

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.
- 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.
- Oil and gas industry** with vertical flame propagation to IEC 60332-3-22.

PRODUCT FEATURES:

- ▶ Tinned copper conductors
- ▶ 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	36.7	Ω/km	12.2	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 ▶

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