

658(*) (c) SW4 150/250 V

TCu/EPR/CAM/ZH/GSWB/ZH

BS 6883

Halogen-free, flame retardant, offshore & shipboard instrumentation cables, elastomer insulated and sheathed, collectively screened pairs, triples or quads with steel wire braid

CONSTRUCTION

Conductors	Tinned annealed circular stranded copper class 5 ¹⁾ acc. to BS EN 60228
Insulation	Halogen-free elastomer compound EPR type GP4 acc. to BS 7655-1.2
Pairs identification*	Black and white with printed number of pairs in contrasting colour on the insulation
Triples identification*	Black, white and red with printed number of triples in contrasting colour on the insulation
Quad identification*	Black, white, red and blue with printed number of quad in a contrasting colour on the insulation
Separator	Polyester tape
Collective screen	Aluminium/polyester tape with the metallic side in contact with tinned copper drain wire
Inner sheath	Halogen-free, heat-resistant, oil-resisting and flame-retardant elastomer compound type SW4, acc. to BS 7655-2.6
Separator	Polyester tape
Armour/mechanical screen	Galvanized steel wire braid ²⁾
Outer sheath	Halogen-free, heat-resistant, oil-resisting and flame-retardant elastomer compound type SW4, acc. to BS 7655-2.6
Colour of outer sheath	Grey (Non Intrinsically Safe) or blue (Intrinsically Safe) ³⁾
Cable marking	ELECTRIC CABLE Type SW4 "number of pairs or triples, quads" "X" "conductor size" "(C)" "150/250 V" "TFK3" "BS6883" "UK00A code" "IEC60332-3-22 cat. A" "year" "metre mark"

¹⁾ Class 2 conductors are available on request

²⁾ Tinned copper wire braid version is available on request

³⁾ Black outer sheathing is available on request

* Alternative coloured cores are available on request



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CHARACTERISTIC

Maximum conductor operating temperature:	+90°C
Lowest ambient temperature for fixed installation:	-40°C
Lowest installation temperature:	-15°C
Minimum bending radius:	8 × D; D – overall diameter of cable

Fire performance

Flame retardant:	IEC 60332-3-22 Category A
Smoke emission:	BS EN 61034-2, IEC 61034-2
Corrosive gas emission:	BS EN 50267-2-1, IEC 60754-1: type SW4 cables ≤ 0.5% HCl

Applications

Armoured instrumentation cable for fixed installations in all areas including accommodation and on open deck in ships and offshore units where halogen-free cable protection is required.

Approvals

LR
Details related to particular Approvals are informative only. Please contact manufacturer to confirm whether the required cross-sections are covered by the Certificate.

Standard length cable packing:	1,000 m on drums Other forms of packing and delivery are available on request
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Number of pairs and nominal area of conductor	Class of conductor	Nominal thickness of insulation	Nominal thickness of inner sheath	Diameter of steel wires in braid	Nominal thickness of outer sheath	Approximate overall diameter of cable	Approximate net weight of cables	UKOOA Code (Grey/Blue)
$n \times 2 \times \text{mm}^2$		mm	mm	mm	mm	mm	kg/km	
1 × 2 × 1.5*	2	0.8	1.2	0.3	1.4	13.2	245	–
1 × 4 × 2.5*	2	0.8	1.4	0.3	1.6	16.3	422	–

