

ShawFlex Item #: 4C021M180110000



ShawFlex, a division of Shawcor

600V CSA Type TC INSTRUMENTATION TRAY CABLE
1PR 18AWG 7W TINNED COPPER, FR XLPE (RW90) Insulation
FR PVC Jacket , Overall Aluminum/Mylar Tape Shielding
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
CSA C22.2 #239, Control & Instrumentation 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 & White		
Nominal Staggered Pair Lay (in):	1.5	(38.1	mm)
Type of Overall Shielding Tape:	1.0" X 1.35 MIL STR-EDGE AL/MYLAR Tape		
Overall Shielding Drain Wire Size:	22AWG 7W TINNED COPPER		
Jacket Type & Colour:	90C -40C FR PVC, BLACK		
Average Inner Jacket Thickness (in):	0.060	(1.52	mm)
Nominal Overall OD of Cable (in):	0.353	(9.0	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 4C021M180110000 (mo#) (month year) (sequential metre marking every 1 metre)		

Physical Characteristics

Cable Weight (lbs/Mft):	54	(81	kg/km)
Max. Pulling Tension (Pulling Eye) (lbs):	26	(12	kg)
Max. Pulling Tension (Cable Grip) (lbs):	55	(25	kg)
Min. Bending Radius: Permanent (in):	4.2	(108	mm)
Min. Bending Radius: Pull (in):	6.4	(161	mm)
Max. Conductor Temperature (C):	90C WET/105C DRY		
Recommended Min. Install Temp. (C):	-10C		
Copper Content(lbs/Mft):	12.5	(18.5	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.

This specification is issued on condition that it is not copied, reprinted or disclosed either wholly or in part to any third party, or used for manufacture by any party; without the consent of ShawFlex.