

# INSTRUMENT (IS-OS)

## Multi-Pair (Cu or ATC/PE/IS-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

U<sub>0</sub>/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

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

**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 <sup>2</sup>	-	no./mm	mm	mm	mm	kg/km	W/km
2Px0.5	re	1/0.8	0.5	0.9	9.7	95	36.8
5Px0.5	re	1/0.8	0.5	1.2	13.0	180	36.8
10Px0.5	re	1/0.8	0.5	1.2	16.9	310	36.8
15Px0.5	re	1/0.8	0.5	1.3	19.7	440	36.8
2Px0.5	rm	16/0.2	0.6	1.1	11.2	110	39.7
5Px0.5	rm	16/0.2	0.6	1.2	14.5	250	39.7
10Px0.5	rm	16/0.2	0.6	1.3	19.3	480	39.7
15Px0.5	rm	16/0.2	0.6	1.5	22.6	570	39.7
2Px1.0	re	1/1.13	0.6	1.1	11.9	200	18.4
5Px1.0	re	1/1.13	0.6	1.2	15.4	290	18.4
10Px1.0	re	1/1.13	0.6	1.3	20.5	580	18.4
15Px1.0	re	1/1.13	0.6	1.5	24.1	780	18.4
2Px1.5	rm	7/0.53	0.6	1.2	13.6	250	12.3
5Px1.5	rm	7/0.53	0.6	1.3	17.7	460	12.3
10Px1.5	rm	7/0.53	0.6	1.5	23.9	760	12.3
15Px1.5	rm	7/0.53	0.6	1.7	28.0	1020	12.3

### Characteristics



### Installation condition

