



## MachFlex LiYCY

LiYCY PVC Control & Signal Cables  
Tinned Copper Braid Shield ( TCB )

### 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. Tinned copper braid shield ensure the cables with excellent noise immunity.

### General Reference Standards

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

### Construction & Performance

1	<b>Conductor Material</b>	Fine wire strands of bare copper wires
2	<b>Insulation Material &amp; Color</b>	PVC ( Polyvinyl Chloride ) , DIN 47100 ( color )
3	<b>Braid Shield Material</b>	Tinned Copper Braid Shield
4	<b>Jacket / Sheath Material</b>	PVC ( Polyvinyl Chloride ) acc. to DIN EN 50290-2-22
5	<b>Flame Retardancy</b>	VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2
6	<b>Peak Operating Voltage (U<sub>0</sub>/U)</b>	@0.14 mm <sup>2</sup> : 350 V (not for power applications) ≥ 0.25 mm <sup>2</sup> : 500 V (not for power applications)
7	<b>Mutual Capacitance</b>	Core to core Nom. 120 nF/km Core to screen Nom. 160 nF/km
8	<b>Inductivity</b>	Nom. 0.50 mH/km
9	<b>Insulation Resistance</b>	> 20 GOhm x cm
10	<b>Temperature Range</b>	-5°C to +70°C ( Occasional movement ) -40°C to +80°C ( Fixed installation )
11	<b>Bending Radius</b>	15 x OD ( Occasional movement ) 6 x OD ( Fixed installation )
12	<b>Testing Voltage</b>	@0.14 mm <sup>2</sup> : 1200 V ≥ 0.25 mm <sup>2</sup> : 1500 V
13	<b>Other Properties</b>	Good UV resistance, flexibility, chemical resistance

**TABLE A**

Part Code	Cable Description	No. of Cores	Nom. Conductor Size (mm <sup>2</sup> )	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
2C0.14YCY	2C0.14	2	0.14	3.6	17
3C0.14YCY	3C0.14	3	0.14	3.8	20
4C0.14YCY	4C0.14	4	0.14	4.0	24
5C0.14YCY	5C0.14	5	0.14	4.5	29
7C0.14YCY	7C0.14	7	0.14	4.9	35
10C0.14YCY	10C0.14	10	0.14	5.9	47
12C0.14YCY	12C0.14	12	0.14	6.1	53
20C0.14YCY	20C0.14	20	0.14	7.3	77
25C0.14YCY	25C0.14	25	0.14	7.9	92
30C0.14YCY	30C0.14	30	0.14	8.6	108
32C0.14YCY	32C0.14	32	0.14	8.9	116
2C0.25YCY	2C0.25	2	0.25	4.2	23
3C0.25YCY	3C0.25	3	0.25	4.6	30
4C0.25YCY	4C0.25	4	0.25	5.2	39
5C0.25YCY	5C0.25	5	0.25	5.3	42
7C0.25YCY	7C0.25	7	0.25	5.8	52
8C0.25YCY	8C0.25	8	0.25	6.4	59
9C0.25YCY	9C0.25	9	0.25	6.8	65
10C0.25YCY	10C0.25	10	0.25	7.0	70
12C0.25YCY	12C0.25	12	0.25	7.3	78
16C0.25YCY	16C0.25	16	0.25	8.0	99
18C0.25YCY	18C0.25	18	0.25	8.4	110
20C0.25YCY	20C0.25	20	0.25	8.9	119
25C0.25YCY	25C0.25	25	0.25	10.0	147
30C0.25YCY	30C0.25	30	0.25	10.1	156
36C0.25YCY	36C0.25	36	0.25	11.5	205
56C0.25YCY	56C0.25	56	0.25	14.4	317
2C0.34YCY	2C0.34	2	0.34	4.6	28
3C0.34YCY	3C0.34	3	0.34	4.8	33
4C0.34YCY	4C0.34	4	0.34	5.5	46
10C0.34YCY	10C0.34	10	0.34	7.5	81
12C0.34YCY	12C0.34	12	0.34	7.7	92
16C0.34YCY	16C0.34	16	0.34	8.5	116
18C0.34YCY	18C0.34	18	0.34	8.9	127
20C0.34YCY	20C0.34	20	0.34	9.6	144
25C0.34YCY	25C0.34	25	0.34	10.6	173
30C0.34YCY	30C0.34	30	0.34	11.4	206
2C0.5YCY	2C0.5	2	0.5	5.2	35
3C0.5YCY	3C0.5	3	0.5	5.4	44
4C0.5YCY	4C0.5	4	0.5	5.9	53
5C0.5YCY	5C0.5	5	0.5	6.4	63

