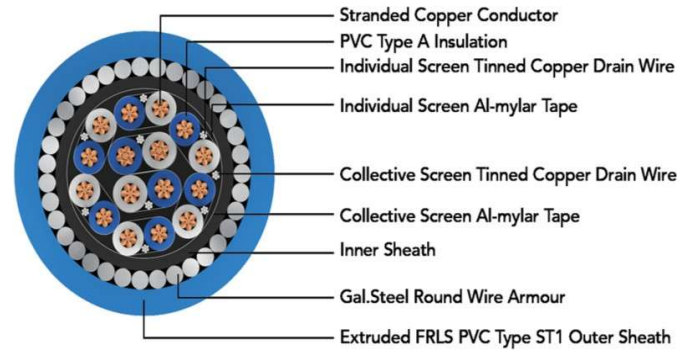


INSTRUMENTATION CABLE • INSTRU 500 (ST) PIMF • 500 V

# INDOCABLES INSTRU 500 (ST) PIMF

MULTI PAIR INSTRUMENTATION CABLE, PVC/PE INSULATED, INDIVIDUAL &amp; OVERALL SHIELDED — EN 50288-7

|                                |                               |                                              |                        |                                  |
|--------------------------------|-------------------------------|----------------------------------------------|------------------------|----------------------------------|
| VOLTAGE RATING<br><b>500 V</b> | STANDARD<br><b>EN 50288-7</b> | CONDUCTOR<br><b>0.5 – 2.5 mm<sup>2</sup></b> | PAIRS<br><b>2 – 37</b> | BENDING RADIUS<br><b>12 × OD</b> |
|--------------------------------|-------------------------------|----------------------------------------------|------------------------|----------------------------------|



Images not to scale. Follow table for dimensions

## APPLICATION

INDOCABLES INSTRU 500 MP, Stranded copper conductor, PVC/PE insulated, Individual & overall al-mylar shielded, armoured/unarmoured and PVC/LSZH sheathed cable confirming to BS EN 50288-7 are designed for transmission of analogue and digital signals in instrument and control systems. INDOCABLES INSTRU 500 MP cables are used for diverse applications within industrial process for control, communication, data & voice transmission in oil, gas & petrochemical industries, cement, steel, fertilizers etc.

## CONSTRUCTION

- 01 Stranded Copper conductor as per EN 60228
- 02 Insulated with PVC/PE as per EN 50288-7
- 03 Individual & Collective screen Al/PET (Aluminium/Polyester tape) with drain wire of tinned Cu/Tinned copper braiding
- 04 Extruded inner sheath with PVC/LSZH to EN 50290-2-22/27
- 05 Armoured with Galvanized Steel Strip/Round as per EN 50288-7
- 06 Sheathed with Extruded PVC/LSZH to EN 50290-2-22/27

### CHARACTERISTICS

|                       |                                                   |
|-----------------------|---------------------------------------------------|
| Voltage Rating        | 500 V                                             |
| Operation Temperature | Max.: PVC 70°C, HRPVC 85°C, XLPE 90°C, LDPE 60°C. |
| Bending Radius        | 12 x Overall diameter                             |

### CORE IDENTIFICATION

|                     |                       |
|---------------------|-----------------------|
| Core                | White & Blue for Pair |
| Outer sheath colour | Blue/Black            |


**ISO 9001**  
 Cert. 99 100 22646 (TÜV SÜD)

**ISI**  
 BIS CM/L 6200267409 (IS 7098 Pt-1)

**RoHS**  
 Compliant

**REACH**  
 Compliant

**Make in India**  
 Manufactured in India

**STANDARD FOLLOWS**

EN 50288-7

EN 50288-1

EN 60228

EN 50290-2-22/27

**COMPLIANCE**Conductor resistance  
EN 60228Insulation resistance  
EN 50288-7L/R Ratio  
EN 50288-7Mutual capacitance  
EN 50288-7**NOTES**

- Outer sheath also available with PE & FRLS on request.
- As per the application/identification requirement, other colour also available on request.

