

PAS 5308



MGT+XLPE/CAM/LSZH/LC/LSZH/SWA/LSZH
MGT+XLPE/IAM/CAM/LSZH/LC/LSZH/SWA/LSZH

PAS 5308 Part 1 Type 3 (ex BS5308)

Multipair MICA Tape + XLPE Insulated, Instrumentation Cable

- Collective Screen, Lead Covered and Armoured 300/500 V
- Individual and Collective Screen, Lead Covered and Armoured 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.). Suitable for direct buried application, **READY FOR FIRE RESISTANT INSTALLATIONS**

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:

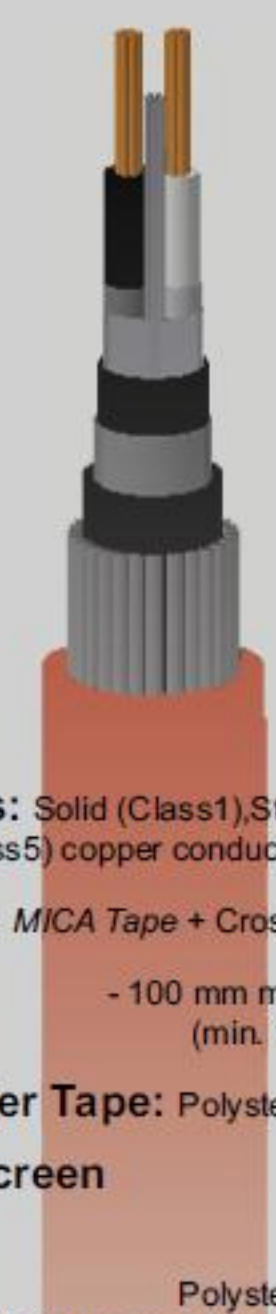
- 40° C / + 90° C

Installation Temperature:

MAX + 50° C

Construction

- **Conductors:** Solid (Class1), Stranded (Class 2) or Flexible (Class5) copper conductor to BS EN 60228
- **Insulation:** MICA Tape + Cross Linked Polythene
 - 100 mm maximum pair length (min. 10 twists per metre)
- **Binder Tape:** Polyester tape 50% overlap
- **Individual and collective Screen**
 - or
 - **Collective Screen**
 - Polyster tape 50% overlap
 - Aluminium/Polyester tape, metallic side down, in contact with Tinned Copper drain wire
- **Bedding:** LSZH Sheat type LTS3
Maximum HCL emission @ 800° C: -0.5%
- **LEAD or Polyamide Cover**
- **Inner Sheath:** LSZH Sheat type LTS3
Maximum HCL emission @ 800° C: -0.5%
- **Armouring:** Galvanized Steel Wires
- **Outer Sheath:** LSZH Sheat type LTS3
Maximum HCL emission @ 800° C: -0.5%
- **Color:** Red and Black



