

Product: [H12G10L](#) 



MachFlex™ 610HH, 11+1G C 1.0mm² Str BC, LSZH Ins, LSZH Jkt, UL AWM Style 21115

Product Description

MachFlex™ 610HH, 11 Conductor + 1 Ground 1.0mm² Stranded Bare Copper, LSZH Insulation, LSZH Jacket , UL AWM Style 21115

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. Utilizing 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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Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	1 mm ²	Class 5	BC - Bare Copper	11
Ground	1 mm ²	Class 5	BC - Bare Copper	1

Conductor Count: 12

Insulation

Material
LSZH - Low Smoke Zero Halogen (Flame Retardant)

Color Chart

Color
Black #1
Black #2
Black #3
Black #4
Black #5
...
Black #11
Green/Yellow

Outer Jacket

Material	Nominal Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	12.38mm

Electrical Characteristics

Conductor DCR

Max. Conductor DCR
19.5 Ohm/km

Voltage

Dielectric Withstand Voltage	Non-UL Description	Non-UL Voltage Rating
4000 V	IEC:	600/1000 V

Temperature Range

Installation Temperature Range:	-40°C to +80°C
Operating Temperature Range:	-25°C to +70°C

Mechanical Characteristics

Oil Resistance:	Yes
UV Resistance:	Yes
Bulk Cable Weight:	242 kg/km
Min. Bend Radius During Installation:	4 x OD
Min. Bend Radius During Operation:	15 x OD

Standards

UL AWM Style Compliance:	AWM 21115
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Applicable Environmental and Other Programs

EU Directive 2011/65/EU (RoHS 2):	Yes
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Suitability

Suitability - Indoor:	Yes
Suitability - Oil Resistance:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2, IEC 60332-3-24, IEC 60332-3-25
Other Flammability:	DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-3-24, IEC 60332-3-25
IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity:	10 µS/mm
IEC 60754-2 - Halogen Acid Gas Amount - Min. pH:	4.3
IEC 61034-2 - Smoke Density Min. Transmittance:	60

History

Update and Revision:	Revision Number: 0.11 Revision Date: 11-09-2022
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