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BIS CM/L 6200267409 (IS 7098 Pt-1)**RoHS**  
Compliant**REACH**  
Compliant**Make in India**  
Manufactured in India



## ORDERING & ITEM CODE

## PART-REGISTERED

The item master registers individual-&-overall-screened (IOSC) pair codes with the 0300 voltage segment (covering the 300/500 V grade) for 2/4/6/8/12/16/24 pairs in 0.5–1.5 sq mm — shown in dark. The remaining pair counts, and the 2.5 sq mm size, are derived from the same structure and carry no item ID until the Item Master Steward registers them.

## CODE STRUCTURE

IC · IN · PAIRS · SIZE · TC · PE · DESIGNATION · 0300 · EN50288P7 · IOSC

|                            |                                             |                                        |                                                   |                                                            |
|----------------------------|---------------------------------------------|----------------------------------------|---------------------------------------------------|------------------------------------------------------------|
| IN<br>Instrumentation line | PAIRS · SIZE<br>Pair count + P, sq.mm × 100 | TC · PE<br>Tinned copper, PE insulated | 2YY · 2YWY<br>Unarmoured · round wire<br>armoured | Ø300 · IOSC<br>300/500 V, individual & overall<br>screened |
|----------------------------|---------------------------------------------|----------------------------------------|---------------------------------------------------|------------------------------------------------------------|

| SIZE | PAIRS | UNARMoured · 2YY                              | ARMoured · 2YWY                                |
|------|-------|-----------------------------------------------|------------------------------------------------|
| 0.5  | 2     | IC-IN-2P-00050-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-2P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|      | 4     | IC-IN-4P-00050-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-4P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|      | 5     | IC-IN-5P-00050-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-5P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|      | 6     | IC-IN-6P-00050-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-6P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|      | 8     | IC-IN-8P-00050-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-8P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|      | 10    | IC-IN-10P-00050-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-10P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 12    | IC-IN-12P-00050-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-12P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 16    | IC-IN-16P-00050-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-16P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 18    | IC-IN-18P-00050-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-18P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 19    | IC-IN-19P-00050-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-19P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 20    | IC-IN-20P-00050-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-20P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 24    | IC-IN-24P-00050-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-24P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 30    | IC-IN-30P-00050-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-30P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 37    | IC-IN-37P-00050-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-37P-00050-TC-PE-2YWY-0300-EN50288P7-IOSC |
| 0.75 | 2     | IC-IN-2P-00075-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-2P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|      | 4     | IC-IN-4P-00075-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-4P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|      | 5     | IC-IN-5P-00075-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-5P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|      | 6     | IC-IN-6P-00075-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-6P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|      | 8     | IC-IN-8P-00075-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-8P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|      | 10    | IC-IN-10P-00075-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-10P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 12    | IC-IN-12P-00075-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-12P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 16    | IC-IN-16P-00075-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-16P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 18    | IC-IN-18P-00075-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-18P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 19    | IC-IN-19P-00075-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-19P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 20    | IC-IN-20P-00075-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-20P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 24    | IC-IN-24P-00075-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-24P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      | 30    | IC-IN-30P-00075-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-30P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC |
|      |       |                                               |                                                |



## ISO 9001

Cert. 99 100 22646 (TÜV SÜD)



ISI

BIS CM/L 6200267409 (IS 7098 Pt-1)

