



BS 6883 / UKOOA offshore cable

BS 6883 UIS / UCS

Unarmoured Offshore Instrumentation Cable

BS 6883 & UKOOA Type UIS (IS+OS) & Type UCS (OS) EPR/SW4 LSZH offshore cable

BS 6883 & UKOOA (GF / GH)

150/250 V (300 V) & 600/1000 V

EPR GP4 / SW4 LSZH · Cat A Flame

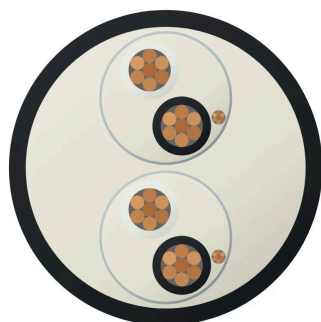
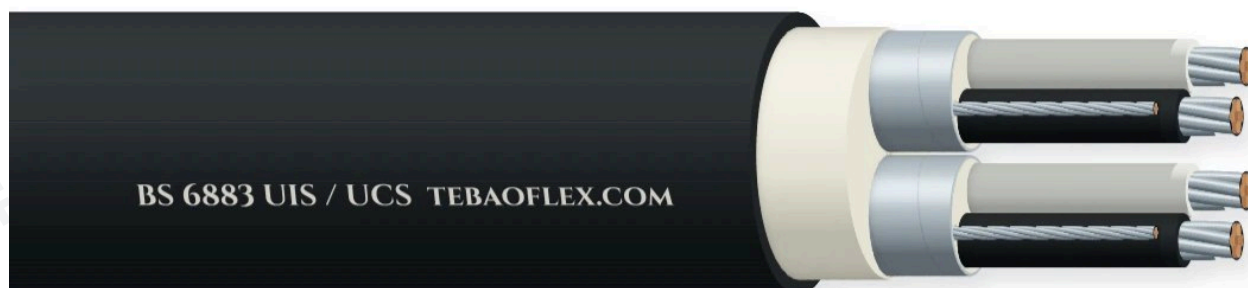


Application

Fixed offshore installation instrumentation cable built to BS 6883 and UKOOA (Type UCS Code GF and Type UIS Code GH) with Class 5 tinned copper conductors, +90 °C EPR GP4 insulation, Al/PET screen and heavy-duty SW4 oil-resistant LSZH elastomer sheath.

Typical uses: Fixed Offshore Oil & Gas Production Platforms, FPSO, FSO & FLNG Topsides Control Modules, Offshore Living Quarters, CCR & Marshalling Rooms, Jack-Up & Semi-Submersible Drilling Units, Offshore Wind HVDC/HVAC Converter Stations

Construction



Cross-section, not to scale

- 1 Class 5 flexible tinned annealed copper
- 2 Cross-linked EPR elastomer (Type GP4)
- 3 Type UCS (Collective) or Type UIS (Individual + Collective) screen
- 4 Cross-linked oil-resistant LSZH elastomer (Type SW4)

Technical data

Typical values

Voltage rating (U ₀ /U)	150/250 V (300 V class) standard · 600/1000 V heavy-duty option	Test voltage (core-to-core / screen)	1500 V AC rms for 5 min (150/250 V grade) · 3500 V AC (600/1000 V grade)
Max. conductor DC resistance @ 20 °C	26.7 (0.75) · 20.0 (1.0) · 13.7 (1.5) · 8.21 Ω/km (2.5 mm ² Cl.5)	Max. mutual capacitance @ 1 kHz	≤ 200 nF/km (UCS) · ≤ 250 nF/km (UIS)
Max. L/R ratio (inductance / resistance)	≤ 25 µH/Ω (0.75 & 1.0 mm ²) · ≤ 40 µH/Ω (1.5 mm ²) · ≤ 60 µH/Ω (2.5 mm ²)	Continuous conductor temperature	+90 °C (short-circuit rating +250 °C for 5 s)
Ambient operating range	−40 °C to +90 °C (fixed) · −25 °C to +90 °C (installation)	Min. bending radius, fixed	6 × OD (unarmoured UIS / UCS elastomeric construction)
Tear & abrasion resistance	Heavy-duty cross-linked SW4 thermoset rubber jacket	Bunched vertical flame test	IEC 60332-3-22 Category A (7 litres/m non-metallic volume, 40 min burner)
Halogen gas & smoke emission	IEC 60754-1 (HCl ≤ 0.5 %), IEC 60754-2 & IEC 61034-2 (≥ 60 % light)	Oil & fluid immersion	BS 7655-2.6 Type SW4 mineral oil, diesel & chemical resistance at +100 °C
Standards	BS 6883, UKOOA (Codes GF & GH), BS 7655-1.2 (GP4) & BS 7655-2.6 (SW4)		

