

INSTRUMENT ARMoured (IS-OS)

Multi-Pair (Cu or ATC/PE/IS-OS/SWA/PVC)

APPLICATION

These armoured cables are generally used when the risk of mechanical damage is increased. The galvanized 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 petroleum industry. The armoured versions are generally used for outdoor installation for direct burial or install in the duct and suitable for wet and damp areas.

STANDARD

BS 5308 Part-1, Type-2

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

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

Bedding: Polyethylene (PE) to BS 6234 or PVC, TM-1 to BS 7655

Armour: Round Galvanized Steel 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 bedding	Nominal diameter of round steel wire armour	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	mm	mm	kg/km	W/km
2Px0.5	re	1/0.8	0.5	0.9	0.9	1.4	14.3	380	36.8
5Px0.5	re	1/0.8	0.5	1.2	1.25	1.5	18.5	640	36.8
10Px0.5	re	1/0.8	0.5	1.2	1.25	1.7	22.8	890	36.8
15Px0.5	re	1/0.8	0.5	1.3	1.6	1.7	26.3	1350	36.8
2Px0.5	rm	16/0.2	0.6	1.1	0.9	1.5	16.0	460	39.7
5Px0.5	rm	16/0.2	0.6	1.2	1.25	1.6	20.2	760	39.7
10Px0.5	rm	16/0.2	0.6	1.3	1.6	1.8	26.1	1300	39.7
15Px0.5	rm	16/0.2	0.6	1.5	1.6	1.8	29.4	1440	39.7
2Px0.75	rm	24/0.2	0.6	1.1	0.9	1.5	16.9	500	26.5
5Px0.75	rm	24/0.2	0.6	1.2	1.25	1.6	21.4	920	26.5
10Px0.75	rm	24/0.2	0.6	1.3	1.6	1.7	27.5	1610	26.5
15Px0.75	rm	24/0.2	0.6	1.5	1.6	1.9	31.6	1960	26.5
2Px1.0	re	1/1.13	0.6	1.1	0.9	1.5	16.7	515	18.2
5Px1.0	re	1/1.13	0.6	1.2	1.25	1.6	21.1	950	18.2
10Px1.0	re	1/1.13	0.6	1.3	1.6	1.8	27.3	1330	18.2
15Px1.0	re	1/1.13	0.6	1.5	1.6	1.9	31.1	1680	18.2
2Px1.5	rm	7/0.53	0.6	1.2	1.25	1.6	19.3	730	12.3
5Px1.5	rm	7/0.53	0.6	1.3	1.6	1.7	24.3	1180	12.3
10Px1.5	rm	7/0.53	0.6	1.5	1.6	1.9	30.9	1820	12.3
15Px1.5	rm	7/0.53	0.6	1.7	2.0	2.0	36.0	2350	12.3

Characteristics



Installation condition

