

INSTRUMENT ARMoured (OS)

Multi-Pair (Cu or ATC/PVC/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-2, 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: Flexible or Stranded Circular, Plain annealed Copper or Tinned Copper, Class-2 or Class 5 to BS 6360

Insulation: PVC, TI1 to BS 7655

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

Bedding: 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 armour wire	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
1Px0.5	rm	16/0.2	0.6	0.8	0.9	1.3	10.6	260	39.7
2Px0.5	rm	16/0.2	0.6	0.8	0.9	1.3	11.5	305	39.7
5Px0.5	rm	16/0.2	0.6	1.1	0.9	1.5	17.2	610	39.7
10Px0.5	rm	16/0.2	0.6	1.2	1.25	1.6	22.2	1060	39.7
15Px0.5	rm	16/0.2	0.6	1.3	1.6	1.7	25.8	1330	39.7
1Px0.75	rm	24/0.2	0.6	0.8	0.9	1.3	11.1	305	26.5
2Px0.75	rm	24/0.2	0.6	0.8	0.9	1.4	12.3	360	26.5
5Px0.75	rm	24/0.2	0.6	1.2	1.25	1.5	19.3	820	26.5
10Px0.75	rm	24/0.2	0.6	1.3	1.6	1.7	25.0	1250	26.5
15Px0.75	rm	24/0.2	0.6	1.3	1.6	1.8	27.9	1600	26.5
1Px1.5	rm	7/0.53	0.6	0.8	0.9	1.4	12.1	360	12.3
2Px1.5	rm	7/0.53	0.6	0.9	0.9	1.4	13.4	460	12.3
5Px1.5	rm	7/0.53	0.6	1.2	1.25	1.6	21.3	1040	12.3
10Px1.5	rm	7/0.53	0.6	1.3	1.6	1.8	27.7	1610	12.3
15Px1.5	rm	7/0.53	0.6	1.5	1.6	1.9	31.6	2060	12.3

Characteristics

- Operating Temperature 20°C to 70°C
- Maximum Short Circuit 160°C
- Meter Marking
- Lead free
- Flame Retardant IEC 60332-1-2
- Test 1.0kV

Installation condition

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