



General rubber flexible cables

SOOW / SJOOW

SOOW 600 V & SJOOW 300 V Flexible Portable Cord

Oil-, water- and weather-resistant Class K rubber/CPE portable power and control cord



UL 62 / CSA C22.2 No. 49

SOOW 600 V · SJOOW 300 V

OO + W Rated

Application

North American extra-hard-usage SOOW (600 V) and junior-service SJOOW (300 V) flexible portable cords to UL 62 and CSA C22.2 No. 49 with Class K stranded copper conductors and dual oil-resistant insulation and jacket.

Typical uses: Portable tools & machinery, Temporary site & event power, Mining & quarry auxiliary leads, Crane pendants & cord reels, Submersible pump & mixer drops, Shipyard & dockside maintenance

Construction



Cross-section, not to scale

1	Conductors	ASTM B174 / ASTM B172
2	Oil-resistant insulation (O)	UL 62 / CSA C22.2 No. 49
3	Cabling & fillers	
4	Separator wrap	
5	Oil & weather jacket (OW)	UL 62 / CSA C22.2 No. 49

Technical data

Typical values

Rated voltage	SOOW: 600 V RMS (extra-hard usage) · SJOOW: 300 V RMS (hard usage / junior service)	Current rating (18–10 AWG)	7 to 30 A (NEC Table 400.5(A)(1): 3 current-carrying cores vs 4–6 current-carrying cores)
Conductor DC resistance	4.05 Ω/1000 ft (16 AWG) down to 0.25 Ω/1000 ft (4 AWG) at 20 °C	Operating temperature range	–40 °C to +90 °C standard (–40 °C to +105 °C on high-visibility yellow CPE series)
Cold bend & cold impact	–40 °C cold bend per UL 62 / CSA C22.2 No. 49	Wet location rating	+90 °C dry / wet (W outdoor & water-resistant designation)
Min. bending radius	6 × OD (portable flexing); 4 × OD (fixed routing)	Conductor stranding	Class K bunch-stranded / rope-lay annealed bare or tinned copper (30 AWG wires, 16/30 to 104/30; 133 to 427 strands in 8–2 AWG)
Service duty	SOOW: Extra-Hard Usage (NEC Table 400.4) · SJOOW: Hard Usage (Junior Service)	Oil resistance (OO)	Dual oil-resistant EPDM/EPR insulation AND oil-resistant CPE outer jacket
Water & outdoor (W)	Sunlight (UV), weather and water immersion resistant per UL 62 'W' designation	Flame retardance	UL 62 / CSA FT2 horizontal & FT1 / MSHA vertical flame resistance
Standards	UL 62 · CSA C22.2 No. 49		

Sizes

20 standard constructions

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

Type · cores × AWG	Stranding wires/AWG	Insulation in	Insulation mm	Nominal OD in	Nominal OD mm	Current A	Weight ≈ lb/kft	Mass ≈ kg/km
SOOW · 600 V · Extra-Hard Usage (18–10 AWG) 10 sizes								
☐ SOOW 600 V · 3 × 18 AWG	16/30	0.030	0.76	0.365	9.27	10	84	125
☐ SOOW 600 V · 4 × 18 AWG	16/30	0.030	0.76	0.394	10.01	7	101	150
☐ SOOW 600 V · 3 × 16 AWG	26/30	0.030	0.76	0.399	10.13	13	103	153
☐ SOOW 600 V · 4 × 16 AWG	26/30	0.030	0.76	0.432	10.97	10	119	177
☐ SOOW 600 V · 3 × 14 AWG	41/30	0.045	1.14	0.532	13.51	18	172	256
☐ SOOW 600 V · 4 × 14 AWG	41/30	0.045	1.14	0.576	14.63	15	208	310
☐ SOOW 600 V · 3 × 12 AWG	65/30	0.045	1.14	0.607	15.42	25	229	341
☐ SOOW 600 V · 4 × 12 AWG	65/30	0.045	1.14	0.650	16.51	20	280	417
☐ SOOW 600 V · 3 × 10 AWG	104/30	0.045	1.14	0.656	16.66	30	295	439
☐ SOOW 600 V · 4 × 10 AWG	104/30	0.045	1.14	0.712	18.08	25	353	525
SJOOW · 300 V · Junior Service (18–10 AWG) 10 sizes								
☐ SJOOW 300 V · 3 × 18 AWG	16/30	0.030	0.76	0.305	7.75	10	63	94
☐ SJOOW 300 V · 4 × 18 AWG	16/30	0.030	0.76	0.334	8.48	7	76	113
☐ SJOOW 300 V · 3 × 16 AWG	26/30	0.030	0.76	0.339	8.61	13	76	113
☐ SJOOW 300 V · 4 × 16 AWG	26/30	0.030	0.76	0.372	9.45	10	95	141
☐ SJOOW 300 V · 3 × 14 AWG	41/30	0.030	0.76	0.365	9.27	18	106	158
☐ SJOOW 300 V · 4 × 14 AWG	41/30	0.030	0.76	0.418	10.62	15	121	180
☐ SJOOW 300 V · 3 × 12 AWG	65/30	0.030	0.76	0.438	11.13	25	146	217
☐ SJOOW 300 V · 4 × 12 AWG	65/30	0.030	0.76	0.479	12.17	20	185	275
☐ SJOOW 300 V · 3 × 10 AWG	104/30	0.045	1.14	0.586	14.88	30	242	360
☐ SJOOW 300 V · 4 × 10 AWG	104/30	0.045	1.14	0.642	16.30	25	304	452

