

# Product: MRTA6P24U



MachFlex<sup>™</sup> Robotic Multi-Pair Control, 6 Pr 24 AWG Str TC, ETFE Ins, PVC Outer Jkt

# **Product Description**

MachFlex™ Robotic Multi-Pair Control & Signal Cable, 6 Pair 24 AWG Stranded Tinned Copper, ETFE Insulation, PVC Outer Jacket

### **Technical Specifications**

### **Product Overview**

Suitable Applications:	MachFlex Robotic AWM 20276, Multi-Pair 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

Elemer	t No. of Elements	Size	Stranding	Material
Pair(s)	6	24 AWG	Stranded	TC - Tinned Copper

#### Insulation

Material	Color Code
ETFE - Ethylene Tetrafluoroethylene	1. Black&Brown, 2. Black&Red, 3. Black&Orange, 4. Black&Yellow, 5. Black&Green, 6. Black&Blue
Outer Jacket	

Material PVC - Polyvinyl Chloride	e
Overall Cable Diameter (Nominal):	5.2 mm (0.20 in)

### **Electrical Characteristics**

#### Electricals

Ma	Max. Conductor DCR
	94.2 Ohm/km (28.7 Ohm/1000ft)

#### Voltage

UL Voltage Rating 30 V (Max. Operating Voltage)

## **Mechanical Characteristics**

Temperature	
Operating -40°C to +80°C	
Table Notes:	±90° 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 +/-180°/m: Min. 8 million cycles; Horizontal Torsion Test +/-90°/m: Min. 8 million cycles.
Bulk Cable Weight:	46.6 kg/km (31.3 lbs/1000ft)
Standards and C	Compliance
Environmental Suitability:	IndoorOutdoor, Indoor, Outdoor, Oil Resistance

Flammability / Reaction to Fire:	FT1, VW-1, IEC 60332-1-2
AWM Compliance:	AWM 20276
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:

Suitability -Oil Resistant : IRM 902 120x18hrs, IRM 903 120x18hrs

**History** 

Update and Revision: Revision Number: 0.32 Revision Date: 05-31-2024

### **Part Numbers**

#### Variants

ltem #	Color	Length
MRTA6P24U G8U100M	Gray	100 m
MRTA6P24U G8U200M	Gray	200 m
MRTA6P24U G8U300M	Gray	300 m
MRTA6P24U 003100M	Orange	100 m
MRTA6P24U 003200M	Orange	200 m
MRTA6P24U 003300M	Orange	300 m

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