



THE COMPANY

Barton Engineering produce and supply the premium quality Barton brand of UK manufactured hot dipped galvanised steel conduit, all main associated electrical cable management systems and a wide range of accessories and fittings.

Barton conduit is produced at its own largescale, modern integrated tube rolling mill in Oldbury, which is located in the industrial West Midlands region of the UK.

Barton products are renowned for their high quality, competitive pricing and worldwide exports.

In 2015, Liberty House Group acquired the business and assets, including all worldwide IPR and trademarks of Barton and today Barton Engineering is an operating division of Liberty Precision Tubes, part of Liberty Tubular Solutions.

Liberty House Group is an international business, specialising in metals trading, manufacture and distribution of steel and advanced engineering products. Operating from four strategically positioned financial hubs in London, Dubai, Singapore and Hong Kong, the Group has sites in Europe, Africa, the Far and Middle East, Australia and North America.

In the Middle East, the entire Barton range is exclusively available through Liberty Building Solutions FZE, who operates a regional distribution centre at Jebel Ali Free Zone South, UAE.

THE QUALITY

The premium quality products listed in this brochure are either manufactured by Barton Engineering under a certified and independently audited ISO 9001 Quality Management System at Liberty Precision Tubes, or are manufactured by our approved suppliers under a certified ISO 9001 system or have their quality assured to the same level rigorous inspection processes at Barton Engineering.

The ISO 9001 Quality Management System includes a complete set of working practices, disciplines and procedures implemented at each stage of the manufacturing programme from raw material receipt to final pre delivery inspection.

As a result, all Barton products perform to the highest quality and safety standards.

THE SERVICE

Barton provide a highly efficient customer focused operation, with fully trained specialist sales personnel available to support all clients at all times.

STANDARDS

Barton products are generally manufactured in accordance with the relevant British Standards. Details of particular standards are given below:

Product Rigid Steel Conduit	British and European (Euro Norme) Standards BS 4568 part 1 BS EN 50086-1:1994 BS EN 50086-2:1996 BS 31
	BS EN 61386 part 21
Conduit Fittings & Accessories	BS EN 50086-1:1994 BS EN 50086-2:1996 BS 31
Adaptable Boxes	BS 4568 part 2
Flexible Conduit	BS EN 50086-2:1996 BS EN 61386 part 23
Switch and Socket Boxes	BS 4662
Trunking	BS 4678

Barton Engineering operations are subject to the Liberty Precision Tubes continuing assessment programme by BSI Assurance UK which confirm compliance with ISO 9001:2008 certificate no. F5650604



About Liberty House Group South Korea Thailand **Ghana** Sri Lanka Singapore Indonesia Australia South Africa

Liberty House Group is an international business, specialising in metals trading as well as the manufacture and distribution of steel and advanced engineering products. Operating from four strategically positioned financial hubs in London, Dubai, Singapore and Hong Kong, the Group has sites in Europe, Africa, the Far and Middle East, Australia and North America. With a network of offices spread across 30 countries around the world, its current turnover is approximately \$4.3 billion and it employs circa 3,000 people globally.

Liberty House Group has two main operating arms – Liberty Commodities and Liberty Industries.

Liberty Commodities (LCG), part of the Liberty House Group, is a comprehensive product and services provider to the global steel and metal industries. The business delivers innovative trade and supply chain solutions, including financing options to its clients through a global network developed over a quarter of a century.

Liberty Industries Group (LIG) is an integrated steel manufacturer and distributor, with processes ranging from the production of liquid steel to value added advanced engineering products. Divided further into Liberty Steel Group (LSG) and Liberty Engineering Group (LEG), the division has sites in the United Kingdom, Africa and India, and employs circa 1,500 people. Its global steel

production capacity exceeds 4 million tonnes per annum and its large and diverse product portfolio includes:

- Steel products such as hot rolled steel coil, steel long products, precision steel tube (both ERW and cold rolled), steel precision strip and steel wire;
- · Steel distribution;
- Tubular solutions for a range of industries, such as automotive, agriculture, yellow goods, construction, and many others;
- Engineered products for the automotive industry, including OEMs, Tier 1,2 & 3 suppliers;
- High performance solutions for the motorsport, aerospace and defence industries; and others.



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Please Note:

- Pre-galvanised conduit does not meet the requirements of BS 4568.
 It does not meet corrosion classifications defined in this standard.
- Binding materials used to make up bundles of Conduit are not intended to be used when lifting this product which should be handled only with approved slings.

HEAVY GAUGE CONDUIT WELDED - SCREWED

Manufactured in accordance with BS 31/BS 4568/BS 6053/BS 6099 (I.E.C. 614) where applicable. Each 3.75 metre length screwed both ends and complete with one solid coupling.



	External Diameter	No. of lengths per bundle	No. of bundles per lift	Metres per lift	Approx. weight per lift Tonnes
BS 4568/BS EN 50086/ BS EN 61386 Part 1 Class 4 finish HOT DIPPED GALVANISED INSIDE & OUTSIDE 3.75 metre lengths	20mm 25mm 32mm	8 8 4	50 40 41	1500 1200 615	1.16 1.17 0.80
BS 31 Class 4 finish HOT DIPPED GALVANISED INSIDE & OUTSIDE 3.75 metre lengths	1 ¹ /2" 2"	4 4	21 21	315 315	0.54 0.85
PRE-GALVANISED INSIDE & OUTSIDE 3.75 metre lengths	20mm 25mm	8 8	50 40	1500 1200	1.09 1.11
BS 4568/BS EN 50086/ BS EN 61386 Part 1 Class 2 finish BLACK ENAMELLED INSIDE & OUTSIDE 3.75 metre lengths	20mm 25mm 32mm	8 8 4	50 40 41	1500 1200 615	1.16 1.17 0.80
BS 31 Class 2 finish BLACK ENAMELLED INSIDE & OUTSIDE 3.75 metre lengths	1 ¹ / ₂ " 2"	4 4	21 21	315 315	0.54 0.85

Above conduit is packed and shipped in LIFTS (also known as Master Bundles). Each lift comprising the stated number of individual bundles measuring approximately 45-50 centimetres in diameter and 3.75 metres long. The weight varies according to size and finish of conduit but approximate weights are shown above.

Length								COI	NDUIT	DIA	METE	R, MN	1							
of run	16	20	25	32	16	20	25	32	16	20	25	32	16	20	25	32	16	20	25	32
Metres		Stra	ight			One	bend		_	Two b	ends		T	hree	bends	3		Four	bends	s
1					188	303	543	947	177	286	514	900	158	256	463	818	130	213	388	692
1.5			red by	y	182	294	528	923	167	270	487	857	143	233	422	750	111	182	333	600
2		Table	-		177	286	514	900	158	256	463	818	130	213	388	692	97	159	292	529
2.5		1 and	1 2		171	278	500	878	150	244	442	783	120	196	358	643	86	141	260	474
3					167	270	487	857	143	233	422	750	111	182	333	600				
3.5	179	290	521	911	162	263	475	837	136	222	404	720	103	169	311	563				,
4	177	286	514	900	158	256	463	818	130	213	388	692	97	159	292	529				
4.5	174	282	507	889	154	250	452	800	125	204	373	667	91	149	275	500				
5	171	278	500	878	150	244	442	783	120	196	358	643	86	141	260	474				
6	167	270	487	857	143	233	422	750	111	182	333	600								
7	162	263	475	837	136	222	404	720	103	169	311	563								
8	158	256	463	818	130	213	388	692	97	159	292	529								
9	154	250	452	800	125	204	373	667	91	149	275	500								
10	150	244	442	783	120	196	358	643	86	141	260	474								

Table 4
Conduit factors
for runs
incorporating
bends



CABLE CAPACITIES OF CONDUIT

The following tables give guidance on the calculation of the number of single-core p.v.c insulated cables which can be located in various sizes of conduit.

