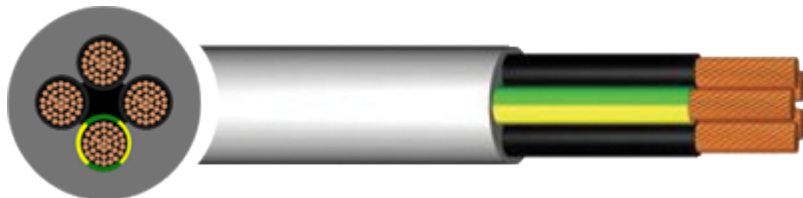


YY Control Flexible - BS EN 50525-3-11 and VDE 0250, LSZH - 0.75mm to 25mm



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



Installation Guidelines

Should not be installed at temperatures below -5°C



Voltage Rating

300/500 Volts



Minimum Bending Radius

As Per Manufacturers Datasheet

Construction

- **Conductor:** Plain Annealed Stranded Copper Conductors
- **Insulation:** LSZH (Low Smoke Zero Halogen)
- **Sheath:** Low Smoke Zero Halogen (LSZH)
- **Sheath Colour:** Grey

Standards

- GENERALLY TO BS EN 50525-3-11, VDE 0250, CY, SY and YY Cables are thoroughly tested under BSI kitemark KM712695 in our accredited lab prior to delivery., The lab is audited by BSI as an independent 3rd party to verify that the testing procedures and the cable meet the standards and are fit for purpose

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

YY Control Flexible - BS EN 50525-3-11 and VDE 0250, LSZH - 0.75mm to 25mm - Dimensions

Reference	Conductor Size (mm ²)	No Of Cores	Stranding(mm)	TYPE	Overall Diameter(mm)	Weight(Kg/Km)	Gland Size
YY2X/75LSF	0.75	2	24/0.20	LSF	5.6	46	20/16
YY3X/75LSF	0.75	3	24/0.20	LSF	5.7	52	20/16
YY4X/75LSF	0.75	4	24/0.20	LSF	6.2	64	20/16
YY5X/75LSF	0.75	5	24/0.20	LSF	7	77	20/16
YY7X/75LSF	0.75	7	24/0.20	LSF	7.3	95	20/16
YY12X/75LSF	0.75	12	24/0.20	LSF	9.5	155	20S
YY25X/75LSF	0.75	25	24/0.20	LSF	13.2	305	20
YY34X/75LSF	0.75	34	24/0.20	LSF	16.7	460	25
YY2X1LSF	1	2	32/0.20	LSF	6	55	20/16
YY3X1LSF	1	3	32/0.20	LSF	6.1	66	20/16
YY4X1LSF	1	4	32/0.20	LSF	6.7	82	20/16
YY5X1LSF	1	5	32/0.20	LSF	7.5	93	20/16
YY2X1/5LSF	1.5	2	30/0.25	LSF	6.6	69	20/16
YY3X1/5LSF	1.5	3	30/0.25	LSF	7	87	20/16
YY4X1/5LSF	1.5	4	30/0.25	LSF	7.6	110	20/16
YY5X1/5LSF	1.5	5	30/0.25	LSF	8.1	124	20S
YY7X1/5LSF	1.5	7	30/0.25	LSF	9.2	176	20S
YY12X1/5LSF	1.5	12	30/0.25	LSF	13.1	290	20
YY18X1/5LSF	1.5	18	30/0.25	LSF	14.8	424	25
YY25X1/5LSF	1.5	25	30/0.25	LSF	18	565	25
YY34X1/5LSF	1.5	34	30/0.25	LSF	21	775	32
YY2X2/5LSF	2.5	2	50/0.25	LSF	7.8	106	20/16
YY3X2/5LSF	2.5	3	50/0.25	LSF	8.1	126	20S
YY4X2/5LSF	2.5	4	50/0.25	LSF	8.9	159	20S
YY5X2/5LSF	2.5	5	50/0.25	LSF	9.7	178	20S
YY7X2/5LSF	2.5	7	50/0.25	LSF	11.1	272	20
YY3X4LSF	4	3	56/0.30	LSF	10.4	201	20S
YY4X4LSF	4	4	56/0.30	LSF	10.7	283	20S
YY5X4LSF	4	5	56/0.30	LSF	12.4	293	20
YY7X4LSF	4	7	56/0.30	LSF	14	413	25
YY3X6LSF	6	3	84/0.30	LSF	11.5	273	20
YY4X6LSF	6	4	84/0.30	LSF	12.8	352	20
YY5X6LSF	6	5	84/0.30	LSF	14.6	415	25
YY3X10LSF	10	3	84/0.30	LSF	15.3	466	25
YY4X10LSF	10	4	80/0.40	LSF	16.5	631	25
YY5X10LSF	10	5	80/0.40	LSF	18.6	720	25
YY3X16LSF	16	3	126/0.40	LSF	18.4	697	25

Reference	Conductor Size (mm ²)	No Of Cores	Stranding(mm)	TYPE	Overall Diameter(mm)	Weight(Kg/Km)	Gland Size
YY4X16LSF	16	4	126/0.40	LSF	19.9	767	32
YY5X16LSF	16	5	126/0.40	LSF	22.4	1151	32
YY3X25LSF	25	3	196/0.40	LSF	21.5	930	32
YY4X25LSF	25	4	196/0.40	LSF	22.5	1150	32
YY4X35LSF	35	4	276/0.40	LSF	29.0	1970	40
YY5X35LSF	35	5	276/0.40	LSF	34.3	2524	40

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	-	414	497
185	-	487	564
240	-	560	673
300	-	394	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	b) Ventilated cylindrical type drum
ventilated: 85 %	1 layer of cable: 85 %
unventilated: 75 %	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; it 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.

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 (mm ²)	Two-core cable or 2 x Single core cables DC (mV/Nm)	2 core cable, single-phase AC (mV/Nm)			1 x 3 core, 4 core or 5 core cable, three-phase AC (mV/Nm)			2 single-core cables, touching Single-phase AC* (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.

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.

For more information contact: 01642 241 133

