



Product: [12C0.5YY](#)

MachFlex™ LiYY, 12 C 0.5mm² Str BC, PVC Ins, PVC Jkt

Product Description

MachFlex™ LiYY PVC Control VDE Certified & Signal Cables, 12 Conductor 0.5mm² Stranded Bare Copper, PVC Insulation, PVC 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, pressure gauge, temperature controllers, control panels, vibration monitoring systems, intelligent security controllers, production machinery and many more
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Physical Characteristics (Overall)

Conductor				
Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	0.5 mm²	Stranded	BC - Bare Copper	12
Conductor Count: 12				

Insulation	
Material	
PVC - Polyvinyl Chloride	

Color Chart	
Number	Color
1	White
2	Brown
3	Green
4	Yellow
5	Grey
6	Pink
7	Blue
8	Red
9	Black
10	Violet
11	Gray with Pink strips
12	Red with Blue strips

Outer Jacket	
Material	Nominal Diameter
PVC - Polyvinyl Chloride	8.2 mm

Electrical Characteristics

Conductor DCR	
Max. Conductor DCR	
39 Ohm/km	

Capacitance	
Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield

120 pF/m	160 pF/m
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Insulation Resistance:	20 GOhm x cm
Min Insulation Resistance:	20 GOhm x cm

Inductance

Nominal Inductance
0.5 µH/m

Voltage

Description	Voltage Rating [V]
Operating Voltage	500 V
Testing Voltage	1500 V

Temperature Range

Installation Temperature Range:	-40°C to +80°C
Operating Temperature Range:	-5°C to +70°C

Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	111 kg/km
Min. Bend Radius During Installation:	4 x OD
Min. Bend Radius During Operation:	10 x OD

Standards

Other Specification:	IEC 60228, DIN EN 50290222, VDE 0812, DIN VDE 020736341, DIN 47100, DIN VDE 0295, BS 6360
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Suitability

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

Flammability, LS0H, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
Other Flammability:	DIN VDE 0482-332-1-2, DIN EN 60332-1-2

Related Part Numbers

Variants

Item #	Color	Length
12C0.5YY 010305M	Black, RAL 9005	305 m
12C0.5YY 010500M	Black, RAL 9005	500 m
12C0.5YY 0101000M	Black, RAL 9005	1,000 m
12C0.5YY F2V305M	Gray, RAL 7032	305 m
12C0.5YY F2V500M	Gray, RAL 7032	500 m
12C0.5YY F2V1000M	Gray, RAL 7032	1,000 m

History

Update and Revision:	Revision Number: 0.20 Revision Date: 04-08-2022
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