The tables deal with two particular cases.

- (i) Single-core p.v.c. insulated cables in straight runs not exceeding 3 metres in length.
- (ii) Single-core p.v.c. insulated cables in straight runs exceeding 3 metres in length or in runs of any length with bends or sets.

STRAIGHT RUNS NOT EXCEEDING 3 METRES IN LENGTH.

For each type of cable being used obtain the cable factor from Table 1. Sum all the cable factors and compare with the conduit factors given in Table 2.

The conduit sizes which will accommodate the cables are those with a conduit factor equal to or greater than the sum of the cable factors.

Type of conductor	Conductor cross-sectional area mm2	Factor
Solid	1 1.5 2.5	22 27 39
Stranded	1.5 2.5 4 6 10	31 43 58 88 146

Table 1 Cable factors for short straight runs

These tables are based on the 17th edition of the I.E.E. Wiring Regulations Appendix 12.

Conduit dia mm	Factor
16	290
20	460
25	800
32	1400

Table 2 Conduit factors for short straight runs

STRAIGHT RUNS EXCEEDING 3 METRES IN LENGTH OR RUNS OF ANY LENGTH INCORPORATING BENDS OR SETS.

For each type of cable being used obtain the cable factor from Table 3.

Sum all the cable factors and compare with the conduit factor given in Table 4 for the relevant length of run and the number of bends and sets in that run.

The conduit sizes which will accommodate the cables are those with a conduit factor equal to or greater than the sum of the cable factors.

Table 3 Cable factors for long straight runs, or runs incorporating bends

Type of conductor	Conductor cross-sectional area mm2	Factor
Solid or Stranded	1 1.5 2.5 4 6 10	16 22 30 43 58 105

SPACING OF SUPPORTS FOR CONDUITS

The following table gives guidance on the spacing of supports for conduit.

Nominal size	Maximum distance between supports			
of conduit mm	Horizontal runs m	Vertical runs m		
16mm	0.75	1.0		
17mm – 25mm	1.75	2.0		
26mm – 40mm	2.0	2.25		
Over 40mm	2.25	2.5		

This table is based on the 17th edition of the I.E.E. Wiring Regulations Appendix 11.

These tables are for guidance only and account needs to be taken of future wiring needs.

STOCKS, DIES, GUIDES

Complete set Comprising Stock, Dies and Guides.

To screw conduit dia. of 16mm up to 2".

SD2025 Complete set comprising stock, dies and guides for 20mm and 25mm Conduit. Overall Dia. of Dies 42mm.

SD32 Complete set comprising stock, die and guide for 32mm Conduit.

Overall Dia. of Die 63.5mm

SD3850 Complete set comprising stock, dies and guides for 1¹/₂" and 2" Conduit. Overal! Dia. of Dies 3¹/₂".

Stock - Spare

	-	Overall Dia, of Die
ST42	Stock	42mm
ST64	Stock	63.5mm





Die - St	Die - Spare Steel						
		Overall Dia. of Die					
DE16	16mm Die	42mm					
DE20	20mm Die	42mm					
DE25	25mm Die	42mm					
DE32	32mm Die	63.5mm					
DE38	1 1/2" Die	31/2"					
DE50	2" Die	31/2"					

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Guide -	- Spare Steel		
GE16 GE20 GE25 GE32 GE38 GE50	16mm Guide 20mm Guide 25mm Guide 32mm Guide 1 ¹ / ₂ " Guide 2" Guide	Overall Dia. of Die 42mm 42mm 42mm 63.5mm 3 ¹ / ₂ "	

DRAW-IN TAPES



Draw-in Tape - Steel

No. DT20

ize 20 Metres x 3.2mm

No. DT30

Size 30 Metres x 3.2mm



BOXES - CIRCULAR, SMALL

Material:

Malleable Iron

Finishes:

Black Enamel, Galvanised

60.3mm Internal Diameter

20mm Boxes

Minimum 25mm Deep

25mm Boxes

Minimum 28mm Deep

Tapped M4 at 50.8mm centres.

With tapped hole in base for earthing screw.

Supplied without covers or fixing screws unless ordered.



Terminal No. M181

20mm 25mm

Standard Pack Qty 10

10



Through No. M182

20mm 25mm

Standard Pack Qty 10



Angle No. M183

20mm 25mm

Standard Pack Qty 10



Tee No. M184

Size

20mm 25mm

Standard Pack Qty 10

10



Intersection No. M185

20mm 25mm

Standard Pack Qty 10

10



Back Outlet No. M186

20mm 25mm

Standard Pack Qty 10

10



Terminal and Back Outlet No. M187

20mm 25mm

Standard Pack Qty 10



Through and Back Outlet No. M188

20mm 25mm

Standard Pack Qty 10

10



Angle and Back Outlet No. M189

20mm 25mm

Standard Pack Qty 10

10



Tee and Back Outlet No. M190

20mm 25mm

Standard Pack Qty 10



Intersection and Back Outlet

No. M191

Size 20mm 25mm

Standard Pack Qty 10 10



Tangent Through No. M192

20mm 25mm

Standard Pack Oty 10 10



Tangent Angle No. M193

20mm 25mm

Standard Pack Qty 10 10



Tangent Tee No. M194

20mm 25mm

Standard Pack Qty 10

10

Branch Two Way (U) No. M195

20mm 25mm

Standard Pack Oty 10

10





Branch Three Way (Y) No. M196

20mm 25mm Standard Pack Qty 10 10



Twin Through Way (H) No. M197

20mm 25mm

Standard Pack Oty 10 10



Material:

Malleable Iron

Finishes: Black Enamel, Galvanised

81mm Internal Diameter.

20mm and 25mm Boxes

Minimum 35mm Deep. Minimum 38mm Deep.

32mm Box 11/2" Box Minimum 44mm Deep.

2" Box Minimum 57mm Deep.

Tapped M4 at 71.5mm Centres. With tapped hole in base for earthing screw.

Supplied without covers or fixing screws unless ordered.



