BELDEN

Product: MRTB3C15S ↗

MachFlex™ Robotic Multi-Core Control, 3 C 15 AWG Str TC, ETFE Ins, TCBS, PVC Outer Jkt

Product Description

MachFlex™ Robotic Multi-Core Control & Signal Cable, 3 Conductor 15 AWG Stranded Tinned Copper, ETFE Insulation, Tinned Copper Braid Shield, PVC Outer Jacket

Technical Specifications

Product Overview

Suitable Applications:	MachFlex Robotic AWM 2586, Multi-Core Cables are meeting the high demands of the robotic industry on the cabling of continuous moving machinery and the corresponding robotic components. These cables are specially designed for high mechanical requirements, they can withstand highly dynamic bending and torsional movements, and can be used in crucial industrial environments.

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Stranding Class	Material
Conductor(s)	3	15 AWG	Stranded	Class 6	TC - Tinned Copper

Insulation

Material	Color Code
ETFE - Ethylene Tetrafluoroethylene	Black, White, Red

Outer Shield

Shield Type	Material
Braid	Tinned Copper (TC)

Outer Jacket

Material
PVC - Polyvinyl Chloride

Overall Cable Diameter (Nominal):	8.1 mm (0.32 in)

Electrical Characteristics

Electricals

Max. Conductor DCR
9.9 Ohm/km (3.0 Ohm/1000ft)

Voltage

UL Voltage Rating
600 V (Max. Operating Voltage)

Mechanical Characteristics

Temperature

Operating
40°C to +105°C

Table Notes:	±90º Bending: Min. 8 million cycles (Speed: 60 cycles/min.; Bending radius: 7.5D) ; Drag Chain: Min. 25 million cycles (Traversing distance: 350mm; Speed: 70 cycles/min; Bending radius: 6D) ; Vertical Torsion Test +/-180º/m: Min. 8 million cycles ; Horizontal Torsion Test +/-90º/m: Min. 8 million cycles.

Bulk Cable Weight:	118.9 kg/km (79.90 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	IndoorOutdoor, Indoor, Outdoor, Oil Resistance
Flammability / Reaction to Fire:	FT1, FT4, VW-1, IEC 60332-1-2
AWM Compliance:	AWM 2586
CEC / C(UL) Compliance:	CSA C22.2 No.210
European Directive Compliance:	EU Directive 2011/65/EU (RoHS 2)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	UL certification : UL 13. Suitability -Oil Resistant : IRM 902 120x18hrs, IRM 903 120x18hrs

History

Update and Revision:	Revision Number: 0.20 Revision Date: 05-31-2024

Part Numbers

Variants

Item #	Color	Length
MRTB3C15S G8U100M	Gray	100 m
MRTB3C15S G8U200M	Gray	200 m
MRTB3C15S G8U300M	Gray	300 m
MRTB3C15S 003100M	Orange	100 m
MRTB3C15S 003200M	Orange	200 m
MRTB3C15S 003300M	Orange	300 m