



Product: [10P0.5YCY](#)

MachFlex™ LiYCY(TP), 10 Pr 0.5mm² Str BC, PVC Ins, TCBS, PVC Jkt

Product Description

MachFlex™ LiYCY(TP) Control VDE Certified & Twisted Pair PVC Signal Cables 10 Pair 0.5mm² Stranded Bare Copper, PVC Insulation, Tinned Copper Braid Shield, 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. Tinned copper braid shield ensure the cables with excellent noise immunity. Twisted pair (TP) design reduced crosstalk effects

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	0.5 mm ²	Stranded	BC - Bare Copper	20

Conductor Count: 20

Insulation

Material
PVC - Polyvinyl Chloride

Color Chart

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

Outer Shield

Type	Material
Braid	Tinned Copper (TC)

Outer Jacket

Material	Nominal Diameter
PVC - Polyvinyl Chloride	14.1 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

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:	244 kg/km
Min. Bend Radius During Installation:	6 x OD
Min. Bend Radius During Operation:	15 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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Applicable Environmental and Other Programs

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

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

Flammability, LSOH, 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
10P0.5YCY 010305M	Black, RAL 9005	305 m
10P0.5YCY 010500M	Black, RAL 9005	500 m
10P0.5YCY F2V305M	Gray, RAL 7032	305 m
10P0.5YCY F2V500M	Gray, RAL 7032	500 m

History

Update and Revision:	Revision Number: 0.22 Revision Date: 04-08-2022
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