

# CONDUITS & ACCESSORIES

CATALOGUE



STEEL CONDUITS

MALLEABLE IRON FITTINGS  
& ACCESSORIES

FLEXIBLE CONDUIT SYSTEMS



## SMART<sup>Tr</sup>

Your Trusted Partner in  
Electrical & Mechanical Support

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# INTRODUCTION

Your Trusted  
Partner  
in Electrical &  
Mechanical Support



SMARTr range of conduit products are OEM manufactured by SMARTr International, a ISO 9001:2000 Singapore company established since 1996.

Products available in this catalogue are manufactured to the highest quality according to the relevant standards mentioned.

In order to maintain product consistency, the company employs a strict set of QC discipline and procedures that are implemented at various stages of the manufacturing program; from raw material selection through to the inspection process, while **ensuring clients' full satisfaction upon receiving our finished products.**

As a result of the company's strict quality policy, our products are confidently and widely installed in major projects throughout Singapore and other regional markets.

## Why is SMARTr Conduit better?



High quality mild steel which ensures superior bending and forming properties



Manufactured by cold forming and high frequency welding



Dimensionally accurate with uniform quality



Each length distinctly marked with embossed branding

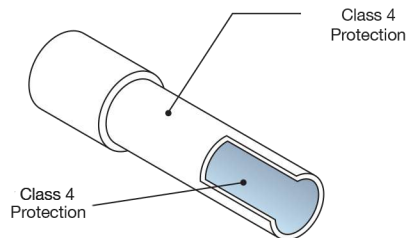


Conduits are packed and securely bundled to ensure easily handling with maximum protection

### CLASS 3 & CLASS 4 CONDUITS BS EN 61386 - 21 : 2004

#### CHARACTERISTICS & APPLICATIONS (CLASS 4)

- Supplied with one standard coupler per length
- Hot-Dipped Galvanized Sheradized
- Metric size threadings
- Smooth interior for easy cable pulling
- Higher protection against corrosion
- Suitable for outdoor use which requires higher level of corrosion protection
- 38MM/50MM conduits are also available; specifications available upon request
- Note: BS 4568 : Part 1 : 1970 and BS EN 50086-2-1 : 1996 are no longer valid



CLASS OF SURFACE PROTECTION	NOMINAL SIZE	ITEM CODE	OUTSIDE DIAMETER		NOMINAL THICKNESS	LENGTH W/O COUPLING	NO. OF LENGTHS PER BUNDLE	NO. OF BUNDLE PER LIFT	TOTAL LENGTHS PER LIFT
			MIN	MAX					
CLASS 4	20mm	CP-20-4-SMARTz	19.7mm	20mm	1.6 ±0.15mm	3.75 metres	10	20	200
	25mm	CP-25-4-SMARTz	24.6mm	25mm	1.6 ±0.15mm	3.75 metres	10	20	200
	32mm	CP-32-4-SMARTz	31.6mm	32mm	1.6 ±0.15mm	3.75 metres	5	20	100

#### CHARACTERISTICS & APPLICATIONS (CLASS 3)

- Supplied with one standard coupler per length
- Metric size threadings
- Smooth interior for easy cable pulling
- Suitable for indoor use with lower levels of humidity
- 38MM/50MM conduits are also available; specifications available upon request
- Note: BS 4568 : Part 1 : 1970 and BS EN 50086-2-1 : 1996 are no longer valid

CLASS OF SURFACE PROTECTION	NOMINAL SIZE	ITEM CODE	OUTSIDE DIAMETER		NOMINAL THICKNESS	LENGTH W/O COUPLING	NO. OF LENGTHS PER BUNDLE	NO. OF BUNDLE PER LIFT	TOTAL LENGTHS PER LIFT
			MIN	MAX					
CLASS 3	20mm	CP-20-3-SMTR	19.7mm	20mm	1.6 ±0.15mm	3.75 metres	10	20	200
	25mm	CP-25-3-SMTR	24.6mm	25mm	1.6 ±0.15mm	3.75 metres	10	20	200
	32mm	CP-32-3-SMTR	31.6mm	32mm	1.6 ±0.15mm	3.75 metres	5	20	100

### EPOXY POWDER COATED CONDUITS FOR CLASS 3 & CLASS 4 BS EN 61386 - 21 : 2004

#### CHARACTERISTICS & APPLICATIONS FOR EPOXY POWDER COATED CONDUITS (CLASS 3 & CLASS 4)

- Additional epoxy powder coating provides heavy surface corrosion protection to conduits
- Epoxy powder coated finishing provides excellent impact and scratch resistance
- Bending of epoxy conduit is not recommended. In the event if bending occurs, touch-up after bending is required
- Reduce cost of manpower needed for epoxy conduits against manual painting
- Supplied both ends threaded with one standard socket on one end
- Suitable for indoor and outdoor areas
- Colours to differentiate the types of M & E services

STANDARDS	SIZE	MODEL NO.	LENGTH W/O COUPLING	NO. OF LENGTHS PER BUNDLE	TOTAL LENGTHS PER LIFT
BS EN 61386 - 21 - 2004 (CLASS 3)	20mm	CP-20-E	3.75 metres	10	200
	25mm	CP-25-E	3.75 metres	10	200
	32mm	CP-32-E	3.75 metres	5	100
BS EN 61386 - 21 - 2004 (CLASS 4)	20mm	CP-20-4-E	3.75 metres	10	200
	25mm	CP-25-4-E	3.75 metres	10	200
	32mm	CP-32-4-E	3.75 metres	5	100

**Note:** Colours quoted are based on client's given colour code/sample and are supplied in bulk, subject to epoxy colour availability.

## CABLE CAPACITIES OF CONDUIT

The following table provide guidance on the calculation of the number of single-core P.V.C insulated cables which can be located in various sizes of the conduits.

The following tables demonstrate 2 particular cases:

1. Single-core P.V.C insulated cables in straight runs not exceeding 3 metres in length.
2. 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 can 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 (mm <sup>2</sup> )	FACTOR	CONDUIT DIA (mm)	FACTOR		
Solid	1	22	16	290		
	1.5	27				
	2.5	39				
Stranded	1.5	31			20	460
	2.5	43				
	4	58				
	6	88				
	10	146				
			25	800		
			32	1400		

Table 1 & 2 Cable factors for short straight runs. These tables are based on the 16th edition of the I.E.E Wiring Regulations Appendix 12.

