



MachFlex LiYCY

LiYCY PVC Control & Signal Cables Tinned Copper Braid Shield (TCB) – Excellent Noise Immunity

Applications

Designed for applications which are installed in occasional flexing and fixed locations. Cable applications include precision control sensors, pressure gauge, temperature controllers, control panels, vibration monitoring systems, intelligent security controllers, production machinery and many more.

General Reference Standards

- VDE 0812, DIN 47100
- DIN VDE 0295, IEC 60228, BS 6360
- DIN EN 50290-2-22, DIN VDE 0207-363-4-1
- DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2
- RoHS, REACH & CE Directives

Construction & Performance

- | | |
|---|---|
| 1. Conductor Material
Stranded bare copper (DIN VDE 0295 Class 5) | 8. Insulation Resistance
> 20 GOhm x cm |
| 2. Insulation Material & Colour
PVC (polyvinyl chloride), DIN 47100 (colour) | 9. Peak Operating Voltage:
at 0.14 mm ² : 350 V (not for power applications)
at ≥ 0.25 mm ² : 500 V (not for power applications) |
| 3. Braid Shield Material
Tinned Copper Braid Shield | 10. Test Voltage
At 0.14 mm ² : 1200 V
≥ 0.25 mm ² : 1500 V |
| 4. Jacket / Sheath Material
PVC (polyvinyl chloride) | 11. Oil Resistant
DIN EN 50290-2-22 (TM54) |
| 5. Flame Retardancy
VDE 0482-332-1-2, DIN EN 60332-1-2,
IEC 60332-1-2 | 12. Temperature Range
-5°C TO +70°C (Occasional movement)
-40°C TO +80°C (Fixed installation) |
| 6. Mutual Capacitance
Core to core Nom. 120 nF/km
Core to screen Nom 160 nF/km | 13. Bending Radius
15 x OD (Occasional movement)
6 x OD (Fixed installation) |
| 7. Inductivity
Nom. 0.50 mH/km | 14. Other Properties
Good UV resistance, chemical resistance &
flexibility |

TABLE A

Part Code	Cable Description	No. Of Cores	Nom. Conductor Size (mm ²)	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
2C0.14YCY	2 x 0.14	2	0.14	3.9	20
3C0.14YCY	3 x 0.14	3	0.14	4.1	22
4C0.14YCY	4 x 0.14	4	0.14	4.4	26
5C0.14YCY	5 x 0.14	5	0.14	4.8	31
7C0.14YCY	7 x 0.14	7	0.14	5.1	37
9C0.14YCY	9 x 0.14	9	0.14	6.1	47
10C0.14YCY	10 x 0.14	10	0.14	6.3	51
12C0.14YCY	12 x 0.14	12	0.14	6.5	56
14C0.14YCY	14 x 0.14	14	0.14	6.8	63
16C0.14YCY	16 x 0.14	16	0.14	7.2	70
18C0.14YCY	18 x 0.14	18	0.14	7.5	78
20C0.14YCY	20 x 0.14	20	0.14	7.9	86
25C0.14YCY	25 x 0.14	25	0.14	8.7	100
36C0.14YCY	36 x 0.14	36	0.14	9.9	136
37C0.14YCY	37 x 0.14	37	0.14	9.9	137
40C0.14YCY	40 x 0.14	40	0.14	10.3	147
50C0.14YCY	50 x 0.14	50	0.14	11.6	183
2C0.25YCY	2 x 0.25	2	0.25	4.6	28
3C0.25YCY	3 x 0.25	3	0.25	4.9	31
4C0.25YCY	4 x 0.25	4	0.25	5.2	37
5C0.25YCY	5 x 0.25	5	0.25	5.6	44
7C0.25YCY	7 x 0.25	7	0.25	6.0	53
9C0.25YCY	9 x 0.25	9	0.25	7.3	71
10C0.25YCY	10 x 0.25	10	0.25	7.6	76
12C0.25YCY	12 x 0.25	12	0.25	7.8	84
14C0.25YCY	14 x 0.25	14	0.25	8.1	94
16C0.25YCY	16 x 0.25	16	0.25	8.5	104
18C0.25YCY	18 x 0.25	18	0.25	8.9	115
20C0.25YCY	20 x 0.25	20	0.25	9.4	127
25C0.25YCY	25 x 0.25	25	0.25	10.7	158
36C0.25YCY	36 x 0.25	36	0.25	12.0	211
37C0.25YCY	37 x 0.25	37	0.25	12.0	213
40C0.25YCY	40 x 0.25	40	0.25	12.7	234
50C0.25YCY	50 x 0.25	50	0.25	14.2	288
2C0.34YCY	2 x 0.34	2	0.34	5.0	33
3C0.34YCY	3 x 0.34	3	0.34	5.3	37
4C0.34YCY	4 x 0.34	4	0.34	5.6	45
5C0.34YCY	5 x 0.34	5	0.34	6.4	58
7C0.34YCY	7 x 0.34	7	0.34	6.9	70
9C0.34YCY	9 x 0.34	9	0.34	8.0	89
10C0.34YCY	10 x 0.34	10	0.34	8.3	96
12C0.34YCY	12 x 0.34	12	0.34	8.6	105
14C0.34YCY	14 x 0.34	14	0.34	8.9	117
16C0.34YCY	16 x 0.34	16	0.34	9.3	130
18C0.34YCY	18 x 0.34	18	0.34	10.4	158

