

## ShawFlex Item #: 4C02HM180110013

**600V CSA Type TC INSTRUMENTATION TRAY CABLE  
 1PR 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 )
Pair Identification:	Black & Red		
Nominal Cable Lay (in):	3.3	(	83.8 mm )
Type of Conductor Shielding Tape:	1/2" 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):	0.346	(	8.8 mm )
Jacket Identification:	SHAWFLEX 1PR 18AWG 600V CSA INSTRUMENTATION CABLE CIC TYPE TCBCD 90C WET/105C DRY XLPE OS SHIELDED SUN RES DIRECT BURIAL -40C FT4 MADE IN CANADA 4C02HM180110013 (mo#) (month year) (sequential metre marking every 1 metre)		

**Physical Characteristics**

Cable Weight (lbs/Mft):	78	(	117 kg/km )
Max. Pulling Tension (Pulling Eye) (lbs):	26	(	12 kg )
Max. Pulling Tension (Cable Grip) (lbs):	43	(	19 kg )
Min. Bending Radius: Permanent (in):	4.2	(	105 mm )
Min. Bending Radius: Pull (in):	6.2	(	158 mm )
Max. Conductor Temperature (C):	90C WET/105C DRY		
Recommended Min. Install Temp. (C):	-25C		
Copper Content(lbs/Mft):	38.9	(	58.0 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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