



MachFlex350 SY

VDE Registered
Galvanized Steel Wire Braid (GSWB) --> Excellent Mechanical Protection

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), DIN VDE 0293-1 (colour) A) All black colour with number coding = without protective earth conductor. OR B) Black colour with number coding and 1 green & yellow colour conductor = with protective earth conductor.
3.	Braid Shield Material	GSWB (Galvanized Steel Wire Braid)
4.	Jacket / Sheath Material	PVC (polyvinyl chloride)
5.	Flame Retardancy	VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2
6.	Voltage Rating (U_o / U)	300 / 500 V
7.	Oil Resistant	DIN EN 50290-2-22 (TM54)

8.	Temperature Range	-30°C TO +70°C (Occasional movement)
		-40°C TO +80°C (Fixed installation)
9.	Bending Radius	20 x OD (Occasional movement)
		6 x OD (Fixed installation)
10.	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)
2XASY	2 X0.5	2	0.5	7.1	55
3XASY	3 X0.5	3	0.5	7.5	79
3GASY	3 G0.5	3	0.5	7.5	79
4XASY	4 X0.5	4	0.5	8.0	92
4GASY	4 G0.5	4	0.5	8.0	92
5XASY	5 X0.5	5	0.5	8.5	106
5GASY	5 G0.5	5	0.5	8.5	106
7XASY	7 X0.5	7	0.5	9.1	124
7GASY	7 G0.5	7	0.5	9.1	124
9XASY	9 X0.5	9	0.5	10.7	158
9GASY	9 G0.5	9	0.5	10.7	158
10XASY	10 X0.5	10	0.5	11.1	173
10GASY	10 G0.5	10	0.5	11.1	173
12XASY	12 X0.5	12	0.5	11.4	190
12GASY	12 G0.5	12	0.5	11.4	190
14XASY	14 X0.5	14	0.5	11.9	210
14GASY	14 G0.5	14	0.5	11.9	210
16XASY	16 X0.5	16	0.5	12.4	232
16GASY	16 G0.5	16	0.5	12.4	232
18XASY	18 X0.5	18	0.5	13.0	256
18GASY	18 G0.5	18	0.5	13.0	256
20XASY	20 X0.5	20	0.5	13.9	288
20GASY	20 G0.5	20	0.5	13.9	288
2XBSY	2 X0.75	2	0.75	7.7	81
3XBSY	3 X0.75	3	0.75	8.0	94
3GBSY	3 G0.75	3	0.75	8.0	94

4XBSY	4 X0.75	4	0.75	8.6	111
4GBSY	4 G0.75	4	0.75	8.6	111
5XBSY	5 X0.75	5	0.75	9.2	129
5GBSY	5 G0.75	5	0.75	9.2	129
7XBSY	7 X0.75	7	0.75	9.9	154
7GBSY	7 G0.75	7	0.75	9.9	154
9XBSY	9 X0.75	9	0.75	11.6	198
9GBSY	9 G0.75	9	0.75	11.6	198
10XBSY	10 X0.75	10	0.75	12.1	216
10GBSY	10 G0.75	10	0.75	12.1	216
12XBSY	12 X0.75	12	0.75	12.4	239
12GBSY	12 G0.75	12	0.75	12.4	239
14XBSY	14 X0.75	14	0.75	13.0	266
14GBSY	14 G0.75	14	0.75	13.0	266
16XBSY	16 X0.75	16	0.75	13.8	305
16GBSY	16 G0.75	16	0.75	13.8	305
18XBSY	18 X0.75	18	0.75	14.5	337
18GBSY	18 G0.75	18	0.75	14.5	337
20XBSY	20 X0.75	20	0.75	15.2	365
20GBSY	20 G0.75	20	0.75	15.2	365

