

# HANDI FIT FIRE RATED

## JUNCTION BOX - IP66/68, 950°C, 3-Hours

### for Emergency Circuits - Fire Rated

### **Features and Benefits**

- Handi-Fit™ Fire Rated Box for emergency circuits (950°C for 3-hours).
- Screw-on lid provides ease of installation. Lid locking with a special key prevents unauthorized
- Supplied complete with safety securing lid lanyard.
- Raised domed lid facilitates connections to be made outside of the box.
- Only approved CCG cable glands and terminals must be used.
- No exposed metal parts.
- Dust and waterproof to IP66/68 when used with CCG sealed cable glands.
- No drilling or tapping of cable entries required.
- Mounting studs provided for DIN rail if using Terminal Blocks.
- DIN Rail mounting studs are provided for use with terminal blocks.
- Internal earthing to all entries and rail provided.













### **Technical Data**

Handi Fit™4-Way Fire Rated Junction Box Type

Handi Fit™ Y Fire Rated Junction Box Handi Fit™ H Fire Rated Junction Box

Box Material: Impact, corrosion and UV resistant glass reinforced polyester compound

**Optional Accessories:** Ceramic Terminals, Insulated Connectors, PTFE Washers, Box Spanner (Lid Locking Key).

4-Blanking plugs are provided

#### **Standards and Certifications**

60°C to +160°C (Unfinished) Continious Temperature Ratino

**Continious Current Rating** 32A - 192A Impact 7-Joules

Fire Rated BS 6387 - 950°C - 3 Hours

Certificate: Conformance: Standard: IEC/BS/EN 62208:2011 CML 17Y11251 MASC 16-1787 SANS 62208:2012 Impact Protection IK10 IEC/BS/EN 62262 CML 17Y11251 IP66/68 - 2m Protection IEC/BS/EN 60529 CML 17Y11251 SANS 60529 MASC 16-1787 **Deluge Protection DTS 01** CML 14CA370-1 IEC 60529 Marine Approvals ABS ABS 14-SG1277927-PDA DNV-GL IFC 60529 DNV-GL TAF0000011

**Short Circuit Protection** IEC 60947-7-2, IEC 62444 CATAPULT OR/15/11677\_2 IEC 60947-7-2 CATAPULT OR/15/11677\_2 **Continuous Current Protection** 

ISO 4892-2 **UV** Protection

Zero Halogen

BS7211, BS 50267-2-1

Flammability UL94V-0

London Underground Approval IEC 62208, IEC 62262 LU 3057



### **Conditions for safe use**

- The CCG lid locking key must be used to open and close Lid.
- Only ceramic terminal blocks or insulated connectors as per the description may be utilised in the junction box. Specific installation conditions as set by the terminal manufacturer/terminal certification must be considered. This includes considering the use of the applicable partitions and end plates for terminal blocks, conductor installation, tightening down of terminal block screws etc.

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- Terminal blocks may only be utilized on the applicable rail and must allow sufficient space to make connections and to close the cover / lid.
- IP66/68 glands and plugs must be used in the threaded entries.
- · Information with relation to entries is indicated in the instructions

### Installation instructions for Handi Fit™ Fire Rated Box without components

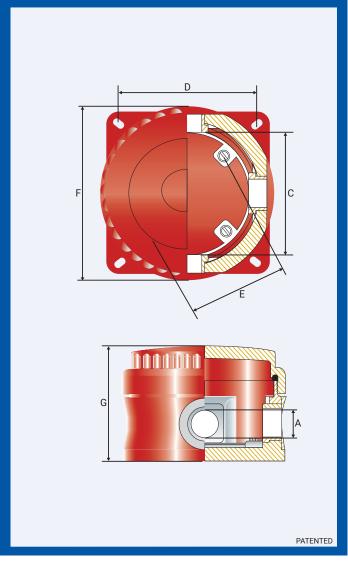
- · Installation must be carried out by a competent person.
- · The box must not be modified in any way, as this will invalidate the certification.
- · Where cables enter the box they must be secured by CCG Cable Glands appropriate to the make up of the cable.
- · Unused entry apertures must be blanked with certified CCG Blanking Plugs.
- To maintain IP66/68 a thread seal gasket between the box and cable gland must be installed.
- · Before replacing the lid, ensure the lid gasket is in place.
- · The use of a CCG Box Spanner (Lid Locking Key) is required to maintain the tamper proof integrity of the box.