### 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.

TYPE OF CONDUCTOR	CONDUCTOR CROSS-SECTIONAL AREA (mm <sup>2</sup> )	FACTOR
Solid	1	16
	1.5	22
	2.5	30
Stranded	4	43
	6	58
	10	105

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

LENGTH OF RUN (m)	CONDUIT DIAMETER (mm)																			
	16				20				25				32							
	STRAIGHT				ONE BEND				TWO BENDS				THREE BENDS				FOUR BENDS			
1					188	303	543	947	177	286	514	900	158	256	463	818	130	213	388	629
1.5					182	294	528	923	167	270	487	857	143	233	422	750	111	182	333	600
2	COVERED BY TABLES 1 & 2				177	286	514	900	158	256	463	818	130	213	388	692	97	159	292	529
2.5					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				

Table 4 Cable factors for runs incorporating bends.



## SPACING SUPPORTS FOR CONDUITS

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

NOMINAL SIZE OF CONDUIT (mm)	MAXIMUM DISTANCE BETWEEN SUPPORTS	
	HORIZONTAL RUNS (m)	VERTICAL RUNS (m)
16mm	0.75	1.0
17 - 25mm	1.75	2.0
26 - 40mm	2.0	2.25
Over 40mm	2.25	2.5

This table is based on the 16th 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.

## BOXES - CIRCULAR, SMALL

### TERMINAL BOX - 1 WAY

ITEM CODE	SIZE	CLASS	BOX/CTN QTY
CF-20-1W-SMTR	20mm	4	10/100
CF-25-1W-SMTR	25mm	4	10/100
CF-20-1W	20mm	3	10/100
CF-25-1W	25mm	3	10/100



### THROUGH BOX - 2 WAYS

ITEM CODE	SIZE	CLASS	BOX/CTN QTY
CF-20-2W-SMTR	20mm	4	10/100
CF-25-2W-SMTR	25mm	4	10/100
CF-20-2W	20mm	3	10/100
CF-25-2W	25mm	3	10/100



### ANGLE BOX - 2 WAYS

ITEM CODE	SIZE	CLASS	BOX/CTN QTY
CF-20-A-SMTR	20mm	4	10/100
CF-25-A-SMTR	25mm	4	10/100
CF-20-A	20mm	3	10/100
CF-25-A	25mm	3	10/100



### TEE BOX - 3 WAYS

ITEM CODE	SIZE	CLASS	BOX/CTN QTY
CF-20-3W-SMTR	20mm	4	10/100
CF-25-3W-SMTR	25mm	4	10/100
CF-20-3W	20mm	3	10/100
CF-25-3W	25mm	3	10/100



### CROSS BOX - 4 WAYS

ITEM CODE	SIZE	CLASS	BOX/CTN QTY
CF-20-4W-SMTR	20mm	4	10/100
CF-25-4W-SMTR	25mm	4	10/100
CF-20-4W	20mm	3	10/100
CF-25-4W	25mm	3	10/100



### TWIN THRU 'H' BOX - 4 WAYS

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-H-SMTR	20mm	10/100
CF-25-H-SMTR	25mm	10/100



### TWIN THRU 'U' BOX - 2 WAYS

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-U-SMTR	20mm	10/100
CF-25-U-SMTR	25mm	10/100



### BRANCH 'Y' BOX - 3 WAYS

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-Y-SMTR	20mm	10/100
CF-25-Y-SMTR	25mm	10/100



### BOXES WITH BACK HOLE OUTLET

ITEM CODE	TYPE	SIZE	BOX/CTN QTY
CF-20-1W-BO-SMTR	1 Way	20mm	10/100
CF-20-2W-BO-SMTR	2 Way	20mm	10/100
CF-20-3W-BO-SMTR	3 Way	20mm	10/100
CF-20-4W-BO-SMTR	4 Way	20mm	10/100
CF-20-A-BO-SMTR	Angle	20mm	10/100
CF-25-1W-BO-SMTR	1 Way	25mm	10/100
CF-25-2W-BO-SMTR	2 Way	25mm	10/100
CF-25-3W-BO-SMTR	3 Way	25mm	10/100
CF-25-4W-BO-SMTR	4 Way	25mm	10/100
CF-25-A-BO-SMTR	Angle	25mm	10/100



### TERMINAL BOX - 1 WAY W/BACK HOLE

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-1W-H-SMTR	20mm	10/100
CF-25-1W-H-SMTR	25mm	10/100

BACK OUTLET HOLE SIZE	
SIZE OF BOX	BACK-HOLE DIAMETER
20mm	20mm
25mm	25mm

**Note :**  
- Also available upon request in 2, 3, Angle & 4 Way Box



### LOOPING BOX

ITEM CODE	SIZE	BOX/CTN QTY
CF-LP-SMTR	-	10/100

**Note :**  
- Also available upon request with Back Hole 20/25mm



**Marking :** SMART<sup>Tr</sup>  
**Material :** Malleable Iron - BS EN 61386 - 21 :2004  
**Finishing :** Hot-Dipped Galvanized to BS EN ISO 1461  
: BS EN 61386 - 21 :2004 (Class 3 boxes in Cast Iron & Galvanized Finish)

**Depth of boxes:**  
- 20mm at min 25mm, tapped with M4 hole at 50.8mm centres  
- 25mm at min 28mm, tapped with M4 hole at 50.8mm centres

**Note :**  
- Boxes come with tapped hole at base for earthing screw  
- Covers and M4 fixing screws are supplied separately  
- 20mm or 25mm fittings are used for BS4568 Class 4, Class 3 Conduits