Part Code	Cable Description	No. of Cores	Nom. Conductor Size (mm <sup>2</sup> )	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
6C0.5YCY	6C0.5	6	0.5	6.9	75
56C0.5YCY	56C0.5	56	0.5	17.8	531
<b>2C0.75YCY</b>	<b>2C0.75</b>	<b>2</b>	<b>0.75</b>	<b>5.6</b>	<b>43</b>
3C0.75YCY	3C0.75	3	0.75	5.8	54
4C0.75YCY	4C0.75	4	0.75	6.4	66
7C0.75YCY	7C0.75	7	0.75	7.5	101
10C0.75YCY	10C0.75	10	0.75	9.6	144
40C0.75YCY	40C0.75	40	0.75	16.6	505
2C1.0YCY	2C1.0	2	1.0	5.9	51
3C1.0YCY	3C1.0	3	1.0	6.2	62
4C1.0YCY	4C1.0	4	1.0	6.7	76
5C1.0YCY	5C1.0	5	1.0	7.3	94
6C1.0YCY	6C1.0	6	1.0	8.5	120
10C1.0YCY	10C1.0	10	1.0	10.2	169
2C1.5YCY	2C1.5	2	1.5	7.2	77
3C1.5YCY	3C1.5	3	1.5	7.2	85
4C1.5YCY	4C1.5	4	1.5	7.8	106
5C1.5YCY	5C1.5	5	1.5	8.5	129
6C1.5YCY	6C1.5	6	1.5	9.5	160
7C1.5YCY	7C1.5	7	1.5	9.5	172
8C1.5YCY	8C1.5	8	1.5	10.0	182
9C1.5YCY	9C1.5	9	1.5	10.9	205
10C1.5YCY	10C1.5	10	1.5	11.6	235
11C1.5YCY	11C1.5	11	1.5	11.6	253
12C1.5YCY	12C1.5	12	1.5	12.0	267
13C1.5YCY	13C1.5	13	1.5	12.6	292
14C1.5YCY	14C1.5	14	1.5	12.6	305
15C1.5YCY	15C1.5	15	1.5	14.0	345
16C1.5YCY	16C1.5	16	1.5	13.3	345
17C1.5YCY	17C1.5	17	1.5	14.3	382
18C1.5YCY	18C1.5	18	1.5	14.3	396
19C1.5YCY	19C1.5	19	1.5	14.3	406
20C1.5YCY	20C1.5	20	1.5	15.1	425
21C1.5YCY	21C1.5	21	1.5	15.1	447
22C1.5YCY	22C1.5	22	1.5	16.0	489
23C1.5YCY	23C1.5	23	1.5	16.0	499
24C1.5YCY	24C1.5	24	1.5	17.0	522
32C1.5YCY	32C1.5	32	1.5	19.7	712
3C2.5YCY	3C2.5	3	2.5	9.0	142

\*For any other cross-section or number of cores, please check with Belden for more information.

**Sheath / Jacket Color**

Color	Color Code
1) Grey (Default RAL = 7032)	F2V
2) Black	010
3) Blue	006

\*Applicable only for certain part codes, please check with Belden for more colors

**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	Putup Length Code
1) 100 Meters	100M
2) 200 Meters*	200M
3) 300 Meters*	300M

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

**Stock Code Selection Procedure**

