

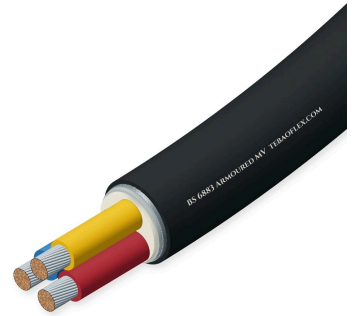


IEEE 1580 LSX & BS 6883 Offshore / Shipboard Power Cables

BS 6883 Armoured MV

Offshore Power Cable

BS 6883 1.9/3.3 kV, 3.8/6.6 kV, 6.35/11 kV & 8.7/15 kV Cu-screened wire-braid armoured



BS 6883 · 3.3 / 6.6 / 11 / 15 kV

Triple-Extruded GP5 HV-EPR

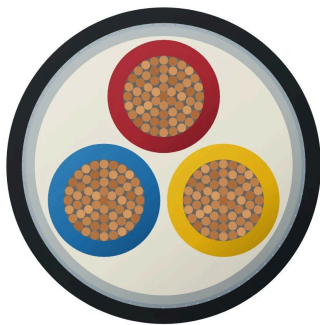
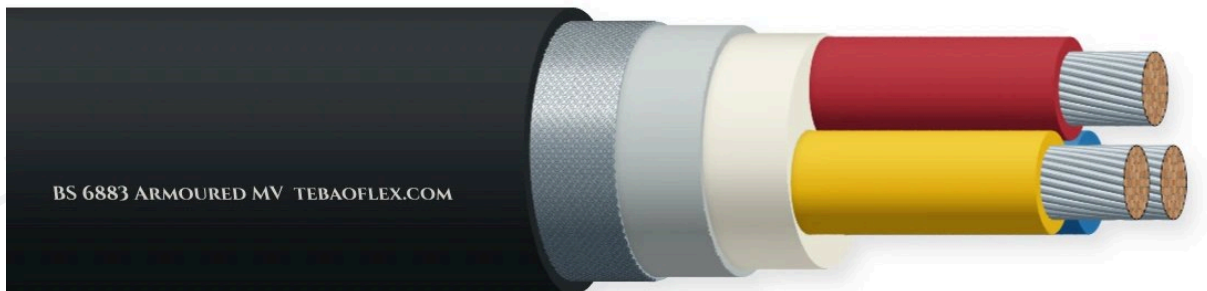
Cu Phase Screens + GSWB / PBWB

Application

BS 6883 Armoured MV Offshore Power Cable is engineered for medium-voltage offshore topside generation, gas compressors, water-injection pumps, and FPSO HV switchboards across 1.9/3.3 kV, 3.8/6.6 kV, 6.35/11 kV, and 8.7/15 kV ratings, featuring Class 2/5

Typical uses: Offshore turbine & generator MV bus, 6.6 kV & 11 kV injection/export pumps, FPSO & semi-submersible MV ring mains, Offshore wind collector topsides

Construction



Cross-section, not to scale

1	Compacted tinned copper conductor	BS 6883 / BS EN 60228
2	Triple-extruded Semi-Con + GP5 HV-EPR	BS 6883 / BS 7655-1.2
3	Tinned copper tape phase screen	BS 6883 Clause 8
4	Extruded SW4 inner bedding	BS 6883 Clause 9
5	Wire braid armour (GSWB / PBWB)	BS 6883 Clause 10
6	Type SW4 MV outer sheath	BS 6883 / BS 7655-2.6

Technical data

Typical values

Rated voltage classes U0/U	1.9/3.3 kV · 3.8/6.6 kV · 6.35/11 kV ·	Routine AC test voltage (5 min)	6.5 kV (3.3 kV) · 11 kV (6.6 kV) · 17 kV
Partial discharge (PD) limit	≤ 5 pC at 1.73 × U0 (3.8/6.6 kV to 8.7/15 kV)	Max. conductor operating temp.	+90 °C continuous · +250 °C short-circuit
Impulse withstand (BIL)	40 kV (3.3 kV) · 60 kV (6.6 kV) · 75/95 kV	Operating temperature range	-40 °C to +90 °C fixed installation
Minimum installation temp.	-20 °C	Min. bending radius	8 × D (3-core) · 10 × D (1-core MV) per BS
Armour wire diameter	0.30 mm or 0.45 mm GSWB / PBWB per BS 6883	Bunched vertical flame test	BS EN 60332-3-22 Category A & BS EN 60332-1-2
Zero halogen, low smoke & oil	BS EN 60754-1 (< 0.5 % HCl) · BS EN 61034-2	Standards	BS 6883 · BS 7655-1.2 (GP5) · BS 7655-2.6

Sizes

6 standard constructions

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

Order designation	Cores × Size	Main cross-section	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard BS 6883 Armoured MV configurations 6 sizes						
☐ BS 6883 1.9/3.3 kV 3C × 35 mm ² GSWB	3 × 35 mm ² (3.3 kV)	35.0 mm ²	31.8	1,008	2,290	254
☐ BS 6883 3.8/6.6 kV 3C × 50 mm ² Cu-Scr GSWB	3 × 50 mm ² (6.6 kV)	50.0 mm ²	41.2	1,680	3,480	330
☐ BS 6883 3.8/6.6 kV 3C × 95 mm ² Cu-Scr GSWB	3 × 95 mm ² (6.6 kV)	95.0 mm ²	49.4	3,020	5,240	395
☐ BS 6883 6.35/11 kV 3C × 120 mm ² Cu-Scr GSWB	3 × 120 mm ² (11 kV)	120.0 mm ²	56.5	3,790	6,620	452
☐ BS 6883 6.35/11 kV 1C × 240 mm ² Cu-Scr PBWB	1 × 240 mm ² (11 kV PBWB)	240.0 mm ²	38.6	2,740	3,780	309
☐ BS 6883 8.7/15 kV 1C × 300 mm ² Cu-Scr PBWB	1 × 300 mm ² (15 kV PBWB)	300.0 mm ²	44.2	3,410	4,650	354

- Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per BS 6883 / IEC 60092-354 (1.9/3.3 kV to 8.7/15 kV Offshore MV).

Electrical & ampacity

6 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Iz free air A	Iz tray / duct A	Isc (1 s) kA	Voltage drop mV/A/m	Dielectric test V
3 × 35 mm ² (3.3 kV)	0.53	155	140	5.01	1.12	6,500
3 × 50 mm ² (6.6 kV)	0.39	190	171	7.15	0.82	11,000
3 × 95 mm ² (6.6 kV)	0.20	280	252	13.59	0.43	11,000
3 × 120 mm ² (11 kV)	0.15	325	292	17.16	0.35	17,000
1 × 240 mm ² (11 kV PBWB)	0.08	620	555	34.32	0.20	17,000
1 × 300 mm ² (15 kV PBWB)	0.06	730	655	42.90	0.18	24,000

- Conductor DC resistance at +20 °C per IEC 60228 and reference current ratings at 30 °C ambient per BS 6883 / IEC 60092-354 (1.9/3.3 kV to 8.7/15 kV Offshore MV).

Standards and approvals

- ✓ BS 6883 (MV 3.3–15 kV)
- ✓ BS 7655-1.2 Type GP5
- ✓ DNV / LR / ABS

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-6883-armoured-offshore-mv-power-cable



Typical values for this cable type, based on BS 6883 / IEC 60092-354 (1.9/3.3 kV to 8.7/15 kV Offshore MV). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.