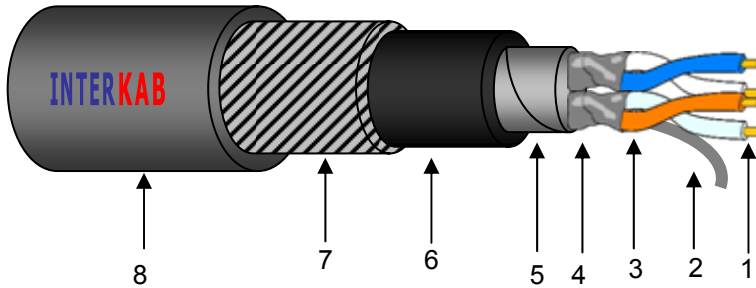


300 / 500v  
Flame Retardant

## Onshore Instrumentation Cables to BS5308 Specification

Multi Pair Armoured Cables – Individually Screened – To BS5308 Part 1 Type 2



### Applicable Standards:

BS 5308

BS 6234

BS 7655

Solid class 1, Stranded class 2 or flexible class 5 copper conductors to BS6360

IEC 60332 Part 3 (Category A,B & C)

<p><b>Application:</b></p>	<p>Ideal for the petrochemical industry, these cables are designed to connect electrical instrument circuits and provide communication services in and around process plants and are also suitable for direct burial applications.</p>
<p><b>(1) Conductor:</b></p> <p><b>Fire Protection:</b></p> <p><b>(2) Drain Wire:</b></p> <p><b>(3) Insulation:</b></p> <p><b>(4) Individual Screen:</b></p> <p><b>(5) Collective Screen:</b></p> <p><b>Binder Tape:</b></p> <p><b>(6) Bedding:</b></p> <p><b>(7) Armour:</b></p> <p><b>(8) Outer Sheath:</b></p>	<p>Solid (class 1), Stranded (class 2) or Flexible (class 5) Copper Conductors to BS6360</p> <p>None</p> <p>Tinned Copper drain wire</p> <p>Polyethylene Insulation type 03 Complying with BS6234</p> <p>Aluminium Mylar Tape Screen</p> <p>Aluminium Mylar Tape Screen</p> <p>PETP Tape 50% Overlap</p> <p>Polyethylene Bedding Type 2C or 03 to BS6234</p> <p>Mild Galvanised Steel Wires to BS EN 10257-1</p> <p>PVC outer sheath type TM.1 to BS7655. In addition the outer sheath displays the following Characteristics:                      -Minimum Oxygen Index: 30%                      -Maximum HCL Emission at 800C : 15%</p> <p><small>The legend will include the manufacturers name, voltage, BS5308, the number of pairs/triples and cross sectional area, cable sheath class (e.g. Polyethylene), and IEC60332 where applicable. The standard sheath colours are Black or Blue, and other colours are available on request.</small></p>
<p><b>Conductor Identification:</b></p>	<p>See Page 5</p>

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### Onshore Instrumentation Cables to BS5308 Specification

Multi Pair Armoured Cables – Individually Screened – To BS5308 Part 1 Type 2

Cable	2x2x0.5	5x2x0.5	10x2x0.5	20x2x0.5	30x2x0.5	50x2x0.5	2x2x0.75	5x2x0.75
Stranding mm	16/0.20	16/0.20	16/0.20	16/0.20	16/0.20	16/0.20	24/0.20	24/0.20
Insulation Thickness mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Diameter over Inner Sheath (min/max) mm	11.0/13.0	14.2/16.2	20.1/22.1	26.3/28.3	31.3/33.3	40.7/42.7	11.8/13.8	15.3/17.3
Diameter of Armour/Braid mm	0.90	1.25	1.60	1.60			0.90	1.25
Overall Diameter (min/max) mm	15.8/17.8	19.9/21.9	26.9/28.9	33.3/35.3	39.5/41.5	50.5/52.5	16.6/18.6	21.0/23.0
Gland Size	A	B	C	C2	D	D	A	B
Weight kg/km	460	760	1300	1870	2400	3920	500	920
Bend Radius - xOD	6	6	6	6	6	6	6	6
Conductor Temperature – (min/max) °C	20/65	20/65	20/65	20/65	20/65	20/65	20/65	20/65
Capacitance – pF/m	115	115	115	115	115	115	115	115
DC Resistance @ 20°C –Ω /km	39.7	39.7	39.7	39.7	39.7	39.7	26.5	26.5
Maximum L/R Ratio	25	25	25	25	25	25	25	25
Sheath Colour	Black/Blue	Black/Blue	Black/Blue	Black/Blue	Black/Blue	Black/Blue	Black/Blue	Black/Blue