Terminal No. M211

Size 20mm 25mm 32mm

Standard Pack Oty 5 5 Size 11/2" and 2" are available on

special request only



Through No. M212

20mm 25mm 32mm Size

5 Standard Pack Oty 5 5 Size $1^{1/2}$ " and 2" are available on

special request only



Angle No. M213

20mm 25mm 32mm Size

Standard Pack Oty 5 Size 11/2" and 2" are available on

special request only



Tee No. M214

20mm 25mm 32mm Size

Standard Pack Qty 5 5

Size 11/2" and 2" are available on

special request only

Intersection No. M215

20mm 25mm 32mm

Standard Pack Qty 5 5

are available on Size $1^{1}/2^{n}$ and 2^{n} special request only



Back Outlet No. M216

20mm Standard Pack Qty 5



Terminal and Back Outlet No. M217

20mm

Standard Pack Oty



Through and Back Outlet No. M218

20mm

Standard Pack Qty 5



Angle and Back Outlet No. M219

20mm

Standard Pack Oty 5



Tee and Back Outlet No. M220

20mm

Standard Pack Qty 5



Intersection and Back Outlet

No. M221

Size 20_{mm}

Standard Pack Qty 5



Tangent Angle No. M222

20mm 25mm 32mm

Standard Pack Qty 5 5



Tangent Tee No. M223

20mm 25mm 32mm

Standard Pack Oty 5 5



BOXES - CIRCULAR, SMALL SPECIAL DEEP

Material:

Malleable Iron

Finishes:

Black Enamel, Galvanised

60.3mm Internal Diameter x 62mm Deep. Tapped M4 at 50.8mm

Centres. With tapped hole in base for earthing screw. Supplied without covers or fixing screws unless ordered.



Terminal No. M231

Size

20mm 25mm

Standard Pack Oty

5

Size 11/2" and 2" are available on

special request only



Through No. M232

20mm

Standard Pack Qty 5



Angle No. M233

Size

20mm 25mm

Standard Pack Qty 5

5



Tee No. M234

20mm 25mm

Standard Pack Oty 5

5



Intersection No. M235

Size

20mm 25mm 5

Standard Pack Qty 5

BOXES - CIRCULAR, SMALL EXTENSION PATTERN

Material:

Malleable Iron

Finishes: Black Enamel, Galvanised

60.3mm Internal Diameter

20mm Boxes

Minimum 25mm Deep Minimum 28mm Deep

25mm Boxes

Tapped M4 at 50.8mm centres.

With tapped hole in base for earthing screw.

Supplied without covers or fixing screws unless ordered.



Terminal No. M241

Size

20mm 25mm

Standard Pack Qty 10

10



Through No. M242

20mm 25mm

Standard Pack Oty 10

10



Angle No. M243

Size

20mm 25mm

Standard Pack Qty 10

10



Tee No. M244

Size

20mm 25mm

Standard Pack Qty 10

10

Intersection No. M245

Size

20mm 25mm

10

Standard Pack Qty 10

BOXES - CEILING ROSE

Material:

Malleable Iron

Finishes:

Black Enamel, Galvanised

With tapped hole in base for earthing screw. Internal Diameter minimum 55mm and Minimum Depth 12.5mm. Tapped M4 at 50.8mm Centres.



Shallow No. M361

Size

20mm

Standard Pack Qty 25

Note this is a special modified version of M186



BOXES - LOOPING IN

With tapped hole in base for earthing screw. 20mm clearance.



Medium, Steel No. R274

Material: Steel. Finishes: Black Enamel, Galvanised. With tapped hole in base for earthing screw. 1 Hole or 4 Knockouts.

Size: 29mm Deep x 63.5mm

Internal Diameter. Standard Pack Qty: 10



Medium, Malleable Iron No. M272

Material: Malleable Iron. Finishes: Black Enamel, Galvanised. With tapped hole in base for earthing screw. 1,2,3,4 Holes. Minimum 31mm Deep x 63.5mm Internal Diameter. Standard Pack Qty: 10

ADAPTORS

Material: Finish:

Steel

Electro Zinc Plated



Imperial to Metric Adaptor No. R114

Size: 3/4" MALE to 20mm FEMALE

Standard Pack Qty: 100

Size: 1" MALE to 25mm FEMALE

Standard Pack Qty: 50



Metric to Imperial Adaptor No. R115

Size: 20mm MALE to 3/4" FEMALE

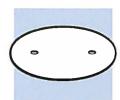
Standard Pack Qty: 100

Size: 25mm MALE to 1" FEMALE

Standard Pack Qty: 50



COVERS - CIRCULAR SMALL



Cover, Light, Overlapping, Loose,

No Screws No. R280

Material: Steel

Finishes: Black Enamel, Galvanised

Standard Pack Qty: 50



Cover, Light, Loose, No Screws.

No. R281

Material: Steel

Finishes: Black Enamel, Galvanised

Standard Pack Oty: 100



Cover, Heavy, Loose, No Screws No. R282

Material: Steel

Finishes: Black Enamel, Galvanised

Standard Pack Oty: 50



Cover, Heavy, Loose, No Screws

No. M283

Material: Malleable Iron

Finishes: Black Enamel, Galvanised

Standard Pack Qty: 50



Cover, Ball and Socket, Earthed

No. M286

Material: Malleable Iron with copper earthwire

Finishes: Black Enamel, Galvanised Size 20mm 25mm

Standard Pack Qty: 25 25



Cover, Hook Dome, Combined No. R287

Material: Steel

Finishes: Black Enamel, Galvanised

Standard Pack Oty: 25



Cover, Female Dome

No. M288

Material: Malleable Iron

Finishes: Black Enamel. Galvanised

Siza

20mm 25mm

Standard Pack Qty 25

25



Cover, Female Dome

No. R289

Material: Steel

Finishes: Black Enamel, Galvanised

Size

20mm 25mm

Standard Pack Qty 25

25



Cover, Ball and Socket, Earthed

No. R290

Material: Steel

Finishes: Black Enamel, Galvanised

Size

20mm

Standard Pack Qty 25

COVERS - CIRCULAR LARGE



Cover, Light, Loose, No Screws

No. R381 Material: Steel

Finishes: Black Enamel, Galvanised

Standard Pack Qty: 50



HOOKS AND LOOPS



Loop, Male No. M501

Material: Malleable Iron

Finishes: Black Enamel, Galvanised Size 20mm 25mm Standard Pack Qty 50 50



Hook, Male No. M502

Material: Malleable Iron

Finishes: Black Enamel, Galvanised Size 20mm 25mm Standard Pack Qty 50 50



Loop, Female No. M503

Material: Malleable Iron

Finishes: Black Enamel, Galvanised Size 20mm 25mm Standard Pack Qty 50 50



Hook, Female No. M504

Material: Malleable Iron

Finishes: Black Enamel, Galvanised Size 20mm 25mm Standard Pack Qty 50 50





Coupling, Solid No. R101

Material: Steel

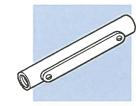
Finishes: Black Enamel, Galvanised

 Size
 20mm
 25mm
 32mm

 Standard Pack Qty
 100
 50
 50

 Size
 1½"
 2"

Standard Pack Qty 25 20



Coupling, Inspection No. M103

Material: Malleable Iron Body, 16mm – 32mm, Steel Cover, 1½" – 2" Malleable Iron Cover

Finishes: Black Enamel, Galvanised

Size 20mm 25mm 32mm Standard Pack Qty 25 10 5 Size $1^{1/2}$ " 2"

Standard Pack Qty 5 1



Coupling, Earthing No. M105

Material: Malleable Iron

Finishes: Black Enamel, Galvanised

Standard Pack Qty 25 10



Nipple, Normal No. F107

Material: Steel

Finishes: Self Colour, Galvanised

Size 1¹/₂" 2" Standard Pack Qty 50 25



Nipple, 300mm Long No. F109

Material: Steel

Finishes: Black Enamel, Galvanised

Standard Pack Qty 10 5



Coupling, Flanged, No. M110/M111

Material: Malleable Iron

Complete with washer and brass bush N.B. – Neoprene washers effect a greater degree of protection from the ingress of dust and/or liquids.

