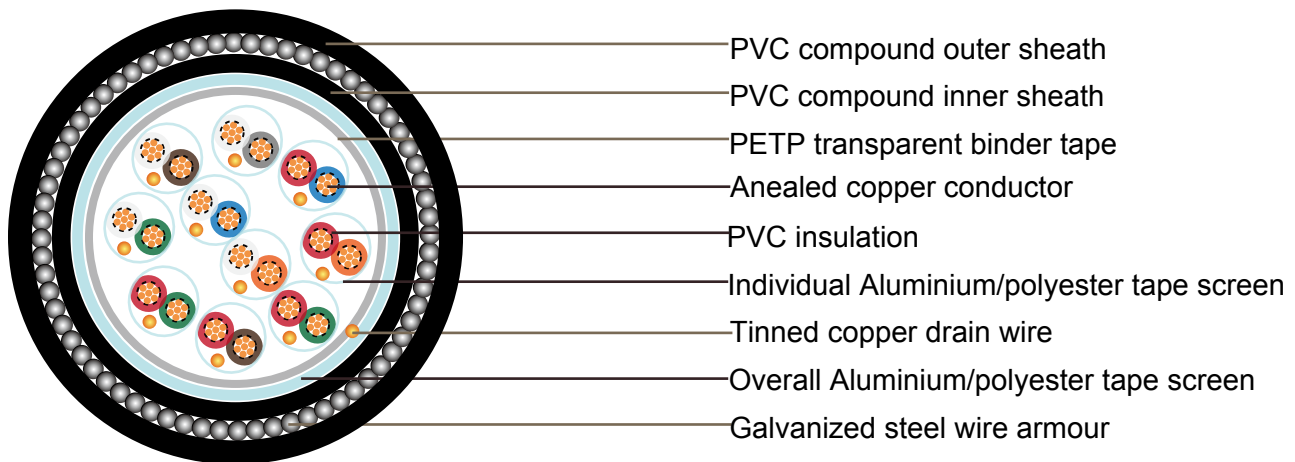




### **BS5308 Cable Part 2 Type 2** **PVC-IS-OS-SWA-PVC/** *RE-Y(St)Y PIMF SWAY*

#### **Application**

The armoured versions (Part 2 Type 2) are generally used when the risk of mechanical damage is increased. The galvanised steel wire armour provides excellent protection. Generally used within industrial process manufacturing plants for communication, data and voice transmission signals and services, Also used for the interconnection of electrical equipment and instruments, typically in chemical or petrolchemical industry. The armored versions are generally use for outdoor installation for direct burial or installed in the duct and suitable for wet and damp areas.



#### **Construction**

<b>Conductor</b>	Annealed or tinned copper, sizes: 0.5mm <sup>2</sup> and 0.75mm <sup>2</sup> multistranded(Class 5), 1.5mm <sup>2</sup> multistranded(Class 2) to BS6360
<b>Insulation</b>	PVC (polyvinyl chloride),type T11 to BS 6746
<b>Pairing</b>	Two insulated conductors uniformly twisted together with a lay not exceeding 100mm
<b>Colour code</b>	Multipair cables:See technical information
<b>Individual screen</b>	Aluminium/polyester tape is applied over each pair metallic side down in contact with tinned copper drain wire, 0.5mm <sup>2</sup>
<b>Binder tape</b>	PETP transparent tape



<b>Collective screen</b>	Aluminium/polyester tape is applied over the laid up pairs metallic side down in contact with tinned copper drain wire, 0.5mm <sup>2</sup>
<b>Inner Sheath</b>	PVC (polyvinyl chloride), type TM 1 to BS 6746
<b>Amour</b>	Galvanized steel wire armour
<b>Outer sheath</b>	PVC Sheath, type TM 1 or type 6 to BS 6746
<b>Sheath colour</b>	Black or blue

## Mechanical and Electrical Properties

**Operating temperature:** -40°C up to + 70°C( fixed installation)  
0°C to +50°C(during operation )

**Minimum bending radius:** 6 x overall diameter

<b>Conductor Area Size</b>	mm <sup>2</sup>	0.5	0.75	1.5
<b>Conductor Stranding</b>	No. x mm	16 x 0.2	24 x 0.2	7 x 0.53
<b>Conductor resistance max</b>	ohm/km	39.7	26.5	12.3
<b>Insulation resistance min</b>	Mohm/km	25	25	25
<b>Max. Mutual Capacitance: pair or adjacent cores</b>	pF/m	250	250	250
<b>Capacitance between any core or screen max.</b>	pF/m	400	400	400
<b>Max. L/R Ratio for adjacent cores(Inductance/Resistance)</b>	µH/ohm	25	25	40
<b>Test voltage</b>	<b>Core to core</b>	V	1000	1000
	<b>Core to screen</b>	V	1000	1000
<b>Rated voltage max</b>	V	300/500	300/500	300/500

