

METRIC MEASUREMENT VERSION

77807WS Multi-Conductor - 600V Shielded, Continuous Flexing Applications Up to 14 Million Flex Life Cycles



For more Information
please call

1-800-Belden1

General Description:

18 AWG stranded (105x38) bare copper conductors, PVC insulation, oil-resistant PVC inner jacket, tinned copper braid shield, 85% coverage, oil-resistant overall PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (mm)
6	18	105x38	BC - Bare Copper	1.321

Total Number of Conductors: 7

Ground Wire

Ground Wire (Y/N): Y

Ground Wire AWG: 18

Ground Wire Stranding: 105x38

Ground Wire Conductor Material: BC - Bare Copper

Ground Wire Insulation Material: PVC - Polyvinyl Chloride

Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)	Dia. (mm)
PVC - Polyvinyl Chloride	0.559	2.438

Insulation Color Code Chart:

Color	Description
Black	Individually Numbered
Yellow/Green	Ground

Inner Jacket

Inner Jacket Material:

Inner Jacket Material	Nom Wall (mm)	Nom. Dia. (mm)
PVC - Polyvinyl Chloride	0.762	10.363

Outer Shield

Outer Shield Material:

Outer Shield Material	Coverage (%)
TC - Tinned Copper	85.000

Outer Shield Separator Material: Tissue Tape, 25#; Overlap, Min.

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	1.143

Overall Cable

Overall Nominal Diameter: 13.513 mm

Mechanical Characteristics (Overall)

Storage Temperature Range: -40°C To +90°C

Installation Temperature Range: Flexing: -5°C To +90°C

Operating Temperature Range: Flexing: -5°C To +90°C

Bulk Cable Weight: 511.941 Kg/Km

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Max. Recommended Pulling Tension:	467.061 N
Min. Bend Radius/Minor Axis:	109.220 mm
Min. Bend/Installation:	109.220 mm
Min. Bend Radius (Continuous Flexing):	109.220 mm
Flex Cycle Rating:	14 Million Flexes

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	THHN/THWN Singles
AWM Specification:	UL Style 2587 (600 V 90°C)
CSA Specification:	600 V AWM I/II A/B
EU Directive 2011/65/EU (ROHS II):	Yes
Other Specification:	AWM/STYLE 10012, AWM/STYLE 2587, AWM I/II A/B, FT1, VDE 0472, Section 803 Oil Test, EU Low Voltage Directive 2014/35/EC, EU Directive 2011/65/EU (RoHS2), REACH Regulation (EC 1907/2006), California Proposition 65

Flame Test

CSA Flame Test:	FT1
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Electrical Characteristics (Overall)

Nom. Inductance:

Inductance (µH/m)
0.623

Nom. Capacitance Cond. to Other Cond. & Ground:

Description	Freq. (kHz)	Capacitance (pF/m)
Nom. Cond. to Cond	1.000	147.645
Nom. Ground.	1.000	265.761

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
20.998

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
6.660

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
77807WS 010100	100 FT	39.800 LB	BLACK		18AWG 105/38 7C SHIELDED
77807WS 0101000	1,000 FT	380.000 LB	BLACK		18AWG 105/38 7C SHIELDED

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