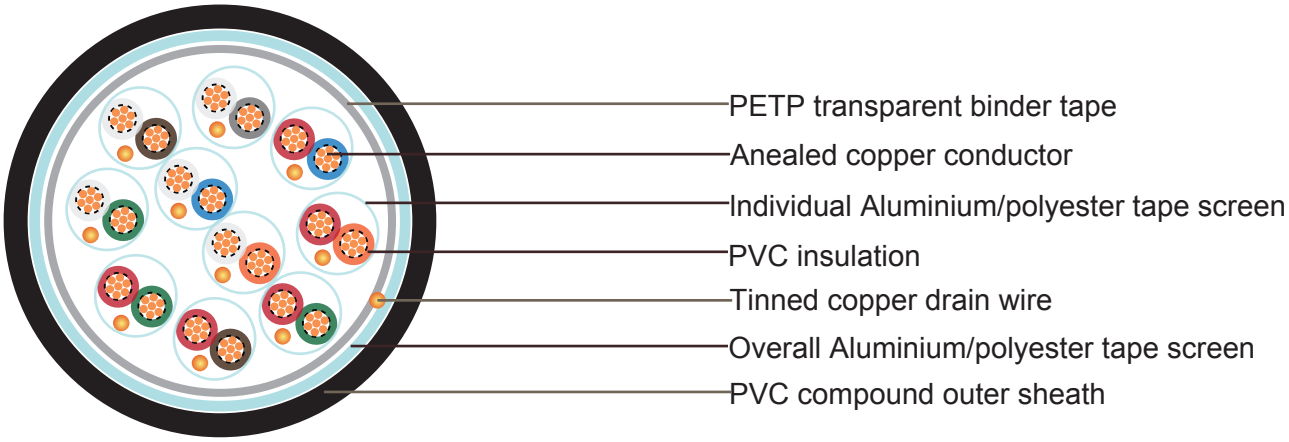
BS5308 Cable Part 2 Type1 PVC-IS-OS-PVC/ *RE-Y(St)Y PIMF*

Application

The unarmoured versions (Part 2 Type 1) are generally use for indoor installation and suitable for wet and damp areas. 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.

Construction



Conductor	Annealed or tinned copper, sizes: 0.5mm² and 0.75mm² mulitistranded(Class 5), 1.5mm² 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	See technical information
Individual screen	Aluminium/polyester tape is applied over each pair metallic side down in contact with tinned copper drain wire, 0.5mm²
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, 0.5mm²
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: 5 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

No.of Pairs	No.and Dia. of Wires	Nominal Conductor Cross-Sectional Area	Nominal Thickness of Insulation	Nominal Thickness of Sheath	Nominal Dia. of Cable	Approx. Weight
	no./mm	mm^2	mm	mm	mm	kg/km
2	16/0.2	0.5	0.6	1.1	11.2	170
5	16/0.2	0.5	0.6	1.2	14.6	270
10	16/0.2	0.5	0.6	1.3	19.4	520
15	16/0.2	0.5	0.6	15	22.7	650
20	16/0.2	0.5	0.6	1.5	25.9	860
30	16/0.2	0.5	0.6	1.7	31.2	1130
50	16/0.2	0.5	0.6	2.2	40.1	1880
2	24/0.2	0.75	0.6	1.1	12.2	200
5	24/0.2	0.75	0.6	1.2	15.8	355
10	24/0.2	0.75	0.6	1.3	21.1	560
15	24/0.2	0.75	0.6	1.5	24.9	770
20	24/0.2	0.75	0.6	1.7	28.6	990
30	24/0.2	0.75	0.6	2	34.7	1380

No.of Pairs	No.and Dia. of Wires	Nominal Conductor Cross-Sectional Area	Nominal Thickness of Insulation	Nominal Thickness of Sheath	Nominal Dia. of Cable	Approx. Weight
	no./mm	mm^2	mm	mm	mm	kg/km
50	24/0.2	0.75	0.6	2.2	43.9	2225
2	7/0.53	1.5	0.6	1.2	13.6	265
5	7/0.53	1.5	0.6	1.3	147.8	490
10	7/0.53	1.5	0.6	1.5	24.1	820
15	7/0.53	1.5	0.6	1.7	28.2	1110
20	7/0.53	1.5	0.6	1.7	31.9	1470
30	7/0.53	1.5	0.6	2	38.8	2070
50	7/0.53	1.5	0.6	2.2	49.1	3340