



BS5308 Cable Part 2 Type 2 PVC-OS-SWA-PVC/ RE-Y(St)YSWAY

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

Conductor	Annealed or tinned copper, sizes: 0.5mm ² and 0.75mm ² multistranded(Class 5), 1.5mm ² multistranded(Class 2) to BS6360
Insulation	PVC (polyvinyl chloride), type TI1 to BS 6746
Pairing	Two insulated conductors uniformly twisted together with a lay not exceeding 100mm
Colour code	Multicore cables: up to 40 cores yellow with black numbers, 41 - 80 cores black with yellow numbers. Multipair cables:See technical information
Binder tape	PETP transparent tape
Collective screen	Aluminium/polyester tape is applied over the laid up pairs metallic side down in contact with tinned copper drain wire, 0.5mm ²
Inner Sheath	PVC (polyvinyl chloride), type TM 1 to BS 6746
Amour	Galvanized steel wire armour
Outer sheath	PVC Sheath, type TM 1 or type 6 to BS 6746
Sheath colour	Black or blue

Mechanical and Electrical Properties

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

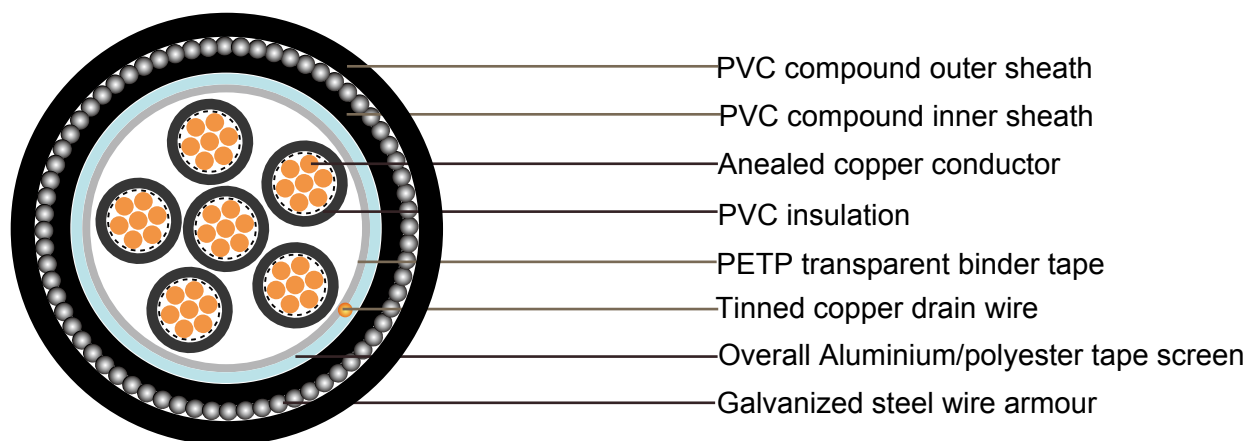
Minimum bending radius: 6 x overall diameter



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

Parameter

Multicore



No. of Cores	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 ²	mm	mm	mm	mm	mm	mm	kg/km
2	16/0.2	0.5	0.6	0.8	6.7	0.9	1.3	11.1	255
3	16/0.2	0.5	0.6	0.8	6.6	0.9	1.3	11.3	280
4	16/0.2	0.5	0.6	0.8	7.2	0.9	1.3	11.6	305
6	16/0.2	0.5	0.6	0.9	8.6	0.9	1.4	13.2	360
10	16/0.2	0.5	0.6	1.1	11.2	0.9	1.5	16	510
20	16/0.2	0.5	0.6	1.2	14.2	1.25	1.6	19.9	960
40	16/0.2	0.5	0.6	1.3	18.7	1.6	1.7	25.3	1440
80	16/0.2	0.5	0.6	1.5	25.8	1.6	1.9	32.8	2200

