



MIL-DTL-24643 LSDPS/LSTPS submarine cable

LSDPS / LSTPS / LSFPS / LS7PS

MIL-DTL-24643 LSDPS / LSTPS / LSFPS

MIL-DTL-24643 600 V 1,000–1,500 psi hydrostatic pressure-tight submarine outboard cable



MIL-DTL-24643/32, /33, /34, /71

1,000–1,500 psi Pressure-Tight

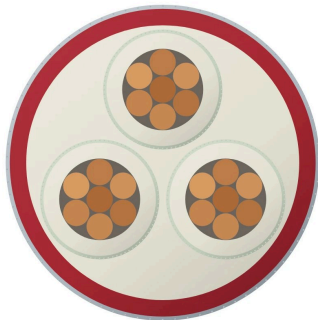
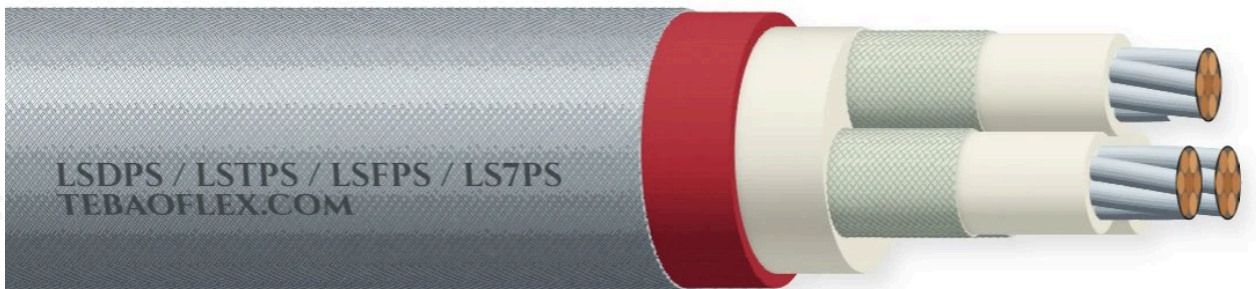
Submarine Hull Penetration · LSZH

Application

US Navy submarine pressure-hull penetration and outboard cable family (LSDPS 2C, LSTPS 3C, LSFPS 4C, LS7PS 7C) built to MIL-DTL-24643/32, /33, /34 and /71 with water-blocked stranded tinned copper conductors, cross-linked polyolefin insulation.

Typical uses: Submarine Pressure-Hull Penetrations & Stuffing Tubes, Outboard Ballast Tank, Rudder & Stern-Plane Actuators, Bow & Flank Array Sonar Dome Power Feeders, Deep-Submergence Vehicles (DSRV / ROV / UUV)

Construction



Cross-section, not to scale

- 1 Strand-blocked concentric tinned copper
- 2 Cross-linked polyolefin (XLPO) dielectric
- 3 High-pressure elastomeric core matrix + reinforcing
- 4 Precision-round LSZH cross-linked polyolefin pressure

Technical data

Typical values

Rated operating voltage	600 V AC / DC rms	High-voltage AC dielectric test	2.5 to 3.0 kV AC rms for 5 minutes + IR ≥ 1,000 MΩ·1000 ft
Conductor operating temperature	−30 °C to +105 °C continuous · +250 °C short-circuit	Thermal cycling & overload stability	Verified thermal ageing and short-circuit withstand per standard
Open-end axial hydrostatic 'hosing' test	Zero water leakage through conductor or core at 500–1,000 psi open-end	Radial hydrostatic pressure rating	1,000 to 1,500 psi (6.9–10.3 MPa) cyclic deep-submergence rating
Minimum bending radius	8 × OD (fixed hull & outboard routing)	Low-smoke zero-halogen fire performance	IEEE 1202 vertical flame pass · Halogen < 0.2 % · Submarine atmosphere safe
Environmental & chemical durability	Resistant to moisture, industrial fluids and service ageing	Standards	MIL-DTL-24643/32 (LSDPS), /33 (LSTPS), /34 (LSFPS) & /71 (LS7PS)

Sizes

9 standard constructions

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

Military PIN / Type	Conductors	Rating	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Ampacity A	Min. bend R mm
LSDPS (2C · M24643/32) & LSTPS (3C · M24643/33) Pressure-Tight Submarine Cables 6 sizes							
☐ M24643/32-01UN (LSDPS-4)	2×14 AWG (2.08 mm ²)	600 V · 1000 psi	14.2	42	265	18	114
☐ M24643/32-04UN (LSDPS-14)	2×8 AWG (8.37 mm ²)	600 V · 1000 psi	20.8	165	590	46	166
☐ M24643/33-01UN (LSTPS-4)	3×14 AWG (2.08 mm ²)	600 V · 1000 psi	15.0	62	310	15	120
☐ M24643/33-03UN (LSTPS-9)	3×10 AWG (5.26 mm ²)	600 V · 1000 psi	18.8	155	510	30	150
☐ M24643/33-05UN (LSTPS-23)	3×6 AWG (13.3 mm ²)	600 V · 1000 psi	24.6	390	960	58	197
☐ M24643/33-07UN (LSTPS-50)	3×3 AWG (26.7 mm ²)	600 V · 1000 psi	30.5	780	1,620	85	244
LSFPS (4C · M24643/34) & LS7PS (7C · M24643/71) Pressure-Tight Submarine Cables 3 sizes							
☐ M24643/34-01UN (LSFPS-4)	4×14 AWG (2.08 mm ²)	600 V · 1000 psi	16.5	83	380	12	132
☐ M24643/34-03UN (LSFPS-9)	4×10 AWG (5.26 mm ²)	600 V · 1000 psi	21.0	206	645	25	168
☐ M24643/71-01UN (LS7PS-4)	7×14 AWG (2.08 mm ²)	600 V · 1000 psi	20.2	145	580	10	162

– Outer diameter roundness and tolerance are tightly held to fit standard NAVSEA pressure-hull stuffing tubes.

Standards and approvals

- ✓ MIL-DTL-24643/32, /33, /34 & /71 Compliant
- ✓ 1,000–1,500 psi Axial & Radial Pressure-Tight
- ✓ Submarine Low-Smoke Zero-Halogen (LSZH)

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/mil-dtl-24643-lsdps-lstps-lsfps-ls7ps-pressure-tight-submarine-outboard-cable



Typical values for this cable type, based on MIL-DTL-24643/32, /33, /34 & /71 / NAVSEA Submarine Spec. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.