# SMART<sup>r</sup> BRITISH STANDARD CONDUIT FITTINGS & ACCESSORIES

## BOXES - CIRCULAR, LARGE

<p><b>TERMINAL BOX - 1 WAY</b></p> <table border="1"> <thead> <tr> <th>ITEM CODE</th> <th>SIZE</th> <th>BOX/CTN QTY</th> </tr> </thead> <tbody> <tr> <td>CF-32-1W-SMTR</td> <td>32mm</td> <td>5/25</td> </tr> </tbody> </table> 	ITEM CODE	SIZE	BOX/CTN QTY	CF-32-1W-SMTR	32mm	5/25	<p><b>THROUGH BOX - 2 WAYS</b></p> <table border="1"> <thead> <tr> <th>ITEM CODE</th> <th>SIZE</th> <th>BOX/CTN QTY</th> </tr> </thead> <tbody> <tr> <td>CF-32-2W-SMTR</td> <td>32mm</td> <td>5/25</td> </tr> </tbody> </table> 	ITEM CODE	SIZE	BOX/CTN QTY	CF-32-2W-SMTR	32mm	5/25
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CF-32-1W-SMTR	32mm	5/25											
ITEM CODE	SIZE	BOX/CTN QTY											
CF-32-2W-SMTR	32mm	5/25											
<p><b>ANGLE BOX - 2 WAYS</b></p> <table border="1"> <thead> <tr> <th>ITEM CODE</th> <th>SIZE</th> <th>BOX/CTN QTY</th> </tr> </thead> <tbody> <tr> <td>CF-32-A-SMTR</td> <td>32mm</td> <td>5/25</td> </tr> </tbody> </table> 	ITEM CODE	SIZE	BOX/CTN QTY	CF-32-A-SMTR	32mm	5/25	<p><b>TEE BOX - 3 WAYS</b></p> <table border="1"> <thead> <tr> <th>ITEM CODE</th> <th>SIZE</th> <th>BOX/CTN QTY</th> </tr> </thead> <tbody> <tr> <td>CF-32-3W-SMTR</td> <td>32mm</td> <td>5/25</td> </tr> </tbody> </table> 	ITEM CODE	SIZE	BOX/CTN QTY	CF-32-3W-SMTR	32mm	5/25
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<p><b>CROSS BOX - 4 WAYS</b></p> <table border="1"> <thead> <tr> <th>ITEM CODE</th> <th>SIZE</th> <th>BOX/CTN QTY</th> </tr> </thead> <tbody> <tr> <td>CF-32-4W-SMTR</td> <td>32mm</td> <td>5/25</td> </tr> </tbody> </table> 	ITEM CODE	SIZE	BOX/CTN QTY	CF-32-4W-SMTR	32mm	5/25	<p><b>Marking :</b> SMART<sup>r</sup>  <b>Material :</b> Malleable Iron - BS EN 61386 - 21 :2004  <b>Finishing :</b> Hot-Dipped Galvanized to BS EN ISO 1461  <b>Note :</b></p> <ul style="list-style-type: none"> <li>- Boxes come with tapped hole at base for earthing screw</li> <li>- Covers and fixing screws are supplied separately</li> <li>- Physical dimension for 38mm/50mm boxes supplied upon request</li> </ul> <table border="1"> <thead> <tr> <th colspan="2">SIZES</th> <th>CONDUIT</th> </tr> </thead> <tbody> <tr> <td>32mm</td> <td>Min 37.5mm deep, tapped M4 at 71.5mm centres</td> <td>BS EN 61386 CL3/4</td> </tr> </tbody> </table>	SIZES		CONDUIT	32mm	Min 37.5mm deep, tapped M4 at 71.5mm centres	BS EN 61386 CL3/4
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CF-32-4W-SMTR	32mm	5/25											
SIZES		CONDUIT											
32mm	Min 37.5mm deep, tapped M4 at 71.5mm centres	BS EN 61386 CL3/4											

## EXTENSION RING

	<p><b>CIRCULAR BOX EXTENSION RING</b></p> <table border="1"> <thead> <tr> <th>ITEM CODE</th> <th>SIZE</th> <th>BOX/CTN QTY</th> </tr> </thead> <tbody> <tr> <td>CF-38-ER</td> <td>38mm</td> <td>10/100</td> </tr> </tbody> </table> <p><b>Material :</b> Malleable Iron  <b>Finishing :</b> Hot-Dipped Galvanized  <b>Note :</b></p> <ul style="list-style-type: none"> <li>- Supplied with 50mm fixing centre holes (for small circular boxes)</li> <li>- Suitable for increasing height of conduit boxes into deep pattern boxes</li> <li>- Steel material is available for order</li> <li>- Covers and Screws are not included</li> <li>- Unbranded</li> </ul>	ITEM CODE	SIZE	BOX/CTN QTY	CF-38-ER	38mm	10/100
ITEM CODE	SIZE	BOX/CTN QTY					
CF-38-ER	38mm	10/100					

## COVERS

### CIRCULAR COVER - SMALL/LARGE

ITEM CODE	SIZE	BOX/CTN QTY
CF-C-SMTR	SMALL (20mm/25mm Boxes)	5/100
CF-C-32	LARGE (32mm Boxes)	4/500

**Marking** : SMART<sup>tr</sup>  
**Material** : Steel  
**Finishing** : Plain Galvanized  
**Thickness** : 1mm/2mm

**Note** :  
 - Screws are supplied separately  
 - Hot-Dipped Galvanized available for order  
 - Suitable Rubber Gasket available for order



### RUBBER GASKET

ITEM CODE	SIZE	BOX/CTN QTY
CF-GASKET	SMALL (20MM/25MM BOXES)	10/1000



### BALL & SOCKET

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-BSC-HDG	20mm	10/200
CF-25-BSC-HDG	25mm	10/200

**Material** : Malleable Iron  
**Finishing** : Hot-Dipped Galvanized

**Note** :  
 - Supplied with 50.5mm fixing centre holes with attached earth wire  
 - Also available in Steel



### DOME LID

ITEM CODE	SIZE	BOX/CTN QTY
CF-DC-20-SMTR	20mm	10/200
CF-DC-25-SMTR	25mm	10/200

**Marking** : SMART<sup>tr</sup>  
**Material** : Malleable Iron  
**Finishing** : Hot-Dipped Galvanized

**Note** :  
 - Steel material available for order  
 - With mounting holes 50.5mm centre use for connecting flexible adaptors, hanging light fittings, etc.



## BENDS, ELBOWS & TEES



### INSPECTION ELBOW

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-IE-SMTR	20mm	10/200
CF-25-IE-SMTR	25mm	10/200
CF-32-IE-SMTR	32mm	10/100

**Marking** : SMART<sup>tr</sup>  
**Material** : Malleable Iron  
**Finishing** : Hot-Dipped Galvanized  
**Note** :  
 - Lid and Steel Screws included



### INSPECTION TEE

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-IT-SMTR	20mm	10/100
CF-25-IT-SMTR	25mm	10/100
CF-32-IT-SMTR	32mm	TBA

**Marking** : SMART<sup>tr</sup>  
**Material** : Malleable Iron  
**Finishing** : Hot-Dipped Galvanized  
**Note** :  
 - Lid and Steel Screws included



### INSPECTION BEND

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-IB-SMTR	20mm	10/200
CF-25-IB-SMTR	25mm	10/100
CF-32-IB-SMTR	32mm	10/50

**Marking** : SMART<sup>tr</sup>  
**Material** : Malleable Iron  
**Finishing** : Hot-Dipped Galvanized  
**Note** :  
 - Lid and Steel Screws included



### SOLID BEND

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-BEND-SMTR	20mm	10/100
CF-25-BEND-SMTR	25mm	10/100
CF-32-BEND-SMTR	32mm	10/50

**Marking** : SMART<sup>tr</sup>  
**Material** : Malleable Iron  
**Finishing** : Hot-Dipped Galvanized  
**Angle** : 90°  
**Note** :  
 - Supplied with internal threaded



### SOLID LONG BEND

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-LB-SMTR	20mm	10/200
CF-25-LB-SMTR	25mm	10/100
CF-32-LB-SMTR	32mm	10/50
CF-38-LB-SMTR	38mm	TBA
CF-50-LB-SMTR	50mm	TBA

**Material** : Steel  
**Finishing** : Hot-Dipped Galvanized  
**Angle** : 90°  
**Note** :  
 - Special non-standard bends available for order  
 - Supplied with external threaded c/w socket



# SMART<sup>r</sup> FITTINGS & ACCESSORIES

## COUPLINGS

### COUPLING

HDG

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-S-SMTR	20mm	10/1000
CF-25-S-SMTR	25mm	10/500
CF-32-S-SMTR	32mm	10/400

G.I.