## RoHS

Compliant

## REACH

Compliant



**Make in India**

Manufactured in India



|     |    |                                               |                                                |
|-----|----|-----------------------------------------------|------------------------------------------------|
|     | 37 | IC-IN-37P-00075-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-37P-00075-TC-PE-2YWY-0300-EN50288P7-IOSC |
| 1.0 | 2  | IC-IN-2P-00100-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-2P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 4  | IC-IN-4P-00100-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-4P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 5  | IC-IN-5P-00100-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-5P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 6  | IC-IN-6P-00100-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-6P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 8  | IC-IN-8P-00100-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-8P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 10 | IC-IN-10P-00100-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-10P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 12 | IC-IN-12P-00100-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-12P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 16 | IC-IN-16P-00100-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-16P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 18 | IC-IN-18P-00100-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-18P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 19 | IC-IN-19P-00100-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-19P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 20 | IC-IN-20P-00100-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-20P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 24 | IC-IN-24P-00100-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-24P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 30 | IC-IN-30P-00100-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-30P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 37 | IC-IN-37P-00100-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-37P-00100-TC-PE-2YWY-0300-EN50288P7-IOSC |
| 1.5 | 2  | IC-IN-2P-00150-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-2P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 4  | IC-IN-4P-00150-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-4P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 5  | IC-IN-5P-00150-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-5P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 6  | IC-IN-6P-00150-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-6P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 8  | IC-IN-8P-00150-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-8P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 10 | IC-IN-10P-00150-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-10P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 12 | IC-IN-12P-00150-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-12P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 16 | IC-IN-16P-00150-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-16P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 18 | IC-IN-18P-00150-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-18P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 19 | IC-IN-19P-00150-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-19P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 20 | IC-IN-20P-00150-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-20P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 24 | IC-IN-24P-00150-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-24P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 30 | IC-IN-30P-00150-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-30P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 37 | IC-IN-37P-00150-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-37P-00150-TC-PE-2YWY-0300-EN50288P7-IOSC |
| 2.5 | 2  | IC-IN-2P-00250-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-2P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 4  | IC-IN-4P-00250-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-4P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 5  | IC-IN-5P-00250-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-5P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 6  | IC-IN-6P-00250-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-6P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 8  | IC-IN-8P-00250-TC-PE-2YY-0300-EN50288P7-IOSC  | IC-IN-8P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC  |
|     | 10 | IC-IN-10P-00250-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-10P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 12 | IC-IN-12P-00250-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-12P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 16 | IC-IN-16P-00250-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-16P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 18 | IC-IN-18P-00250-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-18P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 19 | IC-IN-19P-00250-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-19P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC |
|     | 20 | IC-IN-20P-00250-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-20P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC |

|    |                                               |                                                |
|----|-----------------------------------------------|------------------------------------------------|
| 24 | IC-IN-24P-00250-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-24P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC |
| 30 | IC-IN-30P-00250-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-30P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC |
| 37 | IC-IN-37P-00250-TC-PE-2YY-0300-EN50288P7-IOSC | IC-IN-37P-00250-TC-PE-2YWY-0300-EN50288P7-IOSC |

Sizes and pair counts follow the weight & dimension table. PVC-insulated, strip-armoured and LSZH-sheathed variants use the same structure with the corresponding insulation and designation segments.

## WEIGHT & DIMENSION DATA

500 VOLTS, MULTI PAIR, STR.COPPER, PVC/PE INSULATED, ALUMINIUM MYLAR TAPED INDIVIDUAL & OVERALL SHIELDED, ARMoured AND UNARMoured INSTRUMENTATION CABLES AS PER EN 50288-7

| AREA OF CONDUCTOR 0.5 SQ MM |                 |                     |                 |                 |                   |                  |                 |                 |                 | Min. thickness of insulation 0.44 mm |
|-----------------------------|-----------------|---------------------|-----------------|-----------------|-------------------|------------------|-----------------|-----------------|-----------------|--------------------------------------|
| ARMoured CABLES             |                 |                     |                 |                 | UNARMoured CABLES |                  |                 |                 |                 |                                      |
| NO. OF PAIRS                | INNER SHEATH MM | G.I. ARMOUR WIRE MM | OUTER SHEATH MM | OVERALL DIA. MM | WEIGHT PE KG/KM   | WEIGHT PVC KG/KM | OUTER SHEATH MM | OVERALL DIA. MM | WEIGHT PE KG/KM | WEIGHT PVC KG/KM                     |
| 2                           | 1.0             | 0.9                 | 1.4             | 14.8            | 355               | 365              | 1.0             | 10.2            | 97              | 105                                  |
| 4                           | 1.0             | 0.9                 | 1.5             | 16.7            | 450               | 465              | 1.0             | 11.9            | 150             | 165                                  |
| 5                           | 1.1             | 0.9                 | 1.5             | 18.0            | 520               | 530              | 1.1             | 13.2            | 185             | 200                                  |
| 6                           | 1.1             | 0.9                 | 1.5             | 19.2            | 580               | 590              | 1.1             | 14.4            | 215             | 235                                  |
| 8                           | 1.2             | 0.9                 | 1.6             | 21.4            | 690               | 710              | 1.2             | 16.4            | 275             | 300                                  |
| 10                          | 1.3             | 1.25                | 1.6             | 24.5            | 940               | 970              | 1.3             | 18.8            | 345             | 375                                  |
| 12                          | 1.3             | 1.25                | 1.7             | 25.3            | 1030              | 1070             | 1.3             | 19.4            | 390             | 430                                  |
| 16                          | 1.4             | 1.25                | 1.7             | 27.7            | 1200              | 1250             | 1.4             | 21.8            | 510             | 560                                  |
| 18                          | 1.4             | 1.25                | 1.7             | 28.9            | 1300              | 1350             | 1.4             | 23.0            | 560             | 620                                  |
| 19                          | 1.4             | 1.25                | 1.7             | 28.9            | 1320              | 1380             | 1.4             | 23.0            | 580             | 640                                  |
| 20                          | 1.4             | 1.25                | 1.8             | 30.4            | 1410              | 1470             | 1.4             | 24.3            | 610             | 680                                  |
| 24                          | 1.5             | 1.25                | 1.8             | 33.3            | 1610              | 1690             | 1.5             | 27.2            | 730             | 810                                  |
| 30                          | 1.6             | 1.6                 | 1.9             | 36.0            | 2030              | 2130             | 1.6             | 29.0            | 890             | 990                                  |
| 37                          | 1.7             | 1.6                 | 2.0             | 38.8            | 2330              | 2450             | 1.7             | 31.6            | 1080            | 1200                                 |