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Standards References

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

Ramcro Part No	No. of Pairs/Triple	Cond. mm ²	Nom. O/D mm
Collective screened			
MAS0150AFE0X-OILLC	1P	0.50	15.5
MAS0250AFE0X-OILLC	2P (Q)	0.50	16.8
MAS0550AFE0X-OILLC	5P	0.50	24.5
MAS1050AFE0X-OILLC	10P	0.50	33.4
MAS1550AFE0X-OILLC	15P	0.50	37.3
MAS2050AFE0X-OILLC	20P	0.50	40.6
MAS3750AFE0X-OILLC	1T	0.50	15.9
MAS0175AFE0X-OILLC	1P	0.75	16.0
MAS0275AFE0X-OILLC	2P (Q)	0.75	17.4
MAS0575AFE0X-OILLC	5P	0.75	26.6
MAS1075AFE0X-OILLC	10P	0.75	35.9
MAS1575AFE0X-OILLC	15P	0.75	39.6
MAS2075AFE0X-OILLC	20P	0.75	43.1
MAS3775AFE0X-OILLC	1T	0.75	16.6
MAS0110AFE0X-OILLC	1P	1.00	15.9
MAS0210AFE0X-OILLC	2P (Q)	1.00	17.2
MAS0510AFE0X-OILLC	5P	1.00	26.4
MAS1010AFE0X-OILLC	10P	1.00	35.5
MAS1510AFE0X-OILLC	15P	1.00	39.2
MAS2010AFE0X-OILLC	20P	1.00	42.6
MAS3710AFE0X-OILLC	1T	1.00	16.3
MAS0115AFE0X-OILLC	1P	1.50	17.1
MAS0215AFE0X-OILLC	2P (Q)	1.50	18.5
MAS0515AFE0X-OILLC	5P	1.50	29.1
MAS1015AFE0X-OILLC	10P	1.50	39.3
MAS1515AFE0X-OILLC	15P	1.50	43.4
MAS2015AFE0X-OILLC	20P	1.50	48.2
MAS3715AFE0X-OILLC	1T	1.50	17.6
MAS0125AFE0X-OILLC	1P	2.50	17.9
MAS0225AFE0X-OILLC	2P (Q)	2.50	20.9
MAS0525AFE0X-OILLC	5P	2.50	31.7
MAS1025AFE0X-OILLC	10P	2.50	42.2
MAS1525AFE0X-OILLC	15P	2.50	47.6
MAS2025AFE0X-OILLC	20P	2.50	52.4
MAS3725AFE0X-OILLC	1T	2.50	18.5

Ramcro Part No	No. of Pairs/Triple	Cond. mm ²	Nom. O/D mm
Individual & Collective screened			
MAC0250AFE0X-OILLC	2P	0.50	21.0
MAC0350AFE0X-OILLC	3P	0.50	22.1
MAC0550AFE0X-OILLC	5P	0.50	24.8
MAC1050AFE0X-OILLC	10P	0.50	34.1
MAC1550AFE0X-OILLC	15P	0.50	37.9
MAC2050AFE0X-OILLC	20P	0.50	41.3
MAC3050AFE0X-OILLC	30P	0.50	47.3
MAC0275AFE0X-OILLC	2P	0.75	22.5
MAC0375AFE0X-OILLC	3P	0.75	23.2
MAC0575AFE0X-OILLC	5P	0.75	26.9
MAC1075AFE0X-OILLC	10P	0.75	36.4
MAC1575AFE0X-OILLC	15P	0.75	40.2
MAC2075AFE0X-OILLC	20P	0.75	43.8
MAC3075AFE0X-OILLC	30P	0.75	50.4
MAC0210AFE0X-OILLC	2P	1.00	22.1
MAC0310AFE0X-OILLC	3P	1.00	23.0
MAC0510AFE0X-OILLC	5P	1.00	26.7
MAC1010AFE0X-OILLC	10P	1.00	36.0
MAC1510AFE0X-OILLC	15P	1.00	39.8
MAC2010AFE0X-OILLC	20P	1.00	43.3
MAC3010AFE0X-OILLC	30P	1.00	49.6
MAC0215AFE0X-OILLC	2P	1.50	24.0
MAC0315AFE0X-OILLC	3P	1.50	24.9
MAC0515AFE0X-OILLC	5P	1.50	29.6
MAC1015AFE0X-OILLC	10P	1.50	39.8
MAC1515AFE0X-OILLC	15P	1.50	44.0
MAC2015AFE0X-OILLC	20P	1.50	49.1
MAC3015AFE0X-OILLC	30P	1.50	56.3
MAC0225AFE0X-OILLC	2P	2.50	26.3
MAC0325AFE0X-OILLC	3P	2.50	27.3
MAC0525AFE0X-OILLC	5P	2.50	33.0
MAC1025AFE0X-OILLC	10P	2.50	42.7
MAC1525AFE0X-OILLC	15P	2.50	48.2
MAC2025AFE0X-OILLC	20P	2.50	53.1
MAC3025AFE0X-OILLC	30P	2.50	60.6