



ENGLISH

Datasheet

RS PRO 5 Core YY Control Cable

Stock No: 196-4691



YY CONTROL FLEXIBLE PVC INSULATED AND SHEATHED





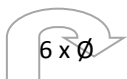
Manufactured generally to BS EN 50525-2-11:2011

Plain Annealed Flexible Copper Conductors / PVC Insulated / PVC Sheathed.
300/500V

| | |
|-------------------------|---|
| Conductor : | Plain Annealed Copper Class 5 to BS EN 60228 |
| Insulation: | PVC Type TI2 to BS EN 50363-3 |
| Sheath: | PVC Type TM2 to B EN 50363-4-1 |
| Current Ratings: | For current ratings refer to table 4F1 and 4F3 of BS7671 IEE Wiring Regulations Seventeenth Edition. |

The cable is designed to be used as an interconnecting cable for measuring, controlling or regulation in control equipment for assembly and production lines, conveyors and for computer units.

Due to the flexibility of YY cable, electricians commonly use YY for linking fixed and mobile equipment. If protected correctly electricians have found that YY can be useful in outdoor projects - however it is recommended and most commonly used for indoor projects in dry or moist conditions.

| STANDARD CORE COLOURS | MINIMUM OPERATING TEMPERATURE | MAXIMUM OPERATING TEMPERATURE | MINIMUM BENDING RADIUS |
|--|---|--|---|
| 2 CORE  3 CORE  + BLACK NUMBERED (some sizes are available colour coded) |  -15°C |  70°C |  6 x Ø |



rspro.com



YY CONTROL FLEXIBLE PVC INSULATED AND SHEATHED

| Reference Number | Nominal Cross Sectional Area of Conductor (mm ²) | Nominal Stranding of Conductor (mm) | Nominal Radial Thickness of insulation (mm) | Nominal Radial Thickness of sheath (mm) | Approximate Overall Diameter Lower Limit (mm) | Approximate Overall Diameter Upper Limit (mm) | Approximate Weight (kg/km) |
|------------------|--|-------------------------------------|---|---|---|---|----------------------------|
| YY0.752C | 0.75 | 24/0.2 | 0.5 | 0.6 | 4.8 | 6.8 | 49 |
| YY1.02C | 1.0 | 32/0.2 | 0.5 | 0.6 | 5.2 | 7.2 | 58 |
| YY1.52C | 1.5 | 30/0.25 | 0.5 | 0.6 | 5.8 | 7.8 | 72 |
| YY2.52C | 2.5 | 50/0.25 | 0.5 | 0.6 | 6.6 | 8.6 | 99 |
| YY0.53C | 0.5 | 16/0.2 | 0.5 | 0.6 | 4.7 | 6.7 | 48 |
| YY0.753C | 0.75 | 24/0.2 | 0.5 | 0.6 | 5.2 | 7.2 | 59 |
| YY1.03C | 1.0 | 32/0.2 | 0.5 | 0.6 | 5.6 | 7.6 | 70 |
| YY1.53C | 1.5 | 30/0.25 | 0.5 | 0.6 | 6.2 | 8.2 | 89 |
| YY2.53C | 2.5 | 50/0.25 | 0.5 | 0.6 | 7.0 | 9.0 | 125 |
| YY4.03C | 4.0 | 56/0.3 | 0.5 | 0.6 | 8.3 | 10.3 | 185 |
| YY6.03C | 6.0 | 84/0.3 | 0.5 | 0.8 | 10.3 | 12.3 | 256 |
| YY7103C | 10.0 | 80/0.4 | 0.6 | 0.8 | 12.6 | 14.6 | 443 |
| YY0.54C | 0.5 | 16/0.2 | 0.5 | 0.6 | 5.2 | 7.2 | 58 |
| YY0.754C | 0.75 | 24/0.2 | 0.5 | 0.6 | 5.7 | 7.7 | 74 |
| YY1.04C | 1.0 | 32/0.2 | 0.5 | 0.6 | 6.2 | 8.2 | 87 |
| YY1.54C | 1.5 | 30/0.25 | 0.5 | 0.6 | 6.8 | 8.8 | 111 |
| YY2.54C | 2.5 | 50/0.25 | 0.5 | 0.6 | 7.8 | 9.8 | 157 |
| YY4.04C | 4.0 | 56/0.3 | 0.5 | 0.6 | 9.3 | 11.3 | 240 |
| YY6.04C | 6.0 | 84/0.3 | 0.5 | 0.8 | 11.4 | 13.4 | 326 |
| YY7104C | 10.0 | 80/0.4 | 0.6 | 0.8 | 14.1 | 16.1 | 532 |
| YY7164C | 16.0 | 126/0.4 | 0.6 | 0.8 | 17.7 | 19.7 | 849 |
| YY7254C | 25.0 | 196/0.4 | 0.7 | 0.8 | 20.6 | 22.6 | 1275 |
| YY0.55C | 0.5 | 16/0.2 | 0.5 | 0.6 | 5.8 | 7.8 | 63 |
| YY0.755C | 0.75 | 24/0.2 | 0.5 | 0.6 | 6.3 | 8.3 | 80 |
| YY1.05C | 1.0 | 32/0.2 | 0.5 | 0.6 | 6.8 | 8.8 | 98 |
| YY1.55C | 1.5 | 30/0.25 | 0.5 | 0.6 | 7.6 | 9.6 | 127 |
| YY2.55C | 2.5 | 50/0.25 | 0.5 | 0.6 | 8.7 | 10.7 | 181 |
| YY4.05C | 4.0 | 56/0.3 | 0.5 | 0.6 | 10.3 | 12.3 | 267 |
| YY6.05C | 6.0 | 84/0.3 | 0.5 | 0.8 | 12.6 | 14.6 | 373 |
| YY7105C | 10.0 | 80/0.4 | 0.6 | 0.8 | 15.6 | 17.6 | 675 |
| YY7165C | 16.0 | 126/0.4 | 0.6 | 0.8 | 22.1 | 24.1 | 1067 |