## **HANDI FIT**<sup>™</sup> **FIRE RATED JUNCTION BOX**

# 4-Way

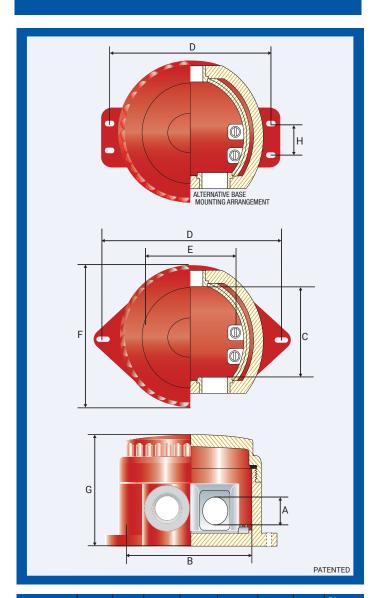
for emergency circuits - fire rated



| Product<br>Code | Entry<br>Thread<br>'A' | Distance<br>Between<br>Centres<br>'C' | Mounting<br>Centres<br>'D' | Rail<br>Mounting<br>Centres<br>'E' | Outer<br>Diameter<br>'F' | Overall<br>Height<br>'G' |
|-----------------|------------------------|---------------------------------------|----------------------------|------------------------------------|--------------------------|--------------------------|
| 0654-0-M16      | * M16                  | 71.0                                  | 79.0                       | 65.0                               | 100.0                    | 78.0                     |
| 0654-0          | M20                    | 71.0                                  | 79.0                       | 65.0                               | 100.0                    | 78.0                     |
| 065401-M16      | * M16                  | 88.0                                  | 92.0                       | 80.0                               | 118.0                    | 98.0                     |
| 065401          | M20                    | 88.0                                  | 92.0                       | 80.0                               | 118.0                    | 98.0                     |
| 065402-M16      | * M16                  | 108.0                                 | 107.0                      | 98.0                               | 140.0                    | 114.0                    |
| 065402-M20      | *M20                   | 108.0                                 | 107.0                      | 98.0                               | 140.0                    | 114.0                    |
| 065402          | M25                    | 108.0                                 | 107.0                      | 98.0                               | 140.0                    | 114.0                    |
| 065403-M16      | * M16                  | 166.0                                 | 167.0                      | 150.0                              | 206.0                    | 142.0                    |
| 065403-M20      | * M20                  | 166.0                                 | 167.0                      | 150.0                              | 206.0                    | 142.0                    |
| 065403-M25      | * M25                  | 166.0                                 | 167.0                      | 150.0                              | 206.0                    | 142.0                    |
| 065403          | M32                    | 166.0                                 | 167.0                      | 150.0                              | 206.0                    | 142.0                    |
| 065404-M16      | * M16                  | 263.0                                 | 240.0                      | 246.0                              | 298.0                    | 186.0                    |
| 065404-M20      | * M20                  | 263.0                                 | 240.0                      | 246.0                              | 298.0                    | 186.0                    |
| 065404-M25      | * M25                  | 263.0                                 | 240.0                      | 246.0                              | 298.0                    | 186.0                    |
| 065404-M32      | * M32                  | 263.0                                 | 240.0                      | 246.0                              | 298.0                    | 186.0                    |
| 065404          | M40                    | 263.0                                 | 240.0                      | 246.0                              | 298.0                    | 186.0                    |

