

# PAS 5308



## PAS 5308 Part 2 Type 1 (ex BS5308)

Multipair PVC 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 >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 / + 80° C

#### Installation Temperature:

MAX + 50° C

### Construction

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

- **Insulation:** PVC T11 to BS EN 50363-3

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

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

- **Individual and collective Screen**

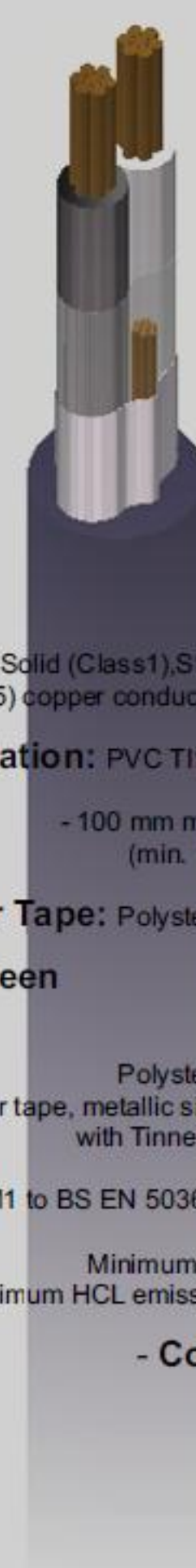
or  
- **Collective Screen**

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



PVC / CAM / PVC  
PVC / IAM / CAM / PVC

6

### Standards References

PAS 5308 Part 2 Type 1  
BS EN 60228  
BS 6234  
BS 50363  
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			
MAS0150HDAAX-OIL	1P	0.50	7.0
MAS0250HDAAX-OIL	2P (Q)	0.50	7.9
MAS0550HDAAX-OIL	5P	0.50	13.1
MAS1050HDAAX-OIL	10P	0.50	17.2
MAS1550HDAAX-OIL	15P	0.50	19.8
MAS2050HDAAX-OIL	20P	0.50	22.3
MAS3750HDAAX-OIL	1T	0.50	7.3
MAS0175HDAAX-OIL	1P	0.75	7.4
MAS0275HDAAX-OIL	2P (Q)	0.75	8.4
MAS0575HDAAX-OIL	5P	0.75	13.8
MAS1075HDAAX-OIL	10P	0.75	18.9
MAS1575HDAAX-OIL	15P	0.75	21.9
MAS2075HDAAX-OIL	20P	0.75	24.6
MAS3775HDAAX-OIL	1T	0.75	7.7
MAS0110HDAAX-OIL	1P	1.00	7.4
MAS0210HDAAX-OIL	2P (Q)	1.00	8.4
MAS0510HDAAX-OIL	5P	1.00	14.2
MAS1010HDAAX-OIL	10P	1.00	18.4
MAS1510HDAAX-OIL	15P	1.00	21.3
MAS2010HDAAX-OIL	20P	1.00	24.4
MAS3710HDAAX-OIL	1T	1.00	7.7
MAS0115HDAAX-OIL	1P	1.50	8.3
MAS0215HDAAX-OIL	2P (Q)	1.50	9.7
MAS0515HDAAX-OIL	5P	1.50	16.4
MAS1015HDAAX-OIL	10P	1.50	21.6
MAS1515HDAAX-OIL	15P	1.50	25.4
MAS2015HDAAX-OIL	20P	1.50	28.5
MAS3715HDAAX-OIL	1T	1.50	8.9
MAS0125HDAAX-OIL	1P	2.50	9.1
MAS0225HDAAX-OIL	2P (Q)	2.50	10.7
MAS0525HDAAX-OIL	5P	2.50	18.2
MAS1025HDAAX-OIL	10P	2.50	25.1
MAS1525HDAAX-OIL	15P	2.50	29.2
MAS2025HDAAX-OIL	20P	2.50	39.8
MAS3725HDAAX-OIL	1T	2.50	9.7

Ramcro Part No	No. of Pairs/Triple	Cond. mm <sup>2</sup>	Nom. O/D mm
Individual & Collective screened			
MAC0250HDAAX-OIL	2P	0.50	10.7
MAC0350HDAAX-OIL	3P	0.50	12.1
MAC0550HDAAX-OIL	5P	0.50	13.6
MAC1050HDAAX-OIL	10P	0.50	19.0
MAC1550HDAAX-OIL	15P	0.50	21.9
MAC2050HDAAX-OIL	20P	0.50	24.6
MAC3050HDAAX-OIL	30P	0.50	29.2
MAC0275HDAAX-OIL	2P	0.75	11.4
MAC0375HDAAX-OIL	3P	0.75	12.8
MAC0575HDAAX-OIL	5P	0.75	14.5
MAC1075HDAAX-OIL	10P	0.75	20.4
MAC1575HDAAX-OIL	15P	0.75	23.8
MAC2075HDAAX-OIL	20P	0.75	26.8
MAC3075HDAAX-OIL	30P	0.75	31.5
MAC0210HDAAX-OIL	2P	1.00	11.3
MAC0310HDAAX-OIL	3P	1.00	13.4
MAC0510HDAAX-OIL	5P	1.00	14.5
MAC1010HDAAX-OIL	10P	1.00	20.4
MAC1510HDAAX-OIL	15P	1.00	23.7
MAC2010HDAAX-OIL	20P	1.00	26.7
MAC3010HDAAX-OIL	30P	1.00	31.4
MAC0215HDAAX-OIL	2P	1.50	13.1
MAC0315HDAAX-OIL	3P	1.50	14.5
MAC0515HDAAX-OIL	5P	1.50	16.8
MAC1015HDAAX-OIL	10P	1.50	23.9
MAC1515HDAAX-OIL	15P	1.50	27.6
MAC2015HDAAX-OIL	20P	1.50	31.1
MAC3015HDAAX-OIL	30P	1.50	36.8
MAC0225HDAAX-OIL	2P	2.50	14.5
MAC0325HDAAX-OIL	3P	2.50	15.9
MAC0525HDAAX-OIL	5P	2.50	18.9
MAC1025HDAAX-OIL	10P	2.50	26.9
MAC1525HDAAX-OIL	15P	2.50	31.1
MAC2025HDAAX-OIL	20P	2.50	35.3
MAC3025HDAAX-OIL	30P	2.50	41.8