



BS 5308-2 Type 2 SWA armoured cable

BS 5308 Part 2 Type 2

Armoured Instrumentation Cable

British Standard PVC-insulated galvanised steel wire armoured instrumentation cable



BS 5308 Part 2 Type 2

Galvanised SWA · PVC Cores

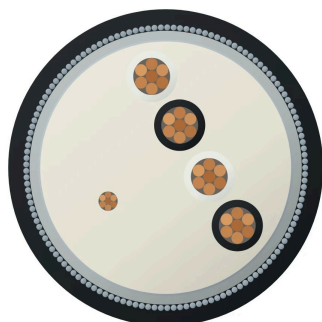
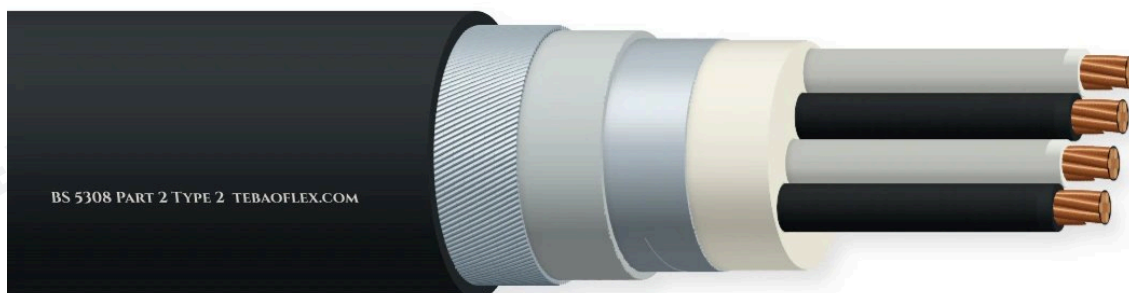
300/500 V · CAM / ICAM

Application

British Standard 300/500 V armoured instrumentation cable built to BS 5308 Part 2 Type 2 with Class 1, 2 or 5 copper conductors, PVC (TI 1) insulation, CAM or ICAM Al/PET screen, extruded bedding, galvanised steel wire armour (SWA) and PVC or LSZH sheath.

Typical uses: Chemical & Pharmaceutical Production Complexes, Water & Wastewater Utility Networks, Power Stations, Boilers & Tank Farms, Cement, Paper & Heavy Manufacturing, Intrinsically Safe (Ex-i) Outdoor Loops

Construction



Cross-section, not to scale

1 Plain annealed copper conductors

Exact BS 5308-2 conductor stranding classes

2 PVC core insulation (Type TI 1)**3** CAM or ICAM Al/PET electrostatic screen

100 % electrostatic interference rejection

4 Extruded PVC inner bedding (Type TM 1)**5** Galvanised steel wire armour (SWA)**6** Flame-retardant PVC or LSZH outer sheath

Technical data

Typical values

Rated voltage U ₀ /U	300/500 V	Test voltage	1000 V AC (core/screen) · 2000 V AC (core/core)
Insulation resistance	≥ 25 MΩ·km at +20 °C	Max. mutual capacitance (at 1 kHz)	≤ 250 pF/m (core/core) · ≤ 450 pF/m (core/screen)
Max. L/R ratio	≤ 25 μH/Ω (0.5–1.0 mm ²) · ≤ 40 μH/Ω (1.5 mm ²)	Operating temperature, fixed	–40 °C to +70 °C
Installation temperature	0 °C to +50 °C	Armour wire diameter	0.90 / 1.25 / 1.60 / 2.00 mm galvanised steel (BS EN 10257-1)
Min. bending radius	10 × OD	Flame retardance	BS EN 60332-1-2 & BS EN 60332-3-24 (Cat C)
Direct burial & impact	Full mechanical protection via galvanised SWA	Standards	BS 5308-2 / PAS 5308-2 Type 2