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-S-GI	20mm	10/1000
CF-25-S-GI	25mm	10/500
CF-32-S-GI	32mm	10/400

**Material** : Steel

**Finishing** : Plain Galvanized / Hot-Dipped Galvanized optional

**Note** : - 38mm/50mm HDG Sockets also available  
- No brand marking on Coupler



### FLANGE COUPLING

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-FC	20mm	10/250
CF-25-FC	25mm	10/250
CF-32-FC	32mm	10/150

**Material** : Malleable Iron / Steel (optional)

**Finishing** : Hot-Dipped Galvanized

**Note** :

- Complete with washer and male brush
- No brand marking on Coupler



### SCREWLESS COUPLING

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-SC	20mm	10/600
CF-25-SC	25mm	10/500
CF-32-SC	32mm	10/300

**Material** : Steel

**Finishing** : Galvanized

**Note** :

- Hot-Dipped Galvanized available upon request
- Supplied with Standard Steel Screws
- Brass or Standard Steel Screws are optional
- Most suitable for connection of P.V.C conduit to Steel conduit
- No brand marking on Coupler



### EXPANSION COUPLER

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-S-EX	20mm	10/500
CF-25-S-EX	25mm	10/500
CF-32-S-EX	32mm	10/300

**Material** : Steel

**Finishing** : Galvanized / Hot-Dipped Galvanized

**Note** :

- Supplied internal one end threaded and other end plain unthreaded to allow for expansion.
- No brand marking on Coupler



### SHORT NIPPLE

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-SN	20mm	10/1000
CF-25-SN	25mm	10/500

**Material** : Steel

**Finishing** : Galvanized

**Note** :

- Larger size available upon request
- No brand marking on Nipple



## CONDUIT FIXING

### SPACER BAR SADDLE

HDG

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-SB-SMTR	20mm	10/1000
CF-25-SB-SMTR	25mm	10/1000
CF-32-SB-SMTR	32mm	10/500
CF-38-SB-SMTR	38mm	10/400
CF-50-SB-SMTR	50mm	10/250

G.I.

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-SB	20mm	10/1000
CF-25-SB	25mm	10/1000
CF-32-SB	32mm	10/500

**Finishing** : Galvanized (Standard) Hot Dipped Galvanized (Optional)

**Standard** : BS4568 : Part 2 : 1970



**Marking** : SMART<sup>r</sup>

**Material** : Base - Steel Strap - Steel

**Note** :

- Supplied with Standard Steel Screws
- Brass or Stainless Steel Screws optional

### HEAVY DUTY - DISTANCE SADDLE

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-DS-SMTR	20mm	10/500
CF-25-DS-SMTR	25mm	5/250

**Marking** : SMART<sup>r</sup>

**Material** : Base - Malleable Iron  
Strap - Hot-Dipped Galvanized Steel

**Note** :

- Suitable for use when installing conduit in wet/hostile environment
- Supplied with Standard Steel Screws
- Brass or Stainless Steel Screws optional
- Spacing distance - 5mm



## CONDUIT FIXING

### HALF SADDLE

ITEM CODE	SIZE	BOX/CTN QTY
CF-34-HS	20mm	5/2000
CF-1-HS	25mm	5/2000
CF-32-HS-SMTR	32mm	10/1000



**Marking** : SMART<sup>Tr</sup>

**Material** : Steel

**Finishing** : Galvanized

**Note** :

- Suitable for temporary installation of conduits / flexible conduit
- Hot-Dipped Galvanized available for order
- Special size for Flexible Conduit available on order

### CONDUIT PIPE CLAMP

ITEM CODE	SIZE	BOX/CTN QTY
SSA-COND-CLAMP-20	20mm	20/500
SSA-COND-CLAMP-25	25mm	20/500
SSA-COND-CLAMP-32	32mm	20/500
SSA-COND-CLAMP-38	38mm	20/300
SSA-COND-CLAMP-50	50mm	TBA
SSA-COND-CLAMP-100	100mm	TBA
SSA-COND-CLAMP-150	150mm	TBA



**Marking** : SMART<sup>Tr</sup>

**Material** : Steel

**Finishing** : Pre-Galvanized / Hot-Dipped Galvanized

**Note** :

- Supplied with Standard Steel Screws
- Brass or Stainless Steel Screws optional
- Larger size pipe clamp available upon request
- No brand marking on product

### KON CLIP

ITEM CODE	SIZE	BOX/CTN QTY
CF-KC-20	20mm	20/800
CF-KC-25	25mm	20/800
CF-KC-K32	32mm	20/600



**Material** : Steel

**Finishing** : Hot-Dipped Galvanized

**Note** :

- For installing conduit or cable onto threaded rod
- No brand marking on product

### PLAIN SADDLE

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-PS-SMTR	20mm	5/2000
CF-25-PS-SMTR	25mm	5/2000
CF-32-PS-SMTR	32mm	10/1000



**Marking** : SMART<sup>Tr</sup>

**Material** : Steel

**Finishing** : Galvanized (Standard)

**Note** :

- Hot-Dipped Galvanized available for order
- Larger size available for order

### PIPE HANGER

HDG

ITEM CODE	SIZE	BOX/CTN QTY
SSA-PIPE HANGER 20MM	20mm	400
SSA-PIPE HANGER 25MM	25mm	350
SSA-PIPE HANGER 32MM	32mm	300
SSA-PIPE HANGER 50MM	50mm	TBA



G.I.

