

FT50/55-CSIS SERIES

High Performance Intrinsically Safe
Multipair Overall 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-hygroscopic polypropylene filler.

Screening Collective shield of aluminium/polyester foil complete with tinned copper drain wire (7 strands of 0.2mm²).

Sheath Special SPVC SV-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 – 1x White and 1x Black conductor, with numbered cores (Triple – White/Black/Red).

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 ▶