



MachFlex LiYY

LiYY PVC Control & Signal Cables

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 Directives

Construction & Performance

- | | |
|---|---|
| <p>1. Conductor Material
Stranded bare copper (DIN VDE 0295 Class 5)</p> <p>2. Insulation Material & Color
PVC (polyvinyl chloride), DIN 47100 (colour)</p> <p>3. Jacket / Sheath Material
PVC (polyvinyl chloride)</p> <p>4. Flame Retardancy
VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2</p> <p>5. Mutual Capacitance
Nom. 120 nF/km</p> <p>6. Inductivity
Nom. 0.50 mH/km</p> <p>7. Insulation Resistance
> 20 GOhm x cm</p> | <p>8. Peak Operating Voltage
at 0.14 mm²: 350 V (not for power applications)
at ≥ 0.25 mm²: 500 V (not for power applications)</p> <p>9. Test voltage
At 0.14 mm²: 1200 V
≥ 0.25 mm²: 1500 V</p> <p>10. Oil Resistant
DIN EN 50290-2-22 (TM54)</p> <p>11. Temperature Range
-5°C TO +70°C (Occasional movement)
-40°C TO +80°C (Fixed installation)</p> <p>12. Bending Radius
15 x OD (Occasional movement)
6 x OD (Fixed installation)</p> <p>13. Other Properties
Good UV resistance, chemical resistance & flexibility</p> |
|---|---|

TABLE A

Part Code	Cable Description	No. Of Cores	Nom. Conductor Size (mm ²)	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
2C0.14YY	2 X 0.14	2	0.14	3.30	12
3C0.14YY	3 X 0.14	3	0.14	3.50	14
4C0.14YY	4 X 0.14	4	0.14	3.80	17
5C0.14YY	5 X 0.14	5	0.14	4.10	21
7C0.14YY	7 X 0.14	7	0.14	4.50	26
9C0.14YY	9 X 0.14	9	0.14	5.40	34
10C0.14YY	10 X 0.14	10	0.14	5.70	38
12C0.14YY	12 X 0.14	12	0.14	5.90	42
14C0.14YY	14 X 0.14	14	0.14	6.20	48
16C0.14YY	16 X 0.14	16	0.14	6.50	54
18C0.14YY	18 X 0.14	18	0.14	6.90	61
20C0.14YY	20 X 0.14	20	0.14	7.30	68
25C0.14YY	25 X 0.14	25	0.14	8.10	80
36C0.14YY	36 X 0.14	36	0.14	9.30	113
37C0.14YY	37 X 0.14	37	0.14	9.30	114
40C0.14YY	40 X 0.14	40	0.14	9.70	123
50C0.14YY	50 X 0.14	50	0.14	10.90	152
2C0.25YY	2 X 0.25	2	0.25	3.80	17
3C0.25YY	3 X 0.25	3	0.25	4.00	20
4C0.25YY	4 X 0.25	4	0.25	4.40	25
5C0.25YY	5 X 0.25	5	0.25	4.70	30
7C0.25YY	7 X 0.25	7	0.25	5.20	38
9C0.25YY	9 X 0.25	9	0.25	6.60	55
10C0.25YY	10 X 0.25	10	0.25	6.90	60
12C0.25YY	12 X 0.25	12	0.25	7.10	67
14C0.25YY	14 X 0.25	14	0.25	7.50	76
16C0.25YY	16 X 0.25	16	0.25	7.90	87
18C0.25YY	18 X 0.25	18	0.25	8.30	96
20C0.25YY	20 X 0.25	20	0.25	8.70	107
25C0.25YY	25 X 0.25	25	0.25	9.60	125
36C0.25YY	36 X 0.25	36	0.25	11.20	179
37C0.25YY	37 X 0.25	37	0.25	11.20	181
40C0.25YY	40 X 0.25	40	0.25	12.00	206
50C0.25YY	50 X 0.25	50	0.25	13.40	251
2C0.34YY	2 X 0.34	2	0.34	4.20	22
3C0.34YY	3 X 0.34	3	0.34	4.40	25
4C0.34YY	4 X 0.34	4	0.34	5.00	33
5C0.34YY	5 X 0.34	5	0.34	5.40	40
7C0.34YY	7 X 0.34	7	0.34	5.80	50
9C0.34YY	9 X 0.34	9	0.34	7.40	72
10C0.34YY	10 X 0.34	10	0.34	7.70	78
12C0.34YY	12 X 0.34	12	0.34	7.90	87
14C0.34YY	14 X 0.34	14	0.34	8.30	98
16C0.34YY	16 X 0.34	16	0.34	8.70	112
18C0.34YY	18 X 0.34	18	0.34	9.10	123
20C0.34YY	20 X 0.34	20	0.34	9.60	136

