# **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 armourd versions are generally use 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

# **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 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: 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 mm³	-	no/mm	mm	mm	mm	mm	mm	kg/km	W/km
2Px0.5	rm	16/0.2	0.6	0.8	0.9	1.3	15.0	505	39.7
5Px0.5	rm	16/0.2	0.6	1.1	0.9	1.5	19.1	830	39.7
10Px0.5	rm	16/0.2	0.6	1.2	1.25	1.6	24.8	1420	39.7
15Px0.5	rm	16/0.2	0.6	1.3	1.6	1.7	28.8	1570	39.7
2Px0.75	rm	24/0.2	0.6	0.8	0.9	1.4	16.1	545	26.5
5Px0.75	rm	24/0.2	0.6	1.2	1.25	1.5	21.2	1005	26.5
10Px0.75	rm	24/0.2	0.6	1.3	1.6	1.7	27.5	1400	26.5
15Px0.75	rm	24/0.2	0.6	1.3	1.6	1.8	31.0	1750	26.5
2Px1.5	rm	7/0.53	0.6	0.9	0.9	1.4	17.6	800	12.3
5Px1.5	rm	7/0.53	0.6	1.2	1.25	1.6	23.2	1290	12.3
10Px1.5	rm	7/0.53	0.6	1.3	1.6	1.8	30.3	1990	12.3
15Px1.5	rm	7/0.53	0.6	1.5	1.6	1.9	34.6	2590	12.3

Characteristics =

















