

PAS5308



PAS 5308 Part 1 Type 1 (ex BS5308)

Multipair XLPE Insulated, Instrumentation Cable

- Collective Screen, Unarmoured 300/500 V
- Individual and Collective Screen, Unarmoured 300/500 V

Applications

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plant (e.g. petrochemical industry etc.).
Not suitable for direct buried application (see types 2 and 3).

Technical Data

Maximum conductor d.c. resistance:

Conductor size	Ohm/km at +20°C
1/0.80 mm (0.50 sqmm)	37.2
16/0.20 mm (0.50 sqmm)	40.0
24/0.20 mm (0.75 sqmm)	26.8
1/1.13 mm (1.00 sqmm)	18.6
7/0.53 mm (1.50 sqmm)	12.5
7/0.67 mm (2.50 sqmm)	7.7

Minimum insulation resistance:

Individual conductors >5 GOhm x km at +20°C

Maximum Mutual Capacitance:

Cables with Collective Screen Only (no 1 pair, 2 pairs, 1 triple)

0.50 sqmm, 0.75 sqmm, 1.00 sqmm: 75 pF/m
1.50 sqmm, 2.50 sqmm: 85 pF/m

1 pair, 2 pairs, 1 triple collectively screened:

0.50 sqmm, 0.75 sqmm, 1.00 sqmm: 115 pF/m
1.50 sqmm, 2.50 sqmm: 120 pF/m

Cables with individually screened pairs:

0.50 sqmm, 0.75 sqmm, 1.00 sqmm: 115 pF/m
1.50 sqmm, 2.50 sqmm: 120 pF/m

Maximum L/R Ratio:

0.50 sqmm, 0.75 sqmm, 1.00 sqmm: 25 µH/Ω
1.50 sqmm: 40 µH/Ω
2.50 sqmm: 65 µH/Ω

Voltage Rating:

300/500 V

Operating Temperature:

- 40° C / + 90° C

Installation Temperature:

MAX + 50° C

Construction

- **Conductors:** Solid (Class1), Stranded (Class 2) or Flexible (Class5) copper conductor to BS EN 60228

- **Insulation:** Cross Linked Polythene type 03 to BS6234

- 100 mm maximum pair length (min. 10 twists per metre)

- **Binder Tape:** Polyester tape 50% overlap

- **Individual and collective Screen**

or
- **Collective Screen**

Polyester tape 50% overlap
Aluminium/Polyester tape, metallic side down, in contact with Tinned Copper drain wire

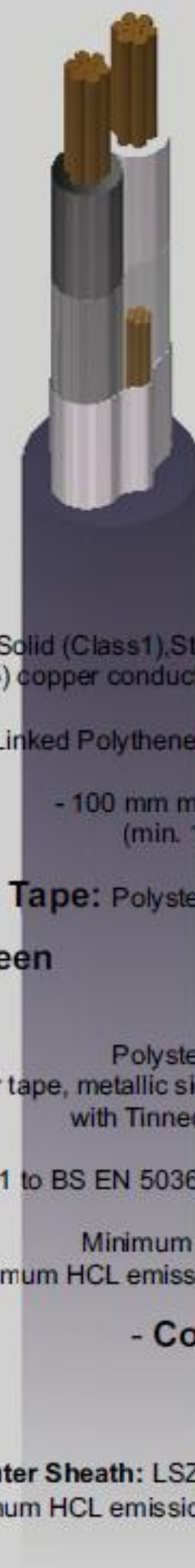
- **Outer Sheath:** PVC Sheat type TM1 to BS EN 50363 with the following characteristics:

Minimum oxygen index: 30%
Maximum HCL emission @ 800° C: 15%

- **Color:** Black or Blue

Optional:

Outer Sheath: LSZH Sheat type LTS3
Maximum HCL emission @ 800° C: -0.5%



XLPE / CAM / PVC
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Standards References