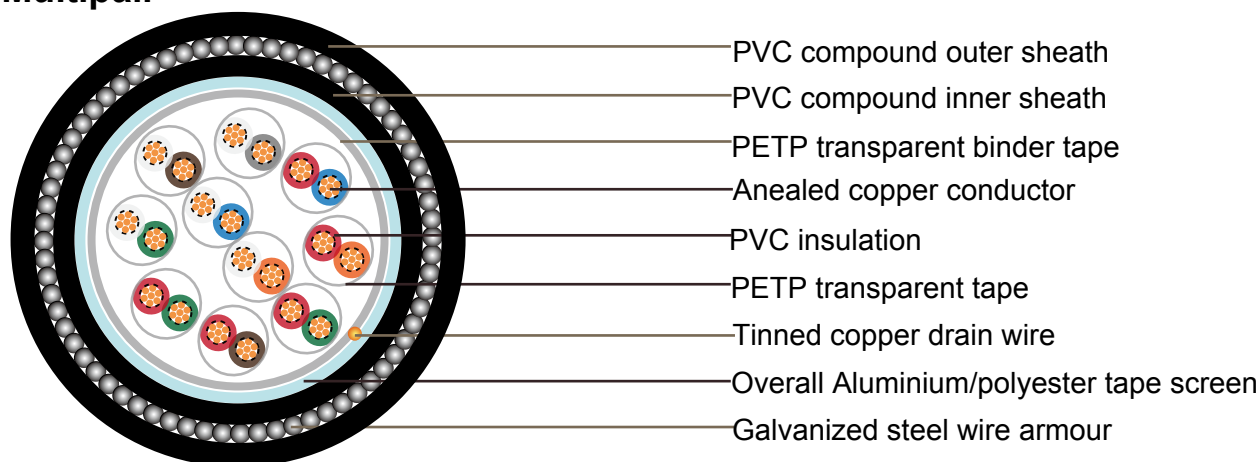
Caledonian Instrumentation Cables



BS5308 Part 2

No. of Cores	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 ²	mm	mm	mm	mm	mm	mm	kg/km
2	24/0.2	0.75	0.6	0.8	7.2	0.9	1.3	11.2	280
3	24/0.2	0.75	0.6	0.8	7.2	0.9	1.3	11.6	305
4	24/0.2	0.75	0.6	0.8	7.8	0.9	1.3	12.4	335
6	24/0.2	0.75	0.6	0.9	9.4	0.9	1.4	14	400
10	24/0.2	0.75	0.6	1.1	12.2	0.9	1.5	17	565
20	24/0.2	0.75	0.6	1.2	15.6	1.25	1.6	21.3	950
40	24/0.2	0.75	0.6	1.3	20.6	1.6	1.7	27.4	1590
80	24/0.2	0.75	0.6	1.5	28.5	1.6	1.9	35.7	2450
2	7/0.53	1.5	0.6	0.8	8	0.9	1.4	12.6	330
3	7/0.53	1.5	0.6	0.9	8.2	0.9	1.4	12.8	380
4	7/0.53	1.5	0.6	0.9	9	0.9	1.4	13.6	420
6	7/0.53	1.5	0.6	1.1	11	0.9	1.4	15.6	540
10	7/0.53	1.5	0.6	1.2	14	1.25	1.6	19.7	750
20	7/0.53	1.5	0.6	1.3	17.9	1.6	1.7	24.5	1260
40	7/0.53	1.5	0.6	1.5	24	1.6	1.9	31	2140
80	7/0.53	1.5	0.6	1.7	32.9	2	2.1	41.1	3300

Multipair



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 ²	mm	mm	mm	mm	mm	mm	kg/km
1	16/0.2	0.5	0.6	0.8	6.2	0.9	1.3	10.6	260
2	16/0.2	0.5	0.6	0.8	7.1	0.9	1.3	11.5	305
5	16/0.2	0.5	0.6	1.1	12.4	0.9	1.5	17.2	610
10	16/0.2	0.5	0.6	1.2	16.5	1.25	1.6	22.2	1060
15	16/0.2	0.5	0.6	1.3	19.2	1.6	1.7	25.8	1330
20	16/0.2	0.5	0.6	1.3	21.7	1.6	1.8	28.5	1800
30	16/0.2	0.5	0.6	1.5	26.4	1.6	1.9	33.4	1980
50	16/0.2	0.5	0.6	1.7	33.4	2	2.1	41.6	3070
1	24/0.2	0.75	0.6	0.8	6.7	0.9	1.3	11.1	305
2	24/0.2	0.75	0.6	0.8	7.7	0.9	1.4	12.3	360
5	24/0.2	0.75	0.6	1.2	13.8	1.25	1.5	19.3	820
10	24/0.2	0.75	0.6	1.3	18.4	1.6	1.7	25	1250
15	24/0.2	0.75	0.6	1.3	21.1	1.6	1.8	27.9	1600
20	24/0.2	0.75	0.6	1.5	24.4	1.6	1.8	31.2	1800
30	24/0.2	0.75	0.6	1.7	29.6	2	2	37.6	2570
50	24/0.2	0.75	0.6	2	37.4	2.5	2.3	47.3	3800
1	7/0.53	1.5	0.6	0.8	7.5	0.9	1.4	12.1	360
2	7/0.53	1.5	0.6	0.9	8.8	0.9	1.4	13.4	460
5	7/0.53	1.5	0.6	1.2	15.6	1.25	1.6	21.3	1040
10	7/0.53	1.5	0.6	1.3	20.9	1.6	1.8	27.7	1610
15	7/0.53	1.5	0.6	1.5	24.6	1.6	1.9	31.6	2060
20	7/0.53	1.5	0.6	1.5	27.8	1.6	2	35	2630
30	7/0.53	1.5	0.6	1.7	33.7	2	2.1	41.9	3460
50	7/0.53	1.5	0.6	2	43	2.5	2.4	52.8	5520