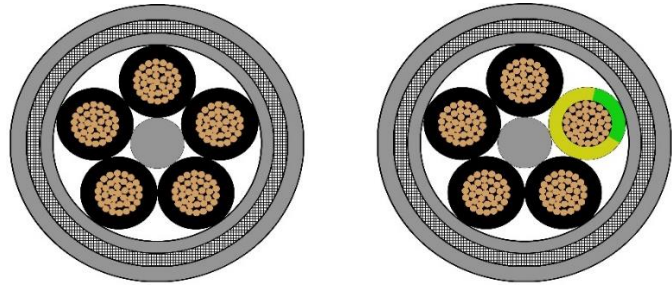


## MachFlex 350CH

### Tinned Copper Braid Shield (TCB)



### Application

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. Tinned copper braid shield ensures cables with excellent noise immunity. This LSZH material emits limited smoke and no halogen when exposed to high sources of heat. It can considerably reduce the amount and density of the smoke, toxic and corrosive gas emitted during a fire, enable easier evacuation as well as safer firefighting operations.

### General Reference Standards

- DIN VDE 0295, IEC 60228, BS 6360
- IEC 60227-5, EN 50525-3-11
- EN 50290-2-25, EN 50290-2-27
- 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 & Color	Polypropylene, DIN VDE 0293-1 ( color ) A) All black colour with number coding = without protective earth conductor. <b>OR</b> B) Black colour with number coding and 1 GN/YE colour conductor = with protective earth conductor.
3	Braid Armor Material	Tinned Copper Braid Shield
4	Inner / Out Jacket Material	LSZH ( Low Smoke Zero Halogen )
5	Flame Retardancy	VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2
6	Oil Resistant	70°C x 4h ( IEC 60811 )
7	Voltage Rating (U <sub>0</sub> /U)	300 / 500 V
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	Test Voltage	4000 V
11	Smoke/ Halogen Properties	IEC 61034-2, IEC 60754-1, IEC 60754-2, VDE 0482-754-1, VDE 0482-754-2
12	Other Properties	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)
2X0.5CH	2 X0.5	2	0.5	7.1	68
3X0.5CH	3 X0.5	3	0.5	7.4	76
3G0.5CH	3 G0.5	3	0.5	7.4	76
4X0.5CH	4 X0.5	4	0.5	8.0	91
4G0.5CH	4 G0.5	4	0.5	8.0	91
5X0.5CH	5 X0.5	5	0.5	8.6	102
5G0.5CH	5 G0.5	5	0.5	8.6	102
6G0.5CH	6 G0.5	6	0.5	9.4	132
7X0.5CH	7 X0.5	7	0.5	9.4	140
7G0.5CH	7 G0.5	7	0.5	9.4	140
9X0.5CH	9 X0.5	9	0.5	11.3	173
9G0.5CH	9 G0.5	9	0.5	11.3	173
10X0.5CH	10 X0.5	10	0.5	11.7	179
10G0.5CH	10 G0.5	10	0.5	11.7	179
12X0.5CH	12 X0.5	12	0.5	12.0	205
12G0.5CH	12 G0.5	12	0.5	12.0	205
14X0.5CH	14 X0.5	14	0.5	12.7	214
14G0.5CH	14 G0.5	14	0.5	12.7	214
16X0.5CH	16 X0.5	16	0.5	13.1	237
16G0.5CH	16 G0.5	16	0.5	13.1	237
18X0.5CH	18 X0.5	18	0.5	13.7	271
18G0.5CH	18 G0.5	18	0.5	13.7	271
20X0.5CH	20 X0.5	20	0.5	14.4	293
20G0.5CH	20 G0.5	20	0.5	14.4	293
2X0.75CH	2 X0.75	2	0.75	7.6	82
3X0.75CH	3 X0.75	3	0.75	8.0	93
3G0.75CH	3 G0.75	3	0.75	8.0	93
4X0.75CH	4 X0.75	4	0.75	8.6	109
4G0.75CH	4 G0.75	4	0.75	8.6	109
5X0.75CH	5 X0.75	5	0.75	9.5	138
5G0.75CH	5 G0.75	5	0.75	9.5	138
6G0.75CH	6 G0.75	6	0.75	10.1	159
7X0.75CH	7 X0.75	7	0.75	10.1	163
7G0.75CH	7 G0.75	7	0.75	10.1	163
9X0.75CH	9 X0.75	9	0.75	12.1	204
9G0.75CH	9 G0.75	9	0.75	12.1	204
10X0.75CH	10 X0.75	10	0.75	12.6	241
10G0.75CH	10 G0.75	10	0.75	12.6	241
12X0.75CH	12 X0.75	12	0.75	13.0	252
12G0.75CH	12 G0.75	12	0.75	13.0	252
13G0.75CH	13 G0.75	13	0.75	13.6	273
14X0.75CH	14 X0.75	14	0.75	13.6	280
14G0.75CH	14 G0.75	14	0.75	13.6	280
16X0.75CH	16 X0.75	16	0.75	14.2	299
16G0.75CH	16 G0.75	16	0.75	14.2	299

