

**BS 7917 Offshore Fire-Resistant Cables**

BS 7917 U FR

Unarmoured Fire-Resistant Offshore Power Cable

0.6/1 kV (600/1000 V) unarmoured fire-resistant offshore power & control cable
(Mica/EPR/S)



600/1000 V

BS 7917 / IEC 60331

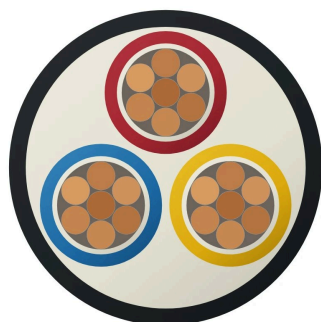
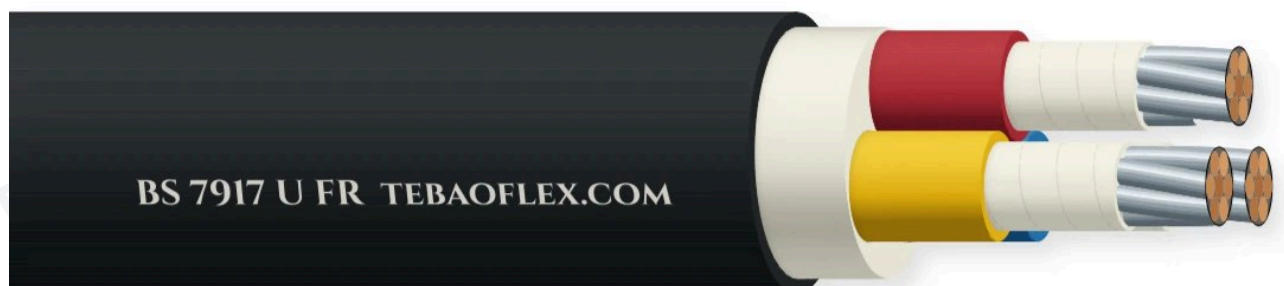
Mica + GP4 EPR + SW4

Application

BS 7917 U FR (Unarmoured Fire-Resistant) is a 600/1000 V offshore and marine circuit-integrity cable featuring Class 2 tinned copper conductors, phlogopite mica-glass fire barrier tape, GP4 EPR insulation and an oil- and mud-resistant SW4 (or reduced-propagati

Typical uses: Offshore oil & gas platforms, FPSO & FLNG vessels, Semi-submersible drilling rigs, Marine engine & control rooms, Petrochemical coastal terminals

Construction



Cross-section, not to scale

1	Tinned annealed copper	BS EN 60228
2	Mica-glass fire barrier	IEC 60331-21
3	GP4 EPR thermoset insulation	BS 7655-1.2
4	Halogen-free binder tape	BS 7917
5	SW4 / SW2 offshore sheath	BS 7655-2.6

Technical data

Typical values

Rated voltage U ₀ /U	600/1000 V (power & control)
Conductor resistance	BS EN 60228 Class 2 tinned copper
Max. short-circuit temperature	+250 °C (5 s)
Min. installation temp.	-20 °C
Tear & abrasion resistance	High-tear cross-linked SW4/SW2 elastomer
Bunched flame propagation	IEC 60332-3-22 Category A
Standards	BS 7917 & UKOOA Cable Code

Routine AC test voltage	3.5 kV rms for 5 minutes
Continuous conductor rating	+90 °C
Fixed operating range	-40 °C to +90 °C
Min. internal bend radius	6 × overall diameter (OD ≤25 mm) · 8 × OD (>25 mm)
Fire survival test	IEC 60331-21 (750 °C flame for 180 min + 15 min cool-down)
Oil & fluid immersion	IRM 902 / IRM 903 mineral oil resistance per BS 7655-2.6

Sizes

14 standard constructions

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

Designation	Cores × mm ²	Cross-section	Outer Ø ≈ mm	Copper kg/km	Total weight ≈ kg/km	Min. bend R fixed mm
BS 7917 U FR standard series 14 sizes						
☐ BS 7917 U FR 2×1.5 (UKOOA YD202)	2×1.5	1.5 mm ²	10.2	30	135	61
☐ BS 7917 U FR 2×2.5 (UKOOA YD203)	2×2.5	2.5 mm ²	11.2	49	170	67
☐ BS 7917 U FR 3×1.5 (UKOOA YD302)	3×1.5	1.5 mm ²	10.8	44	155	65
☐ BS 7917 U FR 3×2.5 (UKOOA YD303)	3×2.5	2.5 mm ²	11.9	74	200	71
☐ BS 7917 U FR 3×4 (UKOOA YD304)	3×4	4.0 mm ²	13.4	118	265	80
☐ BS 7917 U FR 3×6 (UKOOA YD305)	3×6	6.0 mm ²	14.8	176	345	89
☐ BS 7917 U FR 3×10 (UKOOA YD306)	3×10	10 mm ²	17.5	294	510	105
☐ BS 7917 U FR 3×16 (UKOOA YD307)	3×16	16 mm ²	19.8	470	715	119
☐ BS 7917 U FR 4×1.5 (UKOOA YD402)	4×1.5	1.5 mm ²	11.7	59	185	70
☐ BS 7917 U FR 4×2.5 (UKOOA YD403)	4×2.5	2.5 mm ²	12.9	98	240	77
☐ BS 7917 U FR 4×4 (UKOOA YD404)	4×4	4.0 mm ²	14.6	157	325	88
☐ BS 7917 U FR 4×10 (UKOOA YD406)	4×10	10 mm ²	19.2	392	635	115
☐ BS 7917 U FR 7×1.5 (UKOOA YD702)	7×1.5	1.5 mm ²	14.0	103	275	84
☐ BS 7917 U FR 12×1.5 (UKOOA YDA02)	12×1.5	1.5 mm ²	18.2	176	445	109

– Nominal outer diameters and weights are subject to manufacturing tolerances per BS 7917 / IEC 60331-21.

Electrical data

14 sizes

Cores × mm ²	Max. DC R @ 20 °C Ω/km	Current in air A	Current in duct/tray A
2×1.5	12.200	23	20
2×2.5	7.560	31	27
3×1.5	12.200	19	16
3×2.5	7.560	26	22
3×4	4.700	35	30
3×6	3.110	45	39
3×10	1.840	63	54
3×16	1.160	84	72
4×1.5	12.200	19	16
4×2.5	7.560	26	22

Cores × mm ²	Max. DC R @ 20 °C Ω/km	Current in air A	Current in duct/tray A
4×4	4.700	35	30
4×10	1.840	63	54
7×1.5	12.200	14	12
12×1.5	12.200	11	9

– Current ratings apply at +30 °C ambient in free air and +25 °C in enclosed tray/conduit.

Standards and approvals

- ✓ BS 7917
- ✓ UKOOA Offshore Cable Code
- ✓ IEC 60331-21 (750 °C, 3 h)
- ✓ IEC 60332-3-22 Cat. A
- ✓ BS 7655-1.2 GP4 & BS 7655-2.6 SW4

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

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/bs-7917-unarmoured-fire-resistant-offshore-power-cable



Typical values for this cable type, based on BS 7917 / IEC 60331-21. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.