# Y-Box

for emergency circuits - fire rated



| Entry<br>Thread<br>'A' | Internal<br>Dia.<br>'B'   | Distance<br>Between<br>Centres<br>'C'  | Mounting<br>Centres<br>'D'  | Rail<br>Mounting<br>Centres<br>'E'  | Outer<br>Dia.<br>'F'  | Overall<br>Height<br>'G'   | Distance<br>Between<br>Mounting<br>Holes'H'   |
|------------------------|---|--|---|---|---|--|---|
| * M16                  | 84.0  | 60.0   | 108.0   | 62.0  | 100.0   | 84.0   | -   |
| M20                    | 84.0  | 60.0   | 108.0   | 62.0  | 100.0   | 84.0   | -   |
| * M16                  | 101.0   | 75.0   | 132.0   | 77.0  | 116.0   | 94.0   | -   |
| M20                    | 101.0   | 75.0   | 132.0   | 77.0  | 116.0   | 94.0   | -   |
| * M16                  | 123.0   | 94.0   | 148.0   | 95.0  | 140.0   | 104.0  | 42.0  |
| * M20                  | 123.0   | 94.0   | 148.0   | 95.0  | 140.0   | 104.0  | 42.0  |
| M25                    | 123.0   | 94.0   | 148.0   | 95.0  | 140.0   | 104.0  | 42.0  |
| * M16                  | 182.0   | 150.0  | 237.0   | 152.0   | 205.0   | 144.0  | -   |
| * M20                  | 182.0   | 150.0  | 237.0   | 152.0   | 205.0   | 144.0  | -   |
| * M25                  | 182.0   | 150.0  | 237.0   | 152.0   | 205.0   | 144.0  | -   |
| M32                    | 182.0   | 150.0  | 237.0   | 152.0   | 205.0   | 144.0  | -   |
|                        | * M16<br>M20<br>* M16<br>M20<br>* M16<br>M20<br>* M16<br>* M20<br>M25<br>* M16<br>* M20<br>* M25<br>M32 | Thread Dia. 'A' 'B'  * M16 84.0 M20 84.0  * M16 101.0 M20 101.0  * M16 123.0  * M20 123.0  M25 123.0  * M16 182.0  * M20 182.0  * M25 182.0  M32 182.0 | Thread 'A'         Dia. 'Between Centres 'C'           * M16         84.0         60.0           M20         84.0         60.0           * M16         101.0         75.0           M20         101.0         75.0           * M16         123.0         94.0           * M20         123.0         94.0           * M25         123.0         94.0           * M16         182.0         150.0           * M20         182.0         150.0           * M25         182.0         150.0           M32         182.0         150.0 | Thread 'A' Dia. 'B' Centres Centres 'C' C' | Entry Internal Thread (A)         Internal (B)         Between Centres (Centres) (Centres) (Centres) (Centres) (E')         Mounting Centres (E')           * M16         84.0         60.0         108.0         62.0           * M20         84.0         60.0         108.0         62.0           * M16         101.0         75.0         132.0         77.0           * M16         123.0         94.0         148.0         95.0           * M20         123.0         94.0         148.0         95.0           * M25         123.0         94.0         148.0         95.0           * M16         182.0         150.0         237.0         152.0           * M20         182.0         150.0         237.0         152.0           * M25         182.0         150.0         237.0         152.0           * M25         182.0         150.0         237.0         152.0           * M25         182.0         150.0         237.0         152.0 | Thread 'A'         Dia. 'B'         Between Centres Contres 'C'         Centres 'D'         Mounting Centres 'E'         Dia. 'F'           * M16         84.0         60.0         108.0         62.0         100.0           * M16         101.0         75.0         132.0         77.0         116.0           * M16         123.0         94.0         148.0         95.0         140.0           * M20         123.0         94.0         148.0         95.0         140.0           * M20         123.0         94.0         148.0         95.0         140.0           * M25         123.0         94.0         148.0         95.0         140.0           * M16         182.0         150.0         237.0         152.0         205.0           * M20         182.0         150.0         237.0         152.0         205.0           * M25         182.0         150.0         237.0         152.0         205.0 | Thread 'A'         Dia. Between 'A'         Centres 'C'         Centres 'D'         Mounting Centres 'F'         Dia. 'F'         Height 'G'           * M16         84.0         60.0         108.0         62.0         100.0         84.0           M20         84.0         60.0         108.0         62.0         100.0         84.0           *M16         101.0         75.0         132.0         77.0         116.0         94.0           *M20         101.0         75.0         132.0         77.0         116.0         94.0           *M16         123.0         94.0         148.0         95.0         140.0         104.0           *M25         123.0         94.0         148.0         95.0         140.0         104.0           *M16         182.0         150.0         237.0         152.0         205.0         144.0           *M20         182.0         150.0         237.0         152.0         205.0         144.0           *M25         182.0         150.0         237.0         152.0         205.0         144.0           *M25         182.0         150.0         237.0         152.0         205.0         144.0           *M25 <t< td=""></t<> |

All dimensions are in mm.

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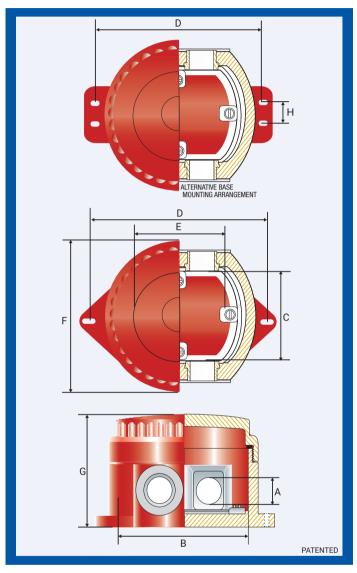
\* Different arrangement of entry sizes are available on request as stated above.