Finishes: Black Enamel, Galvanised

M110 (lead washer), M111 (Neoprene washer)

Size 20mm 25mm 32mm Standard Pack Qty 50 50 25

Size 1½" Standard Pack Qty 25



ELBOWS



Elbow, Solid No. M121

Material: Malleable Iron

Finishes: Black Enamel, Galvanised

Size 20mm 25mm 32mm Standard Pack Qty 25 25 10 Size 11/2"

are available on request only



Steel Cover 11/2" - 2" Malleable Iron Cover

20mm 25mm 32mm Standard Pack Qty 25 25

TEES



Tee, Solid No. M131

Material: Malleable Iron

Finishes: Black Enamel, Galvanised

20mm 25mm 32mm 25 Standard Pack Oty 25 10

Size 11/2"

are available on request only



Elbow, Channel Inspection, No. M123

Material: Malleable Iron, 20mm - 32mm Finishes: Black Enamel, Galvanised

11/2" 2" Size

are available on request only



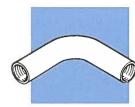
Tee, Channel Inspection, No. M133

Material: Malleable Iron, 20mm - 32mm Steel Cover 11/2" - 2" Malleable Iron Cover Finishes: Black Enamel, Galvanised Size 20mm 25mm 32mm

Standard Pack Oty 25 20 10 11/2" 2" Size

are available on request only

BENDS



Bends, Normal, Internal Thread

No. R141

Material: Steel

Finishes: Black Enamel, Galvanised

Size 20mm 25mm 32mm Standard Pack Qty 25 10 Size 11/2"

are available on request only

are available on request only

RINGS



Ring, Adaptor No. M370

Material: Malleable Iron

Finishes: Black Enamel, Galvanised

Standard Pack Qty: 100



Bend, Inspection No. M145

Material: Malleable Iron, 20mm - 32mm Steel Cover 11/2" - 2" Malleable Iron Cover Finishes: Black Enamel, Galvanised Size 20mm 25mm 32mm Standard Pack Qty 25 10 5 11/2" 2" Size

Ring, Extension No. R294

Material: Steel

Finishes: Black Enamel, Galvanised 6mm 10mm 13mm Standard Pack Oty 100 50 50 Size 16mm 19mm 25mm Standard Pack Qty 25 25 25

Size 32mm 38mm 50mm Standard Pack Oty 10 10 10

WASHERS



Lead No. F112

Neoprene No. F113

Size 20mm 25mm 32mm Standard Pack Qty 50 25 50 11/2" Size

Standard Pack Qty 25



Clip, Earthing No. F506

Material: Copper Finish: Self Colour

Size 20mm 25mm 32mm Standard Pack Oty 100 100 Size 11/2" 2" 50 Standard Pack Qty 50



Serrated No. F116

Material: Steel

Finishes: Self Colour, Zinc Plated

20mm 25mm 32mm Standard Pack Qty 100 100 100



BUSHES



Bush, Short Male No. F531

Material: Brass Finish: Self Colour

Size 20mm 25mm 32mm Standard Pack Qty 100 50 50 Size $1^{1}/_{2}$ " 2" Standard Pack Qty 50 25



Bush, Long Male No. F532

Material: Brass Finish: Self Colour



Bush, Female No. F534

Material: Brass Finish: Self Colour

Standard Pack Qty 100 50

REDUCERS



Reducer No. M471

Material: Malleable Iron

Finishes: Black Enamel, Galvanised

 Size
 20 x 16mm
 25 x 16mm

 St'd Pack Qty
 100
 100

 25 x 20mm
 32 x 20mm

 100
 50

32 x 25mm 1¹/₄" x 20mm 50 50

1¹/₄" x 25mm 1¹/₂" x 20mm 50 50

 $1^{1}/_{2}$ " x 25mm $1^{1}/_{2}$ " x 32mm 50 50

2" x 25mm 2" x 32mm 25 25

2" x 1¹/₂" 25

PLUGS AND GLANDS



Plug, Hexagon Head, No. M527

Material: Malleable Iron

Finishes: Black Enamel, Galvanised

Size 20mm 25mm 32mm Standard Pack Qty 100 100 100 Size 11/2" 2"

Standard Pack Qty 50 25



Plug, Slotted Head No. F535

Material: Brass Finishes: Self Colour

Standard Pack Qty 100 50



Gland for T.R.S. or similar cable

No. F538 Material: Brass Finishes: Self Colour

Size 20mm 25mm Standard Pack Qty 100 100

LOCKNUTS



Locknut, Hexagon Light No. R507

Material: Steel

Finishes: Black Enamel, Galvanised

Size 20mm 25mm 32mm Standard Pack Qty 100 100 100

Size $1^{1/2}$ " 2" Standard Pack Qty 50 25



Locknut, Hexagon Heavy No. M508

Material: Malleable Iron

Finishes: Black Enamel, Galvanised

Size 20mm 25mm 32mm Standard Pack Qty 100 100 100

Size $1^{1/2}$ " 2" Standard Pack Qty 50 50



Locknut, Circular, Milled Edge

No. F505 Material: Steel

Finishes: Self Colour, Zinc Plated

Size 20mm 25mm 32mm Standard Pack Qty 100 100 100

Size $1^{1}/_{2}$ " 2" Standard Pack Qty 50 25



SADDLES



Saddle, Hospital No. M362

Material: Malleable Iron Base, with Steel Top Finishes: Black Enamel, Galvanised Size 20mm 25mm 32mm

Standard Pack Qty 50 25 25 Size $1^{1}/2$ " 2" 2" Standard Pack Qty 25 10

Saddle, Distance No. M363

Material: Iron Base with Steel Top Finishes: Black Enamel, Galvanised

Size 20mm 25mm 32mm Standard Pack Qty 50 25 25 Size $1^{1}/2$ " 2" Standard Pack Qty 25 10

Saddle, Spacer Bar, One Way No. R431

Material: Steel

Finishes: Black Enamel, Galvanised

Standard Pack Qty 50 25



Clip (Half Saddle) No. F441

Material: Steel

Finishes: Black Enamel, Galvanised
Size 20mm 25mm
Standard Pack Qty 100 100
Size 32mm
Standard Pack Qty 100



Saddle, 1 Way (Single) No. R451

Material: Steel

Finishes: Black Enamel, Galvanised

 Size
 20mm
 25mm
 32mm

 Standard Pack Qty
 100
 100
 100

 Size
 1½"
 2"

Size 1½″ 2″ Standard Pack Qty 100 50



Crampet, Steel No. F461

Material: Steel

Finishes: Black Enamel, Galvanised Size 20mm 25mm Standard Pack Qty 100 100

SCREWS



Brass. M4 Pan Head No. F645

Length: 6mm 10mm 12mm 16mm

20mm 25mm

Standard Pack Qty: 100



Brass. M3.5 Pan Head No. F646

Length: 6mm 10mm 12mm 16mm

20mm 25mm

Standard Pack Qty: 100



Brass. M3.5 Raised Countersunk

No. F647

Length: 6mm 10mm 12mm 16mm

20mm 25mm

Standard Pack Qty: 100



Brass. M3.5 Cheese Head No. F648

Length: 6mm 10mm 12mm 16mm

20mm 25mm

Standard Pack Qty: 100



Brass. M4 Earth Terminal Studs

No. F657

Standard Pack Qty: 100



Screw - Steel, Bright Zinc Plated.