Sizes

17 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Format & stranding	SWA wire Ø	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
0.5 mm ² (16/0.20 mm) PVC Type 2 SWA Armoured 5 sizes						
☐ BS5308-2-T2 1P×0.5 CAM SWA	1×2×0.5 mm ² (16/0.20)	0.9 mm SWA	10.9	16	238	109
☐ BS5308-2-T2 2P×0.5 CAM SWA	2×2×0.5 mm ² (16/0.20)	0.9 mm SWA	13.8	26	352	138
☐ BS5308-2-T2 5P×0.5 ICAM SWA	5×2×0.5 mm ² (16/0.20)	1.25 mm SWA	18.2	72	628	182
☐ BS5308-2-T2 10P×0.5 ICAM SWA	10×2×0.5 mm ² (16/0.20)	1.6 mm SWA	22.8	138	940	228
☐ BS5308-2-T2 20P×0.5 ICAM SWA	20×2×0.5 mm ² (16/0.20)	1.6 mm SWA	28.4	268	1,425	284
0.75 mm ² (24/0.20 mm) PVC Type 2 SWA Armoured 4 sizes						
☐ BS5308-2-T2 1P×0.75 CAM SWA	1×2×0.75 mm ² (24/0.20)	0.9 mm SWA	11.4	21	260	114
☐ BS5308-2-T2 2P×0.75 CAM SWA	2×2×0.75 mm ² (24/0.20)	0.9 mm SWA	14.6	36	395	146
☐ BS5308-2-T2 5P×0.75 ICAM SWA	5×2×0.75 mm ² (24/0.20)	1.25 mm SWA	19.4	96	710	194
☐ BS5308-2-T2 10P×0.75 ICAM SWA	10×2×0.75 mm ² (24/0.20)	1.6 mm SWA	24.8	186	1,110	248
1.0 mm ² (32/0.20 mm) PVC Type 2 SWA Armoured 3 sizes						
☐ BS5308-2-T2 1P×1.0 CAM SWA	1×2×1.0 mm ² (32/0.20)	0.9 mm SWA	11.8	26	282	118
☐ BS5308-2-T2 5P×1.0 ICAM SWA	5×2×1.0 mm ² (32/0.20)	1.25 mm SWA	20.5	122	788	205
☐ BS5308-2-T2 10P×1.0 ICAM SWA	10×2×1.0 mm ² (32/0.20)	1.6 mm SWA	26.2	236	1,245	262
1.5 mm ² (7/0.53 mm) PVC Type 2 SWA Armoured 5 sizes						
☐ BS5308-2-T2 1P×1.5 CAM SWA	1×2×1.5 mm ² (7/0.53)	0.9 mm SWA	12.6	36	322	126
☐ BS5308-2-T2 2P×1.5 CAM SWA	2×2×1.5 mm ² (7/0.53)	1.25 mm SWA	17.2	65	565	172
☐ BS5308-2-T2 5P×1.5 ICAM SWA	5×2×1.5 mm ² (7/0.53)	1.6 mm SWA	22.6	172	985	226
☐ BS5308-2-T2 10P×1.5 ICAM SWA	10×2×1.5 mm ² (7/0.53)	1.6 mm SWA	29.0	336	1,555	290
☐ BS5308-2-T2 20P×1.5 ICAM SWA	20×2×1.5 mm ² (7/0.53)	2.0 mm SWA	37.8	662	2,620	378

– 6, 12, 24 and 36-core SWA armoured multicore instrumentation cables to BS 5308 Part 2 Type 2 are also supplied.

Electrical parameters by conductor class (BS 5308-2 Table 5)

5 sizes

Size & stranding	Max. DC R @ 20 °C Ω/km	Max. L/R μH/Ω	Max. C (core/core) pF/m	Max. C (core/scr) pF/m
0.5 mm ² (1/0.80 mm Cl.1)	36.8	25	250	450
0.5 mm ² (16/0.20 mm Cl.5)	39.7	25	250	450
0.75 mm ² (24/0.20 mm Cl.5)	26.5	25	250	450

Size & stranding	Max. DC R @ 20 °C Ω/km	Max. L/R μH/Ω	Max. C (core/core) pF/m	Max. C (core/scr) pF/m
1.0 mm ² (32/0.20 mm Cl.5)	19.8	25	250	450
1.5 mm ² (7/0.53 mm Cl.2)	12.3	40	250	450

– Drain wire is 0.5 mm² (16/0.20 mm) tinned copper across all CAM and ICAM screens.

Standards and approvals

✓ BS 5308-2 / PAS 5308-2 Type 2 Compliant

✓ BS EN 10257-1 Galvanised SWA

✓ BS EN 60332-1-2 & 60332-3-24

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/bs-5308-part-2-type-2-armoured-instrumentation-cable



Typical values for this cable type, based on BS 5308-2 Type 2 (300/500 V). Values for your order are confirmed in the quotation. Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.