Part Code	Cable Description	No. Of Cores	Nom. Conductor Size (mm ²)	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
25C0.34YY	25 X 0.34	25	0.34	11.00	170
36C0.34YY	36 X 0.34	36	0.34	12.40	233
37C0.34YY	37 X 0.34	37	0.34	12.40	235
40C0.34YY	40 X 0.34	40	0.34	13.50	271
50C0.34YY	50 X 0.34	50	0.34	15.00	328
2C0.5YY	2 X 0.5	2	0.5	4.70	28
3C0.5YY	3 X 0.5	3	0.5	5.00	33
4C0.5YY	4 X 0.5	4	0.5	5.60	44
5C0.5YY	5 X 0.5	5	0.5	6.10	54
7C0.5YY	7 X 0.5	7	0.5	7.00	74
9C0.5YY	9 X 0.5	9	0.5	8.40	96
10C0.5YY	10 X 0.5	10	0.5	8.80	105
12C0.5YY	12 X 0.5	12	0.5	9.00	118
14C0.5YY	14 X 0.5	14	0.5	9.50	134
16C0.5YY	16 X 0.5	16	0.5	10.40	162
18C0.5YY	18 X 0.5	18	0.5	10.90	179
20C0.5YY	20 X 0.5	20	0.5	11.40	198
25C0.5YY	25 X 0.5	25	0.5	12.80	239
2C0.75YY	2 X 0.75	2	0.75	5.10	36
3C0.75YY	3 X 0.75	3	0.75	5.60	45
4C0.75YY	4 X 0.75	4	0.75	6.10	57
5C0.75YY	5 X 0.75	5	0.75	7.10	76
7C0.75YY	7 X 0.75	7	0.75	7.70	96
9C0.75YY	9 X 0.75	9	0.75	9.20	124
10C0.75YY	10 X 0.75	10	0.75	9.60	137
12C0.75YY	12 X 0.75	12	0.75	10.30	163
14C0.75YY	14 X 0.75	14	0.75	10.80	185
16C0.75YY	16 X 0.75	16	0.75	11.30	208
18C0.75YY	18 X 0.75	18	0.75	11.90	233
20C0.75YY	20 X 0.75	20	0.75	12.60	259
25C0.75YY	25 X 0.75	25	0.75	14.30	320
2C1.0YY	2 X 1.0	2	1.0	5.70	46
3C1.0YY	3 X 1.0	3	1.0	6.00	55
4C1.0YY	4 X 1.0	4	1.0	6.60	70
5C1.0YY	5 X 1.0	5	1.0	7.30	89
7C1.0YY	7 X 1.0	7	1.0	8.20	118
9C1.0YY	9 X 1.0	9	1.0	10.30	163
10C1.0YY	10 X 1.0	10	1.0	10.70	179
12C1.0YY	12 X 1.0	12	1.0	11.00	201
14C1.0YY	14 X 1.0	14	1.0	11.50	230
16C1.0YY	16 X 1.0	16	1.0	12.10	258
18C1.0YY	18 X 1.0	18	1.0	12.80	291
20C1.0YY	20 X 1.0	20	1.0	13.50	323
25C1.0YY	25 X 1.0	25	1.0	15.30	399
2C1.5YY	2 X 1.5	2	1.5	6.50	60
3C1.5YY	3 X 1.5	3	1.5	6.90	72
4C1.5YY	4 X 1.5	4	1.5	7.80	96

Part Code	Cable Description	No. Of Cores	Nom. Conductor Size (mm ²)	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
5C1.5YY	5 X 1.5	5	1.5	8.70	122
7C1.5YY	7 X 1.5	7	1.5	9.60	161
9C1.5YY	9 X 1.5	9	1.5	11.90	215
10C1.5YY	10 X 1.5	10	1.5	12.40	236
12C1.5YY	12 X 1.5	12	1.5	12.80	267
14C1.5YY	14 X 1.5	14	1.5	13.80	318
16C1.5YY	16 X 1.5	16	1.5	14.50	359
18C1.5YY	18 X 1.5	18	1.5	15.70	416
20C1.5YY	20 X 1.5	20	1.5	16.50	461
25C1.5YY	25 X 1.5	25	1.5	18.20	548
2C2.5YY	2 X 2.5	2	2.5	7.40	84
3C2.5YY	3 X 2.5	3	2.5	7.90	104
4C2.5YY	4 X 2.5	4	2.5	8.90	139
5C2.5YY	5 X 2.5	5	2.5	9.90	176
7C2.5YY	7 X 2.5	7	2.5	11.20	239
9C2.5YY	9 X 2.5	9	2.5	14.00	323
10C2.5YY	10 X 2.5	10	2.5	14.60	356
12C2.5YY	12 X 2.5	12	2.5	15.50	418
14C2.5YY	14 X 2.5	14	2.5	16.20	478
16C2.5YY	16 X 2.5	16	2.5	17.10	541
18C2.5YY	18 X 2.5	18	2.5	18.00	606
20C2.5YY	20 X 2.5	20	2.5	19.40	691
25C2.5YY	25 X 2.5	25	2.5	21.40	824

Sheath / Jacket Colour

Colour	Colour Code
1) Grey (Default RAL = 7032)	F2V
2) Black	010
3) Blue	006
4) Orange	003
5) Violet	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	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:

