YY Control Cable - Flexible - BS EN 50525-3-11 and VDE 0250, LSZH - 0.75mm² to 35mm²

Description

YY cable is used as measuring, control and checking applications on conveyors, assembly and production lines. The low smoke zero halogen outer sheath is designed for areas of high concentrations of people where fire, smoke emissions and toxic fumes can cause a threat to life.

Key Features

Voltage Rating
300/500 Volts

Minimum Bending Radius
10 x Overall Diameter

Flame Retardancy
BS EN/IEC 60332-1
BS EN/IEC 60332-3-24

Temperature Limits
Fixed: -40°C to +80°C

Core Colours

2 core - Black with White numbers

3 core and above - Black with White numbers plus Green Yellow

Also available with coloured cores as follows:

2 core - Blue Brown

3 core - Blue Brown Green Yellow

4 core - Brown Black Grey Green Yellow

5 core - Blue Brown Black Grey Green Yellow

Standards

- Generally to BS EN 50525-3-11
- BS EN/IEC 60332-1-2
- BS EN/IEC 61034-2
- BS EN/IEC 60228
- BS EN/IEC 60332-3-24
- Generally to VDE 0250

Construction

- **Conductor**: Class 5 flexible, stranded copper
- **Insulation**: LSZH (Low Smoke Zero Halogen)
- **Outer Sheath**: Low Smoke Zero Halogen (LSZH)
- **Sheath Colour**: Grey

QA Lab

Cleveland Cable Test & Training Lab
Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.

CPR
Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.

Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.

ecovadis
Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

YY Control Cable - Flexible - BS EN 50525-3-11 and VDE 0250, LSZH - 0.75mm² to 35mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Gland Size
YY2X/75LSF	0.75	2	24/0.20	5.6	46	20/16
YY3X/75LSF	0.75	3	24/0.20	5.7	52	20/16
YY4X/75LSF	0.75	4	24/0.20	6.2	64	20/16
YY5X/75LSF	0.75	5	24/0.20	7	77	20/16
YY7X/75LSF	0.75	7	24/0.20	7.3	95	20/16
YY12X/75LSF	0.75	12	24/0.20	9.5	155	20S
YY25X/75LSF	0.75	25	24/0.20	13.2	305	20
YY34X/75LSF	0.75	34	24/0.20	16.7	460	25
YY2X1LSF	1	2	32/0.20	6	55	20/16
YY3X1LSF	1	3	32/0.20	6.1	66	20/16
YY4X1LSF	1	4	32/0.20	6.7	82	20/16
YY5X1LSF	1	5	32/0.20	7.5	93	20/16
YY2X1/5LSF	1.5	2	30/0.25	6.6	69	20/16
YY3X1/5LSF	1.5	3	30/0.25	7	87	20/16
YY4X1/5LSF	1.5	4	30/0.25	7.6	110	20/16
YY5X1/5LSF	1.5	5	30/0.25	8.1	124	20S
YY7X1/5LSF	1.5	7	30/0.25	9.2	176	20S
YY12X1/5LSF	1.5	12	30/0.25	13.1	290	20
YY18X1/5LSF	1.5	18	30/0.25	14.8	424	25
YY25X1/5LSF	1.5	25	30/0.25	18	565	25
YY34X1/5LSF	1.5	34	30/0.25	21	775	32
YY2X2/5LSF	2.5	2	50/0.25	7.8	106	20/16
YY3X2/5LSF	2.5	3	50/0.25	8.1	126	20S
YY4X2/5LSF	2.5	4	50/0.25	8.9	159	20S
YY5X2/5LSF	2.5	5	50/0.25	9.7	178	178
YY7X2/5LSF	2.5	7	50/0.25	11.1	272	20
YY12X2/5LSF	2.5	12	50/0.25	13.8	403	20
YY18X2/5LSF	2.5	18	50/0.25	17.5	597	25
YY25X2/5LSF	2.5	25	50/0.25	22	885	32
YY3X4LSF	4	3	56/0.30	10.4	201	20S
YY4X4LSF	4	4	56/0.30	10.7	283	20S
YY5X4LSF	4	5	56/0.30	12.4	293	20
YY7X4LSF	4	7	56/0.30	14	413	25
YY3X6LSF	6	3	84/0.30	11.5	273	20
YY4X6LSF	6	4	84/0.30	12.8	352	20
YY5X6LSF	6	5	84/0.30	14.6	415	25
YY7X6LSF	6	7	84/0.30	15.2	537	25
YY3X10LSF	10	3	84/0.30	15.3	466	25

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Gland Size
YY4X10LSF	10	4	80/0.40	16.5	631	25
YY5X10LSF	10	5	80/0.40	18.6	720	25
YY3X16LSF	16	3	126/0.40	18.4	697	25
YY4X16LSF	16	4	126/0.40	19.9	767	32
YY5X16LSF	16	5	126/0.40	22.4	1151	32
YY3X25LSF	25	3	196/0.40	21.5	930	32
YY4X25LSF	25	4	196/0.40	22.5	1150	32
YY5X25LSFCC	25	5	196/0.40	27.9	1679	40
YY4X35LSF	35	4	276/0.40	29.0	1970	40
YY5X35LSF	35	5	276/0.40	34.3	2524	40