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2 × 2 × 0.75 *	5	0.8	1.2	0.3	1.4	13.3	340	–
2 × 2 × 1.0 *	5	0.8	1.2	0.3	1.4	13.5	357	–
2 × 2 × 1.5 *	5	0.8	1.4	0.3	1.6	15.1	352	–
2 × 2 × 2.5 *	2	0.8	1.4	0.3	1.6	16.6	404	–
2 × 2 × 2.5 *	5	0.8	1.4	0.3	1.6	16.6	404	–
3 × 2 × 0.75	5	0.8	1.2	0.3	1.4	16.9	435	KJH00/KGH00
3 × 2 × 1.0	5	0.8	1.2	0.3	1.4	17.8	483	KJH01/KGH01
3 × 2 × 1.5 *	5	0.8	1.4	0.3	1.6	18.9	497	KJH02/KGH02
4 × 2 × 1.5 *	5	0.8	1.4	0.3	1.6	20.4	561	–
5 × 2 × 0.75 *	5	0.8	1.4	0.3	1.5	19.8	563	–
5 × 2 × 1.0 *	5	0.8	1.4	0.3	1.6	20.4	613	–
5 × 2 × 1.5 *	5	0.8	1.4	0.3	1.6	21.9	716	–
5 × 2 × 2.5 *	2	0.8	1.5	0.3	1.7	24.6	846	–
6 × 2 × 1 *	5	0.8	1.4	0.3	1.6	21.9	595	–
7 × 2 × 0.75	5	0.8	1.4	0.3	1.5	21.2	566	KJJ00/KGJ00
7 × 2 × 1.0	5	0.8	1.4	0.3	1.6	22.2	640	KJJ01/KGJ01
7 × 2 × 1.5 *	5	0.8	1.6	0.3	1.8	23.8	761	KJJ02/KGJ02
8 × 2 × 1.5 *	5	0.8	1.6	0.3	1.8	25.5	889	–
10 × 2 × 0.75 *	5	0.8	1.6	0.3	1.7	25.5	922	–
10 × 2 × 1.0 *	5	0.8	1.6	0.3	1.8	26.3	889	–
10 × 2 × 1.5 *	5	0.8	1.6	0.3	1.8	28.2	1,184	–
12 × 2 × 0.75	5	0.8	1.6	0.3	1.7	27.0	1,087	KJK00/KGJ00
12 × 2 × 1.0	5	0.8	1.6	0.3	1.8	28.3	1,155	KJK01/KGJ01
12 × 2 × 1.5 *	5	0.8	1.8	0.45	2.1	30.9	1,470	KJK02/KGJ02
16 × 2 × 1.5 *	5	0.8	1.8	0.45	2.1	34.2	1,540	–
20 × 2 × 0.75	5	0.8	1.8	0.45	2.0	33.4	1,549	KJL00/KGL00
20 × 2 × 1.0	5	0.8	1.8	0.45	2.1	35.7	1,810	KJL01/KGL01
20 × 2 × 1.5 *	5	0.8	2.0	0.45	2.2	37.6	2,061	KJL02/KGL02
20 × 2 × 1.5 *	2	0.8	2.0	0.45	2.2	38.2	1,919	–
24 × 2 × 1.5 *	5	0.8	2.0	0.45	2.2	40.3	2,102	–
27 × 2 × 0.75	5	0.8	1.9	0.45	2.2	37.7	1,724	–
27 × 2 × 1	5	0.8	2.0	0.45	2.2	39.9	1,993	–
27 × 2 × 1.5 *	5	0.8	2.1	0.45	2.3	42.4	2,503	–
37 × 2 × 0.75	5	0.8	2.1	0.45	2.3	43.0	2,199	–
37 × 2 × 1	5	0.8	2.2	0.45	2.4	44.5	2,454	–

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37 × 2 × 1.5 *	5	0.8	2.3	0.45	2.5	48.6	3,191	–
n × 3 × mm²		mm	mm	mm	mm	mm	kg/km	
3 × 3 × 0.75	5	0.8	1.3	0.3	1.4	18.5	440	KJS00/KGS00
3 × 3 × 1.0	5	0.8	1.3	0.3	1.5	19.6	519	KJS01/KGS01
2 × 3 × 1.5	2	0.8	1.4	0.3	1.6	19.9	493	–
3 × 3 × 1.5 *	5	0.8	1.4	0.3	1.6	20.3	560	–
4 × 3 × 1.5 *	5	0.8	1.5	0.3	1.7	22.3	674	–
5 × 3 × 1 *	2	0.8	1.5	0.3	1.7	22.5	700	–
7 × 3 × 0.75	5	0.8	1.4	0.3	1.6	24.2	745	KJT00/KGT00
7 × 3 × 1.0	5	0.8	1.5	0.3	1.7	25.7	871	KJT01/KGT01
7 × 3 × 1.5 *	5	0.8	1.7	0.3	1.9	27.4	1,008	–
8 × 3 × 1.5 *	5	0.8	1.7	0.45	2.0	29.8	1,229	–
12 × 3 × 0.75	5	0.8	1.7	0.45	1.9	30.4	1,381	KJU00/KGU00
12 × 3 × 1.0	5	0.8	1.7	0.45	2.0	32.2	1,591	KJU01/KGU01
12 × 3 × 1.5 *	5	0.8	1.9	0.45	2.1	34.4	1,772	–
16 × 3 × 1.5 *	5	0.8	2.0	0.45	2.2	38.5	2,044	–
n × 4 × mm²		mm	mm	mm	mm	mm	kg/km	
3 × 4 × 0.75 *	5	0.8	1.4	0.3	1.5	20.6	531	–
3 × 4 × 1 *	5	0.8	1.4	0.3	1.6	21.3	576	–
3 × 4 × 1.5 *	5	0.8	1.6	0.3	1.7	23.4	702	–
7 × 4 × 0.75 *	5	0.8	1.6	0.3	1.7	26.8	908	–
7 × 4 × 1 *	5	0.8	1.6	0.45	1.8	28.2	1,223	–
7 × 4 × 1.5 *	5	0.8	1.7	0.45	1.9	30.8	1,466	–

* Based on standard

Electrical parameters

Nominal cross-sectional area	Maximum conductor resistance at 20°C (Ω/km)	
	Class 5	Class 2
0.75 mm ²	26.7	24.8
1.0 mm ²	20.0	18.2
1.5 mm ²	13.7	12.2

Please refer to technical section for additional information relating to these cables.