 and 0,75 sqmm*
SUB-D050	*Size 0,08 and 0,5 sqmm*
COAXIAL CONNECTORS	
C59	*RG58, RG59, RG62*

KIT HWE1

comprising:

- HWE1 Manual mechanical tool
- WF16 die
- IT6 die
- all contained in a sturdy plastic case with extra compartments for interchangeable dies

A robust and reliable tool designed to optimise the installers time and effort.

A single tool body with a range of interchangeable dies allows a quick and simple transfer from one cable/connector combination to another, across a range of applications.

TECHNICAL FEATURES

Dimensions mm	
Length	*240*
Width	*79*
Height	*32,5*
Weight g	*590*

TECHNICAL FEATURES:

- Automatic opening of handles following completion of the crimping operation
- Dull Nickel finish
- Anti-slip handle grips

ND

MECHANICAL TOOLS ND® RANGE

for insulated and uninsulated end sleeves

ERGONOMIC · ONE HAND · BALANCED · DURABLE · TRAPEZIUM

A generation of tools, with a unique mechanism to reduce operator effort. Small and compact, with ergonomically designed handles for ease of operation.

High quality materials combined with advanced design and manufacturing technology, produce a reliable tool with a guaranteed consistent, crimping operation.

nd®

ND1

TECHNICAL FEATURES	
Crimping Range	Insulated and uninsulated end sleeves for conductors sizes 0,3 to 1,5 sqmm
Dimensions mm	
Length	190
Width	72
Height	21
Weight g	470

ND2

TECHNICAL FEATURES	
Crimping Range	Insulated and uninsulated end sleeves for conductors sizes 1 to 6 sqmm
Dimensions mm	
Length	190
Width	72
Height	21
Weight g	470

ND3

TECHNICAL FEATURES	
Crimping Range	Insulated and uninsulated end sleeves for conductors sizes 6 to 16 sqmm
Dimensions mm	
Length	190
Width	72
Height	21
Weight g	470

ND4

TECHNICAL FEATURES	
Crimping Range	Insulated and uninsulated end sleeves for conductors sizes 0,5 to 4 sqmm
Dimensions mm	
Length	190
Width	72
Height	21
Weight g	470

Package Dimensions mm	195 x 76 x 20

MECHANICAL TOOLS ZKE RANGE

ZKE

for insulated and uninsulated end sleeves

ERGONOMIC · ONE HAND · BALANCED · DURABLE

ZKE610

SQUARE

TECHNICAL FEATURES	
Crimping Range	Single aperture, ratchet controlled tool for crimping end sleeves, 0,08 to 10 sqmm side insertion
Dimensions mm	
Length	180
Width	78
Height	20
Weight g	404

ZKE616

SQUARE

TECHNICAL FEATURES	
Crimping Range	Single aperture, ratchet controlled tool for crimping end sleeves, 0,08 to 16 sqmm side insertion
Dimensions mm	
Length	178
Width	74
Height	30
Weight g	422

ZKE6-F

RHOMBUS

TECHNICAL FEATURES	
Crimping Range	Tool for crimping end sleeves 0,5 to 6 sqmm front insertion
Dimensions mm	
Length	200
Width	80
Height	20
Weight g	372

ZKE2

INDENT

TECHNICAL FEATURES	
Crimping Range	For end sleeves 0,5 to 16 sqmm
Dimensions mm	
Length	190
Width	62
Height	11
Weight g	240

HP4-R

MECHANICAL TOOLS HP4 RANGE

for insulated terminals and connectors

ERGONOMIC · ONE HAND · BALANCED · DURABLE · RADIAL

Professional manual mechanical tool with ratchet mechanism that prevents the handles from opening again before reaching the ratchet.
Equipped with a positioning device to reduce the operator's effort and facilitate proper crimping of the conductor.

According to the different thicknesses of the conductor insulation, the crimping on the insulation can be carried out by adjusting the jaws through three different settings:
1) strong, 2) medium, 3) light.
The tool is particularly easy to use thanks to its shape and handle coating.

TECHNICAL FEATURES

Crimping Range	*PVC, PC and PA6.6 insulated terminals and connectors for conductor sizes 0,25 to 1,5 sqmm*
Dimensions mm	
Length	*265*
Width	*80*
Height	*24*
Weight g	*500*
Package Dimensions	*330 x 110 x 50 mm*

At the end of the crimping the outer surface of the conductor is automatically stamped with the following crimping code:
one point for red conductor sizes from 0.25 to 1.5 mm^2

Construction features:
- Special treated and externally protected steel body, ratchet and handles.
- Handle coating in soft red PVC plastic.

HP4-B

MECHANICAL TOOLS HP4 RANGE

for insulated terminals and connectors

ERGONOMIC · ONE HAND · BALANCED · DURABLE · RADIAL

Professional manual mechanical tool with ratchet mechanism that prevents the handles from opening again before reaching the ratchet.
Equipped with a positioning device to reduce the operator's effort and facilitate proper crimping of the conductor.

According to the different thicknesses of the conductor insulation, the crimping on the insulation can be carried out by adjusting the jaws through three different settings:
1) strong, 2) medium, 3) light.
The tool is particularly easy to use thanks to its shape and handle coating.

TECHNICAL FEATURES

Crimping Range	*PVC, PC and PA6.6 insulated terminals and connectors for conductor sizes 1,5 to 2,5 sqmm*
Dimensions mm	
Length	*265*
Width	*80*
Height	*24*
Weight g	*500*
Package Dimensions	*330 x 110 x 50 mm*

At the end of the crimping the outer surface of the conductor is automatically stamped with the following crimping code:
two points for blue conductor sizes from 1.5 to 2.5 mm^2

Construction features:
- Special treated and externally protected steel body, ratchet and handles.
- Handle coating in soft blue PVC plastic.

MECHANICAL TOOLS HP4 RANGE

HP4-G

for insulated terminals and connectors

TECHNICAL FEATURES

Crimping Range	*PVC, PC and PA6.6 insulated terminals and connectors for conductor sizes 4 to 6 sqmm*
Dimensions mm	
Length	*320*
Width	*105*
Height	*25*
Weight g	*810*
Package Dimensions	*330 x 110 x 50 mm*

Professional manual mechanical tool with ratchet mechanism that prevents the handles from opening again before reaching the ratchet.
Equipped with a positioning device to reduce the operator's effort and facilitate proper crimping of the conductor.

According to the different thicknesses of the conductor insulation, the crimping on the insulation can be carried out by adjusting the jaws through three different settings:
1) strong, 2) medium, 3) light.
The tool is particularly easy to use thanks to its shape and handle coating.

At the end of the crimping the outer surface of the conductor is automatically stamped with the following crimping code:
three points for yellow conductor from 4 to 6 sqmm

Construction features:
- Special treated and externally protected steel body, ratchet and handles.
- Handle coating in soft yellow PVC plastic.

MECHANICAL TOOLS HP4 RANGE

HP4-C10

for sleeve connectors

TECHNICAL FEATURES

Crimping Range	*For sleeve connectors type C6-C6 and C10-C10*
Dimensions mm	
Length	*325*
Width	*105*
Height	*21*
Weight g	*730*
Package Dimensions	*330 x 110 x 50 mm*

Professional manual mechanical tool with ratchet mechanism that prevents the handles from opening again before reaching the ratchet.
The tool is particularly easy to use thanks to its shape and handle coating.

Construction features:
- Special treated and externally protected steel body, ratchet and handles.
- Handle coating in soft yellow PVC plastic.

TN70SE

MECHANICAL TOOLS TN RANGE

for uninsulated terminals and connectors

DURABLE INDENT

Professional manual mechanical tool suitable for crimping A-M Cu lugs and non-insulated L-M and L-P connectors.
Heat treated steel crimp jaws.
Easily adjustable die positioning by knurled screw and reference vernier scale.
Handles made from anti-slip plastic with hilt.

TECHNICAL FEATURES

Crimping Range	**Uninsulated terminals and connectors for conductor sizes 6 R/F to 70 R/F sqmm*
Dimensions mm	
Length	*450*
Width	*127*
Height	*47*
Weight kg	*2*

**R= Rigid conductor F= Flexible conductor*

TNN70

MECHANICAL TOOLS TN RANGE

for insulated terminals and connectors

DURABLE INDENT

Professional manual mechanical tool suitable for the crimping of wire terminals and PA 6.6 insulated connectors.
Heat treated steel crimp jaws.
Easily adjustable die positioning by knurled screw and reference vernier scale.
Handles made from anti-slip plastic with hilt.

TECHNICAL FEATURES

Crimping Range	**Polyamide PA6.6 insulated terminals and connectors for conductor sizes 10 F to 70 F sqmm*
Dimensions mm	
Length	*450*
Width	*127*
Height	*47*
Weight kg	*2*

**F= Flexible conductor*

MECHANICAL TOOLS TN RANGE

TN120SE

for uninsulated terminals and connectors

DURABLE INDENT

Professional manual mechanical tool suitable for crimping A-M Cu lugs and non-insulated L-M and L-P connectors.
Heat treated steel crimp jaws.
Easily adjustable die positioning by knurled screw and reference vernier scale.
Handles made from anti-slip plastic with hilt.

TECHNICAL FEATURES

Crimping Range	**Uninsulated terminals and connectors for conductor sizes 10 R/F to 120 R/150 F sqmm*
Dimensions mm	
Length	*700*
Width	*170*
Height	*47*
Weight kg	*3*

**R= Rigid conductor F= Flexible conductor*

MECHANICAL TOOLS TN RANGE

TNN120

for insulated terminals and connectors

DURABLE INDENT

Professional manual mechanical tool suitable for the crimping of wire terminals and PA 6.6 insulated connectors.
Heat treated steel crimp jaws.
Easily adjustable die positioning by knurled screw and reference vernier scale.
Handles made from anti-slip plastic with hilt.

TECHNICAL FEATURES

Crimping Range	**Polyamide PA6.6 insulated terminals and connectors for conductor sizes 10 F to 120 F sqmm*
Dimensions mm	
Length	*700*
Width	*170*
Height	*47*
Weight kg	*3*

**F= Flexible conductor*

TND6-70

MECHANICAL TOOLS TND RANGE

for uninsulated terminals and connectors according to DIN 46235 and DIN 46267 T.1

DURABLE HEXAGONAL

Mechanical tools equipped with rotating dies with hexagonal imprint compliant with DIN 480863 suitable to crimp Copper lugs according to DIN 46235 and through connectors according to DIN 46267 T.1 (refer to page 36-37), particularly sturdy and easy to handle.

TECHNICAL FEATURES

Crimping Range	*Uninsulated terminals and connectors according to DIN 46235 and DIN 46267 T.1 for conductor sizes 6 to 70 sqmm*
Dimensions mm	
Length	*515*
Width	*132*
Height	*46*
Weight kg	*2*

TND10-120

MECHANICAL TOOLS TND RANGE

for uninsulated terminals and connectors according to DIN 46235 and DIN 46267 T.1

DURABLE HEXAGONAL

Mechanical tools equipped with rotating dies with hexagonal imprint compliant with DIN 480863 suitable to crimp Copper lugs according to DIN 46235 and through connectors according to DIN 46267 T.1 (refer to page 36-37), particularly sturdy and easy to handle.

TECHNICAL FEATURES

Crimping Range	*Uninsulated terminals and connectors according to DIN 46235 and DIN 46267 T.1 for conductor sizes 10 to 120 mm²*
Dimensions mm	
Length	*665*
Width	*162*
Height	*52*
Weight kg	*3,7*

CABLE CUTTERS KT RANGE

for cutting cables Cu and Al

KT1

TECHNICAL FEATURES			
Cutting Capacity	Rigid	Multi-Cond.	Flex
Section Cond. mm²	Cu 16 Al 35	Cu 50 Al 50	Cu 70
Dimensions mm			
Length	170		
Width	45		
Weight g	210		

KT2

TECHNICAL FEATURES			
Cutting Capacity	Rigid	Multi-Cond.	Flex
Section Cond. mm²	Cu 16 Al 50	Cu 50 Al 70	Cu 95
Dimensions mm			
Length	210		
Width	47		
Weight g	294		

KT5

TECHNICAL FEATURES	
Cutting Capacity	for cutting cables Cu and Al up to max section 25 sqmm
Dimensions mm	
Length	170
Width	52
Weight g	108

KT3N

TECHNICAL FEATURES	
Cutting Capacity	For cutting cables Cu and Al Ø max 34 mm
Dimensions mm	
Length	260
Weight g	600

KT4N

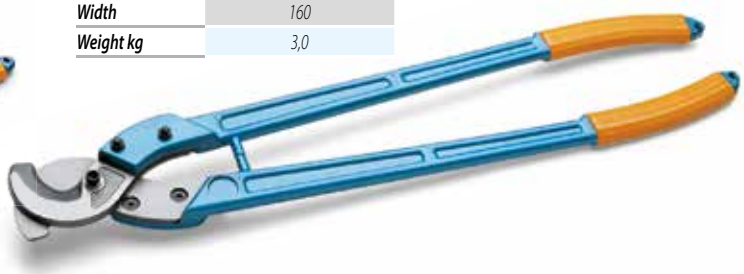
TECHNICAL FEATURES	
Cutting Capacity	For cutting cables Cu and Al Ø max 62 mm
Dimensions mm	
Length	297
Weight g	800

5116660250

TECHNICAL FEATURES	
Cutting Capacity	For cutting cables Cu and Al Ø max 18 mm
Dimensions mm	
Length	600
Width	140
Weight kg	1,5

5116660500

TECHNICAL FEATURES	
Cutting Capacity	For cutting cables Cu and Al Ø max 25,4 mm
Dimensions mm	
Length	800
Width	160
Weight kg	3,0



HB1-U

WIRE STRIPPERS HB RANGE

for insulated cables

Wire stripper, for PVC insulated cables 0,1 to 6 sqmm

HB11

For photovoltaics insulated cables 2,5 to 6 sqmm
stripping length 8,5 mm

SC1

PROFESSIONAL SCISSORS SC RANGE

for flexible conductors Cu-Al

Electricians scissors with high tensile steel blades allowing for excellent strength and performance. Specially micro-serrated blades for anti-slip purpose. Handles are made from dual component materials.

SC5X

Professional scissors with Special Steel frame, high hardness blades (58 HRC) and anti slide serrations.
The moulded plastic handles combine a rigid structure with a softer material for finger comfort.
Cutting of flexible conductors up to 50 mm²

Supplied with carry case and swivel belt hook.

SC3X

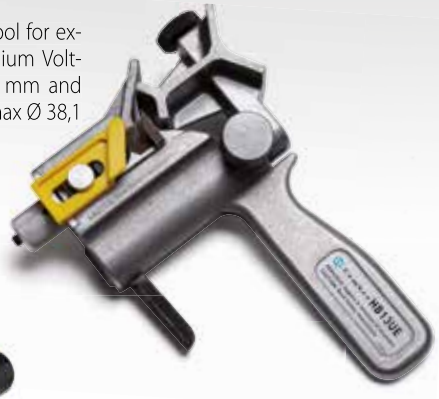
Multi-purpose scissors with high hardness blades (56 HRC) and anti slide serrations.
The moulded plastic handles combine a rigid structure with a softer material for finger comfort.
Cutting of flexible conductors up to 35 sqmm

CABLE STRIPPING TOOLS HB RANGE

HB13UE

for external sleeves of Low/Medium Voltage cables

Universal cable stripping tool for external sleeves of Low/Medium Voltage cables Ø 12,7 to 63,5 mm and primary insulator in XLPE max Ø 38,1 mm



For vulcanised extruded semiconductor

HB12N

The HB 12N kit includes:
- HB 12N cable stripping tool
- sturdy plastic case

HB12N cable stripping tool removes the semiconductor layer by being manually rotated around the cable while lateral advancement is achieved automatically. Safe and convenient, it can be used on cables with a semi-con diameter between 18 - 60 mm.

- Sturdy frame in anodised Aluminium alloy and Steel.
- Special Steel blade with precise cutting depth regulation.
- Stripping operation can start at any point along the conductor.
- Bearing mounted rollers provide smooth cutting action.
- With "REVERSE" function, which allows the removal of semiconductor up to 7 mm thick from the sheath of the cable.
- Double speed for each direction.

HB29-U
HB40-U

Wire stripper, for circular cables.

Three types of cut:
- Circumferential
- Linear
- Spiral

- **Blade height adjustable to suit insulation thickness**
- **Blade profile suits difficult insulation**
- **PTFE blade housing reduces friction**
- **Spare blade HBSJ29/40**

TECHNICAL FEATURES

Stripping Range	*HB29-U* Ø 4,5 - 29 mm	*HB40-U* Ø 19 - 40 mm
Dimensions mm		
Length	138	153
Width	38	54
Height	38	28
Weight kg	100	100

KTS1632

HAND TOOLS

for cutting and sealing flexible plastic conduit

Cuts and seals flexible plastic conduit in a single operation. Lightweight and easy to operate. Suitable for flexible conduits from Ø16 to Ø32 mm.

TECHNICAL FEATURES

Dimensions mm	
Length	230
Width	58
Thickness	32
Weight kg	0,32

PC1

for cutting plastic pipe

Plastic pipe cutting tool
Cutting capacity: Ø 6 to Ø 42 mm.

Body: die-cast aluminium alloy
Blade material: hardened Carbon Steel

TECHNICAL FEATURES

Dimensions mm	
Length	195
Width	96
Thickness	27
Weight kg	0,32

MT-FC48N

FRAME-TYPE HOLE PUNCHING TOOL

for cable trunking

Lightweight and easy to operate, designed for punching holes up to 47,2 mm diameter in the side wall of trunking without the need for pre drilling.

VAL-P30
Supplied in a robust plastic case.

Table denotes the punch/die set reference, for each hole size.
Suitable for punching holes in mild steel, fibreglass or plastic material, up to 2 mm thick.

Hole Dimensions					Maximum thickness of mild steel (mm)	Type
Nominal Ø (mm)	Nominal Ø (inch)	Pg	ISO	Inch		
15,5	.610	Pg9	-	-	2	RD15.5SS-FC
16,2	.638	-	ISO-16	-		RD16.2SS-FC
17,5	.689	-	-	-		RD17.5SS-FC
18,8	.740	Pg11	-	-		RD18.8SS-FC
19,1	.752	-	-	-		RD19.1SS
20,5	.807	Pg 13,5	ISO-20	-		RD20.5SS
22,6	.890	Pg16	-	-		RD22.6SS
23,8	.937	-	-	5/8"		RD23.8SS
25,4	1.000	-	ISO-25	-		RD25.4SS
27,0	1.063	-	-	3/4"		RD27.0SS
28,5	1.122	Pg21	-	-		RD28.5SS
30,5	1.201	-	-	7/8"		RD30.5SS
31,8	1.252	-	-	-		RD31.8SS
32,5	1.279	-	ISO-32	-		RD32.5SS
34,6	1.362	-	-	-		RD34.6SS
37,2	1.464	Pg29	-	-		RD37.2SS
38,1	1.500	-	-	-		RD38.1SS
40,5	1.594	-	ISO-40	-		RD40.5SS-FC
41,3	1.626	-	-	-		RD41.3SS-FC
42,5	1.673	-	-	1"1/4"		RD42.5SS-FC
43,2	1.701	-	-	-		RD43.2SS-FC
44,5	1.752	-	-	-		RD44.5SS-FC
47,2	1.858	Pg36	-	-		RD47.2SS-FC

BENCH PRESS TOOLS

PNB-1

BENCH PRESS TOOL

Pneumo-hydraulic with interchangeable dies

Pneumo-hydraulic, production bench press, controlled by a foot operated pedal, provides a consistent and reliable crimped connection. Extensive range of interchangeable dies available for crimping a wide variety of connectors.

NOTE: for applications not listed, please contact Cembre.

TECHNICAL FEATURES

Nominal operating pressure	*6 bar*
Dimensions mm	
Width	*180*
Depth	*320*
Height	*700*
Weight kg (without dies)	*23*

INTERCHANGEABLE DIES (to be ordered separately)

Die Set	Guard*	Connector Type			Nominal Conductor Size sqmm
PV-1	PU-1	Insulated Connectors		green	0,2÷0,5
PR-1				red	0,25÷1,5
PB-1				blue	1,5÷2,5
PG-1				yellow	4÷6
PH1-1	PH-1**	Through connectors PE HD insulated			0,5÷6
		NL-M, NL-P connectors PA6.6 insulated			0,25÷6
KE0.75-1	PK-1	End Sleeves		KE, PK...	0,3 - 0,5 - 0,75
KE2.5-1					1 - 1,5 - 2,5
KE10-1					4 - 6 - 10
MTT16-50	ME-1				16
MTT25-50					25
N1-1	PU-1	A 03-M..	S 1.5-..	RN-..	0,25 - 1,5
		A 06-M..	S 2.5-..	BN-..	1,5 - 2,5
		A 1-M..	S 6-..	GN-..	4 - 6
ME1-50	PU-1	Uninsulated Copper Lugs		A1-M..	4 - 6
ME2-50	ME-1			A2-M.. S10-M..	10
ME3-50				A3-M..	16
ME5-50				A5-M..	25
ME7-50				A7-M..	35
ME9-50				A9-M..	
ME10-50				A10-M..	50
ME12-50				A12-M..	
MN2RF-50	MN RF-1	Polyamide Insulated Lugs		ANE2-M..	10
MN3RF-50				ANE3-M..	16
MN5RF-50				ANE5-M..	25
MN7RF-50				ANE7-M..	35
				ANE9-M..	

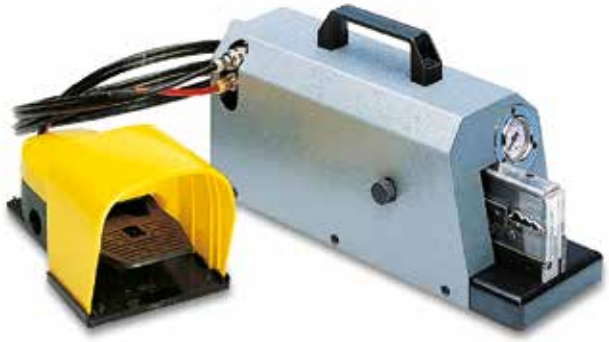
** Supplied as standard with the machine ** Supplied as standard with the die*

BENCH PRESS TOOL

PNB-3

Pneumatic

Pneumatic bench press operated by foot pedal for crimping terminals and connectors 0,25 to 16 sqmm.



TECHNICAL FEATURES

Nominal operating pressure	*6÷7 bar*
Dimensions mm	
Width	*130*
Depth	*370*
Height	*195*
Weight kg	*10,3*

BENCH PRESS RANGE

Type	Connector Type	Conductor Size sqmm
PNB-3P*	Insulated connectors red, blue and yellow	0,25÷6
PNB-3PD	Insulated terminals and butt connectors - frontal insertion	0,25÷6
PNB-3N1	Uninsulated terminals	0,25÷10
PNB-3N5	Uninsulated terminals	10÷16
PNB-3NN3	Polyamide insulated terminals	1,5÷10
PNB-3NN4	Polyamide insulated terminals	10÷16
PNB-3F/M	Bullet connectors	0,5÷2,5

** Will also crimp Polycarbonate fully-insulated terminals if fitted with PNB3F/M positioner, available as an optional accessory.*

BENCH PRESS TOOL

PNB-4KE

Pneumatic with multi-aperture die

Pneumatic bench press, controlled by a foot operated pedal.
Supplied with a multi-aperture die suitable for crimping insulated and uninsulated end sleeves from 0,3 to 10 sqmm.
Compact and efficient. Easy to operate, producing a secure and reliable crimped connection.

TECHNICAL FEATURES

Nominal operating pressure	*6 bar*
Dimensions mm	
Width	*120*
Depth	*160*
Height	*300*
Weight kg	*6*

MULTI DIES

Type	Connector Type	Conductor Size sqmm
PNB-4KE	End Sleeves type PK.. and type KE	0,3÷10

EPB-1NE

ELECTRO-PNEUMATIC BENCH PRESS

automatic stripping / crimping machine for insulated end sleeves

DURABLE · ERGONOMIC · PROTECTED · SILENT · TRAPEZIUM · CE

Bench press type EPB-1NE, electro-pneumatically operated, is designed for stripping and crimping insulated end sleeves Cembre type PKC, PKD and PKE.
The basic configuration processes connectors of c.s.a 0,5/0,75/1,0 and 1,5 mm² with a sleeve lengths of 6, 8, 10 and 12 mm.
Adapter kits are available:

KIT 2.5-EPB1N
for insulated end sleeves c.s.a 2,5 sqmm with a sleeve length of 8, 10 and 12 mm

KIT 4-EPB1N
for insulated end sleeves c.s.a 4,0 sqmm with a sleeve length of 10 mm

Stripping and crimping operations are carried out in quick succession.
Adjustable loading speed of vibrating charger.
Quick and easy change of configuration for different connector sizes.
Automatic adjustment of operating perameters to suit each configuration.
Modular structure and wear-free components guarantee excellent reliability.

Adapter Kit for insulated end sleeves c.s.a 2,5 sqmm
(KIT-2.5-EPB1N)
(KIT-4-EPB1N)

TECHNICAL FEATURES

Crimping Range	*0,5-1,5 mm² (basic configuration)*
Dimensions mm	
Length	*390*
Width	*240*
Height	*490*
Peso kg	*29*
Power Supply	*230 V/50 Hz (110 V/60 Hz)*
Current	*0,5 A*
Length of crimp	*6, 8, 10 and 12 mm*
Geometry of crimp	*Trapezoidal*
Cycle time	*2 s*
Compressed Air supply	*Min. 4 - Max 6 bar*
Air consumption	*1,2 l / cycle*
Cycle controller	*Electro-pneumatic, with microprocessor*
Counter	*Digital*

PNEUMATIC CRIMPING TOOLS

PNB-6KE
PNB-7KE

Hand held - PNB series

PNB-6KE TECHNICAL FEATURES	
Crimping Range	0,25 ÷ 2,5 sqmm / 24 ÷ 14 AWG
Dimensions mm	
Length	190
Width Ø	44
Length with spiral hose	2 m
Weight g	450

PNB-7KE TECHNICAL FEATURES	
Crimping Range	4 ÷ 10 sqmm / 12 ÷ 8 AWG
Dimensions mm	
Length	190
Width Ø	44
Length with spiral hose	2 m
Weight g	450

PNB-6KE and PNB-7KE hand tools facilitate the rapid crimping of insulated end sleeves while avoiding the operator discomfort associated with ordinary manual tools.
Lightweight and easy to use, these tools are ideal for panel building applications and component assembly.

Both tools are designed to be maintenance-free and need no routine calibration. A 4-6 bar air supply is required for connection via the quick coupler fitted to the hose supplied with the tool.

PNEUMATIC CRIMPING TOOLS

PNB-6KE-T
PNB-7KE-T

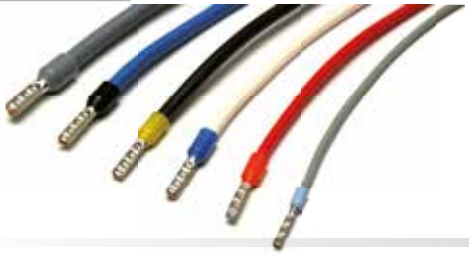
Bench mounted tools with foot pedal - PNB series

PNB-6KE-T TECHNICAL FEATURES	
Crimping Range	0,25 ÷ 2,5 sqmm / 24 ÷ 14 AWG
Dimensions mm	
Length	200
Width Ø	135
Height	75
Length with spiral hose	2 m
Weight g	1000

PNB-7KE-T TECHNICAL FEATURES	
Crimping Range	4 ÷ 10 sqmm / 12 ÷ 8 AWG
Dimensions mm	
Length	200
Width Ø	135
Height	75
Length with spiral hose	2 m
Weight g	1000

PNB-6KE-T and PNB-7KE-T have bench mounts with storage and are foot pedal operated to allow operators to have both hands free when assembling cable harnesses.
Both tools are designed to be maintenance-free and need no routine calibration.

A 4-6 bar air supply is required for connection via the quick coupler fitted to the hose supplied with the tool.

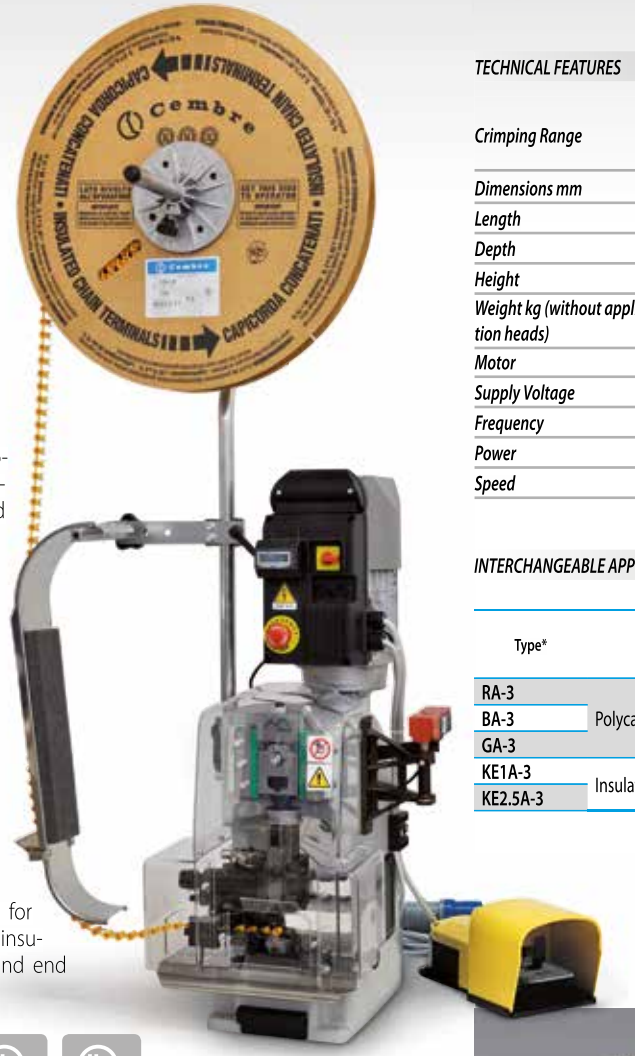


ELB-3

BENCH PRESS

for Polycarbonate insulated chain connectors

DURABLE · ERGONOMIC · SILENT · PROTECTED · CE · RADIAL · TRAPEZIUM



Electro-pneumatic, production bench press, controlled by a foot operated pedal.
Producing a consistent and reliable crimped connection.
Interchangeable application heads available to suit the complete range of Polycarbonate insulated connectors.

See pages 8-9 and 19 for types and features of the insulated chain connectors and end sleeves.

HF HALOGEN FREE · -20°C +115°C · c UL us File no. E125401 · c UL us File no. E212000

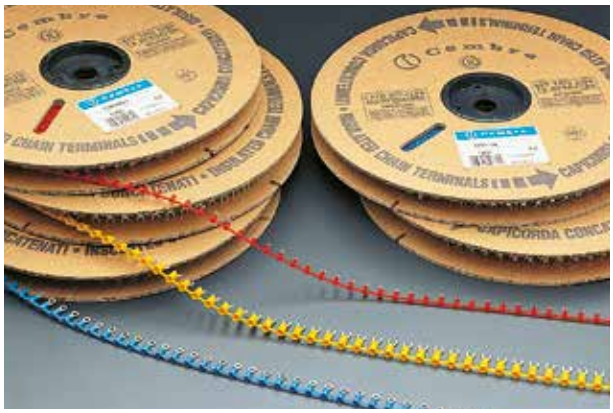
TECHNICAL FEATURES

Crimping Range	Polycarbonate insulated chain terminals 0,25 ÷ 6 mm² and insulated chain end sleeves 0,5 ÷ 2,5 mm²
Dimensions mm	
Length	180
Depth	250
Height	620
Weight kg (without application heads)	41
Motor	
Supply Voltage	220 V
Frequency	50 Hz
Power	0,55 kW/0,75 HP
Speed	2.800 g/1'

INTERCHANGEABLE APPLICATION HEADS, SIDE ENTRY WITH PNEUMATIC FEED

Type*	Connectors	Conductor Size sqmm
RA-3	Polycarbonate insulated chain terminals	0,25÷1,5
BA-3		1,5÷2,5
GA-3		4÷6
KE1A-3	Insulated chain end sleeves	0,5÷1
KE2.5A-3		1÷2,5

** order as required*



Conforms to DIN Standard 46 228/4

HYDRAULIC CRIMPING TOOLS AND CUTTERS

symbol description

hydraulic crimping tools and cutters

Crimping force kN

Double speed action: a rapid approach speed and a slower more powerful speed for crimping or cutting

Openable compression head, ideal for derivations from running conductors

Openable cutting head, ideal for cutting running cables

Tool with a large 42 mm jaw opening, for easier introduction/removal of large size compression terminations and joints

Blades manufactured from high strength special Steel, heat treated to ensure a long service life

Max cutting diameter

Max hole punching diameter

The head can rotate to enable the operator to work in the most comfortable position

Can be operated with one hand

Provided with a maximum pressure valve that allows to check the correct execution of the compressions or the limit switch control of the blades

Manual pressure release button

Ergonomically designed with a sculptured body for operator comfort

Lightweight and balanced tool for greater control

Dual-compound plastic handles.
Greater safety and comfort in handling, thanks to the rubber inserts

Durable moulded body offering high resistance to wear and damage in all operating conditions

CE marking

symbol description

hydraulic crimping tools and cutters

HEXAGONAL — Hexagonal crimp

RADIAL — Radial crimp

INDENT — Indent crimp

OVAL — Oval crimp

TRAPEZIUM — Trapezium crimp

CIRCULAR — Circular crimp

700 bar — Max operating pressure

ISOLATED — Contains isolated oil

60kV — Hydraulic units provide protection against short circuit when accidentally cutting live L.V. / M.V. cables with nominal voltage up to 60 kV

HT45-E

HYDRAULIC CRIMPING TOOL

50kN | 180° | MAX PRESSURE | MANUAL RELEASE | ERGONOMIC | ONE HAND | HEAD OPENING | BALANCED | DURABLE | HEXAGONAL | OVAL | INDENT

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000
L.V. lugs and splices			■	■	■	■	■	■	■	■	■	■								
"C" sleeve Connectors			■	■	■	■	■													
H.V. lugs and splices				■	■	■	■	■	■											

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES

Crimping force kN	50
Dimensions mm	
Length	346
Width	130
Weight kg	2,0

STORAGE

Type	VAL-P1*
Dimensions mm L x W x H	445 x 290 x 95
Weight kg	1,2
Supplied with the tool	✓
Purchase separately	-

**Suitable for storage of the tool and 20 sets of dies*

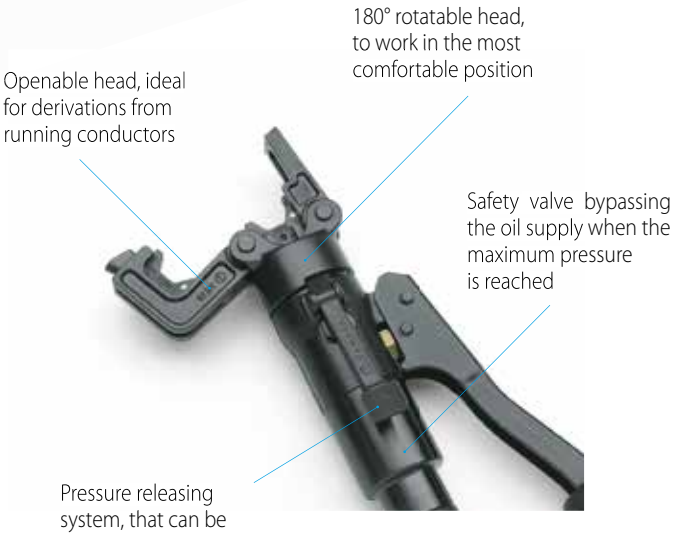
Lightweight and compact, this tool is ideal for the compression of connectors for general applications.

Having the benefit of spring loaded handles, the dies can be advanced using only one hand; therefore leaving the other hand free to position the connector.

For ease of operation and comfort of the operator, the tool head can be fully rotated through 180 degrees.

The built-in safety valve will by-pass the oil supply when the maximum pressure is reached, and a pressure releasing system can easily be operated at any stage of the compression.

The operator can advance the dies using only one hand, leaving the other hand free to position the connector.



HYDRAULIC CRIMPING TOOL

HT51

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices			■	■	■	■	■	■	■	■	■	■	■	■	■						
Insulated terminals				■	■	■	■	■	■	■	■										
End sleeves					■	■	■	■	■	■	■										
"C" sleeve Connectors			■	■	■	■	■	■	■												

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

STORAGE

Type	VAL-P1*
Dimensions mm L x W x H	445 x 290 x 95
Weight kg	1,2
Supplied with the tool	✓
Purchase separately	-

** Suitable for storage of the tool and 20 sets of dies*

TECHNICAL FEATURES

Crimping force kN	50
Dimensions mm	
Length	380
Width	130
Weight kg	2,7

HT 51-KV version also available for Power Supply Companies

New design two speed hydraulic tool, lightweight and compact, this tool is ideal for working in confined spaces.
Having the benefit of spring loaded handles, the dies can be advanced using only one hand; therefore leaving the other hand free to position the connector.
For ease of operation and comfort of the operator, the tool head can be fully rotated through 180 degrees. The built-in safety valve will by-pass the oil supply when the maximum pressure is reached, and a pressure release system can easily be operated at any stage of the compression.

RH50

HYDRAULIC PRESSHEAD

50kN | 700 bar | HEAD OPENING | DURABLE | CE | HEXAGONAL | OVAL | RADIAL | INDENT

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices			■	■	■	■	■	■	■	■	■	■	■	■	■	■					
Insulated terminals				■	■	■	■	■	■	■	■										
End sleeves					■	■	■	■	■	■	■										
"C" sleeve Connectors			■	■	■	■	■	■	■												

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).
RH50 is suitable for installing the same range of connectors as HT51.

TECHNICAL FEATURES

Crimping force kN	*50*
Max operating pressure bar	*700*
Dimensions mm	
Length	*195*
Width	*75*
Weight kg	*1,6*

STORAGE

Type	*VAL-P1**
Dimensions mm L x W x H	*445 x 290 x 95*
Weight kg	*1,2*
Supplied with the tool	✓
Purchase separately	-

** Suitable for storage of the head and 20 sets of dies*

STORAGE

Type	*CVB-007*
Dimensions mm L x W	*350 x 105*
Weight kg	*0,13*
Supplied with the tool	-
Purchase separately	✓

RHM50

HYDRAULIC PRESSHEAD

50kN | 700 bar | DURABLE | CE | HEXAGONAL | OVAL | INDENT | RADIAL

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices			■	■	■	■	■	■	■	■	■	■	■	■	■	■					
Insulated terminals				■	■	■	■	■	■	■	■										
End sleeves					■	■	■	■	■	■	■										

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

Particularly suitable for high volume bench crimping.

Hydraulic presshead complete with quick automatic coupler for connection to hydraulic pump with working pressure of 700 bar max, (see page 194-200).
RHM50 is suitable for installing the same range of connectors as RH50.

TECHNICAL FEATURES

Crimping force kN	*50*
Max operating pressure bar	*700*
Dimensions mm	
Length	*195*
Width	*75*
Weight kg	*1,6*

STORAGE

Type	*VAL-P1**
Dimensions mm L x W x H	*445 x 290 x 95*
Weight kg	*1,2*
Supplied with the tool	✓
Purchase separately	-

** Suitable for storage of the head and 20 sets of dies*

STORAGE

Type	*CVB-007*
Dimensions mm L x W	*350 x 105*
Weight kg	*0,13*
Supplied with the tool	-
Purchase separately	✓

HYDRAULIC CRIMPING TOOL

HT81-U

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	100	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices			■	■	■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors			■	■	■	■	■	■	■	■	■											
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■							

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

STORAGE

Type	VAL-P3*
Dimensions mm L x W x H	620 x 380 x 135
Weight kg	2,5
Supplied with the tool	✓
Purchase separately	-

** Suitable for storage of the tool and three VAL-75*

STORAGE

Type	VAL-75*
Dimensions mm L x W x H	270 x 80 x 30
Weight kg	0,15
Supplied with the tool	-
Purchase separately	✓

**Suitable for storing five sets of dies*

TECHNICAL FEATURES

Crimping force kN	80
Dimensions mm	
Length	485
Width	141
Weight kg	3,4

This lightweight and self contained tool, features a patented closure and release mechanism for the die locking pin.
A wide range of connectors can be crimped with a small number of die sets due to their unique, double groove styling.
Dies for cutting Copper, Aluminum, Aldrey and Aluminum-steel, are also available (see table below).
The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.
For ease of operation and comfort of the operator the tool head can be fully rotated through 180 degrees.
The built-in safety valve will by-pass the oil supply when the maximum pressure is reached, and a pressure releasing system can easily be operated at any stage of the compression.

HYDRAULIC PRESSHEAD

RHU81

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	100	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices			■	■	■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors			■	■	■	■	■	■	■	■	■											
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■							

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES

Crimping force kN	80
Max operating pressure bar	700
Dimensions mm	
Length	235
Width	91
Weight kg	1,9

STORAGE

Type	CVB-007
Dimensions mm L x W	350 x 105
Weight kg	0,13
Supplied with the tool	✓
Purchase separately	-

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).