– Current ratings per NEC Table 400.5(A)(1): 3C assumes 2 current-carrying conductors + 1 equipment ground; 4C assumes 3 current-carrying conductors + 1 equipment ground.

SOOW 600 V Extended · 18–2 AWG

24 sizes

Type · cores × AWG	Strands per core	Nominal OD in	Nominal OD mm	Mass ≈ kg/km	DC resist. Ω/1000ft
SOOW 600 V · 3-Conductor (16–4 AWG) 7 sizes					
SOOW 600 V · 3 × 16 AWG	26	0.395	10.03	140	4.05
SOOW 600 V · 3 × 14 AWG	41	0.530	13.46	245	2.55
SOOW 600 V · 3 × 12 AWG	65	0.608	15.44	336	1.61
SOOW 600 V · 3 × 10 AWG	104	0.665	16.89	434	0.98
SOOW 600 V · 3 × 8 AWG	133	0.848	21.54	635	0.63
SOOW 600 V · 3 × 6 AWG	133	0.990	25.15	1,005	0.40
SOOW 600 V · 3 × 4 AWG	427	1.137	28.88	1,321	0.25
SOOW 600 V · 4-Conductor (16–2 AWG) 8 sizes					
SOOW 600 V · 4 × 16 AWG	26	0.420	10.67	161	–
SOOW 600 V · 4 × 14 AWG	41	0.570	14.48	294	–
SOOW 600 V · 4 × 12 AWG	65	0.650	16.51	397	–
SOOW 600 V · 4 × 10 AWG	104	0.702	17.83	505	–
SOOW 600 V · 4 × 8 AWG	133	0.954	24.23	887	–
SOOW 600 V · 4 × 6 AWG	133	1.075	27.31	1,235	–
SOOW 600 V · 4 × 4 AWG	427	1.257	31.93	1,704	–
SOOW 600 V · 4 × 2 AWG	168	1.480	37.59	2,517	–
SOOW 600 V · 5-Conductor (18–2 AWG) 9 sizes					
SOOW 600 V · 5 × 18 AWG	16	0.465	11.81	184	–
SOOW 600 V · 5 × 16 AWG	26	0.514	13.06	244	–
SOOW 600 V · 5 × 14 AWG	41	0.655	16.64	381	–
SOOW 600 V · 5 × 12 AWG	65	0.719	18.26	492	–
SOOW 600 V · 5 × 10 AWG	104	0.775	19.69	597	–
SOOW 600 V · 5 × 8 AWG	133	1.039	26.39	1,070	–
SOOW 600 V · 5 × 6 AWG	133	1.192	30.28	1,533	–
SOOW 600 V · 5 × 4 AWG	427	1.396	35.45	2,148	–
SOOW 600 V · 5 × 2 AWG	168	1.716	43.59	3,052	–

– Extended SOOW 600 V power and control sizes from 18 AWG to 2 AWG across 3, 4 and 5 conductors.

Standards and approvals

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.

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tebaoflex.com/cables/soow-sjoow-portable-cord



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