



## MachFlex 350YY

### VDE Registered Flexible PVC Control Cables

#### Applications

Designed for applications which are installed in occasional flexing and fixed locations. Cable applications include precision control sensors, multi axis control machines, temperature controllers, control panels, machine cutting tools, auxiliary equipment, motor speed control, production machinery and many more.

#### General Reference Standards

- DIN VDE 0295, IEC 60228, BS 6360
- DIN EN 50290-2-22, DIN VDE 0207-363-4-1
- IEC 60227-5, EN 50525-2-51, VDE 0281-13
- DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2
- RoHS, REACH & CE Directives

#### Construction & Performance

1.	<b>Conductor Material</b>	Stranded bare copper (DIN VDE 0295 Class 5 / IEC 60228 class 5)
2.	<b>Insulation Material &amp; Colour</b>	PVC (polyvinyl chloride), DIN VDE 0293-1 (colour) <b>A)</b> All black colour with number coding = without protective earth conductor. <b>OR</b> <b>B)</b> Black colour with number coding and 1 green & yellow colour conductor = with protective earth conductor.
3.	<b>Jacket / Sheath Material</b>	PVC (polyvinyl chloride)
4.	<b>Flame Retardancy</b>	VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2
5.	<b>Voltage Rating (U<sub>o</sub>/U)</b>	300 / 500 V
6.	<b>Oil Resistant</b>	DIN EN 50290-2-22 (TM54)
7.	<b>Temperature Range</b>	-30°C TO +70°C (Occasional movement) -40°C TO +80°C (Fixed installation)
8.	<b>Bending Radius</b>	10 x OD (Occasional movement)

		4 x OD (Fixed installation)
9.	<b>Other Properties</b>	Good UV resistance, chemical resistance & flexibility

**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)
2X0.5	2 X0.5	2	0.5	4.6	28
3X0.5	3 X0.5	3	0.5	4.9	35
3G0.5	3 G0.5	3	0.5	4.9	35
4X0.5	4 X0.5	4	0.5	5.3	44
4G0.5	4 G0.5	4	0.5	5.3	44
5X0.5	5 X0.5	5	0.5	5.9	53
5G0.5	5 G0.5	5	0.5	5.9	53
7X0.5	7 X0.5	7	0.5	6.4	68
7G0.5	7 G0.5	7	0.5	6.4	68
9X0.5	9 X0.5	9	0.5	7.9	90
9G0.5	9 G0.5	9	0.5	7.9	90
10X0.5	10 X0.5	10	0.5	8.3	100
10G0.5	10 G0.5	10	0.5	8.3	100
12X0.5	12 X0.5	12	0.5	8.6	114
12G0.5	12 G0.5	12	0.5	8.6	114
14X0.5	14 X0.5	14	0.5	9.1	131
14G0.5	14 G0.5	14	0.5	9.1	131
16X0.5	16 X0.5	16	0.5	9.6	148
16G0.5	16 G0.5	16	0.5	9.6	148
18X0.5	18 X0.5	18	0.5	10.2	167
18G0.5	18 G0.5	18	0.5	10.2	167
20X0.5	20 X0.5	20	0.5	10.8	186
20G0.5	20 G0.5	20	0.5	10.8	186
2X0.75	2 X0.75	2	0.75	5.0	36
3X0.75	3 X0.75	3	0.75	5.4	46
3G0.75	3 G0.75	3	0.75	5.4	46
4X0.75	4 X0.75	4	0.75	5.9	58
4G0.75	4 G0.75	4	0.75	5.9	58
5X0.75	5 X0.75	5	0.75	6.5	70
5G0.75	5 G0.75	5	0.75	6.5	70
7X0.75	7 X0.75	7	0.75	7.2	91
7G0.75	7 G0.75	7	0.75	7.2	91
9X0.75	9 X0.75	9	0.75	8.9	120

<b>9G0.75</b>	9 G0.75	9	0.75	8.9	120
<b>10X0.75</b>	10 X0.75	10	0.75	9.3	134
<b>10G0.75</b>	10 G0.75	10	0.75	9.3	134
<b>12X0.75</b>	12 X0.75	12	0.75	9.6	154
<b>12G0.75</b>	12 G0.75	12	0.75	9.6	154
<b>14X0.75</b>	14 X0.75	14	0.75	10.2	176
<b>14G0.75</b>	14 G0.75	14	0.75	10.2	176
<b>16X0.75</b>	16 X0.75	16	0.75	10.8	199
<b>16G0.75</b>	16 G0.75	16	0.75	10.8	199
<b>18X0.75</b>	18 X0.75	18	0.75	11.4	225
<b>18G0.75</b>	18 G0.75	18	0.75	11.4	225
<b>20X0.75</b>	20 X0.75	20	0.75	12.1	251
<b>20G0.75</b>	20 G0.75	20	0.75	12.1	251