This lightweight and self contained head, features a patented closure and release mechanism for the die locking pin.
The head is easy to use and is ideally suited for crimping in confined spaces. RHU81 is suitable for installing the same range of connectors as HT 81-U.

HT 81-U and RHU 81 ACCESSORIES FOR CUTTING CONDUCTORS

Die Type	Cutting Capacity	Conductor Type
	Ø 16 mm	Cu, Alu, Aldrey and Alu-Steel
MB2-80U	This die is suitable to cut steel conductors (R ≤ 160 daN/mm²) having the most common strandings, i.e.: 19 x 1,2 = Ø est. 6,0 mm 7 x 3,0 = Ø est. 9,0 mm 19 x 2,1 = Ø est. 10,5 mm 19 x 2,3 = Ø est. 11,5 mm	
MB3-80U	Suitable to cut aluminium strands of 150 mm² aluminium-steel conductors, without damage to the steel core.	

HT120

HYDRAULIC CRIMPING TOOL

120kN | 2 SPEED | 180° | MAX PRESSURE | MANUAL RELEASE | ERGONOMIC | BALANCED | DURABLE | HEXAGONAL | OVAL | RADIAL | INDENT

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs						■	■	■	■	■	■	■	■	■	■	■	■				
*H.V. Splices**						■	■	■	■	■	■	■	■	■	■	■	■				

*limited to the cable insulation diameter

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES

Crimping force kN	*120*
Dimensions mm	
Length	*488*
Width	*138*
Weight kg	*5,7*

STORAGE

Type	*VAL-P3**
Dimensions mm L x W x H	*620 x 380 x 135*
Weight kg	*2,5*
Supplied with the tool	✓
Purchase separately	-

*Suitable for storage of the tool and 14 sets of dies

This lightweight and self contained tool will accept the semi-circular slotted dies, common to most 130 kN tools.
It is particularly suitable for installing crimp type electrical connectors for overhead line applications.
The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.
For ease of operation and comfort of the operator the tool head can be fully rotated through 180 degrees.
The built-in safety valve will by-pass the oil supply when the maximum pressure is reached, and a pressure release system can easily be operated at any stage of the compression.

HT 120-KV version also available for Power Supply Companies

HT 120 features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.

Die release system, protected from accidental operation

Pressure release trigger, which can be operated at any stage of the compression.

HYDRAULIC CRIMPING TOOL

HT131-C

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs						■	■	■	■	■	■	■	■	■	■	■	■				
H.V. Splices*						■	■	■	■	■	■	■	■	■	■	■	■				

*limited to the cable insulation diameter

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

STORAGE

Type	VAL-P3*
Dimensions mm L x W x H	620 x 380 x 135
Weight kg	2,5
Supplied with the tool	✓
Purchase separately	-

*Suitable for storage of the tool and 14 sets of dies

TECHNICAL FEATURES

Crimping force kN	130
Dimensions mm	
Length	473
Width	144
Jaw opening	25
Weight kg	5,5

This new model, self contained, robust and sturdy, will accept all semi-circular slotted dies, common to most 130 kN tools.
The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.
For ease of operation and comfort of the operator the tool head can be fully rotated through 180 degrees.
The built-in safety valve will by-pass the oil supply when the maximum pressure is reached, and the pressure release system can easily be operated at any stage of compression.

RHC131

HYDRAULIC PRESSHEAD

130kN | 700 bar | DURABLE | CE | HEXAGONAL | OVAL | RADIAL | INDENT

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs						■	■	■	■	■	■	■	■	■	■	■	■				
*H.V. Splices**						■	■	■	■	■	■	■	■	■	■	■	■				

*limited to the cable insulation diameter

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).
This new design with improved mechanical features, is suitable for installing the same range of connectors as HT 131-C.

TECHNICAL FEATURES

Crimping force kN	130
Max operating pressure bar	700
Dimensions mm	
Length	232
Width	124
Jaw opening	25
Weight kg	3,8

STORAGE

Type	VAL-P26*
Dimensions mm L x W x H	445 x 290 x 115
Weight kg	1,2
Supplied with the tool	-
Purchase separately	✓

*Suitable for storage of the head and 14 sets of dies

RHM132

HYDRAULIC PRESSHEAD

130kN | 700 bar | DURABLE | CE | HEXAGONAL | OVAL | INDENT | RADIAL

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
H.V. lugs						■	■	■	■	■	■	■	■	■	■	■	■				

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

Particularly suitable for high volume bench crimping.

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).

TECHNICAL FEATURES

Crimping force kN	130
Max operating pressure bar	700
Dimensions mm	
Length	216
Width	80
Weight kg	3,1

STORAGE

Type	VAL-P26*
Dimensions mm L x W x H	445 x 290 x 115
Weight kg	1,2
Supplied with the tool	-
Purchase separately	✓

*Suitable for storage of the head and 14 sets of dies

HYDRAULIC CRIMPING TOOL

HT131LN-C

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■	■	■				

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

130kN · 2 SPEED · 180° · 42 mm HEAD OPENING · MAX PRESSURE · MANUAL RELEASE · ERGONOMIC · BALANCED · DURABLE

STORAGE

Type	*VAL-P3**
Dimensions mm L x W x H	*620 x 380 x 135*
Weight kg	*2,5*
Supplied with the tool	✓
Purchase separately	-

**Suitable for storage of the tool and 14 sets of dies*

TECHNICAL FEATURES

Crimping force kN	*130*
Dimensions mm	
Length	*538*
Width	*144*
Jaw opening	*42*
Weight kg	*7,0*

HEXAGONAL · OVAL · RADIAL · INDENT

Hydraulic "C" head tool with a large 42 mm jaw opening, for easier introduction/removal of large size compression terminations and joints.
The HT131LN-C will accept all semi-circular slotted dies, common to most 130 kN tools.

The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.
For ease of operation and comfort of the operator the tool head can be fully rotated through 180 degrees.
The built-in safety valve will by-pass the oil supply when the maximum pressure is reached, and the pressure release system can easily be operated at any stage of compression.

HYDRAULIC PRESSHEAD

RHC131LN

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■	■	■				

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

130kN · 700 bar · 42 mm HEAD OPENING · DURABLE · CE · HEXAGONAL · OVAL · RADIAL · INDENT

STORAGE

Type	*VAL-P26**
Dimensions mm L x W x H	*445 x 290 x 115*
Weight kg	*1,2*
Supplied with the tool	-
Purchase separately	✓

**Suitable for storage of the head and 14 sets of dies*

TECHNICAL FEATURES

Crimping force kN	*130*
Max operating pressure bar	*700*
Dimensions mm	
Length	*298*
Width	*122*
Jaw opening	*42*
Weight kg	*5,4*

Hydraulic head featuring a large 42 mm jaw opening; complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).
Is suitable for installing the same range of connectors as HT 131LN-C.

HT131-UC

HYDRAULIC CRIMPING TOOL

130kN · 2 SPEED · 180° · MAX PRESSURE · MANUAL RELEASE · ERGONOMIC · BALANCED · DURABLE · HEXAGONAL · OVAL · RADIAL · INDENT

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■	■	■				
Alu lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■					

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

This robust and self contained tool will accept the accessories for performing the "Deep Stepped Indent" system of crimping on Aluminium cables.
This tool will also accept the semi-circular slotted dies, common to most 130 kN tools.
HT 131-UC performance features are the same as those of HT 131-C.

TECHNICAL FEATURES

Crimping force kN	130
Dimensions mm	
Length	488
Width	149
Weight kg	5,4

STORAGE

Type	VAL-P3*
Dimensions mm L x W x H	620 x 380 x 135
Weight kg	2,5
Supplied with the tool	✓
Purchase separately	-

*Suitable for storage of the tool and 14 sets of dies

STORAGE

Type	VAL-130*
Purchase separately	✓

*Suitable for the storage of accessories for crimping Aluminium connectors

RHU131-C

HYDRAULIC PRESSHEAD

130kN · 700 bar · DURABLE · CE · HEXAGONAL · OVAL · RADIAL · INDENT

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■	■	■				
Alu lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■					

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).
RHU131-C is suitable for installing the same range of connectors as HT 131-UC.

TECHNICAL FEATURES

Crimping force kN	130
Max operating pressure bar	700
Dimensions mm	
Length	245
Width	89
Weight kg	3,7

STORAGE

Type	VAL-P26*
Dimensions mm L x W x H	445 x 290 x 115
Weight kg	1,2
Purchase separately	✓

*Suitable for storage of the head and 14 sets of dies

STORAGE

Type	VAL-130*
Dimensions mm L x W x H	360 x 280 x 48
Weight kg	3,0
Purchase separately	✓

*Suitable for the storage of accessories for crimping Aluminium connectors

STORAGE

Type	VAL-130-U*
Dimensions mm L x W x H	450 x 305 x 80
Weight kg	5,0
Purchase separately	✓

*Suitable for storage of the head, semi-circular slotted dies and dies for crimping Aluminium connectors

VAL-130

VAL-130-U

VAL-P26

HYDRAULIC PRESSHEAD

ECW-H3D

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■	■					
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■	■	■						
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■	■	■	■	■		

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

STORAGE

Type	VAL-ECW-H3D*
Dimensions mm L x W x H	345 x 205 x 90
Weight kg	4,2
Supplied with the tool	-
Purchase separately	✓

** Suitable for storage of the head and 10 sets of dies*

TECHNICAL FEATURES

Crimping force kN	230
Max operating pressure bar	700
Dimensions mm	
Length	290
Width	120
Weight kg	5,5

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).
Adaptor type AU230-130D is available as an optional extra enabling the head to utilise the semi-circular slotted dies which are common to most 130 kN tools. Also available is a series of dies for the compression of DIN electrical connectors, and a die for cutting Copper, Aluminium, aldrey, Aluminium-Steel and Steel conductors.

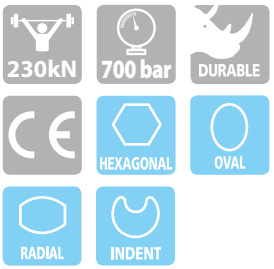
ECW-H3D ACCESSORIES FOR CUTTING CONDUCTORS

Die Type	Cutting Capacity	Conductor Type
	Ø 20 mm	Cu, Alu, Aldrey and Alu-Steel
	Ø 20 mm	Extra flexible Steel with ≥ 200 strands
WT2-3D	This die is suitable to cut Steel conductors (R ≤ 160 daN/mm²) having the most common strandings, i.e.: 19 x 1,2 = Ø est. 6,0 mm 7 x 3,0 = Ø est. 9,0 mm 19 x 2,1 = Ø est. 10,5 mm 19 x 2,3 = Ø est. 11,5 mm	

HYDRAULIC PRESSHEAD

RHU231

general features



MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
Alu lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Cu lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

STORAGE

Type	VAL-231*
Dimensions mm L x W x H	470 x 273 x 96
Weight kg	7,2
Supplied with the tool	✓
Purchase separately	-

** Suitable for storage of the head and dies for Aluminium compression*

TECHNICAL FEATURES

Crimping force kN	230
Max operating pressure bar	700
Dimensions mm	
Length	320
Width	110
Weight kg	6,4

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).
For crimping up to 500 sqmm Aluminium.
Dies are available also for crimping Copper connectors.

RHU230-630

HYDRAULIC PRESSHEAD

230kN | 700 bar | DURABLE | HEXAGONAL | OVAL | RADIAL | INDENT

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Alu lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■	■	■				

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).
It allows for crimping up to 630 sqmm Aluminium (according to HN 68 S90).

Adapters AU 230-130-C/N, and AU 230-PS/E, are available as an optional extra enabling the head to utilise the semicircular slotted dies which are common to most 130 kN tools.

TECHNICAL FEATURES	
Crimping force kN	230
Max operating pressure bar	700
Dimensions mm	
Length	365
Width	193
Weight kg	9,0

STORAGE	
Type	VAL-230-630*
Dimensions mm L x W x H	405 x 230 x 145
Weight kg	3,5
Supplied with the tool	✓
Purchase separately	-

*Suitable for storage of the head

VAL-230-630

STORAGE	
Type	VAL-MAT230-630*
Dimensions mm L x W x H	290 x 260 x 70
Weight kg	3,1
Purchase separately	✓

*Suitable for storage of the accessories

VAL-MAT230-630

RHU450

HYDRAULIC PRESSHEAD

450kN | 700 bar | DURABLE | HEXAGONAL | OVAL | RADIAL | INDENT

general features

MAIN APPLICATIONS - Hexagonal crimp according to DIN 48083 max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	680	800	1000	1200
Cu				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Al				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Al/St				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).
Adaptor type AU 450-130 D is available as an optional extra enabling the head to utilise the semi-circular slotted dies which are common to most 130 kN tools.

TECHNICAL FEATURES	
Crimping force kN	450
Max operating pressure bar	700
Dimensions mm	
Length	260
Width	120
Weight kg	10,3

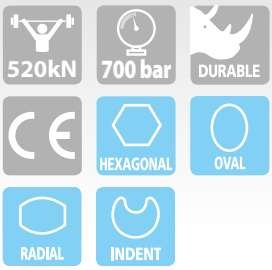
STORAGE	
Type	VAL-450*
Dimensions mm L x W x H	285 x 212 x 124
Weight kg	2,8
Supplied with the tool	✓
Purchase separately	-

* Suitable for storage of the head

HYDRAULIC PRESSHEAD

RHU520

general features



MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000	1200
Lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
H.V. overhead lines				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

STORAGE

Type	*VAL-520**
Dimensions mm L x W x H	*384 x 231 x 145*
Weight kg	*3,2*
Supplied with the tool	-
Purchase separately	✓

**Suitable for storage of the head*

TECHNICAL FEATURES

Crimping force kN	*520*
Max operating pressure bar	*700*
Dimensions mm	
Length	*306*
Width	*200*
Weight kg	*18,0*

STORAGE

Type	*VAL-MAT 520**
Dimensions mm L x W x H	*500 x 310 x 68*
Weight kg	*5,1*
Supplied with the tool	-
Purchase separately	✓

**Suitable for storage of 10 sets of dies*

VAL-520

VAL-MAT 520

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).
Adaptor type AU520-130C is available as an optional extra enabling the head to utilise the semi-circular slotted dies which are common to most 130 kN tools.

RHU600

HYDRAULIC PRESSHEAD

600kN | 700 bar | DURABLE | HEXAGONAL | CIRCULAR

general features

MAIN APPLICATIONS

- "U" Alcoa series die and "L" Burndy series die, etc.
- Aluminium and Copper max size 2156 MCM

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).

TECHNICAL FEATURES

Crimping force kN	600
Max operating pressure bar	700
Dimensions with support mm	
Length	447
Width	241
Weight with support	22,4

STORAGE

Type	VAL-600*
Dimensions mm L x W x H	480 x 235 x 260
Weight kg	8,6
Supplied with the tool	✓
Purchase separately	-

*Suitable for storage of the head

VAL-600

HYDRAULIC PRESSHEAD

RHU1000

general features

STORAGE	
Type	VAL-1000*
Dimensions mm L x W x H	334 x 244 x 435
Weight kg	12
Supplied with the tool	✓
Purchase separately	-

*Suitable for storage of the head

TECHNICAL FEATURES	
Crimping force kN	1.100
Max operating pressure bar	700
Dimensions mm	
Length	414
Width	278
Weight kg	50,6

Operable from single or double acting hydraulic power source

VAL-1000

Lifting eye; screwed into the base of the cylinder, allows easy transportation of the head in aerial operation.

RHU 1000 is a 1.100 kN hydraulic presshead for full tension, transmission and substation connections, complete with quick automatic coupler for connection to hydraulic pumps with a working pressure of 700 bar max, (see page 194-200).

The standard version must be operated by a single acting pump; possibility to convert from single to double acting by substitution of the breather valve with a female quick coupling.
RHU1000 will accept all semi-circular slotted dies common to most 100 ton heads as the Alcoa ones.

The die cap is removable for an easy connector positioning; the upper part of the cap automatically rotates during the die changing process to present the correct positioning of the die. Lifting eye included.

Insertion of the upper die:

After substitution of the dies, insert the die cap into the head.

Pull the pin.

The upper part of the cap automatically rotates…

…to the correct position.

HT-TC051

HYDRAULIC CUTTING TOOL

industrial application

Ø 50mm | 2 SPEED | 90° | HEAD OPENING | SPECIAL | ONE HAND | MAX PRESSURE | MANUAL RELEASE | ERGONOMIC | BALANCED | DURABLE

MAIN APPLICATIONS

specifically designed to cut Copper, Aluminium and Telecommunications cable having Ø max 50 mm

Hand operated hydraulic tool specifically designed to cut Copper, Aluminium and Telecommunications cable having a max overall diameter of 50 mm.
The tool features a double speed action: a fast advancing speed for rapid approach of the blades to the cable and a slower more powerful speed for cutting.

TECHNICAL FEATURES

Max cutting Ø mm	50
Dimensions mm	
Length	497
Width	129
Weight kg	4,38

STORAGE

Type	CVB-010
Dimensions mm L x W	545 x 160
Weight kg	0,15
Supplied with the tool	✓
Purchase separately	-

The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
The head can be easily opened to allow the cutting of running cables.
The head can rotate through 90 degrees, to enable the operator to work in the most comfortable position.
HT-TC051 features an automatic safety valve to bypass oil when reaching maximum pressure; a pressure release device can also be operated at any stage of operation.

TC050

HYDRAULIC CUTTING HEAD

industrial application

Ø 50mm | 700 bar | HEAD OPENING | SPECIAL | DURABLE | CE

MAIN APPLICATIONS

specifically designed to cut Copper, Aluminium and Telecommunications cable having Ø max 50 mm

Hydraulic cutting head complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200)
TC050 features the same cutting capability as HT-TC051.

TECHNICAL FEATURES

Max cutting Ø mm	50
Max operating pressure bar	700
Dimensions mm	
Length	325
Width	112
Weight kg	3,2

STORAGE

Type	CVB-011
Dimensions mm L x W	360 x 137
Weight kg	0,13
Supplied with the tool	✓
Purchase separately	-

HYDRAULIC CUTTING TOOL

HT-TC065

industrial application

MAIN APPLICATIONS

specifically designed to cut Copper, Aluminium and Telecommunications cable having Ø max 65 mm

STORAGE

Type	*CVB-010*
Dimensions mm L x W	*545 x 160*
Weight kg	*0,15*
Supplied with the tool	✓
Purchase separately	-

TECHNICAL FEATURES

Max cutting Ø mm	*65*
Dimensions mm	
Length	*523*
Width	*129*
Weight kg	*5*

Hand operated hydraulic tool specifically designed to cut Copper, Aluminium and Telecommunications cable having a max overall diameter of 65 mm.
The tool features a double speed action.
The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
The head can be easily opened to allow the cutting of running cables.

The head can rotate through 320 degrees, to enable the operator to work in the most comfortable position.
HT-TC065 features an automatic safety valve to bypass oil when reaching maximum pressure; a pressure release device can also be operated at any stage of operation.

HYDRAULIC CUTTING HEAD

TC065-SC

industrial application

MAIN APPLICATIONS

specifically designed to cut Copper, Aluminium and Telecommunications cable having Ø max 65 mm

STORAGE

Type	*VAL-TC065-SC**
Dimensions mm L x W x H	*459 x 231 x 122*
Weight kg	*3,6*
Supplied with the tool	✓
Purchase separately	-

**Suitable for storage of the head*

TECHNICAL FEATURES

Max cutting Ø mm	*65*
Max operating pressure bar	*700*
Dimensions mm	
Length	*426*
Width	*185*
Weight kg	*6,3*

Hydraulic cutting head complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200)
TC065-SC features the same cutting capability as HT-TC065.

The open head and the "scissor" movement of the blades facilitate the cutting of running cables.

HT-TC0851

HYDRAULIC CUTTING TOOL

industrial application

Ø 85mm | 2 SPEED | 90° | HEAD OPENING | SPECIAL | MAX PRESSURE | MANUAL RELEASE | ERGONOMIC | BALANCED | DURABLE

MAIN APPLICATIONS

specifically designed to cut Copper, Aluminium and Telecommunications cable having Ø max 85 mm

Hand operated hydraulic tool specifically designed to cut Copper, Aluminium and Telecommunications cable having a max overall diameter of 85 mm.
New model, self contained, robust and sturdy.
The tool features a double speed action: a fast advancing speed for rapid approach of the blades to the cable and a slower more powerful speed for cutting.

TECHNICAL FEATURES

Max cutting Ø mm	85
Dimensions mm	
Length	652,5
Width	175
Weight kg	6,6

STORAGE

Type	VAL-P7
Dimensions mm L x W x H	727 x 202 x 115
Weight kg	1,3
Supplied with the tool	✓
Purchase separately	-

The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
The head can easily be opened to allow the cutting of running cables, and can rotate through 180 degrees, to enable the operator to work in the most comfortable position.

HT-TC0851 features an automatic safety valve to bypass oil when reaching maximum pressure; a pressure release device can also be operated at any stage of operation.

TC085

HYDRAULIC CUTTING HEAD

industrial application

Ø 85mm | 700 bar | HEAD OPENING | SPECIAL | DURABLE | CE

MAIN APPLICATIONS

specifically designed to cut Copper, Aluminium and Telecommunications cable having Ø max 85 mm

Hydraulic cutting head complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200)
TC085 features the same cutting capability as HT-TC0851.

TECHNICAL FEATURES

Max cutting Ø mm	85
Max operating pressure bar	700
Dimensions mm	
Length	409
Width	135
Weight kg	4,9

STORAGE

Type	VAL-TC085
Dimensions mm L x W x H	465 x 155 x 65
Weight kg	2,4
Supplied with the tool	✓
Purchase separately	-

HYDRAULIC CUTTING HEAD

TC096

industrial application

MAIN APPLICATIONS

specifically designed to cut Copper and Aluminium cable having Ø max 95 mm

STORAGE

Type	VAL-096
Dimensions mm L x W x H	450 x 265 x 145
Weight kg	6,8
Supplied with the tool	✓
Purchase separately	-

TECHNICAL FEATURES

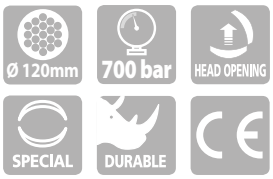
Max cutting Ø mm	95
Max operating pressure bar	700
Dimensions mm	
Length	397
Width	249
Weight kg	7,9

Hydraulic cutting head specifically designed to cut Copper and Aluminium cable having a max overall diameter of 95 mm.
The head is complete with a quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max,
(see page 194-200).

HYDRAULIC CUTTING HEAD

TC120

industrial application



MAIN APPLICATIONS

specifically designed to cut Copper, Aluminium and Telecommunications cable having Ø max 120 mm

STORAGE

Type	VAL-TC120
Dimensions mm L x W x H	590 x 209 x 84
Weight kg	4,9
Supplied with the tool	✓
Purchase separately	-

TECHNICAL FEATURES

Max cutting Ø mm	120
Max operating pressure bar	700
Dimensions mm	
Length	536
Width	175
Weight kg	9,5

Hydraulic cutting head specifically designed to cut Copper, Aluminium and Telecommunications cable having a max overall diameter of 120 mm. The head can easily be opened to cut running cables, and the handle allows the most comfortable positioning of the head onto the cable to be cut.
The head is complete with a quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).

TC 120 cutting capacity - a few examples:

	Section	Conductor Type
Cable Type	3x150 mm²	Steel armoured Ø80 mm
	1000 mm²	Cu - EPR rubber insulated; Ø85 mm
	1000 mm²	Cu - EPR rubber insulated + lead sheath; Ø92 mm
	1000 mm²	Cu - EPR rubber insulated + lead sheath + PE sheath; Ø100 mm
	240 mm²	EPR rubber insulated

HT-TC026

HYDRAULIC CUTTING TOOL

overhead line application

Ø 25mm | SPEED | 90° | HEAD OPENING | SPECIAL | ONE HAND | MAX PRESSURE | MANUAL RELEASE | ERGONOMIC | BALANCED | DURABLE

MAIN APPLICATIONS

specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having Ø max 25 mm

Hand operated hydraulic tool specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having a max overall diameter of 25 mm.
The tool features a double speed action: a fast advancing speed for rapid approach of the blades to the cable and a slower more powerful speed for cutting.

The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
The head can rotate through 180 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow the cutting of running cables.
HT-TC026 features an automatic safety valve to bypass oil when reaching maximum pressure; a pressure release device can also be operated at any stage of operation.

TECHNICAL FEATURES

Max cutting Ø mm	25
Dimensions mm	
Length	382
Width	129
Weight kg	3,2

STORAGE

Type	CVB-001
Dimensions mm L x W	430 x 155
Weight kg	0,15
Supplied with the tool	✓
Purchase separately	-

CUTTING CAPACITY

	MATERIAL	TENSILE STRENGTH (daN/mm²)	MAX CUTTING DIAMETER (mm) HT-TC026 HT-TC026Y TC025 B-TC250E
ROPES & CONDUCTORS	COPPER	≤ 41	25
	ALUMINIUM	≤ 20	25
	ALMELEC	≤ 34	25
	STEEL	≤ 180	INDICATIVE EXAMPLES: 7 x 3,0 : Ø est. = 9,0 mm 19 x 2,1 : Ø est. = 10,5 mm 19 x 2,3 : Ø est. = 11,5 mm
	MULTI STRANDS STEEL (STRANDS Qty ≥ 200)	≤ 180	18
	ACSR	≤ 180	25 INDICATIVE EXAMPLES: 26 x 2,50 + 7 x 1,95 : Ø est. = 15,85 26 x 3,06 + 7 x 2,38 : Ø est. = 19,38 26 x 3,60 + 7 x 2,80 : Ø est. = 22,80
RODS	STEEL	≤ 60	13
		≤ 42	16
	COPPER	≤ 30	20
		≤ 25	23
	ALUMINIUM	≤ 16	25

TC025

HYDRAULIC CUTTING HEAD

overhead line application

Ø 25mm | 700 bar | HEAD OPENING | SPECIAL | DURABLE | CE

MAIN APPLICATIONS

specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having Ø max 25 mm

Hydraulic cutting head complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200)
TC025 has the same cutting capability as HT-TC026.

TECHNICAL FEATURES

Max cutting Ø mm	25
Max operating pressure bar	700
Dimensions mm	
Length	213
Width	82
Weight kg	2,0

STORAGE

Type	CVB-007
Dimensions mm L x W	350 x 105
Weight kg	0,13
Supplied with the tool	✓
Purchase separately	-

HYDRAULIC CUTTING TOOL

HT-TC026Y

overhead line application

MAIN APPLICATIONS

specifically designed to cut Copper, aldrey, Aluminum, Aluminum-Steel cables, stay wire and Steel ropes having Ø max 25 mm and Steel earthing rod up to 16 mm.

STORAGE	
Type	CVB-001
Dimensions mm L x W	430 x 155
Weight kg	0,15
Supplied with the tool	✓
Purchase separately	-

TECHNICAL FEATURES	
Max cutting Ø mm	25
Dimensions mm	
Length	394,5
Width	129
Weight kg	3,35

Hand operated hydraulic tool specifically designed to cut Copper, aldrey, Aluminum, Aluminum-Steel cables, stay wire and Steel ropes having a max overall diameter of 25 mm and Steel earthing rod up to 16 mm. The tool features a double speed action.
The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.

The head can rotate through 180 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow the cutting of running cables.
HT-TC026Y features an automatic safety valve to bypass oil when reaching maximum pressure; a pressure release device can also be operated at any stage of operation.

Ideal for earthing rod and stay wire

HT-TC026Y cutting capacity - a few examples:

Ø		EARTHING RODS AND STAY WIRES
mm	in.	
14,2	/	STEEL EARTHING ROD, COPPER PLATED; Tensile strength = 79 daN/mm²
12,7	1/2"	STEEL EARTHING ROD, COPPER PLATED; Tensile strength = 69 daN/mm²
15,6	/	STEEL EARTHING ROD; Tensile strength = 69 daN/mm²
15,9	5/8"	STEEL EARTHING ROD, COPPER PLATED (CON ED - ILLINOIS); Tensile strength = 57 daN/mm²
15,9	5/8»	STEEL EARTHING ROD, COPPER PLATED (CON ED - STATEN ISLAND); Tensile strength = 78 daN/mm²
19	3/4"	STEEL EARTHING ROD, COPPER PLATED; Tensile strength = 74 daN/mm²
9,15 (3,05x7)	/	STAY WIRE
10,8 (3,6x7)	/	STAY WIRE (PORTLAND GENERAL ELECTRIC)
11,1 (3,7x7)	/	STAY WIRE (PORTLAND GENERAL ELECTRIC)
12,3 (4,1x7)	/	STAY WIRE (PORTLAND GENERAL ELECTRIC)
12,6 (4,2x7)	/	STAY WIRE (PORTLAND GENERAL ELECTRIC)

HT-TC041N

HYDRAULIC CUTTING TOOL

overhead line application

Ø 45mm | SPEED | 180° | HEAD OPENING | SPECIAL | ONE HAND | MAX PRESSURE | MANUAL RELEASE | ERGONOMIC | BALANCED | DURABLE

MAIN APPLICATIONS

specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having Ø max 45 mm

New model, even more self contained, robust and sturdy.
The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
The head can rotate through 180 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow cutting of running cables.

TECHNICAL FEATURES

Max cutting Ø mm	*45*
Dimensions mm	
Length	*550*
Width	*144*
Weight kg	*5,8*

STORAGE

Type	*VAL-P7*
Dimensions mm L x W x H	*727 x 202 x 115*
Weight kg	*1,3*
Supplied with the tool	✓
Purchase separately	-

HT-TC041N features an automatic safety valve to bypass oil when reaching maximum pressure; a pressure release device can also be operated at any stage of operation.

Hand operated hydraulic tool specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having a max overall diameter of 45 mm.

CUTTING CAPACITY

	MATERIAL	TENSILE STRENGTH (daN/mm²)	MAX CUTTING DIAMETER (mm) HT-TC041N TC04N B-TC450E
ROPES & CONDUCTORS	COPPER	≤ 41	45
	ALUMINIUM	≤ 20	45
	ALMELEC	≤ 34	45
	STEEL	≤ 180	INDICATIVE EXAMPLES: 7 x 3,0 : Ø est. = 9,0 mm 19 x 2,1 : Ø est. = 10,5 mm 19 x 2,3 : Ø est. = 11,5 mm
	MULTI STRANDS STEEL (STRANDS Qty ≥ 200)	≤ 180	18
	ACSR	≤ 180	45 INDICATIVE EXAMPLES: 26 x 2,50 + 7 x 1,95 : Ø est. = 15,85 26 x 3,06 + 7 x 2,38 : Ø est. = 19,38 26 x 3,60 + 7 x 2,80 : Ø est. = 22,80 54 x 3,50 + 19 x 2,10 : Ø est. = 31,50 54 x 4,36 + 19 x 2,62 : Ø est. = 39,20
RODS	STEEL	≤ 60	18
		≤ 42	20
	COPPER	≤ 30	30
		≤ 25	32
	ALUMINIUM	≤ 16	45

TC04N

HYDRAULIC CUTTING HEAD

overhead line application

Ø 45mm | 700 bar | HEAD OPENING | SPECIAL | DURABLE | CE

MAIN APPLICATIONS

specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having Ø max 45 mm

Hydraulic cutting head complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200)
TC04N has the same cutting capability as HT-TC041N.

TECHNICAL FEATURES

Max cutting Ø mm	*45*
Max operating pressure bar	*700*
Dimensions mm	
Length	*311*
Width	*100*
Weight kg	*4,0*

STORAGE

Type	*VAL-04*
Dimensions mm L x W x H	*350 x 125 x 68*
Weight kg	*2,0*
Supplied with the tool	✓
Purchase separately	-

HYDRAULIC CUTTING TOOL

HT-TC051Y

overhead line application

MAIN APPLICATIONS

specifically designed to cut Copper, Aluminum, Aluminum-Steel cables (ACSR) having Ø max 50 mm

Not suitable for cutting stay wire, Steel rope or earthing rod

STORAGE	
Type	CVB-010
Dimensions mm L x W	545 x 160
Weight kg	0,15
Supplied with the tool	✓
Purchase separately	-

TECHNICAL FEATURES	
Max cutting Ø mm	50
Dimensions mm	
Length	503
Width	129
Weight kg	4,7

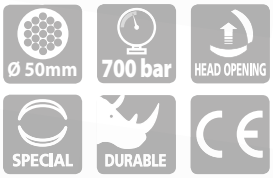
Hand operated hydraulic tool specifically designed to cut Copper, Aluminum, Aluminum-Steel cables (ACSR) having a max overall diameter of 50 mm.
The HT-TC051Y is provided with a two stage hydraulic system, which advances the blades quickly to the cable. This proven system saves operator time and effort.

The HT-TC051Y is provided with an automatic safety valve to bypass oil when reaching max pressure.
This means safety to the operator and protection to the blades.
The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
The shape of the blades provides a "clean" cut.
The head can be opened to allow cutting of running cables and ropes.
The head rotates 90 degrees allowing the operator to perform the cut in the most comfortable position.
The tool is supplied complete with canvas bag 010 for protection and storage when not in use.

HYDRAULIC CUTTING HEAD

TC050Y

overhead line application



MAIN APPLICATIONS

specifically designed to cut Copper, Aluminum, Aluminum-Steel cables (ACSR) having Ø max 50 mm

Not suitable for cutting stay wire, Steel rope or earthing rod

STORAGE	
Type	CVB-011
Dimensions mm L x W x H	360 x 137
Weight kg	0,13
Supplied with the tool	✓
Purchase separately	-

TECHNICAL FEATURES	
Max cutting Ø mm	50
Max operating pressure bar	700
Dimensions mm	
Length	331
Width	112
Weight kg	3,3

Hydraulic cutting head complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200).

TC050Y features the same cutting capability as HT-TC051Y.

HT-TC055

HYDRAULIC CUTTING TOOL

overhead line application

Ø 55mm | 2 SPEED | 330° | HEAD OPENING | SPECIAL | MAX PRESSURE | MANUAL RELEASE | ERGONOMIC | BALANCED | DURABLE

MAIN APPLICATIONS

specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having Ø max 55 mm

Hand operated hydraulic tool specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having a max overall diameter of 55 mm.

The HT-TC055 is provided with a two stage hydraulic system, which advances the blades quickly to the cable.

This proven system saves operator time and effort.
The HT-TC055 is provided with an automatic safety valve to bypass oil when reaching max pressure.
This means safety to the operator and protection to the blades.
The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
The shape of the blades provides a "clean" cut. The head can be opened to allow cutting of running cables and ropes. The head rotates 330 degrees allowing the operator to perform the cut in the most comfortable position. The tool is supplied complete with plastic case VAL P7 for protection and storage when not in use.

TECHNICAL FEATURES

Max cutting Ø mm	*55*
Dimensions mm	
Length	*595*
Width	*144*
Weight kg	*8,3*

STORAGE

Type	*VAL-P7*
Dimensions mm L x W x H	*727 x 202 x 115*
Weight kg	*1,3*
Supplied with the tool	✓
Purchase separately	-

CUTTING CAPACITY

	MATERIAL	TENSILE STRENGTH (daN/mm²)	MAX CUTTING DIAMETER (mm) HT-TC055 TC055 B-TC550E
ROPES & CONDUCTORS	COPPER	≤ 41	55
	ALUMINIUM	≤ 20	55
	ALMELEC	≤ 34	55
	STEEL	≤ 180	INDICATIVE EXAMPLES: 7 x 3,0 : Ø est. = 9,0 mm 19 x 2,1 : Ø est. = 10,5 mm 19 x 2,3 : Ø est. = 11,5 mm
	MULTI STRANDS STEEL (STRANDS Qty ≥ 200)	≤ 180	22
	ACSR	≤ 180	50 INDICATIVE EXAMPLES: 26 x 2,50 + 7 x 1,95 : Ø est. = 15,85 26 x 3,06 + 7 x 2,38 : Ø est. = 19,38 26 x 3,60 + 7 x 2,80 : Ø est. = 22,80 26 x 4,44 + 7 x 3,45 : Ø est. = 28,14 54 x 3,50 + 19 x 2,10 : Ø est. = 31,50 54 x 4,36 + 19 x 2,62 : Ø est. = 39,20 83 x 4,60 + 16 x 2,80 : Ø est. = 50,00
	GUY WIRE (GW15-9/16-188)	Extra high strenght grade	7 x 4,77 : Ø est. =14,30 mm
RODS	STEEL	≤ 60	20
		≤ 42	22
	COPPER	≤ 30	34
		≤ 25	38,5
	ALUMINIUM	≤ 16	50

TC055

HYDRAULIC CUTTING HEAD

overhead line application

Ø 55mm | 700 bar | HEAD OPENING | SPECIAL | DURABLE | CE

MAIN APPLICATIONS

specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having Ø max 55 mm

Hydraulic cutting head complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max, (see page 194-200)
TC055 has the same cutting capability as HT-TC055.

TECHNICAL FEATURES

Max cutting Ø mm	*55*
Max operating pressure bar	*700*
Dimensions mm	
Length	*357*
Width	*134*
Weight kg	*6,6*

STORAGE

Type	*VAL-TC055*
Dimensions mm L x W x H	*384 x 231 x 145*
Weight kg	*3,7*
Supplied with the tool	✓
Purchase separately	-

FRAME-TYPE HOLE PUNCHING HEAD

RH-FC48N

general features

Ø 47,2mm | 700 bar | DURABLE | CE

MAIN APPLICATIONS

designed for punching holes from 15,5 up to 47,2 mm diameter

TECHNICAL FEATURES

Max piercing Ø mm	47,2
Max centre of hole to edge of trunking (mm)	53,5
Max operating pressure bar	700
Dimensions mm	
Length	259,5
Width	147,5
Weight kg	3,7

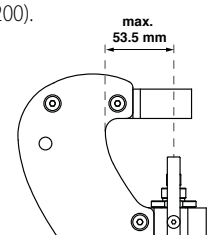
STORAGE

Type	VAL-P30
Dimensions mm L x W	315 x 300 x 95
Weight kg	0,93
Supplied with the tool	✓
Purchase separately	-

Table denotes the punch/die set reference, for each hole size.
Suitable for punching holes in mild Steel, fibreglass or plastic material, up to 2 mm thick.

Hole Dimensions					Maximum thickness of mild Steel (mm)	Type
Nominal Ø (mm)	Nominal Ø (inch)	Pg	ISO	Inch		
15,5	.610	Pg9	-	-		RD15.5SS-FC
16,2	.638	-	ISO-16	-		RD16.2SS-FC
17,5	.689	-	-	-		RD17.5SS-FC
18,8	.740	Pg11	-	-		RD18.8SS-FC
19,1	.752	-	-	-		RD19.1SS
20,5	.807	Pg 13,5	ISO-20	-		RD20.5SS
22,6	.890	Pg16	-	-		RD22.6SS
23,8	.937	-	-	5/8"		RD23.8SS
25,4	1.000	-	ISO-25	-		RD25.4SS
27,0	1.063	-	-	3/4"		RD27SS
28,5	1.122	Pg21	-	-		RD28.5SS
30,5	1.201	-	-	7/8"	2	RD30.5SS
31,8	1.252	-	-	-		RD31.8SS
32,5	1.279	-	ISO-32	-		RD32.5SS
34,6	1.362	-	-	-		RD34.6SS
37,2	1.464	Pg29	-	-		RD37.2SS
38,1	1.500	-	-	-		RD38.1SS
40,5	1.594	-	ISO-40	-		RD40.5SS-FC
41,3	1.626	-	-	-		RD41.3SS-FC
42,5	1.673	-	-	1"1/4"		RD42.5SS-FC
43,2	1.701	-	-	-		RD43.2SS-FC
44,5	1.752	-	-	-		RD44.5SS-FC
47,2	1.858	Pg36	-	-		RD47.2SS-FC

Hydraulic head complete with automatic quick coupler, designed for punching holes from 15,5 up to 47,2 mm diameter in the side wall of trunking without the need for pre drilling.
For operation, the head must be joined to a hydraulic pump developing a pressure of 700 bar (see page 194-200).



PIERCING HEADS

RHT160
RHT160-60N

general features

Ø 21mm | 700 bar | DURABLE | CE

RHT160

Max piercing Ø mm	21
Max hole distance from bar edge (mm)	30
Max operating pressure bar	700
Dimensions mm	
Length	240
Width	153
Weight kg	6,5

RHT160-60N

Max piercing Ø mm	21
Max hole distance from bar edge (mm)	60
Max operating pressure bar	700
Dimensions mm	
Length	240
Width	181
Weight kg	9,2

STORAGE

Type	VAL-160*
Dimensions mm L x W x H	283 x 180 x 100
Weight kg	2,3
Supplied with the tool	✓
Purchase separately	-

*Suitable for storage of the head

Hydraulic head complete with automatic quick coupler, for piercing holes of various diameters in Copper, Aluminium and Steel bars with max. thickness of 10 mm.
This compact and handy tool is widely used for transformer room connections, control switch boards and power plants.
For operation the head must be joined to a hydraulic pump developing a pressure of 700 bar (see page 194-200).