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# H-Box

for emergency circuits - fire rated



| Product<br>Code | Entry<br>Thread<br>'A' | ınternai | Distance<br>Between<br>Centres<br>'C' | Mounting<br>Centres<br>'D' | Rail<br>Mounting<br>Centres<br>'E' | Outer<br>Diameter<br>'F' | Overall<br>Height<br>'G' | Distance<br>Between<br>Mounting<br>Holes'H' |
|-----------------|------------------------|----------|---------------------------------------|----------------------------|------------------------------------|--------------------------|--------------------------|---|
| 065401-H-M16    | *M16                   | 103.0    | 69.0                                  | 130.0                      | 85.0                               | 116.0                    | 93.0                     | -   |
| 065401-H        | M20                    | 103.0    | 69.0                                  | 130.0                      | 85.0                               | 116.0                    | 93.0                     | -   |
| 065402-H-M16    | *M16                   | 124.0    | 78.0                                  | 148.0                      | 104.0                              | 138.0                    | 110.0                    | 42.0  |
| 065402-H-M20    | *M20                   | 124.0    | 78.0                                  | 148.0                      | 104.0                              | 138.0                    | 110.0                    | 42.0  |
| 065402-H        | M25                    | 124.0    | 78.0                                  | 148.0                      | 104.0                              | 138.0                    | 110.0                    | 42.0  |

All dimensions are in mm.

# **Tools / Accessories**

for emergency circuits - fire rated

## Box Spanner (Lid Locking Key)



| Product Code | Box Size Reference |
|--------------|--------------------|
| 4012-0/1     | M20                |
| 401202       | M25                |

# Box Spanner (Lid Locking Key)



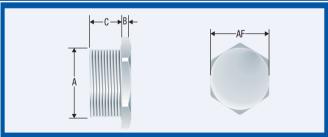
| Product Code | Box Size Reference |
|--------------|--------------------|
| 401203       | M32                |

## **Pole Mounting Bracket**



| Product Code | Box Size Reference |
|--------------|--------------------|
| 401800       | M20                |
| 401801       | M20                |
| 401802       | M25                |
| 401803       | M32                |

## Metric - Hex Plug



| Product<br>Code | Dimension<br>"A" | Dimension<br>Min "B" | Dimension<br>"C" | Dimension<br>A/F Min * |
|-----------------|------------------|----------------------|------------------|------------------------|
| PHM016E         | M16              | 6.0                  | 16.0             | 22.0                   |
| PHM020E         | M20              | 6.0                  | 16.0             | 25.0                   |
| PHM025E         | M25              | 6.0                  | 16.0             | 32.0                   |
| PHM032E         | M32              | 6.0                  | 16.0             | 38.0                   |
| PHM040E         | M40              | 6.0                  | 16.0             | 50.0                   |
| PHM050E         | M50              | 6.0                  | 16.0             | 60.0                   |
| PHM063E         | M63              | 6.0                  | 16.0             | 70.0                   |
| PHM075E         | M75              | 6.0                  | 16.0             | 80.0                   |
| PHM080E         | M80x2P           | 6.0                  | 20.0             | 90.0                   |
| PHM090E         | M90x2P           | 6.0                  | 20.0             | 100.0                  |
| PHM100E         | M100x2P          | 6.0                  | 20.0             | 110.0                  |
| All dimensions  | ro in mm         |                      |                  |                        |

<sup>\*</sup> Different arrangement of entry sizes are available on request as stated above.

## HANDI FIT™ FIRE RATED JUNCTION BOX



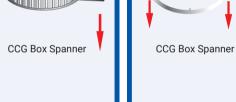
## Wiring and installation instructions for Handi Fit™ Fire Rated Box with components

- Installation must be carried out by a competent person.
- · Do not install under live current conditions.
- The box must not be modified in any way, as this will invalidate the certification.
- · All wiring must be carried out in accordance with the relevant Codes of Practice.
- The voltage and current value of the box must not be exceeded. See relevant certificate for current limitations for conditions of use / schedule of limitations.
- Inner cable bedding must protrude into the box by a minimum of 20mm past the cable entry point.
- · Not more than one single or multiple strand lead shall be connected into either side of the terminals.
- · Only earth conductors of equal size shall be connected with rail mounted terminals.
- · All screws used and unused shall be tightened.
- A parallel shaft screw driver of the correct size should be used for rail mounted terminals screws.
- · Where cables enter the box they must be secured by CCG Cable Glands appropriate to the make up of the cable.
- Unused entry apertures must be blanked with certified CCG Blanking Plugs.
- To maintain IP66/68 a thread seal gasket between the box and cable gland must be installed.
- Before replacing the lid, ensure the lid gasket is in place.
- The use of a CCG Box Spanner (Lid Locking Key) is required to maintain the tamper proof integrity of the box, refer Figure 1.