Sizes

18 standard constructions

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

Order designation UKOOA	Format	Screen type	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
0.75 mm ² (24/0.20 mm) — L/R ≤ 25 µH/Ω · R ₂₀ ≤ 26.7 Ω/km (UKOOA GF/GH) 10 sizes						
☐ BS6883-UCS 1P×0.75 (GF107)	1×2×0.75 mm ²	UCS (OS)	7.2	19	76	43
☐ BS6883-UCS 1T×0.75 (GF132)	1×3×0.75 mm ²	UCS (OS)	7.7	26	88	46
☐ BS6883-UCS 2P×0.75 (GF108)	2×2×0.75 mm ² (Quad)	UCS (OS)	8.6	34	112	52
☐ BS6883-UCS 3P×0.75 (GF109)	3×2×0.75 mm ²	UCS (OS)	11.4	48	172	68
☐ BS6883-UCS 7P×0.75 (GF110)	7×2×0.75 mm ²	UCS (OS)	14.8	108	305	89
☐ BS6883-UCS 12P×0.75 (GF111)	12×2×0.75 mm ²	UCS (OS)	19.2	182	495	115
☐ BS6883-UCS 20P×0.75 (GF112)	20×2×0.75 mm ²	UCS (OS)	23.8	302	768	143
☐ BS6883-UIS 3P×0.75 (GH109)	3×2×0.75 mm ²	UIS (IS+OS)	12.2	62	202	73
☐ BS6883-UIS 7P×0.75 (GH110)	7×2×0.75 mm ²	UIS (IS+OS)	16.2	140	365	97
☐ BS6883-UIS 12P×0.75 (GH111)	12×2×0.75 mm ²	UIS (IS+OS)	21.0	238	590	126
1.0 mm ² (32/0.20 mm) — L/R ≤ 25 µH/Ω · R ₂₀ ≤ 20.0 Ω/km (UKOOA GF/GH) 4 sizes						
☐ BS6883-UCS 1P×1.0 (GF114)	1×2×1.0 mm ²	UCS (OS)	7.6	24	86	46
☐ BS6883-UIS 3P×1.0 (GH116)	3×2×1.0 mm ²	UIS (IS+OS)	13.0	78	236	78
☐ BS6883-UIS 7P×1.0 (GH117)	7×2×1.0 mm ²	UIS (IS+OS)	17.2	178	428	103
☐ BS6883-UIS 12P×1.0 (GH118)	12×2×1.0 mm ²	UIS (IS+OS)	22.4	302	695	134
1.5 mm ² (30/0.25 mm) — L/R ≤ 40 µH/Ω · R ₂₀ ≤ 13.7 Ω/km (UKOOA GF/GH) 3 sizes						
☐ BS6883-UCS 1P×1.5 (GF121)	1×2×1.5 mm ²	UCS (OS)	8.4	34	108	50
☐ BS6883-UIS 3P×1.5 (GH123)	3×2×1.5 mm ²	UIS (IS+OS)	14.6	108	304	88
☐ BS6883-UIS 7P×1.5 (GH124)	7×2×1.5 mm ²	UIS (IS+OS)	19.4	248	558	116
2.5 mm ² (50/0.25 mm) — L/R ≤ 60 µH/Ω · R ₂₀ ≤ 8.21 Ω/km (UKOOA GF/GH) 1 sizes						
☐ BS6883-UCS 1P×2.5 (GF128)	1×2×2.5 mm ²	UCS (OS)	9.8	53	148	59

– UKOOA First Letter 'G' = Grey outer sheath (standard); replace 'G' with 'B' (e.g. BF107 / BH110) for Blue Ex-i outer sheath.

Electrical parameters by cross-section (Class 5 tinned copper)

4 sizes

Conductor size	Max. DC R @ 20 °C Ω/km	Max. L/R ratio μH/Ω	Max. C (UCS) nF/km	Max. C (UIS) nF/km
0.75 mm ² (24/0.20 mm)	26.70	25	200	250
1.00 mm ² (32/0.20 mm)	20.00	25	200	250
1.50 mm ² (30/0.25 mm)	13.70	40	200	250
2.50 mm ² (50/0.25 mm)	8.21	60	200	250

– For fire-survival circuits requiring 950 °C for 3 hours, specify BS 7917 mica-glass taped UIS/UCS offshore cable.

Standards and approvals

- ✓ BS 6883 & UKOOA (Codes GF/GH/BF/BH) Compliant
- ✓ IEC 60332-3-22 Cat A, IEC 60754 & IEC 61034
- ✓ 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.

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Email

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Web

tebaoflex.com/cables/bs-6883-unarmoured-individually-or-collectively-screened-offshore-instrumentation-cable



Typical values for this cable type, based on BS 6883 / UKOOA (Codes GF & GH) / BS 7655 / IEC 60332-3-22. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.