



MachFlex375 YY

FlexibleColourCodedPVC ControlCables

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.	Conductor Material	Stranded bare copper (DIN VDE 0295 Class 5 / IEC 60228 class 5)
2.	Insulation Material & Colour	PVC (polyvinyl chloride), VDE 0293-308 (colour) up to 5 cores: colour-coded according to VDE 0293-308, From 6 cores : Belden MachFlex colour code A) G = with GN-YE protective conductor OR B) X = without protective earth conductor
3.	Jacket / Sheath Material	PVC (polyvinyl chloride)
4.	Flame Retardancy	VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2
5.	Voltage Rating (Uo/U)	Up to 1.5 mm ² : 300 / 500 V From 2.5 mm ² : 450 / 750 V
6.	Oil Resistant	DIN EN 50290-2-22 (TM54)

7.	Temperature Range	-5°C TO +70°C (Occasional movement)
		-40°C TO +80°C (Fixed installation)
8.	Bending Radius	15 x OD (Occasional movement)
		4 x OD (Fixed installation)
9.	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)
C2XA	2 X0.5	2	0.5	4.8	30
C3XA	3 X0.5	3	0.5	5.1	38
C3GA	3 G0.5	3	0.5	5.1	38
C4XA	4 X0.5	4	0.5	5.6	48
C4GA	4 G0.5	4	0.5	5.6	48
C5XA	5 X0.5	5	0.5	6.2	59
C5GA	5 G0.5	5	0.5	6.2	59
C7XA	7 X0.5	7	0.5	6.8	74
C7GA	7 G0.5	7	0.5	6.8	74
C9XA	9 X0.5	9	0.5	8.4	99
C9GA	9 G0.5	9	0.5	8.4	99
C10XA	10 X0.5	10	0.5	8.8	109
C10GA	10 G0.5	10	0.5	8.8	109
C12XA	12 X0.5	12	0.5	9.1	125
C12GA	12 G0.5	12	0.5	9.1	125
C14XA	14 X0.5	14	0.5	9.6	143
C14GA	14 G0.5	14	0.5	9.6	143
C16XA	16 X0.5	16	0.5	10.2	162
C16GA	16 G0.5	16	0.5	10.2	162
C18XA	18 X0.5	18	0.5	10.8	183
C18GA	18 G0.5	18	0.5	10.8	183
C20XA	20 X0.5	20	0.5	11.4	203
C20GA	20 G0.5	20	0.5	11.4	203
C2XB	2 X0.75	2	0.75	5.3	39
C3XB	3 X0.75	3	0.75	5.6	49

C3GB	3 G0.75	3	0.75	5.6	49
C4XB	4 X0.75	4	0.75	6.2	62
C4GB	4 G0.75	4	0.75	6.2	62
C5XB	5 X0.75	5	0.75	6.8	77
C5GB	5 G0.75	5	0.75	6.8	77
C7XB	7 X0.75	7	0.75	7.5	98
C7GB	7 G0.75	7	0.75	7.5	98
C9XB	9 X0.75	9	0.75	9.3	131
C9GB	9 G0.75	9	0.75	9.3	131
C10XB	10 X0.75	10	0.75	9.8	144
C10GB	10 G0.75	10	0.75	9.8	144
C12XB	12 X0.75	12	0.75	10.1	165
C12GB	12 G0.75	12	0.75	10.1	165
C14XB	14 X0.75	14	0.75	10.7	190
C14GB	14 G0.75	14	0.75	10.7	190
C16XB	16 X0.75	16	0.75	11.3	216
C16GB	16 G0.75	16	0.75	11.3	216
C18XB	18 X0.75	18	0.75	12.0	243
C18GB	18 G0.75	18	0.75	12.0	243
C20XB	20 X0.75	20	0.75	12.7	270
C20GB	20 G0.75	20	0.75	12.7	270

Part Code	Cable Description	No. Of Cores	Nom. Conductor Size (mm ²)	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
C2XC	2 X1.0	2	1.0	5.7	47
C3XC	3 X1.0	3	1.0	6.1	60
C3GC	3 G1.0	3	1.0	6.1	60
C4XC	4 X1.0	4	1.0	6.7	77
C4GC	4 G1.0	4	1.0	6.7	77
C5XC	5 X1.0	5	1.0	7.4	95
C5GC	5 G1.0	5	1.0	7.4	95
C7XC	7 X1.0	7	1.0	8.1	122
C7GC	7 G1.0	7	1.0	8.1	122
C9XC	9 X1.0	9	1.0	10.1	163
C9GC	9 G1.0	9	1.0	10.1	163
C10XC	10 X1.0	10	1.0	10.5	180
C10GC	10 G1.0	10	1.0	10.5	180
C12XC	12 X1.0	12	1.0	10.9	208
C12GC	12 G1.0	12	1.0	10.9	208