Available accessories (to be ordered separately):

Piercing Ø mm	6,5	8,5	9	10,5	11	13	13,5	14	15	17	19	21
Type (Kit Punch+Die)	RT6,5	RT8,5	RT9	RT10,5	RT11	RT13	RT13,5	RT14	RT15	RT17	RT19	RT21

Max. thickness

Hole diameter (mm)	6,5	8,5	9	10,5	11	13	13,5	14	15	17	19	21
Max thickness strep in Copper	10	10	10	10	10	10	10	10	10	10	8	8
Max thickness strep in Steel	10	10	10	10	10	9	9	9	8	7	6	4
Punch die/set	RT6,5	RT8,5	RT9	RT10,5	RT11	RT13	RT13,5	RT14	RT15	RT17	RT19	RT21

HT-FL74

PULLER-TYPE HOLE PUNCHING TOOLS

general features

Ø 140mm | SPEED | MAX PRESSURE | MANUAL RELEASE | ERGONOMIC | BALANCED | DURABLE

MAIN APPLICATIONS

specifically designed for hole punching stainless Steel, mild Steel, fibreglass and plastic sheet materials up to 3,5 mm thickness

TECHNICAL FEATURES	
Max Punching Ø mm	140
Dimensions mm	
Length	381
Width	138
Weight kg	3,3

STORAGE	
Type	VAL-P28
Dimensions mm L x W x H	620 x 360 x 138
Weight kg	2,4
Supplied with the tool	✓
Purchase separately	-

Hand operated hydraulic tool specifically designed for hole punching stainless Steel, mild Steel, fibreglass and plastic sheet materials up to 3,5 mm thickness. Compact, lightweight and easy to handle.
The tool is supplied complete with plastic case VAL-P28 for protection and storage when not in use.
Supplied with Pullers TD-11, TD-19 and spiral bit Ø 11,5 mm.
For the punch-die selection chart see page 161.

HT-FL75

Ø 140mm | SPEED | MAX PRESSURE | MANUAL RELEASE | ERGONOMIC | BALANCED | DURABLE

TECHNICAL FEATURES	
Max Punching Ø mm	140
Dimensions mm	
Length	452
Width	138
Weight kg	3,67

STORAGE	
Type	VAL-P28
Dimensions mm L x W x H	620 x 360 x 138
Weight kg	2,4
Supplied with the tool	✓
Purchase separately	-

Hand operated hydraulic tool specifically designed for hole punching stainless Steel, mild Steel, fibreglass and plastic sheet materials up to 3,5 mm thickness. Compact, lightweight and easy to handle. The balanced punching head pivots 180deg through a full 360deg rotation for ease of use in confined spaces.
The tool is supplied complete with plastic case VAL-P28 for protection and storage when not in use.
Supplied with Pullers TD-11, TD-19 and spiral bit Ø 11,5 mm.
For the punch-die selection chart see page 161.

PULLER-TYPE HOLE PUNCHING HEAD

RH-FL75

general features

Ø 140mm | 700 bar | DURABLE

MAIN APPLICATIONS

specifically designed for hole punching stainless Steel, mild Steel, fibreglass and plastic sheet materials up to 3,5 mm thickness

STORAGE

Type	VAL-P29
Dimensions mm L x W x H	448 x 288 x 105
Weight kg	1,4
Supplied with the tool	✓
Purchase separately	-

TECHNICAL FEATURES

Max Punching Ø mm	140
Max operating pressure bar	700
Dimensions mm	
Length	163
Width	106
Weight kg	1,9

Hydraulic head, for hole punching stainless Steel, mild Steel, fibreglass and plastic sheet materials up to 3,5 mm thickness.
Compact and lightweight, easy to handle in confined spaces due to a rotating 90deg quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max (see page 194-200).
Supplied with Pullers TD-11, TD-19 and spiral bit Ø 11,5 mm.

For the punch-die selection chart see table below.

HT-FL74, HT-FL75 and RH-FL75 Punching accessories available

Round punch

Hole diameter Nominal Ø (mm)	Hole diameter Nominal Ø (inch)	Pg	ISO	GAS	Material max thickness (mm) Stainless Steel	Material max thickness (mm) Mild Steel	Pilot hole Ø (mm)	Type KIT (Punch + Die)	Type Puller
15,5	.610	Pg9	-	-	2,5 mm (0.1 in.) Rm= 700 N/mm²	3,5 mm (0.14 in.) Rm= 510 N/mm²	11,5	RD15.5SS	TD-11
16,2	.638	-	ISO-16	-				RD16.2SS	
17,0	.669	-	-	G3/8"				RD17SS	
17,5	.689	-	-	-				RD17.5SS	
18,8	.740	Pg11	-	-				RD18.8SS	
19,1	.752	-	-	-				RD19.1SS	
20,5	.807	Pg 13,5	ISO-20	-				RD20.5SS	
21,5	.846	-	-	G1/2"				RD21.5SS	
22,6	.890	Pg16	-	-				RD22.6SS	
23,8	.937	-	-	G5/8"				RD23.8SS	
25,4	1.000	-	ISO-25	-				RD25.4SS	
27,0	1.063	-	-	G3/4"				RD27SS	
28,5	1.122	Pg21	-	-				RD28.5SS	
30,5	1.201	-	-	G7/8"				RD30.5SS	
28,5	1.122	Pg 21	-	-			20,0	RD28.5SS-19	TD-19
30,5	1.201	-	-	G7/8"				RD30.5SS-19	
31,8	1.252	-	-	-				RD31.8SS	
32,5	1.279	-	ISO-32	-				RD32.5SS	
34,0	1.338	-	-	G1"				RD34SS	
34,6	1.362	-	-	-				RD34.6SS	
37,2	1.464	Pg29	-	-				RD37.2SS	
38,1	1.500	-	-	-				RD38.1SS	
38,5	1.515	-	-	G1"1/8"				RD38.5SS	
40,5	1.594	-	ISO-40	-				RD40.5SS	
41,3	1.626	-	-	-				RD41.3SS	
42,5	1.673	-	-	G1"1/4"				RD42.5SS	
43,2	1.701	-	-	-				RD43.2SS	
44,5	1.752	-	-	-				RD44.5SS	
47,2	1.858	Pg36	-	-				RD47.2SS	
48,5	1.909	-	-	G1"1/2"				RD48.5SS	
50,5	1.988	-	ISO-50	-				RD50.5SS	
51,4	2.023	-	-	-				RD51.4SS	
52,4	2.063	-	-	-				RD52.4SS	
54,2	2.134	Pg42	-	G1"3/4"				RD54.2SS	
60,0	2.362	Pg48	-	G2"				RD60SS	
60,5	2.381	-	-	-				RD60.5SS	
64,0	2.520	-	ISO-63	-				RD64SS	
65,0	2.559	-	-	-				RD65SS	
76,0	2.992	-	-	G2"1/2"		3		RD76SS	
76,5	3.011	-	-	-		3,5		RD76.5SS	
80,5	3.169	-	-	-		3		RD80.5SS	
89,0	3.503	-	-	G3"		3,5		RD89SS	
90,0	3.543	-	-	-	2	3		RD90SS	
100,0	3.937	-	-	-	2	3	29,0	RD100SS	TD-28.5*
102,0	4.015	-	-	-	2	3		RD102SS	
114,0	4.488	-	-	-	2	2,5		RD114SS	
120,0	4.724	-	-	-	1,5	2		RD120SS	
140,0	5.512	-	-	-	1,5	2		RD140SS	

** Puller included in the kit*

Square punch

Hole diameter Nominal (mm)	Hole diameter Nominal (inch)	Material max thickness (mm) Stainless Steel	Material max thickness (mm) Mild Steel	Pilot hole Ø (mm)	Type KIT (Punch+die + Puller)
21,0 x 21,0	.827 x .827	2,5	3,5	12,0	RD21X21
46,0 x 46,0	1.811 x 1.811	1,5	2,0	26,5	RD46X46
68,0 x 68,0	2.677 x 2.677			22,5	RD68X68
92,0 x 92,0	3.622 x 3.622				RD92X92
126,0 x 126,0	4.960 x 4.960			28,5	RD126X126
138,0 x 138,0	5.433 x 5.433	1,0	1,5		RD138X138
220,0 x 220,0	8.661 x 8.661				RD220X220

Rectangular punch

Hole diameter Nominal (mm)	Hole diameter Nominal (inch)	Material max thickness (mm) Stainless Steel	Material max thickness (mm) Mild Steel	Pilot hole Ø (mm)	Type KIT (Punch+die + Puller)
18,0 x 46,0	.709 x 1.811	2,0	2,0	16,5	RD18X46
22,0 x 30,0	.866 x 1.181				RD22X30
22,0 x 46,0	.866 x 1.811				RD22X46
35,0 x 86,0	1.377 x 3.385				RD35X86
35,0 x 112,0	1.377 x 4.409				RD35X112
36,0 x 46,0	1.417 x 1.811			23,8	RD36X46
37,0 x 54,0	1.456 x 2.125	1,5		16,5	RD37X54
37,0 x 67,0	1.456 x 2.637				RD37X67
37,0 x 88,0	1.456 x 3.464			26,5	RD37X88
37,0 x 104,0	1.456 x 4.094				RD37X104
37,0 x 115,0	1.456 x 4.527				RD37X115
46,0 x 54,0	1.811 x 2.126				RD46X54
46,0 x 72,0	1.811 x 2.835				RD46X72
46,0 x 107,0	1.811 x 4.212				RD46X107
50,0 x 98,0	1.968 x 3.858				RD50X98
67,0 x 126,0	2.637 x 4.960			28,5	RD67X126

"D" PUNCH

Hole diameter Nominal (mm)	Hole diameter Nominal (inch)	Material max thickness (mm) Stainless Steel	Material max thickness (mm) Mild Steel	Pilot hole Ø (mm)	Type KIT (Punch+die + Puller)
(a)38,3 x (b)36,6	(a)1.507 x (b)1.442	2,5	3,5	18,5	RD18D
(a)43,1 x (b)41,5	(a)1.696 x (b)1.632				RD24D

Stainless Steel = Rm= 700 N/mm² - Mild Steel = Rm= 500 N/mm²

Use of non-Cembre punching accessories

Type	Punch & Die	Pilot hole Ø mm
TRD-9,4C (*)	KLAUKE, GREENLEE 3/8" - 24 UNF	Ø 9.7
TRD-M11C (*)	IMB, BM, COSMEC (M11x1.5)	Ø 11.5
TD-M16C	IMB, BM, COSMEC (M16x1.5)	Ø 16.5 or RD17.5SS
TD27	COSMEC (Ø105÷Ø140)	Ø 27.5
TD14X14-M14	COSMEC 46x46	Ø 18.8
TD120X20-M20	COSMEC 92x92	Ø 27.5
TD20X20-M20	BM, COSMEC 42x95	Ø 27.5
TGD-13.5X13.5-M13	COSMEC 40x40; 45x45; 46x46	Ø 18.8
TGD-10X10-M9	COSMEC 006505	Ø 13.8

(*) The washer supplied with the KIT must be threaded onto the draw stud and positioned between the head and the die to allow the die to rest correctly

RHTD

NUT SPLITTING HEADS

general features

700 bar · DURABLE · CE

RHTD1724

Suitable for splitting nuts mm	16(M10)÷27(M18)
Max operating pressure bar	700
Weight kg	1,76

Hydraulic nut splitting head complete with automatic quick coupler. For operating the head must be joined to a hydraulic pump developing a pressure of 700 bar (see page 194-200).

RHTD3241

Suitable for splitting nuts mm	27(M18)÷41(M27)
Max operating pressure bar	700
Weight kg	4,6

RHTD410T

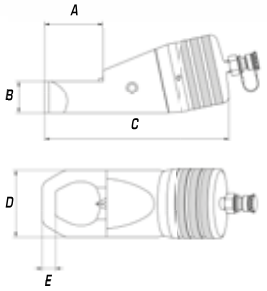
Suitable for splitting nuts mm	27(M18)÷41(M27)
Max operating pressure bar	700
Weight kg	4,9

STORAGE

Type	VAL-P4
Dimensions mm L x W x H	315 x 300 x 95
Weight kg	0,93
Supplied with the tool	✓

Dimensions mm

	RHTD1724	RHTD3241	RHTD410T
A	40,5	66	77
B	25	36	41
C	105,5	208	222
D	54	75,5	75,5
E	7,5	16	21,5



Application range

Type	HEXAGONAL NUTS mm	HEXAGONAL NUTS Ø	SQUARE NUTS mm	SQUARE NUTS Ø
RHTD 1724 B-TD270	16	M 10	17	M 10
	17	M 10	19	M 12
	18	M 12	22	M 14
	19	M 12	24	M 16
	21	M 14	27	M 18
	22	M 14		
	24	M 16		
RHTD 3241 RHTD 410T B-TD410T	27	M 18	27	M 18
	27	M 18	27	M 18
	30	M 20	30	M 20
	32	M 22	32	M 22
	34	M 22	34	M 24
	36	M 24	36	M 27
	41	M 27		

B-TD270E

100kN · 18.0V 4.0Ah · Li-Ion · SPEED · DISPLAY · PROTECTED · ONE HAND · SAFETY · MAX PRESSURE · RELEASE · SILENT · SMOOTH · ERGONOMIC · BALANCED · BI-COMPONENT · LED LIGHTING · ENERGY SAVE · DURABLE · -15°C +50°C · CE

B-TD270E

Crimping force kN	100
Dimensions mm	
Length (with tube and head)	1.292,5
Height	350
Depth	83
Battery	18.0V 4.0Ah
Weight kg (with battery)	5,5

18.0 V battery operated hydraulic tool suitable for splitting fastening bushes, hexagonal and square nuts as per RHTD1724.

STORAGE

Type	CVB-030
Dimensions mm L x W x H	497 x 266 x 455
Weight kg	1,4
Supplied with the tool	✓

B-TD410TE

230kN · 18.0V 4.0Ah · Li-Ion · SPEED · DISPLAY · PROTECTED · ONE HAND · SAFETY · MAX PRESSURE · RELEASE · SILENT · SMOOTH · ERGONOMIC · BALANCED · BI-COMPONENT · LED LIGHTING · ENERGY SAVE · DURABLE · -15°C +50°C · CE

B-TD410TE

Crimping force kN	230
Dimensions mm	
Length (with tube and head)	1.360
Height	350
Depth	83
Battery	18.0V 4.0Ah
Weight kg (with battery)	8,8

18.0 V battery operated hydraulic tool suitable for splitting fastening bushes, hexagonal and square nuts as per RHTD410T.

CORDLESS HYDRAULIC TOOLS

symbol description

cordless hydraulic tools

Crimping force kN

18.0 V Li-Ion high power batteries

Double speed action: a rapid approach speed and a slower more powerful speed for crimping or cutting

Openable compression head, ideal for derivations from running conductors

Openable cutting head, ideal for cutting running cables

Tool with a large 42 mm jaw opening, for easier introduction/removal of large size compression terminations and joints

Blades manufactured from high strength special Steel, heat treated to ensure a long service life

Max cutting diameter

Max hole punching diameter

The head can rotate to enable the operator to work in the most comfortable position

OLED display with multi-function capacitive touch button: Crimping force being generated, Battery power availability, Tool identification, LED state, Reset, No. of operational and service crimping cycles, Tool service required

Battery condition displayed to show the residual battery power

Switch protected against accidental operation

Can be operated with one hand

Equipped with safety valve as a additional safety element for the operator

Provided with a maximum pressure sensor that allows to check the correct execution of the compressions or the limit switch control of the blades

Pressure release button

Extremely quiet in operation

Very little vibration

Ergonomically designed with a sculptured body for operator comfort

Lightweight and balanced tool for greater control

LED lighting of the working area

Dual-compound plastic body.
Greater safety and comfort in handling, thanks to the rubber inserts

symbol description

cordless hydraulic tools

Ensures optimal use of energy available

Durable moulded body offering high resistance to wear and damage in all operating conditions

Crimping cycle data (up to 200,000 events) is automatically stored on a memory card for transfer to PC by USB interface

Operating temperature range between -15 and +50°C

Hexagonal crimp

Radial crimp

Indent crimp

Oval crimp

Trapezium crimp

Circular crimp

Max operating pressure

Manual pressure release button

Fitted with an integral socket, for connection to a 12 V dc external power supply

Contains isolated oil

Hydraulic units provide protection against short circuit when accidentally cutting live L.V. / M.V. cables with nominal voltage up to 60 kV

CE marking

"Bilinear" Structure
Cembre bilinear tools have their mechanical centre of gravity nearest to the operator's wrist to optimise the overall ergonomics of the tool and provide a wider support for the hand

Smart Release Technology
Automatic retraction of the ram only occurs when the operator releases the start button, this allows visual verification of the die to ensure that they have fully met prior to releasing

Electronic Pressure Sensor
The EPS guarantees the precision of the crimping operation, checking the actual value of pressure and informing the operator of possible errors

Data recording and intelligent control allow complete verification of operational parameters. SMARTOOL technology enables the user to to store data from up to 200,000 cycles on the integrated memory card for transfer to a computer via a USB cable

18.0 V - 4.0 Ah CORDLESS TOOL FEATURES

general features

1. Head rotates through 180°
2. Switch protected against accidental operation
3. Pressure release button
4. Slot-in battery with release button
5. LED lighting of the working area
6. Motor ventilation
7. Bi-component body for increased impact resistance
8. Multifunction OLED display with touch button
9. Improved balance for better handling
10. Anatomically shaped grip for greater comfort
11. 18.0 V - 4.0 Ah Li-Ion high power batteries
12. SMARTOOL technology for viewing and downloading operational data

SUPPLIED WITH

1. **CB1840L, 18.0 V - 4.0 Ah Li-Ion high power battery (2 pcs.)**
2. **ASC30-36 UK 27045000 Battery charger**
   (INPUT 220-240 V / 50-60 Hz; OUTPUT 12-42 V DC / 3.0 A max.)
3. **USB cable**
4. **Shoulder strap**

- **Plastic or Metal carrying case**

Multifunction OLED display:

General operating information

Tool service required to maintain optimum condition

Battery power availability

Pressure level check

Crimping force check

18.0 V - 2.0 Ah CORDLESS TOOL FEATURES

general features

1. Head rotates for ease of operation in confined spaces
2. Switch protected against accidental operation
3. Pressure release button
4. Slot-in battery with release button
5. Battery condition displayed to show the residual battery power
6. Motor ventilation
7. The tools are fitted with a maximum pressure valve to indicate a correct crimping operation or the full extent of the ram travel
8. Can be operated with one hand
9. Durable moulded body offering high resistance to wear and damage in all operating conditions
10. Extremely quiet in operation with very little vibration
11. Improved balance for better handling
12. Anatomically shaped grip for greater comfort
13. 18.0 V - 2.0 Ah Li-Ion high power batteries

SUPPLIED WITH

1. **CB1820L, 18.0 V - 2.0 Ah Li-Ion high power battery (2 pcs.)**
2. **ASC30-36 UK 27045000 Battery charger**
   (INPUT 220-240 V / 50-60 Hz; OUTPUT 12-42 V DC / 3.0 A max.)
3. **USB cable** (only for B500NDE)

- **Wrist strap**
- **Plastic carrying case**

New Range nd

B500NDE

New Functional Features:

- Bilinear mechanical design
- Smart Release system to automatically retract the ram at the end of the crimping cycle
- OLED multifunctional display with touch button
- Electronic Pressure Sensor (EPS)
- SMARTOOL technology for viewing and downloading operational data
- Illumination of working area via 4 x LED lights
- Bi-component plastic body
- Ergonomic design for operator comfort

B15MDE

18.0 V CORDLESS HYDRAULIC CRIMPING TOOL

15kN · Li-Ion 18.0V · 340° · BATTERY DISPLAY · PROTECTED · ONE HAND · SAFETY · MAX PRESSURE · RELEASE · SILENT · SMOOTH · ERGONOMIC · BALANCED · ENERGY SAVE · DURABLE · -15°C +50°C · HEXAGONAL · INDENT · OVAL · RADIAL · TRAPEZIUM · INDENT · CE

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0,25÷1,5	1,5÷2,5	4÷6	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000
Copper lugs and splices	■	■	■	■	■															
Insulated terminals	■	■	■	■	■															
End sleeves	■	■	■	■	■	■	■													

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES

Crimping force kN	*15*
Dimensions mm	
Length	*337*
Height	*133*
Width	*81*
Battery	*18.0V 2.0Ah*
Weight kg (with Battery)	*1,74*

STORAGE

Type	*VAL-P22*
Dimensions mm L x W x H	*465 x 315 x 116*
Weight kg	*1,5*
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- Plastic carrying case suitable for storing the tool and accessories

Can be operated with one hand.
Balanced for greater control.
Head rotates by 340° for ease of operation in confined spaces.
The tool is fitted with a maximum pressure valve.
Extremely quiet, minimal vibration.
Durable moulded body offering high resistance to wear and damage in all operating conditions.
New Li-Ion 18.0V 2.0Ah High Power battery.

The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.
Supplied in a robust plastic case to accommodate the tool and all the accessories.
Two batteries and charger included.
Many different interchangeable crimping dies available.
Operating temperature:
-15 to +50 ° C

Many different interchangeable crimping dies available

Conductor Size sqmm (AWG)		Connector Type	Die Set	
0,25 ÷ 16	22 ÷ 6	A... ; L...-M ; L...-P ; S... ; RN... ; BN... ; GN...	MA03/3-15	◡
1,5 ÷ 10	16 ÷ 8	A... ; L...-M ; L...-P	ME03/2-15	
10 ÷ 16	8 ÷ 6	A...; 2A... ; L...-M ; L...-P	ME2/3-15	
4 ÷ 10	12 ÷ 8	T... (NF C 20130 style) ; L...-T	MS4/10-15	
10 ÷ 16	8 ÷ 6	T... (NF C 20130 style) ; L...-T	MS10/16-15	⬡
10 ÷ 16	8 ÷ 6	HR... ; HSV...	MH10/16-15	
6 ÷ 16	10 ÷ 6	DR... (DIN 46235 style) ; DSV... (DIN 46267 T1 style)	MK5/8-15	
10 ÷ 16	8 ÷ 6	ANE... ; AN... ; IN... ; EN...	NN4-15	◡
0,25 ÷ 6	22 ÷ 10	R... ; B... ; G... (not suffix P); PL... ; NL...	RBG-15	
0,25 ÷ 6	22 ÷ 10	R... ; B... ; G... (not suffix P, RF/BF-BF)	RBY-15 with positioner	⬭
0,3 ÷ 4	22 ÷ 12	PKE ; PKC ; PKD ; PKT ; KE	KE4-15	
4 ÷ 16	12 ÷ 6	PKE ; PKC ; PKD ; PKT ; KE	KE16-15	▽
16 ÷ 35	6 ÷ 2	PKE ; PKC ; PKD ; PKT ; KE	KE35-15	
2,5 - 4 - 6	14 -12 -10	CS4 (for photovoltaic systems)	MCS4-15	◡

Battery condition display

Interchangeable die sets

Ergonomically designed operating switch

Automatic slot-in battery

18.0 V CORDLESS HYDRAULIC CRIMPING TOOL

B450ND-BVE

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000
L.V. lugs and splices			■	■	■	■	■	■	■	■	■	■								
"C" sleeve Connectors			■	■	■	■	■													
H.V. lugs and splices				■	■	■	■	■	■											

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

STORAGE

Type	VAL-P22
Dimensions mm L x W x H	465 x 315 x 116
Weight kg	1,5
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

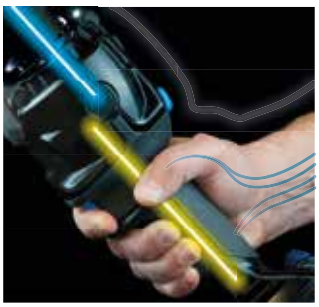
- Basic tool with battery and wrist strap
- Battery charger
- Plastic carrying case suitable for storing the tool and accessories

TECHNICAL FEATURES

Crimping force kN	50
Dimensions mm	
Length	364
Height	136
Width	81
Battery	18.0V 2.0Ah
Weight kg (with Battery)	2,6

B450ND-BVE is a new generation of hand-held cordless tools, characterised by a "Bilinear" mechanical design.
B450ND-BVE is suitable for crimping electrical connectors onto conductor cross sections up to 150 mm^2 and uses the die sets common to all Cembre 45kN tools and heads.
Equipped with Li-Ion 18 V-2Ah rechargeable high capacity batteries. The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.
The tool is fitted with a maximum pressure valve.

Weight and balance have been reconfigured to yield improvements in handling and convenience.
The more rigid structure of the bi-component plastic body provides greater mechanical protection while its rubber inserts boost operator safety and comfort.
Quieter operation, illumination of the working area via LED lights and a minimum of vibration enhance the tool's practicality.
Flashing work lights and a continuous beep indicate to the operator that B450ND-BVE has reached the working hours at which ordinary maintenance is recommended. It is also a feature that the operating data is stored on a memory card for transfer to PC by USB interface . (SMARTOOL technology).



"Bilinear" mechanical design

Wide-opening head, ideal for derivations from running conductors

4 LED lighting of the working area

Manual pressure release button

Battery connection system with release button

Sculptured body for optimum comfort

B500NDE

18.0 V CORDLESS HYDRAULIC CRIMPING TOOL

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices			■	■	■	■	■	■	■	■	■										
Insulated terminals				■	■	■	■	■	■	■	■										
End sleeves					■	■	■	■	■	■	■										
"C" sleeve Connectors			■	■	■	■	■	■	■												

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES

Crimping force kN	*60*
Dimensions mm	
Length	*396*
Height	*135*
Width	*81*
Battery	*18.0V 2.0Ah*
Weight kg (with Battery)	*3,15*

STORAGE

Type	*VAL-P22*
Dimensions mm L x W x H	*465 x 315 x 116*
Weight kg	*1,5*
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and accessories

B500NDE is the first of a new generation of hand-held cordless tools, characterised by a "Bilinear" mechanical design.
Equipped with a Smart Release system which automatically retracts the ram at the end of the operating cycle.
B500NDE is suitable for crimping electrical connectors onto conductor cross sections up to 300 mm² and uses the die sets common to all Cembre 50kN tools and heads.
Equipped with Li-Ion 18 V-2Ah rechargeable high capacity batteries.
Fitted with a maximum pressure sensor for enhanced precision and repeatability of the maximum pressure cycle, and a pressure relief valve providing additional safety for the operator.

The Electronic Pressure Sensor (EPS) guarantees the precision of the crimping operation, checking the actual value of pressure and informing the operator about possible errors.
The OLED display provides essential real time operating data, including:

- generated crimping force thus verifying accordance with best practice
- battery charge status
- general operating information
- the number of work cycles completed and remaining before recommended maintenance.

Weight and balance have been reconfigured to yield improvements in handling and convenience.
The more rigid structure of the bi-component plastic body provides greater mechanical protection while its rubber inserts boost operator safety and comfort.
Quieter operation, illumination of the working area via LED lights and a minimum of vibration enhance the tool's practicality.

The integrated memory card enables the user to store data from up to 200,000 compression cycles for transfer to a computer via a USB cable. (SMARTOOL technology).

"Bilinear" mechanical design

4 LED lighting of the working area

Manual pressure release button

OLED multifunctional display with touch button

Battery connection system with release button

18.0 V CORDLESS HYDRAULIC CRIMPING TOOL

B500E

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices			■	■	■	■	■	■	■	■	■	■	■	■	■	■					
Insulated terminals				■	■	■	■	■	■	■	■										
End sleeves					■	■	■	■	■	■	■										
"C" sleeve Connectors			■	■	■	■	■	■	■												

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES

Crimping force kN	*63*
Dimensions mm	
Length	*300*
Height	*343*
Width	*83*
Battery	*18.0V 4.0Ah*
Weight kg (with Battery)	*4,2*

STORAGE

Type	*VAL-P38*
Dimensions mm L x W x H	*520 x 432 x 126*
Weight kg	*2,6*
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and shoulder strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and 14 die sets

The 63 kN B500E is suitable for a wide range of connectors up to 300 sqmm using die sets common to the Cembre 50 kN tooling range.
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah.

The OLED display provides essential real time tool operating information data including:

- Crimping pressure and force being generated, for confirmation of adherence to norms and best practice
- Battery power availability
- Tool identification, LED work light state, reset, no. of operational and service crimping cycles
- Tool service required to maintain optimum condition.

B500E-KV version also available for Power Supply Companies

LED lighting of the working area

Multifunction OLED display with touch button

Anatomically shaped grip for improved comfort

Slot-in battery with release button

B550E

18.0 V CORDLESS HYDRAULIC CRIMPING TOOL

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices			■	■	■	■	■	■	■	■	■	■	■	■	■						
Insulated terminals				■	■	■	■	■	■	■	■										
End sleeves					■	■	■	■	■	■	■										
"C" sleeve Connectors			■	■	■	■	■	■	■												

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES

Crimping force kN	*63*
Dimensions mm	
Length	*300*
Height	*343*
Width	*83*
Battery	*18.0V 4.0Ah*
Weight kg (with Battery)	*4,2*

STORAGE

Type	*VAL-P38*
Dimensions mm L x W x H	*520 x 432 x 126*
Weight kg	*2,6*
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and shoulder strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and accessories

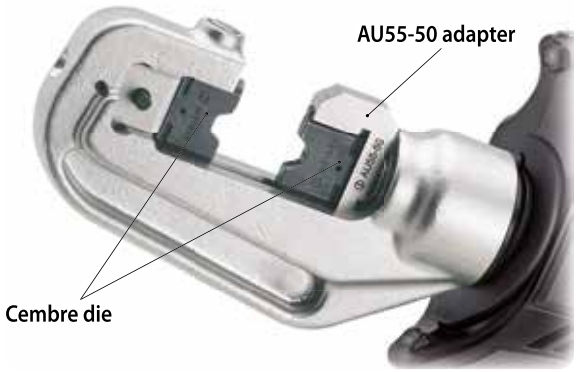
The next generation of Cembre cordless hydraulic tools represents a significantly advantageous evolution from current models.
The B550E, with adapter AU55-50, will accept all Cembre 50 kN dies; with adapter AU55-W it will accept "W" dies.
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah.

The OLED display provides essential real time tool operating information data including:

- Crimping pressure and force being generated, for confirmation of adherence to norms and best practice
- Battery power availability
- Tool identification, LED work light state, reset, no. of operational and service crimping cycles
- Tool service required to maintain optimum condition.

B550E-KV version also available for Power Supply Companies

With adapter AU55-50 for accepting Cembre dies.



With adapter AU55-W for accepting "W" dies.

18.0 V CORDLESS HYDRAULIC CRIMPING TOOLS

B1350-CE

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs						■	■	■	■	■	■	■	■	■	■	■	■				
H.V. Splices*						■	■	■	■	■	■	■	■	■	■	■	■				

*limited to the cable insulation diameter

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES

Crimping force kN	132
Dimensions mm	
Length	338
Height	344
Width	83
Jaw Opening mm	25
Battery	18.0V 4.0Ah
Weight kg (with Battery)	6,5

STORAGE

Type	VAL-P39
Dimensions mm L x W x H	520 x 432 x 126
Weight kg	2,6
Supplied with the tool	✓

The tool is supplied as:

- Basic tool with battery and shoulder strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and 8 die sets

B1350-CE-KV version also available for Power Supply Companies

B1350L-CE

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■	■	■				

same characteristics as B1350-CE except:
B1350L-CE version, featuring a large 42 mm jaw opening, for an easier introduction/removal of large size compression terminations and joints.

TECHNICAL FEATURES

Crimping force kN	132
Dimensions mm	
Length	395
Height	372
Width	83
Jaw Opening mm	42
Battery	18.0V 4.0Ah
Weight kg (with Battery)	8,1

STORAGE

Type	VAL-P39
Dimensions mm L x W x H	520 x 432 x 126
Weight kg	2,6
Supplied with the tool	✓

The tool is supplied as:

- Basic tool with battery and shoulder strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and 8 die sets

B1350L-CE-KV version also available for Power Supply Companies

B1350-UCE

18.0 V CORDLESS HYDRAULIC CRIMPING TOOL

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■	■	■				
Alu lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■					

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES

Crimping force kN	*132*
Dimensions mm	
Length	*351*
Height	*369*
Width	*83*
Battery	*18.0V 4.0Ah*
Weight kg (with Battery)	*6,3*

STORAGE

Type	*VAL-P39*
Dimensions mm L x W x H	*520 x 432 x 126*
Weight kg	*2,6*
Supplied with the tool	✓
Purchase separately	-

B1350-UCE will accept the accessories for performing the "Deep Stepped Indent" system of crimping on Aluminium cables.
The B1350-UCE will accept all semi-circular slotted dies, common to most 12 tons tools (U dies).
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah.
The OLED display provides essential real time tool operating information data including:

- Crimping pressure and force being generated, for confirmation of adherence to norms and best practice
- Battery power availability
- Tool identification, LED work light state, reset, no. of operational and service crimping cycles
- Tool service required to maintain optimum condition.

The tool is supplied as:

- Basic tool with battery and shoulder strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and 8 die sets

VAL-130

STORAGE

Type	*VAL-130**
Dimensions mm L x W x H	*360 x 280 x 48*
Weight kg	*3,0*
Purchase separately	✓

**Suitable for the storage of accessories for crimping Aluminium connectors*

18.0 V CORDLESS HYDRAULIC CRIMPING TOOL

B1300-CE

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs						■	■	■	■	■	■	■	■	■	■	■	■				
*H.V. Splices**						■	■	■	■	■	■	■	■	■	■	■	■				

*limited to the cable insulation diameter

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES

Crimping force kN	132
Dimensions mm	
Length	406
Height	239
Width	102,5
Jaw Opening mm	25
Battery	18.0V 4.0Ah
Weight kg (with Battery)	6,5

STORAGE

Type	VAL-P44
Dimensions mm L x W x H	680 x 473 x 151
Weight kg	3,7
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and shoulder strap, Spare battery, Battery charger, USB cable
- Plastic carrying case suitable for storing the tool and 12 die sets

B1300-CE-KV version also available for Power Supply Companies

LED lighting of the working area

Anataomically shaped grip for improved comfort

Slot-in battery with release button

Multifunction OLED display with touch button

132kN · Li-Ion 18.0V · 2 SPEED · 180° · OLED · BATTERY DISPLAY · PROTECTED · ONE HAND · SAFETY · MAX PRESSURE · RELEASE · SILENT · SMOOTH · ERGONOMIC · BALANCED · LED LIGHTING · BI-COMPONENT · ENERGY SAVE · DURABLE · 200k · -15°C +50°C · HEXAGONAL · RADIAL · INDENT · OVAL · CIRCULAR · CE

B1300-CE is suitable for a wide range of connectors up to 400 sqmm using die sets common to the Cembre 130 kN tooling range.
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah.
The OLED display provides essential real time tool operating information data including:

- Crimping pressure and force being generated, for confirmation of adherence to norms and best practice
- Battery power availability
- Tool identification, LED work light state, reset, no. of operational and service crimping cycles
- Tool service required to maintain optimum condition.

B1300L-CE

18.0 V CORDLESS HYDRAULIC CRIMPING TOOL

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■	■	■				

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES

Crimping force kN	132
Dimensions mm	
Length	471
Height	239
Width	102,5
Jaw Opening mm	42
Battery	18.0V 4.0Ah
Weight kg (with Battery)	8,0

The B1300L-CE version, featuring a large 42 mm jaw opening, for an easier introduction/removal of large size compression terminations and joints.

B1300L-CE is suitable for a wide range of connectors up to 400 sqmm using die sets common to the Cembre 130 kN tooling range.

New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah.

The OLED display provides essential real time tool operating information data including:

- Crimping pressure and force being generated, for confirmation of adherence to norms and best practice
- Battery power availability
- Tool identification, LED work light state, reset, no. of operational and service crimping cycles
- Tool service required to maintain optimum condition.

STORAGE

Type	VAL-P44
Dimensions mm L x W x H	680 x 473 x 151
Weight kg	3,7
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and shoulder strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and 12 die sets

B1300L-CE-KV version also available for Power Supply Companies

18.0 V CORDLESS HYDRAULIC CRIMPING TOOL

B1300-UCE

general features

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■	■	■				
Alu lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■					

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES

Crimping force kN	132
Dimensions mm	
Length	423
Height	239
Width	102,5
Battery	18.0V 4.0Ah
Weight kg (with Battery)	6,5

STORAGE

Type	VAL-P44
Dimensions mm L x W x H	680 x 473 x 151
Weight kg	3,7
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and shoulder strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and 12 die sets

B1300-UCE will accept the accessories for performing the "Deep Stepped Indent" system of crimping on Aluminium cables.
The B1300-UCE will accept all semi-circular slotted dies, common to most 12 tons tools (U dies).

New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah.

The OLED display provides essential real time tool operating information data including:

- Crimping pressure and force being generated, for confirmation of adherence to norms and best practice
- Battery power availability
- Tool identification, LED work light state, reset, no. of operational and service crimping cycles
- Tool service required to maintain optimum condition.

VAL-130

STORAGE

Type	VAL-130*
Dimensions mm L x W x H	360 x 280 x 48
Weight kg	3,0
Purchase separately	✓

**Suitable for the storage of accessories for crimping Aluminium connectors*

B35M-TC025E

18.0 V CORDLESS HYDRAULIC CUTTING TOOL

overhead line application

Ø 25mm | Li-Ion 18.0V | HEAD OPENING | SPECIAL | 180° | BATTERY DISPLAY | PROTECTED | ONE HAND | MAX PRESSURE | RELEASE | SILENT | SMOOTH | ERGONOMIC | BALANCED | ENERGY SAVE | DURABLE | -15°C +50°C | CE

MAIN APPLICATIONS

specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having Ø max 25 mm

TECHNICAL FEATURES

Max cutting Ø mm	25
Dimensions mm	
Length	391
Height	133
Width	81
Battery	18.0V 2.0Ah
Weight kg (with Battery)	3,1

The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and accessories

STORAGE

Type	VAL-P22
Dimensions mm L x W x H	465 x 315 x 116
Weight kg	1,5
Supplied with the tool	✓
Purchase separately	-

Can be operated with one hand.
Balanced for greater control.
Head rotates 180° for ease of operation in confined spaces.
Fitted with a maximum pressure valve.
Extremely quiet, minimal vibration.
Durable moulded body offering high resistance to wear and damage in all operating conditions.
New Li-Ion 18V 2Ah High Power battery.

The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.
Supplied in a robust plastic case to accommodate the tool and all the accessories.
Two batteries and charger included.
Operating temperature:
-15 to +50 ° C

CUTTING CAPACITY - *a few examples*

	MATERIAL	TENSILE STRENGTH (daN/mm²)	MAX CUTTING DIAMETER (mm) B35M-TC025E
ROPES & CONDUCTORS	COPPER	≤ 41	25
	ALUMINIUM	≤ 20	25
	ALMELEC	≤ 34	25
	STEEL	≤ 180	INDICATIVE EXAMPLES: 19 x 2,1 : Ø est. = 10,5 mm 19 x 2,2 : Ø est. = 11,0 mm
	MULTI STRANDS STEEL (STRANDS Qty ≥ 200)	≤ 180	-
	ACSR	≤ 180	25 INDICATIVE EXAMPLES: 26 x 2,50 + 7 x 1,95 : Ø est. = 15,85 26 x 3,06 + 7 x 2,38 : Ø est. = 19,38 26 x 3,60 + 7 x 2,80 : Ø est. = 22,80
RODS	STEEL	≤ 60	10
		≤ 42	-
	COPPER	≤ 30	-
		≤ 25	16
	ALUMINIUM	≤ 16	25

18.0 V CORDLESS HYDRAULIC CUTTING TOOL

B-TC250BSE

overhead line application

MAIN APPLICATIONS

specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having Ø max 26 mm

STORAGE

Type	*VAL-P48*
Dimensions mm L x W x H	*620 x 360 x 138*
Weight kg	*2,4*
Supplied with the tool	✓
Purchase separately	-

TECHNICAL FEATURES

Max cutting Ø mm	*26*
Dimensions mm	
Length	*436*
Height	*140*
Width	*81*
Battery	*18.0V 2.0Ah*
Weight kg (with Battery)	*3,4*

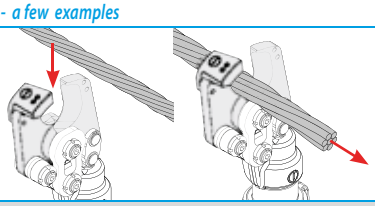
The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and accessories

Can be operated with one hand.
Balanced for greater control.
Head rotates 180° for ease of operation in confined spaces.
The open head and the "scissor" movement of the blades facilitate the cutting of running cables.
Fitted with a maximum pressure valve.

Extremely quiet, minimal vibration.
Durable moulded body offering high resistance to wear and damage in all operating conditions.
New Li-Ion 18V 2Ah High Power battery.
The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.
Supplied in a robust plastic case to accommodate the tool and all the accessories.
Two batteries and charger included.
Operating temperature:
-15 to +50 ° C

CUTTING CAPACITY - a few examples



Section	Ø	Ø	Stranding	Cable Type
mm²	mm	mm		
120	13,3 mm	-	-	*RIM120*
95	-	-	-	*Steel cable with Bitum (DIEPA)*
95	18,5 mm	-	-	*Steel cable flex*
38,5	7,0	-	-	*Round Steel V2A*
78,5	10	-	-	*10mm grounding wire with insulation*
50	8,9	-	7x2,95 mm	*Bronze*
70	10,3	-	19 x 2,06 mm	*Bronze*
95	12,5	-	19 x 2,50 mm	*Bronze*
70	10,7	-	19/2,14	*Aluminium*
95	12,5	-	19/2,5	*Aluminium*
150	15,75	-	37/2,25	*Aluminium*
323	23,25	-	19/4,65	*Aluminium*
415	-	26,46	37/3,78	*Aluminium*
35/6	8,1	-	7/2,70	*Aluminium-steel*
50/8	9,6	-	7/3,20	*Aluminium-steel*
50/30	11,7	-	12/2,33+7/2,33	*Aluminium-steel*
70/12	11,6	-	7/1,45+26/1,80	*Aluminium-steel*
95/15	13,4	-	7/1,65+26/1,10	*Aluminium-steel*
150/25	17,3	-	7/2,15+20/2,70	*Aluminium-steel*
230/30	21,0	-	24/3,5+7/2,33	*Aluminium-steel*
226	19,5	-	37/2,79	*Aluminium-steel*
239	20,1	-	37/2,87	*Rope Aluminum Alloy*
153	16,0	-	19/3,2	*Cu*
16	9,0	-	126/0,4	*Cu flex*
70	19,5	-	2214/0,2	*Cu extra flex*
120	19,9	-	608/0,5	*Cu flex*
240	-	28,6	1221/0,5	*Cu flex*
50	11,0	-	Class 5	*Aluminium flex*

B-TC250E

18.0 V CORDLESS HYDRAULIC CUTTING TOOL

overhead line application

Ø 25mm | Li-Ion 18.0V | 2 SPEED | HEAD OPENING | SPECIAL | 180° | BATTERY DISPLAY | PROTECTED | ONE HAND | MAX PRESSURE | RELEASE | SILENT | SMOOTH | ERGONOMIC | BALANCED | LED LIGHTING | BI-COMPONENT | ENERGY SAVE | DURABLE | 200k | -15°C +50°C | CE

MAIN APPLICATIONS

specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having Ø max 25 mm

SMARTOOL TECHNOLOGY

TECHNICAL FEATURES

Max cutting Ø mm	25
Dimensions mm	
Length	300
Height	337
Width	83
Battery	18.0V 4.0Ah
Weight kg (with Battery)	2,6

STORAGE

Type	VAL-P40
Dimensions mm L x W x H	520 x 432 x 126
Weight kg	2,6
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and accessories

Next generation of 18.0 V cordless hydraulic cutting tool specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having a max overall diameter of 25 mm.
The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah, while greater cutting speed and cutting force result from a revitalised hydraulic system with double speed action.
The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.

The head can rotate through 180 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow cutting of running cables. Fitted with a maximum hydraulic pressure valve. Designed with improved balance, B-TC250E is easily manageable during the cutting process and, by the use of bi-component plastics, has a shell with high resistance to wear and damage.
Rubber grip inserts, low noise and minimal vibration aid operator comfort while additional convenience and safety are provided by LED lighting of the working area.
Operating temperature:
-15 to +50 ° C

CUTTING CAPACITY - a few examples

	MATERIAL	TENSILE STRENGTH (daN/mm²)	MAX CUTTING DIAMETER (mm) B-TC250E
ROPES & CONDUCTORS	COPPER	≤ 41	25
	ALUMINIUM	≤ 20	25
	ALMELEC	≤ 34	25
	STEEL	≤ 180	INDICATIVE EXAMPLES: 7 x 3,0 : Ø est. = 9,0 mm 19 x 2,1 : Ø est. = 10,5 mm 19 x 2,3 : Ø est. = 11,5 mm
	MULTI STRANDS STEEL (STRANDS Qty ≥ 200)	≤ 180	18
	ACSR	≤ 180	25 INDICATIVE EXAMPLES: 26 x 2,50 + 7 x 1,95 : Ø est. = 15,85 26 x 3,06 + 7 x 2,38 : Ø est. = 19,38 26 x 3,60 + 7 x 2,80 : Ø est. = 22,80
RODS	STEEL	≤ 60	13
		≤ 42	16
	COPPER	≤ 30	20
		≤ 25	23
	ALUMINIUM	≤ 16	25

18.0 V CORDLESS HYDRAULIC CUTTING TOOL

B-TC450E

overhead line application

MAIN APPLICATIONS

specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having Ø max 45 mm

TECHNICAL FEATURES

Max cutting Ø mm	*45*
Dimensions mm	
Length	*407*
Height	*401*
Width	*88*
Battery	*18.0V 4.0Ah*
Weight kg (with Battery)	*6,7*

STORAGE

Type	*VAL-P40*
Dimensions mm L x W x H	*520 x 432 x 126*
Weight kg	*2,6*
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and accessories

CUTTING CAPACITY - *a few examples*

	MATERIAL	TENSILE STRENGTH (daN/mm²)	MAX CUTTING DIAMETER (mm) B-TC450E
ROPES & CONDUCTORS	COPPER	≤ 41	45
	ALUMINIUM	≤ 20	45
	ALMELEC	≤ 34	45
	STEEL	≤ 180	INDICATIVE EXAMPLES: 7 x 3,0 : Ø est. = 9,0 mm 19 x 2,1 : Ø est. = 10,5 mm 19 x 2,3 : Ø est. = 11,5 mm
	MULTI STRANDS STEEL (STRANDS Qty ≥ 200)	≤ 180	18
	ACSR	≤ 180	45 INDICATIVE EXAMPLES: 26 x 2,50 + 7 x 1,95 : Ø est. = 15,85 26 x 3,06 + 7 x 2,38 : Ø est. = 19,38 26 x 3,60 + 7 x 2,80 : Ø est. = 22,80 54 x 3,50 + 19 x 2,10 : Ø est. = 31,50 54 x 4,36 + 19 x 2,62 : Ø est. = 39,20
RODS	STEEL	≤ 60	18
		≤ 42	20
	COPPER	≤ 30	30
		≤ 25	32
	ALUMINIUM	≤ 16	45

Next generation of 18.0 V cordless hydraulic cutting tool specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having a max overall diameter of 45 mm.
The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah, while greater cutting speed and cutting force result from a revitalised hydraulic system with double speed action.
The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.

The head can rotate through 180 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow cutting of running cables.
Fitted with a maximum hydraulic pressure valve.
Designed with improved balance, B-TC450E is easily manageable during the cutting process and, by the use of bi-component plastics, has a shell with high resistance to wear and damage.
Rubber grip inserts, low noise and minimal vibration aid operator comfort while additional convenience and safety are provided by LED lighting of the working area.
Operating temperature:
-15 to +50 ° C

B-TC500YE

18.0 V CORDLESS HYDRAULIC CUTTING TOOL

overhead line application

Ø 50mm | Li-Ion 18.0V | 2 SPEED | HEAD OPENING | SPECIAL | 90° | BATTERY DISPLAY | PROTECTED | ONE HAND | MAX PRESSURE | RELEASE | SILENT | SMOOTH | ERGONOMIC | BALANCED | LED LIGHTING | BI-COMPONENT | ENERGY SAVE | DURABLE | 200k | -15°C +50°C | CE

MAIN APPLICATIONS

specifically designed to cut Copper, Aluminum, Aluminum-Steel cables (ACSR) having Ø max 50 mm

Not suitable for cutting stay wire, Steel rope or earthing rod

TECHNICAL FEATURES

Max cutting Ø mm	50
Dimensions mm	
Length	405
Height	398
Width	83
Battery	18.0V 4.0Ah
Weight kg (with Battery)	5,8

STORAGE

Type	VAL-P40
Dimensions mm L x W x H	520 x 432 x 126
Weight kg	2,6
Supplied with the tool	✓
Purchase separately	-

Next generation of 18.0 V cordless hydraulic cutting tool specifically designed to cut Copper, Aluminium, Aluminum-Steel cables (ACSR) having a max overall diameter of 50 mm. The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah, while greater cutting speed and cutting force result from a revitalised hydraulic system with double speed action.
The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.

The head can rotate through 90 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow cutting of running cables.
Fitted with a maximum hydraulic pressure valve.
Designed with improved balance, B-TC500YE is easily manageable during the cutting process and, by the use of bi-component plastics, has a shell with high resistance to wear and damage.
Rubber grip inserts, low noise and minimal vibration aid operator comfort while additional convenience and safety are provided by LED lighting of the working area.
Operating temperature:
-15 to +50 ° C

The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and accessories

18.0 V CORDLESS HYDRAULIC CUTTING TOOL

B-TC550E

overhead line application

MAIN APPLICATIONS

specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having Ø max 55 mm

TECHNICAL FEATURES

Max cutting Ø mm	*55*
Dimensions mm	
Length	*441*
Height	*424*
Width	*87*
Battery	*18.0V 4.0Ah*
Weight kg (with Battery)	*8,9*

STORAGE

Type	*VAL-P40*
Dimensions mm L x W x H	*520 x 432 x 126*
Weight kg	*2,6*
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and accessories

CUTTING CAPACITY - a few examples

	MATERIAL	TENSILE STRENGTH (daN/mm²)	MAX CUTTING DIAMETER (mm) B-TC550E
ROPES & CONDUCTORS	COPPER	≤ 41	55
	ALUMINIUM	≤ 20	55
	ALMELEC	≤ 34	55
	STEEL	≤ 180	INDICATIVE EXAMPLES: 7 x 3,0 : Ø est. = 9,0 mm 19 x 2,1 : Ø est. = 10,5 mm 19 x 2,3 : Ø est. = 11,5 mm
	MULTI STRANDS STEEL (STRANDS Qty ≥ 200)	≤ 180	22
	ACSR	≤ 180	50 INDICATIVE EXAMPLES: 26 x 2,50 + 7 x 1,95 : Ø est. = 15,85 26 x 3,06 + 7 x 2,38 : Ø est. = 19,38 26 x 3,60 + 7 x 2,80 : Ø est. = 22,80 26 x 4,44 + 7 x 3,45 : Ø est. = 28,14 54 x 3,50 + 19 x 2,10 : Ø est. = 31,50 54 x 4,36 + 19 x 2,62 : Ø est. = 39,20 83 x 4,60 + 16 x 2,80 : Ø est. = 50,00
	GUY WIRE (GW15-9/16-188)	Extra high strenght grade	7 x 4,77 : Ø est. =14,30 mm
RODS	STEEL	≤ 60	20
		≤ 42	22
	COPPER	≤ 30	34
		≤ 25	38,5
	ALUMINIUM	≤ 16	50

Next generation of 18.0 V cordless hydraulic cutting tool Specifically designed cut Copper, Aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having a max overall diameter of 55 mm.
The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah, while greater cutting speed and cutting force result from a revitalised hydraulic system with double speed action. The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.
The head can rotate through 330 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow cutting of running cables.

Fitted with a maximum hydraulic pressure valve.
Designed with improved balance, B-TC550E is easily manageable during the cutting process and, by the use of bi-component plastics, has a shell with high resistance to wear and damage.
Rubber grip inserts, low noise and minimal vibration aid operator comfort while additional convenience and safety are provided by LED lighting of the working area.
Operating temperature:
-15 to +50 ° C

B-TC500E

18.0 V CORDLESS HYDRAULIC CUTTING TOOL

industrial application

MAIN APPLICATIONS

specifically designed to cut Copper, Aluminium and Telecommunications cable having Ø max 50 mm

TECHNICAL FEATURES

Max cutting Ø mm	50
Dimensions mm	
Length	405
Height	398
Width	83
Battery	18.0V 4.0Ah
Weight kg (with Battery)	5,8

STORAGE

Type	VAL-P40
Dimensions mm L x W x H	520 x 432 x 126
Weight kg	2,6
Supplied with the tool	✓
Purchase separately	-

Next generation of 18.0 V cordless hydraulic cutting tool specifically designed to cut Copper, Aluminium and telecommunication cable having a max overall diameter of 50 mm.
The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah, while greater cutting speed and cutting force result from a revitalised hydraulic system with double speed action.

The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.
The head can rotate through 90 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow cutting of running cables.
Fitted with a maximum hydraulic pressure valve.

Designed with improved balance, B-TC500E is easily manageable during the cutting process and, by the use of bi-component plastics, has a shell with high resistance to wear and damage.
Rubber grip inserts, low noise and minimal vibration aid operator comfort while additional convenience and safety are provided by LED lighting of the working area.
Operating temperature:
-15 to +50 ° C

The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and accessories

18.0 V CORDLESS HYDRAULIC CUTTING TOOL

B-TC650E

industrial application

MAIN APPLICATIONS

specifically designed to cut Copper, Aluminium and Telecommunications cable having Ø max 65 mm

TECHNICAL FEATURES

Max cutting Ø mm	65
Dimensions mm	
Length	429
Height	415
Width	83
Battery	18.0V 4.0Ah
Weight kg (with Battery)	6,4

STORAGE

Type	VAL-P40
Dimensions mm L x W x H	520 x 432 x 126
Weight kg	2,6
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and accessories

Next generation of 18.0 V cordless hydraulic cutting tool specifically designed to cut Copper, Aluminium and telecommunication cable having a max overall diameter of 65 mm. The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.

New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah, while greater cutting speed and cutting force result from a revitalised hydraulic system with double speed action. The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.
The head can rotate through 335 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow cutting of running cables.
Fitted with a maximum hydraulic pressure valve.

Designed with improved balance, B-TC650E is easily manageable during the cutting process and, by the use of bi-component plastics, has a shell with high resistance to wear and damage.
Rubber grip inserts, low noise and minimal vibration aid operator comfort while additional convenience and safety are provided by LED lighting of the working area.
Operating temperature:
-15 to +50 ° C

B-TC650-SCE

18.0 V CORDLESS HYDRAULIC CUTTING TOOL

industrial application

Ø 65mm | Li-Ion 18.0V | 2 SPEED | HEAD OPENING | SPECIAL | 180° | BATTERY DISPLAY | PROTECTED | ONE HAND | MAX PRESSURE | RELEASE | SILENT | SMOOTH | ERGONOMIC | BALANCED | LED LIGHTING | BI-COMPONENT | ENERGY SAVE | DURABLE | 200k | -15°C +50°C | CE

MAIN APPLICATIONS

specifically designed to cut Copper, Aluminium and Telecommunications cable having Ø max 65 mm

TECHNICAL FEATURES

Max cutting Ø mm	65
Dimensions mm	
Length	503
Height	464
Width	105
Battery	18.0V 4.0Ah
Weight kg (with Battery)	7,7

STORAGE

Type	VAL-B-TC950
Dimensions mm L x W x H	565 x 410 x 132
Weight kg	6,7
Supplied with the tool	✓
Purchase separately	-

Next generation of 18.0 V cordless hydraulic cutting tool specifically designed to cut Copper, Aluminium and telecommunication cable having a max overall diameter of 65 mm.
The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
The open head and the "scissor" movement of the blades facilitate the cutting of running cables.
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah, while greater cutting speed and cutting force result from a revitalised hydraulic system with double speed action.

The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.
The head can rotate through 180 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow cutting of running cables.
Fitted with a maximum hydraulic pressure valve.
Designed with improved balance, B-TC650-SCE is easily manageable during the cutting process and, by the use of bi-component plastics, has a shell with high resistance to wear and damage.

Rubber grip inserts, low noise and minimal vibration aid operator comfort while additional convenience and safety are provided by LED lighting of the working area.
Operating temperature:
-15 to +50 ° C

The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- USB cable
- Metal carrying case suitable for storing the tool and accessories

18.0 V CORDLESS HYDRAULIC CUTTING TOOL

B-TC950E

industrial application

MAIN APPLICATIONS

specifically designed to cut Copper, Aluminium and Telecommunications cable having Ø max 95 mm

TECHNICAL FEATURES

Max cutting Ø mm	95
Dimensions mm	
Length	518
Height	468
Width	83
Battery	18.0V 4.0Ah
Weight kg (with Battery)	7,8

Next generation of 18.0 V cordless hydraulic cutting tool specifically designed to cut Copper, Aluminium and telecommunication cable having a max overall diameter of 95 mm. The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah, while greater cutting speed and cutting force result from a revitalised hydraulic system with double speed action.
The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.

The head can rotate through 335 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow cutting of running cables.
Fitted with a maximum hydraulic pressure valve.
Designed with improved balance, B-TC950E is easily manageable during the cutting process and, by the use of bi-component plastics, has a shell with high resistance to wear and damage.

Rubber grip inserts, low noise and minimal vibration aid operator comfort while additional convenience and safety are provided by LED lighting of the working area.
Operating temperature:
-15 to +50 ° C

STORAGE

Type	VAL-B-TC950
Dimensions mm L x W x H	565 x 410 x 132
Weight kg	6,7
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- USB cable
- Metal carrying case suitable for storing the tool and accessories

B-TC4500E

18.0 V CORDLESS HYDRAULIC CUTTING TOOL

overhead line application

Ø 45mm | Li-Ion 18.0V | 2 SPEED | HEAD OPENING | SPECIAL | 180° | BATTERY DISPLAY | PROTECTED | ONE HAND | MAX PRESSURE | RELEASE | SILENT | SMOOTH | ERGONOMIC | BALANCED | LED LIGHTING | BI-COMPONENT | ENERGY SAVE | DURABLE | 200k | -15°C +50°C | CE

MAIN APPLICATIONS

specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having Ø max 45 mm

TECHNICAL FEATURES

Max cutting Ø mm	45
Dimensions mm	
Length	486
Height	239
Width	103
Battery	18.0V 4.0Ah
Weight kg (with Battery)	6,44

STORAGE

Type	VAL-P54
Dimensions mm L x W x H	690 x 446 x 179
Weight kg	5,5
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- USB cable
- Plastic carrying case suitable for storing the tool and accessories

Next generation of 18.0 V cordless hydraulic cutting tool specifically designed to cut Copper, aldrey, Aluminium, Aluminium-Steel cables and Steel ropes, Aluminium and Steel rods having a max overall diameter of 45 mm.
The blades are manufactured from high strength special Steel, heat treated to ensure a long service life.
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah, while greater cutting speed and cutting force result from a revitalised hydraulic system with double speed action.
The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.

The head can rotate through 180 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow cutting of running cables.
Fitted with a maximum hydraulic pressure valve.
Designed with improved balance, B-TC4500E is easily manageable during the cutting process and, by the use of bi-component plastics, has a shell with high resistance to wear and damage.
Rubber grip inserts, low noise and minimal vibration aid operator comfort while additional convenience and safety are provided by LED lighting of the working area.
Operating temperature:
-15 to +50 ° C

CUTTING CAPACITY - *a few examples*

	MATERIAL	TENSILE STRENGTH (daN/mm²)	MAX CUTTING DIAMETER (mm) B-TC4500E
ROPES & CONDUCTORS	COPPER	≤ 41	45
	ALUMINIUM	≤ 20	45
	ALMELEC	≤ 34	45
	STEEL	≤ 180	INDICATIVE EXAMPLES: 7 x 3,0 : Ø est. = 9,0 mm 19 x 2,1 : Ø est. = 10,5 mm 19 x 2,3 : Ø est. = 11,5 mm
	MULTI STRANDS STEEL (STRANDS Qty ≥ 200)	≤ 180	18
	ACSR	≤ 180	45 INDICATIVE EXAMPLES: 26 x 2,50 + 7 x 1,95 : Ø est. = 15,85 26 x 3,06 + 7 x 2,38 : Ø est. = 19,38 26 x 3,60 + 7 x 2,80 : Ø est. = 22,80 54 x 3,50 + 19 x 2,10 : Ø est. = 31,50 54 x 4,36 + 19 x 2,62 : Ø est. = 39,20
RODS	STEEL	≤ 60	18
		≤ 42	20
	COPPER	≤ 30	30
		≤ 25	32
	ALUMINIUM	≤ 16	45

18.0 V Cordless hydraulic Frame-Type hole punching tool

B-FC470E

general features

MAIN APPLICATIONS

specifically designed to punching holes from 15,5 up to 47,2 mm diameter

TECHNICAL FEATURES

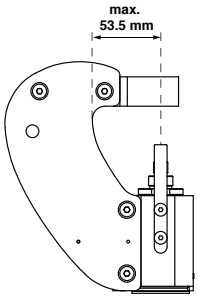
Max hole punch Ø mm	47,2
Max centre of hole to edge of trunking (mm)	53,5
Dimensions mm	
Length	379
Height	346
Width	83
Battery	18.0V 4.0Ah
Weight kg (with Battery)	6,2

STORAGE

Type	VAL-FC470
Dimensions mm L x P	559 x 459 x 131
Weight kg	6,7
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and wrist strap
- Spare battery
- Battery charger
- USB cable
- Metal carrying case suitable for storing the tool and accessories



Next generation of 18.0 V cordless hydraulic cutting tool specifically designed to punching holes from 15,5 up to 47,2 mm diameter in the side wall of trunking without the need for pre drilling.
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah, while greater punch speed and punching force result from a revitalised hydraulic system with double speed action.
The battery is equipped with led indicators that indicate the remaining battery life at any time by pressing the adjacent button.
The head can rotate through 180 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow cutting of running cables.
Fitted with a maximum hydraulic pressure valve.

Designed with improved balance, B-FC470E is easily manageable during the punching process and, by the use of bi-component plastics, has a shell with high resistance to wear and damage.
Rubber grip inserts, low noise and minimal vibration aid operator comfort while additional convenience and safety are provided by LED lighting of the working area.
Operating temperature:
-15 to +50 ° C
Also available in the hand operated mechanical version MT-FC48N (see page 126).

Table denotes the punch/die set reference, for each hole size. Suitable for punching holes in mild Steel, fibreglass or plastic material, up to 2 mm thick.

Hole Dimensions					Maximum thickness of mild Steel (mm)	Type
Nominal Ø (mm)	Ø (inch)	Pg	ISO	Inch		
15,5	.610	Pg9	-	-	2	RD15.5SS-FC
16,2	.638	-	ISO-16	-		RD16.2SS-FC
17,5	.689	-	-	-		RD17.5SS-FC
18,8	.740	Pg11	-	-		RD18.8SS-FC
19,1	.752	-	-	-		RD19.1SS
20,5	.807	Pg 13,5	ISO-20	-		RD20.5SS
22,6	.890	Pg16	-	-		RD22.6SS
23,8	.937	-	-	5/8"		RD23.8SS
25,4	1.000	-	ISO-25	-		RD25.4SS
27,0	1.063	-	-	3/4"		RD27SS
28,5	1.122	Pg21	-	-		RD28.5SS
30,5	1.201	-	-	7/8"		RD30.5SS
31,8	1.252	-	-	-		RD31.8SS
32,5	1.279	-	ISO-32	-		RD32.5SS
34,6	1.362	-	-	-		RD34.6SS
37,2	1.464	Pg29	-	-		RD37.2SS
38,1	1.500	-	-	-		RD38.1SS
40,5	1.594	-	ISO-40	-		RD40.5SS-FC
41,3	1.626	-	-	-		RD41.3SS-FC
42,5	1.673	-	-	1"1/4"		RD42.5SS-FC
43,2	1.701	-	-	-		RD43.2SS-FC
44,5	1.752	-	-	-		RD44.5SS-FC
47,2	1.858	Pg36	-	-		RD47.2SS-FC

B-FL750E

18.0 V Cordless hydraulic Puller-Type hole punching tool

general features

MAIN APPLICATIONS

specifically designed for hole punching stainless Steel, mild Steel, fibreglass and plastic sheet materials up to 3,5 mm thickness

TECHNICAL FEATURES

Max Punching Ø mm	*140*
Dimensions mm	
Length	*363*
Height	*366*
Width	*83*
Battery	*18.0V 4.0Ah*
Weight kg (with Battery)	*5,1*

STORAGE

Type	*VAL-P40*
Dimensions mm L x W x H	*520 x 432 x 126*
Weight kg	*2,6*
Supplied with the tool	✓
Purchase separately	-

The tool is supplied as:

- Basic tool with battery and shoulder strap
- Spare battery
- Battery charger
- USB cable
- Puller TD-11
- Puller TD-19
- Spiral bit Ø 11,5 mm
- Plastic carrying case suitable for storing the tool and accessories

Next generation of 18.0 V cordless hydraulic tool specifically designed for hole punching stainless Steel, mild Steel, fibreglass and plastic sheet materials up to 3,5 mm thickness.
New Li-Ion 18 V 4 Ah batteries offer a higher capacity than 14.4 V 3 Ah, while greater punch speed and punching force result from a revitalised hydraulic system with double speed action.
The battery is equipped with LED indicators to show the remaining battery life at any time by pressing the adjacent button.
The balanced punching head pivots 180deg through a full 360deg rotation for ease of use in confined spaces.
Fitted with a maximum hydraulic pressure valve.

Designed with improved balance, B-FL750E is easily manageable during the punching process and, by the use of bi-component plastics, has a shell with high resistance to wear and damage.
Rubber grip inserts, low noise and minimal vibration aid operator comfort while additional convenience and safety are provided by LED lighting of the working area.
For the punch-die selection chart see page 191.
Operating temperature:
-15 to +50 ° C

Universal joint allows punching head to pivot 180deg over a full 360deg rotation.

18.0 V Cordless hydraulic Puller-Type hole punching tool

B-FL750E

B-FL750E Punching accessories available

Round punch

Hole diameter					Material max thickness (mm)		Pilot hole Ø	Type	
Nominal		Pg	ISO	GAS	Stainless Steel	Mild Steel	Ø	KIT (Punch + Die)	Puller
Ø (mm)	Ø (inch)						(mm)		
15,5	.610	Pg9	-	-	2,5 mm (0.1 in.) Rm= 700 N/mm²	3,5 mm (0.14 in.) Rm= 510 N/mm²	11,5	RD15.5SS	TD-11
16,2	.638	-	ISO-16	-				RD16.2SS	
17,0	.669	-	-	G3/8"				RD17SS	
17,5	.689	-	-	-				RD17.5SS	
18,8	.740	Pg11	-	-				RD18.8SS	
19,1	.752	-	-	-				RD19.1SS	
20,5	.807	Pg 13,5	ISO-20	-				RD20.5SS	
21,5	.846	-	-	G1/2"				RD21.5SS	
22,6	.890	Pg16	-	-				RD22.6SS	
23,8	.937	-	-	G5/8"				RD23.8SS	
25,4	1.000	-	ISO-25	-				RD25.4SS	
27,0	1.063	-	-	G3/4"				RD27SS	
28,5	1.122	Pg21	-	-				RD28.5SS	
30,5	1.201	-	-	G7/8"				RD30.5SS	
28,5	1.122	Pg 21	-	-			20,0	RD28.5SS-19	TD-19
30,5	1.201	-	-	G7/8"				RD30.5SS-19	
31,8	1.252	-	-	-				RD31.8SS	
32,5	1.279	-	ISO-32	-				RD32.5SS	
34,0	1.338	-	-	G1"				RD34SS	
34,6	1.362	-	-	-				RD34.6SS	
37,2	1.464	Pg29	-	-				RD37.2SS	
38,1	1.500	-	-	-				RD38.1SS	
38,5	1.515	-	-	G1"1/8"				RD38.5SS	
40,5	1.594	-	ISO-40	-				RD40.5SS	
41,3	1.626	-	-	-				RD41.3SS	
42,5	1.673	-	-	G1"1/4"				RD42.5SS	
43,2	1.701	-	-	-				RD43.2SS	
44,5	1.752	-	-	-				RD44.5SS	
47,2	1.858	Pg36	-	-				RD47.2SS	
48,5	1.909	-	-	G1"1/2"				RD48.5SS	
50,5	1.988	-	ISO-50	-				RD50.5SS	
51,4	2.023	-	-	-				RD51.4SS	
52,4	2.063	-	-	-				RD52.4SS	
54,2	2.134	Pg42	-	G1"3/4"				RD54.2SS	
60,0	2.362	Pg48	-	G2"				RD60SS	
60,5	2.381	-	-	-				RD60.5SS	
64,0	2.520	-	ISO-63	-				RD64SS	
65,0	2.559	-	-	-				RD65SS	
76,0	2.992	-	-	G2"1/2"		3		RD76SS	
76,5	3.011	-	-	-		3,5		RD76.5SS	
80,5	3.169	-	-	-		3		RD80.5SS	
89,0	3.503	-	-	G3"		3,5		RD89SS	
90,0	3.543	-	-	-	2	3		RD90SS	
100,0	3.937	-	-	-	2	3	29,0	RD100SS	TD-28.5*
102,0	4.015	-	-	-	2	3		RD102SS	
114,0	4.488	-	-	-	2	2,5		RD114SS	
120,0	4.724	-	-	-	1,5	2		RD120SS	
140,0	5.512	-	-	-	1,5	2		RD140SS	

** Puller included in the kit*

Square punch

Hole diameter		Material max thickness (mm)		Pilot hole Ø	Type
Nominal		Stainless Steel	Mild Steel	Ø	KIT (Punch+die + Puller)
(mm)	(inch)			(mm)	
21,0 x 21,0	.827 x .827	2,5	3,5	12,0	RD21X21
46,0 x 46,0	1.811 x 1.811	1,5	2,0	26,5	RD46X46
68,0 x 68,0	2.677 x 2.677			22,5	RD68X68
92,0 x 92,0	3.622 x 3.622				RD92X92
126,0 x 126,0	4.960 x 4.960			28,5	RD126X126
138,0 x 138,0	5.433 x 5.433	1,0	1,5		RD138X138
220,0 x 220,0	8.661 x 8.661				RD220X220

Rectangular punch

Hole diameter		Material max thickness (mm)		Pilot hole Ø	Type
Nominal		Stainless Steel	Mild Steel	Ø	KIT (Punch+die + Puller)
(mm)	(inch)			(mm)	
18,0 x 46,0	.709 x 1.811	2,0	2,0	16,5	RD18X46
22,0 x 30,0	.866 x 1.181				RD22X30
22,0 x 46,0	.866 x 1.811				RD22X46
35,0 x 86,0	1.377 x 3.385				RD35X86
35,0 x 112,0	1.377 x 4.409				RD35X112
36,0 x 46,0	1.417 x 1.811			23,8	RD36X46
37,0 x 54,0	1.456 x 2.125	1,5		16,5	RD37X54
37,0 x 67,0	1.456 x 2.637				RD37X67
37,0 x 88,0	1.456 x 3.464			26,5	RD37X88
37,0 x 104,0	1.456 x 4.094				RD37X104
37,0 x 115,0	1.456 x 4.527				RD37X115
46,0 x 54,0	1.811 x 2.126				RD46X54
46,0 x 72,0	1.811 x 2.835				RD46X72
46,0 x 107,0	1.811 x 4.212				RD46X107
50,0 x 98,0	1.968 x 3.858				RD50X98
67,0 x 126,0	2.637 x 4.960			28,5	RD67X126

"D" PUNCH

Hole diameter		Material max thickness (mm)		Pilot hole Ø	Type
Nominal		Stainless Steel	Mild Steel	Ø	KIT (Punch+die + Puller)
(mm)	(inch)			(mm)	
(a)38,3 x (b)36,6	(a)1.507 x (b)1.442	2,5	3,5	18,5	RD18D
(a)43,1 x (b)41,5	(a)1.696 x (b)1.632				RD24D

Stainless Steel = Rm= 700 N/mm² - Mild Steel = Rm= 500 N/mm²

Use of non-Cembre punching accessories

Type	Punch & Die	Pilot hole Ø mm
TRD-9,4C (*)	KLAUKE, GREENLEE 3/8" - 24 UNF	Ø 9.7
TRD-M11C (*)	IMB, BM, COSMEC (M11x1.5)	Ø 11.5
TD-M16C	IMB, BM, COSMEC (M16x1.5)	Ø 16.5 or RD17.5SS
TD27	COSMEC (Ø105÷Ø140)	Ø 27.5
TD14X14-M14	COSMEC 46x46	Ø 18.8
TD120X20-M20	COSMEC 92x92	Ø 27.5
TD20X20-M20	BM, COSMEC 42x95	Ø 27.5
TGD-13.5X13.5-M13	COSMEC 40x40; 45x45; 46x46	Ø 18.8
TGD-10X10-M9	COSMEC 006505	Ø 13.8

(*) The washer supplied with the KIT must be threaded onto the draw stud and positioned between the head and the die to allow the die to rest correctly

MPC1

PRESSURE TEST DEVICE

for hydraulic pumps and tools

MPC1 device

The MPC1 device, complete with test adapter set, is used to measure the maximum oil pressure on all Cembre tools.

MPC2

MPC2 device

The MPC2 device, complete with test die set, to measure the maximum force developed by Cembre tools: HT131-C, HT131LN-C, HT120, HT120-KV, RHC131, RHC131-KV, RHC131LN, B131-C, B131-C-KV, B131LN-C, B131LN-C-KV, B135-C, B135-C-KV, B135LN-C, B135LN-C-KV.

MPC4

MPC4 device

The MPC4 device, complete with test die set, to measure the maximum force developed by Cembre tools: ECW-H3D, RHU240-3D-850, RHU300-3D

MPC7

MPC7 device

The MPC7 device, complete with test die set, to measure the maximum force developed by Cembre tools: HT45, HT51, HT51-KV, HT51L, HT51L-KV, RH50, HT61, RH61, B15D (use adaptor available separately), B35-45MD, B35-50MD, B46, B51, B51-KV, B51L, B51L-KV, B54D, B55, B55-KV, B62.

HYDRAULIC PUMPS AND UNITS

PO7000

HYDRAULIC PUMP

foot operated

TECHNICAL FEATURES	
Operating pressure bar	700
Dimensions mm	
Length	680
width	200
Height	163
Weight kg	9,8

STORAGE	
Type	VAL-P21
Dimensions mm L x W x H	820 x 430 x 290
Weight kg	6,74
Supplied with the pump	✓
Purchase separately	-

Foot operated double speed pump, developing a maximum pressure of 700 bar.
The pump is supplied with 3 m long high pressure flexible hose complete with female self-lock quick coupler.
Pressure can be withdrawn at any time during operation by depressing the release lever.
A solid shaped stand gives the pump stability during operation.

CPP-0

HYDRAULIC PUMP

foot operated

TECHNICAL FEATURES	
Operating pressure bar	700
Dimensions mm	
Length	320
width	150
Height	200
Weight kg	6,8

The CPP-0 air hydraulic power unit intensifies an air supply of 6÷8 bar (87-115 psi) to a power crimping or cutting force of up to 700 bar (10.000 psi) depending upon the input pressure.
The control pedal allows for advancing and pressure release at any stage of the operation.
The unit is provided with a 2 m high pressure flexible hose, including a 3/8" NPT female self-lock quick coupler.

HYDRAULIC PUMP

powered by single-phase electric motor

CPE-1
CPE-1-110

TECHNICAL FEATURES	
Operating pressure bar	*700*
Dimensions mm	
Length	*372*
width	*223*
Height	*482*
Weight kg	*21*

2 SPEED · 700 bar · MAX PRESSURE · MANUAL RELEASE · DURABLE · CE

The pump is supplied with:
- high pressure flexible hose with male and female automatic quick coupler
- remote hand controller
- external supply connection cable

Electrically driven hydraulic pump, powered by a 230V / 50-60Hz single-phase electric motor.
The remote hand controller allows advancement and pressure release on completion of the crimping operation.
The mechanically actuated emergency button located on the pump body allows the pressure release at any time in case of power shortage.
Also available CPE-1-110 version for 110-115V / 50-60Hz.
Both models are IP 55 rated.

Available as optional accessories:
- Remote foot controller RCP-B70.
- Transportation trolley CS-CPE-1
- Control handle integrated with 3 m length flex hoses ERCH-WH

ERCH-WH

RCP-B70

CS-CPE-1

B1300PLE

PORTABLE ELECTRO-HYDRAULIC PUMP

battery operated

729 bar | Li-Ion 18.0V | 2 SPEED | BATTERY DISPLAY | PROTECTED | ONE HAND | MAX PRESSURE | RELEASE | SILENT | SMOOTH | ERGONOMIC | BALANCED | LED LIGHTING | BI-COMPONENT | ENERGY SAVE | DURABLE | 200k | -15°C +50°C | CE

TECHNICAL FEATURES	
Operating pressure bar	729
Dimensions mm	
Length	354
width	103
Height	240
Battery	18.0V 4.0Ah
Weight kg (with Battery)	4,0

STORAGE	
Type	VAL-P51
Dimensions mm L x W x H	690 x 446 x 179
Weight kg	5,5
Supplied with the pump	✓
Purchase separately	-

New portable electro-hydraulic pump B1300PLE is battery operated for independent use.
Having the inherent strengths of the Cembre 18V tool range the B1300PLE is a compact, lightweight pump suitable for a wide range of applications.
New Li-Ion 18 V 4 Ah batteries offer a high capacity, while improved operating speed results from a revitalised hydraulic system with double speed action.
A security valve assures operator safety.

Designed with improved handling characteristics, B1300PLE is easily manageable during the operating process and, by the use of bi-component plastics, has a shell with high resistance to wear and damage.
Rubber grip inserts, low noise and minimal vibration aid operator comfort while additional convenience and safety are provided by LED lighting of the working area.
Pressure can be released at any time using the appropriate button.

The B1300PLE pump is supplied with:

- 0,9 m flexible hose complete with male + female 3/8" NPT self-lock quick couplers.
- 18.0 V - 4.0 Ah Li-Ion high power battery
- Battery charger
- Shoulder strap
- Plastic carrying case suitable for storing the tool and accessories, type VALP51

APPLICATION RANGE

Crimping	Cutting	Punching
up to 130 kN	up to TC 050	RH-FL75 RH-FC48N

PORTABLE ELECTRO-HYDRAULIC PUMP

B68M-P18E

battery operated

TECHNICAL FEATURES	
Operating pressure bar	729
Dimensions mm	
Length	364
width	186
Height	236
Battery	18.0V 4.0Ah
Weight kg (with Battery)	5,6

STORAGE	
Type	CVB-031
Dimensions mm L x W x H	580 x 300 x 320
Weight kg	2,23
Supplied with the pump	✓
Purchase separately	-

The B68M-P18E pump is supplied with:

- Remote control provides LED working lights and an OLED display
- 2 m flexible hose complete with rotatable Q14-F quick coupler on the pump and female 3/8" NPT self-lock quick couplers
- 18.0 V - 4.0 Ah Li-Ion high power battery (2 pcs.)
- Canvas bag suitable for storing the tool and accessories
- Battery charger
- Shoulder strap

New portable electro-hydraulic pump B68M-P18E is battery operated for independent use.
Having the inherent strengths of the Cembre 18V tool range, the B68M-P18E is a lightweight high capacity pump equipped with an innovative remote control suitable for a wide range of applications.
New Li-Ion 18V 4 Ah batteries offer a high capacity, while improved operating speed results from a revitalised hydraulic system with double speed action.
A maximum pressure sensor assures greater precision and repeatability of the pressure cycle, while a security valve doubles the provision for operator safety.
The unit has a manual pressure release button in case of emergency. Easy access to the oil reservoir is by means of an oil top-up inlet.

APPLICATION RANGE		
Crimping	Cutting	Punching
up to 230 kN	up to TC 120	RH-FL75 RH-FC48N

Example of operating information on OLED display:

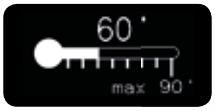

Operating mode

Battery level


Release mode

No. of cycles

Pressure mode



Motor temperature

The innovative remote control provides LED working lights and an OLED display of essential real time tool operating information including:

- Operating mode selection
- Release mode selection: Smart release, manual release
- Minimum set pressure and momentary pressure reached expressed in bar allows verification of correct operation
- Battery charge level
- No. of cycles performed
- No. of cycles before scheduled recommended maintenance
- Motor temperature

Designed with improved handling characteristics, B68M-P18E is easily manageable during the operating process and has a fibreglass-plastic shell with high resistance to wear and damage.
The pump features a rubber pocket to store and protect the remote control.
Low noise levels aid operator comfort while additional convenience and safety are provided by LED lighting on the remote control.
Selecting the SMART release mode on the OLED display allows the operating pressure to be maintained until the operating button is released, thus allowing the operator to make a visual check of, say, the crimped connection.
Releasing the button then automatically releases the pressure.
Crimping cycle data (up to 200,000 events) is automatically stored on a memory card for transfer to PC by USB interface located under the battery.

