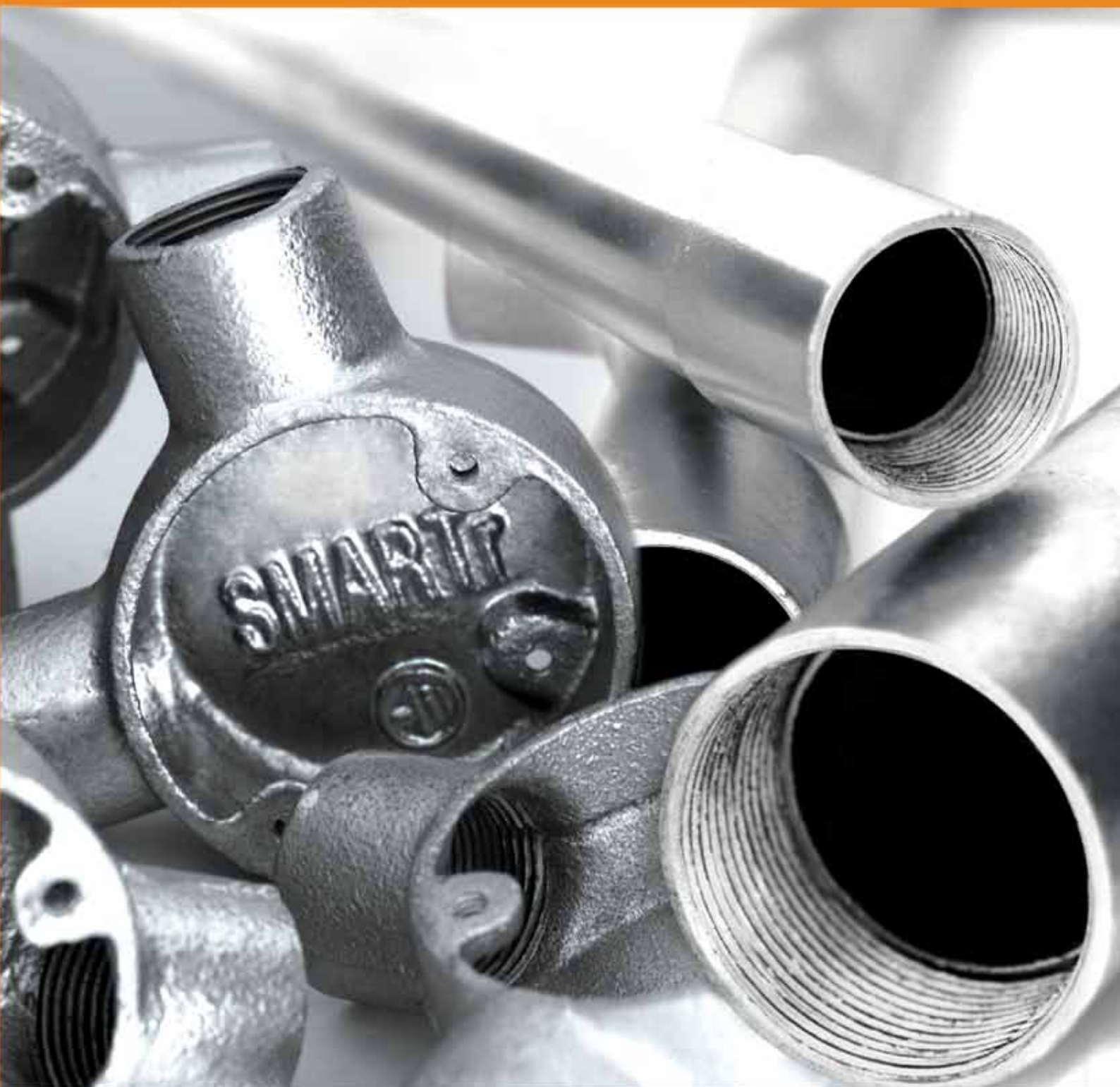


# SMART<sup>®</sup>

CATALOGUE



Steel Conduits

Malleable Iron Fittings & Accessories

Flexible Conduit Systems

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IEC60614 - 2 - 1 : 1993, BS EN 50086 - 2 - 1 : 1996

SMART<sup>®</sup> BS4568 : PT1 : 1970 Class, IEC 61386-21 : 2004  
IEC 60614 - 1 - 2 : 1993, BS EN 50086 - 2 - 1 : 1996

SMART<sup>®</sup> BS31 : 1940 Class 3

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## INTRODUCTION

SMART<sup>®</sup> range of conduit product is OEM manufactured by PEX International Pte Ltd an ISO 9001 – 2000 Singapore Company established since 1996.

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

In order to maintain product consistency, the company employs a strict set of QC discipline and procedures that are implemented at various stages of manufacturing program, from raw material selection through the inspection process, ensuring clients are fully satisfied when they receive a shipment of our finish product.

As a result of the company's quality policy, SMART<sup>®</sup> products are confidently and widely installed in major projects throughout Singapore and major export markets.

### Some advantages of using SMART<sup>®</sup> Conduits are:

- High quality mild steel ensures a conduit with superior bending and forming properties.
- Manufactured by cold forming and high frequency welding.
- Dimensionally accurate and uniform quality in all aspect.
- Each length of conduits is distinctly marked by embossed or silk screening.
- Conduits are pack in small individually wrapped easier to handle bundles and plastic capped to protect thread from damage.
- Master bundles are double wrapped and securely bundled for shipment and storage protection.

### SMART<sup>®</sup> product range includes:

- Full ranges of British standard steel conduit, conduit fittings, accessories, flexible conduit, Adaptable boxes & switches boxes, and standards covering both BS31 & BS4568 of both class, class 4 and Epoxy Powder coated finishing.
- EMT conduit & fittings to UL979-2000, CSA C22.2, ANSI C80.3-2005, conduits are available Pre-Galvanized or Zinc coated HDG.
- A practical and cost effective range of SMART<sup>®</sup> Struts, Angle Bars, Thread Rods, Pipe Clamps & Conduit Hangers.

### CONTACT US AT:

#### PEX International Pte Ltd

17 Link Road,  
Singapore 619034

Tel: 65 62736606

Fax: 65 62716606

Web: [www.pexint.com](http://www.pexint.com)

e-mail: [export@pexint.com](mailto:export@pexint.com)

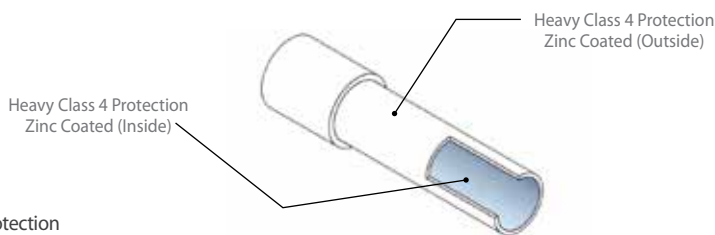
## BS 4568 CLASS 3 & CLASS 4 Conduit IEC 61386 - 21 : 2004, IEC 60614 - 2 - 1 : 1993, BSEN50086 - 2 - 1 : 1996

### CHARACTERISTICS

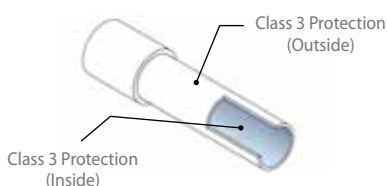
- Zinc-coated on the exterior and interior of conduit surface (Class 4)
- Supplied with one standard coupler per length
- Hot-Dipped Galvanized to BS EN ISO 1461 (Class 4)
- Metric size threadings
- Smooth interior for easy cable pulling

### APPLICATIONS (Class 4)

- Suitable for outdoor use which requires high levels of corrosion protection
- Recommended for use in areas with high humidity, chemical plants, etc.



| Class of Surface Protection | Nominal Size | Item Code    | Outside Diameter |        | Nominal Thickness | Length w/o Coupling | No. of Lengths per Bundle | No. of Bundles per Lift | Length per Bundle |
|-----------------------------|--------------|--------------|------------------|--------|-------------------|---------------------|---------------------------|-------------------------|-------------------|
|                             |              |              | Min              | Max    |                   |                     |                           |                         |                   |
| CLASS 4                     | 20mm         | CP-20-4-SMTR | 19.7mm           | 20.0mm | 1.6 ±0.15mm       | 3.75metres          | 10                        | 20                      | 200               |
|                             | 25mm         | CP-25-4-SMTR | 24.6mm           | 25.0mm | 1.6 ±0.15mm       | 3.75metres          | 10                        | 20                      | 200               |
|                             | 32mm         | CP-32-4-SMTR | 31.6mm           | 32.0mm | 1.6 ±0.15mm       | 3.75metres          | 5                         | 20                      | 100               |
|                             | 38mm         | CP-38-4-SMTR | 37.6mm           | 38.0mm | 1.8 ±0.15mm       | 3.75metres          | 5                         | 10                      | 50                |
|                             | 50mm         | CP-50-4-SMTR | 49.6mm           | 50.0mm | 1.8 ±0.15mm       | 3.75metres          | 5                         | 10                      | 50                |
| CLASS 3                     | 20mm         | CP-20-3-SMTR | 19.7mm           | 20.0mm | 1.6 ±0.15mm       | 3.75metres          | 10                        | 20                      | 200               |
|                             | 25mm         | CP-25-3-SMTR | 24.6mm           | 25.0mm | 1.6 ±0.15mm       | 3.75metres          | 10                        | 20                      | 200               |
|                             | 32mm         | CP-32-3-SMTR | 31.6mm           | 32.0mm | 1.6 ±0.15mm       | 3.75metres          | 5                         | 20                      | 50                |