Part Code	Cable Description	No. Of Cores	Nom. Conductor Size (mm ²)	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
20C0.34YCY	20 x 0.34	20	0.34	10.9	173
25C0.34YCY	25 x 0.34	25	0.34	11.8	201
36C0.34YCY	36 x 0.34	36	0.34	13.6	279
37C0.34YCY	37 x 0.34	37	0.34	13.6	281
40C0.34YCY	40 x 0.34	40	0.34	14.0	301
50C0.34YCY	50 x 0.34	50	0.34	15.9	377
2C0.5YCY	2 x 0.5	2	0.5	5.8	44
3C0.5YCY	3 x 0.5	3	0.5	6.0	50
4C0.5YCY	4 x 0.5	4	0.5	6.5	60
5C0.5YCY	5 x 0.5	5	0.5	7.2	75
7C0.5YCY	7 x 0.5	7	0.5	7.7	90
9C0.5YCY	9 x 0.5	9	0.5	9.3	120
10C0.5YCY	10 x 0.5	10	0.5	9.6	130
12C0.5YCY	12 x 0.5	12	0.5	9.9	143
14C0.5YCY	14 x 0.5	14	0.5	10.3	161
16C0.5YCY	16 x 0.5	16	0.5	11.2	189
18C0.5YCY	18 x 0.5	18	0.5	11.7	209
20C0.5YCY	20 x 0.5	20	0.5	12.3	230
25C0.5YCY	25 x 0.5	25	0.5	14.1	293
2C0.75YCY	2 x 0.75	2	0.75	6.2	53
3C0.75YCY	3 x 0.75	3	0.75	6.5	61
4C0.75YCY	4 x 0.75	4	0.75	7.0	74
5C0.75YCY	5 x 0.75	5	0.75	7.7	92
7C0.75YCY	7 x 0.75	7	0.75	8.3	113
9C0.75YCY	9 x 0.75	9	0.75	10.3	155
10C0.75YCY	10 x 0.75	10	0.75	10.6	168
12C0.75YCY	12 x 0.75	12	0.75	11.0	186
14C0.75YCY	14 x 0.75	14	0.75	11.4	210
16C0.75YCY	16 x 0.75	16	0.75	12.6	252
18C0.75YCY	18 x 0.75	18	0.75	13.2	279
20C0.75YCY	20 x 0.75	20	0.75	13.9	312
25C0.75YCY	25 x 0.75	25	0.75	15.2	365
2C1.0YCY	2 x 1.0	2	1.0	6.5	62
3C1.0YCY	3 x 1.0	3	1.0	6.9	72
4C1.0YCY	4 x 1.0	4	1.0	7.4	89
5C1.0YCY	5 x 1.0	5	1.0	8.0	107
7C1.0YCY	7 x 1.0	7	1.0	8.8	137
9C1.0YCY	9 x 1.0	9	1.0	10.5	177
10C1.0YCY	10 x 1.0	10	1.0	11.1	198
12C1.0YCY	12 x 1.0	12	1.0	11.5	221
14C1.0YCY	14 x 1.0	14	1.0	12.0	251
16C1.0YCY	16 x 1.0	16	1.0	12.6	282
18C1.0YCY	18 x 1.0	18	1.0	13.5	325
20C1.0YCY	20 x 1.0	20	1.0	14.4	366
25C1.0YCY	25 x 1.0	25	1.0	16.2	447
2C1.5YCY	2 x 1.5	2	1.5	7.2	75
3C1.5YCY	3 x 1.5	3	1.5	7.6	88