To ensure the box apparatus is tamper proof: Screw on, tighten and lock lid in place by means of a CCG Box Spanner (Lid Locking Key).

#### **FIGURE 1**







CCG Box Lid







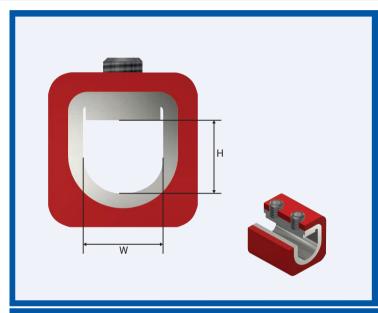
CCG Box Base

#### CCG Box Spanner

| Product<br>Code | Box Size  |
|-----------------|-----------|
| 4012-0/1        | M20 (0/1) |
| 401202          | M25 (2)   |

CCG Box Spanner

| Product<br>Code | Box Size |
|-----------------|----------|
| 401203          | M32 (3)  |



### INTERNAL CONNECTOR

| Product Code | Size | Width 'W' | Height 'H' |
|--------------|------|-----------|------------|
| 680301       | 1    | 10.0      | 10.0       |
| 680302       | 2    | 9.5       | 13.5       |
| 680303       | 3    | 15.7      | 14.5       |
| 680304       | 4    | 15.7      | 17.6       |
| 680305       | 5    | 20.7      | 25.3       |