M4 Pan Head No. F645

Length: 5mm 6mm Standard Pack Qty: 100



Screw - Steel, Bright Zinc Plated. M3.5 Pan Head No. F646

Length: 5mm 6mm Standard Pack Oty: 100



GASKETS



Rubber Gasket for Coupling, Inspection No. F401

Size 20mm 25mm 32mm

Size $1^{1/2}$ " 2"

NO STANDARD PACK - ORDER AS REQUIRED



Rubber Gasket for Bend, Inspection No. F408

Size 20mm 25mm 32mm

Size $1^{1/2}$ " 2"



Rubber Gasket for Elbow, Channel Inspection No. F402

Size 20mm 25mm 32mm

Size $1^{1/2}$ " 2"



Rubber Gasket for Box, Small Circular No. F409



Rubber Gasket for Elbow, Circular Inspection No. F403



Rubber Gasket for Box, Large Circular No. F410

Rubber Gaskets also available for all sizes of Adaptable Boxes **No. F415**



Rubber Gasket for Tee, Channel Inspection No. F405

Size 20mm 25mm 32mm

Size $1^{1/2}$ " 2"



Barton Adaptable Boxes are manufactured from steel and are available with plain sides or knock-outs.

The standard finishes are Black Enamel and Hot Dipped Galvanised.

Where boxes are supplied with knock-outs the number and size are as follows:

Width of side	Number of K.O.'s in each side	Size of K.O.
3"	2	20mm
4"	3	20mm
6"	4	20mm
9"	6	20mm
12"	6	20mm

Flanged lids are fitted as standard to all boxes and are secured by M5 x 8mm mushroom head screws.

Boxes can be supplied to order with overlapping flat lids at an extra charge.

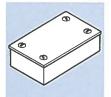
Rubber gaskets are available and supplied to order at an extra charge.

The complete range is manufactured in accordance with BS 4568 Part 2.

A range of Pre-Galvanised Adaptable Boxes are also available on request.



Adaptable Boxes with Knock-outs No. R262



Adaptable Boxes Plain No. R261

Size		
mm	Pack Qty	
75 x 75 x 37.5	3 x 3 x 1 ¹ / ₂	10
75 x 75 x 50	3 x 3 x 2	10
75 x 75 x 75	3 x 3 x 3	6
100 x 75 x 37.5	4 x 3 x 1 ¹ / ₂	10
100 x 75 x 50	4 x 3 x 2	10
100 x 100 x 37.5	4 x 4 x 1 ¹ / ₂	10
100 x 100 x 50	4 x 4 x 2	10
100 x 100 x 75	4 x 4 x 3	6
100 x 100 x 100	4 x 4 x 4	6
150 x 75 x 37.5	6 x 3 x 1 1/2	6
150 x 75 x 50	6 x 3 x 2	6
150 x 75 x 75	6 x 3 x 3	6
150 x 100 x 37.5	$6 \times 4 \times 1^{1/2}$	6
150 x 100 x 50	6x 4x2	- 6
150 x 100 x 75	6x 4x2	6
150 x 150 x 37.5		6
150 x 150 x 50	6 x 6 x 2	6
150 x 150 x 75	6x 6x3	4
150 x 150 x 100	6x 6x4	2
150 x 150 x 150	6x 6x7	6
200 x 150 x 150	8 x 6 x 2	
200 x 200 x 100	8 x 8 x 4	2
200 x 200 x 150	8x 8x6	2
225 x 75 x 37.5	$9 \times 3 \times 1^{1/2}$	6
225 x 75 x 50	9 x 3 x 2	6
225 x 75 x 75	9 x 3 x 3	6
225 x 100 x 75	9 x 4 x 3	4
225 x 150 x 37.5	9 x 6 x 1 ¹ / ₂	4
225 x 150 x 50	9x 6x2	4
225 x 150 x 75	9x 6x3	4
225 x 150 x 100	9x 6x4	2
225 x 225 x 50	9x 9x2	2
225 x 225 x 75	9x 9x3	2
225 x 225 x 100	9x 9x4	1
225 x 225 x 150	9x 9x6	1
300 x 150 x 50	12 x 6 x 2	2
300 x 150 x 75	12 x 6 x 3	2
300 x 150 x 100	12 x 6 x 4	2
300 x 225 x 50	12 x 9 x 2	2
300 x 225 x 75	12 x 9 x 3	1
300 x 225 x 100	12 x 9 x 4	1
300 x 300 x 37.5	12 x 12 x 1	2
300 x 300 x 50	12 x 12 x 2	2
300 x 300 x 75	12 x 12 x 3	1
300 x 300 x 100	12 x 12 x 4	1
300 x 300 x 150	12 x 12 x 6	1
400 x 300 x 150	16 x 12 x 6	1
450 x 450 x 150	18 x 18 x 6	1
600 x 600 x 150	24 x 24 x 6	1



REFER BARTON FLEXIBLE CATALOGUE FOR A COMPLETE RANGE OF FLEXIBLE CONDUITS AND FITTINGS

STANDARD FLEXIBLE METALLIC CONDUIT (UNPACKED)

Galvanised Steel - No. F562

Internal Diameter	16mm	20mm	25mm	
	32mm	40mm	50mm	63mm

P.V.C. COVERED FLEXIBLE METALLIC CONDUIT

Galvanized Steel PVC Covered NO. F582

Available as standard in black P.V.C. sheathed for added protection against ingress of dirt, moisture and greases.

A full range of fittings is also available.

SPACING OF SUPPORTS FOR CONDUITS

The following table gives guidance on the spacing of support for flexible conduit.

Nominal size	Maximum distance between supports		
of conduit	Horizontal runs m	Vertical runs m	
16mm and Under	0.3	0.5	
17mm-25mm	0.4	0.6	
26mm-40mm	0.6	0.8	
Over 40	0.8	1.0	



Adaptor, Flexible Tube, Conduit,

Male Thread No. F536

Material: Brass. Finishes: Self colour.

Standard Pack Quantity
100
100
50
50
25
20
10



Adaptor, Flexible Tube, Conduit, Female Thread No. F537

Material: Brass. Finishes: Self colour.

