

steel perimeter trunking

technical information

Compliance

A steel perimeter trunking system with strength and rigidity manufactured using pre-galvanised steel to BS EN 10346 : 2009 grade DX51D. Manufactured to BS EN 50085-2-1 : 2006 in BS EN ISO9001 : 2008 and BS EN ISO14001 : 2004 approved facilities. Trunking is supplied as standard powder coated with LSF powder to RAL 9010 "Pure White" with a safety return edge. Covers are supplied as push-fit and are designed to give excellent earth continuity without extra components.

Classification to BS EN 50085-1 : 2005 and BS EN 50085-2-1 : 2006

Clause 6.2 According to resistance to impact for installation and application :

Impact 2·0J when used in conjunction with IK 07 accessories

Clause 6.3 According to temperatures given in the table below :

	Min.	Max.
1. Storage and transport	-25°	-
2. Installation	-15°	-
3. Application	-	+60°

Clause 6.4 According to resistance to flame propagation :
Non-flame propagating

Clause 6.5 According to electrical continuity characteristic :
CTS with electrical continuity (maximum linear impedance 1·0 milliohms per metre)

Clause 6.6 According to electrical insulating characteristic :
CTS without electrical insulating characteristic

Clause 6.7 According to degree of protection provided by enclosure according to BS EN 0529 : 1991 :

IP 30 – standard range
IP 40 – when used with IP 40 accessories

Clause 6.9 According to system access cover retention :
CTS access cover which can only be opened with a tool when installation is complete

Clause 6.10 According to electrically protective separation :
CTS without internal protective partition

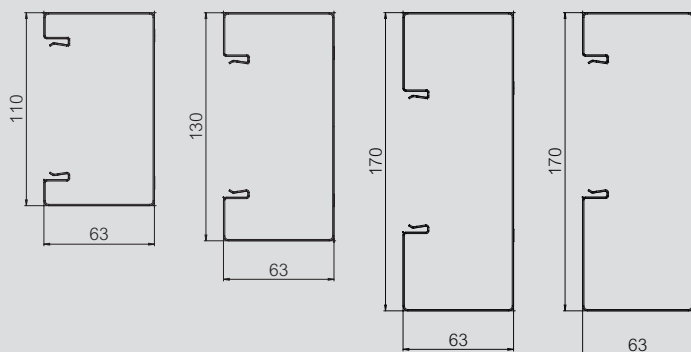
Clause 6.101 According to position when surface mounted :
CTS surface mounted on wall

Clause 6.103 According to the functions provided :
Type 2 CTS (installation)

Sizes available

There are four sizes of body within the range, these are :

110 x 63 mm 130 x 63 mm 170 x 63 mm 170A x 63 mm

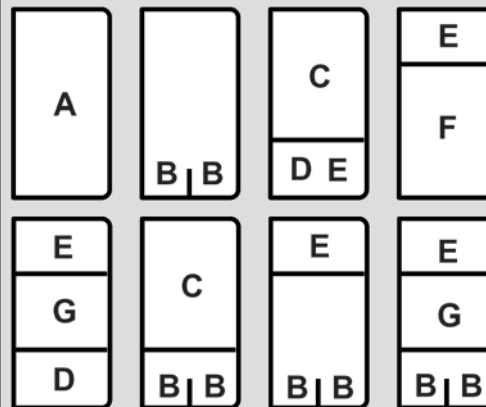


110, 130, 170 and 170A systems are all suitable for dado applications. 170 and 170A are also suitable for skirting applications. Ensure clearance between trunking body and floor finish is allowed to fit the cover straps etc.

Each of these sizes can be configured with 2 or 3 compartments with the option of a base divider giving a maximum potential of 4 compartmented areas within the trunking.

All dimensions (mm) are nominal

Compartment options



Cable capacity

Full capacity mm² per compartment area

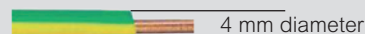
Trunking Size	Back box without		Back box with		Back box without		Back box with		
	without	with	without	with	without	with	without	with	
110 x 63	110 x 63		130 x 63		170 x 63		170A x 63		
Compartment	A	6 408	3 348	7 628	4 568	10 068	7 008	10 068	7 008
	B	-	-	616	616	1 260	1 260	1 260	1 260
	C	4 607	2 087	5 217	2 697	6 437	3 917	5 217	2 697
	D	1 801	1 261	2 411	1 871	3 631	3 091	4 851	4 311
	E	1 801	1 261	2 411	1 871	3 631	3 091	2 411	1 961
	F	4 607	2 087	5 217	2 697	6 437	3 917	7 657	5 047
	G	2 806	826	2 806	826	2 806	826	2 806	736

For each size of cable multiply the number to be installed by its own common factor. Add together the results of these calculations for all cable sizes. The resulting sum should be equal to or less than the trunking capacity. It is recommended that each compartment should not be filled over 45% of its full capacity.

Common cable factors

If the cable is not shown in the table below then the factor (area) can be calculated by :

Measuring diameter
Dividing diameter by 2 to give the radius
Area = 3·142 x radius x radius
e.g.



$$3 \cdot 142 \times 2 \times 2 = 12 \cdot 6 \text{ mm}^2$$

Cable factors : power		
	Conductor size mm ²	Factor
Solid	1·5	8·0
Solid	2·5	11·9
Stranded	1·5	8·6
Stranded	2·5	12·6
Stranded	4·0	16·6
Stranded	6·0	21·2

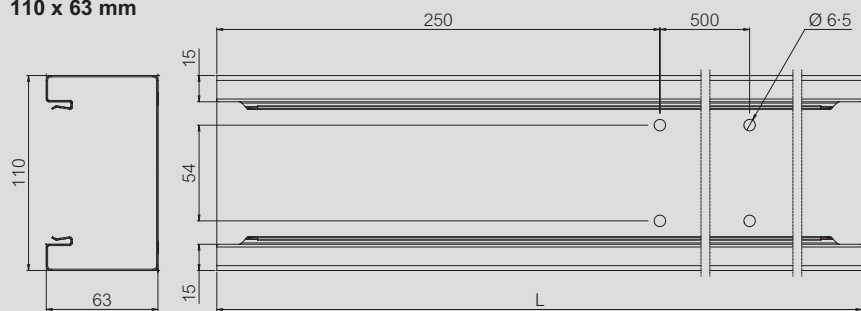
Cable factors : data		
	Ø mm	Factor
5e. UTP	5·5	30·2
5e. STP	6·0	36·0
6 UTP	6·5	42·2
6 STP	7·0	49·0

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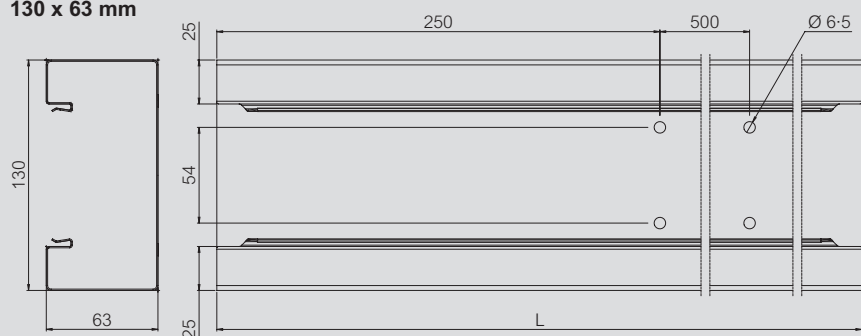
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■ Dimensions