ITEM CODE	SIZE	BOX/CTN QTY
SSA-PIPE HANGER 20MM-G.I	20mm	400
SSA-PIPE HANGER 25MM-G.I	25mm	350
SSA-PIPE HANGER 32MM-G.I	32mm	300

**Material** : Steel

**Note** :

- Also available in Hot-Dipped Galvanized
- No brand marking on product

## REDUCERS / PLUGS

### CONDUIT PIPE REDUCER

TINNED

ITEM CODE	SIZE	BOX/CTN QTY
CF-R-20X25	20mm X 25mm	20/1000
CF-R-32X25	25mm X 32mm	20/500

BRASS

ITEM CODE	SIZE	BOX/CTN QTY
CF-R-20X25-B	20mm X 25mm	20/1000
CF-R-32X25-B	25mm X 32mm	20/500



**Material** : Alloy / Brass

**Finishing** : Plain Galvanized

**Note** :

- For conduit size reducing
- Other sizes of conduit reducers are available upon request

### STOPPING PLUG

ITEM CODE	SIZE	BOX/CTN QTY
CF-SP-20	20mm	10/1000
CF-SP-25	25mm	10/1000
CF-SP-32	32mm	5/250



**Material** : Alloy / Brass

**Finishing** : Plain

**Note** :

- Hexagonal/slotted head stop plug to plug off unutilised sprouts on conduit junction boxes
- Large size is also available upon request

## BUSHINGS



### SHORT MALE BUSH

ITEM CODE	SIZE	BOX/CTN QTY
BF-MB-20-N	20mm	20/2000
BF-MB-25-N	25mm	20/2000
BF-MB-32-N	32mm	20/1000
BF-MB-38-N	38mm	TBA
BF-MB-50-N	50mm	TBA
BF-MB- 2 -N	2"	TBA

Material : Brass

### SHORT FEMALE BUSH

ITEM CODE	SIZE	BOX/CTN QTY
BF-FB-20-N	20mm	20/2000
BF-FB-25-N	25mm	20/2000
BF-FB-32-N	32mm	20/1000
BF-FB-38-N	38mm	TBA
BF-FB-50-N	50mm	TBA

Material : Brass



### LONG MALE BUSH

ITEM CODE	SIZE	BOX/CTN QTY
BF-MB-20-L	20mm	20/2000
BF-MB-25-L	25mm	20/1000
BF-MB-32-L	32mm	TBA
BF-MB-38-L	38mm	TBA
BF-MB-50-L	50mm	TBA

Material : Brass

## LOCKNUTS

### LOCKING RING

ITEM CODE	SIZE	BOX/CTN QTY
CF-20-LR	20mm	20/5000
CF-25-LR	25mm	20/3000

Material : Steel

Finishing : Galvanized

Note :

- For locking conduit to junction boxes



### LOCKNUT

ITEM CODE	ITEM CODE	SIZE	BOX/CTN QTY
ALLOY	BRASS		
CF-20-LN	BF-LN-20	20mm	20/5000
CF-25-LN	BF-LN-25	25mm	20/3000
CF-32-LN	BF-LN-32	32mm	20/2000

Material : Steel / Brass

Finishing : Galvanized

Note :

- For locking conduit to junction boxes

- Available in Tinned Finish



# SMARTr BRITISH STANDARD SWITCH & SOCKET BOXES / ADAPTABLE BOXES

## KNOCK-OUT BOXES (SWITCH & SOCKET BOXES)



### 1 GANG K.O. BOX

ITEM CODE	TYPE	SIZE (mm)	THICKNESS (mm)
KO-1-SMTR	NORMAL	75(W) x 75(L) x 35(D)	1.1 ~ 1.2
KO-1-S-D	DEEP	75(W) x 75(L) x 47(D)	1.1 ~ 1.2
KO-1-S	NORMAL	75(W) x 75(L) x 35(D)	0.8 ~ 0.9

**Marking** : SMARTr

**Material** : Steel

**Standard** : BS4662 : 1970

**Finishing** : Plain Galvanized

: Hot-Dipped Galvanized (on order)

: 1 adjustable lug

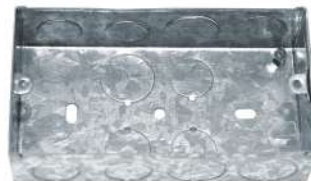
: 1 regulation earth terminal

**Note** :

- Available mixed 20mm & 25mm K.O. holes

- Plain Lids available for order

- 100 pcs / carton



### 2 GANG K.O. BOX

ITEM CODE	TYPE	SIZE (mm)	THICKNESS (mm)
KO-2-SMTR	NORMAL	135(W) x 75(L) x 35(D)	1.1 ~ 1.2
KO-2-S-D	DEEP	135(W) x 75(L) x 47(D)	1.1 ~ 1.2
KO-2-S	NORMAL	135(W) x 75(L) x 35(D)	0.8 ~ 0.9

**Marking** : SMARTr

**Material** : Steel

**Standard** : BS4662 : 1970

**Finishing** : Plain Galvanized

: Hot-Dipped Galvanized (on order)

: 1 adjustable lug

: 1 regulation earth terminal

**Note**:

- Available mixed 20mm & 25mm K.O. holes

- Plain Lids available for order

- 50 pcs / carton

## KNOCK-OUT BOXES WITH "FISH TAIL"

SMARTr "Fish Tail" K.O. Boxes are available in standard 35mm depth (normal pattern) with the 47mm deep pattern type available upon special order.

These boxes are designed with sets of "Fish Tails" welded to the boxes to withstand heavy duty areas like tunnels and civil defence bomb shelters amongst other applications.



### 1 GANG K.O. BOX - WITH "FISH TAIL"

ITEM CODE	TYPE	SIZE (mm)	THICKNESS (mm)
KO-1-SMTR-FT	NORMAL PATTERN WELDED FISHTAIL	75(W) x 75(L) x 35(D)	MIN 1.1

**Marking** : SMARTr

**Material** : Steel

**Standard** : BS4662 : 1970

**Finishing** : Hot-Dipped Galvanized

**Features** : 1 x fix regulation earth terminal

8 x 20mm K.O. holes

c/w 2x Welded Fish Tail

**Note** :

- Plain Lids available for order

- 100 pcs / carton



### 2 GANG K.O. BOX - WITH "FISH TAIL"

ITEM CODE	TYPE	SIZE (mm)	THICKNESS (mm)
KO-2-SMTR-FT	NORMAL PATTERN WELDED FISHTAIL	135(W) x 75(L) x 35(D)	MIN 1.1

**Marking** : SMARTr

**Material** : Steel

**Standard** : BS4662 : 1970

**Finishing** : Hot-Dipped Galvanized

**Features** : 1 x fix regulation earth terminal

10 x 20mm K.O. holes

c/w 4x Welded Fish Tail

**Note** :

- Plain lids available for order

- 50 pcs / carton

## STEEL ADAPTABLE BOXES

SMARTr heavy duty adaptable boxes can be used as a junction box for installation with electrical conduits ranging from 20mm up to 150mm diameter.

Boxes are supplied without knock out holes to allow users to drill the required holes according to installation needs. The boxes can be supplied with a rubber gasket to improve IP rating to IP54. It could also serve as an utility junction box for wiring connection purposes.