Conduit x Flexible	Standard Pack
Conduit I/D	Quantity
20mm x 16mm	100
20mm x 20mm	50
25mm x 20mm	50
25mm x 25mm	50
32mm x 32mm	25
1 ¹ / ₂ " x 40mm	20
2" x 50mm	10
	•



A comprehensive range of switch and socket boxes manufactured in four depths 16mm, 25mm, 35mm and 47mm and all available in one and two gang configurations. To facilitate the easy fitting of accessories into the boxes, they are designed with at least one adjustable lug.



Adjustable Lug

All Barton RE Series Switch and Socket Boxes include a unique Regulation Brass Earth Terminal into which several earth wires can be fitted from either the inside or outside of the box.



Regulation Brass Earth Terminal

Each box is produced with a specified number and size of knock outs which allow adequate cable entries for wiring purposes.

Nominal Dimensions:

One Gang – 72mm x 72mm

Two Gang - 132mm x 72mm

Material: Pre-coated galvanised steel

Barton switch and socket boxes are manufactured in accordance with BS 4662.



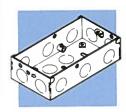


Switch and Socket Boxes

35mm deep

No. BC82RE2025

Gang	Type of Entry	Fixing Lugs	Pack Qty.
One	20 & 25mm	3 fixed and	10
Gang	KO's	1 adjustable	



Switch and Socket Boxes

35mm deep

No. BC92RE

Gang Type of Entry		Fixing Lugs	Pack Qty.	
Two Gang	20 & 25mm KO's	1 fixed and 1 adjustable	5	



Switch and Socket Boxes

47mm deep

No. BC14RE

(For use with double thickness partitioning)

Gang	Type of Entry	Fixing Lugs	Pack Qty.
One	20mm	2 fixed and	20
Gang	KO's	2 adjustable	



Switch and Socket Boxes

47mm deep

No. BC22RE

(For use with double thickness partitioning)

Gang	Type of Entry	Fixing Lugs	Pack Qty.
Two	20 & 25mm	1 fixed and	10
Gang	KO's	1 adjustable	



THE BARTON CABLE TRUNKING RANGE

QUICK-FIX RANGE (QF)

This is the most popular range of trunking. It features a rapid and fool proof method for securing the lid, by simply twisting turnbuckles through 90 degrees. These lock the lid in place, providing full earth continuity between body and lid.

The range is manufactured from high quality galvanised steel as standard and is also available as an option with a coloured powder coating.

LIGHTING TRUNKING (LT)

The range of lighting trunking has a 50 x 50mm body section with either a white PVC or steel snap-in lid. Fittings are common to the Quick-Fix and Screw-Fix ranges, providing complete compatability between cable and lighting trunking.

The standard finish is high quality galvanised steel.

QUALITY

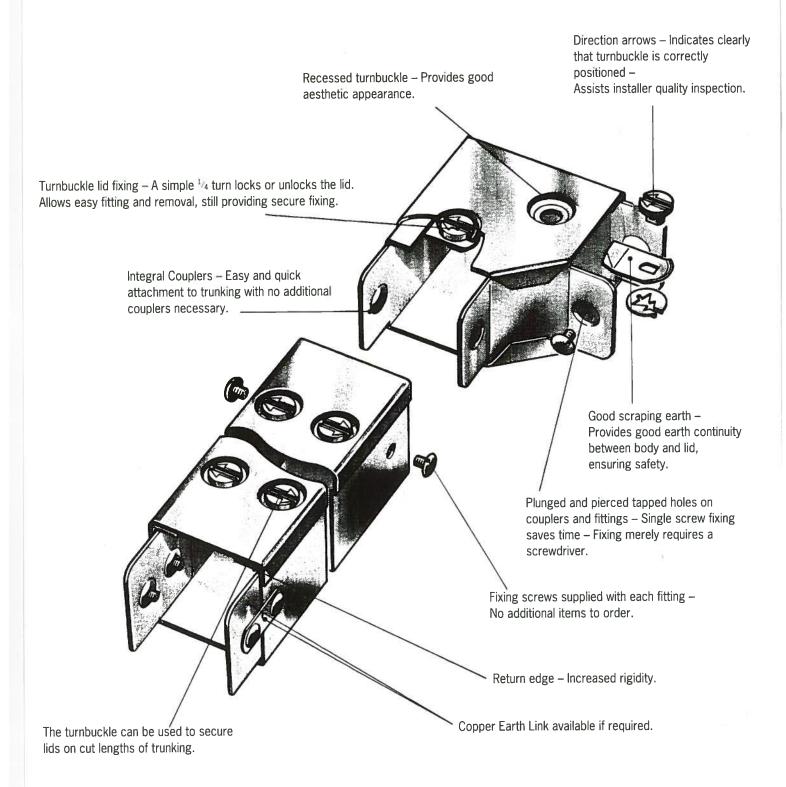
All galvanised steel used in the manufacture of cable trunking and fittings complies with BS EN 10142 (and BS 4678), ensuring a no-flake, no-fracture product.

MULTI COMPARTMENT TRUNKING

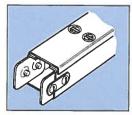
We manufacture Multi Compartment Trunking. Please see Page 28 for further information.

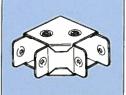


QUICK-FIX

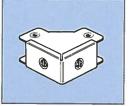










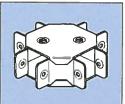


Dimensions (mm)	CABLE TRUNKING (See note (1) below)	RIGHT ANGLE BEND – TOP LID	RIGHT ANGLE BEND - INSIDE LID	RIGHT ANGLE BEND - OUTSIDE LID
50 x 50	QF/22	QF/RABT 22	QF/RABI 22	QF/RABO 22
75 x 50	QF/32	QF/RABT 32	QF/RABI 32	QF/RABO 32
75 x 75	QF/33	QF/RABT 33	QF/RABI 33	QF/RABO 33
100 x 50	QF/42	QF/RABT 42	QF/RABI 42	QF/RABO 42
100 x 75	QF/43	QF/RABT 43	QF/RABI 43	QF/RABO 43
100 x 100	QF/44	QF/RABT 44	QF/RABI 44	QF/RABO 44
150 x 50	QF/62	QF/RABT 62	QF/RABI 62	QF/RABO 62
150 x 75	QF/63	QF/RABT 63	QF/RABI 63	QF/RABO 63
150 x 100	QF/64	QF/RABT 64	QF/RABI 64	QF/RABO 64
150 x 150	QF/66	QF/RABT 66	QF/RABI 66	QF/RABO 66
225 x 100	QF/94	QF/RABT 94	QF/RABI 94	QF/RABO 94