Part Code	Cable Description	No. of Cores	Nom. Conductor Size (mm <sup>2</sup> )	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
18X0.75CH	18 X0.75	18	0.75	15.0	341
18G0.75CH	18 G0.75	18	0.75	15.0	341
20X0.75CH	20 X0.75	20	0.75	15.7	367
20G0.75CH	20 G0.75	20	0.75	15.7	367
26G0.75CH	26 G0.75	26	0.75	17.2	453
2X1.0CH	2 X1.0	2	1.0	8.0	91
3X1.0CH	3 X1.0	3	1.0	8.3	105
3G1.0CH	3 G1.0	3	1.0	8.3	105
4X1.0CH	4 X1.0	4	1.0	9.3	133
4G1.0CH	4 G1.0	4	1.0	9.3	133
5X1.0CH	5 X1.0	5	1.0	10.0	156
5G1.0CH	5 G1.0	5	1.0	10.0	156
7X1.0CH	7 X1.0	7	1.0	10.7	186
7G1.0CH	7 G1.0	7	1.0	10.7	186
9X1.0CH	9 X1.0	9	1.0	12.9	241
9G1.0CH	9 G1.0	9	1.0	12.9	241
10X1.0CH	10 X1.0	10	1.0	13.3	262
10G1.0CH	10 G1.0	10	1.0	13.3	262
12X1.0CH	12 X1.0	12	1.0	13.8	290
12G1.0CH	12 G1.0	12	1.0	13.8	290
14X1.0CH	14 X1.0	14	1.0	14.4	324
14G1.0CH	14 G1.0	14	1.0	14.4	324
16X1.0CH	16 X1.0	16	1.0	15.1	361
16G1.0CH	16 G1.0	16	1.0	15.1	361
18X1.0CH	18 X1.0	18	1.0	15.8	398
18G1.0CH	18 G1.0	18	1.0	15.8	398
20X1.0CH	20 X1.0	20	1.0	16.6	432
20G1.0CH	20 G1.0	20	1.0	16.6	432
2X1.5CH	2 X1.5	2	1.5	8.5	119
3X1.5CH	3 X1.5	3	1.5	9.3	138
3G1.5CH	3 G1.5	3	1.5	9.3	138
4X1.5CH	4 X1.5	4	1.5	10.0	162
4G1.5CH	4 G1.5	4	1.5	10.0	162
5X1.5CH	5 X1.5	5	1.5	10.8	192
5G1.5CH	5 G1.5	5	1.5	10.8	192
7X1.5CH	7 X1.5	7	1.5	11.6	233
7G1.5CH	7 G1.5	7	1.5	11.6	233
9X1.5CH	9 X1.5	9	1.5	14.1	313
9G1.5CH	9 G1.5	9	1.5	14.1	313
10X1.5CH	10 X1.5	10	1.5	14.6	314
10G1.5CH	10 G1.5	10	1.5	14.6	314
12X1.5CH	12 X1.5	12	1.5	15.1	368
12G1.5CH	12 G1.5	12	1.5	15.1	368
14X1.5CH	14 X1.5	14	1.5	15.7	393
14G1.5CH	14 G1.5	14	1.5	15.7	393
16X1.5CH	16 X1.5	16	1.5	16.5	438
16G1.5CH	16 G1.5	16	1.5	16.5	438