C14XC	14 X1.0	14	1.0	11.5	239
C14GC	14 G1.0	14	1.0	11.5	239
C16XC	16 X1.0	16	1.0	12.3	271
C16GC	16 G1.0	16	1.0	12.3	271
C18XC	18 X1.0	18	1.0	13.0	306
C18GC	18 G1.0	18	1.0	13.0	306
C20XC	20 X1.0	20	1.0	13.8	340
C20GC	20 G1.0	20	1.0	13.8	340
C2XD	2 X1.5	2	1.5	6.2	58
C3XD	3 X1.5	3	1.5	6.6	75
C3GD	3 G1.5	3	1.5	6.6	75
C4XD	4 X1.5	4	1.5	7.3	96
C4GD	4 G1.5	4	1.5	7.3	96
C5XD	5 X1.5	5	1.5	8.1	119
C5GD	5 G1.5	5	1.5	8.1	119
C7XD	7 X1.5	7	1.5	8.9	154
C7GD	7 G1.5	7	1.5	8.9	154
C9XD	9 X1.5	9	1.5	11.0	204
C9GD	9 G1.5	9	1.5	11.0	204
C10XD	10 X1.5	10	1.5	11.6	226
C10GD	10 G1.5	10	1.5	11.6	226
C12XD	12 X1.5	12	1.5	12.0	261
C12GD	12 G1.5	12	1.5	12.0	261
C14XD	14 X1.5	14	1.5	12.7	300
C14GD	14 G1.5	14	1.5	12.7	300
C16XD	16 X1.5	16	1.5	13.4	342
C16GD	16 G1.5	16	1.5	13.4	342
C18XD	18 X1.5	18	1.5	14.3	385
C18GD	18 G1.5	18	1.5	14.3	385
C20XD	20 X1.5	20	1.5	15.1	429
C20GD	20 G1.5	20	1.5	15.1	429
C2XC	2 X2.5	2	2.5	9.1	114

Part Code	Cable Description	No. Of Cores	Nom. Conductor Size (mm ²)	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
C3XE	3 X2.5	3	2.5	9.8	147
C3GE	3 G2.5	3	2.5	9.8	147
C4XE	4 X2.5	4	2.5	10.9	189
C4GE	4 G2.5	4	2.5	10.9	189

C5XE	5 X2.5	5	2.5	12.0	234
C5GE	5 G2.5	5	2.5	12.0	234
C7XE	7 X2.5	7	2.5	13.3	301
C7GE	7 G2.5	7	2.5	13.3	301
C9XE	9 X2.5	9	2.5	16.6	401
C9GE	9 G2.5	9	2.5	16.6	401
C10XE	10 X2.5	10	2.5	17.4	447
C10GE	10 G2.5	10	2.5	17.4	447
C12XE	12 X2.5	12	2.5	18.1	516
C12GE	12 G2.5	12	2.5	18.1	516
C1FXE	14 X2.5	14	2.5	19.1	594
C1FGE	14 G2.5	14	2.5	19.1	594
C1GXE	16 X2.5	16	2.5	20.3	677
C1GGE	16 G2.5	16	2.5	20.3	677
C18XE	18 X2.5	18	2.5	21.6	764
C18GE	18 G2.5	18	2.5	21.6	764
C20XE	20 X2.5	20	2.5	22.9	852
C20GE	20 G2.5	20	2.5	22.9	852
C2XF	2 X4	2	4	10.5	165
C3XF	3 X4	3	4	11.3	216
C3GF	3 G4	3	4	11.3	216
CFXF	4 X4	4	4	12.6	278
CFGF	4 G4	4	4	12.6	278
C5XF	5 X4	5	4	13.9	346
C5GF	5 G4	5	4	13.9	346
C7XF	7 X4	7	4	15.4	450
C7GF	7 G4	7	4	15.4	450
C9XF	9 X4	9	4	19.3	597
C9GF	9 G4	9	4	19.3	597
C10XF	10 X4	10	4	20.2	667
C10GF	10 G4	10	4	20.2	667
C12XF	12 X4	12	4	21.0	772
C12GF	12 G4	12	4	21.0	772
C2XG	2 X6	2	6	11.9	224
C3XG	3 X6	3	6	12.8	297
C3GG	3 G6	3	6	12.8	297
CFXG	4 X6	4	6	14.2	384
CFGG	4 G6	4	6	14.2	384
C5XG	5 X6	5	6	15.8	478

C5GG	5 G6	5	6	15.8	478
C7XG	7 X6	7	6	17.4	625
C7GG	7 G6	7	6	17.4	625
C3XE	9 X6	9	6	21.9	828
Part Code	Cable Description	No. Of Cores	Nom. Conductor Size (mm ²)	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
C9GG	9 G6	9	6	21.9	828
C2XH	2 X10	2	10	14.3	335
C3XH	3 X10	3	10	15.3	447
C3GH	3 G10	3	10	15.3	447
C4XH	4 X10	4	10	17.1	580
C4GH	4 G10	4	10	17.1	580
C5XH	5 X10	5	10	19.0	723
C5GH	5 G10	5	10	19.0	723
C7XH	7 X10	7	10	21.0	950
C7GH	7 G10	7	10	21.0	950
C9XH	9 X10	9	10	26.4	1256
C9GH	9 G10	9	10	26.4	1256
C2X1G	2 X16	2	16	18.2	547
C3X1G	3 X16	3	16	19.6	730
C3G1G	3 G16	3	16	19.6	730
C4X1G	4 X16	4	16	21.9	949
C4G1G	4 G16	4	16	21.9	949
C5X1G	5 X16	5	16	24.3	1186
C5G1G	5 G16	5	16	24.3	1186
C7X1G	7 X16	7	16	26.9	1559
C7G1G	7 G16	7	16	26.9	1559
C2XJ	2 X25	2	25	20.8	776
C3XJ	3 X25	3	25	22.3	1048
C3GJ	3 G25	3	25	22.3	1048
C4XJ	4 X25	4	25	24.9	1367
C4GJ	4 G25	4	25	24.9	1367
C5XJ	5 X25	5	25	27.7	1709
C5GJ	5 G25	5	25	27.7	1709

Sheath / Jacket Colour

Colour	Colour Code
1) Grey (RAL 7001)	G8U
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) 50 Meters	050M
2) 100 Meters	100M
3) 200 Meters*	200M
4) 300 Meters*	300M

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

Stock Code Selection Procedure:



