

# **FEATURES**

- Plain Annealed Flexible Copper Conductor
- PVC Insulated
- PVC Bedding
- GSWB (Galvanised Steel Wire Braid)
- PVC Sheathed. 300/500V

# **RS PRO SY Cable**

RS Stock No.: 2080520



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.



# **Product Description**

The cable is designed to be used as interconnecting cable for measuring, controlling or regulation in control equipment for assembly and production lines, conveyors and for computer units. It is commonly used in a wide number of industries including building and construction, rail and transport infrastructures, transmission and automation and process control. This cable is also used by electricians in certain fixed installations where only light mechanical stress may occur. This cable can also be used outdoors (but should be protected); however, it is best suited to dry or moist conditions indoors.

#### **General Specifications**

| Sheath Material  | Clear PVC Type TM2 to B EN 50363-4-1 |  |  |  |  |
|------------------|--------------------------------------|--|--|--|--|
| Braiding         | GSWB (Galvanised Steel Wire Braid)   |  |  |  |  |
| Bedding Material | PVC Type TM2 to B EN 50363-4-1       |  |  |  |  |

### **Electrical Specifications**

| Current Rating      | For current ratings refer to table 4F1 and 4F3 of BS7671 IEE Wiring Regulations Seventeenth Edition. |  |  |  |  |
|---------------------|--|--|--|--|--|
| Conductor Material  | Plain Annealed Copper Class 5 to BS EN 60228   |  |  |  |  |
| Insulation Material | PVC Type TI2 to BS EN 50363-3  |  |  |  |  |

#### **Mechanical Specifications**

| Length                                      | 50m       |
|---|-----------|
| Number of Cores                             | 4         |
| Minimum Bend Radius                         | 6 x Ø     |
| Nominal Cross Sectional Area of Conductor   | 1.0       |
| Nominal Stranding of Conductor (mm)         | 32/0.2mm  |
| Nominal Radial Thickness of insulation (mm) | 0.5mm     |
| Nominal Radial Thickness of bedding (mm)    | 0.4mm     |
| Nominal Radial Thickness of sheath (mm)     | 1.0mm     |
| Approximate Overall Diameter Lower Limit    | 8.9       |
| Approximate Overall Diameter Upper Limit    | 10.9      |
| Approximate Weight (kg/km)                  | 145 kg/km |



#### **Operation Environment Specifications**

| Minimum Operating Temperature | -15°C |
|-------------------------------|-------|
| Maximum Operating Temperature | 70°C  |

## **Approvals**

| <b>Standards Met</b> BS EN 50525-2-11:2011 |
|--|
|--|



#### **XT Gland Chart**

|      |                 | •   |     |     |     |    |    |    |  |  |
|------|-----------------|-----|-----|-----|-----|----|----|----|--|--|
| Size | Number of Cores |     |     |     |     |    |    |    |  |  |
| mm²  | 2               | 3   | 4   | 5   | 7   | 12 | 18 | 25 |  |  |
| 0.75 | 20S             | 20S | 205 | 205 | 205 | 20 | 25 | 25 |  |  |
| 1.0  | 205             | 205 | 205 | 205 | 205 | 20 | 25 | 25 |  |  |
| 1.5  | 208             | 208 | 20S | 20  | 20  | 25 | 25 | 32 |  |  |
| 2.5  | -               | 20  | 20  | 20  | 25  | 25 | 25 |    |  |  |
| 4.0  | -               | 20  | 20  | 25  | 25  |    |    |    |  |  |
| 6.0  | -               | 25  | 25  | 25  |     |    |    |    |  |  |
| 10.0 | -               | 25  | 32  | 32  |     |    |    |    |  |  |
| 16.0 | -               | 32  | 32  | 40  |     |    |    |    |  |  |
| 25.0 | _               | _   | 40  | 40  | l   |    |    |    |  |  |

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#### **Multicore Loading**

35.0

In practice, the majority of cores in a multicore control cable of 7 cores and above carry only small or intermittent current and a current rating based on the assumption that all cores are equally loaded is quite unrealistic. In most cases only two cores, the line and neutral feed cores are likely to approach the maximum permitted loading. The current rating for twin core cable can therefore be used in these cables. Where more than two cores are known to carry an appreciable current, the multiplying factors applicable to the two core ratings are given below. The normal current rating for twin cable may also be used in cases where the number of cores carrying appreciable current does not exceed the square root of the total number of cores in the cable.

| Number of loaded cores | 3    | 4    | 5    | 6    | 7    | 10   | 12   | 14   |
|------------------------|------|------|------|------|------|------|------|------|
| Multiplying factor     | 0.87 | 0.78 | 0.72 | 0.67 | 0.63 | 0.56 | 0.53 | 0.51 |
|                        |      |      |      |      |      |      |      |      |
| Number of loaded cores | 19   | 24   | 27   | 30   | 37   | 44   | 46   | 48   |
| Multiplying factor     | 0.45 | 0.42 | 0.40 | 0.39 | 0.36 | 0.34 | 0.33 | 0.33 |



# **Similar Products**

| Parameters                                | 2080516  | 2080517  | 2080518  | 2080520  |  |
|---|--|--|--|--|--|
| Brand                                     | RS PRO   | RS PRO   | RS PRO   | RS PRO   |  |
| Sheath Material                           | Clear PVC Type<br>TM2 to B EN<br>50363-4-1   | Clear PVC<br>Type TM2 to B<br>EN 50363-4-1   | Clear PVC<br>Type TM2 to B<br>EN 50363-4-1   | Clear PVC<br>Type TM2 to B<br>EN 50363-4-1   |  |
| Braiding                                  | GSWB<br>(Galvanised<br>Steel Wire<br>Braid)  | GSWB<br>(Galvanised<br>Steel Wire<br>Braid)  | GSWB<br>(Galvanised<br>Steel Wire<br>Braid)  | GSWB<br>(Galvanised<br>Steel Wire<br>Braid)  |  |
| Bedding Material                          | PVC Type TM2<br>to B EN 50363-<br>4-1 PVC Type<br>TM2 to B EN<br>50363-4-1                           |  | PVC Type<br>TM2 to B EN<br>50363-4-1   | PVC Type<br>TM2 to B EN<br>50363-4-1   |  |
| Current Rating                            | For current ratings refer to table 4F1 and 4F3 of BS7671 IEE Wiring Regulations Seventeenth Edition. | For current ratings refer to table 4F1 and 4F3 of BS7671 IEE Wiring Regulations Seventeenth Edition. | For current ratings refer to table 4F1 and 4F3 of BS7671 IEE Wiring Regulations Seventeenth Edition. | For current ratings refer to table 4F1 and 4F3 of BS7671 IEE Wiring Regulations Seventeenth Edition. |  |
| Conductor Material                        | Plain Annealed<br>Copper Class 5<br>to BS EN 60228   | Copper Class 5 Copper Class  |  | Plain<br>Annealed<br>Copper Class<br>5 to BS EN<br>60228   |  |
| Insulation Material                       | PVC Type TI2<br>to BS EN<br>50363-3  |  |
| Minimum Operating Temperature             | -15°C  | -15°C  | -15°C  | -15°C  |  |
| Maximum Operating Temperature             | 70°C   | 70°C   | 70°C   | 70°C   |  |
| Length                                    | 50m  | 100m   | 100m   | 100m   |  |
| Minimum Bend Radius                       | 6 x Ø  | 6 x Ø  | 6 x Ø  | 6 x Ø  |  |
| Nominal Cross Sectional Area of Conductor | 1.0  | 1.0  | 1.0  | 1.0  |  |