

INSTRUMENTATION CABLES

FT53/56-ESCS/SWA SERIES

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



APPLICATIONS:

Hazardous Areas This steel wire armour cable is suitable for use for instrumentation in oil and gas industries, mine sites and other harsh environments.

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:

- ▶ Steel wire armoured for hazardous conditions
- ▶ 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 and individual shield of aluminium/polyester foil complete with tinned copper drain wire.

Bedding Flame retardant 5V-90 PVC extruded non hydroscopic.

Armour Steel wire armour.

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 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 ▶

FT53/56-ESCS/SWA SERIES continued

Code	No. of Cores x Size (mm ²)	Nearest AWG	Approx. Stranding No. of wires x mm ²	Overall Diameter over bedding (mm)	Overall Diameter over Armour (mm)	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)	Gland Size
FT5302ESCSWA	2 triple 0.5	20	7/0.30	9.6	11.4	13.6	240	GMCW20S
FT5304ESCSWA	4 triple 0.5	20	7/0.30	11.6	13.4	15.6	410	GMCW20S
FT5306ESCSWA	6 triple 0.5	20	7/0.30	14.0	16.5	19.0	640	GMCW20
FT5308ESCSWA	8 triple 0.5	20	7/0.30	16.4	18.9	21.6	780	GMCW25S
FT5310ESCSWA	10 triple 0.5	20	7/0.30	16.7	19.2	21.9	850	GMCW25S
FT5312ESCSWA	12 triple 0.5	20	7/0.30	18.5	21.7	24.7	1100	GMCW25S
FT5316ESCSWA	16 triple 0.5	20	7/0.30	22.3	25.5	28.5	1350	GMCW32
FT5320ESCSWA	20 triple 0.5	20	7/0.30	24.9	28.1	31.6	1560	GMCW32
FT5324ESCSWA	24 pair 0.5	20	7/0.30	27.9	31.1	34.6	1800	GMCW40
FT5336ESCSWA	36 triple 0.5	20	7/0.30	31.1	35.1	39.2	2600	GMCW40
FT5602ESCSWA	2 triple 1.5	15	7/0.50	12.7	15.2	17.8	400	GMCW20
FT5604ESCSWA	4 triple 1.5	15	7/0.50	15.7	18.2	20.8	800	GMCW25S
FT5606ESCSWA	6 triple 1.5	15	7/0.50	22.8	26.0	29.3	1400	GMCW32
FT5608ESCSWA	8 triple 1.5	15	7/0.50	25.6	28.8	32.4	1660	GMCW32
FT5610ESCSWA	10 triple 1.5	15	7/0.50	26.3	29.5	33.2	1800	GMCW40
FT5612ESCSWA	12 triple 1.5	15	7/0.50	27.2	30.4	33.9	1920	GMCW40
FT5616ESCSWA	16 triple 1.5	15	7/0.50	27.9	31.1	34.6	2180	GMCW40
FT5620ESCSWA	20 triple 1.5	15	7/0.50	31.4	36.2	40.7	2600	GMCW40
FT5624ESCSWA	24 triple 1.5	15	7/0.50	34.2	39.2	43.7	3800	GMCW50S
FT5636ESCSWA	36 triple 1.5	15	7/0.50	41.9	46.9	52.0	4350	GMCW50S