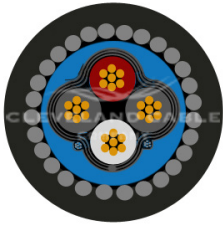


## BS5308 PART1 TYPE2 ARMoured INSTRUMENTATION CABLE PVC CAT



### APPLICATION

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.

### CABLE STANDARDS

Flame propagation to BS4066 Pt 1 & 3  
PAS5308  
BS 50265  
BS EN 50266  
BS EN/IEC 60332-3-24

### CONSTRUCTION PART 1

**Conductor:** Plain Annealed Copper Conductors  
**Insulation:** Polyethylene (PET) Laid up to form pairs  
**Screen:** Collective aluminium / mylar tape screen complete with 0.5mm drain wire  
**Bedding:** Polyethylene (PET)  
**Armour:** Galvanised Steel Wire  
**Sheath:** Polyvinyl Chloride (PVC)  
**Sheath Colour:** ■ Blue or ■ Black  
(\*\*available in Green)

### CHARACTERISTICS

**Voltage Rating:** 300/500 Volts  
**Temperature Limits:** -20°C to +65°C  
**Minimum Bending Radius:** As per cable manufacturer datasheet

### CORE IDENTIFICATION

Refer to Part 1 colour chart on page 3

## PAS 5308 PART1 TYPE2 ARMoured PVC CAT CABLE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM <sup>2</sup> )	STRANDING (MM)	NO OF PAIRS	WEIGHT (KG/KM)	OVERALL DIAMETER	GLAND SIZE
PART 1						
7118	0.5	16/0.20	1	242	10.8	20/16
7119	0.5	16/0.20	2	288	11.7	20S
7120	0.5	16/0.20	5	535	17.3	20
7121	0.5	16/0.20	10	868	22.3	25
7122	0.5	16/0.20	20	1466	28.5	32
7123	0.5	16/0.20	30	1944	33.3	32
7124	0.5	16/0.20	50	3360	41.5	50S
7125	0.5	16/0.20	1 Triple	259	11	20/16
7155	0.75	24/0.20	1	270	11.1	20/16
7156	0.75	24/0.20	2	330	12.3	20S
7157	0.75	24/0.20	5	719	19.2	20
7158	0.75	24/0.20	10	1150	24.7	25
7159	0.75	24/0.20	20	1704	30.7	32
7160	0.75	24/0.20	30	2570	36.9	40
7161	0.75	24/0.20	50	4400	46.4	50S
7162	0.75	24/0.20	1 Triple	288	11.4	20S
**7231	1	1/1.13	1	250	11.8	20/16
**7232	1	1/1.13	2	300	13	20S
**7233	1	1/1.13	5	560	19.7	20
**7234	1	1/1.13	10	970	24.3	25
**7235	1	1/1.13	20	1240	31.2	40
**7236	1	1/1.13	30	2180	36.2	50S
**7237	1	1/1.13	50	3500	45.7	50
7189	1.5	7/0.53	1	312	12.3	20S
7190	1.5	7/0.53	2	397	13.7	20S
7191	1.5	7/0.53	5	918	21.5	25
7192	1.5	7/0.53	10	1466	27.8	32
7193	1.5	7/0.53	20	2519	35.1	40
7194	1.5	7/0.53	30	3352	41.9	50S
7195	1.5	7/0.53	50	5310	53.4	63S
7196	1.5	7/0.53	1 Triple	357	12.6	20S
7208	2.5	7/0.67	1	395	13.1	20S
7209	2.5	7/0.67	2	490	15.9	20
7210	2.5	7/0.67	5	1430	26.5	20
7211	2.5	7/0.67	10	2235	35.1	40
7212	2.5	7/0.67	20	3935	46.7	50
7213	2.5	7/0.67	1 Triple	407	13.7	20S

## PAS 5308 TYPE 2 PVC CAT CABLE – CONDUCTOR RESISTANCE

NOMINAL CROSS SECTIONAL AREA (MM <sup>2</sup> )	CONDUCTOR CLASS	MAXIMUM RESISTANCE CONDUCTOR AT 200C Ω/KM
0.5	5	39
0.75	5	26
1	1	18.1
1.5	2	12.1
2.5	2	7.41

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

## PAS 5308 TYPE 2 – CURRENT CAPACITY

NOMINAL CROSS SECTIONAL AREA (MM <sup>2</sup> )	MUTUAL CAPACITANCE pF/m			MINIMUM INSULATION RESISTANCE AT 20°C MOHMS/KM	MAXIMUM L/R RATIO MH/OHMS
	CABLES WITH COLLECTIVE SCREEN ONLY	1 PAIR, 2 PAIRS, 1 TRIPLE COLLECTIVELY SCREENED	CABLES WITH INDIVIDUALLY SCREENED PAIRS		
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
2.5	85	120	120	>5	65

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

## PAS 5308 INSTRUMENT CABLE - PAIR COLOUR CHARTS

PART 1 PAIR COLOURS					
PAIR	A	B	PAIR	A	B
1	BLACK	BLUE	26	WHITE	YELLOW
2	BLACK	GREEN	27	RED	YELLOW
3	BLUE	GREEN	28	ORANGE	YELLOW
4	BLACK	BROWN	29	BLACK	GREY
5	BLUE	BROWN	30	BLUE	GREY
6	GREEN	BROWN	31	GREEN	GREY
7	BLACK	WHITE	32	BROWN	GREY
8	BLUE	WHITE	33	WHITE	GREY
9	GREEN	WHITE	34	RED	GREY
10	BROWN	WHITE	35	ORANGE	GREY
11	BLACK	RED	36	YELLOW	GREY
12	BLUE	RED	37	BLACK	VIOLET
13	GREEN	RED	38	BLUE	VIOLET
14	BROWN	RED	39	GREEN	VIOLET
15	WHITE	RED	40	BROWN	VIOLET
16	BLACK	ORANGE	41	WHITE	VIOLET
17	BLUE	ORANGE	42	RED	VIOLET
18	GREEN	ORANGE	43	ORANGE	VIOLET
19	BROWN	ORANGE	44	YELLOW	VIOLET
20	WHITE	ORANGE	45	GREY	VIOLET
21	RED	ORANGE	46	BLACK	TURQUOISE
22	BLACK	YELLOW	47	BLUE	TURQUOISE
23	BLUE	YELLOW	48	GREEN	TURQUOISE
24	GREEN	YELLOW	49	BROWN	TURQUOISE
25	BROWN	YELLOW	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

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.