Part Code	Cable Description	No. Of Cores	Nom. Conductor Size (mm ²)	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
2XCSY	2 X1.0	2	1.0	8.1	93
3XCSY	3 X1.0	3	1.0	8.4	109
3GCSY	3 G1.0	3	1.0	8.4	109
4XCSY	4 X1.0	4	1.0	9.1	129
4GCSY	4 G1.0	4	1.0	9.1	129
5XCSY	5 X1.0	5	1.0	9.8	152
5GCSY	5 G1.0	5	1.0	9.8	152
7XCSY	7 X1.0	7	1.0	10.5	184
7GCSY	7 G1.0	7	1.0	10.5	184
9XCSY	9 X1.0	9	1.0	12.4	236
9GCSY	9 G1.0	9	1.0	12.4	236
10XCSY	10 X1.0	10	1.0	12.9	258
10GCSY	10 G1.0	10	1.0	12.9	258
12XCSY	12 X1.0	12	1.0	13.3	287
12GCSY	12 G1.0	12	1.0	13.3	287
14XCSY	14 X1.0	14	1.0	14.1	331

14GCSY	14 G1.0	14	1.0	14.1	331
16XCSY	16 X1.0	16	1.0	14.8	369
16GCSY	16 G1.0	16	1.0	14.8	369
18XCSY	18 X1.0	18	1.0	15.5	408
18GCSY	18 G1.0	18	1.0	15.5	408
20XCSY	20 X1.0	20	1.0	16.3	442
20GCSY	20 G1.0	20	1.0	16.3	442
2XDSY	2 X1.5	2	1.5	8.6	108
3XDSY	3 X1.5	3	1.5	9.0	124
3GDSY	3 G1.5	3	1.5	9.0	124
4XDSY	4 X1.5	4	1.5	9.7	153
4GDSY	4 G1.5	4	1.5	9.7	153
5XDSY	5 X1.5	5	1.5	10.5	181
5GDSY	5 G1.5	5	1.5	10.5	181
7XDSY	7 X1.5	7	1.5	11.3	215
7GDSY	7 G1.5	7	1.5	11.3	215
9XDSY	9 X1.5	9	1.5	13.4	285
9GDSY	9 G1.5	9	1.5	13.4	285
10XDSY	10 X1.5	10	1.5	14.2	321
10GDSY	10 G1.5	10	1.5	14.2	321
12XDSY	12 X1.5	12	1.5	14.6	352
12GDSY	12 G1.5	12	1.5	14.6	352
14XDSY	14 X1.5	14	1.5	15.3	403
14GDSY	14 G1.5	14	1.5	15.3	403
16XDSY	16 X1.5	16	1.5	16.0	450
16GDSY	16 G1.5	16	1.5	16.0	450
18XDSY	18 X1.5	18	1.5	16.8	499
18GDSY	18 G1.5	18	1.5	16.8	499
20XDSY	20 X1.5	20	1.5	17.7	543
20GDSY	20 G1.5	20	1.5	17.7	543
2XESY	2 X2.5	2	2.5	10.4	159

Part Code	Cable Description	No. Of Cores	Nom. Conductor Size (mm ²)	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
3XESY	3 X2.5	3	2.5	11.0	191
3GESY	3 G2.5	3	2.5	11.0	191
4XESY	4 X2.5	4	2.5	11.9	233
4GESY	4 G2.5	4	2.5	11.9	233
5XESY	5 X2.5	5	2.5	12.9	278

