

**Thermoset Cross-Linked Elastomer Portable Cords**

3XSW / 3XSOW

Oil-Resistant Elastomer Portable Cord

UL 62 / CSA C22.2 No. 49 · Class 3 extra-hard usage · 600 V · +90 °C XL-EPR · Oil &



UL 62 / CSA C22.2

600 V Class 3

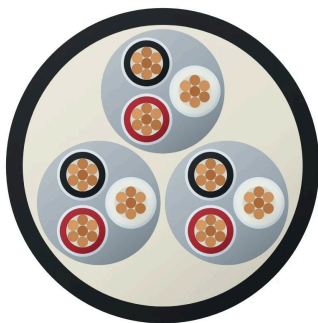
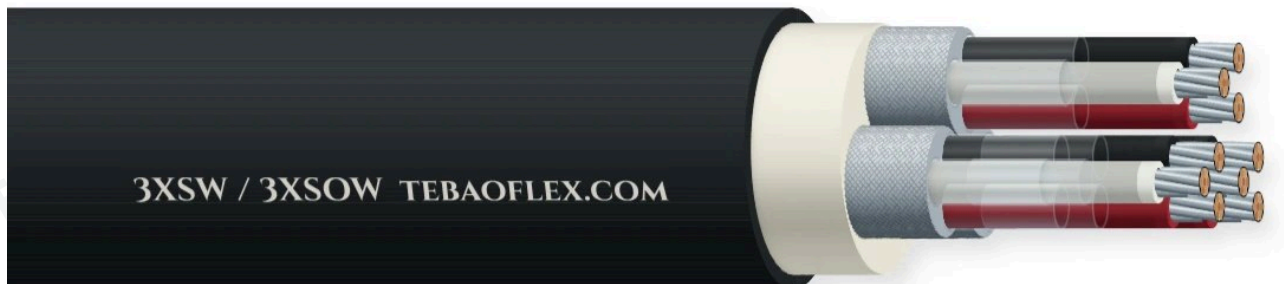
Extra-Hard Usage '3XSOW'

Application

3XSW and 3XSOW are Class 3 extra-hard-usage 600 V flexible portable power cords engineered with heavy-wall +90 °C cross-linked elastomer ('XS') insulation and an extra-thick weather/water ('W') and oil-resistant ('O') thermoset outer jacket for shipyards

Typical uses: Shipyards & Dry-Dock Power, Heavy Civil & Tunnel Construction, Mobile Diesel Generator Rental, Steelworks & Scrap Magnet Reels, Surface Mining & Quarry Shops

Construction



Cross-section, not to scale

1	Flexible rope-lay copper conductor	UL 62 / IEC 60228 Class 5
2	Heavy-wall +90 °C XL-EPR insulation	UL 62 / ICEA S-75-381
3	High-strength filler & fabric binder	ICEA S-75-381
4	Extra-heavy Class 3 outer jacket (3XSW)	UL 62 / CSA C22.2 No. 49

Technical data

Typical values

Rated voltage	600 V AC (RMS) / 1000 V IEC	Dielectric withstand test	3.0 kV AC for 5 minutes
Wet insulation resistance	≥ 500 MΩ·km at +20 °C	Operating frequency	50 / 60 Hz & DC
Conductor stranding	ASTM Class K / IEC Class 5	Ampacity reference	NEC Table 400.5(A)(1) & (A)(2)
Max. conductor operating temp.	+90 °C continuous (wet or dry)	Max. short-circuit temperature	+250 °C (max. 5 s)
Cold-bend rating	-40 °C without cracking	Mobile ambient range	-40 °C to +80 °C
Hot-surface contact	Thermoset non-melting jacket	Heat shock resistance	+150 °C / 1 h
Min. bend radius (fixed)	5 × overall diameter (D)	Min. bend radius (flexing)	8 × overall diameter (D)
Duty class	Class 3 extra-hard usage	Max. tensile pull on copper	15 N/mm ² (up to 20 N/mm ² reeled)
Jacket tensile strength	≥ 13.8 MPa unaged	Tear resistance	≥ 18 N/mm extra-heavy wall
Oil & diesel resistance (3XSOW)	IRM 902 / ASTM No. 2 oil immersion	Weather & UV sunlight ('W')	720 h UV weatherometer approved
Water immersion ('W')	Continuous wet & sump operation	Flame retardance	UL/CSA FT2 & MSHA / IEC 60332-1-2
Ozone & chemical splash	Resistant to acids, alkalis & ozone	RoHS / REACH status	RoHS 3 compliant
Standards	UL 62 / CSA C22.2 No. 49		

Sizes

12 standard constructions

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

Order designation	Type & Core Configuration	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Type 3XSW — Extra-hard usage weather/water-resistant elastomer cord 4 sizes						
☐ 3XSW 4×4.0 (12 AWG)	4G4.0 (12 AWG)	4.0	17.8	154	430	89
☐ 3XSW 4×6.0 (10 AWG)	4G6.0 (10 AWG)	6.0	20.2	230	575	101
☐ 3XSW 4×10 (8 AWG)	4G10 (8 AWG)	10	25.0	384	910	125
☐ 3XSW 4×16 (6 AWG)	4G16 (6 AWG)	16	28.5	614	1,280	142
Type 3XSOW — Extra-hard usage oil-, weather- & water-resistant cord 8 sizes						
☐ 3XSOW 3×4.0 (12 AWG)	3G4.0 (12 AWG)	4.0	16.4	115	355	82
☐ 3XSOW 4×4.0 (12 AWG)	4G4.0 (12 AWG)	4.0	18.0	154	442	90
☐ 3XSOW 4×6.0 (10 AWG)	4G6.0 (10 AWG)	6.0	20.4	230	590	102
☐ 3XSOW 4×10 (8 AWG)	4G10 (8 AWG)	10	25.2	384	930	126
☐ 3XSOW 4×16 (6 AWG)	4G16 (6 AWG)	16	28.8	614	1,310	144
☐ 3XSOW 4×25 (4 AWG)	4G25 (4 AWG)	25	33.4	960	1,890	167
☐ 3XSOW 4×35 (2 AWG)	4G35 (2 AWG)	35	37.2	1,344	2,480	186
☐ 3XSOW 4×50 (1/0 AWG)	4G50 (1/0 AWG)	50	42.6	1,920	3,390	213

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per UL 62 / CSA C22.2 No. 49 / ICEA S-75-381.

Electrical & ampacity data

12 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C pF/m≈	AC test V _{rms}
4G4.0 (12 AWG)	4.950	40	34	84	2,500
4G6.0 (10 AWG)	3.300	51	43	87	2,500
4G10 (8 AWG)	1.910	70	60	92	2,500
4G16 (6 AWG)	1.210	93	79	101	2,500
3G4.0 (12 AWG)	4.950	40	34	84	2,500

Configuration	Max. DC R @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C pF/m≈	AC test V _{rms}
4G4.0 (12 AWG)	4.950	40	34	84	2,500
4G6.0 (10 AWG)	3.300	51	43	87	2,500
4G10 (8 AWG)	1.910	70	60	92	2,500
4G16 (6 AWG)	1.210	93	79	101	2,500
4G25 (4 AWG)	0.780	123	105	114	2,500
4G35 (2 AWG)	0.554	152	129	129	2,500
4G50 (1/0 AWG)	0.386	189	161	150	2,500

– Current ratings apply at +25/+30 °C ambient in free air; apply standard derating factors for elevated ambient or drum coiling.

Standards and approvals

- ✓ UL 62 / ICEA S-75-381
- ✓ FT2 / IEC 60332-1-2
- ✓ CE / RoHS

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/3xsw-3xsow-oil-resistant-elastomer-portable-cord



Typical values for this cable type, based on UL 62 / CSA C22.2 No. 49 / ICEA S-75-381. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.