



Product: [76005WS](#)

MachFlex™, 5 C #28 Str TC, SRPVC Ins, OS+TC Srv, PVC Jkt, CMG

[Request Sample](#)

Product Description

MachFlex™ for High Flex, 5 Conductor 28AWG (7x36) Tinned Copper, SRPVC Insulation, Overall Beldfoil®+Tinned Copper Serve(90%) Shield, PVC Outer Jacket, CMG

Technical Specifications

Product Overview

Suitable Applications:	Robotics, Robot, Continuous Flex
------------------------	----------------------------------

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	28	7x36	TC - Tinned Copper	5

Conductor Count:	5
------------------	---

Insulation

Element	Material	Nominal Wall Thickness
Conductor(s)	PVC - Polyvinyl Chloride	0.010 in

Outer Shield

Type	Material	Coverage [%]	Drainwire Material	Drainwire AWG
Tape	Bi-Laminate (Alum+Poly)	100%	TC - Tinned Copper	26
Spiral Serve / Screen	Tinned Copper (TC)	90%		

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.200 in	0.040 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
66 Ohm/1000ft	6.9 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor
25 pF/ft

Inductance

Nominal Inductance
.220 µH/ft

Voltage

UL Voltage Rating
300 V

Temperature Range

UL Temp Rating:	105°C
Operating Temperature Range:	-10°C To 105°C (Static), 5°C To 105°C (Flexing)

Mechanical Characteristics

Flex Cycle Rating:	6 Million Cycles
Bulk Cable Weight:	26 lbs/1000ft
Max. Pull Tension:	10 lbs
Min. Bend Radius (Continuous Flexing):	1.6 in
Min. Bend Radius/Minor Axis:	1.6 in

Standards

NEC/(UL) Compliance:	CM
CEC/C(UL) Compliance:	CMG
UL AWM Style Compliance:	AWM 2661, AWM 10002
CSA AWM Compliance:	AWM I/II A/B

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes

Suitability

Suitability - Sunlight Resistance:	Yes
------------------------------------	-----

Flammability, LS0H, Toxicity Testing

CSA Flammability:	FT4
UL voltage rating:	300 V RMS

Related Part Numbers

Variants

Item #	Color	Put-Up Type	UPC
76005WS 008100	Gray	Reel	612825410409
76005WS 0081000	Gray	Reel	612825410416
76005WS 008500	Gray	Reel	612825410423

History

Update and Revision:	Revision Number: 0.250 Revision Date: 09-26-2023
----------------------	--

© 2025 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.