## BS31 : 1940 (CLASS 3)

### CHARACTERISTICS

- Medium Corrosion protection on the exterior surface and medium corrosion protection on the interior surface of the conduit
- Supplied with one standard coupler per length
- Imperial size threadings

### APPLICATIONS

- Suitable for indoor and semi outdoor areas

| Class of Surface Protection | Nominal Size | Item Code   | Outside Diameter |        | Nominal Thickness | Length w/o Coupling | No. of Lengths per Bundle | No. of Lengths per Lift |
|-----------------------------|--------------|-------------|------------------|--------|-------------------|---------------------|---------------------------|-------------------------|
|                             |              |             | Min              | Max    |                   |                     |                           |                         |
| CLASS 3                     | 3/4"         | CP-34-SMTR  | 18.8mm           | 19.1mm | 1.6 ±0.15mm       | 3.75metres          | 10                        | 20                      |
|                             | 1"           | CP-1-SMTR   | 25.1mm           | 25.4mm | 1.6 ±0.15mm       | 3.75metres          | 10                        | 20                      |
|                             | 1 1/4"       | CP-114-SMTR | 31.5mm           | 31.8mm | 1.6 ±0.15mm       | 3.75metres          | 5                         | 20                      |

**NOTE:** 1 1/2" & 2" conduit are available on request.

## EPOXY POWDER COATED CONDUITS BS4568 : PT1 : 1970, BS EN 61386 - 21 : 2004, BS31 : 1940

### CHARACTERISTICS

- Supplied in various standards according to project's requirement
- Heavy surface corrosion protection
- Epoxy powder coated finishing provides excellent impact and scratch resistance
- Conduits are bendable without affecting the performance outlook
- Reduce cost of manpower needed for manual painting and no space constraint
- Supplied both ends threaded with one standard socket on one end

### APPLICATIONS

- 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 | No. of Lengths per Lift |
|----------------------------------------------------------|--------|-----------|---------------------|---------------------------|-------------------------|
| BS 31 : 1940 (CLASS 3)                                   | 20mm   | CP-20-4-E | 3.75metres          | 10                        | 20                      |
|                                                          | 25mm   | CP-25-4-E | 3.75metres          | 10                        | 20                      |
|                                                          | 32mm   | CP-32-4-E | 3.75metres          | 5                         | 20                      |
| BS4568 : PT1 : 1970<br>BS EN 61386 - 21 - 2004 (CLASS 4) | 20mm   | CP-20-3-E | 3.75metres          | 10                        | 20                      |
|                                                          | 25mm   | CP-25-3-E | 3.75metres          | 10                        | 20                      |
|                                                          | 32mm   | CP-32-3-E | 3.75metres          | 5                         | 20                      |
| BS4568 : PT1 : 1970<br>BS EN 61386 - 21 - 2004 (CLASS 3) | 3/4"   | CP-34-E   | 3.75metres          | 10                        | 20                      |
|                                                          | 1"     | CP-1-E    | 3.75metres          | 10                        | 20                      |
|                                                          | 1 1/4" | CP-114-E  | 3.75metres          | 5                         | 20                      |

**NOTE:** Colours are quoted to client's given colour code/sample and supplied in bulk orders of minimum 200 lengths per size.

## CABLE CAPACITIES OF CONDUIT

The following table 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.

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 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                                              | 22     |
|                   | 1.5                                            | 27     |
|                   | 2.5                                            | 39     |
| Stranded          | 1.5                                            | 31     |
|                   | 2.5                                            | 43     |
|                   | 4                                              | 58     |
|                   | 6                                              | 88     |
|                   | 10                                             | 146    |

| Conduit dia mm | Factor |
|----------------|--------|
| 16             | 290    |
| 20             | 460    |
| 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

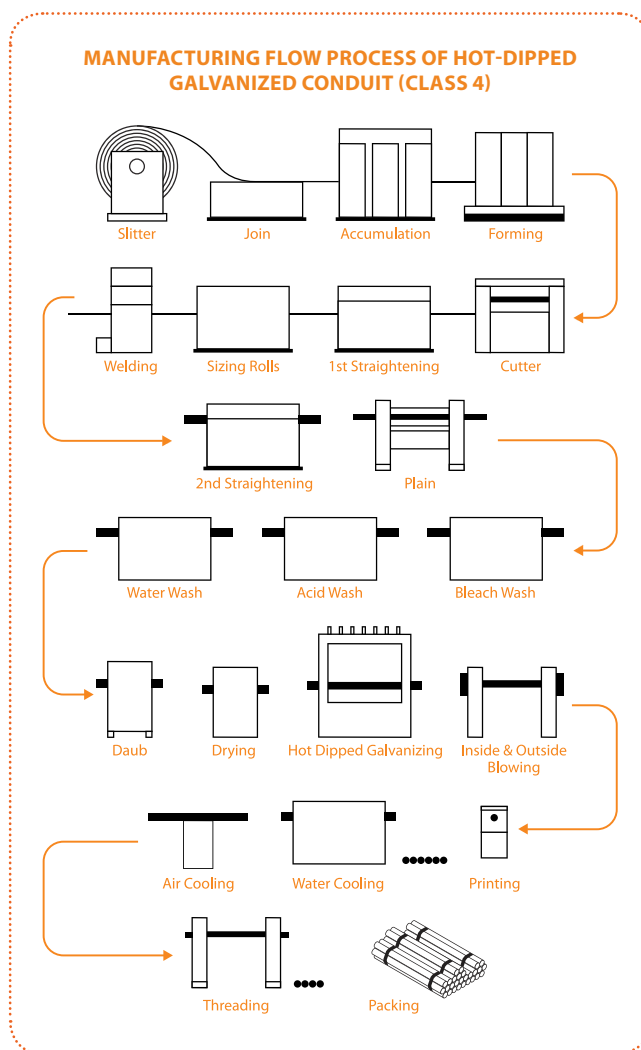
For each type of cable being used obtain the cable factor from Table 3.

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 or Stranded | 1                                              | 16     |
|                   | 1.5                                            | 22     |
|                   | 2.5                                            | 30     |
|                   | 4                                              | 43     |
|                   | 6                                              | 58     |
|                   | 10                                             | 105    |

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



### SPACING OF 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             |
| 17mm - 25mm                | 1.75                              | 2.0             |
| 26mm - 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.

| Length of Run Metres | Conduit Diameter (mm)   |     |     |     |          |     |     |     |           |     |     |     |             |     |     |     |
|----------------------|-------------------------|-----|-----|-----|----------|-----|-----|-----|-----------|-----|-----|-----|-------------|-----|-----|-----|
|                      | 16                      | 20  | 25  | 32  | 16       | 20  | 25  | 32  | 16        | 20  | 25  | 32  | 16          | 20  | 25  | 32  |
|                      | Straight                |     |     |     | One Bend |     |     |     | Two Bends |     |     |     | Three Bends |     |     |     |
| 1                    | Covered by Tables 1 & 2 |     |     |     | 188      | 303 | 543 | 947 | 177       | 286 | 514 | 900 | 158         | 256 | 463 | 818 |
| 1.5                  |                         |     |     |     | 182      | 294 | 528 | 923 | 167       | 270 | 487 | 857 | 143         | 233 | 422 | 750 |
| 2                    |                         |     |     |     | 177      | 286 | 514 | 900 | 158       | 256 | 463 | 818 | 130         | 213 | 388 | 692 |
| 2.5                  |                         |     |     |     | 171      | 278 | 500 | 878 | 150       | 244 | 442 | 783 | 120         | 196 | 358 | 643 |
| 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.

## BOXES - Circular, Small

**Marking** : SMART<sup>®</sup>  
**Material** : Malleable Iron - BS4568 : PT2 : 1970 IEC 61386 - 21 - 2004  
**Finish** : Hot-Dipped Galvanized to BS EN ISO 1461  
**Note** : BS31 boxes available in cast iron & galvanized finish  
BS4568 boxes can be ordered in cast iron & galvanized finish

### NOTE:

- Boxes come with tapped hole at base for earthing screw
- Covers and fixing screws are supplied separately
- 3/4" or 1" fittings are used for BS31 conduits (Imperial Threads)
- 20mm or 25mm fittings are used for BS4568 conduits (Metric Threads)

| Sizes |                                             | Conduit          |
|-------|---------------------------------------------|------------------|
| 20mm  | Min 25mm deep, Tapped M4 at 50.8mm centres  | BS4568 CL3 / CL4 |
| 25mm  | Min 28mm deep, Tapped M4 at 50.8mm centres  | BS4568 CL3 / CL4 |
| 3/4"  | Min 25mm deep, Tapped 2BA at 50.8mm centres | BS31 CL3         |
| 1"    | Min 28mm deep, Tapped 2BA at 50.8mm centres | BS31 CL3         |

### TERMINAL BOX - 1 WAY



| ITEM CODE     | SIZE | PACK QTY (PCS) |
|---------------|------|----------------|
| CF-20-1W-SMTR | 20mm | 100            |
| CF-25-1W-SMTR | 25mm | 100            |
| CF-34-1W-SMTR | 3/4" | 100            |
| CF-1-1W-SMTR  | 1"   | 100            |

### TEE BOX - 3 WAYS



| ITEM CODE     | SIZE | PACK QTY (PCS) |
|---------------|------|----------------|
| CF-20-3W-SMTR | 20mm | 100            |
| CF-25-3W-SMTR | 25mm | 100            |
| CF-34-3W-SMTR | 3/4" | 100            |
| CF-1-3W-SMTR  | 1"   | 100            |

