

**Thermoset Cross-Linked Elastomer Portable Cords**

2XSAW / 2XSAOW / 2XSW / 2XSOW

Heavy-Duty Portable Cord

UL 62 / CSA C22.2 No. 49 · 600 V · +90 °C XL-EPR · Weather/water ('W') & oil ('O')



UL 62 / CSA C22.2

600 V

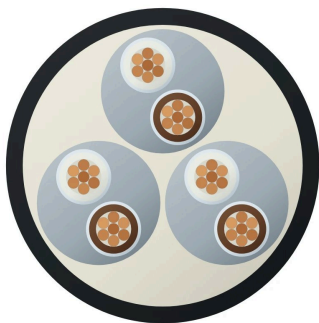
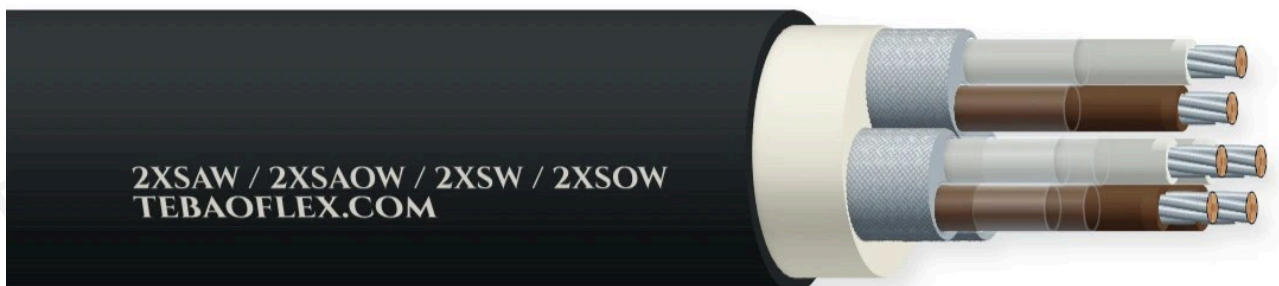
Weather & Oil 'W/OW'

Application

2XSAW, 2XSAOW, 2XSW, and 2XSOW are 600 V heavy-duty outdoor and industrial portable cords built with +90 °C cross-linked elastomer ('XS') insulation and weather/water-resistant ('W') thermoset jacketing. The 'O' variants (2XSAOW, 2XSOW) add oil-resistant

Typical uses: Outdoor Construction & Rental Power, Oilfield & Cold-Climate Rig Service, Food & Beverage Washdown Plants, Port & Shipyard Portable Tools, Mobile Dewatering & Sump Pumps

Construction



Cross-section, not to scale

1	Flexible bunched/rope-lay copper	UL 62 / IEC 60228 Class 5
2	Cross-linked elastomer insulation	UL 62 / CSA C22.2 No. 49
3	Non-wicking core lay-up	UL 62
4	Weather & oil-resistant jacket ('W')	UL 62 / CSA C22.2 No. 49

Technical data

Typical values

Rated voltage	600 V AC (RMS)
Wet insulation resistance	Stable at +90 °C water immersion
Conductor stranding	ASTM Class K / IEC Class 5
Max. conductor operating temp.	+90 °C wet or dry
Cold-bend rating (2XSW / 2XSOW)	-40 °C
Recommended mobile ambient	-40 / -50 °C to +80 °C
Min. bend radius (fixed)	5 × overall diameter (D)
Max. pulling tension	15 N/mm ² total copper area
Crush & impact resistance	Heavy-duty Class 2 portable cord
Weather & UV sunlight ('W')	720 h carbon-arc / xenon-arc UV test
Oil & chemical resistance ('O')	IRM 902 / ASTM No. 2 oil immersion
Ozone stability	Ozone-inert XL-EPR & CPE/PCP
Standards	UL 62 / CSA C22.2 No. 49

Dielectric withstand test	2.5 kV AC for 5 minutes
Operating frequency	50 / 60 Hz & DC
Ampacity reference	NEC Table 400.5(A)(1) / CEC
Max. short-circuit temperature	+250 °C (max. 5 s)
Cold-bend rating (2XSAW / 2XSAOW)	-50 °C arctic grade
Heat shock resistance	+150 °C / 1 h
Min. bend radius (flexing)	8 × overall diameter (D)
Jacket tensile strength	≥ 12.0 MPa unaged
Abrasion resistance	High-tear cross-linked CPE/PCP
Water immersion ('W')	UL 62 wet-location & submersion rated
Flame retardance	UL/CSA FT2 & IEC 60332-1-2
RoHS / REACH status	RoHS 3 compliant

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
2XSW / 2XSOW — Weather-, water- and oil-resistant (-40 to +90 °C) 6 sizes						
☐ 2XSOW 3×1.5 (16 AWG)	3G1.5 (16 AWG)	1.5	10.2	43	136	51
☐ 2XSOW 3×2.5 (14 AWG)	3G2.5 (14 AWG)	2.5	13.6	72	228	68
☐ 2XSOW 4×2.5 (14 AWG)	4G2.5 (14 AWG)	2.5	14.8	96	280	74
☐ 2XSOW 4×4.0 (12 AWG)	4G4.0 (12 AWG)	4.0	16.8	154	384	84
☐ 2XSOW 4×6.0 (10 AWG)	4G6.0 (10 AWG)	6.0	18.8	230	510	94
☐ 2XSOW 4×10 (8 AWG)	4G10 (8 AWG)	10	23.8	384	830	119
2XSAW / 2XSAOW — All-weather arctic & oil-resistant (-50 to +90 °C) 6 sizes						
☐ 2XSAOW 3×2.5 (14 AWG)	3G2.5 (14 AWG)	2.5	13.8	72	235	69
☐ 2XSAOW 4×2.5 (14 AWG)	4G2.5 (14 AWG)	2.5	15.0	96	288	75
☐ 2XSAOW 4×4.0 (12 AWG)	4G4.0 (12 AWG)	4.0	17.0	154	395	85
☐ 2XSAOW 4×6.0 (10 AWG)	4G6.0 (10 AWG)	6.0	19.0	230	524	95
☐ 2XSAOW 4×16 (6 AWG)	4G16 (6 AWG)	16	27.2	614	1,180	136
☐ 2XSAOW 4×25 (4 AWG)	4G25 (4 AWG)	25	31.6	960	1,720	158

– 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}
3G1.5 (16 AWG)	13.300	22	19	80	2,500
3G2.5 (14 AWG)	7.980	30	26	82	2,500
4G2.5 (14 AWG)	7.980	30	26	82	2,500
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
3G2.5 (14 AWG)	7.980	30	26	82	2,500
4G2.5 (14 AWG)	7.980	30	26	82	2,500
4G4.0 (12 AWG)	4.950	40	34	84	2,500
4G6.0 (10 AWG)	3.300	51	43	87	2,500
4G16 (6 AWG)	1.210	93	79	101	2,500
4G25 (4 AWG)	0.780	123	105	114	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 / CSA C22.2 No. 49

✓ 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/2xsaw-2xsaow-2xsw-2xsow-heavy-duty-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.