Part Code	Cable Description	No. Of Cores	Nom. Conductor Size (mm <sup>2</sup> )	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
<b>2X1.0</b>	2 X1.0	2	1.0	5.4	44
<b>3X1.0</b>	3 X1.0	3	1.0	5.8	57
<b>3G1.0</b>	3 G1.0	3	1.0	5.8	57
<b>4X1.0</b>	4 X1.0	4	1.0	6.4	72
<b>4G1.0</b>	4 G1.0	4	1.0	6.4	72
<b>5X1.0</b>	5 X1.0	5	1.0	7.1	89
<b>5G1.0</b>	5 G1.0	5	1.0	7.1	89
<b>7X1.0</b>	7 X1.0	7	1.0	7.8	115
<b>7G1.0</b>	7 G1.0	7	1.0	7.8	115
<b>9X1.0</b>	9 X1.0	9	1.0	9.6	151
<b>9G1.0</b>	9 G1.0	9	1.0	9.6	151
<b>10X1.0</b>	10 X1.0	10	1.0	10.1	169
<b>10G1.0</b>	10 G1.0	10	1.0	10.1	169
<b>12X1.0</b>	12 X1.0	12	1.0	10.5	195
<b>12G1.0</b>	12 G1.0	12	1.0	10.5	195
<b>14X1.0</b>	14 X1.0	14	1.0	11.0	224
<b>14G1.0</b>	14 G1.0	14	1.0	11.0	224
<b>16X1.0</b>	16 X1.0	16	1.0	11.7	255
<b>16G1.0</b>	16 G1.0	16	1.0	11.7	255
<b>18X1.0</b>	18 X1.0	18	1.0	12.4	287
<b>18G1.0</b>	18 G1.0	18	1.0	12.4	287
<b>20X1.0</b>	20 X1.0	20	1.0	13.2	319
<b>20G1.0</b>	20 G1.0	20	1.0	13.2	319
<b>2X1.5</b>	2 X1.5	2	1.5	6.0	55

<b>3X1.5</b>	3 X1.5	3	1.5	6.4	71
<b>3G1.5</b>	3 G1.5	3	1.5	6.4	71
<b>4X1.5</b>	4 X1.5	4	1.5	7.0	91
<b>4G1.5</b>	4 G1.5	4	1.5	7.0	91
<b>5X1.5</b>	5 X1.5	5	1.5	7.8	112
<b>5G1.5</b>	5 G1.5	5	1.5	7.8	112
<b>7X1.5</b>	7 X1.5	7	1.5	8.5	145
<b>7G1.5</b>	7 G1.5	7	1.5	8.5	145
<b>9X1.5</b>	9 X1.5	9	1.5	10.6	191
<b>9G1.5</b>	9 G1.5	9	1.5	10.6	191
<b>10X1.5</b>	10 X1.5	10	1.5	11.1	213
<b>10G1.5</b>	10 G1.5	10	1.5	11.1	213
<b>12X1.5</b>	12 X1.5	12	1.5	11.5	247
<b>12G1.5</b>	12 G1.5	12	1.5	11.5	247
<b>14X1.5</b>	14 X1.5	14	1.5	12.2	284
<b>14G1.5</b>	14 G1.5	14	1.5	12.2	284
<b>16X1.5</b>	16 X1.5	16	1.5	12.9	323
<b>16G1.5</b>	16 G1.5	16	1.5	12.9	323
<b>18X1.5</b>	18 X1.5	18	1.5	13.7	364
<b>18G1.5</b>	18 G1.5	18	1.5	13.7	364
<b>20X1.5</b>	20 X1.5	20	1.5	14.5	405
<b>20G1.5</b>	20 G1.5	20	1.5	14.5	405
<b>2X2.5</b>	2 X2.5	2	2.5	7.7	91

<b>Part Code</b>	<b>Cable Description</b>	<b>No. Of Cores</b>	<b>Nom. Conductor Size (mm<sup>2</sup>)</b>	<b>Nom. Cable Diameter (mm)</b>	<b>Nom. Cable Weight (kg/km)</b>
<b>3X2.5</b>	3 X2.5	3	2.5	8.3	118
<b>3G2.5</b>	3 G2.5	3	2.5	8.3	118
<b>4X2.5</b>	4 X2.5	4	2.5	9.2	152
<b>4G2.5</b>	4 G2.5	4	2.5	9.2	152
<b>5X2.5</b>	5 X2.5	5	2.5	10.1	188
<b>5G2.5</b>	5 G2.5	5	2.5	10.1	188
<b>7X2.5</b>	7 X2.5	7	2.5	11.2	244
<b>7G2.5</b>	7 G2.5	7	2.5	11.2	244
<b>9X2.5</b>	9 X2.5	9	2.5	13.9	322
<b>9G2.5</b>	9 G2.5	9	2.5	13.9	322
<b>10X2.5</b>	10 X2.5	10	2.5	14.6	360
<b>10G2.5</b>	10 G2.5	10	2.5	14.6	360
<b>12X2.5</b>	12 X2.5	12	2.5	15.2	417
<b>12G2.5</b>	12 G2.5	12	2.5	15.2	417

