

# Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

## 89418 Multi-Conductor - Audio, Control and Instrumentation Cable



For more Information  
please call

1-800-Belden1



### General Description:

18 AWG stranded (19x30) TC conductors, conductors cabled, plenum, FEP insulation, overall Beldfoil® shield (100% coverage), 20 AWG stranded TC drain wire, FEP jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
4	18	19x30	TC - Tinned Copper

Total Number of Conductors: 4

#### Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)
FEP - Fluorinated Ethylene Propylene	0.1778

#### Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape w/Shorting Fold	100

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
20	19x32	TC - Tinned Copper

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
FEP - Fluorinated Ethylene Propylene	0.3556

#### Overall Cable

Overall Cabling Lay Length & Direction:

Length (mm)	Direction	Twists (twist/m)
50.800	Left Hand	19.686

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	White
3	Red
4	Green

Overall Nominal Diameter: 4.394 mm

### Mechanical Characteristics (Overall)

Operating Temperature Range: -70°C To +200°C

Bulk Cable Weight: 52.087 Kg/Km

Max. Recommended Pulling Tension: 507.095 N

Min. Bend Radius/Minor Axis: 44.450 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

NEC Articles: 800

CEC/C(UL) Specification: CMP

EU Directive 2011/65/EU (ROHS II): Yes

EU CE Mark: Yes

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EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

#### Flame Test

UL Flame Test:	NFPA 262
CSA Flame Test:	FT6

#### Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Burial:	Yes

#### Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	9418

#### Electrical Characteristics (Overall)

##### Nom. Inductance:

Inductance ( $\mu$ H/m)
0.49215

##### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)
98.43

##### Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)
187.017

##### Nominal Velocity of Propagation:

VP (%)
69

##### Nominal Delay:

Delay (ns/m)
0.482307

##### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
20.9984

##### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
25.9199

##### Max. Operating Voltage - UL:

Voltage
300 V RMS

##### Max. Recommended Current:

Description	Current
10C Temperature Rise	4.3 Amps per conductor @ 25°C ambient

#### Notes (Overall)

Notes: Chemical Resistance: Gasoline, Oil

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
89418 002100	30 MT	2,449 KG	RED	C	4#18 FEP FS FEP
89418 0021000	305 MT	16,783 KG	RED	C	4#18 FEP FS FEP
89418 002500	152 MT	8,845 KG	RED	C	4#18 FEP FS FEP
89418 0025000	1,524 MT	83,915 KG	RED	C Z	4#18 FEP FS FEP

##### Notes:

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

### 89418 Multi-Conductor - Audio, Control and Instrumentation Cable

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