

# INSTRUMENTATION CABLES

## FT50/55-ESCS SERIES

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



### APPLICATIONS:

**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 0.2mm<sup>2</sup>).

**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** Black.

**Standard Core Colours** Each pair – 1 x White and 1 x Black conductor, with numbered cores.

**Relevant Standards** AS/NZS 1125, AS/NZS 3808, IEC 60332-1-2, IEC 60079.14, IEC 60332-3-22, **RoHS** Compliant.

Property	0.5mm <sup>2</sup>		1.5mm <sup>2</sup>	
	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 ▶

## FT50/55-ESCS SERIES continued

Code	No. of Cores x Size  (mm <sup>2</sup> )	Nearest AWG	Approx. Stranding  No. of wires x mm <sup>2</sup>	Approx. Overall Diameter  (mm)	Approx. Weight  (Kg/Km)
<b>FT5002ESCS</b>	2 pair 0.5	20	7/0.30	7.6	58
<b>FT5004ESCS</b>	4 pair 0.5	20	7/0.30	10.4	100
<b>FT5006ESCS</b>	6 pair 0.5	20	7/0.30	12.7	145
<b>FT5008ESCS</b>	8 pair 0.5	20	7/0.30	14.5	193
<b>FT5010ESCS</b>	10 pair 0.5	20	7/0.30	14.9	244
<b>FT5012ESCS</b>	12 pair 0.5	20	7/0.30	15.4	279
<b>FT5016ESCS</b>	16 pair 0.5	20	7/0.30	16.3	370
<b>FT5020ESCS</b>	20 pair 0.5	20	7/0.30	19.3	462
<b>FT5024ESCS</b>	24 pair 0.5	20	7/0.30	23.5	558
<b>FT5036ESCS</b>	36 pair 0.5	20	7/0.30	25.3	792
<b>FT5502ESCS</b>	2 pair 1.5	15	7/0.50	10.0	113
<b>FT5504ESCS</b>	4 pair 1.5	15	7/0.50	12.1	199
<b>FT5506ESCS</b>	6 pair 1.5	15	7/0.50	14.6	290
<b>FT5508ESCS</b>	8 pair 1.5	15	7/0.50	16.2	381
<b>FT5510ESCS</b>	10 pair 1.5	15	7/0.50	19.0	470
<b>FT5512ESCS</b>	12 pair 1.5	15	7/0.50	21.1	570
<b>FT5516ESCS</b>	16 pair 1.5	15	7/0.50	22.2	717
<b>FT5520ESCS</b>	20 pair 1.5	15	7/0.50	24.2	884
<b>FT5524ESCS</b>	24 pair 1.5	15	7/0.50	27.8	1064
<b>FT5536ESCS</b>	36 pair 1.5	15	7/0.50	31.9	1535