shipboard & offshore power cable

MGG / MGH & MGCG / MGCH 0.6/1 KV (DIN 89158)

MGG / MGH & MGCG / MGCH 0.6/1 kV DIN 89158 / 89160 HEPR Shipboard Powe

DIN 89158 / DIN 89160 · 0.6/1 kV · Shipboard & offshore power cable



DIN 89158 / DIN 89160 | **0.6/1 kV (-40 to +90 °C)** | **Polychloroprene / SHF1 Outer Sheath**

Application

MGG / MGH & MGCG / MGCH 0.6/1 kV (DIN 89158 / DIN 89160) HEPR-Insulated Copper-Braided & Unscreened Polychloroprene/SHF1 Shipboard Power Cable (DIN 89158 / DIN 89160, 0.6/1 kV, -40 to +90 °C, min. bend radius 6 × OD).

Typical uses: Commercial Vessels & Cruise Ships, Offshore Oil & Gas Platforms (FPSO), Jack-Up & Semi-Submersible Drilling Rigs, Naval Surface Vessels & Submarines

Construction





Cross-section, not to scale

1. Stranded Copper Conductors (3×50 mm²)
2. HEPR (3GI3) Rubber Insulation
3. Extruded Inner Covering
4. Copper Wire Braid Armour (DIN 89158)
5. Polychloroprene / SHF1 Outer Sheath

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (DIN 89158 (MGCG/MGCH) & DIN 89160 (MGG/MGH) / IEC 60092-353)	**Core / conductor construction**	Stranded Copper Conductors (3×50 mm²) — DIN VDE 0295 / IEC 60228 Class 2 stranded plain copper
Primary dielectric / buffering	HEPR (3GI3) Rubber Insulation — 90 °C high-modulus ethylene-propylene rubber core insulation	**Continuous operating temperature**	−40…+90 °C (shipboard & offshore duty)
Short-circuit / peak thermal rating	Verified thermal stability per DIN 89158 (MGCG/MGCH) & DIN 89160 (MGG/MGH) / IEC 60092-353	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Polychloroprene / SHF1 Outer Sheath — Heavy-duty polychloroprene (MGCG) or halogen-free (MGCH) jacket	**Minimum bending radius**	6 × OD
Armour, screen & mechanical duty	Copper Wire Braid Armour (DIN 89158) — Bare copper wire braid screen and mechanical armouring	**Flame, fire & smoke performance**	Qualified for marine flame-retardance and low-smoke zero-halogen / fire safety per DIN 89158 (MGCG/MGCH) & DIN 89160 (MGG/MGH) / IEC 60092-353
Oil, drilling mud & seawater resistance	Resistant to marine fuel/lube oils, salt mist and offshore fluids per DIN 89158 (MGCG/MGCH) & DIN 89160 (MGG/MGH) / IEC 60092-353	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	DIN 89158 (MGCG/MGCH) & DIN 89160 (MGG/MGH) / IEC 60092-353		

Sizes

3 standard constructions

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

Order designation	Configuration	Core / stranding	Outer Ø ≈ mm	Net weight ≈ kg/km	Tensile rating kN ≈	Min. bend R mm
MGG / MGH & MGCG / MGCH 0.6/1 KV (DIN 89158) Construction Schedule (−40…+90 °C) 3 sizes						
☐ **MGG 3×16+1G16 mm²**	**3 × 16 + 1G16 mm² (4G16)**	**IEC 60228 Class 2/5 Cu/SnCu**	**22.4**	**920**	**3.8**	**135**
☐ **MGG 3×35+1G16 mm²**	**3 × 35 + 1G16 mm² (4G35)**	**IEC 60228 Class 2/5 Cu/SnCu**	**28.8**	**1,690**	**7.4**	**175**
☐ **MGG 3×70+1G35 mm²**	**3 × 70 + 1G35 mm² (4G70)**	**IEC 60228 Class 2/5 Cu/SnCu**	**38.2**	**3,260**	**14.8**	**230**

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per DIN 89158 (MGCG/MGCH) & DIN 89160 (MGG/MGH) / IEC 60092-353.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3 × 16 + 1G16 mm² (4G16)	**1.15**	**0.6/1 kV (98 A)**	**−40…+90 °C**
3 × 35 + 1G16 mm² (4G35)	**0.52**	**0.6/1 kV (158 A)**	**−40…+90 °C**
3 × 70 + 1G35 mm² (4G70)	**0.27**	**0.6/1 kV (245 A)**	**−40…+90 °C**

– Every production length undergoes routine conductor DC resistance, high-voltage dielectric or OTDR continuity and dimensional verification.

Standards and approvals

- DIN 89158 / DIN 89160 Compliant
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

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/mgg-mgh-mgcg-mgch-0-6-1-kv-din-89158

Typical values for this cable type, based on DIN 89158 (MGCG/MGCH) & DIN 89160 (MGG/MGH) / IEC 60092-353. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.