PORTABLE ELECTRO-HYDRAULIC PUMPS B70M-P24 RANGE

battery operated

700 bar | 24V 3.1Ah | Ni-MH | SPEED | 24 VCC INPUT | BATTERY DISPLAY | ONE HAND | MAX PRESSURE | RELEASE | SILENT | SMOOTH | ERGONOMIC | BALANCED | ENERGY SAVE | DURABLE | -15°C +50°C | CE

Easily accessible oil top-up inlet

Remote electrical hand or foot controller connection (not KV version)

Remote pneumatic hand controller connection (KV version only)

24V dc external power supply socket with protective cap

High pressure hose connects to automatic self-lock quick coupling with protective cap

Powerful 24V Ni-MH rechargeable battery

Battery residual power level display

Manual pressure release button

Variously supplied with different versions:

PORTABLE ELECTRO-HYDRAULIC PUMPS

battery operated

B70M-P24

TECHNICAL FEATURES	
Operating pressure bar	700
Dimensions mm	
Length	390
width	163
Height	323
Battery	24V 3.1Ah
Weight kg (with Battery)	9,2*

*without accessories

B70M-P24

1. Portable electro-hydraulic pump, 24V dc battery for independent use, developing 700 bar pressure; equipped with an integral socket for connection to an external 24 V dc supply
2. BH2433 Battery 24V dc 3.1Ah
3. DC24 External battery charger
4. Shoulder strap
5. Canvas holdall for carrying accessories
6. 3 m flexible hose complete with male + female 3/8" NPT self-lock quick couplers
7. ERCH Remote control

B70M-P24-CH

TECHNICAL FEATURES	
Operating pressure bar	700
Dimensions mm	
Length	390
width	163
Height	323
Battery	24V 3.1Ah
Weight kg (with Battery)	9,2*

*without accessories

B70M-P24-CH

1. Portable electro-hydraulic pump, 24V dc battery for independent use, developing 700 bar pressure; equipped with an integral socket for connection to an external 24 V dc supply
2. BH2433 Battery 24V dc 3.1Ah
3. DC24 External battery charger
4. Shoulder strap
5. Canvas holdall for carrying accessories
9. ERCH-WH Remote hand controller integrated with 3 m length flexible hose complete with male + female 3/8" NPT self-lock quick couplers

B70M-P24-KV

TECHNICAL FEATURES	
Operating pressure bar	700
Dimensions mm	
Length	390
width	163
Height	323
Battery	24V 3.1Ah
Weight kg (with Battery)	9,2*

*without accessories

B70M-P24-KV

1. Portable electro-hydraulic pump, 24V dc battery for independent use. Equipped with high dielectric insulated oil and automatic "insulated" lock quick coupler to allow connection only with insulated hoses.
2. BH2433 Battery 24V dc 3.1Ah
3. DC24 External battery charger
4. Shoulder strap
5. Canvas holdall for carrying accessories
8. PRCH Remote pneumatic hand controller

ACCESSORIES FOR B70M-P24

purchase separately

ESC300CEE
Connecting cable with 24V dc CEE type plug (for power from an external source, length 3 meters)

ESC600
Connecting cable with crocodile clips (for power from an external source, length 6 meters)

BPS230.24
network power supply (not for intensive use)
INPUT 230V ac 50-60Hz; OUTPUT 24V dc
thermal and short circuit protection.
Current supply: up to 4A extended use;
18A for 50 s; 25A for 8 s.

EPS115-230.24
network power supply
SUPPLY IN: 110/240V
ac autorange
50-60Hz; 700W
SUPPLY OUT: 24V dc; 30A max

ERCH-WH
Remote hand controller integrated with 3 m length flexible hose

TRS-B70
Canvas rucksack
(for carrying the pump)

VAL-P18
Durable transport case for pump and accessories.

SH-B70
Hook for hanging the pump from a ladder

RCP-B70
Portable remote foot control

HYDRAULIC UNIT

CP1131

pump PO7000 + head RHC131

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs						■	■	■	■	■	■	■	■	■	■	■	■				
H.V. Splices*						■	■	■	■	■	■	■	■	■	■	■	■				

*limited to the cable insulation diameter

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES	
Crimping force kN	130
Dimensions mm	
Dimensions pump L x W x H	680 x 200 x 163
Dimensions head L x H	232 x 124
Weight unit kg	13,6

STORAGE	
Type	VAL-P21*
Dimensions mm L x W x H	820 x 430 x 290
Weight kg	6,74
Supplied with the unit	✓

*Supplied with the unit, suitable for storage of 24 semi-circular slotted dies

HYDRAULIC UNIT

CPU1131-C

pump PO7000 + head RHU131-C

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■						
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■								
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■	■	■				
Alu lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■					

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES	
Crimping force kN	130
Dimensions mm	
Dimensions pump L x W x H	680 x 200 x 163
Dimensions head L x H	245 x 89
Weight unit kg	13,5

STORAGE	
Type	VAL-P21*
Dimensions mm L x W x H	820 x 430 x 290
Weight kg	6,74
Supplied with the unit	✓

*Supplied with the unit, suitable for storage of 24 semi-circular slotted dies and accessories for crimping Aluminium connectors

CPU1230-3D

HYDRAULIC UNIT

pump PO7000 + head ECW-H3D

230kN | 700 bar | 2 SPEED | MAX PRESSURE | MANUAL RELEASE | DURABLE | HEXAGONAL | OVAL | RADIAL | INDENT

MAIN APPLICATIONS - max section sqmm

Section sqmm	0.25÷1.5	1.5÷2.5	4÷6	10	16	25	35	50	70	95	120	150	185	200	240	300	400	500	630	800	1000
L.V. lugs and splices				■	■	■	■	■	■	■	■	■	■	■	■	■					
Insulated terminals				■	■	■	■	■	■	■	■	■	■	■	■	■					
"C" sleeve Connectors				■	■	■	■	■	■	■	■	■	■	■	■						
H.V. lugs and splices						■	■	■	■	■	■	■	■	■	■	■	■	■	■		

These tools are supplied without dies. For die selection, please refer to chart on pages 206 to 220

TECHNICAL FEATURES

Crimping force kN	*230*
Dimensions mm	
Dimensions pump L x W x H	*680 x 200 x 163*
Dimensions head L x H	*290 x 120*
Weight unit kg	*15,3*

STORAGE

Type	*VAL-P21**
Dimensions mm L x W x H	*820 x 430 x 290*
Weight kg	*6,74*
Supplied with the unit	✓

**Supplied with the unit, suitable for storage of 24 semi-circular slotted dies and adaptors and dies specific for head ECW-H3D*

CP1096

HYDRAULIC CUTTING UNIT

pump PO7000 + head TC096

Ø 95mm | 700 bar | 2 SPEED | MAX PRESSURE | MANUAL RELEASE | DURABLE

TECHNICAL FEATURES

Max cutting Ø mm	*95*
Dimensions mm	
Dimensions pump L x W x H	*680 x 200 x 163*
Dimensions head L x H	*397 x 249*
Weight unit kg	*17,7*

STORAGE

Type	*VAL-CP096*
Dimensions mm L x W x H	*785 x 430 x 175*
Weight kg	*10,0*
Supplied with the unit	✓

CP1120

HYDRAULIC CUTTING UNIT

pump PO7000 + head TC120

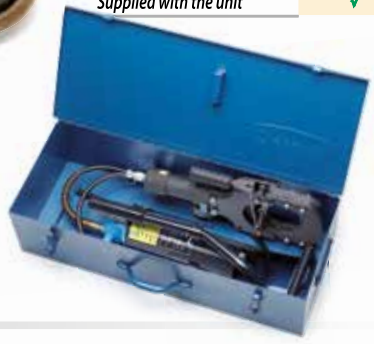
Ø 120mm | 700 bar | 2 SPEED | MAX PRESSURE | MANUAL RELEASE | DURABLE

TECHNICAL FEATURES

Max cutting Ø mm	*120*
Dimensions mm	
Dimensions pump L x W x H	*680 x 200 x 163*
Dimensions head L x H	*536 x 175*
Weight unit kg	*19,3*

STORAGE

Type	*VAL-22-TC120*
Dimensions mm L x W x H	*766 x 305 x 191*
Weight kg	*8,3*
Supplied with the unit	✓



HYDRAULIC CUTTING UNIT

CP-W-KV

according to DIN EN 50340 - VDE 0682 part 661

GS approval n. ET 13045

Hydraulic units provide protection against short circuit when accidentally cutting live L.V. / M.V. cables with nominal voltage up to 60 kV.

Ø 85mm | Ø 95mm | Ø 120mm | 60kV | ISOLATED | 700 bar | SPEED | MAX PRESSURE | MANUAL RELEASE | DURABLE

CP 1086-W-1000-KV

TECHNICAL FEATURES

Max cutting Ø mm	85
Dimensions mm	
Dimensions pump L x W x H	680 x 200 x 163
Dimensions head L x H	405 x 143
Weight unit kg	16,6

CP 1096-W-1000-KV

TECHNICAL FEATURES

Max cutting Ø mm	95
Dimensions mm	
Dimensions pump L x W x H	680 x 200 x 163
Dimensions head L x H	407 x 245
Weight unit kg	19,0

CP 1120-W-1000-KV

TECHNICAL FEATURES

Max cutting Ø mm	120
Dimensions mm	
Dimensions pump L x W x H	680 x 200 x 163
Dimensions head L x H	556 x 185
Weight unit kg	20,2

STORAGE

Type	VAL-CP096-W
Dimensions mm L x W x H	785 x 430 x 175
Weight kg	10,0
Supplied with the unit	✓

Available as optional accessories:

- EK100 earth cable for the pump (1 m length)
- EK500P earth cable for the head (5 m length) with earth rod and canvas bag

EK 500P

EK 100

TF

Flexible hoses

High pressure flexible hoses for joining hydraulic heads to pumps.
In addition to the standard versions listed below alternative hose lengths are available, upon request:

TF300-Q38FM
3 m length flexible hose fitted with an automatic female quick coupler and a male quick coupler.

TF600-Q38FM
6 m length flexible hose fitted with an automatic female quick coupler and a 3/8" NPT male threaded bush.

TF300-Q38F
3 m length flexible hose equipped with automatic female quick coupler at one end and male threading at the other end.

Q-M, Q-F

Quick couplers

standard version

Q14-MS

Q38-F

Q38-MS

Q14-MS
Male automatic coupler for hydraulic heads (1/4" NPT).

Q38-F
Female automatic coupler for hydraulic pumps and flexible hoses (3/8" NPT).

Q38-MS
Male automatic coupler for flexible hoses (3/8" NPT).

I-F, I-M

insulated version

I38-F

I38-MS

I38-F
Female automatic coupler for insulated hydraulic pumps and flexible hoses (3/8" NPT).

I38-MS
Male automatic coupler for insulated flexible hoses (3/8" NPT).

DIE SELECTOR CHART

DIE SELECTOR CHART

DIE SELECTOR CHART

APPLICATION	CONDUCTOR		CONNECTOR			HYDRAULIC TOOLS					HYDRAULIC TOOLS													
						B15MDE	HT45-E B450ND-BVE				HT51 RH50 B500E B500NDE B550E			HT 81-U RHU 81		HT 120 and tools and heads with 130 kN crimping force			ECW-H3D			RHU520		
	Conductor Size sqmm		TERMINAL		SPLICE	DIE SET	NEST	INDEN-TOR	DIE SET		NEST	INDEN-TOR	DIE SET	NEST E INDENTOR	DIE SET	NEST	INDEN-TOR	DIE SET	NEST	INDENTOR	DIE SET	NEST	INDENTOR	DIE SET
	Low Str.	Flex																						
	0,25 ÷ 2,5		A 03-M.. A 06-M..		L 03-M / L 03-P L 06-M / L 06-P	ME03/2-15 ① MA03/3-15 Ⓨ																		
	4 ÷ 6		A 1-M.. A 1-L..		L 1-M L 1-P	ME03/2-15 ① MA03/3-15 Ⓨ	MA1 Ⓨ	PA 1	ME1 ①		MA1-50 Ⓨ	PA 1-50	ME1-50 ①											
A..-M..	10		A 2-M.. A 2-L.. A 2-P12		L 2-M L 2-P	ME03/2-15 ① ME2/3-15 ① MA03/3-15 Ⓨ	MA2.3 Ⓨ	PA 5	ME2 ①		MA2.3-50 Ⓨ	PA 5-50	ME2-50 ①	MA3.5-U Ⓨ	ME2.19-U ①	MA2-C Ⓨ	PA 10-C	ME2-C ①	Adaptor **AU230-130D** with die set **MA..-C** and indentor **PA..-C**		Adaptor **AU230-130D** with die set **ME..-C**	Adaptor **AU520-130C** with die set **MA..-C** and indentor **PA..-C**		Adaptor **AU 520-130 C** with die set **ME..-C**
	16		A 3-M.. A 3-L.. A 3-P14	2A 3-M..	L 3-M L 3-P	ME2/3-15 ① MA03/3-15 Ⓨ			ME3 ①				ME3-50 ①		ME3.14-U ①	MA3-C Ⓨ		ME3-C ①						
A..-P..	25		A 5-M.. A 5-L.. A 5-P16	2A 5-M..	L 5-M L 5-P		MA5 Ⓨ		ME5 ①		MA5-50 Ⓨ		ME5-50 ①		ME5.7-U ①	MA5-C Ⓨ		ME5-C ①						
	35	25* 35	A 7-M.. A 7-L.. A 7-P20	2A 7-M..	L 7-M L 7-P		MA7 Ⓨ	PA 10	ME7 ①		MA7-50 Ⓨ	PA 10-50	ME7-50 ①	MA7.14-U Ⓨ		MA7-C Ⓨ		ME7-C ①						
	50	35* 50	A 10-M.. A 10-L.. A 10-P25	2A 10-M..	L 10-M L 10-P		MA10 Ⓨ		ME10 ②		MA10-50 Ⓨ		ME10-50 ②	MA10.19-U Ⓨ	ME10.24-U ②	MA10-C Ⓨ		ME10-C ①						
	70	50* 70	A 14-M.. A 14-L..	2A 14-M..	L 14-M L 14-P				ME14 ②		MA14-50 Ⓨ	PA 19-50	ME14-50 ②	MA7.14-U Ⓨ	ME3.14-U ②	MA14-C Ⓨ	PA 24-C	ME14-C ①						
			A 14-P30						ME17 ②				ME17-50 ②					ME17-C ①						
L..-M..	95	70* 95	A 19-M.. A 19-L..	2A 19-M..	L 19-M L 19-P				ME19 ②		MA19-50 Ⓨ		ME19-50 ②	MA10.19-U MA19-U Ⓨ	ME2.19-U ②	MA19-C Ⓨ		ME19-C ①						
	120	95* 120	A 24-M.. A 24-L..	2A 24-M..	L 24-M L 24-P				ME24 ②		MA24-50 Ⓨ	PA 24-50	ME24-50 ②	MA24-U Ⓨ	ME10.24-U ②	MA24-C Ⓨ		ME24-C ①						
L..-P..	150	120* 150	A 30-M.. A 30-L..	2A 30-M..	L 30-M L 30-P				ME30 ③				ME30-50 ③	MA30.80-U Ⓨ	ME30-U ②	MA30-C Ⓨ		ME30-C ①						
	185	150* 185	A 37-M.. A 37-L..	2A 37-M..	L 37-M L 37-P								ME37-50 ③	MA37-U ②	ME37-U ②	MA37-C Ⓨ	PA 48-C	ME37-C ①						
	240	185* 240	A 48-M.. A 48-L..	2A 48-M..	L 48-M L 48-P								ME48-50 ③	MA48-U ③	ME48-U ③	MA48-C Ⓨ		ME48-C ②						
2A..-M..	300	240 300	A 60-M.. A 60-L..	2A 60-M..	L 60-M L 60-P								ME60-50** ④			MA60-C Ⓨ	PA 60-C	ME60-C ③						
	400	300 400	A 80-M..	2A 80-M..	L 80-M													ME80-C ③	MA80-3D Ⓨ	PA100-3D	ME80-3D ②	MA80-520 Ⓨ	PA120-520	ME80-520 ②
	500	400 500	A 100-M..	2A 100-M..	L 100-M														MA100-3D Ⓨ		ME100-3D ②	MA100-520 Ⓨ		ME100-520 ②
	630	500 630	A 120-M..	2A 120-M..	L 120-M														MA120-3D Ⓨ	PA120-3D	ME120-3D ②	MA120-520 Ⓨ		ME120-520 ②
	800	630	A 160-M..	2A 160-M..	L 160-M																	MA160-520 Ⓨ	PA200-520	ME160-520 ②
	1000	800	A 200-M..	2A 200-M..	L 200-M																	MA200-520 Ⓨ		ME200-520 ②
A..-M..		35	A 9-M..				MA9 Ⓨ	PA10	ME9 ①		MA9-50 Ⓨ	PA 10-50	ME9-50 ①	MA9.17-U Ⓨ	ME9.20-U ①	MA9-C Ⓨ	PA10-C	ME9-C ①	Adaptor **AU 230-130 D** with die set **MA..-C** and indentor **PA..-C**		Adaptor **AU 230-130 D** with die set **ME..-C**	Adaptor **AU520-130C** with die set **MA..-C** and indentor **PA..-C**		Adaptor **AU 520-130 C** with die set **ME..-C**
		50	A 12-M..						ME12 ②		MA12-50 Ⓨ		ME12-50 ②	MA12.20-U Ⓨ	ME12.17-U ②	MA12-C Ⓨ		ME12-C ①						
		70	A 17-M..						ME17 ②		MA17-50 Ⓨ	PA 19-50	ME17-50 ②	MA9.17-U Ⓨ	ME12.17-U ②	MA17-C Ⓨ	PA24-C	ME17-C ①						
		95	A 20-M..						ME20 ②		MA20-50 Ⓨ		ME20-50 ②	MA12.20-U Ⓨ	ME9.20-U ②	MA20-C Ⓨ		ME20-C ①						
		120	A 29-M..						ME29 ③				ME29-50 ③	MA29.80-U Ⓨ	ME29-U ②	MA29-C Ⓨ		ME29-C ①						
		150	A 35-M..										ME35-50 ③	MA35-U ②	ME35-U ②	MA35-C Ⓨ	PA48-C	ME35-C ①						
		185	A 40-M..										ME40-50 ③	MA40-U ②	ME40-U ③	MA40-C Ⓨ		ME40-C ①						

⬡ = Hexagonal crimp (use one size up with fine stranded conductors, E.G.: 95° fine stranded use A19-.. + ME 19 or A 20-.. + ME 20)

Ⓨ ⬡ = Indent crimp

* Contact Cembre for appropriate die set

N.B.: Number inside symbol indicates the number of crimps on A-M barrel

** Only for B500E, B500NDE and RH50.

DIE SELECTOR CHART

COPPER CONDUCTORS

HYDRAULIC TOOLS

APPLICATION	CONDUCTOR Conductor Size sqmm Low str.	Flex	CONNECTOR TERMINAL	B15MDE DIE SET	HT45-E B450ND-BVE NEST	INDENTOR	DIE SET	HT51 RH50 B500E B500NDE B550E NEST	INDENTOR	DIE SET
	16		2A 3-M..	ME2/3-15 (hexagonal) MA03/3-15 (2)	MA 2.3 (2)		ME 3 (2)	MA2.3-50 (2)	PA5-50	ME3-50 (2)
	25		2A 5-M..		MA 5 (2)		ME 5 (2)	MA5-50 (2)		ME5-50 (2)
	35	25* 35	2A 7-M..		MA 7 (2)	PA 10	ME 7 (2)	MA7-50 (2)	PA10-50	ME7-50 (2)
	50	35* 50	2A 10-M.. 2A 10-2M..		MA 10 (2)		ME 10 (3)	MA10-50 (2)		ME10-50 (3)
 2A..-M..	70	50* 70	2A 14-M.. 2A 14-2M..				ME 14 (3)	MA14-50 (2)	PA19-50	ME14-50 (3)
	95	70* 95	2A 19-M.. 2A 19-2M..				ME 19 (3)	MA19-50 (2)		ME19-50 (3)
	120	95* 120	2A 24-M.. 2A 24-2M..				ME 24 (4)	MA24-50 (2)	PA24-50	ME24-50 (4)
	150	120* 150	2A 30-M.. 2A 30-2M..				ME 30 (5)			ME30-50 (5)
 2A..-2M..	185	150* 185	2A 37-M.. 2A 37-2M..							ME37-50 (5)
	240	185* 240	2A 48-M.. 2A 48-2M..							ME48-50 (6)
	300	240 300	2A 60-M.. 2A 60-2M..							ME60-50** (8)
	400	300 400	2A 80-M.. 2A 80-2M..							
	500	400 500	2A 100-M.. 2A 100-2M..							
	630	500 630	2A 120-M.. 2A 120-2M..							
	800	630	2A 160-M.. 2A 160-2M..							
	1000	800	2A 200-M.. 2A 200-2M..							

HYDRAULIC TOOLS

Low str.	Flex	HT81-U RHU81 DIE SET	DIE SET	HT120 and tools and heads with 130 kN crimping force NEST	INDENTOR	DIE SET	ECW-H3D NEST	INDENTOR	DIE SET	RHU520 NEST	INDENTOR	DIE SET
16		MA3.5-U (2)	ME3.14-U (2)	MA3-C (2)	PA 10-C	ME3-C (2)	Adaptor **AU230-130D** with die set **MA..-C** and indentor **PA..-C**		Adaptor **AU230-130D** with die set **ME..-C**	Adaptor **AU520-130C** with die set **MA..-C** and indentor **PA..-C**		Adaptor **AU520-130C** with die set **ME..-C**
25			ME5.7-U (2)	MA5-C (2)		ME5-C (2)						
35	25* 35	MA7.14-U (2)		MA7-C (2)		ME7-C (2)						
50	35* 50	MA10.19-U (2)	ME10.24-U (3)	MA10-C (2)		ME10-C (2)						
70	50* 70	MA7.14-U (2)	ME3.14-U (3)	MA14-C (2)	PA 24-C	ME14-C (2)						
95	70* 95	MA10.19-U MA19-U (2)	ME2.19-U (3)	MA19-C (2)		ME19-C (2)						
120	95* 120	MA24-U (2)	ME10.24-U (4)	MA24-C (2)		ME24-C (3)						
150	120* 150	MA30.80-U (2)	ME30-U (4)	MA30-C (2)	PA 48-C	ME30-C (3)						
185	150* 185	MA37-U (5)	ME37-U (5)	MA37-C (2)		ME37-C (3)						
240	185* 240	MA48-U (5)	ME48-U (5)	MA48-C (2)		ME48-C (3)						
300	240 300			MA60-C (2)	PA 60-C	ME60-C (5)						
400	300 400					ME80-C (6)	MA80-3D (2)	PA100-3D	ME80-3D (3)	MA80-520 (2)	PA120-520	ME 80-520 (3)
500	400 500						MA100-3D (2)		ME100-3D (3)	MA 100-520 (2)		ME 100-520 (3)
630	500 630						MA120-3D (2)	PA120-3D	ME120-3D (4)	MA 120-520 (2)		ME 120-520 (4)
800	630									MA 160-520 (2)	PA200-520	ME 160-520 (3)
1000	800									MA 200-520 (2)		ME 200-520 (3)

Hexagonal crimp (use one size up with fine stranded conductors, E.G.: 95 fine stranded use A19-.. + ME 19 or A 20-.. + ME 20)*

Indent crimp

** Contact Cembre for appropriate die set*

*** Only for B500E, B500NDE and RH50.*

DIE SELECTOR CHART

COPPER CONDUCTORS

APPLICATION	CONDUCTOR	CONNECTOR							HYDRAULIC TOOLS								
									B15MDE	HT45-E B450ND-BVE	HT51 RH50 B500 B500ND	HT81-U RHU81	HT 120 and tools and heads with 130 kN crimping force			ECW-H3D	
	Conductor Size Flex sqmm	TERMINAL							DIE SET		DIE SET		NEST	INDENTOR	DIE SET	NEST	INDENTOR
ANE..-M.. 	10	ANE2-M..	ANE2-P12	ANE2-U..					NN4-15		MN2RF-50		MN2-C	PN7-C	MN2RF-C	Adaptor AU230-130D with die set MN..-C and indentor PN..-C or with die set MN..-RF-C and die set MN..F-C	
	16	ANE3-M..	ANE3-P14	ANE3-U..							MN3RF-50		MN3-C		MN3RF-C		
	25	ANE5-M..	ANE5-P16								MN5RF-50		MN5-C		MN5RF-C		
	35	ANE7-M..	ANE7-P20								MN7RF-50		MN7-C		MN7RF-C		
ANE..-P.. 	50	ANE10-M..									MN10RF-50		MN10-C	PN14-C	MN10RF-C		
	70	ANE14-M..									MN14RF-50		MN14-C		MN14RF-C		
	95	ANE19-M..									MN19RF-50		MN19-C	PN24-C	MN19RF-C		
	120	ANE24-M..									MN24RF-50		MN24-C		MN24RF-C		
ANE..-U.. 	150	ANE30-M..											MN30-C	PN37-C	MN30RF-C		
EXTRA FLEXIBLE COPPER CONDUCTORS	35	ANE9-M..									MN7RF-50		MN9-C	PN14-C	MN7RF-C	Adaptor AU230-130D with die set MN..-C and indentor PN..-C or with die set MN..-RF-C and die set MN..F-C	
	50	ANE12-M..									MN12F-50		MN12-C		MN12F-C		
ANE..-M..	70	ANE17-M..									MN17F-50		MN17-C	PN24-C	MN17F-C		
	95	ANE20-M..									MN20F-50		MN20-C		MN20F-C		
	120	ANE29-M..											MN29-C	PN37-C	MN29F-C		
	150	ANE35-M..											MN35-C		MN35F-C		

COPPER CONDUCTORS

	Conductor Size Flex sqmm	TERMINAL							DIE SET		DIE SET						
PK ... 	0,3 ÷ 4	PKD506÷PKD418	PKE508÷PKE418	PKC508÷PKC418	KE506÷KE412				KE4-15								
	4 ÷ 16	PKD410÷PKD1618	PKE410÷PKE1618	PKC410÷PKC1618	KE410÷KE1616				KE16-15								
	16	PKD16..	PKE16..	PKC16..	KE16..				KE35-15		MTT16-50						
	25	PKD25..	PKE25..	PKC25..	KE25..						MTT25-50						
KE ... 	35	PKD35..		PKC35..	KE35..						MTT35-50						
	50	PKD50..		PKC50..							MTT50-50						
	70			PKC70..							MTT70-50						
	95			PKC95..							MTT95-50						
	120			PKC120..							MTT120-50						

COPPER CONDUCTORS

	Conductor Size Flex sqmm	TERMINAL							DIE SET	COMP. APERTURE		DIE SET					
PKT ... 	2 x 0,5	PKT508 PKT510							KE4-15	1							
	2 x 0,75	PKT7508 PKT7510								1,5							
	2 x 1	PKT108 PKT110								2,5							
	2 x 1,5	PKT1508 PKT1512								2,5							
	2 x 2,5	PKT2510 PKT2512							KE4-15 KE16-15	4							
	2 x 4	PKT412							KE16-15	6							
	2 x 6	PKT614								10							
	2 x 10	PKT1014							KE16-15 KE35-15	16		MTT16-50					
	2 x 16	PKT1614							KE35-15	35		MTT35-50					

= Indent crimp = Radial crimp = Trapezium crimp

DIE SELECTOR CHART

TAP-OFF ON COPPER CONDUCTOR

APPLICATION	CONDUCTOR		CONNECTOR				HT45-E B450ND-BVE	HT51 RH50 B500E B500NDE B550E	HT 81-U RHU 81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
	Conductor Size sqmm		CONNECTOR	CONNECTOR			DIE SET	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET
	Run	Tap										
	6 ÷ 2,5	6 ÷ 1,5	C6-C6ST	C6-C6			MC6 (1)	MC6-50 (1)	MC6.25-U (1)			
	10	10 ÷ 1,5	C10-C10ST	C10-C10			MC10 (1)	MC10-50 (1)	MC10-U (1)	MC10-C (1)	Adaptor AU230-130D with die set MC..-C	Adaptor AU520-130C with die set MC..-C
	16	16 ÷ 1,5	C16-C16ST	C16-C16			MC25 (2)	MC25-50 (2)	MC6.25-U MC25-U (1)	MC25-C (1)		
	25 ÷ 16	10 ÷ 1,5	C25-C10ST	C25-C10								
	25	25 ÷ 16	C25-C25ST	C25-C25								
	40 ÷ 35	16 ÷ 1,5	C35-C16ST	C35-C16			MC35 (2)	MC35-50 (2)	MC35-U (1)	MC35-C (1)		
	40 ÷ 35	40 ÷ 25	C35-C35ST	C35-C35								
	50	25 ÷ 10										
	70 ÷ 63	25 ÷ 1,5	C70-C25NST	C70-C25N								
	50	25 ÷ 4	C50-C25ST	C50-C25				*MC70-50 (3)	MC70-80-U (3)	MC70-C (3)	MC70-3D (1)	
	*50	50 ÷ 35	C50-C50ST	C50-C50								
	*70 ÷ 50	40 ÷ 4	C70-C35ST	C70-C35								
	*70 ÷ 50	70 ÷ 35	C70-C70ST	C70-C70								
	100 ÷ 95	40 ÷ 4	C95-C35ST	C95-C35					MC95-80-U (3)	MC95-C (3)	MC95-3D (1)	
	100 ÷ 95	70 ÷ 40	C95-C70ST	C95-C70								
	100 ÷ 95	100 ÷ 63	C95-C95ST	C95-C95								
	125 ÷ 110	125 ÷ 25	C120-C120ST	C120-C120						MC185-C (3)	MC185-3D (1)	
	160 ÷ 150	125 ÷ 25	C150-C120ST	C150-C120								
	125	125										
	150	150 ÷ 63	C150-C150ST	C150-C150								
	125	125										
	185	100 ÷ 16	C185-C95ST	C185-C95								
	185 ÷ 120	185 ÷ 120	C185-C185ST	C185-C185							MC240-3D (1)	
	240 ÷ 150	120 ÷ 95	C240-C120ST	C240-C120								

H.V. COPPER CONDUCTORS

Cond. Size sqmm	TERMINAL		TERMINAL				DIE SET	DIE SET	DIE SET	DIE SET	DIE SET
25 R	MT25-TD	MT25-GC	CA25-M..	CA25-2M..	MT25-C..		MMT25-50 ◯	MMT25-U ◯	MMT25-C ◯	Adaptor AU230-130D with die set MMT..-C	Adaptor AU520-130C with die set MMT..-C
35 RC/S ÷ 40 S	MT40S-TD	MT40S-GC	CA40S-M..	CA40S-2M..	MT40S-C..		MMT50-50 ◯	MMT50-U ◯	MMT50-C ◯		
50 RC	MT50R-TD	MT50R-GC	CA50R-M..	CA50R-2M..	MT50R-C..						
50 S	MT50S-TD	MT50S-GC	CA50S-M..	CA50S-2M..	MT50S-C..						
63 S ÷ 70 S	MT70S-TD	MT70S-GC	CA70S-M..	CA70S-2M..	MT70S-C..		MMT95-50 ◯	MMT95-U ◯	MMT95-C ◯		
80 S ÷ 95 RC	MT95R-TD	MT95R-GC	CA95R-M..	CA95R-2M..	MT95R-C..						
95 S ÷ 100 S	MT95S-TD	MT95S-GC	CA95S-M..	CA95S-2M..	MT95S-C..						
120 RC/S ÷ 150 RC	MT150R-TD	MT150R-GC	CA150R-M..	CA150R-2M..	MT150R-C..		MMT200-50 ◯	MMT200-U ◯	MMT200-C ◯		
150 S ÷ 160 RC	MT150S-TD	MT150S-GC	CA150S-M..	CA150S-2M..	MT150S-C..						
160 S ÷ 200 RC	MT200R-TD	MT200R-GC	CA200R-M..	CA200R-2M..	MT200R-C..						
185 BR/BS	MT185-TD	MT185-GC	CA185-M..	CA185-2M..	MT185-C..						
200 S ÷ 240 RC	MT240R-TD	MT240R-GC	CA240R-M..	CA240R-2M..	MT240R-C..				MMT315-C ◯		
240 S ÷ 315 RC	MT315R-TD	MT315R-GC	CA315R-M..	CA315R-2M..	MT315R-C..						
315 S	MT315S-TD	MT315S-GC	CA315S-M..	CA315S-2M..	MT315S-C..						
400 R	MT400-TD		2A80-M..	2A80-2M..					ME80-C ⬡	ME80-3D ⬡	ME80-520 ⬡
500 R	MT500-TD		2A100-M..	2A100-2M..						ME100-3D ⬡	ME100-520 ⬡
600 R ÷ 630 R	MT630-TD		2A120-M..	2A120-2M..						ME120-3D ⬡	ME120-520 ⬡

⬡ = Hexagonal crimp ◯ = oval crimp ◯ = circular crimp

*When using die set type MC70-50, the conductors marked with a star must be annealed.

ALUMINIUM CONDUCTORS

APPLICATION	CONDUCTOR	CONNECTOR		HYDRAULIC TOOLS			
				HT 131-UC RHU 131-C B1350-UCE B1300-UCE			
	Conductor Size sqmm	LUGS		DIE HOLDER	DIE		INDENTOR
CAA..-M.. 	10	CAA10-M..		AU130-150	MV35	MUA35	PS130-35/E
	16	CAA16-M..					
	25	CAA25-M..					
	35	CAA35-M..	MTA35-C				
MTA..-C 	35	CAA35-20-M..	MTA35-20-C14-60		MV95	MUA95	PS130-95/E
	50	CAA50-M..	MTA50-C				
	70	CAA70-M..	MTA70-C..				
	95	CAA95-M..	MTA95-C..				
	120	CAA120-M..	MTA120-C..		MV150	MUA150	PS130-150/E
	150	CAA150-M..	MTA150-C..				
	185	CAA185-M..	MTA185-C..	AU130-240	MV240	MUA240	PS130-240/E
	240	CAA240-M..	MTA240-C..				
	300	CAA300-34M..			MUA300-34		
	Conductor Size sqmm	LUGS		DIE HOLDER	DIE		INDENTOR
AA..-M.. 	16	AA16-M..		AU130-150	MUA35		PS130-35/E
	25	AA25-M..					
	35	AA35-M..					
	50	AA50-M..			MUA95		PS130-95/E
	70	AA70-M..					
	95	AA95-M..					
	120	AA120-M..			MUA150		PS130-150/E
	150	AA150-M..					
	185	AA185-M..		AU130-240	MUA240		PS130-240/E
	240	AA240-M..					
	300	AA300-34M..			MUA300-34		

= *Indent crimp*

DIE SELECTOR CHART FOR DEEP STEPPED INDENTING WITH CONTAINING DIES

ALUMINIUM CONDUCTORS


MTMA..-..GC

Conductor Size sqmm	SPLICE	Conductor Size sqmm Al	Conductor Size sqmm Al/Cu	SPLICES	HYDRAULIC TOOLS HT 131-UC RHU 131-C B1350-UCE B1300-UCE DIE HOLDER	NEST	INDENTOR
10	MTMA10-GC				AU130-150	MVM35	PS130-35/E
16	MTMA16-GC	16	10	MTMA16-10GC			
25	MTMA25-GC	25	10	MTMA25-10GC			
		25	16	MTMA25-16GC			
35	MTMA35-GC						
35	MTMA35-20-GC						
50	MTMA50-GC	50	25	MTMA50-25GC		MVM95	PS130-95/E
		50	35	MTMA50-35GC			
70	MTMA70-GC	70	35	MTMA70-35GC			
		70	50	MTMA70-50GC			
95	MTMA95-GC	95	50	MTMA95-50GC			
		95	70	MTMA95-70GC			
120	MTMA120-GC	120	70	MTMA120-70GC		MVM150	PS130-150/E
		120	95	MTMA120-95GC			
150	MTMA150-GC	150	70	MTMA150-70GC			
		150	95	MTMA150-95GC			
		150	120	MTMA150-120GC			
185	MTMA185-GC	185	120	MTMA185-120GC	AU130-240	MVM240	PS130-240/E
		185	150	MTMA185-150GC			
240	MTMA240-GC	240	150	MTMA240-150GC			
		240	185	MTMA240-185GC			

= *Indent crimp*

PRE-ROUNDERS SELECTION

ALUMINIUM CONDUCTOR SIZE sqmm	PRE-ROUNDER	DIE-SUPPORT
23	UP 130-25	AC 130-P
35	UP 130-35	
50	UP 130-50	
70	UP 130-70	
95	UP 130-95	
120	UP 130-120	
150	UP 130-150	
185	UP 130-185	
240	UP 130-240	

DIES DESCRIPTION

1) AU 130-.. DIE-HOLDER
Used to house dies and pre-rounders.

2) UP 130-.. PRE-ROUNDERS
Used to round aluminium sectoral conductors in order to introduce them into circular connectors.
Each pre-rounder is made of two parts: the upper part is housed in die-holder AU 130-.. and the lower part is locked onto AC 130-P.. die support.

3) AC 130-P.. DIE SUPPORT
Houses lower part of pre-rounder UP 130-..

4) MUA... DIES
Containing dies.

5) PS 130-../E INDENTORS
Such indentors are specifically engineered for deep indentation of aluminium conductors of any stranding configuration.

DIES SEQUENCE

CONDUCTOR ROUNDING

CRIMPING

ALUMINIUM CONDUCTORS

APPLICATION	CONDUCTOR	CONNECTOR				HYDRAULIC TOOLS							
						HT 120 and tools and heads with 130 kN crimping force	HT131-UC RHU131-C B1350-UCE B1300-UCE			ECW-H3D	RHU230-630		
	Conductor Size sqmm	LUGS				HEXAGONAL CRIMP	INDENT CRIMP			HEXAGONAL CRIMP	INDENT CRIMP		
						DIE SET	DIE HOLDER	DIE	INDENTOR	DIE SET	ADAPTOR	DIE	INDENTOR
CAA..-M.. 	300	CAA300-34-M..				MK34L-C	AU130-240	MUA300-34	PS130-240/E	MK34-3D			
	300	CAA300-M16								MK38-3D	AU 230-630	MV230-400MC5E	PS230-400 5E
	400	CAA400-M16											
	500	CAA500-M16TNBD											
	630	CAA630-4M8								MK46-3D		MV230-630MC6E	PS230-630 6E
	Conductor Size sqmm	LUGS				DIE SET	DIE HOLDER	DIE	INDENTOR	DIE SET	ADAPTOR	DIE	INDENTOR
	300	AA300-34-M..				MK34L-C	AU130-240	MUA300-34	PS130-240/E	MK34-3D			
AA..-M.. 	300	AA300-M16								MK38-3D	AU 230-630	MUA230-630-400	PS230-400 5E
	400	AA400-M16											
	500	AA500-40-M16											
	630	AA630-M16								MK46-3D		MUA230-630-630	PS230-630 6E
	Conductor Size sqmm	SPLICES	Conductor Size sqmm		SPLICE	DIE SET	DIE HOLDER	DIE	INDENTOR	DIE SET	ADAPTOR	DIE	INDENTOR
			Al	Al/Cu									
	300	MTMAD300/1	300	95	MTMAD300-95-GC	MK34L-C	AU130-240	MUA300-34	PS130-240/E	MK34-3D			
				150	MTMAD300-150-GC								
		MTMAD300-GC		185	MTMAD300-185-GC								
				240	MTMAD300-240-GC								
MTMA.. 	300	MTMA300-GC								MK38-3D	AU 230-630	MVM230-400MJ5E	PS230-400 5E
	400	MTMA400/1	400	240	MTMA400-240-GC								
				300	MTMA400-300-GC								
	500	MTMA500-40/1											
	500	MTMA500-GC	500	300	MTMA500-300-GC					MK46-3D		MVM230-630MJ6E	PS230-630 6E
				400	MTMA500-400-GC								
	630	MTMA630/1											

= Indent crimp = Hexagonal crimp

DIE SELECTOR CHART

COPPER CONDUCTORS

APPLICATION	CONDUCTOR			CONNECTOR			HYDRAULIC TOOLS									
							B15MDE		HT51 RH50 B500E B500NDE		HT 120 and tools and heads with 130 kN crimping force		ECW-H3D		RHU520	
	Conductor Size sqmm	Conductor Size AWG	Conductor Size Navy	LUGS		SPLICE	DIE SET		DIE SET		DIE SET		DIE SET		DIE SET	
C..-.. 	10	8	23	C8-..	CL8-..	BSCL8	ME03/2-15 (1) ME2/3-15 (1) MA03/3-15 (1)		MY2-50 (1)		MY2-C (1)		Adaptador **AU230-130D** con matriz **MY..-C**		Adaptador **AU520-130C** con matriz **MY..-C**	
	16	6		C6-..	CL6-..	BSCL6	ME2/3-15 (1) MA03/3-15 (1)		MY3-50 (1)		MY3-C (1)					
	25	4	40	C4-..	CL4-..	BSCL4			MY4-50 (1)		MY4-C (1)					
CL..-.. 		3	50	C3-..	CL3-..	BSCL3			MY5-50 (1)		MY5-C (1)					
	35	2	60	C2-..	CL2-..	BSCL2			MY6-50 (1)		MY6-C (1)					
		1	75	C1-..	CL1-..	BSCL1			MY7-50 (1)		MY7-C (1)					
	50	1/0	100	C1/0..	CL1/0..	BSCL1/0			MY10-50 (2)		MY10-C (1)					
	70	2/0	125	C2/0..	CL2/0..	BSCL2/0			MY14-50 (2)		MY14-C (1)					
CL..-.. 	95	3/0	150	C3/0..	CL3/0..	BSCL3/0			MY16-50 (2)		MY16-C (1)					
		4/0	200	C4/0..	CL4/0..	BSCL4/0			MY19-50 (2)		MY19-C (1)					
	120	250 MCM	250	C250-..	CL250-..	BSCL250			MY24-50 (2)		MY24-C (1)					
	150	300 MCM	300	C300-..	CL300-..	BSCL300			MY30-50 (2)		MY30-C (1)					
	185	350 MCM	350	C350-..	CL350-..	BSCL350			MY36-50 (2)		MY36-C (1)					
		400 MCM	400	C400-..	CL400-..	BSCL400			MY37-50 (2)		MY37-C (1)					
BSCL.. 	240	500 MCM		C500-..	CL500-..	BSCL500			MY48-50 (3)		MY48-C (2)					
	300	600 MCM		C600-..	CL600-..	BSCL600					MY60-C (2)					
		750 MCM		C750-..	CL750-..	BSCL750					MY76-C (2)					

○ = Circular crimp ⌓ = Indent crimp ⬡ = Hexagonal crimp

N.B.: Number inside symbol indicates the number of crimps for C short barrel lugs only.

