

ShawFlex Item #: 4C03HM180110013

600V CSA Type TC INSTRUMENTATION CABLE
1TR 18AWG 7W TINNED COPPER, FR XLPE (RW90) Insulation
FR PVC Jacket , Overall Copper Tape Shield
Suitable for use in 90C WET/105C DRY, SUN RES , -40C, FT4 , Direct Burial
TCBCD rated for Class I Zone 2 (Div 2) & Class II Div 2 Hazardous Locations

Specification Reference

CSA C22.2 #230, Tray Cables
 CSA C22.2 #38, Thermoset Insulated Wires and Cables

Electrical Characteristics

Voltage Class (volts):	600		
Max. DC Conductor Res. (ohms/Mft @25C):	7.364	(	24.16 ohms/km)
Capacitance(cond to cond)(pF / ft):	21.3	(	69.87 pF / mt)
Capacitance (cond to shield)(pF / ft):	39.8	(	131 pF / mt)
Ampacity @ 30C (amps)*:	5		
Inductive Reactance (Ohms/1000ft):	0.043	(	0.14 ohms/Km)
Characteristic Impedance (Ohms):	78.8		

Construction Specifications

Type of Conductor Stranding:	18AWG 7W TINNED COPPER		
ASTM Standard (Conductor):	ASTM B8 & ASTM B33		
Diameter of Conductor (in):	0.046	(	1.17 mm)
Conductor Insulation Type:	FR XLPE (RW90)		
Insulation Thickness (in):	0.030	(	0.76 mm)
Nominal Insulated Wire Diameter (in):	0.108	(	2.74 mm)
Triad Identification:	White, Black & Red		
Nominal Cable Lay (in):	3.3	(	83.8 mm)
Type of Conductor Shielding Tape:	3/4" X 5 MIL COPPER TAPE Single Helical Copper Tape (50% Overlap)		
Jacket Material Type & Colour:	90C -40C FR PVC, BLACK		
Average Jacket Thickness (in):	0.045	(	1.14 mm)
Nominal Overall Diameter of Cable (in):	0.363	(	9.2 mm)
Jacket Identification:	SHAWFLEX 1TR 18AWG 600V CSA INSTRUMENTATION CABLE CIC TYPE TCBCD 90C WET/105C DRY XLPE OS SHIELDED SUN RES DIRECT BURIAL -40C FT4 MADE IN CANADA 4C03HM180110013 (mo#) (month year) (sequential metre marking every 1 metre)		

Physical Characteristics

Cable Weight (lbs/Mft):	92	(	137 kg/km)
Max. Pulling Tension (Pulling Eye) (lbs):	39	(	18 kg)
Max. Pulling Tension (Cable Grip) (lbs):	45	(	20 kg)
Min. Bending Radius: Permanent (in):	4.4	(	111 mm)
Min. Bending Radius: Pull (in):	6.5	(	166 mm)
Max. Conductor Temperature (C):	90C WET/105C DRY		
Recommended Min. Install Temp. (C):	-25C		
Copper Content(lbs/Mft):	46.2	(	68.8 kg/km)
Flame Propagation Test Rating:	CSA FT-4		
Additional Ratings:	TCBCD , -40C Cold Impact, -40C Cold Bend , SUN RES RoHS Compliant		

* Ampacity value based on Canadian Electrical Code, Version 2015, Table-57. Values are corrected according to number of Conductors.
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