### TERMINAL BOX - 1 WAY WITH BACK-HOLE



| ITEM CODE       | SIZE | PACK QTY (PCS) |
|-----------------|------|----------------|
| CF-20-1W-H-SMTR | 20mm | 100            |
| CF-25-1W-H-SMTR | 25mm | 100            |
| CF-34-1W-H-SMTR | 3/4" | 100            |
| CF-1-1W-H-SMTR  | 1"   | 100            |

| BACK OUTLET HOLE SIZE |                    |
|-----------------------|--------------------|
| Size of Box           | Back-Hole Diameter |
| 20mm                  | 20mm               |
| 25mm                  | 25mm               |

### CROSS BOX - 4 WAYS



| ITEM CODE     | SIZE | PACK QTY (PCS) |
|---------------|------|----------------|
| CF-20-4W-SMTR | 20mm | 100            |
| CF-25-4W-SMTR | 25mm | 100            |
| CF-34-4W-SMTR | 3/4" | 100            |
| CF-1-4W-SMTR  | 1"   | 100            |

### BRANCH 'Y' BOX - 3 WAYS



| ITEM CODE    | SIZE | PACK QTY (PCS) |
|--------------|------|----------------|
| CF-20-Y-SMTR | 20mm | 100            |
| CF-25-Y-SMTR | 25mm | 100            |
| CF-34-Y-SMTR | 3/4" | 100            |
| CF-1-Y-SMTR  | 1"   | 100            |

### THROUGH BOX - 2 WAYS



| ITEM CODE     | SIZE | PACK QTY (PCS) |
|---------------|------|----------------|
| CF-20-2W-SMTR | 20mm | 100            |
| CF-25-2W-SMTR | 25mm | 100            |
| CF-34-2W-SMTR | 3/4" | 100            |
| CF-1-2W-SMTR  | 1"   | 100            |

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



| ITEM CODE    | SIZE | PACK QTY (PCS) |
|--------------|------|----------------|
| CF-20-U-SMTR | 20mm | 100            |
| CF-25-U-SMTR | 25mm | 100            |
| CF-34-U-SMTR | 3/4" | 100            |
| CF-1-U-SMTR  | 1"   | 100            |

### ANGLE BOX - 2 WAYS



| ITEM CODE    | SIZE | PACK QTY (PCS) |
|--------------|------|----------------|
| CF-20-A-SMTR | 20mm | 100            |
| CF-25-A-SMTR | 25mm | 100            |
| CF-34-A-SMTR | 3/4" | 100            |
| CF-1-A-SMTR  | 1"   | 100            |

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



| ITEM CODE    | SIZE | PACK QTY (PCS) |
|--------------|------|----------------|
| CF-20-H-SMTR | 20mm | 100            |
| CF-25-H-SMTR | 25mm | 100            |
| CF-34-H-SMTR | 3/4" | 100            |
| CF-1-H-SMTR  | 1"   | 100            |

## BOXES - Circular, Large

**Marking** : SMART<sup>®</sup>  
**Material** : Malleable Iron - BS4568 : PT2 : 1970 IEC 61386 - 21 - 2004  
**Finish** : Hot-Dipped Galvanized to BS EN ISO 1461

### NOTE:

- Boxes come with tapped hole at base for earthing screw
- Covers and fixing screws are supplied separately
- ¾" or 1" fittings are used for BS31 conduits (Imperial Threads)
- 20mm or 25mm fittings are used for BS4568 conduits (Metric Threads)

| SIZES                                               | CONDUIT          |
|-----------------------------------------------------|------------------|
| 32mm Min 37.5mm deep, Tapped M4 at 71.5mm centres   | BS4568 CL3 / CL4 |
| 1 1/4" Min 37.5mm deep, Tapped M4 at 71.5mm centres | BS31 CL3         |

### ANGLE BOX - 2 WAYS



| ITEM CODE     | SIZE   | PACK QTY (PCS) |
|---------------|--------|----------------|
| CF-32-A-SMTR  | 32mm   | 50             |
| CF-114-A-SMTR | 1 1/4" | 50             |

### TERMINAL BOX - 1 WAY



| ITEM CODE      | SIZE   | PACK QTY (PCS) |
|----------------|--------|----------------|
| CF-32-1W-SMTR  | 32mm   | 50             |
| CF-114-1W-SMTR | 1 1/4" | 50             |

### TEE BOX - 3 WAYS



| ITEM CODE      | SIZE   | PACK QTY (PCS) |
|----------------|--------|----------------|
| CF-32-3W-SMTR  | 32mm   | 50             |
| CF-114-3W-SMTR | 1 1/4" | 50             |

### THROUGH BOX - 2 WAYS



| ITEM CODE      | SIZE   | PACK QTY (PCS) |
|----------------|--------|----------------|
| CF-32-2W-SMTR  | 32mm   | 50             |
| CF-114-2W-SMTR | 1 1/4" | 50             |

### CROSS BOX - 4 WAYS



| ITEM CODE      | SIZE   | PACK QTY (PCS) |
|----------------|--------|----------------|
| CF-32-4W-SMTR  | 32mm   | 50             |
| CF-114-4W-SMTR | 1 1/4" | 50             |

## BOXES - Circular, Special Deep

**Marking** : SMART<sup>®</sup>  
**Material** : Malleable Iron - BS4568 : PT2 : 1970  
**Finish** : Hot-Dipped Galvanized to BS EN ISO 1461

### NOTE:

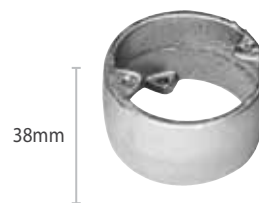
- Boxes come with tapped hole at base for earthing screw
- Covers and fixing screws are supplied separately
- ¾" or 1" fittings (Imperial Threads)
- 20mm or 25mm fittings (Metric Threads)
- 60.3mm Internal Diameter
- Deep boxes available in 1-4 way and angle



| SIZES                                            | ITEM CODE       | CONDUIT          |
|--------------------------------------------------|-----------------|------------------|
| 20mm Box Depth 62mm, Tapped M4 at 50.8mm centres | CF-20-2W-D-SMTR | BS4568 CL3 / CL4 |
| 25mm Box Depth 62mm, Tapped M4 at 50.8mm centres | CF-25-2W-D-SMTR | BS4568 CL3 / CL4 |
| ¾" Box Depth 62mm, Tapped 2BA at 50.8mm centres  | CF-34-2W-D-SMTR | BS31 CL3         |
| 1" Box Depth 62mm, Tapped 2BA at 50.8mm centres  | CF-1-2W-D-SMTR  | BS31 CL3         |

## EXTENSION RING

### CIRCULAR BOX EXTENSION RING



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

| ITEM CODE | SIZE | PACK QTY (PCS) |
|-----------|------|----------------|
| CF-38-ER  | 38mm | 100            |
| CF-50-ER  | 50mm | TBA            |

### NOTE:

- Supplied with 50.0mm fixing centre holes (for small circular boxes)
- Suitable for increasing height of conduit boxes into deep pattern boxes
- Steel material are available in order
- Covers and screws not included



## COVERS

## CIRCULAR COVER - SMALL/LARGE



**Material** : Steel  
**Finish** : Plain Galvanized  
**Thickness** : 1.0mm/2.0mm

| ITEM CODE | SIZE                        | PACK QTY (PCS) |
|-----------|-----------------------------|----------------|
| CF-C-SMTR | SMALL (For 20mm/25mm Boxes) | 400            |
| CF-C-32   | LARGE (For 32mm Boxes)      | 500            |

**NOTE:**

- Screws are supplied separately
- Hot-dipped Galvanized available on order
- Suitable rubber gasket available on order

## DOME LID



**Marking** : SMART<sup>™</sup>  
**Material** : Malleable Iron  
**Finish** : Hot-Dipped Galvanized

| ITEM CODE     | SIZE | PACK QTY (PCS) |
|---------------|------|----------------|
| CF-DC-20-SMTR | 20mm | 200            |
| CF-DC-25-SMTR | 25mm | 200            |
| CF-DC-34-SMTR | 3/4" | 200            |
| CF-DC-1-SMTR  | 1"   | 100            |

**NOTE:**

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

## BALL &amp; SOCKET



**Material** : Steel  
**Finish** : Galvanized

| ITEM CODE | SIZE | PACK QTY (PCS) |
|-----------|------|----------------|
| CF-20-BSC | 20mm | 100            |
| CF-25-BSC | 25mm | 100            |
| CF-34-BSC | 3/4" | 100            |
| CF-1-BSC  | 1"   | 100            |

**NOTE:**

- Supplied with 50.5mm fixing centre holes with attached earth wire
- Also available in malleable iron material

## BENDS, ELBOWS AND TEES

## INSPECTION ELBOW



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

| ITEM CODE     | SIZE | PACK QTY (PCS) |
|---------------|------|----------------|
| CF-20-IE-SMTR | 20mm | 200            |
| CF-25-IE-SMTR | 25mm | 100            |
| CF-32-IE-SMTR | 32mm | 100            |

**NOTE:**

- Lid and steel screws included
- SMART<sup>®</sup> marking on cover

## INSPECTION TEE



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

| ITEM CODE     | SIZE | PACK QTY (PCS) |
|---------------|------|----------------|
| CF-20-IT-SMTR | 20mm | 100            |
| CF-25-IT-SMTR | 25mm | 100            |
| CF-32-IT-SMTR | 32mm | TBA            |

**NOTE:**

- Lid and steel screws included
- SMART<sup>®</sup> marking on cover

## INSPECTION BEND



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

| ITEM CODE     | SIZE | PACK QTY (PCS) |
|---------------|------|----------------|
| CF-20-IB-SMTR | 20mm | 100            |
| CF-25-IB-SMTR | 25mm | 100            |
| CF-32-IB-SMTR | 32mm | TBA            |