DIN 46235 - 46267 T.1

APPLICATION	CONDUCTOR	CONNECTOR		HYDRAULIC TOOLS							
				B15MD	HT45 B450ND-BVE	HT51 RH50 B500 B500ND	HT81-U RHU81 ◊	HT 120 and tools and heads with 130 kN crimping force		ECW-H3D	RHU520
		LUGS	SPLICES	DIE SET	DIE SET	DIE SET	DIE SET	NEST	INDENTOR	NEST / INDENTOR	
	6	DR6-..	DSV6	MK5/8-15 (1)	MK5 (1)	MK5-50 (1)	MK5-50 (1)	MK5-C (1)		Adaptor AU230-130D with die set MK..-C	Adaptor AU520-130C with die set MK..-C
	10	DR10-..	DSV10		MK6 (1)	MK6-50 (1)	MK6-50 (1)	MK6-C (1)			
	16	DR16-..	DSV16		MK8 (2)	MK8-50 (2)	MK8-50 (2)	MK8-C (1)			
	25	DR25-..	DSV25		MK10 (2)	MK10-50 (2)	MK10-50 (2)	MK10-C (1)			
	35	DR35-..	DSV35		MK12 (2)	MK12-50 (2)	MK12-50 (2)	MK12-C (1)			
	50	DR50-..	DSV50		MK14 (3)	MK14-50 (3)	MK14-50 (3)	MK14-C (2)		MK14-3D (2)	
	70	DR70-..	DSV70		MK16 (3)	MK16-50 (3)	MK16-50 (3)	MK16-C (2)		MK16-3D (2)	
	95	DR95-..	DSV95		MK18 (4)	MK18-50 (4)	MK18-50 (4)	MK18-C (2)		MK18-3D (2)	
	120	DR120-..	DSV120		MK20 (4)	MK20-50 (4)	MK20-50 (4)	MK20-C (2)		MK20-3D (2)	
	150	DR150-..	DSV150		MK22L (4)	MK22-50 (4)	MK22-50 (4)	MK22-C (2)		MK22-3D (2)	
	185	DR185-..	DSV185			MK25-50 (5)	MK25-50 (5)	MK25-C (2)		MK25-3D (2)	
	240	DR240-..	DSV240			MK28-50 (5)	MK28-50 (5)	MK28-C (4)		MK28-3D (2)	
	300	DR300-..	DSV300			MK32-50* (6)		MK32-C (4)		MK32-3D (2)	
	400	DR400-..	DSV400							MK38-3D (3)	MK38-520 (3)
	500	DR500-..	DSV500							MK42-3D (3)	MK42-520 (3)
	625	DR625-..	DSV625							MK44-3D (3)	MK44-520 (3)
	800	DR800-..	DSV800								MK52-520 (3)
	1000	DR1000-..	DSV1000								MK58-520 (3)

= Indent crimp = Hexagonal crimp

* Only for B500, B500ND and RH50

◊ Tools type HT 81-U and RHU 81 with adaptor type 6780232 can use the same dies of HT 51 but are equipped with spring type 6522051

NB: for through connectors this is the number of crimps per conductor

DIN EN 50182

APPLICATION	Conductor Size sqmm		MATERIAL (Al)		HT45-E B450ND-BVE	HT51 RH50 B500E B500NDE	HT81-U RHU81 ◊	HT 120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU450	RHU520
	rm/sm	re/se	LUGS	SPLICES	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET
 AAD..	16	25	AAD16-M..	DSVA16	MK12B (4)	MK12B-50 (4)	MK12B-50 (4)	MK12-C (4)	Adaptor AU230-130D with die set MK...-C	Adaptor AU450-130D with die set MK...-C	Adaptor AU520-130C with die set MK...-C
	25	35	AAD25-M..	DSVA25	MK12B (4)	MK12B-50 (4)	MK12B-50 (4)	MK12-C (4)			
	35	50	AAD35-M..	DSVA35	MK14B (5)	MK14B-50 (5)	MK14B-50 (5)	MK14-C (5)			
	50	70	AAD50-M..	DSVA50	MK16B (5)	MK16B-50 (5)	MK16B-50 (5)	MK16-C (5)			
	70	95	AAD70-M..	DSVA70	MK18B (6)	MK18B-50 (6)	MK18B-50 (6)	MK18-C (6)			
	95	120	AAD95-M..	DSVA95	MK22B (6)	MK22B-50 (6)	MK22B-50 (6)	MK22-C (6)			
	120	150	AAD120-M..	DSVA120	MK22B (6)	MK22B-50 (6)	MK22B-50 (6)	MK22-C (6)			
	150	185	AAD150-M..	DSVA150		MK25B-50 (6)	MK25B-50 (6)	MK25-C (6)			
	185	240	AAD185-M..	DSVA185		MK28B-50 (6)	MK28B-50 (6)	MK28L-C (6)			
 DSVA..	240	300	AAD240-M..	DSVA240		MK 32B-50 (8)		MK32L-C (6)			
	300		AAD300-M..	DSVA300				MK34L-C (6)			
	400		AAD400-M..	DSVA400 / DSVA401					MK38-3D (4)	MK38-450 (4)	MK38-520 (4)
	500		AAD500-M..	DSVA500 / DSVA501					MK44-3D (4)	MK44-450 (4)	MK44-520 (4)
	625			DSVA625						MK52-450 (5)	MK52-520 (5)
	800			DSVA800						MK58-450 (5)	MK58-520 (5)
	1000			DSVA1000						MK60-450 (5)	MK60-520 (5)

rm = round stranded
sm = sector stranded
re = round solid
se = sector solid

⬡ = Hexagonal crimp

NB: for through connectors this is the number of crimps per conductor

◊ Tools type HT 81-U and RHU 81 with adaptor type 6780232 can use the same dies of HT 51 but are equipped with spring type 6522051

RHU600 DIES CROSS REFERENCE CHART

DIE INDEX	DIE TYPE		
	 CEMBRE	ALCOA	HUSKIE
10SH	M10SH-600	6010SH	HA60-01
12SH	M12SH-600	6012SH	HA60-02
14SH	M14SH-600	6014SH	HA60-03
16SH	M16SH-600	6016SH	HA60-04
18SH	M18SH-600	6018SH	HA60-05
20SH	M20SH-600	6020SH	HA60-06
74SH	M74SH-600	6074SH	HA60-07
75SH	M75SH-600	6075SH	HA60-08
76SH	M76SH-600	6076SH	HA60-09
76.1SH	M76.1SH-600	6076.1SH	-
20AH	M20AH-600	6020AH	HA60-20
24AH	M24AH-600	6024AH	HA60-21
27AH	M27AH-600	6027AH	HA60-22
30AH	M30AH-600	6030AH	HA60-23
34AH	M34AH-600	6034AH	HA60-24
36AH	M36AH-600	6036AH	HA60-25
38AH	M38AH-600	6038AH	HA60-26
40AH	M40AH-600	6040AH	HA60-27
74AH	M74AH-600	6074AH	HA60-28
75AH	M75AH-600	6075AH	HA60-29
76AH	M76AH-600	6076AH	HA60-30
07CD	M7CD-600	6007CD	HA60-40
08CD	M8CD-600	6008CD	HA60-41
09CD	M9CD-600	6009CD	HA60-42
10CD	M10CD-600	6010CD	HA60-43
11CD	M11CD-600	6011CD	HA60-44
12CD	M12CD-600	6012CD	HA60-45
13CD	M13CD-600	6013CD	HA60-46
14CD	M14CD-600	6014CD	HA60-47
15CD	M15CD-600	6015CD	HA60-48
16CD	M16CD-600	6016CD	HA60-49
17CD	M17CD-600	6017CD	HA60-50

RHU1000 DIES CROSS REFERENCE CHART

DIE INDEX	DIE TYPE		
	 CEMBRE	ALCOA	HUSKIE
10SH	M10SH-1000	10010SH	HA100-01
12SH	M12SH-1000	10012SH	HA100-02
14SH	M14SH-1000	10014SH	HA100-03
16SH	M16SH-1000	10016SH	HA100-04
18SH	M18SH-1000	10018SH	HA100-05
20SH	M20SH-1000	10020SH	HA100-06
76SH	M76SH-1000	10076SH	-
20AH	M20AH-1000	10020AH	HA100-20
24AH	M24AH-1000	10024AH	HA100-21
27AH	M27AH-1000	10027AH	HA100-22
30AH	M30AH-1000	10030AH	HA100-23
34AH	M34AH-1000	10034AH	HA100-24
36AH	M36AH-1000	10036AH	HA100-25
38AH	M38AH-1000	10038AH	HA100-26
40AH	M40AH-1000	10040AH	HA100-27
76AH	M76AH-1000	10076AH	HA100-30
42AH	M42AH-1000	10042AH	HA100-34
44AH	M44AH-1000	10044AH	HA100-36
48AH	M48AH-1000	10048AH	HA100-38
07CD	M7CD-1000	10007CD	HA100-40
08CD	M8CD-1000	10008CD	HA100-41
09CD	M9CD-1000	10009CD	HA100-42
10CD	M10CD-1000	10010CD	HA100-43
11CD	M11CD-1000	10011CD	HA100-44
12CD	M12CD-1000	10012CD	HA100-45
13CD	M13CD-1000	10013CD	HA100-46
14CD	M14CD-1000	10014CD	HA100-47
15CD	M15CD-1000	10015CD	HA100-48
16CD	M16CD-1000	10016CD	HA100-49
17CD	M17CD-1000	10017CD	HA100-50
18CD	M18CD-1000	10018CD	HA100-51
19CD	M19CD-1000	10019CD	HA100-52
20CD	M20CD-1000	10020CD	HA100-53

APPENDIX


File no. E472117
c UL us
File no. E212000
Lloyd's Register
TA
TYPE APPROVED

Type/Code Cross-Reference chart

Type	Code
1052007	3005900
1052007N	3005901
1052009	3005903
1052009N	3005904
1052011	3005906
1052011N	3005907
1052013	3005909
1052013N	3005910
1052016	3005912
1052016N	3005913
1052021	3005915
1052021N	3005916
1052029	3005918
1052029N	3005919
1052036	3005921
1052036N	3005922
1052042	3005924
1052042N	3005925
1052048	3005927
1052048N	3005928
1053M12	3005958
1053M12N	3005959
1053M16	3005961
1053M16N	3005962
1053M20	3005964
1053M20N	3005965
1053M25	3005967
1053M25N	3005968
1053M32	3005970
1053M32N	3005971
1053M40	3005973
1053M40N	3005974
1053M50	3005976
1053M50N	3005977
1053M63	3005979
1053M63N	3005980
1112	3005715
1112N	3005716
1116	3005720
1116N	3005721
1120	3005725
1120N	3005726
1125	3005730
1125N	3005731
1132	3005735
1132N	3005736
1140	3005740
1140N	3005741
1141012	3005120
1141012N	3005121
1141112	3005155
1141112N	3005156
1141200	3005170
1141200N	3005171
1142007	3005010
1142007G	3005012
1142007N	3005011
1142009	3005015
1142009G	3005017
1142009N	3005016
1142011	3005020
1142011G	3005022
1142011N	3005021
1142013	3005025
1142013G	3005027
1142013N	3005026
1142016	3005030
1142016G	3005032
1142016N	3005031
1142021	3005035
1142021G	3005037
1142021N	3005036
1142029	3005040
1142029G	3005042
1142029N	3005041
1142036	3005045
1142036G	3005047
1142036N	3005046
1142042	3005050
1142042G	3005052
1142042N	3005051
1142048	3005055
1142048G	3005057
1142048N	3005056

Type	Code
1143M12	3005215
1143M12G	3005217
1143M12N	3005216
1143M16	3005220
1143M16G	3005222
1143M16N	3005221
1143M20	3005225
1143M20G	3005227
1143M20N	3005226
1143M25	3005230
1143M25G	3005232
1143M25N	3005231
1143M32	3005235
1143M32G	3005237
1143M32N	3005236
1143M40	3005240
1143M40G	3005242
1143M40N	3005241
1143M50	3005245
1143M50G	3005247
1143M50N	3005246
1143M63	3005250
1143M63G	3005252
1143M63N	3005251
1150	3005745
1150N	3005746
1163	3005750
1163N	3005751
1253M12	3006750
1253M12N	3006751
1253M16	3006755
1253M16N	3006756
1253M20	3006760
1253M20N	3006761
1253M25	3006765
1253M25N	3006766
1253M32	3006770
1253M32N	3006771
1253M40	3006775
1253M40N	3006776
1253M50	3006780
1253M50N	3006781
1253M63	3006785
1253M63N	3006786
1400	3003110
1401	3003114
1401B	3003116
1401BN	3003117
1401C	3003118
1401CN	3003119
1401N	3003115
1402	3003120
1402N	3003121
1403	3003125
1404	3003130
1405	3003135
1407	3003155
1408	3003170
1410	3005610
1410N	3005611
1411	3005615
1411N	3005616
1412	3005620
1412N	3005621
1413	3005625
1413N	3005626
1414	3005630
1414N	3005631
1415	3005635
1415N	3005636
1500.07	3002010
1500.07N	3002011
1500.09	3002015
1500.09N	3002016
1500.11	3002020
1500.11N	3002021
1500.12	3002120
1500.12N	3002121
1500.13	3002025
1500.13N	3002026
1500.14	3002110
1500.14N	3002111
1500.16	3002030
1500.16N	3002031

Type	Code
1500.21	3002035
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1500.M32	3002225
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1700.2	3004015
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1700N	3003016
1700P	3006015
1700T	3003515
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1701	3003020
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1701N	3003021
1701P	3006020
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1701T	3003517
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1702	3003025
1702.2	3004025
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1702.5	3004425
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1702CONC	3003523
1702CONCN	3003524
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1702P	3006025
1702PN	3006026
1702T	3003519
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1703	3003030
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1703.5	3004430
1703P	3006030
1704	3003035
1704.2	3004035
1704P	3006035
1705	3003040
1705.2	3004040
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1708	3003055
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182129	3017670

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1883	3016230
1884	3016235
1884A	3016236
1885	3016240
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1887	3016250
1888	3016255
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1891A	3016431
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20432520N	3017959
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2176	3051430
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2326	3052020
2329	3052030
2333	3052110
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2342	3052140
2344	3052150
2346	3052160
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2900.09N	3012015
2900.11N	3012020
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2900.16N	3012030
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2900.29N	3012040
2900.36N	3012045
2900.42N	3012050
2900.48N	3012055
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2900.M63N	3012250
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2901.16N	3012602
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2901.29N	3012608
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2901.42N	3012614
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2910.13N	3012531
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2911.09N	3012113
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2A100-M20	2509670
2A120-2M14/55°	2509952
2A120-M16	2509870
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2A14-M14	2503150
2A14-M16	2503190
2A160-M20	2509980
2A19-M10	2504030
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2A19-M14	2504190
2A19-M16	2504270
2A19-M20	2504350
2A200-M20	2509989
2A24-M10	2505030
2A24-M12	2505150
2A24-M14	2505230
2A24-M16	2505310
2A24-M20	2505390
2A3-M10	2500070
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2A5-M10	2500570
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2A60-M12	2508480
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2A60-M16	2508530
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2A7-M10	2501110
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2A80-2M14/55°	2509346
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2A10-2M12	2502410
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2A160-2M16	2509982
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3412016	3016657
3412021	3016685
3412029	3016705
3422016	3016658
3422021	3016686
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3441012	3017045
3441034	3017065
3572007	3017410
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3572013	3017445
35720131	3017446
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3572021	3017480
3573M16	3017520
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36A3M2554	3016938
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A37-L10	2320510
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A10-M14	2220230
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A12-M6/15	2230210
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A160-M20	2374170
A17-M10	2250270
A17-M10/19	2250280
A17-M12	2250310
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A17-M6	2250210
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A19-M10	2260190
A19-M12	2260230
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A24-M10	2280150
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A24-M14	2280230
A24-M16	2280270
A24-M20	2280310
A24-M8	2280110
A24B-M10/19	2280155
A24B-M8/19	2280115
A29-M10	2290270
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A2-M5/9	2170155
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A2-P12	2170650
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A30-M14	2300230
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A30B-M10/19	2300120
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Type/Code Cross-Reference chart

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A120-4ESI	2372850
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AA630-M16	2743370
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AA95-M12	2741030
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AAD240-M20	8016856
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ANE12-M12	2442230
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ANE14-M8	2446420
ANE14-M10	2446430
ANE14-M12	2446440
ANE14-M14	2446450
ANE17-M10	2447260
ANE17-M10/19	2447265
ANE17-M12	2447270
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ANE17-M16	2447290
ANE17-M6	2447240
ANE17-M8	2447250
ANE19-M8	2449510
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ANE19-M14	2449540
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ANE24-M16	2453590
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ANE29-M12	2456030
ANE29-M14	2456050
ANE29-M16	2456070
ANE29-M20	2456090
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ANE3-M12	2415850
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ANE3-M5	2415810
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ANE3-M8	2415830
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ANE3-U5	2415875
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ANE30-M14	2458350
ANE30-M16	2458370
ANE30-M20	2458390
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ANE35-M14	2460030
ANE35-M16	2460050
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ANE5-M10	2418540
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ANE5-M5	2418510
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ANE7-M10	2422320
ANE7-M12	2422330
ANE7-P20	2422360
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ANE9-M12	2430180
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ANE9-M8	2430160
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AU130-240	2615590
AU230-130D	2636960
AU230-630	2680300
AU520-130C	2648230
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B-FL750E	2598867
B-TC250E	2596268
B-TC250BSE	2596264
B-TC450E	2599407
B-TC4500E	2599418
B-TC500E	2598829
B-TC500YE	2598817
B-TC550E	2599422
B-TC650E	2599442
B-TC650-SCE	2599432
B-TC950E	2599462
B-TD270E	2598953
B-TD410TE	2598947
B15MDE	2599839
B1300-CE	2599352
B1300-CE-KV	2599390
B1300-UCE	2599367
B1300L-CE	2599360
B1300PLE	2598555
B1350-CE	2599323
B1350L-CE	2599329
B1350-UCE	2599337
B35M-TC025E	2599517
B450ND-BVE	2596236
B500E	2596212
B500E-KV	2596208
B500NDE	2596222
B550E	2598970
B550E-KV	2598973

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B70M-P24-CH	2596136
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BF-BM5	2053660
BF-F405	2053560
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BF-F608	2053610
BF-F608P	2053620
BF-FM608	2053690
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BF-M12	2052430
BF-M2	2052010
BF-M3	2052030
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BF-M3,5/1	2052110
BF-M4	2052150
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BF-PP16/25	2053410
BF-PPL30	2053460
BF-PPL46	2053465
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BF-U4	2052710
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BF-U5	2052750
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BKF-BF4	2053632
BKF-BM4	2053662
BKF-F405	2053562
BKF-F405P	2053567
BKF-F408	2053572
BKF-F408P	2053577
BKF-F608	2053612
BKF-F608P	2053622
BKF-FM608	2053692
BKF-M608	2053652
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BKY-M3.5	2145845
BKY-M3.5/1	2145847
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BKY-M6/1	2145862
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BKY-PP16/23	2145944
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BN-M3	2152030
BN-M3,5	2152070
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BN-M4	2152150
BN-M5	2152190
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BN-M6/1	2152270
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BN-PP16/25	2153350
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BN-U8	2152870
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BP-M2	2046305
BP-M3	2046310
BP-M3,5	2046315
BP-M3,5/1	2046316
BP-M4	2046320
BP-M5	2046325
BP-M6	2046330
BP-M6/1	2046331
BP-M6/2	2046332
BP-M7	2046335
BP-M8	2046340
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BP-P12	2046420
BP-P8	2046410
BP-PP12	2046440
BP-PP12/25	2046445
BP-PP12/29	2046450
BP-PP16/25	2046455
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BP-PPL46	2046475
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BP-U6	2046555
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BSCL250	2489560
BSCL3	2489525
BSCL3/0	2489550
BSCL300	2489565
BSCL350	2489570
BSCL4	2489520
BSCL4/0	2489555
BSCL400	2489575
BSCL500	2489580
BSCL6	2489515

Type/Code Cross-Reference chart

Type	Code
BSCL600	2489585
BSCL750	2489590
BSCL8	2489510
C1/0-12	2396280
C1/0-14	2396220
C1/0-38	2396260
C1/0-516	2396240
C1/0-58	2396320
C1/0-916	2396300
C1-12	2396080
C1-14	2396020
C1-38	2396060
C1-516	2396040
C2/0-12	2396480
C2/0-14	2396420
C2/0-34	2396540
C2/0-38	2396460
C2/0-516	2396440
C2/0-58	2396520
C2/0-916	2396500
C2-10	2395820
C2-12	2395900
C2-14	2395840
C2-38	2395880
C250-12	2397080
C250-14	2397020
C250-34	2397140
C250-38	2397060
C250-516	2397040
C250-58	2397120
C250-78	2397160
C250-916	2397100
C2-516	2395860
C3/0-12	2396680
C3/0-14	2396620
C3/0-34	2396740
C3/0-38	2396660
C3/0-516	2396640
C3/0-58	2396720
C3/0-916	2396700
C300-12	2397360
C300-34	2397420
C300-38	2397340
C300-516	2397320
C300-58	2397400
C300-78	2397440
C300-916	2397380
C3-10	2395640
C3-12	2395720
C3-14	2395660
C3-38	2395700
C350-12	2397540
C350-34	2397600
C350-38	2397520
C350-58	2397580
C350-78	2397620
C350-916	2397560
C3-516	2395680
C3-8	2395620
C4/0-12	2396880
C4/0-14	2396820
C4/0-34	2396940
C4/0-38	2396860
C4/0-516	2396840
C4/0-58	2396920
C4/0-916	2396900
C400-12	2397740
C400-34	2397800
C400-38	2397720
C400-58	2397780
C400-78	2397820
C400-916	2397760
C4-10	2395440
C4-12	2395520
C4-14	2395460
C4-38	2395500
C4-516	2395480
C4-8	2395420
C500-12	2397940
C500-34	2398000
C500-38	2397920
C500-58	2397980
C500-78	2398020
C500-916	2397960

Type	Code
C600-12	2398120
C600-34	2398180
C600-58	2398160
C600-78	2398200
C600-916	2398140
C6-10	2395240
C6-12	2395320
C6-14	2395260
C6-38	2395300
C6-516	2395280
C6-8	2395220
C750-12	2398320
C750-34	2398380
C750-58	2398360
C750-78	2398400
C8-10	2395040
C8-12	2395120
C8-14	2395060
C8-38	2395100
C8-516	2395080
C8-8	2395020
C10-C10	2490070
C120-C120	2490630
C150-C120	2490670
C150-C150	2490690
C16-C16	2490110
C185-C185	2490745
C185-C95	2490710
C240-C120	2490760
C25-C10	2490150
C25-C25	2490190
C35-C16	2490230
C35-C35	2490270
C50-C25	2490350
C50-C50	2490390
C59	8420035
C6-C6	2490030
C70-C25N	2490310
C70-C35	2490430
C70-C70	2490470
C95-C35	2490510
C95-C70	2490550
C95-C95	2490590
C10-C10ST	2492070
C120-C120ST	2492630
C150-C120ST	2492670
C150-C150ST	2492690
C16-C16ST	2492110
C185-C185ST	2492745
C185-C95ST	2492710
C240-C120ST	2492760
C25-C10ST	2492150
C25-C25ST	2492190
C35-C16ST	2492230
C35-C35ST	2492270
C50-C25ST	2492350
C50-C50ST	2492390
C6-C6ST	2492030
C70-C25NST	2492310
C70-C35ST	2492430
C70-C70ST	2492470
C95-C35ST	2492510
C95-C70ST	2492550
C95-C95ST	2492590
CA1202M12	8005766
CA1502M12	8005776
CA1852M12	8005786
CA252M10	2530170
CA3002M12	8005806
CA352M12	8005726
CA502M12	8005736
CA952M12	8005756
CA120M12	8005566
CA120M16	8005570
CA150M12	8005576
CA150M16	8005580
CA150R-2M14	2533010
CA150R-M12	2532810
CA150R-M14	2532850
CA150S-2M14	2533330
CA150S-M12	2533210
CA150S-M14	2533250
CA185M12	8005586
CA185M16	8005590

Type	Code
CA240M12	8005594
CA240M16	8005596
CA240M20	8005600
CA200R-2M14	2533570
CA200R-M14	2533530
CA240R-2M14	2533850
CA240R-M14	2533770
CA300M12	8005604
CA300M16	8005608
CA300M20	8005610
CA25-2M12	2530210
CA25-2M8	2530130
CA25-M10	2530050
CA25-M12	2530090
CA25-M8	2530010
CA35M10	8005524
CA35M12	8005526
CA35M16	8005530
CA315R-2M14	2534430
CA315R-M14	2534330
CA315S-2M14	2534610
CA315S-M14	2534530
CA40S-2M12	2530510
CA40S-M12	2530450
CA40S-M16	2530490
CA50RM12	2530790
CA50SM12	2531110
CA50SM16	2531150
CA50R-2M12	2530870
CA50R-M12	2530790
CA50S-2M12	2531190
CA50S-M12	2531110
CA50S-M16	2531150
CA70-M12	2531870
CA70SM10	2531420
CA70SM12	2531430
CA70SM14	2531450
CA70S-2M12	2531510
CA70S-M12	2531430
CA70S-M16	2531470
CA95R-2M14	2532230
CA95R-M12	2532150
CA95R-M14	2532190
CA95M10	8005554
CA95M12	8005556
CA95M16	8005560
CA95S-2M14	2532610
CA95S-M12	2532450
CA95S-M14	2532490
CA95S-M16	2532500
CAA10-M12	2760005
CAA120-M12	2760310
CAA150-M12	2760350
CAA16-M12	2760012
CAA185-M12	2760430
CAA240-M12	2760590
CAA25-M12	2760030
CAA300-M16	2760710
CAA300-34-M12	2760680
CAA300-34-M16	2760715
CAA35-M12	2760070
CAA35ADN	2762260
CAA400-M16	2760750
CAA50-M12	2760110
CAA500-M16-TNBD	2760852
CAA630-4M8	2760950
CAA70-M12	2760150
CAA95-M12	2760190
CB1820L	2598495
CB1840L	2598493
CBP-F405	2076535
CBP-F408	2076540
CBP-F408P	2076543
CBP-F608	2076545
CBP-F608P	2076550
CBP-M3	2076310
CBP-M3,5	2076315
CBP-M3,5/1	2076320
CBP-M4	2076325
CBP-M5	2076335
CBP-M6	2076340
CBP-M6/1	2076345
CBP-M608	2076560
CBP-M7	2076350

Type	Code
CBP-M8	2076355
CBP-P10	2076455
CBP-P12	2076460
CBP-P8	2076450
CBP-PP12	2076480
CBP-PP12/25	2076490
CBP-PPL30	2076498
CBP-U3	2076380
CBP-U3,5	2076385
CBP-U4	2076395
CBP-U4/1	2076400
CBP-U4/2	2076405
CBP-U4/3L	2076408
CBP-U5	2076410
CBP-U6	2076415
CDD6	2599940
CDD6-8	2599941
CFA2600	3031942
CFA300	3031900
CFA400	3031914
CFA600	3031928
CFAB600	3031970
CFAR600	3031956
CGP-F608	2076845
CGP-F608P	2076850
CGP-M3	2076610
CGP-M3,5	2076615
CGP-M4	2076625
CGP-M5	2076635
CGP-M6	2076640
CGP-M6/1	2076645
CGP-M608	2076860
CGP-M7	2076650
CGP-M8	2076660
CGP-M8/1	2076665
CGP-P10	2076755
CGP-P12	2076760
CGP-P14	2076765
CGP-PP12	2076780
CGP-PP17	2076790
CGP-U3,5	2076685
CGP-U4	2076695
CGP-U5	2076710
CGP-U6	2076715
CL1/0-10	2396385
CL1/0-12	2396397
CL1/0-38	2396394
CL1/0-516	2396391
CL1/0-D14	2396360
CL1/0-D141	2396361
CL1/0-D38	2396370
CL1/0-DN	2396375
CL1/0IH-10	2396405
CL1/0IH-12	2396413
CL1/0IH-14	2396407
CL1/0IH-38	2396411
CL1/0IH-516	2396409
CL1/0IH-58	2396417
CL1/0IH-916	2396415
CL1-10	2396183
CL1-12	2396191
CL1-516	2396187
CL1-D14	2396160
CL1-D141	2396161
CL1-D38	2396170
CL1-DN	2396175
CL1IH-10	2396205
CL1IH-12	2396217
CL1IH-14	2396208
CL1IH-38	2396214
CL1IH-516	2396211
CL2/0-12	2396594
CL2/0-38	2396591
CL2/0-D14	2396560
CL2/0-D141	2396561
CL2/0-D38	2396570
CL2/0-DN	2396575
CL2/0IH-12	2396611
CL2/0IH-14	2396605
CL2/0IH-34	2396617
CL2/0IH-38	2396609
CL2/0IH-516	2396607
CL2/0IH-58	2396615
CL2/0IH-916	2396613

Type	Code
CL2-10	2395985
CL2-12	2395997
CL2-14	2395988
CL250-12	2397204
CL250-D38	2397180
CL250-DN	2397185
CL250IH-12	2397229
CL250IH-14	2397220
CL250IH-34	2397238
CL250IH-38	2397226
CL250IH-516	2397223
CL250IH-58	2397235
CL250IH-916	2397232
CL2-516	2395991
CL2-D14	2395960
CL2-D141	2395961
CL2-D38	2395970
CL2-DN	2395975
CL2-DN38	2395971
CL2IH-10	2396005
CL2IH-12	2396017
CL2IH-14	2396008
CL2IH-38	2396014
CL2IH-516	2396011
CL3/0-12	2396794
CL3/0-D141	2396761
CL3/0-D38	2396770
CL3/0-DN	2396775
CL3/0IH-12	2396811
CL3/0IH-14	2396805
CL3/0IH-34	2396817
CL3/0IH-38	2396809
CL3/0IH-516	2396807
CL3/0IH-58	2396815
CL3/0IH-916	2396813
CL300-12	2397491
CL300-D38	2397470
CL300-DN	2397475
CL300IH-12	2397509
CL300IH-34	2397515
CL300IH-38	2397507
CL300IH-516	2397505
CL300IH-58	2397513
CL300IH-916	2397511
CL3-12	2395797
CL3-14	2395788
CL3-38	2395794
CL350-12	2397688
CL350-D141	2397661
CL350-D38	2397670
CL350-DN	2397675
CL350IH-12	2397708
CL350IH-34	2397717
CL350IH-38	2397705
CL350IH-58	2397714
CL350IH-916	2397711
CL3-516	2395791
CL3-D38	2395770
CL3-DN	2395775
CL3IH-10	2395805
CL3IH-12	2395817
CL3IH-14	2395808
CL3IH-38	2395814
CL3IH-516	2395811
CL4/0-12	2396994
CL4/0-38	2396991
CL4/0-D141	2396961
CL4/0-D38	2396970
CL4/0-DN	2396975
CL4/0-DN38	2396971
CL4/0IH-12	2397011
CL4/0IH-14	2397005
CL4/0IH-34	2397017
CL4/0IH-38	2397009
CL4/0IH-516	2397007
CL4/0IH-58	2397015
CL4/0IH-916	2397013
CL400-12	2397888
CL400-58	2397894
CL400-D141	2397861
CL400-D38	2397870
CL400-DN	2397875
CL400IH-12	2397908
CL400IH-34	2397917

Type/Code Cross-Reference chart

Type	Code
CL400IH-38	2397905
CL400IH-58	2397914
CL400IH-916	2397911
CL4-10	2395585
CL4-12	2395597
CL4-14	2395588
CL4-38	2395594
CL4-D14	2395560
CL4-D141	2395561
CL4-D38	2395570
CL4-DN	2395575
CL4IH-10	2395605
CL4IH-12	2395617
CL4IH-14	2395608
CL4IH-38	2395614
CL4IH-516	2395611
CL500-12	2398088
CL500-58	2398094
CL500-D141	2398061
CL500-D38	2398070
CL500-DN	2398075
CL500IH-12	2398108
CL500IH-34	2398117
CL500IH-38	2398105
CL500IH-58	2398114
CL500IH-916	2398111
CL600-12	2398285
CL600-58	2398291
CL600-D38	2398270
CL600-DN	2398275
CL600IH-12	2398305
CL600IH-34	2398314
CL600IH-58	2398311
CL600IH-916	2398308
CL6-10	2395385
CL6-12	2395397
CL6-14	2395388
CL6-D14	2395360
CL6-D141	2395361
CL6-D38	2395370
CL6-DN	2395375
CL6IH-10	2395405
CL6IH-12	2395417
CL6IH-14	2395408
CL6IH-38	2395414
CL6IH-516	2395411
CL750-12	2398485
CL750-58	2398488
CL750-D38	2398470
CL750-DN	2398475
CL750-DN38	2398471
CL750IH-12	2398505
CL750IH-34	2398511
CL750IH-58	2398508
CL8-10	2395183
CL8-14	2395186
CL8-38	2395192
CL8-D14	2395160
CL8-D141	2395161
CL8-D38	2395170
CL8IH-10	2395203
CL8IH-12	2395215
CL8IH-14	2395206
CL8IH-38	2395212
CL8IH-516	2395209
CMA600	3031984
CMB1	2599943
CMB2	2599945
CP1086-W-1000-KV	2597905
CP1096	2597700
CP1096-W-1000-KV	2597695
CP1120	2597962
CP1120-W-1000-KV	2597958
CP1131	2610120
CPE-1	2592751
CPE-1-110	2592752
CPKD108	2808582
CPKD1508	2808587
CPKD2508	2808592
CPKD508	2808573
CPKD7508	2808578
CPP-0	2592671
CPU1131-C	2610150
CPU1230-3D	2630200

Type	Code
CRP-F305	2076225
CRP-F308	2076230
CRP-F405	2076235
CRP-F405P	2076237
CRP-F408	2076240
CRP-F408P	2076242
CRP-F608	2076245
CRP-F608P	2076250
CRP-M3	2076010
CRP-M3,5	2076015
CRP-M3,5/1	2076020
CRP-M4	2076025
CRP-M4/3	2076030
CRP-M5	2076035
CRP-M6	2076040
CRP-M6/1	2076045
CRP-M608	2076260
CRP-M7	2076050
CRP-M8	2076055
CRP-P10	2076155
CRP-P12	2076160
CRP-P8	2076150
CRP-PP12	2076180
CRP-PP12/1	2076185
CRP-PP12/23	2076190
CRP-PP14	2076195
CRP-PPL30	2076205
CRP-U3	2076080
CRP-U3,5	2076085
CRP-U3,5/2	2076090
CRP-U4	2076095
CRP-U4/1	2076100
CRP-U4/2	2076105
CRP-U5	2076110
CRP-U6	2076115
CRP-U6/1	2076120
CRP-U8	2076125
CS-CPE-1	2592748
CVB-001	2593300
CVB-007	2593295
CVB-010	2593298
CVB-011	2593299
CVB-013	2593294
DC24	2596100
DR6-5	2387910
DR6-6	2387920
DR6-8	2387930
DR10-5	2388000
DR10-6	2388005
DR10-8	2388010
DR10-10	2388015
DR16-5	2388025
DR16-6	2388030
DR16-8	2388040
DR16-10	2388050
DR16-12	2388060
DR25-6	2388110
DR25-8	2388120
DR25-10	2388130
DR25-12	2388140
DR25-16	2388160
DR35-6	2388210
DR35-8	2388220
DR35-10	2388230
DR35-12	2388240
DR35-16	2388246
DR50-6	2388250
DR50-8	2388255
DR50-10	2388260
DR50-12	2388270
DR50-14	2388280
DR50-16	2388290
DR70-8	2388320
DR70-10	2388330
DR70-12	2388340
DR70-14	2388350
DR70-16	2388360
DR70-20	2388380
DR95-8	2388390
DR95-10	2388395
DR95-12	2388400
DR95-14	2388410
DR95-16	2388420
DR95-20	2388430

Type	Code
DR120-8	2388450
DR120-10	2388460
DR120-12	2388470
DR120-16	2388490
DR120-20	2388500
DR150-10	2388530
DR150-12	2388540
DR150-16	2388560
DR150-20	2388570
DR185-10	2388600
DR185-12	2388610
DR185-16	2388620
DR185-20	2388630
DR240-10	2388710
DR240-12	2388720
DR240-16	2388730
DR240-20	2388740
DR300-10	2388780
DR300-12	2388790
DR300-16	2388810
DR300-20	2388820
DR400-12	2388870
DR400-16	2388890
DR400-20	2388900
DR500-12	2388950
DR500-16	2388970
DR500-20	2388980
DR625-12	2389030
DR625-16	2389050
DR625-20	2389060
DR800-20	2389110
DR1000-20	2389130
DSV6	2489010
DSV10	2489015
DSV16	2489020
DSV25	2489025
DSV35	2489030
DSV50	2489035
DSV70	2489040
DSV95	2489045
DSV120	2489050
DSV150	2489055
DSV185	2489060
DSV240	2489065
DSV300	2489070
DSV400	2489075
DSV500	2489080
DSV625	2489085
DSV800	2489090
DSV1000	2489095
DSVA16	8016400
DSVA25	8016401
DSVA35	8016402
DSVA50	8016403
DSVA70	8016404
DSVA95	8016405
DSVA120	8016406
DSVA150	8016407
DSVA185	8016408
DSVA240	8016409
DSVA300	8016410
DSVA400	8016411
DSVA500	8016412
DSVA401	8016413
DSVA501	8016414
DSVA625	8016415
DSVA800	8016416
DSVA1000	8016417
ECT-KE2.5	8030200
ECW-H3D	2630073
ELB-3	2598422
EPB-1N	2598453
EPS115-230.24	2596091
ERCH	2596112
ERCH-WH	2596114
ES03-BU	2470410
ES06-BU	2470411
ES1-BU	2470412
ES2-BU	2470413
ES3-BU	2470414
ES5-BU	2470415
ES10-BU	2470416
ES14-BU	2470417
ES19-BU	2470418

Type	Code
ES24-BU	2470419
ES30-BU	2470420
ES37-BU	2470421
ES40-BU	2470422
ES48-BU	2470423
ES80-BU	2470424
ES03-GY	2470430
ES06-GY	2470431
ES1-GY	2470432
ES2-GY	2470433
ES3-GY	2470434
ES5-GY	2470435
ES10-GY	2470436
ES14-GY	2470437
ES19-GY	2470438
ES24-GY	2470439
ES30-GY	2470440
ES37-GY	2470441
ES40-GY	2470442
ES48-GY	2470443
ES80-GY	2470444
ES03-BR	2470450
ES06-BR	2470451
ES1-BR	2470452
ES2-BR	2470453
ES3-BR	2470454
ES5-BR	2470455
ES10-BR	2470456
ES14-BR	2470457
ES19-BR	2470458
ES24-BR	2470459
ES30-BR	2470460
ES37-BR	2470461
ES40-BR	2470462
ES48-BR	2470463
ES80-BR	2470464
ES03-BK	2470470
ES06-BK	2470471
ES1-BK	2470472
ES2-BK	2470473
ES3-BK	2470474
ES5-BK	2470475
ES10-BK	2470476
ES14-BK	2470477
ES19-BK	2470478
ES24-BK	2470479
ES30-BK	2470480
ES37-BK	2470481
ES40-BK	2470482
ES48-BK	2470483
ES80-BK	2470484
ES03-RE	2470510
ES06-RE	2470511
ES1-RE	2470512
ES2-RE	2470513
ES3-RE	2470514
ES5-RE	2470515
ES10-RE	2470516
ES14-RE	2470517
ES19-RE	2470518
ES24-RE	2470519
ES30-RE	2470520
ES37-RE	2470521
ES40-RE	2470522
ES48-RE	2470523
ES80-RE	2470524
ES03-GN	2470530
ES06-GN	2470531
ES1-GN	2470532
ES2-GN	2470533
ES3-GN	2470534
ES5-GN	2470535
ES10-GN	2470536
ES14-GN	2470537
ES19-GN	2470538
ES24-GN	2470539
ES30-GN	2470540
ES37-GN	2470541
ES40-GN	2470542
ES48-GN	2470543
ES80-GN	2470544
ES03-YE	2470550
ES06-YE	2470551
ES1-YE	2470552

