

# ShawFlex Item #: 64222M160418700



**300V CSA ACIC ARMOURED INSTRUMENTATION CABLE**  
**4PR 16AWG 7W TINNED COPPER, XLPE Insulation , Individual and Overall Aluminum/Mylar Tape Shielding**  
**FR PVC LAG Jacket , Aluminum Interlocked Armour**  
**Suitable for use in 90C WET/105C DRY , SUN RES , -40C, FT4**  
**HLBCD rated for Class I Zone 1, Class 1 Zone 2, Class II Div 1 & Class II Div 2 Hazardous Locations**

ShawFlex, a division of Shawcor

## Specification Reference

CSA C22.2 #239, Control & Instrumentation Cables  
CSA C22.2 #38, Thermoset Insulated Wires and Cables  
CSA C22.2 #174, Cables & Glands Suitable for Use in Hazardous Locations

## Electrical Characteristics

Voltage Class (volts):	300		
Max. DC Conductor Res. (ohms/Mft @25C):	4.722	( 15.49	ohms/km )
Capacitance(cond to cond)(pF / ft):	23.6	( 77.53	pF / mt )
Capacitance (cond to shield)(pF / ft):	44.2	( 145	pF / mt )
Ampacity @ 30C (amps)*:	7		
Inductive Reactance (Ohms/1000ft):	0.037	( 0.12	ohms/Km )
Characteristic Impedance (Ohms):	65.5		

## Construction Specifications

Type of Conductor Stranding:	16AWG 7W TINNED COPPER		
ASTM Standard (Conductor):	ASTM B8 & ASTM B33		
Diameter of Conductor (in):	0.058	( 1.47	mm )
Conductor Insulation Type:	XLPE (RW 90)		
Insulation Thickness (in):	0.025	( 0.58	mm )
Nominal Insulated Wire Diameter (in):	0.106	( 2.69	mm )
Pair Identification:	Black & White Number Coded		
Nominal Pair Lay (in):	2.8	( 71.9	mm )
Ind. Component Shield Type:	7/8" X 1.35 MIL FOIL FREE AL/MYLAR Tape		
Ind. Component Shield Drain Wire Size:	22AWG 7W TINNED COPPER		
Nominal Cable Lay (in):	6.7	( 170.2	mm )
Overall Separator Type:	Clear Mylar Tape ( 1mil thick )		
Type of Overall Shielding Tape:	2.0" X 1.35 MIL STR-EDGE AL/MYLAR Tape		
Overall Shielding Drain Wire Size:	20 AWG 7W TINNED COPPER		
Inner Jacket Type & Colour:	90C -40C FR LAG PVC, Black		
Average Inner Jacket Thickness (in):	0.060	( 1.52	mm )
OD Over Inner Jacket (in):	0.577	( 14.7	mm )
Armour Type:	Aluminum Interlocked Armour		
Nominal Diameter over Armour (in):	0.817	( 20.8	mm )
Outer Jacket Material Type & Colour:	90C -40C FR LAG PVC, GREY		
Average Outer Jacket Thickness (in):	0.050	( 1.27	mm )
Nominal Overall Diameter of Cable (in):	0.929	( 23.6	mm )
Jacket Identification:	SHAWFLEX 4PR 16AWG 300V CSA INSTRUMENTATION CABLE ACIC 90C WET/105C DRY XLPE ISOS SHIELDED -40C FT4 HLBCD SUN RES --- DIRECT BURIAL MADE IN CANADA 64222M160418700 (mo#) (month year) (sequential metre marking every 1 metre)		

## Physical Characteristics

Cable Weight (lbs/Mft):	363	( 540	kg/km )
Max. Pulling Tension (Pulling Eye) (lbs):	165	( 75	kg )
Max. Pulling Tension (Cable Grip) (lbs):	138	( 63	kg )
Min. Bending Radius: Permanent (in):	11.1	( 283	mm )
Min. Bending Radius: Pull (in):	16.7	( 425	mm )
Recommended Min. Install Temp. (C):	-10C		
Copper Content(lbs/Mft):	77.2	( 114.9	kg/km )
Flame Propagation Test Rating:	CSA FT4		
Additional Ratings:	HLBCD , -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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