**NOTE:**

- Lid and steel screws included
- SMART<sup>®</sup> marking on cover

## SOLID BEND



**Material** : Malleable Iron  
**Finish** : Hot-Dipped Galvanized  
**Angle** : 90°

| ITEM CODE       | SIZE | PACK QTY (PCS) |
|-----------------|------|----------------|
| CF-20-BEND-SMTR | 20mm | 100            |
| CF-25-BEND-SMTR | 25mm | 100            |
| CF-32-BEND-SMTR | 32mm | TBA            |

**NOTE:**

- Supplied internal threaded

## SOLID LONG BEND



**Material** : Steel  
**Finish** : Hot-Dipped Galvanized  
**Angle** : 90°

| ITEM CODE     | SIZE | PACK QTY (PCS) |
|---------------|------|----------------|
| CF-20-LB-SMTR | 20mm | 150            |
| CF-25-LB-SMTR | 25mm | 100            |
| CF-32-LB-SMTR | 32mm | 50             |
| CF-38-LB-SMTR | 38mm | 20             |
| CF-50-LB-SMTR | 50mm | 20             |

**NOTE:**

- Special non-standard bends available on order
- Imperial threaded bends available on order
- Supplied external threaded c/w socket



## COUPLINGS

### COUPLING



**Material** : Steel  
**Finish** : Plain Galvanized / HDG optional

| ITEM CODE    | SIZE   | PACK QTY (PCS) |
|--------------|--------|----------------|
| CF-20-S-MTR  | 20mm   | 1000           |
| CF-25-S-MTR  | 25mm   | 500            |
| CF-32-S-MTR  | 32mm   | 400            |
| CF-38-S-MTR  | 38mm   | TBA            |
| CF-50-S-MTR  | 50mm   | TBA            |
| CF-34-S-MTR  | 3/4"   | 1000           |
| CF-1-S-MTR   | 1"     | 500            |
| CF-114-S-MTR | 1 1/4" | 400            |
| CF-112-S-MTR | 1 1/2" | TBA            |
| CF-2-S-MTR   | 2"     | TBA            |

### FLANGE COUPLING



**Material** : Malleable Iron/Steel (optional)  
**Finish** : Hot-Dipped Galvanized

| ITEM CODE | SIZE   | PACK QTY (PCS) |
|-----------|--------|----------------|
| CF-20-FC  | 20mm   | 100            |
| CF-25-FC  | 25mm   | 100            |
| CF-32-FC  | 32mm   | 100            |
| CF-34-FC  | 3/4"   | 100            |
| CF-1-FC   | 1"     | 100            |
| CF-114-FC | 1 1/4" | 100            |

**NOTE:**

- Complete with washer and male bush

### SCREWLESS COUPLING



**Material** : Steel  
**Finish** : Galvanized

| ITEM CODE   | SIZE | PACK QTY (PCS) |
|-------------|------|----------------|
| CF-20-S-MTR | 3/4" | 600            |
| CF-25-S-MTR | 1"   | 500            |
| CF-20-SC    | 20mm | 600            |
| CF-25-SC    | 25mm | 500            |

**NOTE:**

- Hot Dipped Galvanized available upon request
- Supplied with standard steel screws
- Brass or SS screws are optional
- Most suitable for connection of PVC conduit to Steel conduit

### SHORT NIPPLE



**Material** : Steel  
**Finish** : Galvanized

| ITEM CODE | SIZE   | PACK QTY (PCS) |
|-----------|--------|----------------|
| CF-20-SN  | 20mm   | 1000           |
| CF-25-SN  | 25mm   | 500            |
| CF-32-SN  | 32mm   | 500            |
| CF-34-SN  | 3/4"   | 1000           |
| CF-1-SN   | 1"     | 500            |
| CF-114-SN | 1 1/4" | 500            |

## CONDUIT FIXINGS

### SPACER BAR SADDLE



**Marking** : SMART<sup>®</sup>  
**Material** : Base - Steel  
: Strap - Steel  
**Finish** : Galvanized (Standard)  
: Hot-Dipped Galvanized (Optional)  
**Standard** : BS4568 : Part 2 : 1970, BS31

| ITEM CODE      | SIZE   | PACK QTY (PCS) |
|----------------|--------|----------------|
| CF-20-SB-SMTR  | 20mm   | 1000           |
| CF-25-SB-SMTR  | 25mm   | 1000           |
| CF-32-SB-SMTR  | 32mm   | 500            |
| CF-38-SB-SMTR  | 38mm   | 400            |
| CF-50-SB-SMTR  | 50mm   | 200            |
| CF-34-SB-SMTR  | 3/4"   | 1000           |
| CF-1-SB-SMTR   | 1"     | 1000           |
| CF-114-SB-SMTR | 1 1/4" | 500            |
| CF-112-SB-SMTR | 1 1/2" | 400            |
| CF-2-SB-SMTR   | 2"     | 200            |

**NOTE:**

- Supplied with standard steel screws
- Brass or stainless steel screws optional

### PLAIN SADDLES



**Material** : Steel  
**Finish** : Galvanized (Standard)

| ITEM CODE | SIZE   | PACK QTY (PCS) |
|-----------|--------|----------------|
| CF-20-PS  | 20mm   | 2000           |
| CF-25-PS  | 25mm   | 2000           |
| CF-32-PS  | 32mm   | 1000           |
| CF-38-PS  | 38mm   | 500            |
| CF-50-PS  | 50mm   | 500            |
| CF-34-PS  | 3/4"   | 2000           |
| CF-1-PS   | 1"     | 2000           |
| CF-114-PS | 1 1/4" | 1000           |
| CF-112-PS | 1 1/2" | 500            |
| CF-2-PS   | 2"     | 500            |

**NOTE:**

- Hot dipped Galvanized available in order
- Larger size available in order

## CONDUIT FIXINGS

### HALF SADDLE



**Material** : Steel  
**Finish** : Galvanized

| ITEM CODE | SIZE   | PACK QTY (PCS) |
|-----------|--------|----------------|
| CF-20-HS  | 20mm   | 1000           |
| CF-25-HS  | 25mm   | 1000           |
| CF-32-HS  | 32mm   | 500            |
| CF-34-HS  | 3/4"   | 1000           |
| CF-1-HS   | 1"     | 1000           |
| CF-114-HS | 1 1/4" | 500            |

**NOTE:**

- Suitable for temporary installation of conduits / flexible conduit
- Hot-dipped galvanized available on order

### CONDUIT PIPE CLAMP



**Marking** : SMART<sup>®</sup>  
**Material** : Steel  
**Finish** : Galvanized  
Hot-Dipped Galvanized (Optional)

| ITEM CODE         | SIZE | PACK QTY (PCS) |
|-------------------|------|----------------|
| SSA-COND-CLAMP-20 | 20mm | 500            |
| SSA-COND-CLAMP-25 | 25mm | 500            |
| SSA-COND-CLAMP-32 | 32mm | 100            |
| SSA-COND-CLAMP-38 | 38mm | 50             |
| SSA-COND-CLAMP-50 | 50mm | 50             |

**NOTE:**

- Supplied with standard steel screws
- Brass or Stainless Steel screws optional
- Also suitable for use for Imperial (Inches Threads) size conduits
- Larger size pipe clamp available upon request

### KON CLIP



**Material** : Steel  
**Finish** : Enamel Black /  
Hot-dipped Galvanized

| FINISH       | ITEM CODE | SIZE | PACK QTY (PCS) |
|--------------|-----------|------|----------------|
| Black Enamel | CD-KC-K12 | 20mm | 2000           |
|              | CD-KC-K16 | 25mm | 2000           |
|              | CD-KC-K20 | 32mm | 1000           |
| HDG          | CF-KC-K20 | 20mm | 2000           |
|              | CF-KC-K25 | 25mm | 2000           |
|              | CF-KC-K32 | 32mm | 1000           |

**NOTE:**

- For installing conduit or cable onto threaded rod
- Also suitable for use for Imperial (Inches Threads) size conduits
- No brand marking on product

### HEAVY DUTY - DISTANCE SADDLE



**Marking** : SMART<sup>®</sup>  
**Material** : Base - Malleable Iron  
Strap - HDG Steel

| ITEM CODE      | SIZE   | PACK QTY (PCS) |
|----------------|--------|----------------|
| CF-20-DS-SMTR  | 20mm   | 500            |
| CF-25-DS-SMTR  | 25mm   | 500            |
| CF-32-DS-SMTR  | 32mm   | 250            |
| CF-34-DS-SMTR  | 3/4"   | 500            |
| CF-1-DS-SMTR   | 1"     | 500            |
| CF-114-DS-SMTR | 1 1/4" | 250            |

**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

## REDUCERS / PLUGS

### CONDUIT PIPE REDUCER



**Material** : Alloy / Brass  
**Finish** : Plain Galvanized

| ITEM CODE  | SIZE        | PACK QTY (PCS) |
|------------|-------------|----------------|
| CF-R-20X25 | 20mm X 25mm | 1000           |
| CF-R-32X25 | 25mm X 32mm | 500            |
| CF-R-34X1  | 3/4" x 1"   | 1000           |
| CF-R-1X114 | 1" x 1 1/4" | 500            |

