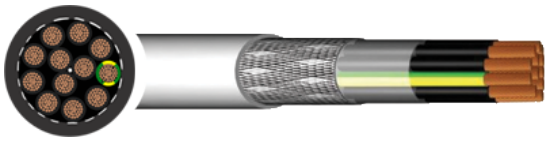
CY Control Cable - Flexible - BS EN 50525-2-11 and VDE 0250 - 0.5mm² to 16mm²



Description

CY Control Flexible cable is used in similar areas as YY flexible cable (such as assembly and production lines) where there is a requirement to avoid high frequency interference.

These cables are not UV resistant but can be used outdoors if adequately protected against direct sunlight in trunking etc.

Key Features

Voltage Rating
300/500 Volts

Minimum Bending Radius
10 x Overall Diameter

Flame Retardancy
BS EN/IEC 60332-1-2

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 50525-2-11
- BS EN/IEC 60332-1-2
- BS EN/IEC 60228
- EN 50395
- Generally to VDE 0250

Construction

- **Conductor**: Class 5 flexible, stranded copper
- **Insulation**: Polyvinyl Chloride (PVC)
- **Separator**: Polyester Tape (PET)
- **Screen**: Tinned Copper Wire Braiding
- **Outer Sheath**: Polyvinyl Chloride (PVC)
- **Sheath Colour**: Grey

Training & Testing Lab

AN ISO/IEC 17025 ACCREDITED FACILITY

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.

ISO/IEC 17025 Accredited Testing Laboratory

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

CY Control Cable - Flexible - BS EN 50525-2-11 and VDE 0250 - 0.5mm² to 16mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Gland Size(mm) Brass A2
CY2X/5	0.5	2	16/0.20	5	41	20/16
CY3X/5	0.5	3	16/0.20	5.2	50	20/16
CY4X/5	0.5	4	16/0.20	6.2	66	20/16
CY5X/5	0.5	5	16/0.20	7	79	20/16
CY7X/5	0.5	7	16/0.20	7.2	102	20/16
CY2X/75	0.75	2	24/0.20	5.5	43	20/16
CY3X/75	0.75	3	24/0.20	5.8	52	20/16
CY4X/75	0.75	4	24/0.20	6.5	68	20/16
CY5X/75	0.75	5	24/0.20	7.1	80	20/16
CY7X/75	0.75	7	24/0.20	7.6	103	20/16
CY12X/75	0.75	12	24/0.20	9.9	161	20S
CY18X/75	0.75	18	24/0.20	11.7	238	20
CY25X/75	0.75	25	24/0.20	13.9	316	20
CY2X1	1	2	32/0.20	6.3	53	20/16
CY3X1	1	3	32/0.20	6.4	64	20/16
CY4X1	1	4	32/0.20	7.2	84	20/16
CY5X1	1	5	32/0.20	7.8	100	20/16
CY7X1	1	7	32/0.20	8.5	125	20/16
CY12X1	1	12	32/0.20	11.3	209	20S
CY18X1	1	18	32/0.20	13.3	308	20
CY25X1	1	25	32/0.20	16.23	420	25
CY34X1	1	34	32/0.20	19.5	650	25
CY2X1/5	1.5	2	30/0.25	6.5	61	20/16
CY3X1/5	1.5	3	30/0.25	6.9	78	20/16
CY4X1/5	1.5	4	30/0.25	7.7	104	20/16
CY5X1/5	1.5	5	30/0.25	8.6	128	20S
CY7X1/5	1.5	7	30/0.25	9.2	159	20
CY12X1/5	1.5	12	30/0.25	12.7	281	25
CY18X1/5	1.5	18	30/0.25	14.7	396	25
CY25X1/5	1.5	25	30/0.25	17.49	534	25
CY34X1/5	1.5	34	30/0.25	19.89	720	32
CY42X1/5	1.5	42	30/0.25	23.8	1015	25
CY2X2/5	2.5	2	50/0.25	8	102	20/16
CY3X2/5	2.5	3	50/0.25	8.4	117	20/16
CY4X2/5	2.5	4	50/0.25	9.19	168	20S
CY5X2/5	2.5	5	50/0.25	10.3	199	20S
CY7X2/5	2.5	7	50/0.25	11.2	252	20S

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Gland Size(mm) Brass A2
CY12X2/5	2.5	12	50/0.25	16.8	500	25
CY2X4	4	2	56/0.30	10.5	165	20S
CY3X4	4	3	56/0.30	10.3	186	20S
CY4X4	4	4	56/0.30	11.8	239	20S
CY5X4	4	5	56/0.30	13	301	20S
CY4X6	6	4	84/0.30	12.9	327	20S
CY5X6	6	5	84/0.30	14.6	543	25
CY4X10	10	4	80/0.30	17.2	553	25
CY5X10CC	10	5	84/0.40	18.05	630	32
CY4X16	16	4	126/0.40	21	846	32
CY5X16CC	16	5	126/0.40	22.7	1140	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).

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.

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.