

INSTRUMENT (OS)

Multi-Pair (Cu or ATC/PVC/OS/PVC)

APPLICATION

These cables are generally used 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 petroleum industry.

STANDARD

BS 5308 Part-1, Type-1

VOLTAGE GRADE

U₀/U : 300/500 V

COLOR

Insulated core : See color chart of technical information

Sheath : or (Black or Blue or Other Colors available on request)

CONSTRUCTION

Conductor: Solid/ Flexible/ Stranded Circular, Plain annealed Copper or Tinned Copper, Class 1 or Class-2 or Class 5 to BS 6360

Insulation: Polyethylene, PE to BS 6234

Pairing: Two insulated core uniformly twisted together

Binder: PETP tape

Collective screen: Aluminium/polyester tape is applied over the laid up pairs with tinned copper drain wire

Sheath: PVC-FR, TM-1-FR to BS 7655



No. of pairs & Cross sectional area of conductor	Shape of conductor	No. of strands & Diameter of Wire	Nominal thickness of insulation	Nominal thickness of sheath	Approx. Overall diameter of cable	Approx. Weight of cable	Max. D.C Resistance of conductor at 20 °C
pair x mm ²	-	no./mm	mm	mm	mm	kg/km	W/km
1Px0.5	re	1/0.8	0.5	0.8	5.5	35	36.8
2Px0.5	re	1/0.8	0.5	0.8	6.8	55	36.8
5Px0.5	re	1/0.8	0.5	1.1	10.9	125	36.8
10Px0.5	re	1/0.8	0.5	1.2	14.4	215	36.8
15Px0.5	re	1/0.8	0.5	1.2	16.5	300	36.8
1Px0.5	rm	16/0.2	0.6	0.8	6.2	60	39.7
2Px0.5	rm	16/0.2	0.6	0.8	7.6	80	39.7
5Px0.5	rm	16/0.2	0.6	1.1	12.4	210	39.7
10Px0.5	rm	16/0.2	0.6	1.2	16.5	340	39.7
15Px0.5	rm	16/0.2	0.6	1.3	19.2	440	39.7
1Px0.75	rm	24/0.2	0.6	0.8	6.7	75	26.5
2Px0.75	rm	24/0.2	0.6	0.9	8.4	100	26.5
5Px0.75	rm	24/0.2	0.6	1.2	13.8	250	26.5
10Px0.75	rm	24/0.2	0.6	1.3	18.4	450	26.5
15Px0.75	rm	24/0.2	0.6	1.5	21.1	600	26.5
1Px1.0	re	1/1.13	0.6	0.8	6.6	85	18.4
2Px1.0	re	1/1.13	0.6	0.8	8.0	115	18.4
5Px1.0	re	1/1.13	0.6	1.2	13.5	290	18.4
10Px1.0	re	1/1.13	0.6	1.2	17.7	500	18.4
15Px1.0	re	1/1.13	0.6	1.3	20.6	670	18.4
1Px1.5	rm	7/0.53	0.6	0.8	7.5	100	12.3
2Px1.5	rm	7/0.53	0.6	0.9	9.3	150	12.3
5Px1.5	rm	7/0.53	0.6	1.2	15.6	360	12.3
10Px1.5	rm	7/0.53	0.6	1.3	20.9	690	12.3
15Px1.5	rm	7/0.53	0.6	1.5	24.6	880	12.3

Characteristics

- Operating Temperature 20°C to 70°C
- Maximum Short Circuit 160°C
- Meter Marking
- Lead free
- Flame Retardant
- Test 1.0kV

Installation condition

- Industrial Use
- Outdoor Installation
- In Duct
- Open air
- In water