

# Doncaster **Cables**

## **YY CONTROL FLEXIBLE PVC INSULATED AND SHEATHED**



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## YY CONTROL FLEXIBLE

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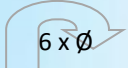
Manufactured generally to BS EN 50525-2-11:2011

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

- Conductor :** Plain Annealed Copper Class 5 to BS EN 60228
- Insulation:** PVC Type T12 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.

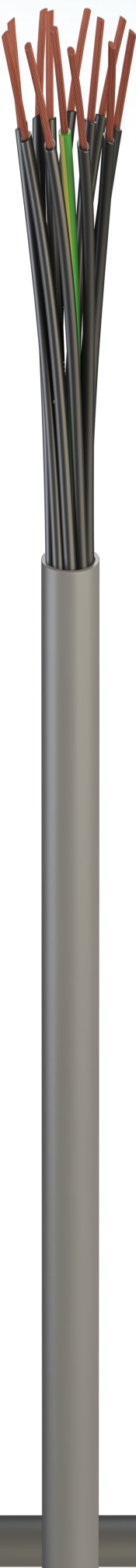
STANDARD CORE COLOURS	MINIMUM OPERATING TEMPERATURE	MAXIMUM OPERATING TEMPERATURE	MINIMUM BENDING RADIUS
2 CORE  3 CORE  + BLACK NUMBERED (some sizes are available colour coded)	 -15°C	 70°C	 6 x Ø



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Reference Number	Nominal Cross Sectional Area of Conductor (mm <sup>2</sup> )	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



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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



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### 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