## Parameter

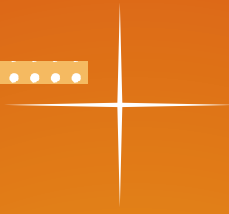
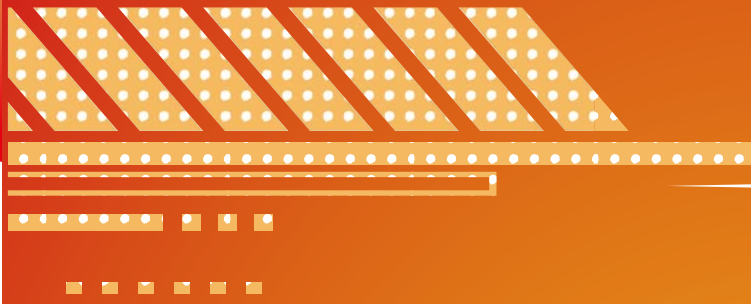
No.of pairs	No.and Dia. of Wires	Nominal Conductor Cross-Sectional Area	Nominal Thick-ness of Insulation	Nominal Thick-ness of bedding	Nominal Dia. over Bedding	Nominal Thick-ness of Armour	Nominal Thick-ness of Sheath	Nominal Dia. of Cable	Approx. Weight
	no./mm	mm <sup>2</sup>	mm	mm	mm	mm	mm	mm	kg/km
2	16/0.2	0.5	0.6	0.8	10.6	0.9	1.3	15	505
5	16/0.2	0.5	0.6	1.1	14.3	0.9	1.5	19.1	830
10	16/0.2	0.5	0.6	1.2	19.1	1.25	1.6	24.8	1420
15	16/0.2	0.5	0.6	1.3	22.2	1.6	1.7	28.8	1570

# Caledonian Instrumentation Cables



## BS5308 Part 2

No. of pairs	No. and Dia. of Wires	Nominal Conductor Cross-Sectional Area	Nominal Thickness of Insulation	Nominal Thickness of bedding	Nominal Dia. over Bedding	Nominal Thickness of Armour	Nominal Thickness of Sheath	Nominal Dia. of Cable	Approx. Weight
	no./mm	mm <sup>2</sup>	mm	mm	mm	mm	mm	mm	kg/km
20	16/0.2	0.5	0.6	1.3	25.3	1.6	1.8	32.1	2040
30	16/0.2	0.5	0.6	1.5	30.6	1.6	1.9	37.6	2610
50	16/0.2	0.5	0.6	1.7	38.9	2	2.1	47.1	4270
2	24/0.2	0.75	0.6	0.8	11.5	0.9	1.4	16.1	545
5	24/0.2	0.75	0.6	1.2	15.7	1.25	1.5	21.2	1005
10	24/0.2	0.75	0.6	1.3	20.9	1.6	1.7	27.5	1400
15	24/0.2	0.75	0.6	1.3	24.2	1.6	1.8	31	1750
20	24/0.2	0.75	0.6	1.5	27.9	1.6	1.8	34.7	2300
30	24/0.2	0.75	0.6	1.7	33.8	2	2	41.8	2460
50	24/0.2	0.75	0.6	2	43.1	2.5	2.3	52.7	4800
2	7/0.53	1.5	0.6	0.9	13	0.9	1.4	17.6	800
5	7/0.53	1.5	0.6	1.2	17.5	1.25	1.6	23.2	1290
10	7/0.53	1.5	0.6	1.3	23.5	1.6	1.8	30.3	1990
15	7/0.53	1.5	0.6	1.5	27.6	1.6	1.9	34.6	2590
20	7/0.53	1.5	0.6	1.5	31.3	1.6	2	38.5	3310
30	7/0.53	1.5	0.6	1.7	38	2	2.1	46.2	4380
50	7/0.53	1.5	0.6	2	48.5	2.5	2.4	58.3	6260



## **ESI 09-6**



**Multipair instrument cables ESI 09-6 Issue 5**

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