Part Code	Cable Description	No. of Cores	Nom. Conductor Size (mm <sup>2</sup> )	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
18X1.5CH	18 X1.5	18	1.5	17.3	487
18G1.5CH	18 G1.5	18	1.5	17.3	487
20X1.5CH	20 X1.5	20	1.5	18.3	528
20G1.5CH	20 G1.5	20	1.5	18.3	528
2X2.5CH	2 X2.5	2	2.5	10.4	163
3X2.5CH	3 X2.5	3	2.5	11.0	197
3G2.5CH	3 G2.5	3	2.5	11.0	197
4X2.5CH	4 X2.5	4	2.5	11.9	238
4G2.5CH	4 G2.5	4	2.5	11.9	238
5X2.5CH	5 X2.5	5	2.5	12.9	281
5G2.5CH	5 G2.5	5	2.5	12.9	281
7X2.5CH	7 X2.5	7	2.5	14.0	346
7G2.5CH	7 G2.5	7	2.5	14.0	346
9X2.5CH	9 X2.5	9	2.5	17.0	466
9G2.5CH	9 G2.5	9	2.5	17.0	466
10X2.5CH	10 X2.5	10	2.5	17.6	492
10G2.5CH	10 G2.5	10	2.5	17.6	492
12X2.5CH	12 X2.5	12	2.5	18.4	573
12G2.5CH	12 G2.5	12	2.5	18.4	573
14X2.5CH	14 X2.5	14	2.5	19.1	624
14G2.5CH	14 G2.5	14	2.5	19.1	624
16X2.5CH	16 X2.5	16	2.5	20.4	721
16G2.5CH	16 G2.5	16	2.5	20.4	721
18X2.5CH	18 X2.5	18	2.5	21.5	802
18G2.5CH	18 G2.5	18	2.5	21.5	802
20X2.5CH	20 X2.5	20	2.5	22.7	872
20G2.5CH	20 G2.5	20	2.5	22.7	872
2X4CH	2 X4	2	4	11.9	222
3X4CH	3 X4	3	4	12.6	271
3G4CH	3 G4	3	4	12.6	271
4X4CH	4 X4	4	4	13.7	333
4G4CH	4 G4	4	4	13.7	333
5X4CH	5 X4	5	4	14.9	400
5G4CH	5 G4	5	4	14.9	400
7X4CH	7 X4	7	4	16.2	497
7G4CH	7 G4	7	4	16.2	497
9X4CH	9 X4	9	4	20.0	674
9G4CH	9 G4	9	4	20.0	674
10X4CH	10 X4	10	4	20.8	742
10G4CH	10 G4	10	4	20.8	742
12X4CH	12 X4	12	4	21.6	860
12G4CH	12 G4	12	4	21.6	860
2X6CH	2 X6	2	6	13.8	303
3X6CH	3 X6	3	6	14.6	375
3G6CH	3 G6	3	6	14.6	375
4X6CH	4 X6	4	6	16.0	470
4G6CH	4 G6	4	6	16.0	470

Part Code	Cable Description	No. of Cores	Nom. Conductor Size (mm <sup>2</sup> )	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
5X6CH	5 X6	5	6	17.5	562
5G6CH	5 G6	5	6	17.5	562
7X6CH	7 X6	7	6	19.1	709
7G6CH	7 G6	7	6	19.1	709
9X6CH	9 X6	9	6	23.6	955
9G6CH	9 G6	9	6	23.6	955
2X10CH	2 X10	2	10	16.7	429
3X10CH	3 X10	3	10	17.8	539
3G10CH	3 G10	3	10	17.8	539
4X10CH	4 X10	4	10	19.8	722
4G10CH	4 G10	4	10	19.8	722
5X10CH	5 X10	5	10	21.7	844
5G10CH	5 G10	5	10	21.7	844
7X10CH	7 X10	7	10	23.8	1068
7G10CH	7 G10	7	10	23.8	1068
9X10CH	9 X10	9	10	29.2	1403
9G10CH	9 G10	9	10	29.2	1403
2X16CH	2 X16	2	16	20.1	694
3X16CH	3 X16	3	16	21.5	818
3G16CH	3 G16	3	16	21.5	818
4X16CH	4 X16	4	16	23.6	1086
4G16CH	4 G16	4	16	23.6	1086
5X16CH	5 X16	5	16	26.0	1259
5G16CH	5 G16	5	16	26.0	1259
7X16CH	7 X16	7	16	28.5	1609
7G16CH	7 G16	7	16	28.5	1609
2X25CH	2 X25	2	25	24.2	1012
3X25CH	3 X25	3	25	25.9	1213
3G25CH	3 G25	3	25	25.9	1213
4X25CH	4 X25	4	25	28.6	1577
4G25CH	4 G25	4	25	28.6	1577
5X25CH	5 X25	5	25	31.5	1916
5G25CH	5 G25	5	25	31.5	1916
7X25CH	7 X25	7	25	34.2	2431
7G25CH	7 G25	7	25	34.2	2431
2X35CH	2 X35	2	35	26.6	1229
3X35CH	3 X35	3	35	28.5	1583
3G35CH	3 G35	3	35	28.5	1583
4X35CH	4 X35	4	35	31.4	1996
4G35CH	4 G35	4	35	31.4	1996

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

## Sheath / Jacket Color

Color	Color Code
1) Grey ( RAL 7001 )	G8U
2) Black	010
3) Blue	006

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