ITEM CODE	SIZE (mm)	PACK QTY
CF-AD-75X75	75(W) x 75(L) x 35(D)	50
CF-AD-100X100X50	100(W) x 100(L) x 50(D)	50
CF-AD-100X100X75	100(W) x 100(L) x 75(D)	40
CF-AD-150X150	150(W) x 150(L) x 75(D)	20
CF-AD-225X225	225(W) x 225(L) x 75(D)	10
CF-AD-300X300	300(W) x 300(L) x 75(D)	5

**BODY**

**Material** : Steel, Malleable Iron (Optional)

**Finishing** : Hot-Dipped Galvanized

**Marking** : SMARTr **IP Rating** : IP40 / IP54

**Note** :

- Supplied with Steel Screws as standard

- Brass or Stainless Steel Screws are optional

- Boxes are supplied plain without K.O. holes

- Boxes with K.O. holes can be supplied upon special request

with client's dimensions

- Other size boxes are quoted upon request

**FLAT LID**

**Material** : Steel

**Finishing** : Hot-Dipped Galvanized

## FLEXIBLE CONDUIT SYSTEMS

### STEEL FLEXIBLE CONDUIT

**Flexible Material** : Electro-Galvanized Steel  
**Properties** : Provides strong protection for cables  
**Temp range** : -50 degC to +350 degC  
**IP Rating** : IP40  
**Construction** : Highly flexible steel conduit offers excellent mechanical protection  
**Features** : Ideal for general wiring installations and provides good flexible bending and vibration applications  
**Standard** : BS731 (where applicable)

#### SELECTION CHART

DESCRIPTIONS	SIZE	ITEM CODE	PACKING PER COIL	O.D.	COMPATIBLE WITH ADAPTOR'S CODE
STEEL FLEXIBLE CONDUITS	16mm	FP-16-S-SMTR	100FT	19.0 ± 0.35	BF-FA
	20mm	FP-20-S-SMTR	100FT	22.8 ± 0.35	
	25mm	FP-25-S-SMTR	100FT	28.0 ± 0.40	
	32mm	FP-32-S-SMTR	100FT	36.0 ± 0.40	
	38mm	FP-38-S	50FT	42.5 ± 0.50	
	50mm	FP-50-S-SMTR	50FT	54.5 ± 0.50	
	5/8"	FP-58-S	50FT	5/8" = 16mm	
	3/4"	FP-34-S	50FT	3/4" = 20mm	
	1"	FP-1-S	50FT	1" = 25mm	
	1 1/4"	FP-114-S	100FT	1 1/4" = 32mm	
	1 1/2"	FP-112-S	50FT	1 1/2" = 38mm	
2"	FP-2-S	50FT	2" = 50mm		

### PVC COATED FLEXIBLE CONDUIT

**Flexible Material** : Electro-Galvanized Steel  
**Jacket Properties** : Heat retardant self extinguishing P.V.C Sheath  
**PVC Color** : Black (White/Grey and other colors available upon specific request)  
**Temp range** : -25 degC to +120 degC  
**IP Rating** : IP65 (when installed with suitable water tight adaptors)  
**Construction** : Galvanized Steel core with enhanced low acid P.V.C Sheath  
**Features** : Highly Flexible  
**Standard** : BS731 / BS EN 50086 (where applicable)

#### SELECTION CHART

DESCRIPTIONS	SIZE	ITEM CODE	PACKING PER COIL	O.D.	COMPATIBLE WITH ADAPTOR'S CODE
PVC COATED G.I FLEXIBLE CONDUITS (Imperial sizes available on order)	16mm	FP-16-PC-SMTR	100FT	19.7 ± 0.35	BF-FA BF-FA-WT BF-FA-T FA-WT
	20mm	FP-20-PC-SMTR	100FT	23.5 ± 0.35	
	25mm	FP-25-PC-SMTR	100FT	28.8 ± 0.40	
	32mm	FP-32-PC-SMTR	100FT	37.0 ± 0.40	
	38mm	FP-38-PC-SMTR	50FT	43.7 ± 0.50	
	50mm	FP-50-PC-SMTR	50FT	55.8 ± 0.50	

### LOW SMOKE ZERO HALOGEN (LSOH) COATED FLEXIBLE CONDUIT

**Flexible Material** : Electro-Galvanized Steel  
**Jacket Properties** : Heat resistant, Low Smoke Halogen free  
**PVC Color** : Black  
**Temp range** : -25 degC to +120 degC  
**IP Rating** : IP65 (when installed with suitable water tight adaptors)  
**Construction** : Flexible with LSOHPVC sheath  
**Features** : Do not emit hazardous gases when heated or in flames  
**Standard** : IEC 61386 (where applicable)

#### SELECTION CHART

DESCRIPTIONS	SIZE	ITEM CODE	PACKING PER COIL	O.D.	COMPATIBLE WITH ADAPTOR'S CODE
LOW SMOKE ZERO HALOGEN COATED FLEXIBLE CONDUIT (Imperial sizes available on order)	16mm	FP-16-PC-H	100FT	19.8 ± 0.35	BF-FA-T BF-FA-WT FA-WT
	20mm	FP-20-PC-H	100FT	23.6 ± 0.35	
	25mm	FP-25-PC-H	100FT	29.0 ± 0.40	
	32mm	FP-32-PC-H	100FT	37.2 ± 0.40	
	38mm	FP-38-PC-H	50FT	43.9 ± 0.50	
	50mm	FP-50-PC-H	50FT	56.0 ± 0.50	

## LIQUID TIGHT FLEXIBLE CONDUIT

**Flexible Material** : Electro-Galvanized Steel  
**Jacket Properties** : Excellent mechanical strength with flexible capabilities  
 : Thick P.V.C Jacket is resistant to oil, acid and sea water  
**PVC Color** : Black (Grey also available in specific order)  
**Temp range** : -25 degC to +150 degC  
**IP Rating** : IP65 (when installed with suitable water tight adaptors)  
**Standard** : BS EN 61386 / BS 731 (where applicable)



### SELECTION CHART

DESCRIPTIONS	SIZE	ITEM CODE	PACKING PER COIL	O.D.	COMPATIBLE WITH ADAPTOR'S CODE
<b>LIQUID TIGHT FLEXIBLE CONDUITS</b> (Imperial sizes available on order)	16mm	FP-16-PC-WT-SMTR	100FT	22.0 ± 0.45	FA-WT BF-FA-WT
	20mm	FP-20-PC-WT-SMTR	100FT	26.7 ± 0.50	
	25mm	FP-25-PC-WT-SMTR	100FT	31.9 ± 0.50	
	32mm	FP-32-PC-WT-SMTR	100FT	40.6 ± 0.60	
	38mm	FP-38-PC-WT-SMTR	50FT	47.0 ± 0.70	
	50mm	FP-50-PC-WT-SMTR	50FT	59.0 ± 0.70	

