



power connection cable series

SPYC TPYC MV

JIS Medium-Voltage Shipboard Power Cable

JIS C 3410 3.3 kV, 6.6 kV & 6/10 kV screened wire-braid armoured MV shipboard cable



JIS C 3410 / IEC 60092-354

3.3 kV · 6.6 kV · 6/10 kV

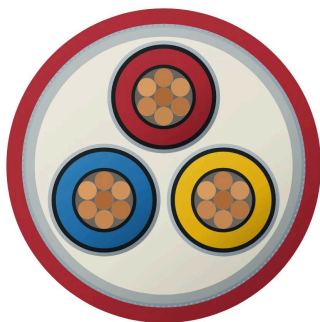
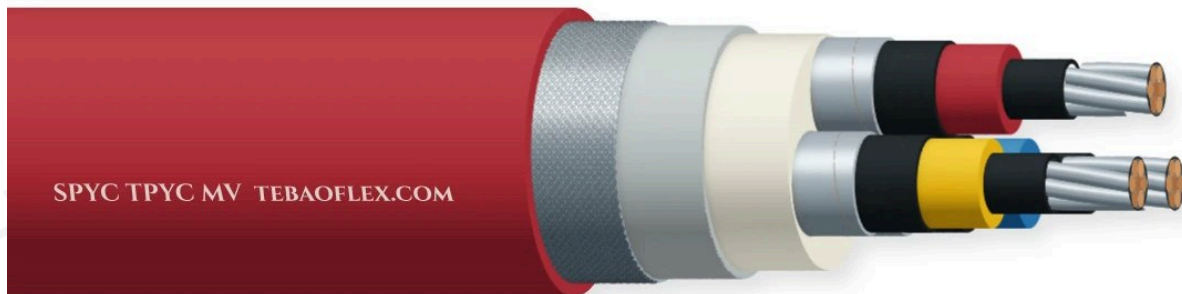
SPYC (1C) & TPYC (3C)

Application

SPYC (Single-Core) and TPYC (Three-Core) Medium-Voltage Shipboard Power Cable (3.3/3.3 kV, 6.6/6.6 kV & 6/10 kV) per JIS C 3410 and IEC 60092-354 featuring compacted tinned copper conductors, triple-extruded semi-conductive + 90 °C.

Typical uses: 6.6 kV / 11 kV LNG & Ultra-Large Container Ships, Marine Electric Pod & Azimuth Thruster Drives, High-Voltage Shore Connection (AMP / IEC 80005-1), FPSO & Offshore Drilling Topside MV Feeders, Dredgers, Icebreakers & Cruise Ship Propulsion

Construction



Cross-section, not to scale

- | | | |
|---|---|---|
| 1 | Compacted stranded tinned copper conductor | |
| 2 | Triple-extruded semi-con + HV EPR + semi-con screen | Partial discharge < 5 pC at 1.73 U _o |
| 3 | Helical annealed/tinned copper tape screen | |
| 4 | Wire braid armour ('C' / '-Y') | |
| 5 | Flame-retardant Vinyl ('Y') or SHF1 LSZH outer sheath | IEC 60332-3-22 Cat A bunched fire test |

Technical data

Typical values

Rated voltages (Uo/U)	1.9/3.3 (3.3/3.3) kV · 3.8/6.6 (6.6/6.6) kV · 6/10 kV	AC routine test voltage	9.5 kV (3.3 kV class) · 17 kV (6.6 kV IT class) · 21 kV (6/10 kV)
Partial discharge (PD)	≤ 5 pC at 1.73 Uo (routine tested on every drum)	Impulse withstand (BIL)	40 kV (3.3 kV) · 60 kV (6.6 kV) · 75 kV (6/10 kV)
Continuous conductor temp.	+90 °C	Short-circuit temperature	+250 °C (5 s)
Ambient temperature range	-25 °C to +45 °C (rated marine engine-room base)	Min. bend radius	12 × OD (single-core SPYC) · 10 × OD (three-core TPYC)
EPR insulation wall	3.4 mm (3.3/3.3 kV) · 5.0 mm (6.6/6.6 kV ungrounded IT)	Short-circuit cleat rating	Withstands > 40 kA peak electrodynamic fault forces
Flame propagation	IEC 60332-3-22 Category A bunched vertical tray burn	Ozone & corona resistance	EPR passes IEC 60811-403 ozone test without cracking
Oil & bilge resistance	Resistant to marine fuel, synthetic lube oil & humidity	Standards	JIS C 3410 & IEC 60092-354

Sizes

6 standard constructions

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

JIS designation	Cores & voltage	Outer Ø ≈ mm	Weight ≈ kg/km	Max. DC R Ω/km	Ampacity 45°C A
6.6 kV Single-Core SPYCY 3 sizes					
☐ 6.6kV SPYCY-95	1 × 95 mm ² · 6.6 kV Bronze Braid	31.5	2,150	0.1950	275
☐ 6.6kV SPYCY-150	1 × 150 mm ² · 6.6 kV Bronze Braid	35.0	2,840	0.1260	365
☐ 6.6kV SPYCY-240	1 × 240 mm ² · 6.6 kV Bronze Braid	40.5	4,050	0.0762	500
6.6 kV Three-Core TPYCY 3 sizes					
☐ 6.6kV TPYCY-35	3 × 35 mm ² · 6.6 kV Steel Braid	47.0	3,620	0.5300	115
☐ 6.6kV TPYCY-70	3 × 70 mm ² · 6.6 kV Steel Braid	55.5	5,480	0.2700	175
☐ 6.6kV TPYCY-120	3 × 120 mm ² · 6.6 kV Steel Braid	64.0	7,850	0.1540	245

– Supplied with 100 % routine partial-discharge (< 5 pC) and AC high-voltage test certificates witnessed by ClassNK / ABS / DNV upon request.

Standards and approvals

- ✓ JIS C 3410 & IEC 60092-354
- ✓ ClassNK / ABS / DNV / LR
- ✓ IEC 60332-3-22 Cat A

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/jis-medium-voltage-shipboard-power-cable



Typical values for this cable type, based on JIS C 3410 / IEC 60092-354 / ClassNK. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.