Part Code	Cable Description	No. Of Cores	Nom. Conductor Size (mm ²)	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
4C1.5YCY	4 x 1.5	4	1.5	8.2	110
5C1.5YCY	5 x 1.5	5	1.5	8.9	134
7C1.5YCY	7 x 1.5	7	1.5	9.7	169
9C1.5YCY	9 x 1.5	9	1.5	11.7	220
10C1.5YCY	10 x 1.5	10	1.5	12.3	246
12C1.5YCY	12 x 1.5	12	1.5	12.7	277
14C1.5YCY	14 x 1.5	14	1.5	13.3	317
16C1.5YCY	16 x 1.5	16	1.5	14.1	358
18C1.5YCY	18 x 1.5	18	1.5	15.2	415
20C1.5YCY	20 x 1.5	20	1.5	16.0	460
25C1.5YCY	25 x 1.5	25	1.5	17.7	547
2C2.5YCY	2 x 2.5	2	2.5	8.3	105
3C2.5YCY	3 x 2.5	3	2.5	9.0	130
4C2.5YCY	4 x 2.5	4	2.5	9.7	164
5C2.5YCY	5 x 2.5	5	2.5	10.8	204
7C2.5YCY	7 x 2.5	7	2.5	11.7	259
9C2.5YCY	9 x 2.5	9	2.5	14.5	354
10C2.5YCY	10 x 2.5	10	2.5	15.1	389
12C2.5YCY	12 x 2.5	12	2.5	15.8	444
14C2.5YCY	14 x 2.5	14	2.5	16.6	506
16C2.5YCY	16 x 2.5	16	2.5	17.4	571
18C2.5YCY	18 x 2.5	18	2.5	18.5	646
20C2.5YCY	20 x 2.5	20	2.5	19.5	715
25C2.5YCY	25 x 2.5	25	2.5	22.5	901

Sheath / Jacket Colour

Colour

- 1) Grey (Default RAL = 7032)
- 2) Black
- 3) Blue
- 4) Orange
- 5) Violet

Colour Code

- F2V
010
006
003
007

Packaging

*Belden can offer these cables with various packing options like coiled, plastic or wooden reels. This will be decided at the discretion of Belden based on the cable design and structure.

Put-up Length

Putup Length

- 1) 100 Meters
- 2) 200 Meters*
- 3) 300 Meters*

Putup Length Code

- 100M
- 200M
- 300M

*Applicable only for certain part codes, please check with Belden for more information.

Stock Code Selection Procedure:

5 | C | 1 | . | 5 | Y | C | Y

Select the part code from Table A

F | 2 | V

Select the sheath / jacket color code

2 | 0 | 0 | M

Select the putup length code

5 | C | 1 | . | 5 | Y | C | Y

F | 2 | V | 2 | 0 | 0 | M

Cable Stock Code = 5C1.5YCY F2V200M

