

# INSTRUMENTATION CABLES

## FT53/56-CS SERIES

High Performance Triad Overall Foil Screened Tinned Instrumentation Cable 110VAC 90°C



### APPLICATIONS:

**Control** Electrical sensing devices to control cabinets and to supervisory consoles and panels.

**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 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 (available in intrinsically safe blue and other colours on request).

**Standard Core Colours** Each Triad – 1 x White, 1 x Black, 1 Red 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 ▶

## FT53/56-CS 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>FT5301CS</b>	1 triple 0.5	20	7/0.30	5.2	36
<b>FT5302CS</b>	2 triple 0.5	20	7/0.30	7.8	70
<b>FT5303CS</b>	3 triple 0.5	20	7/0.30	8.2	93
<b>FT5304CS</b>	4 triple 0.5	20	7/0.30	9.2	120
<b>FT5306CS</b>	6 triple 0.5	20	7/0.30	11.3	179
<b>FT5308CS</b>	8 triple 0.5	20	7/0.30	12.2	225
<b>FT5310CS</b>	10 triple 0.5	20	7/0.30	14.6	290
<b>FT5312CS</b>	12 triple 0.5	20	7/0.30	15.5	348
<b>FT5316CS</b>	16 triple 0.5	20	7/0.30	17.1	442
<b>FT5320CS</b>	20 triple 0.5	20	7/0.30	18.6	543
<b>FT5324CS</b>	24 triple 0.5	20	7/0.30	21.3	653
<b>FT5336CS</b>	36 triple 0.5	20	7/0.30	24.4	936
<b>FT5103ES</b>	1 triple 1.5	15	7/0.50	8.0	70
<b>FT5602CS</b>	2 triple 1.5	15	7/0.50	10.0	142
<b>FT5603CS</b>	3 triple 1.5	15	7/0.50	11.0	198
<b>FT5604CS</b>	4 triple 1.5	15	7/0.50	11.8	251
<b>FT5606CS</b>	6 triple 1.5	15	7/0.50	14.5	373
<b>FT5608CS</b>	8 triple 1.5	15	7/0.50	16.0	491
<b>FT5610CS</b>	10 triple 1.5	15	7/0.50	19.1	624
<b>FT5612CS</b>	12 triple 1.5	15	7/0.50	19.7	726
<b>FT5616CS</b>	16 triple 1.5	15	7/0.50	22.5	946
<b>FT5620CS</b>	20 triple 1.5	15	7/0.50	24.3	1153
<b>FT5624CS</b>	24 triple 1.5	15	7/0.50	27.7	1374
<b>FT5636CS</b>	36 triple 1.5	15	7/0.50	32.0	2014