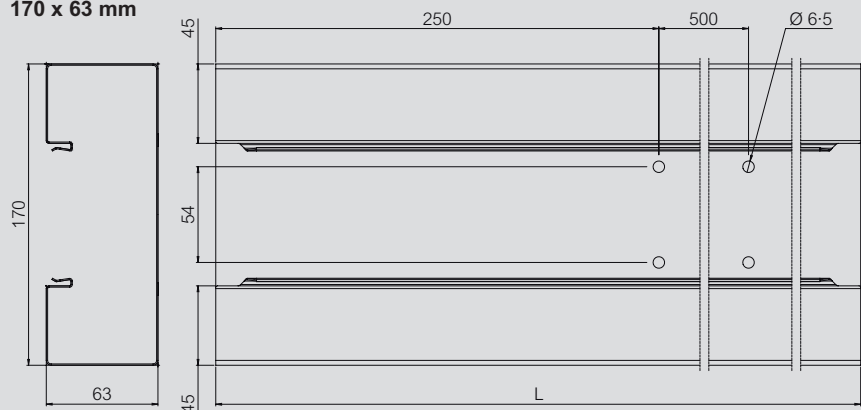
110 x 63 mm



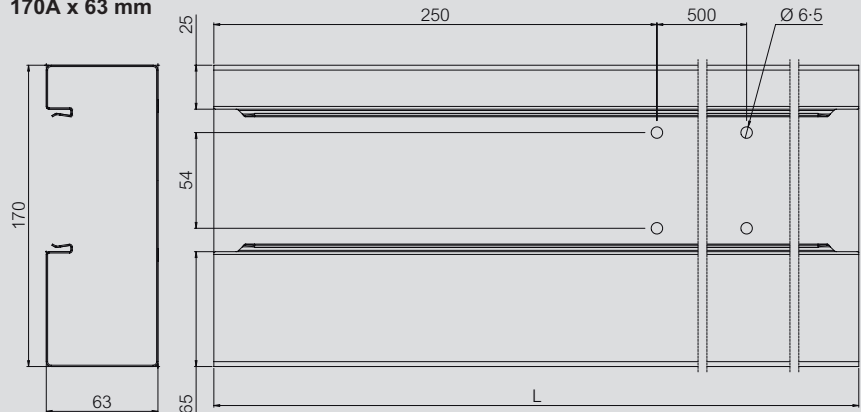
130 x 63 mm



170 x 63 mm



170A x 63 mm



Material thickness : 1 mm

All dimensions (mm) are nominal

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■ Weights

Trunking size	Product							
	110		130		170		170A	
	Cat. Nos.	Weight	Cat. Nos.	Weight	Cat. Nos.	Weight	Cat. Nos.	Weight
Body 3 m	MP351233	5.56	MP351235	6.27	MP351236	7.68	MP351237	7.68
Lid 1.5 m	MP351230	0.98	MP351230	0.98	MP351230	0.98	MP351230	0.98
Accessory spacer lid 100 mm	MP351220	0.07	MP351220	0.07	MP351220	0.07	MP351220	0.07
Coupler ¹	MP351523	0.08	MP351525	0.09	MP351526	0.05	MP351527	0.11
Universal internal/external bend lid	MP351173	0.23	MP351175	0.24	MP351176	0.27	MP351177	0.27
Internal bend cover straps	MP351203	0.37	MP351205	0.37	MP351206	0.38	MP351207	0.38
Internal bend body	MP351273	0.47	MP351275	0.52	MP351276	0.62	MP351277	0.62
External bend body	MP351303	0.53	MP351305	0.59	MP351306	0.71	MP351307	0.71
External bend lid	MP351240	0.26	MP351240	0.26	MP351240	0.26	MP351240	0.26
Flat bend body	MP351333	0.44	MP351335	0.65	MP351336	1.09	–	–
Flat bend lid	MP351260	0.21	MP351260	0.21	MP351260	0.21	MP351260	0.21
Flat bend body rising	–	–	–	–	–	–	MP351337	1.08
Flat bend body descending	–	–	–	–	–	–	MP351367	1.10
Tee body	MP351393	0.62	MP351395	0.74	MP351396	0.99	–	–
Tee body rising	–	–	–	–	–	–	MP351397	0.96
Tee cover strap	MP351563	0.15	MP351565	0.20	MP351566	0.30	MP351567 ² MP351597 ³	0.29
End cap	MP351043	0.08	MP351045	0.08	MP351046	0.10	MP351046	0.10
Cover strap	MP351103	0.05	MP351105	0.06	MP351106	0.07	MP351107	0.07
Tolerance cover strap	MP351073	0.09	MP351075	0.10	MP351076	0.11	MP351077	0.11
Wall flange plate	MP351483	0.05	MP351485	0.05	MP351486	0.06	MP351486	0.06
Wall flange closing plate	MP351513	0.03	MP351515	0.03	MP351516	0.04	MP351516	0.04
Support flange	MP351453	0.13	MP351455	0.14	MP351456	0.15	MP351456	0.15
Riser trunking body ¹ – 2 m	MP351409	5.60	MP351409	5.60	MP351409	5.60	MP351409	5.60
Riser trunking lid – 1 m	MP351439	1.47	MP351439	1.47	MP351439	1.47	MP351439	1.47
Earthing wire	MP351499	0.01	MP351499	0.01	MP351499	0.01	MP351499	0.01
Universal snapper clip ¹	MP351319	0.06	MP351319	0.06	MP351319	0.06	MP351319	0.06
Divider ¹ – 1 m	MP351189	0.36	MP351189	0.36	MP351189	0.36	MP351189	0.36
Base divider ¹ – 2 m	–	–	MP351279	0.47	MP351289	0.66	MP351289	0.66
Base divider fixing bracket ¹	–	–	MP351299	0.02	MP351309	0.02	MP351309	0.02
Internal lid support ¹	MP351469	0.03	MP351469	0.03	MP351469	0.03	MP351469	0.03
Internal bend lid	MP351250	0.12	MP351250	0.12	MP351250	0.12	MP351250	0.12
End support bracket ¹	MP351449	0.03	MP351449	0.03	MP351449	0.03	MP351449	0.03
Tee support bracket ¹	MP351459	0.03	MP351459	0.03	MP351459	0.03	MP351459	0.03
Acoustic insulation block	MP351389	0.05	MP351389	0.05	MP351399	0.05	MP351399	0.05
Cutting support block	MP351533	1.51	MP351535	1.64	MP351536	1.89	MP351536	1.89
Touch-up paint	MP351029	0.04	MP351029	0.04	MP351029	0.04	MP351029	0.04
1 gang back box	MP820329	0.85	MP820329	0.85	MP820329	0.85	MP820329	0.85
2 gang back box	MP820339	0.15	MP820339	0.15	MP820339	0.15	MP820339	0.15