| 680                | 305   | 5  |                               |  |   | 20.7  |  |  | 25.3  |  |  |
|--------------------|---|--|-------------------------------|--|---|---|--|--|---|--|--|
|                    | mm app.   |  | NUMBER OF CORES PER CONNECTOR |  |   |   |  |  |   |  |  |
| Cable              | Ø Over<br>Conductor   |  | CONNECTOR                     |  |   |   |  |  |   |  |  |
| Size               | (Below<br>Insulation  | )  | Size 1                        | Siz  | e 2   | Size 3  | ,  | Size 4   | Size 5  |  |  |
| 1.5mm²             | 1.5   |  | 6                             |  | 9   | 9   | 1  | 1/12   | 16/17   |  |  |
| 2.5mm <sup>2</sup> | 2.0   |  | 5                             |  | 6   | 7   |  | 8  | 12  |  |  |
| 4.0mm <sup>2</sup> | 2.5   |  | 4                             |  | 5   | 5/6   |  | 7  | 10  |  |  |
| 6.0mm <sup>2</sup> | 3.0   |  | 3                             |  | 4   | 4/5   |  | 5/6  | 8   |  |  |
| 10mm <sup>2</sup>  | 4.0   |  | 2                             |  | 3   | 3/4   |  | 4  | 6   |  |  |
| 16mm²              | 5.0   |  | 2                             | 2/   | 3   | 3   |  | 3  | 5   |  |  |
| 25mm <sup>2</sup>  | 6.5   |  | 1                             |  | 2   | 2   |  | 2  | 3/4   |  |  |
| 35mm²              | 7.5   |  | 1                             |  | 1   | 1/2   |  | 2  | 3   |  |  |
| 50mm <sup>2</sup>  | 8.5   |  | 1                             |  | 1   | 1   |  | 2  | 2/3   |  |  |
| 70mm <sup>2</sup>  | 10.0  |  | 1                             |  | 1   | 1   |  | 1  | 2   |  |  |
| 95mm²              | 12.0  |  | •                             |  | 1   | 1   |  | 1  | 1   |  |  |
| 120mm <sup>2</sup> | 13.5  |  | •                             |  | 1   | 1   |  | 1  | 1   |  |  |
| 150mm <sup>2</sup> | 15.0  |  | •                             |  | •   | •   |  | 1  | 1   |  |  |
| 185mm²             | 16.5  |  | •                             |  | •   |   |  | 1  | 1   |  |  |
| 240mm <sup>2</sup> | 19.0  |  | •                             |  | •   | •   |  | •  | 1   |  |  |
| 300mm <sup>2</sup> | 21.5  |  | •                             |  | •   | •   |  | •  | 1   |  |  |
| 400mm <sup>2</sup> | 24.0  |  | •                             |  | •   | •   |  | •  |   |  |  |
| 500mm <sup>2</sup> | 27.5  |  | •                             |  | •   | •   |  | •  |   |  |  |
|                    | Cable Size  1.5mm² 2.5mm² 4.0mm² 6.0mm² 10mm² 16mm² 25mm² 35mm² 50mm² 70mm² 120mm² 120mm² 130mm² 400mm² | Cable Size         Ø Over Conductor (Below Insulation)           1.5mm²         1.5           2.5mm²         2.0           4.0mm²         2.5           6.0mm²         3.0           10mm²         4.0           16mm²         5.0           25mm²         6.5           35mm²         7.5           50mm²         10.0           95mm²         12.0           120mm²         15.0           185mm²         16.5           240mm²         19.0           300mm²         21.5           400mm²         24.0 | Cable Size                    | Cable Size         mm app. Ø Over Conductor (Below Insulation)         NUM           1.5mm²         1.5         6           2.5mm²         2.0         5           4.0mm²         2.5         4           6.0mm²         3.0         3           10mm²         4.0         2           25mm²         6.5         1           35mm²         7.5         1           50mm²         8.5         1           70mm²         10.0         1           95mm²         12.0         -           150mm²         15.0         -           185mm²         16.5         -           240mm²         19.0         -           300mm²         21.5         -           400mm²         24.0         - | Cable Size         mm app. Ø Over Conductor (Below Insulation)         Size 1         Size 1 | Cable Size         mm app. Ø Over Conductor (Below Insulation)         NUMBER OF CONDUCTOR (Below Insulation)           1.5mm²         1.5         6         9           2.5mm²         2.0         5         6           4.0mm²         2.5         4         5           6.0mm²         3.0         3         4           10mm²         4.0         2         3           16mm²         5.0         2         2/3           25mm²         6.5         1         2           35mm²         7.5         1         1           50mm²         8.5         1         1           70mm²         10.0         1         1           95mm²         12.0         1         1           150mm²         15.0         .         .           185mm²         16.5         .         .           240mm²         19.0         .         .           300mm²         21.5         .         .           400mm²         24.0         .         . | Cable Size         Mmm app. Qover Conductor (Below Insulation)         NUMBER OF CORES PER CONNECTOR           1.5mm²         1.5         6         9         9           2.5mm²         2.0         5         6         7           4.0mm²         2.5         4         5         5/6           6.0mm²         3.0         3         4         4/5           10mm²         4.0         2         3         3/4           16mm²         5.0         2         2/3         3           25mm²         6.5         1         2         2           35mm²         7.5         1         1         1/2           50mm²         8.5         1         1         1           70mm²         10.0         1         1         1           95mm²         12.0         1         1         1           150mm²         15.0         .         .         .           185mm²         16.5         .         .         .           240mm²         19.0         .         .         .           300mm²         21.5         .         .         .           400mm²         24.0         < | Cable Size         mm app. Ø Over Conductor (Below Insulation)         NUMBER OF CORES PER CONNECTOR           1.5mm²         1.5         6         9         9         1           2.5mm²         2.0         5         6         7         4           4.0mm²         2.5         4         5         5/6         6           6.0mm²         3.0         3         4         4/5         10mm²         4.0         2         3         3/4         4/5         10mm²         6.5         1         2         2         2/3         3         25mm²         6.5         1         2         2         2         35mm²         7.5         1         1         1/2         50mm²         8.5         1 | Cable Size         mm app. Ø Over Conductor (Below Insulation)         NUMBER OF CORES PER CONNECTOR           1.5mm²         1.5         6         9         9         11/12           2.5mm²         2.0         5         6         7         8           4.0mm²         2.5         4         5         5/6         7           6.0mm²         3.0         3         4         4/5         5/6           10mm²         4.0         2         3         3/4         4           16mm²         5.0         2         2/3         3         3           25mm²         6.5         1         2         2         2           35mm²         7.5         1         1         1/2         2           50mm²         8.5         1         1         1         1         1           95mm²         12.0         1         1         1         1         1         1           150mm²         15.0         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         . |  |  |

630mm<sup>2</sup>

31.5