



## PAS 5308 Part 1 Type 1 (ex BS5308)

Multipair Silicon Rubber 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).

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 >25 MOhm x km at +20°C

#### Maximum Mutual Capacitance:

Between pairs or adjacent cores: 250 pF/m  
Between any core and screen: 450 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 / +180° C

#### Installation Temperature:

MAX + 50° C

### Construction

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

- **Insulation:** Silicon Rubber  
Ceramic Type

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

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

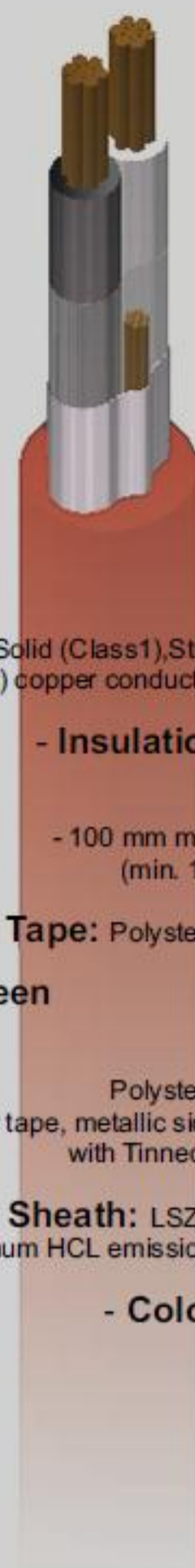
- **Individual and collective Screen**

or  
- **Collective Screen**

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

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

- **Color:** Red and Black



SIL / CAM / LSZH  
SIL / IAM / CAM / LSZH

### Standards References

- PAS 5308 Part 1 Type 1
- BS EN 60228
- BS 6234
- BS 50363
- IEC 60331-21
- IEC 60332-1
- IEC 60332-3-24

Ramcro Part No	No. of Pairs/Triple	Cond. mm <sup>2</sup>	Nom. O/D mm
Collective screened			
MAS0150HFESX-OIL	1P	0.50	6.3
MAS0250HFESX-OIL	2P (Q)	0.50	7.3
MAS0550HFESX-OIL	5P	0.50	12.5
MAS1050HFESX-OIL	10P	0.50	17.4
MAS1550HFESX-OIL	15P	0.50	20.6
MAS2050HFESX-OIL	20P	0.50	23.1
MAS3750HFESX-OIL	1T	0.50	6.7
MAS0175HFESX-OIL	1P	0.75	6.8
MAS0275HFESX-OIL	2P (Q)	0.75	8.1
MAS0575HFESX-OIL	5P	0.75	13.5
MAS1075HFESX-OIL	10P	0.75	19.6
MAS1575HFESX-OIL	15P	0.75	22.4
MAS2075HFESX-OIL	20P	0.75	25.2
MAS3775HFESX-OIL	1T	0.75	7.2
MAS0110HFESX-OIL	1P	1.00	6.7
MAS0210HFESX-OIL	2P (Q)	1.00	7.8
MAS0510HFESX-OIL	5P	1.00	13.3
MAS1010HFESX-OIL	10P	1.00	19.3
MAS1510HFESX-OIL	15P	1.00	22.1
MAS2010HFESX-OIL	20P	1.00	24.7
MAS3710HFESX-OIL	1T	1.00	7.1
MAS0115HFESX-OIL	1P	1.50	7.7
MAS0215HFESX-OIL	2P (Q)	1.50	9.2
MAS0515HFESX-OIL	5P	1.50	15.5
MAS1015HFESX-OIL	10P	1.50	22.5
MAS1515HFESX-OIL	15P	1.50	25.8
MAS2015HFESX-OIL	20P	1.50	29.0
MAS3715HFESX-OIL	1T	1.50	8.4
MAS0125HFESX-OIL	1P	2.50	8.7
MAS0225HFESX-OIL	2P (Q)	2.50	10.1
MAS0525HFESX-OIL	5P	2.50	17.4
MAS1025HFESX-OIL	10P	2.50	25.0
MAS1525HFESX-OIL	15P	2.50	28.8
MAS2025HFESX-OIL	20P	2.50	32.7
MAS3725HFESX-OIL	1T	2.50	9.3

Ramcro Part No	No. of Pairs/Triple	Cond. mm <sup>2</sup>	Nom. O/D mm
Individual & Collective screened			
MAC0250HFESX-OIL	2P	0.50	10.0
MAC0350HFESX-OIL	3P	0.50	10.6
MAC0550HFESX-OIL	5P	0.50	13.4
MAC1050HFESX-OIL	10P	0.50	19.4
MAC1550HFESX-OIL	15P	0.50	22.3
MAC2050HFESX-OIL	20P	0.50	25.0
MAC3050HFESX-OIL	30P	0.50	29.2
MAC0275HFESX-OIL	2P	0.75	11.0
MAC0375HFESX-OIL	3P	0.75	12.1
MAC0575HFESX-OIL	5P	0.75	14.5
MAC1075HFESX-OIL	10P	0.75	21.1
MAC1575HFESX-OIL	15P	0.75	24.2
MAC2075HFESX-OIL	20P	0.75	27.2
MAC3075HFESX-OIL	30P	0.75	32.1
MAC0210HFESX-OIL	2P	1.00	10.7
MAC0310HFESX-OIL	3P	1.00	11.9
MAC0510HFESX-OIL	5P	1.00	14.3
MAC1010HFESX-OIL	10P	1.00	20.8
MAC1510HFESX-OIL	15P	1.00	23.8
MAC2010HFESX-OIL	20P	1.00	26.8
MAC3010HFESX-OIL	30P	1.00	31.5
MAC0215HFESX-OIL	2P	1.50	13.0
MAC0315HFESX-OIL	3P	1.50	13.8
MAC0515HFESX-OIL	5P	1.50	16.8
MAC1015HFESX-OIL	10P	1.50	24.2
MAC1515HFESX-OIL	15P	1.50	27.8
MAC2015HFESX-OIL	20P	1.50	31.5
MAC3015HFESX-OIL	30P	1.50	37.0
MAC0225HFESX-OIL	2P	2.50	14.3
MAC0325HFESX-OIL	3P	2.50	15.2
MAC0525HFESX-OIL	5P	2.50	19.3
MAC1025HFESX-OIL	10P	2.50	26.9
MAC1525HFESX-OIL	15P	2.50	31.0
MAC2025HFESX-OIL	20P	2.50	35.2
MAC3025HFESX-OIL	30P	2.50	42.0