**NOTE:**

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

### STOPPING PLUG



**Material** : Alloy / Brass  
**Finish** : Plain

| ITEM CODE | SIZE   | PACK QTY (PCS) |
|-----------|--------|----------------|
| CF-SP-20  | 20mm   | 1000           |
| CF-SP-25  | 25mm   | 1000           |
| CF-SP-32  | 32mm   | 250            |
| CF-SP-34  | 3/4"   | 1000           |
| CF-SP-1   | 1"     | 100            |
| CF-SP-114 | 1 1/4" | 250            |

**NOTE:**

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

## BUSHINGS

Short Male Bush



Short Female Bush

### SHORT MALE BUSH

Material : Alloy / Brass

| ITEM CODE | SIZE   | PACK QTY (PCS) |
|-----------|--------|----------------|
| MB-20-N   | 20mm   | 2000           |
| MB-25-N   | 25mm   | 1000           |
| MB-32-N   | 32mm   | 1000           |
| MB-38-N   | 38mm   | 720            |
| MB-50-N   | 50mm   | 250            |
| MB-34-N   | 3/4"   | 2000           |
| MB-1-N    | 1"     | 1000           |
| MB-114-N  | 1 1/4" | 500            |
| MB-112-N  | 1 1/2" | 300            |
| MB-2-N    | 2"     | 200            |

### SHORT FEMALE BUSH

Material : Alloy / Brass

| ITEM CODE | SIZE   | PACK QTY (PCS) |
|-----------|--------|----------------|
| FB-20-N   | 20mm   | 3000           |
| FB-25-N   | 25mm   | 2000           |
| FB-32-N   | 32mm   | 2000           |
| FB-38-N   | 38mm   | 1000           |
| FB-50-N   | 50mm   | 500            |
| FB-34-N   | 3/4"   | 3000           |
| FB-1-N    | 1"     | 2000           |
| FB-114-N  | 1 1/4" | 2000           |
| FB-112-N  | 1 1/2" | 1000           |
| FB-2-N    | 2"     | 500            |

Long Male Bush



Long Female Bush

### LONG MALE BUSH

Material : Alloy / Brass

| ITEM CODE | SIZE | PACK QTY (PCS) |
|-----------|------|----------------|
| MB-20-L   | 20mm | 1000           |
| MB-25-L   | 25mm | 1000           |
| MB-50-L   | 50mm | 150            |
| MB-34-L   | 3/4" | 1000           |
| MB-1-L    | 1"   | 1000           |

### LONG FEMALE BUSH

Material : Alloy / Brass

| ITEM CODE | SIZE   | PACK QTY (PCS) |
|-----------|--------|----------------|
| FB-20-L   | 20mm   | 3000           |
| FB-25-L   | 25mm   | 2000           |
| FB-32-L   | 32mm   | 2000           |
| FB-38-L   | 38mm   | 1000           |
| FB-50-L   | 50mm   | 500            |
| FB-34-L   | 3/4"   | 3000           |
| FB-1-L    | 1"     | 2000           |
| FB-114-L  | 1 1/4" | 2000           |
| FB-112-L  | 1 1/2" | 1000           |
| FB-2-L    | 2"     | 500            |

## LOCKNUTS

### LOCKING RING

Material : Alloy / Steel  
Finish : Galvanized



| ITEM CODE | SIZE   | PACK QTY (PCS) |
|-----------|--------|----------------|
| CF-20-LR  | 20mm   | 2000           |
| CF-25-LR  | 25mm   | 2000           |
| CF-32-LR  | 32mm   | 1000           |
| CF-38-LR  | 38mm   | TBA            |
| CF-50-LR  | 50mm   | TBA            |
| CF-34-LR  | 3/4"   | 2000           |
| CF-1-LR   | 1"     | 2000           |
| CF-114-LR | 1 1/4" | 1000           |
| CF-112-LR | 1 1/2" | TBA            |
| CF-2-LR   | 2"     | TBA            |

**NOTE:**

- For locking conduit to junction boxes

### LOCK NUT

Material : Alloy / Brass  
Finish : Galvanized



| ITEM CODE |           | SIZE   | PACK QTY (PCS) |
|-----------|-----------|--------|----------------|
| ALLOY     | BRASS     |        |                |
| CF-20-LN  | BF-LN-20  | 20mm   | 2000           |
| CF-25-LN  | BF-LN-25  | 25mm   | 2000           |
| CF-32-LN  | BF-LN-32  | 32mm   | 1000           |
| CF-38-LN  | BF-LN-38  | 38mm   | TBA            |
| CF-50-LN  | BF-LN-50  | 50mm   | TBA            |
| CF-34-LN  | BF-LN-34  | 3/4"   | 2000           |
| CF-1-LN   | BF-LN-1   | 1"     | 2000           |
| CF-114-LN | BF-LN-114 | 1 1/4" | 1000           |
| CF-112-LN | BF-LN-112 | 1 1/2" | TBA            |
| CF-2-LN   | BF-LN-2   | 2"     | TBA            |

**NOTE:**

- For locking conduit to junction boxes
- Available in tinned finish

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

### 1 GANG K.O. BOX



**Marking** : SMART<sup>®</sup>  
**Material** : Steel  
**Finish** : 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 in order
- 100 pcs / carton

| STANDARD      | TYPE           | ITEM CODE | SIZE (mm) |        |       |           |
|---------------|----------------|-----------|-----------|--------|-------|-----------|
|               |                |           | Width     | Length | Depth | Thickness |
| BS4662 : 1970 | Normal Pattern | KO-1-SMTR | 75        | 75     | 35    | 1.1 ~ 1.2 |
|               | Deep Pattern   | KO-1-D    | 75        | 75     | 47    | 1.1 ~ 1.2 |
|               | Normal Pattern | KO-1-S    | 75        | 75     | 35    | 0.8 ~ 0.9 |
|               | Deep Pattern   | KO-1-D    | 75        | 75     | 47    | 0.8 ~ 0.9 |

### 2 GANG K.O. BOX



**Marking** : SMART<sup>®</sup>  
**Material** : Steel  
**Finish** : Plain Galvanized  
Hot-dipped Galvanized (on order)  
: 1 adjustable lug  
: 1 regulation earth terminal

**NOTE:**

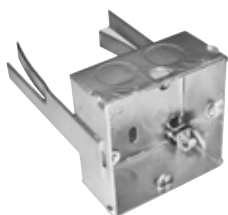
- Available mixed 20mm & 25mm K.O. holes
- Plain lids available in order
- 50 pcs / carton

| STANDARD      | TYPE           | ITEM CODE | SIZE (mm) |        |       |           |
|---------------|----------------|-----------|-----------|--------|-------|-----------|
|               |                |           | Width     | Length | Depth | Thickness |
| BS4662 : 1970 | Normal Pattern | KO-2-SMTR | 135       | 75     | 35    | 1.1 ~ 1.2 |
|               | Deep Pattern   | KO-2-D    | 135       | 75     | 47    | 1.1 ~ 1.2 |
|               | Normal Pattern | KO-2-S    | 135       | 75     | 35    | 0.8 ~ 0.9 |
|               | Deep Pattern   | KO-2-D    | 135       | 75     | 47    | 0.8 ~ 0.9 |

## KNOCK-OUT BOXES WITH "FISH TAIL"

SMART<sup>®</sup> "Fish Tail" K.O. Boxes are available in standard 35mm depth (normal pattern) with the 47mm deep pattern type are also 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"



**Marking** : SMART<sup>®</sup>  
**Material** : Steel  
**Finish** : Hot-dipped Galvanized  
**Standard** : 1 x fix regulation earth terminal  
**Features** : 8 x 20mm K.O. holes  
c/w 2x welded Fish Tail

**NOTE:**

- Plain lids available in order
- 100 pcs / carton

| STANDARD      | TYPE                           | ITEM CODE    | SIZE (mm) |        |       |            |
|---------------|--------------------------------|--------------|-----------|--------|-------|------------|
|               |                                |              | Width     | Length | Depth | Thickness  |
| BS4662 : 1970 | Normal Pattern Welded Fishtail | KO-1-SMTR-FT | 75        | 75     | 35    | Min. 1.1mm |

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



**Marking** : SMART<sup>®</sup>  
**Material** : Steel  
**Finish** : Hot-dipped Galvanized  
**Standard** : 1 x fix regulation earth terminal  
**Features** : 10 x 20mm K.O. holes  
c/w 4x welded Fish Tail

**NOTE:**

- Plain lids available in order
- 50 pcs / carton

| STANDARD      | TYPE                           | ITEM CODE    | SIZE (mm) |        |       |            |
|---------------|--------------------------------|--------------|-----------|--------|-------|------------|
|               |                                |              | Width     | Length | Depth | Thickness  |
| BS4662 : 1970 | Normal Pattern Welded Fishtail | KO-2-SMTR-FT | 75        | 75     | 35    | Min. 1.1mm |

## STEEL ADAPTABLE BOXES

SMART<sup>®</sup> 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 so as users can drill the required holes according to installation needs. The boxes can be supplied with a rubber gasket to improve the IP rating to IP54. It could also serve as an utility junction box for wiring connection purposes.