PAS 5308 Part 1 Type 1
BS EN 60228
BS 6234
BS 50363
IEC 60332-1
IEC 60332-3-24

Ramcro Part No	No. of Pairs/Triple	Cond. mm²	Nom. O/D mm
Collective screened			
MAS0150HDAXX-OIL	1P	0.50	7.0
MAS0250HDAXX-OIL	2P (Q)	0.50	7.9
MAS0550HDAXX-OIL	5P	0.50	13.1
MAS1050HDAXX-OIL	10P	0.50	17.2
MAS1550HDAXX-OIL	15P	0.50	19.8
MAS2050HDAXX-OIL	20P	0.50	22.3
MAS3750HDAXX-OIL	1T	0.50	7.3
MAS0175HDAXX-OIL	1P	0.75	7.4
MAS0275HDAXX-OIL	2P (Q)	0.75	8.4
MAS0575HDAXX-OIL	5P	0.75	13.8
MAS1075HDAXX-OIL	10P	0.75	18.9
MAS1575HDAXX-OIL	15P	0.75	21.9
MAS2075HDAXX-OIL	20P	0.75	24.6
MAS3775HDAXX-OIL	1T	0.75	7.7
MAS0110HDAXX-OIL	1P	1.00	7.4
MAS0210HDAXX-OIL	2P (Q)	1.00	8.4
MAS0510HDAXX-OIL	5P	1.00	14.2
MAS1010HDAXX-OIL	10P	1.00	18.4
MAS1510HDAXX-OIL	15P	1.00	21.3
MAS2010HDAXX-OIL	20P	1.00	24.4
MAS3710HDAXX-OIL	1T	1.00	7.7
MAS0115HDAXX-OIL	1P	1.50	8.3
MAS0215HDAXX-OIL	2P (Q)	1.50	9.7
MAS0515HDAXX-OIL	5P	1.50	16.4
MAS1015HDAXX-OIL	10P	1.50	21.6
MAS1515HDAXX-OIL	15P	1.50	25.4
MAS2015HDAXX-OIL	20P	1.50	28.5
MAS3715HDAXX-OIL	1T	1.50	8.9
MAS0125HDAXX-OIL	1P	2.50	9.1
MAS0225HDAXX-OIL	2P (Q)	2.50	10.7
MAS0525HDAXX-OIL	5P	2.50	18.2
MAS1025HDAXX-OIL	10P	2.50	25.1
MAS1525HDAXX-OIL	15P	2.50	29.2
MAS2025HDAXX-OIL	20P	2.50	39.8
MAS3725HDAXX-OIL	1T	2.50	9.7

Ramcro Part No	No. of Pairs/Triple	Cond. mm²	Nom. O/D mm
Individual & Collective screened			
MAC0250HDAXX-OIL	2P	0.50	10.7
MAC0350HDAXX-OIL	3P	0.50	12.1
MAC0550HDAXX-OIL	5P	0.50	13.6
MAC1050HDAXX-OIL	10P	0.50	19.0
MAC1550HDAXX-OIL	15P	0.50	21.9
MAC2050HDAXX-OIL	20P	0.50	24.6
MAC3050HDAXX-OIL	30P	0.50	29.2
MAC0275HDAXX-OIL	2P	0.75	11.4
MAC0375HDAXX-OIL	3P	0.75	12.8
MAC0575HDAXX-OIL	5P	0.75	14.5
MAC1075HDAXX-OIL	10P	0.75	20.4
MAC1575HDAXX-OIL	15P	0.75	23.8
MAC2075HDAXX-OIL	20P	0.75	26.8
MAC3075HDAXX-OIL	30P	0.75	31.5
MAC0210HDAXX-OIL	2P	1.00	11.3
MAC0310HDAXX-OIL	3P	1.00	13.4
MAC0510HDAXX-OIL	5P	1.00	14.5
MAC1010HDAXX-OIL	10P	1.00	20.4
MAC1510HDAXX-OIL	15P	1.00	23.7
MAC2010HDAXX-OIL	20P	1.00	26.7
MAC3010HDAXX-OIL	30P	1.00	31.4
MAC0215HDAXX-OIL	2P	1.50	13.1
MAC0315HDAXX-OIL	3P	1.50	14.5
MAC0515HDAXX-OIL	5P	1.50	16.8
MAC1015HDAXX-OIL	10P	1.50	23.9
MAC1515HDAXX-OIL	15P	1.50	27.6
MAC2015HDAXX-OIL	20P	1.50	31.1
MAC3015HDAXX-OIL	30P	1.50	36.8
MAC0225HDAXX-OIL	2P	2.50	14.5
MAC0325HDAXX-OIL	3P	2.50	15.9
MAC0525HDAXX-OIL	5P	2.50	18.9
MAC1025HDAXX-OIL	10P	2.50	26.9
MAC1525HDAXX-OIL	15P	2.50	31.1
MAC2025HDAXX-OIL	20P	2.50	35.3
MAC3025HDAXX-OIL	30P	2.50	41.8