Type	Code
ES2-YE	2470553
ES3-YE	2470554
ES5-YE	2470555
ES10-YE	2470556
ES14-YE	2470557
ES19-YE	2470558
ES24-YE	2470559
ES30-YE	2470560
ES37-YE	2470561
ES40-YE	2470562
ES48-YE	2470563
ES80-YE	2470564
ES03-PK	2470570
ES06-PK	2470571
ES1-PK	2470572
ES2-PK	2470573
ES3-PK	2470574
ES5-PK	2470575
ES10-PK	2470576
ES14-PK	2470577
ES19-PK	2470578
ES24-PK	2470579
ES30-PK	2470580
ES37-PK	2470581
ES40-PK	2470582
ES48-PK	2470583
ES80-PK	2470584
ESC300CEE	2596110
ESC600	2599001
F1-15	2599865
FD11	3017354
FD13,5	3017356
FD16	3017358
FD21	3017360
FD29	3017362
FD36	3017364
FD42	3017366
FD48	3017368
FD7	3017350
FD9	3017352
FDM12	3017375
FDM16	3017374
FDM20	3017377
FDM25	3017379
FDM32	3017381
FDM40	3017383
FDM50	3017385
FDM63	3017387
FL10-150	2510070
FL10-200	2510150
FL10-250	2510190
FL16-150	2510470
FL16-200	2510550
FL16-250	2510590
FL16-320	2510670
FL16-350	2510690
FL16-420	2510710
FL16-570	2510750
FL16-660	2510790
FL25-150	2510950
FL25-200	2511070
FL25-250	2511110
FL25-300	2511190
GA-3	2598429
GF-F608	2055630
GF-F608P	2055650
GF-M10	2054250
GF-M10/1	2054290
GF-M12	2054330
GF-M14	2054370
GF-M16	2054410
GF-M3	2054010
GF-M3,5	2054030
GF-M4	2054070
GF-M5	2054110
GF-M6	2054150
GF-M6/1	2054160
GF-M608	2055670
GF-M7	2054170
GF-M8	2054210
GF-M8/1	2054220
GF-P10	2055310
GF-P12	2055350
GF-P14	2055370

Type/Code Cross-Reference chart

Type	Code
GF-PP12	2055390
GF-PP17	2055430
GF-PPL46	2055465
GF-U10	2054810
GF-U10/1	2054850
GF-U12	2054890
GF-U14	2054930
GF-U16	2054970
GF-U3,5	2054610
GF-U4	2054650
GF-U5	2054690
GF-U6	2054730
GF-U8	2054770
GK-F608	2145500
GK-F608P	2145502
GKF-M608	2055672
GKY-M3.5	2145982
GKY-M4	2145985
GKY-M5	2145988
GKY-M6	2145991
GKY-M8	2145994
GKY-M10	2145997
GKY-M12	2146000
GKY-M14	2146003
GKY-M16	2146006
GKY-P14	2146040
GKY-PP12	2146045
GKY-PP17	2146047
GKY-PPL46	2146055
GKY-U3.5	2146020
GKY-U4	2146023
GKY-U5	2146026
GKY-U6	2146029
GKY-U8	2146032
GN-M10	2154250
GN-M10/1	2154290
GN-M12	2154330
GN-M14	2154370
GN-M16	2154410
GN-M3	2154010
GN-M3,5	2154030
GN-M4	2154070
GN-M5	2154110
GN-M6	2154150
GN-M6/1	2154160
GN-M7	2154170
GN-M8	2154210
GN-M8/1	2154220
GN-P10	2155250
GN-P12	2155290
GN-P14	2155310
GN-PP12	2155330
GN-PP17	2155370
GN-U10	2154850
GN-U10/1	2154890
GN-U12	2154930
GN-U14	2154970
GN-U16	2155010
GN-U3,5	2154650
GN-U4	2154690
GN-U5	2154730
GN-U6	2154770
GN-U8	2154810
GP-M10	2046645
GP-M10/1	2046646
GP-M12	2046650
GP-M14	2046655
GP-M16	2046660
GP-M3	2046610
GP-M3,5	2046615
GP-M4	2046620
GP-M5	2046625
GP-M6	2046630
GP-M6/1	2046631
GP-M7	2046635
GP-M8	2046640
GP-M8/1	2046641
GP-P10	2046715
GP-P12	2046720
GP-P14	2046725
GP-PP12	2046740
GP-PP17	2046750
GP-PPL46	2046755
GP-U10	2046865

Type	Code
GP-U10/1	2046866
GP-U12	2046870
GP-U14	2046875
GP-U16	2046880
GP-U3,5	2046825
GP-U4	2046830
GP-U5	2046845
GP-U6	2046855
GP-U8	2046860
HB1-U	2598062
HB29-U	8060030
HB40-U	8060035
HB11	2591343
HB12N	2591345
HB13UE	2591347
HF1	2590900
HF2	2590905
HN1	2590300
HN5	2590291
HNA25	2590401
HND25	2590403
HNKE4	2590299
HNKE16	2590329
HNKE50	2590342
HNN3	2590296
HNN4	2590292
HP1	2590500
HP1-1	2590502
HP3	2590531
HP3-1	2590532
HP4-B	2590032
HP4-C10	2590040
HP4-G	2590033
HP4-R	2590031
HPH-1	2590029
HT-FL74	2665028
HT-FL75	2665030
HT-TC026	2591406
HT-TC026Y	2591408
HT-TC041N	2591427
HT-TC051	2591472
HT-TC051Y	2591475
HT-TC055	2591445
HT-TC065	2591477
HT-TC0851	2591496
HT120	2610420
HT120-KV	2610430
HT131-C	2610416
HT131-UC	2610436
HT131LN-C	2610419
HT45-E	2650040
HT51	2670610
HT51-KV	2670611
HT81-U	2600036
HWE-1	8420010
I38-F	6060130
I38-MS	6060128
IT6	8420016
KE0,75-1	2591050
KE10-1	2591049
KE1016ST	2803150
KE106ST	2802310
KE110ST	2802390
KE1508ST	2802510
KE1510ST	2802550
KE16-15	2599861
KE1616ST	2803190
KE1A-3	2598430
KE2,5-1	2598459
KE2,5A-3	2598432
KE25015ST	2803455
KE25018ST	2803460
KE2508ST	2802670
KE2510ST	2802710
KE35-15	2599862
KE35012ST	2803470
KE35015ST	2803475
KE35018ST	2803480
KE4-15	2599860
KE410ST	2802870
KE412ST	2802910
KE506ST	2802030
KE508ST	2802070
KE610ST	2802990

Type	Code
KE612ST	2803030
KE616ST	2803070
KE7506ST	2802110
KE7508ST	2802150
KIT2.5EPB1N	2598463
KIT4EPB1N	2598464
KITHWE1	8420012
KT1	2591319
KT2	2591320
KT3N	2591276
KT4N	2591278
KT5	2591279
KTS1632	2590700
L03-M	2480020
L03-P	2485010
L06-M	2480050
L06-P	2485040
L10-M	2480330
L10-P	2485270
L100-M	2480930
L120-M	2481010
L14-M	2480410
L14-P	2485350
L160-M	2481050
L19-M	2480490
L19-P	2485430
L1-M	2480090
L1-P	2485070
L200-M	2481090
L24-M	2480570
L24-P	2485510
L2-M	2480130
L2-P	2485100
L30-M	2480650
L30-P	2485590
L37-M	2480730
L37-P	2485670
L3-M	2480170
L3-P	2485130
L48-M	2480810
L48-P	2485680
L5-M	2480210
L5-P	2485160
L60-M	2480850
L60-P	2485690
L7-M	2480250
L7-P	2485190
L80-M	2480890
M108-520	2648752
M108-C	2611860
M108.215-U	2603723
M110-520	2648754
M113	2651130
M113-50	2675855
M113-C	2611870
M113.173-U	2603730
M118	2651150
M118-50	2675860
M118-C	2611910
M118.158-U	2603725
M140	2651170
M140-50	2675870
M140-C	2612010
M140.190-U	2603800
M145-520	2648770
M158	2651200
M158-50	2675880
M158-C	2612130
M160-520	2648771
M173	2651210
M173-50	2675890
M173-C	2612230
M173L-C	2612240
M190-50	2675900
M190-520	2648772
M190-C	2612330
M208-C	2612420
M208-U	2603780
M215-50	2675910
M215-520	2648773
M215-C	2612490
M220-520	2648774
M232-C	2612590
M255-520	2648776

Type	Code
M295-520	2648780
M340-520	2648784
M440-520	2648840
M540-520	2648910
M20AH-600	2649235
M24AH-600	2649237
M27AH-600	2649239
M30AH-600	2649241
M34AH-600	2649243
M36AH-600	2649245
M38AH-600	2649247
M40AH-600	2649249
M74AH-600	2649253
M75AH-600	2649255
M76AH-600	2649257
M7CD-600	2649205
M8CD-600	2649207
M9CD-600	2649209
M10CD-600	2649211
M11CD-600	2649213
M12CD-600	2649215
M13CD-600	2649217
M14CD-600	2649219
M15CD-600	2649221
M16CD-600	2649223
M17CD-600	2649225
M10SH-600	2649265
M12SH-600	2649267
M14SH-600	2649269
M16SH-600	2649271
M18SH-600	2649273
M20SH-600	2649275
M74SH-600	2649277
M75SH-600	2649279
M76SH-600	2649281
M76.1SH-600	2649283
M20AH-1000	2649570
M24AH-1000	2649572
M27AH-1000	2649574
M30AH-1000	2649576
M34AH-1000	2649578
M36AH-1000	2649580
M38AH-1000	2649582
M40AH-1000	2649584
M42AH-1000	2649586
M44AH-1000	2649588
M48AH-1000	2649590
M76AH-1000	2649592
M7CD-1000	2649510
M8CD-1000	2649512
M9CD-1000	2649514
M10CD-1000	2649516
M11CD-1000	2649518
M12CD-1000	2649520
M13CD-1000	2649522
M14CD-1000	2649524
M15CD-1000	2649526
M16CD-1000	2649528
M17CD-1000	2649530
M18CD-1000	2649532
M19CD-1000	2649534
M20CD-1000	2649536
M10SH-1000	2649550
M12SH-1000	2649552
M14SH-1000	2649554
M16SH-1000	2649556
M18SH-1000	2649558
M20SH-1000	2649560
M76SH-1000	2649562
M70	2651090
M70-50	2675800
M70-C	2611590
M70.140-U	2603710
M75	2651100
M75-50	2675805
M75-C	2611650
M75.96-U	2603715
M96	2651110
M96-50	2675850
M96-C	2611800
MA03/3-15	2599870
MA1	2650110
MA10	2650190
MA10-50	2675666

Type	Code
MA10-C	2610860
MA10.19-U	2600290
MA100-3D	2631790
MA100-520	2645690
MA12-C	2610870
MA12.20-U	2600310
MA120-3D	2631810
MA120-520	2645711
MA14-50	2675670
MA14-C	2610880
MA160-520	2645731
MA17-50	2675672
MA17-C	2610890
MA19-50	2675674
MA19-C	2610900
MA19-U	2600320
MA2-C	2610810
MA2.3	2650130
MA2.3-50	2675660
MA20-50	2675675
MA20-C	2610910
MA200-520	2645750
MA24-50	2675676
MA24-C	2610920
MA24-U	2600330
MA29-C	2610930
MA29.80-U	2600360
MA3-C	2610820
MA3.5-U	2600210
MA30-80-U	2600380
MA30-C	2610940
MA35-C	2610950
MA35-U	2600390
MA37-C	2610960
MA37-U	2600410
MA40-C	2610970
MA40-U	2600430
MA48-C	2610980
MA48-U	2600450
MA5	2650150
MA5-50	2675662
MA5-C	2610830
MA60-C	2610990
MA7	2650170
MA7-50	2675664
MA7-C	2610840
MA7.14-U	2600250
MA80-3D	2631770
MA80-520	2645671
MA9	2650180
MA9-50	2675665
MA9-C	2610850
MA9.17-U	2600270
MB2-80U	2604350
MB3-80U	2604400
MBS50-240-C	2777030
MBS95-240-C	2777032
MC0	2650490
MC0-U	2603510
MC02-U	2603550
MC10	2650530
MC10-50	2675610
MC10-C	2611100
MC10-U	2600610
MC185-3D	2632030
MC185-C	2611150
MC2	2650500
MC240-3D	2632035
MC25	2650550
MC25-50	2675620
MC25-C	2611110
MC25-U	2600650
MC3	8420018
MC35	2650570
MC35-50	2675630
MC35-C	2611120
MC35-U	2600690
MC4	8420019
MC6	2650510
MC6-50	2675605
MC6.25-U	2600630
MC70-3D	2632010
MC70-50	2675640
MC70-80U	2600720

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Type	Code
MC70-C	2611130
MC95-3D	2632020
MC95-80U	2600730
MC95-C	2611140
MCCC16-C	2617050
MCCC25-C	2617070
MCCC35-C	2617090
MCCC50-C	2617110
MCS4-15	2599868
ME03/2-15	2599875
ME1	2652010
ME1-50	2676005
ME10	2652130
ME10-50	2676060
ME10-C	2614211
ME10.24-U	2604830
ME100-3D	2634940
ME100-520	2648552
ME12	2652150
ME12-50	2676070
ME12-C	2614213
ME12.17-U	2604850
ME120-3D	2634950
ME120-520	2648554
ME14	2652170
ME14-50	2676080
ME14-C	2614215
ME160-520	2648556
ME17	2652190
ME17-50	2676090
ME17-C	2614217
ME19	2652210
ME19-50	2676100
ME19-C	2614219
ME2	2652030
ME2/3-15	2599876
ME2-50	2676010
ME2-C	2614201
ME2.19-U	2604750
ME20	2652230
ME20-50	2676110
ME200-520	2648558
ME20-C	2614221
ME24	2652250
ME24-50	2676120
ME24-C	2614223
ME29-50	2676130
ME29-C	2614225
ME29-U	2604870
ME3	2652050
ME3-50	2676020
ME3-C	2614203
ME3.14-U	2604770
ME30-50	2676140
ME30-C	2614227
ME30-U	2604890
ME35-50	2676150
ME35-C	2614229
ME35-U	2604910
ME37-50	2676160
ME37-C	2614231
ME37-U	2604930
ME40-50	2676165
ME40-C	2614233
ME40-U	2604950
ME48-50	2676170
ME48-C	2614235
ME48-U	2604970
ME5	2652070
ME5-50	2676030
ME5-C	2614205
ME5.7-U	2604790
ME60-C	2614237
ME7	2652090
ME7-50	2676040
ME7-C	2614207
ME80-3D	2634930
ME80-520	2648550
ME80-C	2614239
ME9	2652110
ME9-50	2676050
ME9-C	2614209
ME9.20-U	2604810
MFB13-40	2598040
MFB50-63	2598045
MH10/16-15	2599886
MK17S-C	2614307
MK17S-C	2614307
MK14-3D	2634781
MK16-3D	2634783
MK18-3D	2634785
MK20-3D	2634786
MK22-3D	2634787
MK25-3D	2634788
MK28-3D	2634790
MK32-3D	2634800
MK34-3D	2634810
MK38-3D	2634830
MK42-3D	2634850
MK44-3D	2634870
MK46-3D	2634880
MK5	2651575
MK6	2651580
MK8	2651610
MK10	2651640
MK12	2651670
MK12B	2651672
MK14	2651700
MK14B	2651710
MK16	2651730
MK16B	2651740
MK18	2651750
MK18B	2651760
MK20	2651770
MK22B	2651800
MK5/8-15	2599890
MK5-50	2675360
MK6-50	2675370
MK7-50	2675380
MK8-50	2675390
MK9-50	2675400
MK10-50	2675410
MK12-50	2675430
MK12B-50	2675431
MK13-50	2675440
MK14-50	2675450
MK14B-50	2675451
MK16-50	2675470
MK16B-50	2675471
MK18-50	2675490
MK18B-50	2675491
MK19-50	2675500
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MK20B-50	2675511
MK22-50	2675530
MK22L	2651791
MK22L-50	2675534
MK22B-50	2675531
MK25-50	2675550
MK25B-50	2675551
MK28-50	2675560
MK28B-50	2675561
MK32-50	2675564
MK32B-50	2675565
MK22L	2651791
MK22L-50	2675534
MK25-50	2675550
MK28-50	2675560
MK28-60	2671460
MK6-C	2614250
MK8-C	2614260
MK10-C	2614270
MK12-C	2614280
MK14-C	2614290
MK16-C	2614300
MK18-C	2614310
MK20-C	2614320
MK22-C	2614330
MK25-C	2614340
MK28-C	2614350
MK32-C	2614360
MK34L-C	2614371
MK38-450	2640285
MK38-520	2648640
MK44-450	2640287
MK44-520	2648700
MK52-450	2640295
MK52-520	2648670
MK58-450	2640297
MK58-520	2648710
MK60-450	2640298
MK60-520	2648730
ML95-240-12C	2752175
ML95-240-16C	2752177
ML150-240-12C	2752180
ML150-240-16C	2752182
MLA50-240-12C	2752170
MMT200-50	2676388
MMT200-C	2611190
MMT200-U	2601170
MMT25-50	2676380
MMT25-C	2611160
MMT25-U	2601050
MMT315-C	2611200
MMT50-50	2676382
MMT50-C	2611170
MMT50-U	2601090
MMT95-50	2676384
MMT95-C	2611180
MMT95-U	2601130
MN10-C	2610560
MN10RF-50	2676250
MN10RF-C	2610768
MN12-C	2610570
MN12F-50	2676260
MN12F-C	2610770
MN14-C	2610580
MN14RF-50	2676270
MN14RF-C	2610772
MN17-C	2610591
MN17F-50	2676280
MN17F-C	2610774
MN19-C	2610600
MN19RF-50	2676285
MN19RF-C	2610776
MN2-C	2610511
MN20-C	2610610
MN20F-50	2676290
MN20F-C	2610778
MN24-C	2610620
MN24RF-50	2676295
MN24RF-C	2610780
MN29-C	2610625
MN29F-C	2610782
MN2RF-50	2676210
MN2RF-C	2610760
MN3-C	2610520
MN30-C	2610630
MN30RF-C	2610784
MN35-C	2610635
MN35F-C	2610786
MN37-C	2610640
MN37RF-C	2610788
MN3RF-50	2676220
MN3RF-C	2610762
MN48-C	2610650
MN48RF-C	2610790
MN5-C	2610530
MN5RF-50	2676230
MN5RF-C	2610764
MN60-C	2610660
MN7-C	2610540
MN7RF-50	2676240
MN7RF-C	2610766
MN80-3D	2631450
MN9-C	2610551
MP608	3031810
MP608/45	3031815
MP608/90	3031820
MP608D	3031830
MPC1	2595201
MPC2	2595203
MPC4	2595208
MPC5	8460004
MPC7	2595221
MQ10-50	2675010
MQ16-50	2675013
MQ25-50	2675016
MQ35-50	2675019
MQ50-50	2675021
MQ70-50	2675024
MQM10-C	2610661
MQM16-C	2610662
MQM25-C	2610663
MQM35-C	2610664
MQM50-C	2610665
MQM70-C	2610666
MQM95-C	2610667
MQM120-C	2610668
MQM150-C	2610669
MQM185-C	2610670
MQM240-C	2610671
MQS16-C	2610752
MQS35-C	2610753
MQS70-C	2610754
MQS150-C	2610755
MQS240-C	2610756
MS4/10-15	2599880
MS10/16-15	2599881
MT-FC48N	2685903
MT120C12	8006254
MT120C16	8006258
MT150C10	8006252
MT150C12	8006264
MT150C1480	8006266
MT150C16	8006268
MT185C10	8006262
MT185C16	8006278
MT240C12	8006284
MT240C16	8006288
MT300C16	8006298
MT35C8	8006210
MT35C10	8006212
MT35C1480	8006216
MT50C8	8006220
MT50C10	8006222
MT50C1480	8006226
MT70C10	8006232
MT95C10	8006242
MT95C12	8006244
MT95C1480	8006246
MT120GC	8006150
MT150GC	8006160
MT185GC	8006170
MT240GC	8006180
MT300GC	8006190
MT35GC	8006110
MT400GC	8006195
MT50GC	8006120
MT70GC	8006130
MT95GC	8006140
MT120TD	8006050
MT150TD	8006060
MT185TD	8006070
MT240TD	8006080
MT300TD	8006090
MT35TD	8006010
MT50TD	8006020
MT70TD	8006030
MT95TD	8006040
MT150R-C12	2545010
MT150R-C16	2545090
MT150R-GC	2541870
MT150R-TD	2540550
MT150S-C12	2545310
MT150S-C14-80	2546270
MT150S-C16	2545350
MT150S-GC	2541910
MT150S-TD	2540630
MT200R-C10	2545540
MT200R-C16	2545550
MT200R-GC	2542030
MT200R-TD	2540670
MT240R-C12	2545710
MT240R-C16	2545750
MT240R-GC	2542110
MT240R-TD	2540710
MT25-C8	2543030
MT25-GC	2541570
MT25-TD	2540150
MT315R-C16	2545950
MT315R-GC	2542150
MT315R-TD	2540750
MT315S-C16	2545990
MT315S-GC	2542290
MT315S-TD	2540790
MT400-TD	2540830
MT40S-C10	2543410
MT40S-C14-80	2546070
MT40S-C8	2543400
MT40S-GC	2541610
MT40S-TD	2540190
MT500-TD	2540870
MT50R-C10	2543650
MT50R-C8	2543610
MT50R-GC	2541690
MT50R-TD	2540270
MT50S-C10	2543850
MT50S-C14-80	2546110
MT50S-C8	2543810
MT50S-GC	2541650
MT50S-TD	2540230
MT630-TD	2540890
MT70S-C10	2544050
MT70S-GC	2541730
MT70S-TD	2540350
MT95R-C10	2544290
MT95R-C12	2544330
MT95R-GC	2541770
MT95R-TD	2540390
MT95S-C10	2544530
MT95S-C12	2544570
MT95S-C14-80	2546230
MT95S-GC	2541850
MT95S-TD	2540470
MTA16-C	2770001
MTA25-C	2770020
MTA35-C	2770030
MTA50-C	2770310
MTA70-C	2770550
MTA95-C	2770830
MTA120-C	2771510
MTA150-C	2771710
MTA185-C	2772150
MTA240-C	2773010
MTMA10-GC	2720025
MTMA120-70-GC	2721410
MTMA120-95-GC	2721450
MTMA120-GC	2720272
MTMA150-120-GC	2721630
MTMA150-70-GC	2721550
MTMA150-95-GC	2721590
MTMA150-GC	2720330
MTMA16-10-GC	2720560
MTMA16-GC	2720035
MTMA185-120-GC	2721900
MTMA185-150-GC	2721910
MTMA185-GC	2720360
MTMA240-GC	2720410
MTMA240-150-GC	2722050
MTMA240-185-GC	2722090
MTMA25-10-GC	2720575
MTMA25-16-GC	2720580
MTMA25-GC	2720090
MTMA300-GC	2720430
MTMA35-20-GC	2720135
MTMA35-GC	2720130
MTMA400-240-GC	2722245
MTMA400-300-GC	2722250
MTMA50-25-GC	2720650
MTMA50-35-GC	2720660
MTMA50-GC	2720152
MTMA500-GC	2720515
MTMA500-300-GC	2722260
MTMA500-400-GC	2722270
MTMA70-35-GC	2720940
MTMA70-50-GC	2720980
MTMA70-GC	2720195
MTMA95-50-GC	2721030
MTMA95-70-GC	2721070
MTMA95-GC	2720232
MTMA16/1	2720031
MTMA25/1	2720071
MTMA35/1	2720111
MTMA50/1	2720160
MTMA70/1	2720191
MTMA95/1	2720250
MTMA120/1	2720280
MTMA150/1	2720320
MTMA185/1	2720370

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Type	Code
MTMA240/1	2720400
MTMAD300/1	2720460
MTMA400/1	2720475
MTMA500-40/1	2720509
MTMA630/1	2720530
MTMAD300-GC	2720440
MTMAD300-95-GC	2722121
MTMAD300-150-GC	2722140
MTMAD300-185-GC	2722160
MTMAD300-240-GC	2722220
MTT16-50	2677220
MTT25-50	2677230
MTT35-50	2677240
MTT50-50	2677250
MTT70-50	2677260
MTT95-50	2677270
MTT120-50	2677275
MUA150	2616050
MUA230-630-400	2680129
MUA230-630-630	2680130
MUA240	2616070
MUA300-34	2616090
MUA95	2616030
MV150	2616170
MV230-400 MC5E	2680860
MV230-630 MC6E	2680870
MV240	2616180
MV35	2616150
MV95	2616160
MVM150	2616310
MVM230-400 MJ5E	2680910
MVM230-630 MJ6E	2680920
MVM240	2616320
MVM35	2616290
MVM95	2616300
MY10-50	2677340
MY10-C	2613380
MY14-50	2677345
MY14-C	2613385
MY16-50	2677350
MY16-C	2613390
MY19-50	2677355
MY19-C	2613395
MY24-50	2677360
MY24L-50	2677362
MY24-C	2613400
MY2-50	2677310
MY2-C	2613350
MY30-50	2677365
MY30L-50	2677366
MY30-C	2613405
MY3-50	2677315
MY36-50	2677370
MY36-C	2613410
MY37-50	2677375
MY37-C	2613415
MY3-C	2613355
MY4-50	2677320
MY48-50	2677380
MY48-C	2613420
MY4-C	2613360
MY5-50	2677325
MY5-C	2613365
MY60-C	2613425
MY6-50	2677330
MY6-C	2613370
MY7-50	2677335
MY76-C	2613430
MY7-C	2613375
ND1	2590080
ND2	2590082
ND3	2590084
ND4	2590086
NIT10	8420017
NL03-M	2469328
NL03-P	2110870
NL06-M	2469330
NL06-P	2111950
NL06-PB	2111960
NL1-M	2469350
NL1-P	2113970
NL1-PG	2113990
NL2-M	2469390
NL3-M	2469430

Type	Code
NN4-15	2599867
OB2.5P	8420034
PA1	2650230
PA10	2650290
PA10-50	2675686
PA10-C	2611010
PA100-3D	2631930
PA120-3D	2631950
PA120-520	2645600
PA19-50	2675694
PA200-520	2645610
PA24-50	2675696
PA24-C	2611020
PA48-C	2611030
PA5	2650250
PA5-50	2675682
PA60-C	2611040
PB-1	2591046
PC-1	2590705
PG-1	2591047
PH1-1	2591061
PKC108	8010070
PKC112	8010075
PKC1012	8010120
PKC1018	8010125
PKC1508	8010080
PKC1518	8010085
PKC1612	8010130
PKC1618	8010135
PKC2508	8010090
PKC2518	8010095
PKC25016	8010140
PKC25022	8010145
PKC306	8010040
PKC308	8010045
PKC35016	8010150
PKC35025	8010155
PKC409	8010100
PKC418	8010105
PKC508	8010050
PKC510	8010055
PKC50020	8010160
PKC50030	8010165
PKC612	8010110
PKC618	8010115
PKC70022	2809595
PKC7508	8010060
PKC7512	8010065
PKC95025	2809600
PKC120027	2809605
PKD1012	2808915
PKD1018	2808917
PKD106	2808870
PKD108	2808872
PKD110	2808874
PKD112	2808876
PKD1508	2808880
PKD1510	2808882
PKD1512	2808884
PKD1518	2808886
PKD1612	2808920
PKD1618	2808922
PKD25016	2808925
PKD25022	2808927
PKD2508	2808890
PKD2512	2808892
PKD2518	2808894
PKD35016	2808930
PKD35025	2808932
PKD410	2808900
PKD412	2808902
PKD418	2808904
PKD50020	2808935
PKD50025	2808937
PKD506	2808850
PKD508	2808852
PKD510	2808854
PKD612	2808910
PKD618	2808912
PKD7506	2808860
PKD7508	2808862
PKD7510	2808864
PKD7512	2808866
PKE108	8020020

Type	Code
PKE1012	8020110
PKE1018	8020120
PKE1508	8020030
PKE1518	8020040
PKE1612	8020126
PKE1618	8020128
PKE2508	8020050
PKE25016	8020130
PKE25022	8020140
PKE2518	8020060
PKE308	8010197
PKE409	8020070
PKE418	8020080
PKE508	8020000
PKE612	8020090
PKE618	8020100
PKE7508	8020010
PKCT108	8020220
PKCT112	8020225
PKCT1014	8020260
PKCT1508	8020230
PKCT1512	8020235
PKCT2510	8020240
PKCT2512	8020245
PKCT412	8020250
PKCT508	8020200
PKCT614	8020255
PKCT1616	8020265
PKCT7508	8020210
PKCT7512	8020215
PKET108	8020320
PKET112	8020327
PKET1014	8020360
PKET1508	8020330
PKET1512	8020335
PKET1616	8020365
PKET2510	8020340
PKET2512	8020345
PKET412	8020350
PKET508	8020300
PKET614	8020355
PKET7508	8020310
PKET7512	8020315
PL01-M	2049510
PL03-M	2051850
PL03-P	2051860
PL06-M	2053850
PL06-P	2053860
PL1-M	2055870
PN14-C	2610710
PN24-C	2610720
PN37-C	2610730
PN48-C	2610740
PN60-C	2610750
PN7-C	2610700
PN80-3D	2631460
PNB-1	2591040
PNB-3F/M	2591088
PNB-3N1	2591092
PNB-3N5	2591096
PNB-3NN3	2591094
PNB-3NN4	2591095
PNB-3P	2591090
PNB-3P1	2591084
PNB-3PD	2591091
PNB-4KE	2591251
PNB-6KE	2591260
PNB-6KE-T	2591262
PNB-7KE	2591268
PNB-7KE-T	2591270
PO7000	2595904
PR-1	2591045
PRCH	2596113
PS130-150/E	2616371
PS130-240/E	2616381
PS130-35/E	2616351
PS130-95/E	2616361
PS230-400 5E	2680186
PS230-630 6E	2680189
Q14-MS	6060120
Q38-F	6060126
Q38-MS	6060124
RA-3	2598428
RBG-15	2599850

Type	Code
RBY-15	2599852
RCP-B70	2596116
RD100SS	2685623
RD102SS	2685636
RD114SS	2685626
RD120SS	2685624
RD126X126	2685669
RD138X138	2685670
RD140SS	2685637
RD15.5SS	2685560
RD15.5SS-FC	2685550
RD16.2SS	2685562
RD16.2SS-FC	2685552
RD17SS	2685563
RD17.5SS	2685564
RD17.5SS-FC	2685554
RD18.8SS	2685566
RD18.8SS-FC	2685556
RD18X46	2685654
RD19.1SS	2685568
RD20.5SS	2685570
RD21.5SS	2685571
RD21X21	2685650
RD22.6SS	2685572
RD22X30	2685651
RD22X46	2685656
RD220X220	2685676
RD23.8SS	2685574
RD25.4SS	2685576
RD27SS	2685578
RD28.5SS	2685580
RD30.5SS	2685582
RD28.5SS-19	2685584
RD30.5SS-19	2685586
RD31.8SS	2685588
RD32.5SS	2685590
RD34SS	2685591
RD34.6SS	2685592
RD36X46	2685658
RD37.2SS	2685594
RD37X104	2685674
RD37X115	2685661
RD37X54	2685671
RD37X67	2685672
RD37X88	2685673
RD38.1SS	2685596
RD38.5SS	2685597
RD40.5SS	2685598
RD40.5SS-FC	2685627
RD41.3SS	2685600
RD41.3SS-FC	2685628
RD42.5SS	2685602
RD42.5SS-FC	2685629
RD43.2SS	2685604
RD43.2SS-FC	2685630
RD44.5SS	2685606
RD44.5SS-FC	2685632
RD46X107	2685652
RD46X46	2685660
RD46X54	2685662
RD46X72	2685664
RD47.2SS	2685608
RD47.2SS-FC	2685634
RD48.5SS	2685609
RD50.5SS	2685610
RD50X98	2685663
RD51.4SS	2685611
RD52.4SS	2685613
RD54.2SS	2685612
RD60SS	2685614
RD60.5SS	2685615
RD64SS	2685616
RD65SS	2685618
RD67X126	2685665
RD68X68	2685666
RD76SS	2685620
RD76.5SS	2685619
RD80.5SS	2685622
RD89SS	2685621
RD90SS	2685625
RD92X92	2685668
RF-BF4	2051630
RF-BM4	2051660
RF-F305	2051560

Type	Code
RF-F305P	2051565
RF-F308	2051580
RF-F308P	2051585
RF-F405	2051600
RF-F405P	2051605
RF-F408	2051590
RF-F408P	2051595
RF-F608	2051610
RF-F608P	2051620
RF-FM608	2051690
RF-M10	2050390
RF-M12	2050430
RF-M2	2050010
RF-M3	2050030
RF-M3,5	2050070
RF-M3,5/1	2050110
RF-M4	2050150
RF-M4/3	2050170
RF-M5	2050190
RF-M6	2050230
RF-M6/1	2050270
RF-M608	2051650
RF-M608P	2051655
RF-M7	2050310
RF-M8	2050350
RF-P10	2051250
RF-P12	2051290
RF-P8	2051210
RF-PP12	2051330
RF-PP12/1	2051340
RF-PP12/19	2051370
RF-PP12/23	2051380
RF-PP14	2051410
RF-PP16/23	2051450
RF-PPL30	2051460
RF-PPL46	2051465
RF-U10	2050950
RF-U12	2050990
RF-U3	2050630
RF-U3,5	2050670
RF-U3,5/1	2050680
RF-U3,5/2	2050681
RF-U4	2050710
RF-U4/1	2050730
RF-U4/2	2050750
RF-U5	2050790
RF-U5/1	2050791
RF-U6	2050830
RF-U6/1	2050870
RF-U8	2050910
RH50	2670050
RHC131	2619010
RHC131LN	2619021
RH-FC48N	2592596
RH-FL75	2592597
RHM132	2619410
RHM50	2670035
RHT160	2592422
RHT160-60N	2592584
RHTD1724	2682482
RHTD3241	2682502
RHTD410T	2682520
RHU131-C	2619210
RHU230-630	2680075
RHU450	2640011
RHU520	2640151
RHU600	2640250
RHU1000	2640810
RHU81	2600045
RKF-BF4	2051632
RKF-BM4	2051662
RKF-F305	2051562
RKF-F308	2051582
RKF-F405	2051602
RKF-F405P	2051607
RKF-F408	2051592
RKF-F408P	2051597
RKF-F608	2051612
RKF-F608P	2051622
RKF-FM608	2051692
RKF-M608	2051652
RKY-M3	2145684
RKY-M3.5	2145685
RKY-M3.5/1	2145687

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Type	Code
RKY-M4	2145690
RKY-M5	2145699
RKY-M6/1	2145705
RKY-M8	2145711
RKY-M10	2145715
RKY-M12	2145718
RKY-P8	2145782
RKY-P10	2145783
RKY-P12	2145784
RKY-PP12	2145790
RKY-PP12/19	2145792
RKY-PP16/23	2145793
RKY-PPL30	2145795
RKY-PPL46	2145798
RKY-U3	2145730
RKY-U3.5	2145733
RKY-U4	2145736
RKY-U5	2145739
RKY-U6	2145742
RKY-U6/1	2145743
RN-FA305	3031610
RN-FA405	3031615
RN-FA608	3031620
RN-M10	2150430
RN-M12	2150470
RN-M2	2150010
RN-M3	2150030
RN-M3,5	2150070
RN-M3,5/1	2150110
RN-M4	2150150
RN-M4/3	2150170
RN-M5	2150190
RN-M6	2150230
RN-M6/1	2150270
RN-M7	2150350
RN-M8	2150390
RN-MA305	3031710
RN-MA405	3031715
RN-MA608	3031720
RN-P10	2151270
RN-P12	2151310
RN-P8	2151230
RN-PP12	2151350
RN-PP12/1	2151370
RN-PP12/19	2151390
RN-PP14	2151400
RN-PP16/23	2151410
RN-U10	2150990
RN-U12	2151030
RN-U3	2150670
RN-U3,5	2150710
RN-U3,5/2	2150720
RN-U4	2150750
RN-U4/1	2150760
RN-U4/2	2150790
RN-U5	2150830
RN-U5/1	2150840
RN-U6	2150870
RN-U6/1	2150910
RN-U8	2150950
RP-M10	2046045
RP-M12	2046050
RP-M2	2046005
RP-M3	2046010
RP-M3,5	2046015
RP-M3,5/1	2046016
RP-M4	2046020
RP-M4/3	2046023
RP-M5	2046025
RP-M6	2046030
RP-M6/1	2046031
RP-M7	2046035
RP-M8	2046040
RP-P10	2046115
RP-P12	2046120
RP-P8	2046110
RP-PP12	2046140
RP-PP12/1	2046145
RP-PP12/19	2046150
RP-PP12/23	2046155
RP-PP14	2046160
RP-PP16/23	2046165
RP-PPL30	2046180
RP-PPL46	2046185

Type	Code
RP-U10	2046265
RP-U12	2046270
RP-U3	2046210
RP-U3,5	2046215
RP-U3,5/2	2046217
RP-U4	2046230
RP-U4/1	2046231
RP-U4/2	2046240
RP-U5	2046245
RP-U5/1	2046246
RP-U6	2046255
RP-U6/1	2046256
RP-U8	2046260
RS0305.07	3008006
RS0407.M12	3008050
RS0507.09	3008008
RS0509.M16	3008052
RS0710.11	3008010
RS0813.M20	3008054
RS1014.16	3008012
RS1117.M25	3008056
RS1420.21	3008014
RS1520.M32	3008058
RS1928.M40	3008060
RS2026.29	3008016
RS2635.36	3008018
RS2735.M50	3008062
RT11	2592480
RT10.5	2592470
RT21	2592550
RT13	2592490
RT13,5	2592495
RT14	2592500
RT15	2592510
RT17	2592530
RT6.5	2592430
RT8.5	2592450
RT9	2592460
S10-M4	2165130
S10-M5	2165150
S10-M6	2165190
S10-M7	2165230
S1,5-M10	2160390
S1,5-M12	2160430
S1,5-M2	2160010
S1,5-M3	2160030
S1,5-M3,5	2160070
S1,5-M3,5/1	2160110
S1,5-M4	2160150
S1,5-M4/3	2160160
S1,5-M5	2160190
S1,5-M6	2160230
S1,5-M6/1	2160270
S1,5-M7	2160310
S1,5-M8	2160350
S1,5-P10	2161190
S1,5-P12	2161230
S1,5-P8	2161150
S1,5-PP12	2161310
S1,5-PP12/1	2161330
S1,5-PP12/19	2161350
S1,5-PP14	2161360
S1,5-U10	2160950
S1,5-U12	2160990
S1,5-U3	2160630
S1,5-U3,5	2160670
S1,5-U3,5/2	2160682
S1,5-U4	2160710
S1,5-U4/1	2160730
S1,5-U4/2	2160750
S1,5-U5	2160790
S1,5-U5/1	2160800
S1,5-U6	2160830
S1,5-U6/1	2160870
S1,5-U8	2160910
S2,5-M10	2162170
S2,5-M12	2162210
S2,5-M2	2161800
S2,5-M3	2161810
S2,5-M3,5	2161850
S2,5-M3,5/1	2161890
S2,5-M4	2161930
S2,5-M5	2161970
S2,5-M6	2162010

Type	Code
S2,5-M6/1	2162050
S2,5-M7	2162090
S2,5-M8	2162130
S2,5-P10	2163050
S2,5-P12	2163090
S2,5-P8	2163010
S2,5-PP12	2163170
S2,5-PP12/25	2163210
S2,5-PP16/25	2163250
S2,5-U10	2162730
S2,5-U12	2162770
S2,5-U3	2162410
S2,5-U3,5	2162450
S2,5-U3,5/1	2162460
S2,5-U4	2162490
S2,5-U4/1	2162510
S2,5-U4/2	2162530
S2,5-U5	2162570
S2,5-U6	2162610
S2,5-U6/1	2162650
S2,5-U8	2162690
S6-M10	2163830
S6-M10/1	2163850
S6-M12	2163890
S6-M14	2163930
S6-M16	2163970
S6-M3	2163510
S6-M3,5	2163550
S6-M4	2163590
S6-M5	2163630
S6-M6	2163670
S6-M6/1	2163710
S6-M7	2163750
S6-M8	2163790
S6-M8/1	2163800
S6-P10	2164710
S6-P12	2164750
S6-P14	2164790
S6-PP12	2164830
S6-PP17	2164870
S6-U10	2164370
S6-U10/1	2164390
S6-U12	2164430
S6-U14	2164470
S6-U16	2164510
S6-U3,5	2164170
S6-U4	2164210
S6-U5	2164250
S6-U6	2164290
S6-U8	2164330
SC1	2591261
SC3X	2591264
SC4X	2591265
SH-B70	2596080
SUB-D050	8420033
SUB-D075	8420032
TC025	2591895
TC04N	2591392
TC050	2597050
TC050Y	2597056
TC055	2591860
TC065-SC	2591870
TC085	2597150
TC096	2597360
TC120	2597250
TCP10	3019220
TCP12	3019225
TCP15	3019230
TCP18	3019235
TCP20	3019240
TCP25	3019250
TCP30	3019260
TCP35	3019270
TCP40	3019280
TCP45	3019290
TCP5	3019210
TCP50	3019300
TCP55	3019305
TCP60	3019310
TCP65	3019315
TCP70	3019320
TD14X14-M14	2685012
TD20X20-M20	2685014
TD27	2685007

