



**Product:** [20G1.0SH](#)

MachFlex™ 350 SH, 19C + 1G 1 mm<sup>2</sup> Str BC, PP Ins, LSZH Inner Jkt, GSW Brd, LSZH Outer Jkt

### Product Description

MachFlex™ 350 SH Control Cable 19 Conductor + 1 Ground 1 mm<sup>2</sup> Stranded Bare Copper, PP Insulation, LSZH Inner Jacket, Galvanized Steel Wire Braiding Armor, LSZH Outer Jacket

### Technical Specifications

#### Product Overview

Suitable 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. Galvanized steel wire braid armor provides excellent mechanical protection. 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.
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#### Construction Details

##### Conductor

Element	No. of Elements	Size	Stranding	Stranding Class	Material
Conductor(s)	19	1 mm <sup>2</sup>	Stranded	Class 5	BC - Bare Copper
Ground	1	1 mm <sup>2</sup>	Stranded	Class 5	BC - Bare Copper

##### Insulation

Element	Material	Color Code
Conductor(s)	PP - Polypropylene	Black #1, Black #2, Black #3, Black #4, Black #5, Black #6, Black #7, Black #8, Black #9, Black #10, Black #11, Black #12, Black #13, Black #14, Black #15, Black #16, Black #17, Black #18, Black #19
Ground	PP - Polypropylene	Yellow/Green

##### Inner Jacket

Material
LSZH - Low Smoke Zero Halogen (Flame Retardant)

##### Armor

Armor Type & Material
SWB - Steel Wire Braid Armor

##### Outer Jacket

Material
LSZH - Low Smoke Zero Halogen (Flame Retardant)

Overall Cable Diameter (Nominal):	16.9 mm (0.665 in)
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#### Electrical Characteristics

##### Voltage

Voltage Rating
300 / 500 V (Max. Operating Voltage), 4000 V (Testing Voltage)

#### Mechanical Characteristics

##### Temperature

Operating	Installation
-25°C to +70°C (Occasional movement)	-40°C to +80°C (Fixed installation)

#### Bend Radius

Installation Min.	Flexing Min.
101.4 mm (3.992 in)	338 mm (13.3 in)

Bulk Cable Weight: 442 kg/km (297 lbs/1000ft)

#### Standards and Compliance

Environmental Suitability:	UV Resistance, Oil Resistance
Flammability / Reaction to Fire:	IEC 60332-1-2, DIN VDE 048233212, DIN EN 6033212
ISO/IEC Compliance:	IEC 60228
CENELEC Compliance:	EN 50290-2-22EN 50290-2-27
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2)
Other Standard Compliance(s):	VDE 0295, IEC 60227-5, EN 50525-3-11, EN 61034-2, BS 6360

#### Product Notes

Notes:	Smoke/Halogen Properties : IEC 60754-1, IEC 60754-2, VDE 0482-754-1, VDE 0482-754-2
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#### History

Update and Revision:	Revision Number: 0.17 Revision Date: 03-05-2024
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#### Part Numbers

##### Variants

Item #	Color	Length
20G1.0SH 010100M	Black	100 m
20G1.0SH 010200M	Black	200 m
20G1.0SH 010300M	Black	300 m
20G1.0SH 006100M	Blue	100 m
20G1.0SH 006200M	Blue	200 m
20G1.0SH 006300M	Blue	300 m
20G1.0SH G8U100M	Gray, RAL 7001	100 m
20G1.0SH G8U200M	Gray, RAL 7001	200 m
20G1.0SH G8U300M	Gray, RAL 7001	300 m

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