**Marking** : SMART<sup>®</sup>  
**IP Rating** : IP40 / IP54

**BODY**

**Material** : Steel  
Malleable Iron (Optional)  
**Finish** : Plain Galvanized  
Hot-dipped Galvanized (Optional)

**FLAT LID**

**Material** : Steel  
**Finish** : Plain Galvanized  
Hot-dipped Galvanized (Optional)

| STANDARD      | ITEM CODE        | SIZE (mm) |        |       | PACK QTY (PCS) |
|---------------|------------------|-----------|--------|-------|----------------|
|               |                  | Width     | Length | Depth |                |
| BS4662 : 1970 | CF-AD-75X75X35   | 75        | 75     | 35    | 50             |
|               | CF-AD-100X100X50 | 100       | 100    | 50    | 50             |
|               | CF-AD-100X100X75 | 100       | 100    | 75    | 40             |
|               | CF-AD-150X150X75 | 150       | 150    | 75    | 20             |
|               | CF-AD-225X225X75 | 225       | 225    | 75    | 10             |
|               | CF-AD-300X300X75 | 300       | 300    | 75    | 5              |

**NOTE:**

- Supplied with Steel screws as standard
- Brass or Stainless steel screws 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



## FLEXIBLE CONDUIT SYSTEM AND ADAPTORS

### STEEL FLEXIBLE CONDUIT



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

### PVC COATED FLEXIBLE CONDUIT



|                          |                                                                       |
|--------------------------|-----------------------------------------------------------------------|
| <b>Flexible Material</b> | : Electro-Galvanized Steel                                            |
| <b>Jacket Properties</b> | : Heat retardant self extinguishing PVC sheath                        |
| <b>PVC color</b>         | : Black (White/Grey and other colors available upon specific request. |
| <b>Temp range</b>        | : -25 degC to +120 degC                                               |
| <b>IP Rating</b>         | : IP67 (When installed with suitable water tight adaptors)            |
| <b>Construction</b>      | : Galvanized steel core with enhanced low acid PVC Sheath             |
| <b>Features</b>          | : Highly flexible                                                     |
| <b>Standard</b>          | : BS731 / BS EN 50086 (where applicable)                              |

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



|                          |                                                            |
|--------------------------|------------------------------------------------------------|
| <b>Flexible Material</b> | : Electro-Galvanized Steel                                 |
| <b>Jacket Properties</b> | : Heat resistant, Low Smoke Halogen free                   |
| <b>PVC color</b>         | : Black                                                    |
| <b>Temp range</b>        | : -25 degC to +120 degC                                    |
| <b>IP Rating</b>         | : IP67 (When installed with suitable water tight adaptors) |
| <b>Construction</b>      | : Flexible with LSOHPVC sheath                             |
| <b>Features</b>          | : Do not emit hazardous gases when heated or in flames     |
| <b>Standard</b>          | : IEC 61386 (where applicable)                             |

### LIQUID TIGHT FLEXIBLE CONDUIT



|                          |                                                                                                                      |
|--------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Flexible Material</b> | : Electro-Galvanized Steel                                                                                           |
| <b>Jacket Properties</b> | : Excellent mechanical strength with flexible capabilities. Thick PVC Jacket is resistant to oil, acid and sea water |
| <b>PVC color</b>         | : Black (Grey also available in specific order)                                                                      |
| <b>Temp range</b>        | : -25 degC to +150 degC                                                                                              |
| <b>IP Rating</b>         | : IP67 (When installed with suitable water tight adaptors)                                                           |
| <b>Standard</b>          | : BS731 (where applicable)                                                                                           |

### STAINLESS STEEL FLEXIBLE CONDUIT

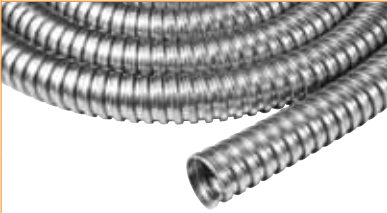
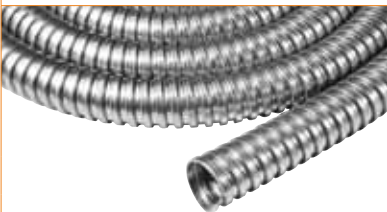


|                          |                                                                                    |
|--------------------------|------------------------------------------------------------------------------------|
| <b>Flexible Material</b> | : Stainless Steel - 304 / 306                                                      |
| <b>Properties</b>        | : Provides strong protection for cables                                            |
| <b>Temp range</b>        | : 50 Deg C to +350 Deg C                                                           |
| <b>IP Rating</b>         | : IP40                                                                             |
| <b>Construction</b>      | : Highly flexible steel conduit offers excellent mechanical & corrosion protection |
| <b>Features</b>          | : For special and heavy duty corrosive environment                                 |
| <b>Standard</b>          | : BS731 (where applicable)                                                         |

**NOTE:**

• Hot-dipped Galvanized Steel Flexible Conduit also available upon special request.

## FLEXIBLE CONDUIT SYSTEM AND ADAPTORS - SELECTION CHART

| DESCRIPTIONS                                                                                                                                                                             | SIZE   | ITEM CODE        | PACKING PER COIL | IP RATING | COMPATIBLE WITH ADAPTOR'S CODES     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------------|------------------|-----------|-------------------------------------|
|  <p><b>Steel Flexible Conduits</b></p>                                                                  | 16mm   | FP-16-S-SMTR     | 100 FT           | 40        | BA, BA-S, NPA, NPA-S, NPA-SS<br>LTA |
|                                                                                                                                                                                          | 20mm   | FP-20-S-SMTR     | 100 FT           | 67        |                                     |
|                                                                                                                                                                                          | 25mm   | FP-25-S-SMTR     | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 32mm   | FP-32-S-SMTR     | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 38mm   | FP-38-S-SMTR     | 50 FT            |           |                                     |
|                                                                                                                                                                                          | 50mm   | FP-50-S-SMTR     | 50 FT            |           |                                     |
|                                                                                                                                                                                          | 5/8"   | FP-58-S          | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 3/4"   | FP-34-S          | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 1"     | FP-1-S           | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 1 1/4" | FP-114-S         | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 1 1/2" | FP-112-S         | 50 FT            |           |                                     |
|                                                                                                                                                                                          | 2"     | FP-2-S           | 50 FT            |           |                                     |
|  <p><b>PVC Coated G.I. Flexible Conduits</b><br/>(Imperial sizes available on order)</p>                | 16mm   | FP-16-PC-SMTR    | 100 FT           | 40        | BA, BA-S, NPA, NPA-S, NPA-SS<br>LTA |
|                                                                                                                                                                                          | 20mm   | FP-20-PC-SMTR    | 100 FT           | 67        |                                     |
|                                                                                                                                                                                          | 25mm   | FP-25-PC-SMTR    | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 32mm   | FP-32-PC-SMTR    | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 38mm   | FP-38-PC-SMTR    | 50 FT            |           |                                     |
|                                                                                                                                                                                          | 50mm   | FP-50-PC-SMTR    | 50 FT            |           |                                     |
|  <p><b>Liquid Tight Flexible Conduit</b><br/>(Imperial sizes available on order)</p>                   | 16mm   | FP-16-PC-WT-SMTR | 100 FT           | 40        | NPA, NPA-S, NPA-SS<br>LTA           |
|                                                                                                                                                                                          | 20mm   | FP-20-PC-WT-SMTR | 100 FT           | 67        |                                     |
|                                                                                                                                                                                          | 25mm   | FP-25-PC-WT-SMTR | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 32mm   | FP-32-PC-WT-SMTR | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 38mm   | FP-38-PC-WT-SMTR | 50 FT            |           |                                     |
|                                                                                                                                                                                          | 50mm   | FP-50-PC-WT-SMTR | 50 FT            |           |                                     |
|  <p><b>Low Smoke Zero Halogen Coated Flexible Conduit</b><br/>(Imperial sizes available on order)</p> | 16mm   | FP-16-PC-H       | 100 FT           | 40        | BA, BA-S, NPA, NPA-S<br>LTA         |
|                                                                                                                                                                                          | 20mm   | FP-20-PC-H       | 100 FT           | 67        |                                     |
|                                                                                                                                                                                          | 25mm   | FP-25-PC-H       | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 32mm   | FP-32-PC-H       | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 38mm   | FP-38-PC-H       | 50 FT            |           |                                     |
|                                                                                                                                                                                          | 50mm   | FP-50-PC-H       | 50 FT            |           |                                     |
|  <p><b>Stainless Steel Flexible Conduits</b></p>                                                      | 16mm   | FP-16-S-SMTR     | 100 FT           | 40        | BA, BA-S, NPA, NPA-S, NPA-SS<br>LTA |
|                                                                                                                                                                                          | 20mm   | FP-20-S-SMTR     | 100 FT           | 67        |                                     |
|                                                                                                                                                                                          | 25mm   | FP-25-S-SMTR     | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 32mm   | FP-32-S-SMTR     | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 38mm   | FP-38-S-SMTR     | 50 FT            |           |                                     |
|                                                                                                                                                                                          | 50mm   | FP-50-S-SMTR     | 50 FT            |           |                                     |
|                                                                                                                                                                                          | 5/8"   | FP-58-S          | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 3/4"   | FP-34-S          | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 1"     | FP-1-S           | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 1 1/4" | FP-114-S         | 100 FT           |           |                                     |
|                                                                                                                                                                                          | 1 1/2" | FP-112-S         | 50 FT            |           |                                     |
|                                                                                                                                                                                          | 2"     | FP-2-S           | 50 FT            |           |                                     |

| Nominal size of conduit (mm) | Maximum distance between supports |              |
|------------------------------|-----------------------------------|--------------|
|                              | Horizontal run                    | Vertical run |
| 16mm and under               | 0.3m                              | 0.5m         |
| 17mm - 25mm                  | 0.4m                              | 0.6m         |
| 26mm - 40mm                  | 0.6m                              | 0.8m         |
| Over 40mm                    | 0.8m                              | 1.0m         |