Multi core non-armoured 90 °C and 180°C thermosetting insulated flexible cables with sheath Reproduced from BS7671:2018 Wiring Regulations

TABLE 4F2A

CURRENT-CARRYING CAPACITY (Amps)

Ambient temperature: 30 °C
Conductor operating temperature: 90 °C

Conductor cross sectional area	Single-phase AC or DC	Three-phase AC	Single-phase AC or DC
	1 x 2 core cable, with or without protective conductor	1 x 3 core, 4 core or 5 core cable	2 single-core cables, touching
(mm^2)	(A)	(A)	(A)
4	42	37	-
6	55	49	-
10	76	66	-
16	103	89	-
25	136	119	-
35	-	146	200
50	-	177	250
70	-	225	310
95	-	273	369
120	-	316	432
150	-	363	497
185	-	414	564
240	-	487	673
300	-	560	773
400	-	-	924
500	-	-	1062
630	-	-	1242

NOTES:

1 The current ratings tabulated are for cables in free air but may also be used for cables resting on a surface. If the cable is to be wound on a drum on load the ratings should be reduced in accordance with ***NOTE 2*** below and for cables which may be covered, ***NOTE 3 below.***

2 **Flexible cables wound on reeling drums**
The current ratings of cables used on reeling drums are to be reduced by the following factors:

a) Radial type drum
ventilated: 85 %
unventilated: 75 %

b) Ventilated cylindrical type drum
I layer of cable: 85 %
2 layers of cable: 65 %
3 layers of cable: 45 %
4 layers of cable: 35 %

A radial type drum is one where spiral layers of cable are accommodated between closely spaced flanges; if fitted with solid flanges the ratings given above should be reduced and the drum is described as non-ventilated. If the flanges have suitable apertures the drum is described as ventilated.

A ventilated cylindrical cable drum is one where layers of cable are accommodated between widely spaced flanges and the drum and end flanges have suitable ventilating apertures.

3 Where cable may be covered over or coiled up whilst on load, or the air movement over the cable restricted, the current rating should be reduced.

It is not possible to specify the amount of reduction but the table of rating factors for reeling drums can be used as a guide.

4 For 180 °C cables, the rating factors for ambient temperature allow a conductor operating temperature up to 150 °C.
Consult the cable manufacturer for further information.

5 Where it is intended to connect the cables in this table to equipment or accessories designed to operate at a temperature lower than the maximum operating temperature of the cable, the cables should be rated at the maximum operating temperature of the equipment or accessory (see Regulation 512.1.5).

6 Where it is intended to group a cable in this table with other cables, the cable should be rated at the lowest of the maximum operating temperatures of any of the cables in the group (see Regulation 512.1.5).

Multi core non-armoured 90 °C and 180°C thermosetting insulated flexible cables with sheath Reproduced from BS7671:2018 Wiring Regulations

TABLE 4F2B

VOLTAGE DROP (per ampere per metre):

Conductor operating temperature: 90 °C

Conductor cross-sectional area	Two-core cable or 2 x Single core cables DC	2 core cable, single-phase AC			1 x 3 core, 4 core or 5 core cable, three-phase AC			2 single-core cables, touching Single-phase AC*		
(mm^2)	(mV/Nm)	(mV/Nm)			(mV/Nm)			(mV/Nm)		
4	13.20	13.20			11.10			-		
6	8.50	8.50			7.40			-		
10	5.10	5.10			4.40			-		
16	3.20	3.20			2.70			-		
		r	x	z	r	x	z	r	x	z
25	2.03	2.03	0.175	2.04	1.73	0.150	1.73	-	-	-
35	1.420	-	-	-	1.22	0.150	1.23	1.44	0.21	1.46
50	1.000	-	-	-	0.91	0.145	0.93	1.00	0.21	1.02
70	0.710	-	-	-	0.62	0.140	0.64	0.71	0.20	0.73
95	0.540	-	-	-	0.47	0.135	0.49	0.54	0.195	0.57
120	0.420	-	-	-	0.37	0.135	0.39	0.42	0.190	0.46
150	0.340	-	-	-	0.29	0.130	0.32	0.34	0.190	0.39
185	0.270	-	-	-	0.24	0.130	0.27	0.27	0.190	0.33
240	0.210	-	-	-	0.188	0.130	0.23	0.210	0.185	0.28
300	0.167	-	-	-	0.147	0.125	0.195	0.173	0.180	0.25
400	0.127	-	-	-	-	-	-	0.132	0.175	0.22
500	0.100	-	-	-	-	-	-	0.107	0.170	0.20
630	0.074	-	-	-	-	-	-	0.085	0.170	0.190

NOTES:

1 The voltage drop figures given above are based on a conductor operating temperature of 90 °C and are therefore not accurate when the operating temperature is in excess of 90 C. In the case of the 180 °C cables with a conductor temperature of 150 °C the above resistive values should be increased by a factor of 1.2.

2 *A larger voltage drop will result if the cables are spaced.