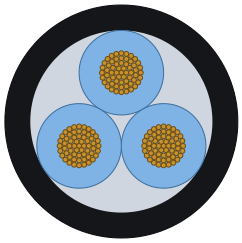
SJOOW 300 V Junior Service Cord

SORIVO Product Series: **Rubber portable cord** | 300 V | UL 62 · CSA C22.2 No. 49 | 12 AWG, 3 conductor



- CPE jacket — thinner than SOOW, same compound
- Fillers and binder tapes
- EPDM insulation — 0.76 mm (0.030 in)
- Class K stranded bare copper, ASTM B-174

APPLICATION

Three-conductor 300 V junior service cord for portable tools, bench equipment, temporary lighting and extension leads in dry and damp locations. The smaller jacket and 300 V rating make it the lighter choice where the load is a single tool rather than a distribution run.

CONSTRUCTION

Conductor
Bare copper, 65 strands of 30 AWG, Class K to ASTM B-174

Insulation
EPDM rubber, 0.76 mm (0.030 in), colour-coded

Jacket
Black CPE, oil-, water- and weather-resistant, FT2 flame rated

MODEL DESIGNATION

SJ Junior service cord · **OO** oil-resistant insulation *and* jacket · **W** water-resistant, 300 V

KEY FEATURES

- 300 V rating — lighter and more flexible than 600 V SOOW for the same AWG
- Same 25 A ampacity as 12/3 SOOW: the voltage class does not change the current a 12 AWG conductor carries
- Class K rope-lay stranding for repeated coiling and flexing at the tool end
- FT2 flame test, oil-resistant jacket, -40 °C to +90 °C fixed

STANDARDS

- UL 62 — Flexible Cords and Cables
- CSA C22.2 No. 49 — Flexible Cords and Cables
- NEC Article 400 — Flexible Cords and Cables
- ASTM B-174 — rope-lay stranded copper conductors
- UL 1581 / CSA FT2 — vertical flame test

TECHNICAL PARAMETERS

Rated Voltage
300 V AC

Temperature
Flexing -20 °C to +90 °C
Fixed -40 °C to +90 °C

Conductor
Bare copper, Class K, 65 × 30 AWG

Insulation
EPDM, 0.76 mm

Jacket
CPE, black — thinner wall than SOOW

Overall Diameter
10.92 mm (0.43 in)

Weight
217 kg/km (146 lb/1000 ft)

Ampacity
25 A — NEC Table 400.5(A)(1), column A

Conductors
3 — black, white, green

WHERE IT STOPS

SJOOW is a 300 V cord. It is not a substitute for SOOW on 480 V equipment, and it is not a tray or raceway cable. Both limits are the reason the two families are catalogued separately rather than as one range.

300 V	25 A	FT2
UL 62	12 AWG, col. A	flame rated

CONSTRUCTION AND RATING

Table 1 — SJOOW 12/3, every value on one page

PARAMETER	PUBLISHED VALUE	NOTE
Rated voltage	300 V AC	UL 62 junior service cord
Conductor	12 AWG, 65 × 30 AWG Class K	Bare copper, ASTM B-174
Insulation	EPDM, 0.76 mm (0.030 in)	Colour-coded
Jacket	CPE, black	Oil, water and weather resistant
Overall diameter	10.92 mm (0.43 in)	Nominal
Weight	217 kg/km (146 lb/1000 ft)	Nominal
DC resistance @20 °C	1.59 Ω/1000 ft (5.22 Ω/km)	Bare copper, not the NEC 75 °C value
Ampacity	25 A	NEC Table 400.5(A)(1), column A
Temperature	Flexing -20 to +90 °C Fixed -40 to +90 °C	UL 62
Flame	FT2	UL 1581 / CSA vertical flame

Resistance is quoted at 20 °C. It is the property of the copper, not the NEC Chapter 9 Table 8 figure, which is tabulated at 75 °C. Mixing the two is the most common error in cord datasheets; the 75 °C value for 12 AWG stranded is 1.93 Ω/1000 ft, not 1.59.

SJ VERSUS SO

Table 2 — what the J changes, and the one thing it does not

	SJOOW	SOOW
Voltage rating	300 V	600 V
Service class	Junior — single tool or lead	Standard — distribution, heavy duty
Insulation wall	0.76 mm (0.030 in)	1.14 mm (0.045 in)
Jacket wall	Thinner — junior construction	2.41 mm (0.095 in) at 12 AWG
12/3 ampacity	25 A	25 A
Outdoor, permanent	Not recommended	Listed for it

The ampacity is identical, and the voltage class is not. Ampacity follows the conductor, so 12 AWG carries 25 A at 300 V or 600 V — but the insulation wall and the dielectric withstand differ. Never substitute SJOOW into a 480 V circuit because the ampacity matches; on that equipment the correct product is SOOW.

Disclaimer. The information in this datasheet is for guidance only and is subject to change without notice. Dimensions and masses are nominal and subject to manufacturing tolerance; confirm against the certificate of the delivered product. This document is uncontrolled once printed or forwarded — the current revision, issued under document number SORIVO-TM-SJOOW-001, governs. © 2026 SORIVO. All rights reserved. Ampacity assumes 30 °C ambient and not more than three current-carrying conductors, in air. The green conductor is the equipment grounding conductor and is not counted.