

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



Also available with coloured cores as follows:



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.







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

ecovadis



















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	0.75 2 24/		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	205	
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	20\$	
YY7X1/5LSF	1.5	7	30/0.25	9.2	176	20\$	
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	20\$	
YY4X2/5LSF	2.5	4	50/0.25	8.9 159		20\$	
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	205	
YY4X4LSF	4	4	56/0.30	10.7	283	205	
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	



 $\begin{tabular}{ll} \textbf{UK and Ireland Sales} & \underline{sales@clevelandcable.com} & \textbf{International Sales} & \underline{international@clevelandcable.com} & \textbf{UK} & \underline{01642\ 241\ 133} \\ \end{tabular}$

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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	26/0.40 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	6/0.40 27.9 1679		40
YY4X35LSF	35	4	276/0.40	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

onductor cross sectional	Single-phase AC or DC	Three-phase AC	Single-phase AC or DC 2 single-core cables, touching		
area	1 x 2 core cable, with or without protective conductor	1 x 3 core, 4 core or 5 core cable			
(mm ²)	(A)	(A)	(A)		
4	42	37			
6	55	49			
10	76	66			
16	103	89	/-		
25	136	119			
35	50 50 50 50 50 50 50 50 - 50 50 50 50 50 50 50 50	146	200		
50		177	250		
70		225	310		
95	-	273	369		
120	-	316	432		
150		363	497		
185	5050000000000000000 - 6000000000000000000000000000000000000	414	564		
240		487	673		
300	-	560	773		
400	-	- 1117 / /1117	924		
500			1062		
630			1242		

NOTES:

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 1 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:

b) Ventilated cylindrical type drum 85 % a) Radial type drum I layer of cable: 2 layers of cable: 65 % unventilated: 75 % 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.

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

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).



















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*			
(mm²)	(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	х	z	r	х	z	r	х	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		_	1 1 2 1 1	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:

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.

















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.