API Spec 17E subsea BOP & electro-hydraulic hose umbilical

53DM / 55LT / 2245N

API 17E Subsea BOP Thermoplastic Hose Umbilical

API Spec 17E / SAE 100R18 · 0.6/1 kV · Api spec 17e subsea bop & electro-hydraulic

API Spec 17E / SAE 100R18 | **3,045–6,525 PSI Hoses** | **600–1,000 V + Hydraulic**

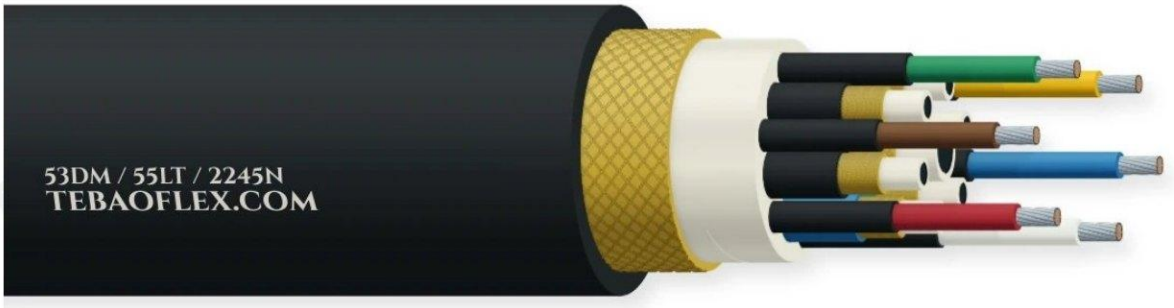


Application

Multitube Subsea BOP & Electro-Hydraulic Thermoplastic Hose Umbilical System (Series 53DM / 538DM , 55LT & 2245N API Spec 17E Compliant) (API Spec 17E / SAE 100R18, 0.6/1 kV, -30 to +70 °C, min. bend radius 12 × OD).

Typical uses: Work-Class & Observation ROV Systems, Offshore Wind & Subsea Power Grids, Oceanographic, Sonar & Seismic Survey, Commercial Diving & Subsea Intervention

Construction





Cross-section, not to scale

1. Center Velocity / Hotline Hose (1/2")
2. 53DM / 55LT / 2245N Pilot Hoses (6×1/4")
3. Integrated Power & Signal Sub-Cables
4. Aramid / Steel Armour & Bedding
5. Marine TPU / HDPE Umbilical Jacket

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (API Spec 17E / ISO 13628-5 / SAE J517 100R18 BOP Umbilical)	**Core / conductor construction**	Center Velocity / Hotline Hose (1/2") — Low-expansion copolyester/PA11 core + aramid/wire braid + orange 538DM cover
Primary dielectric / buffering	53DM / 55LT / 2245N Pilot Hoses (6×1/4") — 3,045–6,525 psi thermoplastic hoses (12,180–26,100 psi burst, ≤±2% length change)	**Continuous operating temperature**	−30…+70 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per API Spec 17E / ISO 13628-5 / SAE J517 100R18 BOP Umbilical	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Marine TPU / HDPE Umbilical Jacket — Extruded black abrasion-resistant thermoplastic polyurethane overall jacket	**Minimum bending radius**	12 × OD
Hydrostatic, tensile & crush duty	Aramid / Steel Armour & Bedding — Polyester tape + aramid/steel tensile layer (≥1.5 collapse factor at 10,000 ft)	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per API Spec 17E / ISO 13628-5 / SAE J517 100R18 BOP Umbilical
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per API Spec 17E / ISO 13628-5 / SAE J517 100R18 BOP Umbilical	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	API Spec 17E / ISO 13628-5 / SAE J517 100R18 BOP Umbilical		

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
53DM / 55LT / 2245N Construction Schedule (−30…+70 °C) 3 sizes						
☐ **53DM 3-Part / Compact Assembly**	Gas/Hydraulic Hose + Power + Comms/Coax	Helical cabled composite umbilical	28.5	920	25.0	285
☐ **53DM 4-Part / Standard Assembly**	Dual Hose + 75 Ω Video Coax + Comms Pairs	Helical cabled composite umbilical	36.0	1,540	48.0	360
☐ **53DM Heavy Bell / Intervention**	Multi-Hose + 3×Coax + Power/Signal Quads	Aramid-reinforced subsea umbilical	54.0	3,420	90.0	540

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per API Spec 17E / ISO 13628-5 / SAE J517 100R18 BOP Umbilical.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
Gas/Hydraulic Hose + Power + Comms/Coax	4.95	0.6/1 kV + 35–240 bar Fluid	−30…+70 °C
Dual Hose + 75 Ω Video Coax + Comms Pairs	3.30	0.6/1 kV + 35–240 bar Fluid	−30…+70 °C
Multi-Hose + 3×Coax + Power/Signal Quads	1.91	0.6/1 kV + 100–240 bar Fluid	−30…+70 °C

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

Standards and approvals

- API Spec 17E / SAE 100R18 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/53dm-55lt-2245n

Typical values for this cable type, based on API Spec 17E / ISO 13628-5 / SAE J517 100R18 BOP Umbilical. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.