Type	Code
TD120X20-M20	2685013
TD-M16C	2685010
TF300-Q38F	2592862
TF300-Q38FM	2592863
TF600-Q38FM	2592981
TGD-10X10-M9	2685018
TGD-13.5X13.5-M13	2685017
TGM38	3016155
TGM48	3016157
TGM513	3016165
TGM58	3016159
TGM613	3016167
TGM713	3016169
TGM817	3016171
TN120S	2590270
TN70	2590230
TNN120	2590290
TNN70	2590240
TNN71	2590241
TRD-9.4C	2685015
TRD-M11C	2685016
TRS-B70	2593280
UP130-120	2616520
UP130-150	2616530
UP130-185	2616550
UP130-240	2616560
UP130-50	2616470
UP130-70	2616490
UP130-95	2616500
VAL-04	2593310
VAL-096	2593669
VAL-1000	2593426
VAL-130	2610450
VAL-130-U	2610451
VAL-160	2593405
VAL-22	2593370
VAL-22-3	2593406
VAL-22-C	2593402
VAL-22-TC120	2593391
VAL-230-630	2680085
VAL-450	2593424
VAL-520	2593410
VAL-600	2593425
VAL-75	2600110
VAL-CP096	2593671
VAL-CP096-W	2593674
VAL-B-TC950	2593704
VAL-ECW-H3D	2593421
VAL-FC470	2593710
VAL-MAT230-630	2680086
VAL-MAT520	2593411
VAL-P1	2590595
VAL-P3	2590610
VAL-P4	2590612
VAL-P7	2590616
VAL-P19	2590629
VAL-P21	2874156
VAL-P22	2874157
VAL-P26	2590635
VAL-P27	2590638
VAL-P28	2590639
VAL-P30	2590642
VAL-P38	2590650
VAL-P39	2590651
VAL-P40	2590652
VAL-P44	2590654
VAL-P48	2590655
VAL-P51	2590658
VAL-P54	2590661
VALSTARV3-F	2590577
VAL-TC055	2593325
VAL-TC065-SC	2593324
VAL-TC085	2593323
VAL-TC120	2593322
VP-M2	2048010
VP-M3	2048030
VP-M3,5	2048070
VP-M4	2048150
VP-M5	2048190
VP-M6	2048210
VP-P10	2049210
VP-PP12/19	2049370
VP-U3	2048630
VP-U3,5	2048670

Type	Code
VP-U4	2048710
WF6	8420030
WF16	8420015
WF35	8420031
WL03-M	8440100
WL06-M	8440101
WL1-M	8440102
WT2-3D	2636970
Z10-1	2845030
Z16-1	2845040
Z16-12	2844156
Z16-12D	2844157
Z16-3	2844115
Z16-3D	2844116
Z16-4	2844130
Z16-4D	2844131
Z16-5N	2844122
Z16-5ND	2844123
Z16-8	2844140
Z16-8D	2844141
Z25-1	2845050
Z25-DP7-100	2845180
Z2,5-1	2845010
Z35-1	2845060
Z35-26D	2844216
Z35-3	2844205
Z35-3D	2844206
Z35-4	2844201
Z35-4D	2844202
Z35-6	2844210
Z35-6D	2844211
Z35-DP14-125	2845210
Z35-DP14B-125	2845212
Z35T-11	2844220
Z35T-11D	2844221
Z50-10D	2844230
Z50-DP12-160	2845220
Z6-1	2845020
Z6-10	2844106
Z6-10D	2844107
Z6-3	2844080
Z6-3D	2844081
Z6-5	2844100
Z6-5D	2844101
Z6-6	2844108
Z6-6D	2844109
ZKE2	2590710
ZKE610	2590718
ZKE616	2590725
ZKE6-F	2590716
ZS-B16	2842185
ZS-B4	2842115
ZS-B6	2842155
ZS-T16	2842190
ZS-T4	2842120
ZS-T6	2842160
ZS-U16	2842180
ZS-U4	2842110
ZS-U6	2842150

Comparison of AWG, MCM and Metric conductor cross sections

CONDUCTORS SECTIONS					
Conversion Table AWG, MCM / mm²					
[AWG]	Actual conductor csa mm²	Comparable metric csa mm²	[MCM]	Actual conductor csa mm²	Comparable metric csa mm²
27	0,10		250	127	120
26	0,13	0,14	300	152	150
25	0,16	-	350	177	185
24	0,21	0,2	400	203	-
23	0,26	0,25	500	253	240
22	0,33	0,34	600	304	300
21	0,41	-	700	355	-
20	0,52	0,5	800	405	400
19	0,65	-	900	456	-
18	0,82	0,75	1000	507	500
17	1,04	1	1250	633	625
16	1,31	-	1500	760	800
15	1,65	1,5	1750	887	-
14	2,08	-	2000	1010	1000
13	2,63	2,5			
12	3,31	-			
11	4,15	4			
10	5,27	6			
9	6,62	-			
8	8,35	-			
7	10,6	10			
6	13,3	-			
5	16,8	16			
4	21,2	-			
3	26,7	25			
2	33,6	35			
1	42,4	-			
1/0	53,4	50			
2/0	67,5	70			
3/0	85,0	95			
4/0	107,2	120			

IEC 60228 : 2004 - 11 conductor tables

MAXIMUM DIAMETERS OF CIRCULAR COPPER CONDUCTORS: SOLID, NON COMPACTED STRANDED AND FLEXIBLE			
Cross sectional area [mm²]	Conductors in cables for fixed installations		Flexible conductors (Classes 5 and 6) Maximum diameter [mm]
	Solid (Class 1) Maximum diameter [mm]	Stranded (Class 2) Maximum diameter [mm]	
0,5	0,9	1,1	1,1
0,75	1	1,2	1,3
1	1,2	1,4	1,5
1,5	1,5	1,7	1,8
2,5	1,9	2,2	2,4
4	2,4	2,7	3
6	2,9	3,3	3,9
10	3,7	4,2	5,1
16	4,6	5,3	6,3
25 [a]	5,7	6,6	7,8
35 [a]	6,7	7,9	9,2
50 [a]	7,8	9,1	11
70 [a]	9,4	11	13,1
95 [a]	11	12,9	15,1
120 [a]	12,4	14,5	17
150 [a]	13,8	16,2	19
185	15,4	18	21
240	17,6	20,6	24
300	19,8	23,1	27
400	22,2	26,1	31
500	-	29,2	35
630	-	33,2	39
800	-	37,6	-
1000	-	42,2	-

NOTE: The values given for flexible conductors represent both class 5 and class 6 conductors.

[a] Solid copper conductor shaving cross-sectional areas of 25 mm² and above are for particular types of cable, e.g. mineral insulated, and not for general purposes.

MINIMUM AND MAXIMUM DIAMETERS OF STRANDED COMPACTED CIRCULAR COPPER, ALUMINIUM AND ALUMINIUM ALLOY CONDUCTORS		
Cross-sectional area [mm²]	Stranded compacted circular conductors (Class 2)	
	Minimum diameter [mm]	Maximum diameter [mm]
10	3,6	4,0
16	4,6	5,2
25	5,6	6,5
35	6,6	7,5
50	7,7	8,6
70	9,3	10,2
95	11,0	12,0
120	12,3	13,5
150	13,7	15,0
185	15,3	16,8
240	17,6	19,2
300	19,7	21,6
400	22,3	24,6
500	25,3	27,6
630	28,7	32,5

NOTES: - The dimensional limits of Aluminium conductors with cross-sectional areas above 630 mm² are not given as the compaction technology is not generally estabilished.

- The values are given for compacted copper conductors in the size range 1,5 mm² to 6 mm².

MINIMUM AND MAXIMUM DIAMETERS OF CIRCULAR ALUMINIUM CONDUCTORS		
Cross-sectional area [mm²]	Solid conductors (Class 1)	
	Minimum diameter [mm]	Maximum diameter [mm]
10	3,4	3,7
16	4,1	4,6
25	5,2	5,7
35	6,1	6,7
50	7,2	7,8
70	8,7	9,4
95	10,3	11,0
120	11,6	12,4
150	12,9	13,8
185	14,5	15,4
240	16,7	17,6
300	18,8	19,8
400	21,2	22,2
500	24,0	25,1
630	27,3	28,4
800	30,9	32,1
1000	34,8	36,0
1200	37,8	39,0

IEC 60228 : 2004 - 11 conductor tables

CLASS 1: SOLID CONDUCTORS FOR SINGLE-CORE AND MULTI-CORE CABLES			
Nominal cross-sectional [mm²]	Maximum resistance of conductor at 20 °C		
	Circular, annealed Copper conductors		Aluminium and Aluminium alloy conductors, circular or shaped c [ohm/km]
	Plain [ohm/km]	Metal [ohm/km]	
0,5	36	36,7	-
0,75	24,5	24,8	-
1	18,1	18,2	-
1,5	12,1	12,2	-
2,5	7,41	7,56	-
4	4,61	4,70	-
6	3,08	3,11	-
10	1,83	1,84	3,08 [a]
16	1,15	1,16	1,91 [a]
25	0,727 [b]	-	1,20 [a]
35	0,524 [b]	-	0,868 [a]
50	0,387 [b]	-	0,641
70	0,268 [b]	-	0,443
95	0,193 [b]	-	0,320 [d]
120	0,153 [b]	-	0,253 [d]
150	0,124 [b]	-	0,206 [d]
185	0,101 [b]	-	0,164 [d]
240	0,0775 [b]	-	0,125 [d]
300	0,0620 [b]	-	0,100 [d]
400	0,0465 [b]	-	0,0778
500	-	-	0,0605
630	-	-	0,0469
800	-	-	0,0367
1000	-	-	0,0291
1200	-	-	0,0247

[a] *Aluminium conductors 10 mm² to 35 mm² circular only*

[b] *Solid Copper conductors having nominal cross-sectional area of 25 mm² and above are for particular types of cable, e.g. mineral insulated, and not for general purposes.*

[c] *For solid Aluminium alloy conductors, having the same nominal cross-sectional area as an Aluminium conductor, the resistance value given in the table should be multiplied by a factor of 1,162 unless otherwise agreed between the manufacturer and the purchaser.*

[d] *For single core cables, four sectoral shaped conductors may be assembled into a single circular conductor. The maximum resistance of the assembled conductor shall be 25% of that of the individual component conductors.*

CLASS 2: STRANDED CONDUCTORS FOR SINGLE-CORE AND MULTI-CORE CABLES									
Nominal cross-sectional area [mm²]	Minimum number of wires in the conductor						Maximum resistance of conductor at 20 °C		
	Circular		Circular compacted		Shaped		Annealed copper conductor		Aluminium or aluminium alloy conductor [c] [ohm/km]
	Cu	Al	Cu	Al	Cu	Al	Plain wires [ohm/km]	Metal-coated wires [ohm/km]	
0,5	7	-	-	-	-	-	36,0	36,7	-
0,75	7	-	-	-	-	-	24,5	24,8	-
1,0	7	-	-	-	-	-	18,1	18,2	-
1,5	7	-	6	-	-	-	12,1	12,2	-
2,5	7	-	6	-	-	-	7,41	7,56	-
4	7	-	6	-	-	-	4,61	4,70	-
6	7	-	6	-	-	-	3,08	3,11	-
10	7	7	6	6	-	-	1,83	1,84	3,08
16	7	7	6	6	-	-	1,15	1,16	1,91
25	7	7	6	6	6	6	0,727	0,734	1,20
35	7	7	6	6	6	6	0,524	0,529	0,868
50	19	19	6	6	6	6	0,387	0,391	0,641
70	19	19	12	12	12	12	0,268	0,270	0,443
95	19	19	15	15	15	15	0,193	0,195	0,320
120	37	37	18	15	18	15	0,153	0,154	0,253
150	37	37	18	15	18	15	0,124	0,126	0,206
185	37	37	30	30	30	30	0,0991	0,100	0,164
240	61	61	34	30	34	30	0,0754	0,0762	0,125
300	61	61	34	30	34	30	0,0601	0,0607	0,100
400	61	61	53	53	53	53	0,0470	0,0475	0,0778
500	61	61	53	53	53	53	0,0366	0,0369	0,0605
630	91	91	53	53	53	53	0,0283	0,0286	0,0469
800	91	91	53	53	-	-	0,0221	0,0224	0,0367
1000	91	91	53	53	-	-	0,0176	0,0177	0,0291
1200	[b]						0,0151	0,0151	0,0247
1400 [a]	[b]						0,0129	0,0129	0,0212
1600	[b]						0,0113	0,0113	0,0186
1800 [a]	[b]						0,0101	0,0101	0,0165
2000	[b]						0,0090	0,0090	0,0149
2500	[b]						0,0072	0,0072	0,0127

[a] *Non-preferred sizes. Other non-preferred sizes are recognized for some specialized applications but are not within the scope of this standard.*

[b] *The minimum number of wires for these sizes is not specified. These sizes may be constructed from 4, 5 or 6 equal segments (Milliken).*

[c] *For stranded Aluminium alloy conductors having the same nominal cross-sectional area as an Aluminium conductor the resistance value should be agreed between the manufacturer and the purchaser.*

IEC 60228 : 2004 - 11 conductor tables

CLASS 5:			
FLEXIBLE COPPER CONDUCTORS FOR SINGLE-CORE AND MULTI-CORE CABLES			
Nominal cross-sectional [mm²]	Maximum diameter of wires in conductor [mm]	Maximum resistance of conductor at 20 °C	
		Plain wires [ohm/km]	Metal-coated wires [ohm/km]
0,5	0,21	39	40,1
0,75	0,21	26	26,7
1	0,21	19,5	20
1,5	0,26	13,3	13,7
2,5	0,26	7,98	8,21
4	0,31	4,95	5,09
6	0,31	3,3	3,39
10	0,41	1,91	1,95
16	0,41	1,21	1,24
25	0,41	0,78	0,795
35	0,41	0,554	0,565
50	0,41	0,386	0,393
70	0,51	0,272	0,277
95	0,51	0,206	0,21
120	0,51	0,161	0,164
150	0,51	0,129	0,132
185	0,51	0,106	0,108
240	0,51	0,080	0,081
300	0,51	0,064	0,065
400	0,51	0,048	0,049
500	0,61	0,038	0,039
630	0,61	0,028	0,029

CLASS 6:			
FLEXIBLE COPPER CONDUCTORS FOR SINGLE-CORE AND MULTI-CORE CABLES			
Nominal cross-sectional [mm²]	Maximum diameter of wires in conductor [mm]	Maximum resistance of conductor at 20 °C	
		Plain wires [ohm/km]	Metal-coated wires [ohm/km]
0,5	0,16	39	40,1
0,75	0,16	26	26,7
1	0,16	19,5	20
1,5	0,16	13,3	13,7
2,5	0,16	7,98	8,21
4	0,16	4,95	5,09
6	0,21	3,3	3,39
10	0,21	1,91	1,95
16	0,21	1,21	1,24
25	0,21	0,78	0,795
35	0,21	0,554	0,565
50	0,31	0,386	0,393
70	0,31	0,272	0,277
95	0,31	0,206	0,21
120	0,31	0,161	0,164
150	0,31	0,129	0,132
185	0,41	0,106	0,108
240	0,41	0,080	0,081
300	0,41	0,064	0,065

System of denomination of harmonised cables according to CENELEC HD 361

REFERENCE TO THE STANDARDS

- **H** Cable conforming to harmonised standards
- **A** Recognised national type of cable
- **N** Other type of national cable

RATED VOLTAGE

- **00** Less than 100 / 100 V
- **01** Above 100 / 100 V and less than 300 / 300 V
- **03** 300 / 300 V
- **05** 300 / 500 V
- **07** 450 / 750 V
- **1** 0,6 / 1 kV

INSULATION AND SHEATH MATERIAL

- **B** Ethylenpropylene rubber for working temperature of 60° C
- **N** Polychloroprene
- **N2** Polychloroprene for welding cables
- **Q** Polyurethane
- **R** Rubber
- **V** Common-quality PVC
- **V2** PVC for working temperatures of 90° C
- **V3** PVC for low temperature cables
- **V4** Reticulate PVC
- **V5** Oil-resistant PVC
- **Z** Polyolefin mixture

SCREENS

- **C** Concentric Copper core
- **C4** Copper braid screen on multiple cores
- **C5** Copper braid screen on single cores
- **C7** Screen made of Copper straps or ribbons

ARMOURS

- **Z2** Round Steel strand armour
- **Z3** Steel strap armour
- **Z4** Steel ribbon armour
- **Z5** Steel strand braid

CONSTRUCTIVE FORM OF THE CABLE

- **H** Flat divisible cable with or without sheath
- **H2** Flat indivisible cable
- **H3** Flat cable with cores separated by a slat
- **H6** Flat cable with three or more cores
- **H7** Cable with double-layered insulation
- **H8** Extendable cord

CONDUCTOR FLEXIBILITY DEGREE

- **D** Flexible core for weldings cables
- **E** Very flexible core for welding cables
- **F** Flexible core for moving connections
- **H** Very flexible core for moving connections
- **K** Flexible core for fixed laying
- **R** Rigid round cord
- **U** Round rigid single strand

UL and VDE marking of cable glands

MAXIblock® spiralblock®

Type (°)	Thread	COMPRESSION RANGE Ø (min-max) Nominal [mm]	UL 514B [mm]	UL 514B [inches]	EN 62444 [mm]	IMPACT CATEGORY (*)	MARKING
1900.M12	M12x1,5	3,5-7	4,5	0.18	3,5-7	1	**USR-CNR / VDE**
1900.M16	M16x1,5	5-10	7	0.28	7-10	1	**USR-CNR / VDE**
1900.M20	M20x1,5	7-13	13	0.51	8-13	3	**USL-CNL / VDE**
1900.M25	M25x1,5	10-17	17	0.67	10-17	3	**USL-CNL / VDE**
1900.M32	M32x1,5	13-21	15-21	0.60-0.83	15-21	3	**USL-CNL / VDE**
1900.M40	M40x1,5	19-28	21-28	0.83-1.10	19-28	3	**USL-CNL / VDE**
1900.M50	M50x1,5	27-35	27-34	1.06-1.34	27-35	3	**USL-CNL / VDE**
1900.M63	M63x1,5	34-45	35-45	1.38-1.77	34-45	3	**USL-CNL / VDE**
1910.M12	M12x1,5	2-5	3-5	0.12-0.20	2-5	1	**USR-CNR / VDE**
1910.M16	M16x1,5	3-7	5-7	0.20-0.28	5-7	1	**USR-CNR / VDE**
1910.M20	M20x1,5	5-10	5-10	0.20-0.40	6-10	3	**USR-CNR / VDE**
1910.M25	M25x1,5	7-13	7-13	0.28-0.51	7-13	3	**USR-CNR / VDE**
1910.M32	M32x1,5	8-14	8-14	0.31-0.55	8-14	3	**USR-CNR / VDE**
1910.M40	M40x1,5	15-23	17-23	0.67-0.91	15-23	3	**USL-CNL / VDE**
1910.M50	M50x1,5	20-29	21-29	0.83-1.14	21-29	3	**USL-CNL / VDE**
1910.M63	M63x1,5	27-39	28-39	1.1-1.54	28-39	3	**USL-CNL / VDE**
1901.M12	M12x1,5	3,5-7	4,5	0.18	3,5-7	1	**USR-CNR / VDE**
1901.M16	M16x1,5	5-10	7	0.28	5-10	1	**USR-CNR / VDE**
1901.M20	M20x1,5	7-13	13	0.51	8-13	3	**USL-CNL / VDE**
1901.M25	M25x1,5	10-17	17	0.67	10-17	3	**USL-CNL / VDE**
1901.M32	M32x1,5	13-21	15-21	0.60-0.83	15-21	3	**USL-CNL / VDE**
1901.M40	M40x1,5	19-28	21-28	0.83-1.10	19-28	3	**USL-CNL / VDE**
1901.M50	M50x1,5	27-35	27-34	1.06-1.34	27-35	3	**USL-CNL / VDE**
1901.M63	M63x1,5	34-45	35-45	1.38-1.77	34-45	3	**USL-CNL / VDE**
1500.M12	M12x1,5	3,5-7	4,5	0.18	3,5-7	1	**USR-CNR / VDE**
1500.M16	M16x1,5	5-10	7	0.28	7-10	1	**USR-CNR / VDE**
1500.M20	M20x1,5	7-13	13	0.51	8-13	3	**USL-CNL / VDE**
1500.M25	M25x1,5	10-17	17	0.67	10-17	3	**USL-CNL / VDE**
1500.M32	M32x1,5	13-21	15-21	0.60-0.83	15-21	3	**USL-CNL / VDE**

MAXIblock® spiralblock®

Type (°)	Thread	COMPRESSION RANGE Ø (min-max) Nominal [mm]	UL 514B [mm]	UL 514B [inches]	MARKING
1900.07	Pg 7	3,5-7	4.5-6.5	0.18-0.25	**USR-CNR**
1900.09	Pg 9	5-8	6-8	0.24-0.31	**USR-CNR**
1900.11	Pg 11	5-10	6.5-9.5	0.26-0.37	**USR-CNR**
1900.13	Pg 13,5	7-12	8-11.5	0.31-0.45	**USL-CNL**
1900.16	Pg 16	10-14	10.5-14	0.41-0.55	**USL-CNL**
1900.21	Pg 21	13-18	13-18	0.51-0.71	**USL-CNL**
1900.29	Pg 29	18-25	22-25	0.67-0.98	**USL-CNL**
1900.36	Pg 36	20-32	21.5-32	0.85-1.26	**USR-CNR**
1900.42	Pg 42	28-38	32-38	1.26-1.49	**USL-CNL**
1900.48	Pg 48	37-45	40-44	1.57-1.73	**USL-CNL**
1910.07	Pg 7	2-5	3-5	0.12-0.20	**USR-CNR**
1910.11	Pg 11	4-7	4-7	0.16-0.28	**USR-CNR**
1910.13	Pg 13	5-10	10	0.39	**USR-CNR**
1910.21	Pg 21	9-15	10-14	0.39-0.55	**USR-CNR**
1910.36	Pg 36	18-26	18-26	0.71-1.02	**USR-CNR**
1910.42	Pg 42	25-31	25-31	0.98-1.22	**USL-CNL**
1901.07	Pg 7	3.5-7	6.5	0.26	**USR-CNR**
1901.09	Pg 9	5-8	6-8	0.24-0.31	**USR-CNR**
1901.11	Pg 11	5-10	6.5-9.5	0.26-0.37	**USR-CNR**
1901.13	Pg 13,5	7-12	8-11.5	0.31-0.45	**USL-CNL**
1901.16	Pg 16	10-14	10.5-14	0.41-0.55	**USL-CNL**
1901.21	Pg 21	13-18	13-18	0.51-0.71	**USL-CNL**
1901.29	Pg 29	18-25	22-25	0.67-0.98	**USL-CNL**
1901.36	Pg 36	20-32	21.5-32	0.85-1.26	**USR-CNR**
1901.42	Pg 42	28-38	32-38	1.26-1.48	**USL-CNL**
1901.48	Pg 48	37-45	40-44	1.57-1.73	**USL-CNL**
1500.07	Pg 7	3,5-7	4.5-6.5	0.18-0.25	**USR-CNR**
1500.09	Pg 9	5-8	6-8	0.24-0.31	**USR-CNR**
1500.11	Pg 11	5-10	6.5-9.5	0.26-0.37	**USR-CNR**
1500.13	Pg 13,5	7-12	8-11.5	0.31-0.45	**USL-CNL**
1500.16	Pg 16	10-14	10.5-14	0.41-0.55	**USL-CNL**
1500.21	Pg 21	13-18	13-18	0.51-0.71	**USL-CNL**
1900.14	G1/4"	3-6,5	4.5-6.5	0.18-0.25	**USR-CNR**
1900.38	G3/8"	4-8	6-8	0.24-0.31	**USR-CNR**
1900.12	G1/2"	7-12	8-11.5	0.31-0.45	**USL-CNL**
1900.34	G3/4"	13-18	13-18	0.51-0.71	**USL-CNL**
1901.12	G1/2"	7-12	8-11.5	0.31-0.45	**USL-CNL**
1500.14	G1/4"	3-6,5	4.5-6.5	0.18-0.25	**USR-CNR**
1500.38	G3/8"	4-8	6-8	0.24-0.31	**USR-CNR**
1500.12	G1/2"	7-12	8-11.5	0.31-0.45	**USL-CNL**
1500.34	G3/4"	13-18	13-18	0.51-0.71	**USL-CNL**

MAXIbrass®

Type	Thread	COMPRESSION RANGE Ø (min-max) Nominal [mm]	UL 514B [mm]	UL 514B [inches]	MARKING
2900.07N	Pg 7	3-7	3-7	0.12-0.28	**USR-CNR**
2900.09N	Pg 9	4-8	4-8	0.16-0.31	**USR-CNR**
2900.11N	Pg 11	4,5-10	6-10	0.24-0.39	**USR-CNR**
2900.13N	Pg 13,5	5-12	10-12	0.39-0.47	**USL-CNL**
2900.16N	Pg 16	7-13	10-13	0.39-0.51	**USL-CNL**
2900.21N	Pg 21	10-17	12-17	0.47-0.67	**USL-CNL**
2900.29N	Pg 29	17-25	18-25	0.71-0.98	**USL-CNL**
2900.36N	Pg 36	20-32	23-32	0.91-1.26	**USL-CNL**
2900.42N	Pg 42	28-38	28-35	1.10-1.38	**USL-CNL**
2900.48N	Pg 48	34-45	34-45	1.33-1.77	**USL-CNL**
2910.07N	Pg 7	1-5	2-5	0.08-0.20	**USR-CNR**
2910.09N	Pg 9	2-6	3-6	0.12-0.24	**USR-CNR**
2910.11N	Pg 11	2,5-7	3,5-7	0.14-0.28	**USR-CNR**
2910.13N	Pg13,5	4-10	5,5-10	0.22-0.39	**USR-CNR**
2910.16N	Pg 16	5-10	6-10	0.24-0.39	**USR-CNR**
2910.21N	Pg 21	6-13	7-13	0.28-0.51	**USR-CNR**
2910.29N	Pg 29	11-20	12-20	0.47-0.79	**USR-CNR**
2910.36N	Pg 36	18-26	19-26	0.75-1.02	**USL-CNL**
2910.42N	Pg 42	24-31	24-31	0.94-1.22	**USL-CNL**
2910.48N	Pg 48	27-39	31-39	1.22-1.54	**USL-CNL**
2901.07N	Pg 7	3-7	3-7	0.12-0.28	**USR-CNR**
2901.09N	Pg 9	4-8	4-8	0.16-0.31	**USR-CNR**
2901.11N	Pg 11	4,5-10	6-10	0.24-0.39	**USR-CNR**
2901.13N	Pg13,5	5-12	10-12	0.39-0.47	**USL-CNL**
2901.16N	Pg 16	7-13	10-13	0.39-0.51	**USL-CNL**
2901.21N	Pg 21	10-17	12-17	0.47-0.67	**USL-CNL**
2901.29N	Pg 29	17-25	18-25	0.71-0.98	**USL-CNL**
2901.36N	Pg 36	20-32	23-32	0.91-1.26	**USL-CNL**
2901.42N	Pg 42	28-38	28-35	1.10-1.38	**USL-CNL**
2911.07N	Pg 7	1-5	2-5	0.08-0.20	**USR-CNR**
2911.09N	Pg 9	2-6	3-8	0.12-0.31	**USR-CNR**
2911.11N	Pg 11	2,5-7	3,5-7	0.14-0.28	**USR-CNR**
2911.13N	Pg13,5	4-10	5,5-10	0.22-0.39	**USR-CNR**
2911.16N	Pg 16	5-10	6-10	0.24-0.39	**USR-CNR**
2911.21N	Pg 21	6-13	7-13	0.28-0.51	**USR-CNR**
2911.29N	Pg29	11-20	12-20	0.47-0.79	**USR-CNR**
2911.36N	Pg36	18-26	19-26	0.75-1.02	**USL-CNL**
2911.42N	Pg42	24-31	24-31	0.94-1.22	**USL-CNL**

MAXIbrass®

Type	Thread	COMPRESSION RANGE Ø (min-max) Nominal [mm]	UL 514B [mm]	UL 514B [inches]	EN 62444 [mm]	IMPACT CATEGORY (*)	MARKING
2900.M12N	M12x1,5	3-7	3-7	0.12-0.28	3-7	5	**USR-CNR / VDE**
2900.M16N	M16x1,5	4,5-10	6-10	0.24-0.39	4,5-10	6	**USR-CNR / VDE**
2900.M20N	M20x1,5	7-13	8-13	0.31-0.51	7-13	6	**USL-CNL / VDE**
2900.M25N	M25x1,5	10-17	13-17	0.51-0.67	11-17	6	**USL-CNL / VDE**
2900.M32N	M32x1,5	11-21	13-21	0.51-0.83	13-21	6	**USL-CNL / VDE**
2900.M40N	M40x1,5	19-28	21-28	0.83-1.10	19-28	6	**USL-CNL / VDE**
2900.M50N	M50x1,5	26-35	27-35	1.06-1.38	26-35	6	**USL-CNL / VDE**
2900.M63N	M63x1,5	34-45	34-45	1.33-1.77	34-45	6	**USL-CNL / VDE**
2910.M12N	M12x1,5	1-5	2-5	0.08-0.20	2-5	5	**USR-CNR / VDE**
2910.M16N	M16x1,5	2,5-7	3,5-7	0.14-0.28	4-7	6	**USR-CNR / VDE**
2910.M20N	M20x1,5	5-10	5-10	0.20-0.39	5,5-10	6	**USR-CNR / VDE**
2910.M25N	M25x1,5	6-13	8-13	0.31-0.51	6-13	6	**USR-CNR / VDE**
2910.M32N	M32x1,5	7-14	7-14	0.28-0.55	9-14	6	**USR-CNR / VDE**
2910.M40N	M40x1,5	13-23	15-23	0.59-0.90	17-23	6	**USL-CNL / VDE**
2910.M50N	M50x1,5	20-29	20-29	0.79-1.14	25-29	6	**USL-CNL / VDE**
2910.M63N	M63x1,5	27-39	28-39	1.10-1.54	31-39	6	**USL-CNL / VDE**
2901.M12N	M12x1,5	3-7	3-7	0.12-0.28	3-7	5	**USR-CNR / VDE**
2901.M16N	M16x1,5	4,5-10	6 -10	0.24-0.39	4,5-10	6	**USR-CNR / VDE**
2901.M20N	M20x1,5	7-13	8-13	0.31-0.51	7-13	6	**USL-CNL / VDE**
2901.M25N	M25x1,5	10-17	13-17	0.51-0.67	11-17	6	**USL-CNL / VDE**
2901.M32N	M32x1,5	11-21	13-21	0.51-0.83	13-21	6	**USL-CNL / VDE**
2901.M40N	M40x1,5	19-28	21-28	0.83-1.10	19-28	6	**USL-CNL / VDE**
2901.M50N	M50x1,5	26-35	27-35	1.06-1.38	26-35	6	**USL-CNL / VDE**
2911.M12N	M12x1,5	1-5	2-5	0.08-0.20	2-5	5	**USR-CNR / VDE**
2911.M16N	M16x1,5	2,5-7	3,5-7	0.14-0.28	4-7	6	**USR-CNR / VDE**
2911.M20N	M20x1,5	5-10	5-10	0.20-0.39	5,5-10	6	**USR-CNR / VDE**
2911.M25N	M25x1,5	6-13	8-13	0.31-0.51	6-13	6	**USR-CNR / VDE**
2911.M32N	M32x1,5	7-14	7-14	0.28-0.55	9-14	6	**USR-CNR / VDE**
2911.M40N	M40x1,5	13-23	15-23	0.59-0.90	17-23	6	**USL-CNL / VDE**
2911.M50N	M50x1,5	20-29	20-29	0.79-1.14	25-29	6	**USL-CNL / VDE**

VDE: Licence nos 40008472, 40008474, 40008475 and 40008476

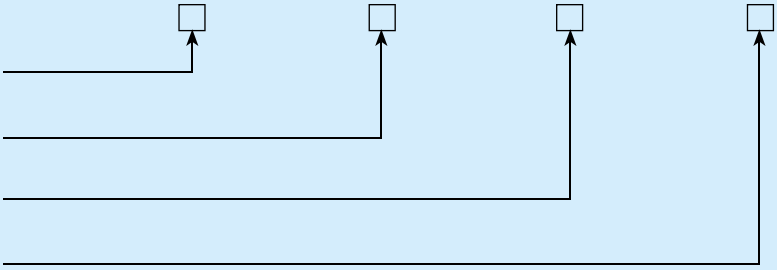
USL-CNL: UL LISTING file no E220310; control no 48SB valid in USA & Canada

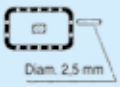
USR-CNR: UL RECOGNITION file no E220310 valid in USA & Canada (with reduced tightening force)

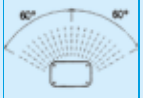
(°) Add to Ref: N for Black, G for Dark Grey

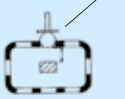
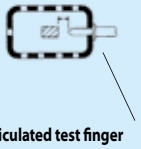
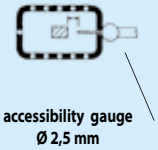
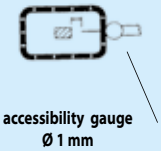
(*) EN 62444 § 9.5

Ingress protection (IP) rating according to EN 60529 - CEI 70-1

IP CODE	
The first digit (0-6 or X letter): Protection against ingress of solid matter	
Second digit (0-8 or X letter): Protection against ingress of liquids	
(A, B, C, D) for future use. Restricted entry to dangerous parts:	
(H,M,S,W) for future use. Specific criteria:	

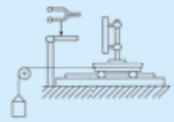
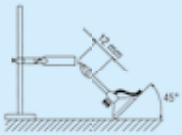
1st CHARACTERISTIC NUMBER:							
PROTECTION AGAINST INGRESS OF SOLID MATTER							
PROTECTION	**0**	**1**	**2**	**3**	**4**	**5**	**6**
Protection against ingress of solid matter caused by		solid bodies measuring over 50 mm	solid bodies measuring over 12,5 mm	solid bodies measuring over 2,5 mm	solid bodies measuring over 1 mm	powder in harmful quantities	Powder (completely protected)
Test method		 Accessibility gauge ø 50 mm	 Accessibility gauge ø 12,5 mm	 Accessibility gauge ø 2,5 mm	 Accessibility gauge ø 1 mm	 talcum powder	 talcum powder

2nd CHARACTERISTIC NUMBER:									
PROTECTION AGAINST INGRESS OF LIQUIDS									
PROTECTION	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Protection against ingress of liquids caused by		Drops of water falling vertically	Vertical drops of water with inclination of casing up to 15°	Rain	Sprays of water	Jets of water	Powerful jets of water	Temporary Immersion	Permanent Immersion
Test method									Agreement between manufacturer and user but more severe than 7

1st ADDITIONAL LETTER:				
RESTRICTED ENTRY TO DANGEROUS PARTS				
RESTRICTED ENTRY	**A**	**B**	**C**	**D**
Restricted entry to dangerous parts caused by	back of hand	finger	tool	wire
Test method	accessibility gauge Ø 50 mm 	 articulated test finger	 accessibility gauge Ø 2,5 mm	 accessibility gauge Ø 1 mm

2nd ADDITIONAL LETTER :				
MEANING OF THE SECOND ADDITIONAL LETTER				
SPECIFIC CRITERIA	**H**	**M**	**S**	**W**
Specific criteria	High voltage equipment	Tested against negative effects of water penetration, when the moveable parts of the equipment (e.g. wheels of a revolving machine) are moving	Tested against the negative effects of water penetration, when the moveable parts of the equipment (e.g. wheels of a revolving machine) are stationary	Suitable for use in environmental conditions as specified and equipped with additional measures of protection

Flammability test for products and materials

TYPE OF TEST	TEST EQUIPMENT	COMPLIANCE WITH STANDARDS	OBJECTIVE OF TEST	TEST RESULTS	TEST CONDITIONS		
					heat source	length of test	characteristic features
CHARACTERISTIC FEATURES		IEC 695-2-1 CEI 50-11 DIN VDE 0471-2-1	Check that abnormal heating produced by overcurrent and bad contacts does not compromise the safety of the insulating material. Lighting test. The wire is pressed against the sample using force and penetrates up to 7 mm.	Any sign of flame starting must stop within 30 sec. of removing the glowing wire. TEST TEMPERATURE • 650° for materials which do not support parts under tension • 750° for materials which support parts under tension of moving sockets and plugs • 850° for materials which support parts under tension of fixed sockets and switches	Glow-wire 4 mm in diameter	Wire applied for 30 seconds	Flame extin-ction time
NEEDLE FLAME		IEC 695-2-1 CEI 50-11	Simulates the effect small fla-mes have which may occur due to internal faults of products in order to judge the fire risk.	• the sample does not catch fire • the flame and incandescent particles do not spread the fire • combustion lasts less than 30 seconds	Bunsen burner flame	Flame ap-plied for (Ta) 5, 10, 20, 30, 60, 120 sec. According to particular standards	The degree of severity: flame appli-cation time (Ta)
UL (UNDERWRITER' LABORATORIES)		UL 94	Measuring of time the sample continues to burn after the direct flame has been removed.	• V0 if the sample burns for less than 5 sec. before going out. • V1 if it burns for less than 25 sec. • V2 if it burns for less than 25 sec. With incandescent drops • HB if it burns for more than 25 sec. (horizontal sample and burning speed less than 38 mm per minute) Comparable to ASTM D-635	Bunsen burner flame	Flame ap-plied for 10 seconds twi-ce following	Length of combustion

Recommended torque settings for cable glands

MAXIblock®, spiralblock®, MAXIbrass®, MAXIinox METRIC THREADS, TO OBTAIN IP68 INGRESS PROTECTION IN ACCORDANCE WITH EN 50262			
	THREAD CABLE GLAND	CABLE GLAND	
		metallic	non-metallic
		torque (Nm)	
Torque values apply to mounting in a threaded entry and to use with a locknut	M12 x 1,5	6	2.7
	M16 x 1,5	6	5.0
	M20 x 1,5	8	7.0
	M25 x 1,5	8	7.5
	M32 x 1,5	18	8.0
	M40 x 1,5	18	8.0
	M50 x 1,5	18	15.0
	M63 x 1,5	18	15.0

MAXIblock®, spiralblock®, MAXIbrass®, MAXIinox PG THREADS, TO OBTAIN IP68 INGRESS PROTECTION IN ACCORDANCE WITH DIN VDE			
	THREAD CABLE GLAND	CABLE GLAND	
		metallic	non-metallic
		torque (Nm)	
Torque values apply to mounting in a threaded entry and to use with a locknut	Pg7	6.25	2.5
	Pg9	6.25	3.75
	Pg11	6.25	3.75
	Pg13,5	7.5	5.0
	Pg16	7.5	5.0
	Pg21	10.0	7.5
	Pg29	15.0	8.0
	Pg36	25.0	10.0
	Pg42	25.0	10.0
	Pg48	25.0	10.0

MAXIblock®, spiralblock® GAS THREADS, TO OBTAIN IP68 WITH REDUCED TIGHTENING FORCE		
	THREAD CABLE GLAND	NON-METALLIC CABLE GLAND
		torque (Nm)
Torque values apply to mounting in a threaded entry and to use with a locknut	G1/4"	4
	G3/8"	5
	G1/2"	6
	G3/4"	10

Cable glands installation:

1) Before proceeding with the installation, inspect the cable gland; installation must be performed by qualified personnel and with suitable tools.
2) Cable glands must be used in their original supplied condition with no modifications.
3) Torque values listed in the catalogue are intended as the recommended level for reaching the correct IP protection level and achieving the required cable retention properties. As the torque depends on the type of insulation of the conductor used, it is responsibility of the user to define the ideal torque for their specific application.
4) Both the body and head of the cable gland must be correctly tightened; excessive or reduced tightening may compromise the protection level and the cable retention performance.
5) Loosening a cable gland already installed and then tightening again may result in a reduction of the IP protection level achieved and compromise the cable retention properties. In these instances, we recommend replacement of the cable gland.

Also available in the Cembre product range

"Industrial Marking Systems"

THERMAL TRANSFER SYSTEM FOR REEL MEDIA PRINTING

MARKINGENIUS 3

PC-DRIVEN THERMAL TRANSFER MARKER PRINTING SYSTEM

RING cablesys

MANUAL CABLE MARKING SYSTEMS

SIGN stick-onsys

WARNING, PROHIBITION AND MANDATORY SIGNS

NEW MARKERS FOR THE IDENTIFICATION OF TERMINAL BLOCKS AND CABLES

ASK FOR THE CATALOGUES

Cembre

Crimpstar

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MARKIN Genius

ZETAmini

ZETApiù

ZETAblock

MAXIblock

spiralblock

MAXIbrass

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Cembre Ltd.

Dunton Park
Kingsbury Road, Curdworth
Sutton Coldfield - West Midlands B76 9EB UK
Tel.: 01675 470440
Fax: 01675 470220
E-mail: sales@cembre.co.uk
Web: www.cembre.co.uk

CERTIFIED ISO 9001

CERTIFIED ISO 14001

Design, manufacture and sales of electrical connectors and associated tools, cable accessories, marking systems, toolings and products for railway applications. Tools for pressed joints for water, gas, steam, waste and HVAC and related accessories. In house repair, refurbishment and calibration of toolings.

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