Product: [7435WS](#) ⧉

MachFlex™, 2+1G C #14 Str BC, PVC-NYL Ins, OA TC Brd, TPE Jkt, TPE Jkt, 1000V WTTC, 600V TC-ER

⊞ Request Sample

Product Description

MachFlex™ for High Flex, 2+1G Conductor 14AWG (41x30) Bare Copper, PVC-NYL Insulation, Overall Tinned Copper Braid(85%) Shield, TPE Inner Jacket, TPE Outer Jacket, 1000V WTTC, 600V TC-ER

Technical Specifications

Product Overview

Suitable Applications:	Robotics, Robot, Continuous Flex

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
	14	41x30	BC - Bare Copper	2
Ground Wire	14	41x30	BC - Bare Copper	1

Conductor Count:		3

Insulation

Material	Nominal Diameter
PVC/Nylon - Polyvinyl Chloride + Nylon	0.117 in

Color Chart

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Green/Yellow

Inner Jacket

Material	Nominal Diameter	Nominal Wall Thickness
TPE - Thermoplastic Elastomer	0.285 in	0.025 in

Outer Shield

Type	Material	Coverage [%]	Nominal Diameter
Braid	Tinned Copper (TC)	85%	0.313 in

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
TPE - Thermoplastic Elastomer	0.407 in	0.047 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
2.5 Ohm/1000ft

Voltage

UL Voltage Rating

1000 V RMS	
600 V RMS	

Temperature Range

UL Temp Rating:	75°C Dry, 90°C Wet
Other Temp Range:	Flexing: -5°C To +90 °C

Mechanical Characteristics

Oil Resistance:	Yes
Flex Cycle Rating:	1 Million Flexes
Bulk Cable Weight:	119 lbs/1000ft
Max. Pull Tension:	201 lbs
Min. Bend Radius (Continuous Flexing):	4.1 in

Standards

NEC/(UL) Compliance:	TC-ER, WTTC
CEC/C(UL) Compliance:	CIC, TC
UL AWM Style Compliance:	AWM 20328
CSA AWM Compliance:	AWM I/II A/B

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	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)
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Non-Halogenated:	No
Suitability - Oil Resistance:	Yes - Oil Res II
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT4
IEEE Flammability:	1202
UL voltage rating:	1000 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
7435WS 060250	Chrome	Reel	250 ft	612825186595
7435WS 0601000	Chrome	Reel	1,000 ft	612825186588
7435WS 0605000	Chrome	Reel	5,000 ft	612825186601

Footnote:	C - CRATE REEL PUT-UP.

History

Update and Revision:	Revision Number: 0.283 Revision Date: 02-03-2025

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Belden Wire & Cable](#):

[7435WS 0601000](#) [7435WS 060250](#)