Weight and dimensional information is provided as an approximate guide only.



YY CONTROL FLEXIBLE PVC INSULATED AND SHEATHED

| Reference Number | Nominal Cross Sectional Area of Conductor (mm ²) | Nominal Stranding of Conductor (mm) | Nominal Radial Thickness of insulation (mm) | Nominal Radial Thickness of sheath (mm) | Approximate Overall Diameter Lower Limit (mm) | Approximate Overall Diameter Upper Limit (mm) | Approximate Weight (kg/km) |
|------------------|--|-------------------------------------|---|---|---|---|----------------------------|
| YY0.57C | 0.5 | 16/0.2 | 0.5 | 0.6 | 6.4 | 8.4 | 75 |
| YY0.757C | 0.75 | 24/0.2 | 0.5 | 0.6 | 7.0 | 9.0 | 112 |
| YY1.07C | 1.0 | 32/0.2 | 0.5 | 0.6 | 7.5 | 9.5 | 134 |
| YY1.57C | 1.5 | 30/0.25 | 0.5 | 0.6 | 8.4 | 10.4 | 172 |
| YY2.57C | 2.5 | 50/0.25 | 0.5 | 0.6 | 9.6 | 11.6 | 248 |
| YY4.07C | 4.0 | 56/0.3 | 0.5 | 0.6 | 12.1 | 14.1 | 358 |
| YY0.758C | 0.75 | 24/0.2 | 0.5 | 0.6 | 6.7 | 8.7 | 109 |
| YY1.08C | 1.0 | 32/0.2 | 0.5 | 0.6 | 8.3 | 10.3 | 152 |
| YY1.58C | 1.5 | 30/0.25 | 0.5 | 0.6 | 8.8 | 10.8 | 175 |
| YY0.512C | 0.5 | 16/0.2 | 0.5 | 0.6 | 8.6 | 10.6 | 162 |
| YY0.7512C | 0.75 | 24/0.2 | 0.5 | 0.6 | 9.5 | 11.5 | 230 |
| YY1.012C | 1.0 | 32/0.2 | 0.5 | 0.6 | 10.2 | 12.2 | 256 |
| YY1.512C | 1.5 | 30/0.25 | 0.5 | 0.6 | 11.4 | 13.4 | 330 |
| YY2.512C | 2.5 | 50/0.25 | 0.5 | 0.6 | 13.0 | 15.0 | 417 |
| YY0.7518C | 0.75 | 24/0.2 | 0.5 | 0.6 | 10.4 | 12.4 | 216 |
| YY1.018C | 1.0 | 32/0.2 | 0.5 | 0.6 | 11.0 | 13.0 | 266 |
| YY1.518C | 1.5 | 30/0.25 | 0.5 | 0.6 | 13.0 | 15.0 | 362 |
| YY2.518C | 2.5 | 50/0.25 | 0.5 | 0.6 | 16.4 | 18.4 | 559 |
| YY0.525C | 0.5 | 16/0.2 | 0.5 | 0.6 | 11.8 | 13.8 | 219 |
| YY0.7525C | 0.75 | 24/0.2 | 0.5 | 0.6 | 12.7 | 14.7 | 296 |
| YY1.025C | 1.0 | 32/0.2 | 0.5 | 0.6 | 13.6 | 15.6 | 658 |
| YY1.525C | 1.5 | 30/0.25 | 0.5 | 0.6 | 16.2 | 18.2 | 426 |

Weight and dimensional information is provided as an approximate guide only.

rspro.com



YY CONTROL FLEXIBLE PVC INSULATED AND SHEATHED

Multicore Loading

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 |