



SMARTSENSE[®] SSFM-100-CC DATA-LINK CABLE

- 1 Pair 22 AWG Overall Shielded & 90% Braid Shield with Jacket + 2/C 14 AWG, provide reliable RS485 datalink and DC Power for the SSFM-100 environmental monitoring system
- Ultra-low conductor resistance: only 8.45 ohms/km for the DC power line.
- Certified for Hazardous locations

PRODUCT DATA SHEET

Part No: SSFM-100-CC

CERTIFICATIONS AND CONSTRUCTION SPECIFICATIONS

Description	1 Pair 22 AWG Overall Shielded & 90% Braid Shield with Jacket + 2/C 14 AWG		
Specification Reference	CSA C22.2 No. 230 Tray Cables CSA C22.2 No. 38 / UL 44 Thermoset Insulated Wires and Cables CSA C22.2 No. 239 Control and Instrumentation Cables		
Conductor	22 AWG 7 Strand Tinned Copper - Concentric 14 AWG 7 Strand Bare Copper - Concentric		
ASTM Standard	ASTM B8, B33		
Conductor Diameter	0.030" / 0.76 mm; 22 AWG 0.073" / 1.85 mm; 14 AWG		
Insulation Type	Flame Retardant Cross Linked Polyethylene RW90		
Insulation Thickness	0.025" / 0.64 mm		
Pair Identification	White/Blue Stripe & Blue/White Stripe		
Drain Wire	22 AWG 7 Strand Tinned Copper - Concentric		
Shielding Tape	Aluminum/Mylar		
Braid Shield	36 AWG Tinned Copper Braid, 90% Coverage		
Conductor Identification	Black, Red		
Cable Assembly	22 AWG conductors are cabled together with flame retardant cable fillers. An overall aluminum/mylar shield and drain are applied (foil side out, drain out). A tinned copper braid shield is applied over the shielded assembly. A PVC jacket is applied over the braid. The jacketed core is cabled together with two 14 AWG conductors, flame retardant cable fillers and an overall clear mylar tape. A PVC jacket is applied overall.		
RipCORDS	Polyester RipCORD included under both the inner jacket and outer jacket		
Inner Jacket over 22 AWG	0.020" / 0.51 mm (minimum average) Flame Retardant Light Blue PVC		
Outer Jacket	0.060" / 1.52 mm (minimum average) Flame Retardant Light Blue PVC		
Overall Cable Diameter	0.608" / 15.44 mm		
Jacket Print	DECA 1PR 22 AWG SHIELDED 2/C 14 AWG 300V CSA TYPE CIC TC 90C WET/105C DRY XLPE SUN RES DIRECT BURIAL -40C FT4 LL83251 work order #, month, year, metre markings (every 1 metre)		

ELECTRICALS

Voltage	300V		
Conductor Resistance	54.5	Ohms/KM @20C	22 AWG
	8.45	Ohms/KM @20C	14 AWG
Inductance	0.236 microhenries/ft	0.774 microhenries/metre;	22 AWG
	0.180 microhenries/ft	0.591 microhenries/metre;	14 AWG
Capacitance	16 pF/ft	52 pF/metre	(on the 14 AWG conductors)
	13 pF/ft	43 pF/metre	(on the 22 AWG shielded pair)
Characteristic Impedance	120	Ohms	(on the 22 AWG shielded pair)

APPLICATIONS AND PHYSICAL PROPERTIES

Applications	Hazardous Locations: Class I Zone 0, Class I, Zone 2, Class II, Zone 22 (Div2)			
Flame Test Rating	CSA FT4			
Temperature Rating	-40C to 90C Wet/105C Dry			
Cable Weight	183	kgs/km	123	lbs/1000ft
Copper Content	63	kgs/km	42	lbs/1000ft
Max Pull Tension (Eye)	48	kgs	106	lbs
Min Bending Radius	127	mm (installed)	5.00	inches (installed)
Nominal Cable Length	3000	metres	9842	feet
Min Install Temperature	-25C			

Technical data are limit values.

If the product is integrated into systems or operated in combination with other devices, its permissible operating values can deviate from these limit values. Subject to technical modifications without prior notice.

Rev. D



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