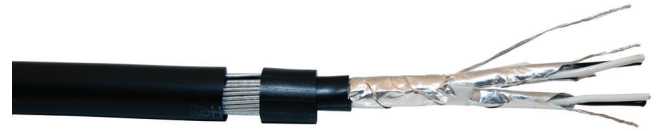


# INSTRUMENTATION CABLES

## FT50/55-ESCS/SWA SERIES

High Performance Multipair 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 petrol, oil and gas field industries, mine sites and other harsh environments.

**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
- ▶ 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 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** Intrinsically safe 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	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-ESCS/SWA SERIES continued

Code	No. of Cores x Size (mm <sup>2</sup> )	Nearest AWG	Approx. Stranding  No. of wires x mm <sup>2</sup>	Overall Diameter over bedding  (mm)	Overall Diameter over Armour  (mm)	Approx. Overall Diameter  (mm)	Approx. Weight  (Kg/Km)	Gland Size
FT5002ESCSWA	2 pair 0.5	20	7/0.30	8	9.8	12.9	245	GMCW16 or GMCW20SS
FT5004ESCSWA	4 pair 0.5	20	7/0.30	10.5	12.3	14.3	340	GMCW20S
FT5006ESCSWA	6 pair 0.5	20	7/0.30	12.7	14.5	16.7	420	GMCW20
FT5008ESCSWA	8 pair 0.5	20	7/0.30	14.5	17.0	19.4	630	GMCW25S
FT5010ESCSWA	10 pair 0.5	20	7/0.30	15.9	18.4	20.9	710	GMCW25S
FT5012ESCSWA	12 pair 0.5	20	7/0.30	16.3	18.8	21.3	760	GMCW25S
FT5016ESCSWA	16 pair 0.5	20	7/0.30	20.2	23.4	26.3	1130	GMCW25
FT5020ESCSWA	20 pair 0.5	20	7/0.30	22.6	25.8	29.2	1304	GMCW32
FT5024ESCSWA	24 pair 0.5	20	7/0.30	23.5	26.7	30.1	1450	GMCW32
FT5502ESCSWA	2 pair 1.5	15	7/0.50	10.8	12.6	14.9	380	GMCW20S
FT5504ESCSWA	4 pair 1.5	15	7/0.50	14.5	17.0	19.6	680	GMCW25S
FT5506ESCSWA	6 pair 1.5	15	7/0.50	17.6	20.8	23.7	1010	GMCW25S
FT5508ESCSWA	8 pair 1.5	15	7/0.50	18.5	21.7	24.7	1130	GMCW25
FT5510ESCSWA	10 pair 1.5	15	7/0.50	22.4	25.6	28.9	1400	GMCW32
FT5512ESCSWA	12 pair 1.5	15	7/0.50	23.5	26.7	30.1	1540	GMCW32
FT5516ESCSWA	16 pair 1.5	15	7/0.50	28.2	31.4	35.3	1950	GMCW40
FT5520ESCSWA	20 pair 1.5	15	7/0.50	31.4	35.4	39.6	2550	GMCW40
FT5524ESCSWA	24 pair 1.5	15	7/0.50	34.3	39.3	44.0	3270	GMCW50S
FT5536ESCSWA	36 pair 1.5	15	7/0.50	42.0	47.0	52.2	4360	GMCW50
FT5550ESCSWA	50 pair 1.5	15	7/0.50	49.2	54.2	60.1	5550	GMCW63