1 : Internal components supplied unpainted

2 : Rising to 170 mm wide trunking 3 : Rising to 130 mm wide trunking

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■ Supporting cable trunking systems

The connector between all types of cable trunking lengths is to provide electrical and mechanical connection between the lengths ; it does not provide a load bearing connection between lengths. Consequently each length must be fully secured to the wall so that there is no significant bending force applied to the connector

■ Electromagnetic compatibility (EMC)

Cable trunking and duct systems are considered passive under normal conditions in respect of electromagnetic influences. The installation of current carrying cables may cause emissions and these cables may also be influenced by electromagnetic signals from elsewhere, but the degree of influence will depend on the nature of the installation and the apparatus connected to the system. Specific information relating to the details of cable separation required according to the type of signal, and further information on the subject of EMC, is provided in the relevant Standards and Regulations. However, as a basic principle, if power and data cables are run in separate compartments of a metal trunking system, then the metal segregation will significantly reduce the possibility of one circuit having an undesirable effect upon another

■ Installation

110, 130, 170 and 170A systems are all suitable for dado applications
170 and 170A systems are also suitable for skirting applications
Ensure clearance between trunking body and floor finish is allowed to fit the cover straps etc

The system is designed to fit together without the use of screws on the body, lid or component parts, with the exception of the wiring accessory back box which has a screw to secure a sliding plate into the body

Trunking body

The trunking body has fixing points every 500 mm and 250 mm from each end

It is recommended to secure at least every metre and near to joints / ends

Use washers and dome head screws or plastic caps to avoid damage to cables

Do not over tighten

Fit trunking body to wall ensuring it is level with preceding length and that joints are closely butted together

Once secured, install earthing coupler to trunking joint by simply pushing into place ensuring that the coupler is evenly distributed over both parts

For best results when cutting, use a fine tooth circular saw

Cut edges must be de-burred to avoid cable damage

The trunking body is supplied with a protective film to avoid marks and scratches during installation ; this can be removed when lids are fitted

Fittings

Fittings (e.g. bends, tees) are installed in the same manner as the trunking body

Dividers

The trunking can be divided into two or three compartments

Dividers are supplied in 1 m lengths and have rolled edges for safety

The multifunction snapper clips into the base and provides two locations to fit the dividers

The snapper is earthed to the trunking body and dividers automatically when installed

One snapper is required per metre

Additional snapper clips may be required at the end of the run and closer to back boxes. The snapper also provides additional support to the lid

A base divider is also available to further separate the base compartment if required

Back boxes

The 35 mm deep steel back boxes are slotted into place and secured by sliding the two fixing brackets under the return and tightening the screws
Boxes are designed to have some lateral movement for final adjustments
Marks in the rear of the trunking body every 100 mm allow for easy positioning

20 mm knockouts are provided on all sides and the base. Once removed, 20 mm grommets should be fitted to protect the cable from the cut edge before feeding cable into box

Lids

Once the wiring installation is complete, lids are simply clicked into place

Earthing cams are located every 150 mm

Minimum length of lid should be 50 mm and include at least one earthing cam

To remove, the lids should be carefully lifted from one end

This can be from any joint, fitting or wiring accessory location

If the installation comprises a single length between two walls, a coupler joint is required in the centre to aid lid removal

25 mm wide cover straps are available to provide a neat finish at lid and body joints

These clip into place over the completed trunking run after the lids have been fitted

A wider (40 mm) tolerance cover strap is also available

Earthing

The Legrand steel perimeter trunking system is designed with parts that provide earth continuity when installed, however, the connection to earth is the responsibility of the installer. Legrand provides the means to achieve a correct and safe installation. It is the responsibility of the installer to determine the number and position of earth connections