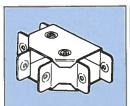
Dimensions (mm)	45 DEGREE BEND - TOP LID	45 DEGREE BEND - INSIDE LID	45 DEGREE BEND – OUTSIDE LID	4 WAY BOX	HANGER
50 x 50	QF/FFT 22	QF/FFI 22	QF/FFO 22	QF/FW 22	OF/H 22
75 x 50	QF/FFT 32	QF/FFI 32	QF/FFO 32	QF/FW 32	OF/H 32
75 x 75	QF/FFT 33	QF/FFI 33	QF/FFO 33	QF/FW 33	QF/H 33
100 x 50	QF/FFT 42	QF/FFI 42	QF/FFO 42	QF/FW 42	QF/H 42
100 x 75	QF/FFT 43	QF/FFI 43	QF/FFO 43	QF/FW 43	QF/H 43
100 x 100	QF/FFT 44	QF/FFI 44	QF/FFO 44	QF/FW 44	QF/H 44
150 x 50	QF/FFT 62	QF/FFI 62	QF/FFO 62	QF/FW 62	QF/H 62
150 x 75	QF/FFT 63	QF/FFI 63	QF/FFO 63	QF/FW 63	QF/H 63
150 x 100	QF/FFT 64	QF/FFI 64	QF/FFO 64	QF/FW 64	QF/H 64
150 x 150	QF/FFT 66	QF/FFI 66	QF/FFO 66	QF/FW 66	QF/H 66
225 x 100	QF/FFT 94	QF/FFI 94	QF/FFO 94	QF/FW 94	QF/H 94

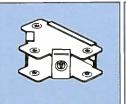
(1) Cable Trunking – 3m length complete with lid and couplers.

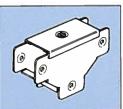
Product Code Example. QF/RABT 22. ie. Quick-Fix/Right Angle Bend Top 2" x 2".

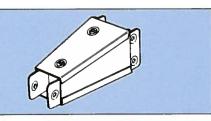
All 50 x 50mm Fittings are compatible with 50 x 50mm Lighting Trunking.











Dimensions (mm)	TEE BEND - TOP LID	TEE BEND - INSIDE LID	TEE BEND - OUTSIDE LID	REDUCER	
50 x 50	QF/TT 22	QF/TI 22	QF/TO 22		
75 x 50	QF/TT 32	QF/TI 32	QF/TO 32	75 x 50 TO 50 x 50mm	QF/RED 32/22
75 x 75	QF/TT 33	QF/TI 33	QF/TO 33	75 x 75 TO 50 x 50mm	QF/RED 33/22
100 x 50	QF/TT 42	QF/TI 42	QF/TO 42	75 x 75 TO 75 x 50mm	QF/RED 33/32
100 x 75	QF/TT 43	QF/TI 43	QF/TO 43	100 x 50 TO 50 x 50mm	QF/RED 42/22
100 x 100	QF/TT 44	QF/TI 44	QF/TO 44	100 x 75 TO 50 x 50mm	QF/RED 43/22
150 x 50	QF/TT 62	QF/TI 62	QF/TO 62	100 x 100 TO 50 x 50mm	QF/RED 44/22
150 x 75	QF/TT 63	QF/TI 63	QF/TO 63	100 x 100 TO 75 x 75mm	QF/RED 44/33
150 x 100	QF/TT 64	QF/TI 64	QF/TO 64	150 x 100 TO 100 x 100mm	QF/RED 64/44
150 x 150	QF/TT 66	QF/TI 66	QF/TO 66	150 x 150 TO 100 x 100mm	QF/RED 66/44
225 x 100	QF/TT 94	QF/TI 94	QF/TO 94	150 x 150 TO 150 x 100mm	QF/RED 66/64

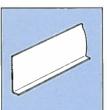












Dimensions (mm)	STOP END	COUPLER	FLANGED COUPLER	CABLE RETAINER	PIN RACK	LOOSE SEPARATOR 3m LENGTHS
50 x 50	QF/SE 22	QF/C 2	QF/FC 2	QF/CRS 2	QF/PR 22	QF/LS 2
75 x 50	QF/SE 32	QF/C 2	QF/FC 2	QF/CRS 3	QF/PR 32	QF/LS 2
75 x 75	QF/SE 33	QF/C 3	QF/FC 3	QF/CRS 3	QF/PR 33	QF/LS 3
100 x 50	QF/SE 42	QF/C 2	QF/FC 2	QF/CRS 4	QF/PR 42	QF/LS 2
100 x 75	QF/SE 43	QF/C 3	QF/FC 3	QF/CRS 4	QF/PR 43	QF/LS 3
100 x 100	QF/SE 44	QF/C 4	QF/FC 4	QF/CRS 4	QF/PR 44	QF/LS 4
150 x 50	QF/SE 62	QF/C 2	QF/FC 2	QF/CRS 6	QF/PR 62	QF/LS 2
150 x 75	QF/SE 63	QF/C 3	QF/FC 3	QF/CRS 6	QF/PR 63	QF/LS 3
150 x 100	QF/SE 64	QF/C 4	QF/FC 4	QF/CRS 6	QF/PR 64	QF/LS 4
150 x 150	QF/SE 66	QF/C 6	QF/FC 6	QF/CRS 6	QF/PR 66	QF/LS 6
225 x 100	QF/SE 94	QF/C 4	QF/FC 4	QF/CRS 9	QF/PR 94	QF/LS 4

^{*2} Metre lengths available to order.

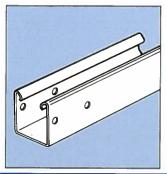
Hangers are available with 11mm or 21mm holes.

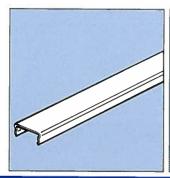
Manufactured from pre-galvanised sheet steel to BS EN 10142.

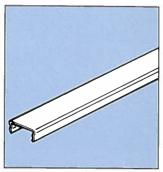
^{*}Powder-coated finishes are available to suit customer requirements.

^{*}Non gusset fittings and accessories are available.

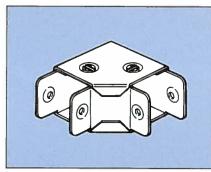


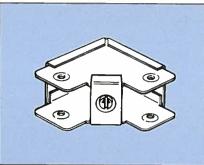


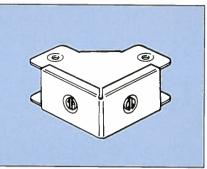




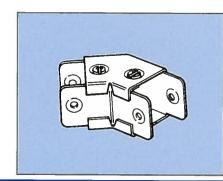
Dimensions mm	LIGHTING TRUNKING – BODY ONLY		METAL LID	P.V.C. LID
50 x 50	3.5M long LT22/3.5	5.0M long LT22/5.0	2M long	2M long
30 X 30	4.5M long LT22/4.5	6.0M long LT22/6.0	LT2/ML	LT2/PVCL

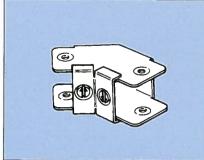


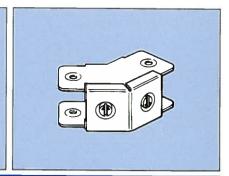




Dimensions mm	RIGHT ANGLE BEND - TOP LID	RIGHT ANGLE BEND - INSIDE LID	RIGHT ANGLE BEND - OUTSIDE LID
50 x 50	QF/RABT 22	QF/RABI 22	QF/RABO 22



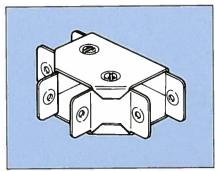


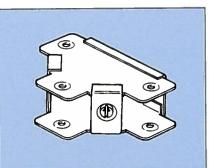


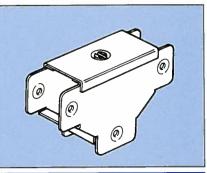
Dimensions mm	45 DEGREE BEND - TOP LID	45 DEGREE BEND - INSIDE LID	45 DEGREE BEND - OUTSIDE LID
50 x 50	QF/FFT 22	QF/FFI 22	QF/FFO 22

Product Code Example QF/RABT 22 i.e. Quick-Fix/Right Angle Bend Top 2" x 2".