### 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.

### Available on Special Order only:

Hot-Dipped Galvanized Flexible conduit / Stainless Steel 304 Flexible Conduit

## FLEXIBLE CONDUIT SYSTEM AND ADAPTORS

### FLEXIBLE ADAPTOR WITH RETAINING SCREW



**Material** : Alloy  
**Finish** : Brass  
**IP Rating** : IP40  
**Code** : BA

**NOTE:** Nickel Plate available on order

### FLEXIBLE ADAPTOR WITHOUT RETAINING SCREW



**Material** : Alloy  
**Finish** : Brass  
**IP Rating** : IP40  
**Code** : BA-S

**NOTE:** Nickel Plate available on order

### NICKEL PLATED ADAPTOR



**Material** : Alloy  
**Finish** : Nickel Plate  
**IP Rating** : IP40  
**Code** : NPA

### NICKEL PLATE ADAPTOR SWIVEL TYPE (3 PCS)



**Material** : Alloy  
**Finish** : Nickel Plate  
**IP Rating** : IP40  
**Code** : NPA-S

### NICKEL PLATE ADAPTOR SMOOTH ENTRY (2 PCS)



**Material** : Alloy  
**Finish** : Nickel Plate  
**IP Rating** : IP40  
**Code** : NPA-SS

### LIQUID TIGHT ADAPTOR



**Material** : Steel / Alloy  
**Finish** : Galvanized  
**IP Rating** : IP67  
**Code** : LTA

| DESCRIPTION                                                        | ITEM CODE      |                | SIZE        | PACK QTY (PCS) |
|--------------------------------------------------------------------|----------------|----------------|-------------|----------------|
|                                                                    | c/w Ret. screw | w/o Ret. screw |             |                |
| Flexible Adaptor<br>- C/W Retaining Screw<br>- W/O Retaining Screw | FA-16X16       | FA-16X16-P     | 16mm x 16mm | 1000           |
|                                                                    | FA-16X34       | FA-16X34-P     | 16mm x 3/4" | 1000           |
|                                                                    | FA-20X16       | FA-20X16-P     | 20mm x 16mm | 1000           |
|                                                                    | FA-20X58       | FA-20X58-P     | 20mm x 5/8" | 1000           |
|                                                                    | FA-20X20       | FA-20X20-P     | 20mm x 20mm | 1000           |
|                                                                    | FA-20X25       | FA-20X25-P     | 20mm x 25mm | 800            |
|                                                                    | FA-25X25       | FA-25X25-P     | 25mm x 25mm | 500            |
|                                                                    | FA-25X1        | FA-25X1-P      | 25mm x 1"   | 500            |
|                                                                    | FA-32X32       | FA-32X32-P     | 32mm x 32mm | 500            |
|                                                                    | FA-38X38       | FA-38X38-P     | 38mm x 38mm | 160            |
|                                                                    | FA-50X50       | FA-50X50-P     | 50mm x 50mm | 150            |
|                                                                    | 2 PC           | 3 PC SWIVEL    |             |                |
|                                                                    | FA-16X16-T     | FA-16X16-T-S   | 16mm x 16mm | 500            |
| Nickel Plate Adaptor<br>- 2 Pcc Typs<br>- 3 Pcs Swivel Type        | FA-16X34-T     | FA-16X34-T-S   | 16mm x 3/4" | 500            |
|                                                                    | FA-20X16-T     | FA-20X16-T-S   | 20mm x 16mm | 500            |
|                                                                    | FA-20X58-T     | FA-20X58-T-S   | 20mm x 5/8" | 500            |
|                                                                    | FA-20X20-T     | FA-20X20-T-S   | 20mm x 20mm | 500            |
|                                                                    | FA-20X25-T     | FA-20X25-T-S   | 20mm x 25mm | 500            |
|                                                                    | FA-25X25-T     | FA-25X25-T-S   | 25mm x 25mm | 300            |
|                                                                    | FA-25X1-T      | FA-25X1-T-S    | 25mm x 1"   | 300            |
|                                                                    | FA-32X32-T     | FA-32X32-T-S   | 32mm x 32mm | 200            |
|                                                                    | FA-38X38-T     | FA-38X38-T-S   | 38mm x 38mm | TBA            |
|                                                                    | FA-50X50-T     | FA-50X50-T-S   | 50mm x 50mm | TBA            |
|                                                                    | FA-16X16-SE    |                | 16mm x 16mm | 500            |
|                                                                    | FA-16X34-SE    |                | 16mm x 3/4" | 500            |
|                                                                    | FA-20X16-SE    |                | 20mm x 16mm | 500            |
| Nickel Plate Adaptor<br>- Smooth Entry                             | FA-20X58-SE    |                | 20mm x 5/8" | 500            |
|                                                                    | FA-20X20-SE    |                | 20mm x 20mm | 500            |
|                                                                    | FA-20X25-SE    |                | 20mm x 25mm | 500            |
|                                                                    | FA-25X25-SE    |                | 25mm x 25mm | 300            |
|                                                                    | FA-25X1-SE     |                | 25mm x 1"   | 300            |
|                                                                    | FA-32X32-SE    |                | 32mm x 32mm | 200            |
|                                                                    | FA-38X38-SE    |                | 38mm x 38mm | TBA            |
|                                                                    | FA-50X50-SE    |                | 50mm x 50mm | TBA            |
|                                                                    | FA-16X16-WT    |                | 16mm x 16mm | 500            |
|                                                                    | FA-16X34-WT    |                | 16mm x 3/4" | 500            |
|                                                                    | FA-20X16-WT    |                | 20mm x 16mm | 500            |
|                                                                    | FA-20X58-WT    |                | 20mm x 5/8" | 500            |
|                                                                    | FA-20X20-WT    |                | 20mm x 20mm | 500            |
| Liquid Tight Adaptor                                               | FA-20X25-WT    |                | 20mm x 25mm | 500            |
|                                                                    | FA-25X25-WT    |                | 25mm x 25mm | 300            |
|                                                                    | FA-25X1-WT     |                | 20mm x 1"   | 300            |
|                                                                    | FA-32X32-WT    |                | 32mm x 32mm | 200            |
|                                                                    | FA-38X38-WT    |                | 38mm x 38mm | TBA            |
|                                                                    | FA-50X50-WT    |                | 50mm x 50mm | TBA            |

## MECHANICAL SUPPORT SYSTEM

### STANDARD STRUT CHANNELS

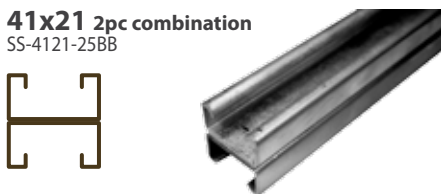
#### STANDARD SPECIFICATION

**Material** : Hot-Rolled Low-Carbon Steel  
**Thickness** : 1.9mm - 2.5mm  
**Std Length** : 3.0m / 5.8m / 6.0m (non-standard lengths available upon request)  
**Std Finish** : Hot-Dipped Galvanized BS EN ISO 1461 / Pre-Galvanized BS EN 10147 - 1992 / Zinc Plated BS1706/BS3382 : PT2  
**Other Finish** : Stainless Steel (304/316) / Hot-Dipped Galvanized + Epoxy Powder Coated

**41x21**  
SS-4121-25



**41x21 2pc combination**  
SS-4121-25BB



**41x21 Slotted**  
SS-4121-25SL



**41x41**  
SS-4141-25



**41x41 2pc combination**  
SS-4141-25BB



**41x41 Slotted**  
SS-4141-25SL



#### BEAM LOADING DATA

| SPAN (mm)                                |              | 600  | 900  | 1200 | 1500 | 1800 | 2100 | 2400 | 2700 | 3000 | 3600 | 4200 | 4800 | 5400 | 6000 |
|------------------------------------------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Max allowable uniform load (KN)          | SS-4121-25   | 2.7  | 1.8  | 1.3  | 1.1  | 0.9  | 0.8  | 0.7  | 0.6  | 0.5  | -    | -    | -    | -    | -    |
|                                          | SS-4121-25BB | 7.6  | 5.1  | 3.8  | 3.0  | 2.5  | 2.2  | 1.9  | 1.7  | 1.5  | -    | -    | -    | -    | -    |
|                                          | SS-4141-25   | 7.6  | 5.0  | 3.8  | 3.0  | 2.5  | 2.1  | 1.9  | 1.7  | 1.5  | 1.2  | 1.1  | 0.9  | 0.8  | 0.8  |
|                                          | SS-4141-25BB | 14.5 | 14.5 | 10.9 | 8.7  | 7.2  | 6.2  | 5.4  | 4.8  | 4.3  | 3.6  | 3.1  | 2.7  | 2.4  | 2.1  |
| Deflection at uniform load (KN)          | SS-4121-25   | 3    | 6    | 10   | 16   | 22   | 31   | 40   | 50   | 57   | -    | -    | -    | -    | -    |
|                                          | SS-4121-25BB | 1    | 3    | 5    | 8    | 11   | 15   | 20   | 25   | 30   | -    | -    | -    | -    | -    |
|                                          | SS-4141-25   | 1    | 3    | 5    | 8    | 12   | 16   | 21   | 27   | 33   | 46   | 67   | 82   | 103  | 142  |
|                                          | SS-4141-25BB | 1    | 2    | 3    | 5    | 7    | 8    | 12   | 15   | 19   | 27   | 37   | 49   | 62   | 74   |
| Uniform load at SPAN/200 Deflection (KN) | SS-4121-25   | 2.7  | 1.5  | 0.8  | 0.5  | 0.4  | 0.3  | 0.2  | 0.2  | 0.1  | -    | -    | -    | -    | -    |
|                                          | SS-4121-25BB | 7.6  | 5.1  | 3.8  | 2.6  | 1.8  | 1.4  | 1.0  | 0.8  | 0.7  | -    | -    | -    | -    | -    |
|                                          | SS-4141-25   | 7.6  | 7.6  | 4.2  | 2.7  | 1.9  | 1.4  | 1.1  | 0.8  | 0.7  | 0.5  | 0.4  | 0.3  | 0.2  | 0.2  |
|                                          | SS-4141-25BB | 14.5 | 14.5 | 10.9 | 8.7  | 7.2  | 6.2  | 5.3  | 4.2  | 3.4  | 2.4  | 1.7  | 1.3  | 1.1  | 0.9  |

