Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

83335 Multi-Conductor - MIL-W-16878/4 (Type E) Control and Instrumentation Cable

Obsolete
Call
1-800-BELDEN1

For more Information please call

1-800-Belden1

Description:

20 AWG stranded (19x32) silver-plated copper conductors, cabled and color-coded, extruded TFE Teflon® insulation, silver-plated copper braid (90% coverage), TFE Teflon® tape-wrapped jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
3	20	19x32	SPC - Silver Plated Copper

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (in.)
Teflon®	TFE - Tetrafluoroethylene	.010

Insulation Resistance:	100, 000 Megaohms/1000 ft. @ 500 V DC

Outer Shield

Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Braid	SPC - Silver Plated Copper	90

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material	Nom. Wall Thickness (in.)
Teflon®	TFE - Tetrafluoroethylene	.010

Overall Cabling

Overall Cabling Lay Length & Direction:

Length (in.)	Twists (ft.)
1.75	6.8

Overall Cabling Color Code Chart:

Number	Color
1	White
2	Black
3	Red

Overall Nominal Diameter:	0.167 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-65°C To +200°C
Bulk Cable Weight:	29 lbs/1000 ft.
Max. Recommended Pulling Tension:	74.800 lbs.
Min. Bend Radius (Install)/Minor Axis:	1.750 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

Military Specification:	MIL-W-16878/4 (Type E except stranding) (insulated conductors)

Flame Test

UL Flame Test:	UL1685 UL Loading, VW-1

Plenum/Non-Plenum

Plenum (Y/N):	No
Non-Plenum Number:	83335E

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Electrical Characteristics (Overall)

Nom. Inductance:

Inductance (µH/ft)
.124

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
31.7

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
51.0

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
7.3

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.4

Max. Operating Voltage - UL:

Voltage
600 V RMS

Max. Recommended Current:

Current
6.5 Amps per conductor @ 25°C

Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc

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