## STAINLESS STEEL FLEXIBLE CONDUIT

**Flexible Material** : Stainless Steel - 304 / 316  
**Properties** : Provides strong protection for cables  
**Temp range** : 50 degC to +350 degC  
**IP Rating** : IP40  
**Construction** : Highly flexible steel conduit offers excellent mechanical & corrosion protection  
**Features** : For special and heavy duty corrosive environment  
**Standard** : BS EN 61386 / BS 731 (where applicable)



### SELECTION CHART

DESCRIPTIONS	SIZE	ITEM CODE	PACKING PER COIL	O.D.	COMPATIBLE WITH ADAPTOR'S CODE
<b>STAINLESS STEEL FLEXIBLE CONDUIT</b>	16mm	FP-16-SS-SMTR	100FT	19.0 ± 0.35	BF-FA-T
	20mm	FP-20-SS-SMTR	100FT	23.0 ± 0.35	
	25mm	FP-25-SS-SMTR	100FT	29.0 ± 0.40	
	32mm	FP-32-SS-SMTR	100FT	36.0 ± 0.40	
	38mm	FP-38-SS-SMTR	50FT	42.5 ± 0.50	
	50mm	FP-50-SS-SMTR	50FT	55.0 ± 0.50	

## SPACING SUPPORT FOR FLEXIBLE CONDUITS (GUIDANCE)

NOMINAL SIZE OF CONDUIT (mm)	MAXIMUM DISTANCE BETWEEN SUPPORTS	
	HORIZONTAL RUN (m)	VERTICAL RUN (m)
16 and under	0.3	0.5
17 - 25	0.4	0.6
26 - 40	0.6	0.8
Over 40	0.8	1.0

### Spacing of Supports for Flexible Conduits

The table gives guidance on the spacing of supports for flexible conduits. To comply with the requirements of the 16th Edition of the I.E.E. wiring regulation flexible conduits shall not be used as a protective conductor.

# SMART<sup>r</sup> BRITISH STANDARD FLEXIBLE CONDUIT ADAPTORS

## FLEXIBLE CONDUIT ADAPTORS

### FLEXIBLE ADAPTOR WITH RETAINING SCREW

ITEM CODE	SIZE	CTN QTY
BF-FA-20X58	20mm x 16mm	1000
BF-FA-20X20	20mm x 20mm	1000
BF-FA-25X20	20mm x 25mm	500
BF-FA-25X1	25mm x 25mm	500
BF-FA-32X32	32mm x 32mm	400
BF-FA-2X2	2" x 2"	80



**Material** : Brass  
**Finishing** : Brass  
**IP Rating** : IP40  
**Ordering Code** : BF-FA

**Note:**  
- Nickel Plate available for order  
- No brand marking on product

### FEMALE ADAPTOR

ITEM CODE	SIZE	CTN QTY
BF-FFA-20X20	20mm X 20mm	500
BF-FFA-25X1	25mm X 25mm	500



**Material** : Brass  
**Finishing** : Brass  
**IP Rating** : IP40  
**Ordering Code** : BF-FFA

**Note:**  
- No brand marking on product

### NICKEL PLATED ADAPTOR (2PC) MALE ADAPTOR

ITEM CODE	SIZE	CTN QTY
BF-FA-20-T	20mm x 16mm	500
BF-FA-20X20-T	20mm x 20mm	500
BF-FA-25-T	20mm x 25mm	500
BF-FA-25X25-T	25mm x 25mm	300
BF-FA-32X32-T	32mm x 32mm	200



**Material** : Brass  
**Finishing** : Nickel Plate  
**IP Rating** : IP40  
**Ordering Code** : BF-FA-T

**Note:**  
- Female Adaptor available  
on request  
- No brand marking on product

### LIQUID/WATER TIGHT NICKEL PLATED 2 PART BRASS MALE ADAPTOR (HEAVY GAUGE)

ITEM CODE	SIZE	CTN QTY
BF-FA-20X20-WT	20mm x 20mm	120
BF-FA-25X25-WT	25mm x 25mm	80
BF-FA-32X32-WT	32mm x 32mm	60
BF-FA-38X38-WT	38mm x 38mm	20
BF-FA-50X50-WT	50mm x 50mm	20



**Material** : Brass  
**Finishing** : Nickel Plate  
**IP Rating** : IP65  
**Ordering Code** : BF-FA-WT

**Note:**  
- Female Adaptor available  
on request  
- No brand marking on product

### LIQUID/WATER TIGHT ADAPTOR

ITEM CODE	SIZE	CTN QTY
FA-WT-20X16	20mm x 16mm	500
FA-WT-20X20	20mm x 20mm	500
FA-WT-25X20	20mm x 25mm	500
FA-WT-25X25	25mm x 25mm	300
FA-WT-32X32	32mm x 32mm	200
FA-WT-38X38	38mm x 38mm	TBA



**Material** : Steel / Alloy  
**Finishing** : Galvanized  
**IP Rating** : IP65  
**Ordering Code** : FA-WT

**Note:**  
- Angle Adaptor available  
on request

# SMART<sup>tr</sup> STAINLESS STEEL CONDUIT & FITTINGS

## SS316 STAINLESS STEEL CONDUIT & FITTINGS

### BENEFITS OF SS CONDUITS

DURABLE LONG LASTING

HIGHLY CORROSION-RESISTANT

WATER-PROOF CONDUIT BODY

FAST AND CLEAN INSTALLATION

Conduit Systems for Cable Management.  
Certified to BS EN Standards:  
BS EN 61386, Conduit Systems for Cable Management  
Part 1: General Requirements  
Part 21: Particular Requirements - Rigid Conduit Systems  
Part 25: Particular Requirements - Conduits Fixing Devices



### CONDUIT

### SPECIFICATIONS

STANDARD	BS EN 61386 PART 1/21/25
MATERIAL	304/316 STAINLESS STEEL
MATERIAL THICKNESS	20M/25MM- 1.5MM
THREAD	ISO FORM 1.5MM PITCH
LENGTH	3.0MTR/LGTH

### DESCRIPTION

### PART CODE

20MM SS316 CONDUIT 3MTR	CP-20-SS-SMTR
25MM SS316 CONDUIT 3MTR	CP-25-SS-SMTR
20MM SS 1 WAY BOX	CF-20-1W-SS-SMTR
20MM SS 2 WAY BOX	CF-20-2W-SS-SMTR
20MM SS ANGLE BOX	CF-20-A-SS-SMTR
20MM SS 3 WAY BOX	CF-20-3W-SS-SMTR
20MM SS 4 WAY BOX	CF-20-4W-SS-SMTR
20MM SS SOCKET (COUPLER)	CF-20-S-SS
20MM SS SADDLES	CF-20-SB-SS
20MM DISTANCE SADDLES	CF-20-DS-SS-SMTR
25MM SS 1 WAY BOX	CF-25-1W-SS-SMTR
25MM SS 2 WAY BOX	CF-25-2W-SS-SMTR
25MM SS ANGLE BOX	CF-25-A-SS-SMTR
25MM SS 3 WAY BOX	CF-25-3W-SS-SMTR
25MM SS 4 WAY BOX	CF-25-4W-SS-SMTR
25MM SS SOCKET (COUPLER)	CF-25-S-SS
25MM SS SADDLES	CF-25-SB-SS
25MM SS DISTANCE SADDLES	CF-25-DS-SS-SMTR