<b>14X2.5</b>	14 X2.5	14	2.5	16.0	481
<b>14G2.5</b>	14 G2.5	14	2.5	16.0	481
<b>16X2.5</b>	16 X2.5	16	2.5	17.0	548
<b>16G2.5</b>	16 G2.5	16	2.5	17.0	548
<b>18X2.5</b>	18 X2.5	18	2.5	18.1	618
<b>18G2.5</b>	18 G2.5	18	2.5	18.1	618
<b>20X2.5</b>	20 X2.5	20	2.5	19.2	688
<b>20G2.5</b>	20 G2.5	20	2.5	19.2	688
<b>2X4</b>	2 X4	2	4	9.1	137
<b>3X4</b>	3 X4	3	4	9.8	182
<b>3G4</b>	3 G4	3	4	9.8	182
<b>4X4</b>	4 X4	4	4	10.9	235
<b>4G4</b>	4 G4	4	4	10.9	235
<b>5X4</b>	5 X4	5	4	12.0	292
<b>5G4</b>	5 G4	5	4	12.0	292
<b>7X4</b>	7 X4	7	4	13.3	383
<b>7G4</b>	7 G4	7	4	13.3	383
<b>9X4</b>	9 X4	9	4	16.6	504
<b>9G4</b>	9 G4	9	4	16.6	504
<b>10X4</b>	10 X4	10	4	17.5	564
<b>10G4</b>	10 G4	10	4	17.5	564
<b>12X4</b>	12 X4	12	4	18.1	655
<b>12G4</b>	12 G4	12	4	18.1	655
<b>2X6</b>	2 X6	2	6	11.0	202
<b>3X6</b>	3 X6	3	6	11.8	269
<b>3G6</b>	3 G6	3	6	11.8	269
<b>4X6</b>	4 X6	4	6	13.1	349
<b>4G6</b>	4 G6	4	6	13.1	349
<b>5X6</b>	5 X6	5	6	14.5	434
<b>5G6</b>	5 G6	5	6	14.5	434
<b>7X6</b>	7 X6	7	6	16.0	570
<b>7G6</b>	7 G6	7	6	16.0	570
<b>9X6</b>	9 X6	9	6	20.1	751
<b>Part Code</b>	<b>Cable Description</b>	<b>No. Of Cores</b>	<b>Nom. Conductor Size (mm<sup>2</sup>)</b>	<b>Nom. Cable Diameter (mm)</b>	<b>Nom. Cable Weight (kg/km)</b>
<b>9G6</b>	9 G6	9	6	20.1	751
<b>2X10</b>	2 X10	2	10	13.8	320
<b>3X10</b>	3 X10	3	10	14.8	427
<b>3G10</b>	3 G10	3	10	14.8	427

<b>4X10</b>	4 X10	4	10	16.5	555
<b>4G10</b>	4 G10	4	10	16.5	555
<b>5X10</b>	5 X10	5	10	18.3	692
<b>5G10</b>	5 G10	5	10	18.3	692
<b>7X10</b>	7 X10	7	10	20.3	910
<b>7G10</b>	7 G10	7	10	20.3	910
<b>9X10</b>	9 X10	9	10	25.5	1198
<b>9G10</b>	9 G10	9	10	25.5	1198
<b>2X16</b>	2 X16	2	16	16.8	497
<b>3X16</b>	3 X16	3	16	18.1	668
<b>3G16</b>	3 G16	3	16	18.1	668
<b>4X16</b>	4 X16	4	16	20.2	870
<b>4G16</b>	4 G16	4	16	20.2	870
<b>5X16</b>	5 X16	5	16	22.4	1086
<b>5G16</b>	5 G16	5	16	22.4	1086
<b>7X16</b>	7 X16	7	16	24.8	1433
<b>7G16</b>	7 G16	7	16	24.8	1433
<b>2X25</b>	2 X25	2	25	20.8	770
<b>3X25</b>	3 X25	3	25	22.3	1038
<b>3G25</b>	3 G25	3	25	22.3	1038
<b>4X25</b>	4 X25	4	25	24.9	1354
<b>4G25</b>	4 G25	4	25	24.9	1354
<b>5X25</b>	5 X25	5	25	27.7	1693
<b>5G25</b>	5 G25	5	25	27.7	1693
<b>7X25</b>	7 X25	7	25	30.6	2229
<b>7G25</b>	7 G25	7	25	30.6	2229
<b>2X35</b>	2 X35	2	35	24.0	1013
<b>3X35</b>	3 X35	3	35	25.9	1365
<b>3G35</b>	3 G35	3	35	25.9	1365
<b>4X35</b>	4 X35	4	35	28.9	1780
<b>4G35</b>	4 G35	4	35	28.9	1780

## Sheath / Jacket Colour

### Colour

- 1) Grey (RAL 7001)
- 2) Black
- 3) Blue

### Colour Code

G8U

010

006

- |           |     |
|-----------|-----|
| 4) Orange | 003 |
| 5) Violet | 007 |

**Packaging**

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\*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**

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**Putup Length**

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

**Putup Length Code**

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

**Stock Code Selection Procedure:**

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