

INSTRUMENTATION CABLES

FT50/55-ESCSIS SERIES

High Performance Intrinsically Safe Multipair Overall & Individually Foil Screened Tinned Instrumentation Cable 110VAC 90°C



APPLICATIONS:

- Hazardous Areas** Suitable for wiring of intrinsically safe circuits.
- BUS Systems** Extra low capacitance cable suitable for RS485, RS422 POS, building and home BUS automation systems.
- Signal and Controls** Power control or signal/instrumentation cables on machines, conveying equipment or similar industrial applications.
- Marine** Tinned copper conductors for use in marine applications.

PRODUCT FEATURES:

- ▶ Extremely pliable PVC sheath
- ▶ UV stabilised
- ▶ Flame retardant
- ▶ Reduced flame propagation
- ▶ Heat, oil and chemical resistant (*See Technical Section*)

CONSTRUCTION:

- Conductor** Annealed tinned copper stranded (Class 2).
- Insulation** Special SPVC V-90 (available in LSHF on request).
- Filler** Non-hydroscopic polypropylene filler.
- Screening** Collective & individual shield of aluminium/polyester foil complete with tinned copper drain wire (7 strands of 0.2mm²).
- Sheath** Special SPVC 5V-90 (available in LSHF on request).

CHARACTERISTICS:

- Operating Temperature Range** Fixed -20°C to 90°C.
- Maximum Conductor Temperature** 90°C.
- Rated Voltage** 110VAC / 150VDC.
- Minimum Bending Radius** 10 x cable diameter.
- Sheath Colour** Intrinsically safe blue.
- Standard Core Colours** Each pair – 1 x white and 1 x black conductor, with numbered cores.
- Relevant Standards** AS/NZS 1125, AS/NZS 2381, AS/NZS 3808, IEC 60332-1-2, IEC 60079.14, IEC 60332-3-22, **RoHS** Compliant.

Property	0.5mm ²		1.5mm ²	
	Value	Units	Value	Units
DC Conductor Resistance @ 20°C	38.4	Ω/km	13.6	Ω/km
Max. Capacitance Cond. to Cond. (screened)	145	pF/m	200	pF/m
Max. Capacitance Cond. to Scr. (screened)	240	pF/m	300	pF/m
Max. Capacitance Cond. to Cond. (unscreened)	82	pF/m	110	pF/m
Cross talk attenuation between pairs @ 1kHz (screened)	>125	dB/100m	>125	dB/100m
Cross talk attenuation between pairs @ 1kHz (unscreened)	>90	dB/100m	>90	dB/100m
Characteristic impedance @ 1kHz (screened)	300	Ω	150	Ω
Characteristic impedance @ 1kHz (unscreened)	380	Ω	200	Ω
Inductance @ 1kHz	1.00	mH/km	0.95	mH/km
L/R ratio @ 1kHz	13.7	μH/Ω	36.5	μH/Ω
Insulation Resistance @ 20°C	140	MΩ.km	140	MΩ.km

See over for full product table ▶

Firstflex has taken every precaution to ensure accurate information in this catalogue, but accept no liability for any errors or omissions. Firstflex reserves the right to modify specifications at any time.

FT50/55-ESCSIS SERIES continued

Code	No. of Cores x Size (mm ²)	Nearest AWG	Approx. Stranding No. of wires x mm ²	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)
FT5002ESCSIS	2 pair 0.5	20	7/0.30	7.6	58
FT5004ESCSIS	4 pair 0.5	20	7/0.30	10.4	100
FT5006ESCSIS	6 pair 0.5	20	7/0.30	12.7	145
FT5008ESCSIS	8 pair 0.5	20	7/0.30	14.5	193
FT5010ESCSIS	10 pair 0.5	20	7/0.30	14.9	244
FT5012ESCSIS	12 pair 0.5	20	7/0.30	16.3	279
FT5016ESCSIS	16 pair 0.5	20	7/0.30	17.5	370
FT5020ESCSIS	20 pair 0.5	20	7/0.30	19.3	462
FT5024ESCSIS	24 pair 0.5	20	7/0.30	23.5	558
FT5036ESCSIS	36 pair 0.5	20	7/0.30	25.3	792
FT5502ESCSIS	2 pair 1.5	15	7/0.50	10.0	113
FT5504ESCSIS	4 pair 1.5	15	7/0.50	12.1	199
FT5506ESCSIS	6 pair 1.5	15	7/0.50	14.6	290
FT5508ESCSIS	8 pair 1.5	15	7/0.50	16.2	381
FT5510ESCSIS	10 pair 1.5	15	7/0.50	19.0	470
FT5512ESCSIS	12 pair 1.5	15	7/0.50	21.1	570
FT5516ESCSIS	16 pair 1.5	15	7/0.50	22.2	717
FT5520ESCSIS	20 pair 1.5	15	7/0.50	24.2	884
FT5524ESCSIS	24 pair 1.5	15	7/0.50	27.8	1064
FT5536ESCSIS	36 pair 1.5	15	7/0.50	31.9	1535