**300 / 500v**  
Flame Retardant

### Onshore Instrumentation Cables to BS5308 Specification

Multi Pair Armoured Cables – Individually Screened – To BS5308 Part 1 Type 2

Cable	10x2x0.75	20x2x0.75	30x2x0.75	50x2x0.75	2x2x1.0	5x2x1.0	10x2x1.0	20x2x1.0
Stranding mm	24/0.20	24/0.20	24/0.2	24/0.2	1/1.13	1/1.13	1/1.13	1/1.13
Insulation Thickness mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Diameter over Inner Sheath (min/max) mm	21.7/23.7	28.8/30.8	34.5/36.5	44.0/46.0	11.8/13.8	15.2/17.2	21.6/23.6	28.8/30.8
Diameter of Armour/Braid mm	1.60	2.00			0.90	1.25	1.60	2.00
Overall Diameter (min/max) mm	28.5/30.5	36.8/38.8	42.9/44.9	54.0/56.0	16.6/18.6	20.9/22.9	28.4/30.4	36.8/38.8
Gland Size	C	C2	D	E	A	B	C	C2
Weight kg/km	1610	2420	3100	4900	515	950	1670	2540
Bend Radius - xOD	6	6	6	6	6	6	6	6
Conductor Temperature- (min/max) °C	20/65	20/65	20/65	20/65	20/65	20/65	20/65	20/65
Capacitance – nF/KM	115	115	115	115	115	115	115	115
DC Resistance @ 20°C –Ω /km	26.5	26.5	26.5	26.5	18.4	18.4	18.4	18.4
Maximum L/R Ratio	25	25	25	25	25	25	25	25
Sheath Colour	Black/ Blue	Black/ Blue	Black/ Blue	Black/ Blue	Black/Blue	Black/Blue	Black/Blue	Black/Blue

**300 / 500v**  
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### Onshore Instrumentation Cables to BS5308 Specification

Multi Pair Armoured Cables – Individually Screened – To BS5308 Part 1 Type 2

Cable	30x2x1.0	50x2x1.0	2x2x1.5	5x2x1.5	10x2x1.5	20x2x1.5	30x2x1.5	50x2x1.5
Stranding mm	1/1.13	1/1.13	7/0.53	7/0.53	7/0.53	7/0.53	7/0.53	7/0.53
Insulation Thickness mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Diameter over Inner Sheath (min/max) mm	34.4/36.4	43.9/45.9	13.7/15.7	17.8/19.8	25.5/27.5	33.4/35.4	40.0/42.0	51.2/53.2
Diameter of Armour/Braid mm			1.25	1.60	1.60	2.00		
Overall Diameter (min/max) mm	42.8/44.8	53.9/55.9	19.4/21.4	24.4/26.4	32.5/34.5	41.6/43.6	49.8/51.8	61.6/63.6
Gland Size	D	E	B	C	C2	D	D	E
Weight kg/km	2900	4800	730	1180	1820	3030	4040	6000
Bend Radius - xOD	6	6	6	6	6	6	6	6
Conductor Temperature - (min/max) °C	20/65	20/65	20/65	20/65	20/65	20/65	20/65	20/65
Capacitance – pF/m	115	115	120	120	120	120	120	120
DC Resistance @ 20°C –Ω /km	18.4	18.4	12.3	12.3	12.3	12.3	12.3	12.3
Maximum L/R Ratio	25	25	40	40	40	40	40	40
Sheath Colour	Black/Blue	Black/Blue	Black/Blue	Black/Blue	Black/Blue	Black/Blue	Black/Blue	Black/Blue

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## Onshore Instrumentation Cables to BS5308 Specification

### BS5308 Part 1 Core Identification

Pair Number	Element A	Element B	Pair Number	Element A	Element 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