#### COLUMN LOADING DATA

| UNBRACED HEIGHT (mm)            |              | 600  | 900  | 1200 | 1500 | 1800 | 2100 | 2400 | 2700 | 3000 |
|---------------------------------|--------------|------|------|------|------|------|------|------|------|------|
| Max allowable lateral load (KN) | SS-4121-25   | 9.4  | 8.0  | 6.2  | 4.8  | 3.8  | -    | -    | -    | -    |
|                                 | SS-4121-25BB | 18.3 | 17.0 | 15.4 | 13.7 | 10.0 | -    | -    | -    | -    |
|                                 | SS-4141-25   | 15.1 | 13.3 | 11.4 | 9.9  | 8.8  | 7.8  | 7.0  | 6.4  | 5.7  |
|                                 | SS-4141-25BB | 28.3 | 27.5 | 26.6 | 25.3 | 23.8 | 22.1 | 20.1 | 17.9 | 16.1 |

## MECHANICAL SUPPORT SYSTEM

### THREADED RODS



- Material** : Low-Carbon Steel
- Finish** : Threaded Rods are supplied with standard Zinc-Plated Electro-Galvanized finish. Stainless Steel of grade 304 and Hot-Dipped Galvanized finish are also available upon request
- Range** : Standard sizes are available in both metric and imperial threads up to 20mm and 3/4". Larger sizes are available upon special order.
- Length** : Standard 2 metres for all metric rods.  
Standard 6 foot lengths for imperial rods.  
Other lengths also available.

| TYPE OF THREADING | ITEM CODE   | SIZES | STD LENGTH |
|-------------------|-------------|-------|------------|
| METRIC            | SSA-ROD-M6  | 6mm   | 2m         |
|                   | SSA-ROD-M8  | 8mm   |            |
|                   | SSA-ROD-M10 | 10mm  |            |
|                   | SSA-ROD-M12 | 12mm  |            |
|                   | SSA-ROD-M16 | 16mm  |            |
|                   | SSA-ROD-M20 | 20mm  |            |
| IMPERIAL          | SSA-ROD-14  | 1/4"  | 6ft        |
|                   | SSA-ROD-516 | 5/16" |            |
|                   | SSA-ROD-38  | 3/8"  |            |
|                   | SSA-ROD-12  | 1/2"  |            |
|                   | SSA-ROD-58  | 5/8"  |            |
|                   | SSA-ROD-34  | 3/4"  |            |

### FITTINGS AND ACCESSORIES FOR THREADED RODS

#### Thread Rod Coupler



- Material** : Low-Carbon Steel
- Finish** : Electro Galvanized

| ITEM CODE  | SIZES       |               |
|------------|-------------|---------------|
|            | METRIC (mm) | IMPERIAL (in) |
| SSA-LN-M6  | 6           | 1/4"          |
| SSA-LN-M8  | 8           | 5/16"         |
| SSA-LN-M10 | 10          | 3/8"          |
| SSA-LN-M12 | 12          | 1/2"          |
| SSA-LN-M16 | 16          | 5/6"          |
| SSA-LN-M20 | 20          | 3/4"          |

#### Drop in Anchor



- Material** : Low-Carbon Steel
- Finish** : Electro Galvanized

| ITEM CODE   | SIZES       |               |
|-------------|-------------|---------------|
|             | METRIC (mm) | IMPERIAL (in) |
| SSA-DIA-M6  | 6           | 1/4"          |
| SSA-DIA-M8  | 8           | 5/16"         |
| SSA-DIA-M10 | 10          | 3/8"          |
| SSA-DIA-M12 | 12          | 1/2"          |
| SSA-DIA-M16 | 16          | 5/6"          |
| SSA-DIA-M20 | 20          | 3/4"          |

### SPRING NUTS

Spring Nuts are used in conjunction with SMART<sup>®</sup> C-Channels for quick and easy installations. No welding and drilling is required, fully adjustable and reusable.

- Finish** : Steel-Zinc Plated

| ITEM CODE  | SIZES       |               |
|------------|-------------|---------------|
|            | METRIC (mm) | IMPERIAL (in) |
| SSA-SN-M6  | 6           | 1/4"          |
| SSA-SN-M8  | 8           | 5/16"         |
| SSA-SN-M10 | 10          | 3/8"          |
| SSA-SN-M12 | 12          | 1/2"          |



**Long Spring Nut**  
Use with 41x41 channel.



**Reg. Spring Nut**  
Use with 41x41 channel.



**Short Spring Nut**  
Use with 41x21 channel.



**Channel Nut w/o Spring**

### BEAM CLAMPS

#### STANDARD SPECIFICATION

- Finish** : Steel-Zinc Plated  
Also available in HDG.



**Beam Hanger**  
SSA-BC

**Beam Hanger c/w Swivel Bracket**  
SSA-BC-SW



**Wedge C-Clamp**  
SSA-BC-WCC

**Tiger Tooth Clamp**  
SSA-BC-TTC



### BOLTS, NUTS, AND WASHERS

#### STANDARD SPECIFICATION

- Finish** : Steel-Zinc Plated  
Also available in HDG.  
Other finish available upon request.

| SIZES       |               |
|-------------|---------------|
| METRIC (mm) | IMPERIAL (in) |
| 6           | 1/4"          |
| 8           | 5/16"         |
| 10          | 3/8"          |
| 12          | 1/2"          |
| 16          | 5/6"          |
| 20          | 3/4"          |



**Flat Washer**



**Lock Washer**



**Wedge Nut**  
M4, M6, M8, M10, M12, 3/8"



**Hex Nut**



**Hex Bolt**  
Length of thread: 20, 25, 30, 35, 40, 50mm available.



**Truss Head Machine Screw**  
SSA-ROOFING BOLT  
Length of thread: 20, 25, 30, 35, 40, 50mm available.



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

## American Standard Electrical Metallic Tubing

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

### E.M.T. CONDUIT COUPLINGS

**Material** : Steel  
**Finish** : Zinc Electrogalvanized



| SIZE (in) | DIMENSIONS (mm) |       | WEIGHT (kg) per 100 |
|-----------|-----------------|-------|---------------------|
|           | A               | B     |                     |
| 1/2"      | 38.85           | 21.35 | 3.2                 |
| 3/4"      | 45.25           | 27.00 | 4.80                |
| 1"        | 50.40           | 32.90 | 6.40                |
| 1 1/4"    | 63.20           | 44.00 | 17.00               |
| 1 1/2"    | 72.70           | 49.05 | 17.60               |
| 2"        | 85.35           | 61.60 | 30.50               |

### APPLICATION TOLERANCES OF EMT CONDUITS:

**Outside Diameter** :  $\pm 0.005\text{in}$  (0.13mm)  
**Wall Thickness** :  $+ 5-10\%$   
**Length** :  $\pm 0.25\text{in}$  (6.4mm)  
**Standard** : UL979-2000, CSA C22.2, ANSI C80.3-2005 (where applicable)  
**Available finishes** : Pre-Galvanized or Zinc coated Hot dipped galvanized.

**NOTE:** The wall thickness shall not vary more than 0.003in (0.08mm) throughout a 10ft length.

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

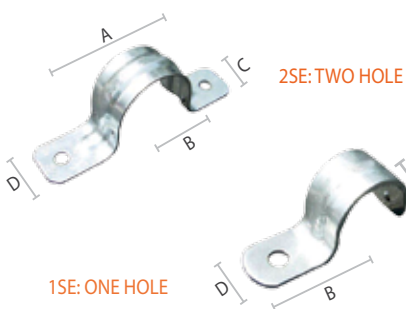
- EMT conduits are sometimes called thin wall conduits.
- Unthreaded, making it easy to coupler and for a faster installation.
- Light and easy to carry and handle.
- Superior quality finish and good standard export packing.

**NOTE:** Details of coupling sizes 2 1/2" ~ 4" are available upon request.

### STRAP E.M.T.

**Material** : Steel

**Finish** : Zinc Electrogalvanized



| SIZE (in) | DIMENSIONS (mm) |       |       |      | WEIGHT (kg) per 100 | WEIGHT (kg) per 100* |
|-----------|-----------------|-------|-------|------|---------------------|----------------------|
|           | A               | B     | C     | D    |                     |                      |
| 1/2"      | 51.00           | 40.80 | 15.90 | 4.65 | 10.00               | 7.50                 |
| 3/4"      | 57.75           | 47.00 | 16.00 | 4.65 | 12.00               | 10.00                |
| 1"        | 66.00           | 56.00 | 18.75 | 4.75 | 16.00               | 14.00                |
| 1 1/4"    | 84.70           | 74.40 | 18.75 | 4.60 | 20.00               | 18.20                |
| 1 1/2"    | 99.15           | 85.85 | 18.95 | 4.65 | 21.00               | 19.50                |
| 2"        | 106.70          | 88.25 | 18.50 | 4.80 | 31.00               | 27.90                |

**NOTE:** Details of strap sizes 2 1/2" ~ 4" are available upon request.

### E.M.T. ELBOWS 90



**Material** : Hot-Rolled Steel Strip  
**Finish** : Galvanized (Hot-dipped)  
 Galvanized available on request

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

**NOTE:** Details of fittings sizes 2 1/2" ~ 4" are available upon request.

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