\*Other sizes available upon request

All conduit boxes are supplied with a cover, gasket and screws

\*SS Flexible Conduit & other accessories not shown are available upon request

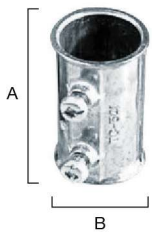


## ELECTRICAL METALLIC TUBING (E.M.T.) CONDUIT & FITTINGS

### AMERICAN STANDARD ELECTRICAL METALLIC TUBING

SIZE	OUTSIDE DIAMETER		INSIDE DIAMETER		WALL THICKNESS		LENGTH		WEIGHT	
1/2"	0.706"	17.93mm	0.522"	15.80mm	0.042"	1.067mm	10"	3048mm	0.285"	0.424mm
3/4"	0.922"	23.42mm	0.824"	20.93mm	0.049"	1.245mm	10"	3048mm	0.435"	0.647mm
1"	1.163"	29.54mm	1.049"	26.64mm	0.057"	1.448mm	10"	3048mm	0.640"	0.952mm
1 1/4"	1.510"	38.35mm	1.380"	35.05mm	0.065"	1.651mm	10"	3048mm	0.950"	1.414mm
1 1/2"	1.740"	44.20mm	1.610"	40.89mm	0.065"	1.651mm	10"	3048mm	1.100"	1.637mm
2"	2.197"	55.80mm	2.067"	52.50mm	0.065"	1.651mm	10"	3048mm	1.400"	2.083mm
2 1/2"	2.875"	73.03mm	2.731"	69.37mm	0.072"	1.83mm	10"	3048mm	2.052"	3.052mm
3"	3.500"	88.90mm	3.356"	85.24mm	0.072"	1.83mm	10"	3048mm	2.499"	3.716mm
3 1/2"	4.000"	101.60mm	3.834"	97.38mm	0.083"	2.11mm	10"	3048mm	3.316"	4.931mm
4"	4.500"	114.30mm	4.334"	110.08mm	0.083"	2.11mm	10"	3048mm	3.734"	5.554mm

### E.M.T. CONDUIT COUPLINGS



SIZE	DIMENSIONS A	DIMENSIONS B	WEIGHT (KG) PER 100
1/2"	38.85mm	21.35mm	3.20kg
3/4"	45.25mm	27.00mm	4.80kg
1"	50.40mm	32.90mm	6.40kg
1 1/4"	63.20mm	44.00mm	17.00kg
1 1/2"	72.70mm	49.05mm	17.60kg
2"	85.35mm	61.60mm	30.50kg

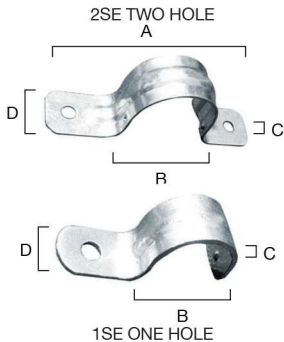
**Material** : Steel

**Finishing** : Zinc Electro-Galvanized

**Note** :

- Coupling sizes above 2-1/2" available upon request

### E.M.T. STRAPS



SIZE	DIMENSIONS A	DIMENSIONS B	DIMENSIONS C	DIMENSIONS D	WEIGHT (KG) PER 100	WEIGHT (KG) PER 100*
1/2"	51.00mm	40.80mm	15.90mm	4.65mm	10kg	7.5kg
3/4"	57.75mm	47.00mm	16.00mm	4.65mm	12kg	10kg
1"	66.00mm	56.00mm	18.75mm	4.75mm	16kg	14kg
1 1/4"	84.70mm	74.40mm	18.75mm	4.60mm	20kg	18.2kg
1 1/2"	99.15mm	85.85mm	18.95mm	4.65mm	21kg	19.5kg
2"	106.70mm	88.25mm	18.50mm	4.80mm	31kg	27.9kg

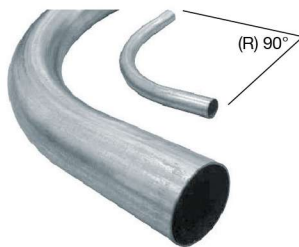
**Material** : Steel

**Finishing** : Zinc Electro-Galvanized

**Note** :

- Details of Strap sizes 2 1/2" ~ 4" are available upon request

### E.M.T. ELBOW 90



SIZE	OUTSIDE DIAMETER	WALL THICKNESS	MIN RADIUS (R)	MIN. STRAIGHT LENGTH (LN)	WEIGHT (KG) PER PC
1/2"	17.93mm	1.07mm	103.97mm	68.34mm	0.13kg
3/4"	23.42mm	1.25mm	126.71mm	50.48mm	0.19kg
1"	29.54mm	1.45mm	159.77mm	62.02mm	0.38kg
1 1/4"	38.35mm	1.65mm	204.18mm	52.14mm	0.64kg
1 1/2"	44.20mm	1.65mm	232.10mm	67.71mm	0.88kg
2"	55.80mm	1.65mm	267.90mm	89.59mm	1.30kg

**Material** : Hot-Rolled Steel Strip

**Finishing** : Galvanized (Hot-Dipped Galvanized available upon request)

**Note** :

- Details of Elbow sizes 2 1/2" ~ 4" are available upon request

#### APPLICATION TOLERANCES OF EMT CONDUITS:

**Outside Diameter** : ± 0.005in (0.13mm)

**Wall Thickness** : ± 5-10%

**Length** : ± 0.25" (6.4mm)

**Standard** : UL979-2000, CSA C22.2, ANSI C80.3-2005 (where applicable)

**Available Finishing** : Pre-Galvanized or Zinc Coated Hot-Dipped Galvanized

**Note** :

- The wall thickness shall not vary more than 0.003" (0.08mm) throughout a 10ft length

#### FEATURES OF SMART<sup>®</sup> EMT CONDUIT:

- E.M.T conduits are sometimes called thin wall conduits
- Unthreaded, making it easy to coupler and for a faster installation
- Light and easy to carry and handle
- Superior quality finish and good standard export packing

**Note** :

- Details of coupling sizes 2 1/2" ~4" are available upon request

# SMARTr<sup>®</sup>

Your Trusted Partner in  
Electrical & Mechanical Support

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