

# PAS5308 Part1, Type1 Instrumentation Cable, Overall Screened - 0.5mm<sup>2</sup> to 1.5mm<sup>2</sup>



## Description

Manufactured to PAS5308, instrumentation cables are intrinsically safe and designed for use in communication and instrumentation applications in and around process industries for transmission of signals in control systems. The signals can be analogue or digital from a variety of sensors and transducers.

## Key Features



**Voltage Rating**  
300/500 Volts



**Minimum Bending Radius**  
Fixed: 6 x overall diameter



**Flame Retardancy**  
BS EN/IEC 60332-1  
BS EN/IEC 60332-3-24



**Temperature Limits**  
Fixed: -40°C to +70°C

## Core Colours

[PAS5308 pair identification colour chart](#)

## Standards

- IEC/EN 60332-1-2
- BS EN/IEC 60332-3-24
- BS EN/IEC 60228
- PAS5308 / BS5308

## Construction

- **Conductor:** Under 1mm<sup>2</sup> Class 5 flexible copper conductor  
1mm<sup>2</sup> & above Class 2 stranded copper conductor
- **Insulation:** Polyethylene (PE) Laid up to form pairs
- **Screen:** Collective Aluminium/mylar tape with 0.5mm drain wire
- **Outer Sheath:** Polyvinyl Chloride (PVC)
- **Sheath Colour:** Blue or Black

## QA Lab

### Cleveland Cable Test & Training Lab

Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.



## CPR

Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.



## Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.



## ecovadis

Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

## ecovadis

**PAS5308 Part1,Type1 Instrumentation Cable, Overall Screened - 0.5mm<sup>2</sup> to 1.5mm<sup>2</sup> - Dimensions**

Reference	Conductor Size (mm <sup>2</sup> )	No Of Pairs	Stranding(mm)	Outside Diameter(mm)	Weight(Kg/Km)	Brass A2 Gland
7107B	0.5	1 Triple	16/0.20	6.1	69	20/16
7100	0.5	1	16/0.20	6	60	20/16
7101B	0.5	2	16/0.20	6.9	75	20/16
7102B	0.5	5	16/0.20	12.1	190	20
7103B	0.5	10	16/0.20	16.2	305	25
7104B	0.5	20	16/0.20	21.3	518	32
7105B	0.5	30	16/0.20	25.9	759	32
7106B	0.5	50	16/0.20	32.9	1251	50S
7143B	0.75	1 Triple	24/0.20	8.3	83	20/16
7136B	0.75	1	24/0.20	6.3	69	20/16
7137B	0.75	2	24/0.20	7.3	99	20/16
7138B	0.75	5	24/0.20	13.3	242	20
7139BU	0.75	10	24/0.20	17.7	380	25
7139BK	0.75	10	24/0.20	17.720	380	25
7140B	0.75	20	24/0.20	23.5	684	32
7141B	0.75	30	24/0.20	28.5	989	40
7142B	0.75	50	24/0.20	36.4	1670	50S
7178B	1.5	1 Triple	7/0.53	8.4	115	20S
7173B	1.5	1	7/0.53	7.3	87	20/16
7174B	1.5	2	7/0.53	8.7	145	20S
7175B	1.5	5	7/0.53	15.4	345	25
7176B	1.5	10	7/0.53	20.6	575	32
7177B	1.5	20	7/0.53	27.5	1075	40

## PART 1 PAIR COLOURS

PAIR	A	B
1	Black	Blue
2	Black	Green
3	Blue	Green
4	Black	Brown
5	Blue	Brown
6	Green	Brown
7	Black	White
8	Blue	White
9	Green	White
10	Brown	White
11	Black	Red
12	Blue	Red
13	Green	Red
14	Brown	Red
15	White	Red
16	Black	Orange
17	Blue	Orange
18	Green	Orange
19	Brown	Orange
20	White	Orange
21	Red	Orange
22	Black	Yellow
23	Blue	Yellow
24	Green	Yellow
25	Brown	Yellow

PAIR	A	B
26	White	Yellow
27	Red	Yellow
28	Orange	Yellow
29	Black	Grey
30	Blue	Grey
31	Green	Grey
32	Brown	Grey
33	White	Grey
34	Red	Grey
35	Orange	Grey
36	Yellow	Grey
37	Black	Violet
38	Blue	Violet
39	Green	Violet
40	Brown	Violet
41	White	Violet
42	Red	Violet
43	Orange	Violet
44	Yellow	Violet
45	Grey	Violet
46	Black	Turquoise
47	Blue	Turquoise
48	Green	Turquoise
49	Brown	Turquoise
50	White	Turquoise

For individual screened pairs, identification will be Black/Blue numbered pairs.

Two pair collectively screened cables are in quad formation colour coded in rotation, Black, Blue, Green, Brown.

Single triple will be Blue , Black, Green

## PART 1 ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA (MM <sup>2</sup> )	MUTUAL CAPACITANCE pF/m			MINIMUM INSULATION RESISTANCE AT 20° C	MAXIMUM L/R RATIO
	Cables with Collective Screen Only	1 Pair, 2 Pairs, 1 Triple Collectively Screened	Cables with Individually Screened Pairs	mohms/km	µH/ohms
0.5	75	115	115	>5	25
0.75	75	115	115	>5	25
1	75	115	115	>5	25
1.5	85	120	120	>5	40

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.