



Product: [2P0.5YCY](#)

MachFlex™ LiYCY(TP), 2 Pr 0.5mm² Str BC, PVC Ins, TCBS, PVC Jkt

Product Description

MachFlex™ LiYCY(TP) Control VDE Certified & Twisted Pair PVC Signal Cables 2 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 cooper braid shield ensure the cables with excellent noise immunity.Twistedpair (TP) design reduced crosstalk effects
------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Physical Characteristics (Overall)

Conductor				
Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	0.5 mm²	Stranded	BC - Bare Copper	4
Conductor Count: 4				

Insulation	
Material	
PVC - Polyvinyl Chloride	

Color Chart	
Number	Color
1	White, Brown
2	Green, Yellow

Outer Shield	
Type	Material
Braid	Tinned Copper (TC)

Outer Jacket	
Material	Nominal Diameter
PVC - Polyvinyl Chloride	8.1 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:	72 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
----------------------	-------------------------------------------------------------------------------------------

Applicable Environmental and Other Programs

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

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
2P0.5YCY 010305M	Black, RAL 9005	305 m
2P0.5YCY 010500M	Black, RAL 9005	500 m
2P0.5YCY 0101000M	Black, RAL 9005	1,000 m
2P0.5YCY F2V305M	Gray, RAL 7032	305 m
2P0.5YCY F2V500M	Gray, RAL 7032	500 m
2P0.5YCY F2V1000M	Gray, RAL 7032	1,000 m

History

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

© 2022 Belden, Inc  
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.