5GESY	5 G2.5	5	2.5	12.9	278
7XESY	7 X2.5	7	2.5	14.2	353
7GESY	7 G2.5	7	2.5	14.2	353
9XESY	9 X2.5	9	2.5	17.1	459
9GESY	9 G2.5	9	2.5	17.1	459
10XESY	10 X2.5	10	2.5	17.8	505
10GESY	10 G2.5	10	2.5	17.8	505
12XESY	12 X2.5	12	2.5	18.4	568
12GESY	12 G2.5	12	2.5	18.4	568
1FXESY	14 X2.5	14	2.5	19.3	641
1FGESY	14 G2.5	14	2.5	19.3	641
1GXESY	16 X2.5	16	2.5	20.3	719
1GGESY	16 G2.5	16	2.5	20.3	719
18XESY	18 X2.5	18	2.5	21.4	801
18GESY	18 G2.5	18	2.5	21.4	801
20XESY	20 X2.5	20	2.5	22.6	873
20GESY	20 G2.5	20	2.5	22.6	873
2XFSY	2 X4	2	4	11.9	218
3XFSY	3 X4	3	4	12.6	268
3GFSY	3 G4	3	4	12.6	268
FXFSY	4 X4	4	4	13.9	341
FGFSY	4 G4	4	4	13.9	341
5XFSY	5 X4	5	4	15.1	410
5GFSY	5 G4	5	4	15.1	410
7XFSY	7 X4	7	4	16.4	514
7GFSY	7 G4	7	4	16.4	514
9XFSY	9 X4	9	4	19.9	671
9GFSY	9 G4	9	4	19.9	671
10XFSY	10 X4	10	4	20.8	740
10GFSY	10 G4	10	4	20.8	740
12XFSY	12 X4	12	4	21.5	839
12GFSY	12 G4	12	4	21.5	839
2XGSY	2 X6	2	6	14.0	308
3XGSY	3 X6	3	6	14.9	384
3GGSY	3 G6	3	6	14.9	384
FXGSY	4 X6	4	6	16.2	477
FGGSY	4 G6	4	6	16.2	477
5XGSY	5 X6	5	6	17.7	578
5GGSY	5 G6	5	6	17.7	578

7XGSY	7 X6	7	6	19.3	731
7GGSY	7 G6	7	6	19.3	731
9XGSY	9 X6	9	6	23.5	958
Part Code	Cable Description	No. Of Cores	Nom. Conductor Size (mm ²)	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
9GGSY	9 G6	9	6	23.5	958
2XHSY	2 X10	2	10	17.0	456
3XHSY	3 X10	3	10	18.0	574
3GHSY	3 G10	3	10	18.0	574
4XHSY	4 X10	4	10	19.8	721
4GHSY	4 G10	4	10	19.8	721
5XHSY	5 X10	5	10	21.7	878
5GHSY	5 G10	5	10	21.7	878
7XHSY	7 X10	7	10	23.7	1119
7GHSY	7 G10	7	10	23.7	1119
9XHSY	9 X10	9	10	29.1	1473
9GHSY	9 G10	9	10	29.1	1473
2X1GSY	2 X16	2	16	20.1	666
3X1GSY	3 X16	3	16	21.4	851
3G1GSY	3 G16	3	16	21.4	851
4X1GSY	4 X16	4	16	23.6	1077
4G1GSY	4 G16	4	16	23.6	1077
5X1GSY	5 X16	5	16	25.9	1321
5G1GSY	5 G16	5	16	25.9	1321
7X1GSY	7 X16	7	16	28.4	1700
7G1GSY	7 G16	7	16	28.4	1700
2XJSY	2 X25	2	25	24.2	985
3XJSY	3 X25	3	25	25.9	1273
3GJSY	3 G25	3	25	25.9	1273
4XJSY	4 X25	4	25	28.6	1622
4GJSY	4 G25	4	25	28.6	1622
5XJSY	5 X25	5	25	31.2	1982
5GJSY	5 G25	5	25	31.2	1982
7XJSY	7 X25	7	25	33.9	2533
7GJSY	7 G25	7	25	33.9	2533
2X35SY	2 X35	2	35	27.6	1268
3X35SY	3 X35	3	35	29.5	1644
3G35SY	3 G35	3	35	29.5	1644
4X35SY	4 X35	4	35	32.2	2072

4G35SY	4 G35	4	35	32.2	2072
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Sheath / Jacket Colour



Colour	Colour Code
1) Grey (RAL 7001)	G8U
2) Transparent*	368
3) Black	010
4) Blue	006
5) Orange 003 6) Violet 007	

* Transparent jacket colour by default will have a Grey (RAL 7001) inner jacket colour. For all other colours the inner and outer jacket colour will be the same. Special colours can also be provided upon request.

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:



5 | X | 2 | . | 5 | S | Y

G | 8 | U

2 | 0 | 0 | M

Select the part code from Table A

Select the sheath / jacket colour code

Select the putup length code

5	X	2	.	5	S	Y
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G	8	U	2	0	0	M
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Cable Stock Code = 5X2.5SY G8U200M