| AREA OF CONDUCTOR 0.75 SQ MM |                 |                     |                 |                 |                   |                  |                 |                 |                 | Min. thickness of insulation 0.44 mm |
|------------------------------|-----------------|---------------------|-----------------|-----------------|-------------------|------------------|-----------------|-----------------|-----------------|--------------------------------------|
| ARMoured CABLES              |                 |                     |                 |                 | UNARMoured CABLES |                  |                 |                 |                 |                                      |
| NO. OF PAIRS                 | INNER SHEATH MM | G.I. ARMOUR WIRE MM | OUTER SHEATH MM | OVERALL DIA. MM | WEIGHT PE KG/KM   | WEIGHT PVC KG/KM | OUTER SHEATH MM | OVERALL DIA. MM | WEIGHT PE KG/KM | WEIGHT PVC KG/KM                     |
| 2                            | 1.0             | 0.9                 | 1.4             | 15.6            | 390               | 395              | 1.0             | 11.0            | 110             | 120                                  |
| 4                            | 1.1             | 0.9                 | 1.5             | 17.8            | 510               | 530              | 1.1             | 13.0            | 185             | 200                                  |
| 5                            | 1.1             | 0.9                 | 1.5             | 19.0            | 570               | 590              | 1.1             | 14.2            | 220             | 235                                  |
| 6                            | 1.2             | 0.9                 | 1.5             | 20.5            | 650               | 680              | 1.2             | 15.7            | 260             | 285                                  |
| 8                            | 1.2             | 1.25                | 1.6             | 23.4            | 900               | 930              | 1.2             | 17.7            | 330             | 360                                  |
| 10                           | 1.3             | 1.25                | 1.7             | 26.2            | 1060              | 1100             | 1.3             | 20.3            | 410             | 445                                  |
| 12                           | 1.3             | 1.25                | 1.7             | 26.9            | 1150              | 1190             | 1.3             | 21.0            | 470             | 510                                  |
| 16                           | 1.4             | 1.25                | 1.8             | 29.7            | 1370              | 1430             | 1.4             | 23.6            | 610             | 670                                  |
| 18                           | 1.5             | 1.25                | 1.8             | 31.2            | 1500              | 1560             | 1.5             | 25.1            | 690             | 750                                  |
| 19                           | 1.5             | 1.25                | 1.8             | 31.2            | 1520              | 1590             | 1.5             | 25.1            | 710             | 780                                  |
| 20                           | 1.5             | 1.25                | 1.8             | 32.6            | 1610              | 1680             | 1.5             | 26.5            | 750             | 830                                  |
| 24                           | 1.6             | 1.6                 | 1.9             | 36.6            | 2060              | 2150             | 1.6             | 29.6            | 900             | 990                                  |
| 30                           | 1.7             | 1.6                 | 2.0             | 38.8            | 2360              | 2470             | 1.7             | 31.6            | 1100            | 1210                                 |
| 37                           | 1.8             | 1.6                 | 2.0             | 41.6            | 2690              | 2830             | 1.8             | 34.4            | 1330            | 1470                                 |



**AREA OF CONDUCTOR 1.0 SQ MM**

Min. thickness of insulation 0.44 mm

| ARMoured CABLES |                 |                     |                 |                 |                 | UNARMoured CABLES |                 |                 |                 |                  |
|-----------------|-----------------|---------------------|-----------------|-----------------|-----------------|-------------------|-----------------|-----------------|-----------------|------------------|
| NO. OF PAIRS    | INNER SHEATH MM | G.I. ARMOUR WIRE MM | OUTER SHEATH MM | OVERALL DIA. MM | WEIGHT PE KG/KM | WEIGHT PVC KG/KM  | OUTER SHEATH MM | OVERALL DIA. MM | WEIGHT PE KG/KM | WEIGHT PVC KG/KM |
| 2               | 1.0             | 0.9                 | 1.4             | 16.2            | 420             | 425               | 1.0             | 11.6            | 125             | 135              |
| 4               | 1.1             | 0.9                 | 1.5             | 18.6            | 560             | 570               | 1.1             | 13.8            | 210             | 225              |
| 5               | 1.1             | 0.9                 | 1.5             | 19.9            | 630             | 650               | 1.1             | 15.1            | 250             | 270              |
| 6               | 1.2             | 0.9                 | 1.6             | 21.7            | 720             | 750               | 1.2             | 16.7            | 300             | 325              |
| 8               | 1.3             | 1.25                | 1.6             | 24.7            | 1000            | 1030              | 1.3             | 19.0            | 390             | 420              |
| 10              | 1.3             | 1.25                | 1.7             | 27.5            | 1170            | 1210              | 1.3             | 21.6            | 475             | 510              |
| 12              | 1.4             | 1.25                | 1.7             | 28.4            | 1280            | 1330              | 1.4             | 22.5            | 560             | 610              |
| 16              | 1.5             | 1.25                | 1.8             | 31.4            | 1540            | 1610              | 1.5             | 25.3            | 720             | 790              |
| 18              | 1.5             | 1.25                | 1.8             | 32.8            | 1660            | 1740              | 1.5             | 26.7            | 800             | 870              |
| 19              | 1.5             | 1.25                | 1.8             | 32.8            | 1700            | 1770              | 1.5             | 26.7            | 830             | 910              |
| 20              | 1.6             | 1.25                | 1.9             | 34.7            | 1820            | 1900              | 1.6             | 28.4            | 890             | 970              |
| 24              | 1.7             | 1.6                 | 2.0             | 38.9            | 2330            | 2430              | 1.7             | 31.7            | 1070            | 1160             |
| 30              | 1.7             | 1.6                 | 2.0             | 40.9            | 2620            | 2740              | 1.7             | 33.7            | 1280            | 1400             |
| 37              | 1.8             | 1.6                 | 2.1             | 44.0            | 3030            | 3180              | 1.8             | 36.6            | 1560            | 1710             |

**AREA OF CONDUCTOR 1.5 SQ MM**

Min. thickness of insulation 0.44 mm

| Armoured Cables |                 |                     |                 |                 |                 | Unarmoured Cables |                 |                 |                 |                  |
|-----------------|-----------------|---------------------|-----------------|-----------------|-----------------|-------------------|-----------------|-----------------|-----------------|------------------|
| No. of Pairs    | Inner Sheath mm | G.I. Armour Wire mm | Outer Sheath mm | Overall Dia. mm | Weight PE kg/km | Weight PVC kg/km  | Outer Sheath mm | Overall Dia. mm | Weight PE kg/km | Weight PVC kg/km |
| 2               | 1.1             | 0.9                 | 1.5             | 17.7            | 485             | 490               | 1.1             | 12.9            | 160             | 170              |
| 4               | 1.2             | 0.9                 | 1.5             | 20.1            | 650             | 660               | 1.2             | 15.3            | 265             | 285              |
| 5               | 1.2             | 0.9                 | 1.6             | 21.7            | 740             | 760               | 1.2             | 16.7            | 320             | 345              |
| 6               | 1.3             | 1.25                | 1.6             | 24.2            | 980             | 1010              | 1.3             | 18.5            | 380             | 410              |
| 8               | 1.3             | 1.25                | 1.7             | 26.7            | 1150            | 1190              | 1.3             | 20.8            | 485             | 520              |
| 10              | 1.4             | 1.25                | 1.8             | 30.0            | 1380            | 1430              | 1.4             | 23.9            | 600             | 650              |
| 12              | 1.5             | 1.25                | 1.8             | 31.0            | 1520            | 1570              | 1.5             | 24.9            | 710             | 770              |
| 16              | 1.6             | 1.25                | 1.9             | 34.3            | 1830            | 1910              | 1.6             | 28.0            | 920             | 990              |
| 18              | 1.6             | 1.6                 | 1.9             | 36.5            | 2180            | 2270              | 1.6             | 29.5            | 1020            | 1100             |
| 19              | 1.6             | 1.6                 | 1.9             | 36.5            | 2230            | 2310              | 1.6             | 29.5            | 1070            | 1150             |
| 20              | 1.7             | 1.6                 | 2.0             | 38.6            | 2380            | 2480              | 1.7             | 31.4            | 1140            | 1230             |
| 24              | 1.8             | 1.6                 | 2.1             | 42.5            | 2760            | 2880              | 1.8             | 35.1            | 1360            | 1470             |
| 30              | 1.9             | 1.6                 | 2.1             | 44.9            | 3160            | 3300              | 1.9             | 37.5            | 1660            | 1800             |
| 37              | 2.0             | 2.0                 | 2.2             | 49.2            | 3970            | 4140              | 2.0             | 40.8            | 2020            | 2190             |

## AREA OF CONDUCTOR 2.5 SQ MM

Min. thickness of insulation 0.53 mm

| ARMoured CABLES |                 |                     |                 |                 |                 |                  | UNARMoured CABLES |                 |                 |                  |
|-----------------|-----------------|---------------------|-----------------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| NO. OF PAIRS    | INNER SHEATH MM | G.I. ARMOUR WIRE MM | OUTER SHEATH MM | OVERALL DIA. MM | WEIGHT PE KG/KM | WEIGHT PVC KG/KM | OUTER SHEATH MM   | OVERALL DIA. MM | WEIGHT PE KG/KM | WEIGHT PVC KG/KM |
| 2               | 1.2             | 0.9                 | 1.5             | 20.0            | 600             | 610              | 1.2               | 15.2            | 220             | 235              |
| 4               | 1.3             | 1.25                | 1.6             | 23.8            | 960             | 980              | 1.3               | 18.1            | 375             | 400              |
| 5               | 1.3             | 1.25                | 1.7             | 25.8            | 1090            | 1120             | 1.3               | 19.9            | 450             | 485              |
| 6               | 1.4             | 1.25                | 1.7             | 27.8            | 1250            | 1290             | 1.4               | 21.9            | 540             | 580              |
| 8               | 1.5             | 1.25                | 1.8             | 31.1            | 1510            | 1560             | 1.5               | 25.0            | 700             | 750              |
| 10              | 1.6             | 1.6                 | 1.9             | 35.5            | 2000            | 2070             | 1.6               | 28.6            | 870             | 940              |
| 12              | 1.6             | 1.6                 | 1.9             | 36.7            | 2170            | 2250             | 1.6               | 29.7            | 1010            | 1090             |
| 16              | 1.8             | 1.6                 | 2.0             | 40.7            | 2660            | 2770             | 1.8               | 33.5            | 1320            | 1430             |
| 18              | 1.8             | 1.6                 | 2.1             | 42.8            | 2890            | 3010             | 1.8               | 35.4            | 1470            | 1590             |
| 19              | 1.8             | 1.6                 | 2.1             | 42.8            | 2960            | 3090             | 1.8               | 35.4            | 1540            | 1660             |
| 20              | 1.9             | 1.6                 | 2.1             | 45.0            | 3130            | 3270             | 1.9               | 37.6            | 1640            | 1770             |
| 24              | 2.0             | 2.0                 | 2.3             | 50.7            | 4000            | 4160             | 2.0               | 42.1            | 1960            | 2120             |
| 30              | 2.1             | 2.0                 | 2.3             | 53.4            | 4540            | 4740             | 2.1               | 44.8            | 2390            | 2590             |
| 37              | 2.3             | 2.0                 | 2.4             | 57.8            | 5310            | 5560             | 2.3               | 49.0            | 2930            | 3180             |

For Cables of sizes or pair not listed above the product data is available on request Dimensions & Weights are representative figures and may vary

## ELECTRICAL PARAMETER

| AREA OF CONDUCTOR | MAX. DC RESISTANCE AT 20°C — PLAIN WIRES | MAX. DC RESISTANCE AT 20°C — METAL COATED WIRES | INSULATION RESISTANCE (PVC) | INSULATION RESISTANCE (PE/XLPE) | MUTUAL CAPACITANCE | L/R RATIO |
|-------------------|------------------------------------------|-------------------------------------------------|-----------------------------|---------------------------------|--------------------|-----------|
| Sq mm             | Ohm/km                                   | Ohm/km                                          | MΩ/Km                       | MΩ/Km                           | nF/Km              | μH/Ω      |
| 0.5               | 36                                       | 36.7                                            | 10                          | 1000                            | < 250              | < 25      |
| 0.75              | 24.5                                     | 24.8                                            | 10                          | 1000                            | < 250              | < 25      |
| 1                 | 18.1                                     | 18.2                                            | 10                          | 1000                            | < 250              | < 25      |
| 1.5               | 12.1                                     | 12.2                                            | 10                          | 1000                            | < 250              | < 40      |
| 2.5               | 7.41                                     | 7.56                                            | 10                          | 1000                            | < 250              | < 60      |

## OUTSTANDING FEATURES



**FLAME RETARDANT**



**LOW SMOKE EMISSION**



**LONG LIFE**