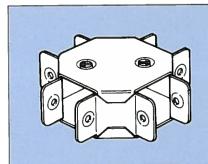


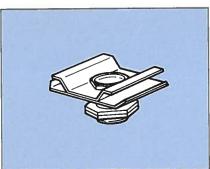


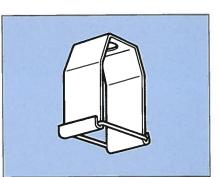




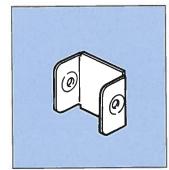
Dimensions mm	TEE BEND - TOP LID	TEE BEND - INSIDE LID	TEE BEND - OUTSIDE LID
50 x 50	QF/TT 22	QF/TI 22	QF/TO 22
30 x 30			

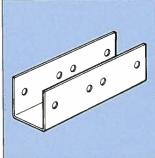


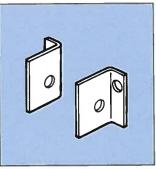


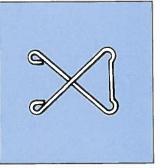


Dimensions mm	FOUR WAY BOX	SUSPENSION UNIT	HANGER
50 x 50	QF/FW 22	LT/SU 22	LT/H 22
30 X 30			









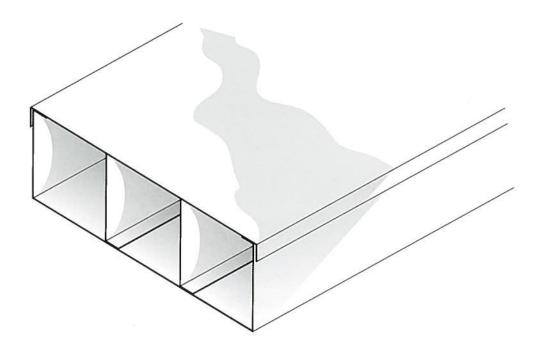
Dimensions mm	STOP END	COUPLER	FLANGED COUPLER	CABLE RETAINER
E0 :: E0	QF/SE 22	LT/SC 22 (Short)	QF/FC 22	QF/CRS 2
50 x 50		LT/LC 22 (Long)		

 $50 \times 50 \text{mm}$ Quick-Fix fittings are available for use with Lighting Trunking.

Hangers are available with 11mm or 21mm holes.

Manufactured from pre-galvanised sheet steel to BS EN 10142.

AVAILABLE IN QUICK-FIX



For 2 Compartment Trunking add QF/----/2 the listed numbers on the previous pages.



For 3 Compartment Trunking add QF/----/3 to the listed numbers on the previous pages.



Multi Compartment Trunking is supplied with evenly spaced separators. Trunking with different sized compartments may be supplied subject to prior agreement.

Details must be confirmed in writing when ordering.

TRUNKING AND BENDS

"L" shaped separators are welded into position or can be supplied loose for fitting on site.

TEES AND INTERSECTIONS

Separators are supplied loose so that wiring can be laid into position. 50% of the wiring area is lost by the fitting of separators.



TRUNKING CAPACITY GUIDE

The following guide will help you select the correct size of trunking for the required number and size of cables in your installation. It has been prepared from Appendix 12 of the I.E.E. wiring regulations for Electrical Installations.

When cables are pulled into trunking, they experience drag from other cables and from the trunking itself. Using this guide to select the size of trunking for your cabling will ensure that an acceptable pulling force is required to install the cables, and that minimum damage to the insulation will occur. This is only a guide: and is designed for use with single core PVC insulated cables.

TO USE THIS GUIDE

- (a) Calculate Capacity Unit by multiplying the number of cables by the Factor from table A.
- (b) Use Capacity Unit to choose nearest size of trunking from table B.
- (c) Remember that cables can cross over each other and that you may need space for future wiring. Consequently, select the next size up.

EXAMPLE			
NUMBER OF CABLES	CONDUCTOR CROSS SECTION MM ²	FACTOR (FROM A)	CAPACITY UNIT (FROM B)
50	1.5 stranded	8.1	405
40	2.5 stranded	11.4	456
20	6.0 stranded	22.9	458
		Total	1319

From Table B, The Capacity Unit of 1319 falls between $50 \times 50 \text{mm}$ and $75 \times 50 \text{mm}$ hence choose $75 \times 50 \text{mm}$ trunking.

TABLE A			
TYPE OF CONDUCTOR	CONDUCTOR CROSS SECTION	FACTOR	
0-64	1.5	7.1	
Solid	2.5	10.2	
	1.5	8.1	
	2.5	11.4	
	4	15.2	
Stranded	6	22.9	
	10	36.3	
	16	42.9	
	25	62.6	
	35	95	

Note: For sizes and types of cables not included in the above tables A and B, calculate total cross section of cables and select trunking size so that not more than 45% of trunking is filled.

	TABLE B			
CAPACITY	DIMENSION OF TRUNKING MM X MM			
738	75 x 25			
993	100 x 25			
1037	50 x 50			
1555	75 x 50			
2091	100 x 50			
2371	75 x 75			
3162	150 x 50			
3189	100 x 75			
4252	100 x 100			
4743	150 x 75			
9697	150 x 150			



ORDERING PROCEDURES

- 1. Please contact our sales office to discuss product availability, delivery times and any commercial queries.
- 2. All telephone orders must be confirmed in writing and be clearly marked 'Confirmation Order'. Please order using the catalogue number and specify the finish required.
- 3. Invoices will reflect current ongoing discounts unless there is a valid special price. In such cases, these prices will only be available if the written order refers to special prices and refers to the quotation reference number.
- **4.** Orders for items not usually held in stock must be placed in writing and may not then be cancelled.
- **5.** Please refer to our current price lists for details of minimum carriage paid order values and any minimum order charges.
- **6.** All orders and transactions are subject to our Conditions of Sale which may be obtained upon request.

QUALITY ASSURANCE PROCEDURES

All aspects of the operations of Barton Engineering are governed by detailed Quality Assurance Procedures. These are subject to regular independent audit who provide independent certification to confirm that they comply with the requirements of the International Standard ISO 9001.

CE MARKING

It is our policy that Barton Engineering products will be CE marked to confirm that they comply with the relevant directives.

At the time of writing our best advice is that our ranges of Cable Protection Products will be classified within the Low Voltage Products Directive. We will therefore ensure that the CE marking is undertaken to comply with the necessary regulation.



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