

UL Cordage Type

Construction and Rating

Cord Type*	AWG Size Range	No. of Cond.	Conductor Insulation Material and Min. Average Thickness (inches)	Jacket Material and Min. Average Thickness** (inches)	Temperature Rating (°C)†		Voltage Rating
					Standard	Other	
HPN	18 – 12	2 or 3††	.045 Rubber		90	105	300
HSJ	18 – 12	2, 3, 4	.030 Rubber††	.030 Rubber	90		300
HSJO	18 – 12	2, 3, 4	.030 Rubber▲	.030 Oil-Resistant Rubber	90		300
S	18 – 2	2 or more	.030 Rubber▲	.060 Rubber▲	60	75, 90	600
SE	18 – 2	2 or more	.030 Elastomer	.060 Elastomer	105		600
SEO	18 – 2	2 or more	.030 Elastomer	.060 Elastomer	105		600
SJ	18 – 10	2, 3, 4, 5	.030 Rubber♦	.030 Rubber	60	75, 90	300
SJE	18 – 10	2, 3, 4, 5	.030 Elastomer††	.030 Elastomer	105		300
SJEO	18 – 10	2, 3, 4, 5	.030 Elastomer	.030 Elastomer	105		300
SJO	18 – 10	2, 3, 4, 5	.030 Rubber♦	.030 Oil-Resistant Rubber	60	75, 90, 105	300
SJT	18 – 10	2, 3, 4, 5	.030 Plastic♦	.030 Plastic	60	75, 90, 105	300
SJTO	18 – 10	2, 3, 4, 5	.030 Plastic♦	.030 Plastic	60	75, 90, 105	300
SO	18 – 2	2 or more	.030 Rubber▲	.060 Oil-Resistant Rubber▲	60	75, 90	600
SP-1	18	2 or 3††	.030 Rubber		60		300
SP-2	18 – 16	2 or 3††	.045 Rubber		60		300
SP-3	18 – 12	2 or 3††	.060 Rubber▲		60		300
SPT-1	18	2 or 3††	.030 Plastic		60	75, 90, 105	300
SPT-2	18 – 16	2 or 3††	.045 Plastic		60	75, 90, 105	300
SPT-3	18 – 10	2 or 3††	.060 Plastic▲		60	75, 90, 105	300
ST	18 – 2	2 or more	.030 Plastic▲	.060 Plastic▲	60	75, 90, 105	600
STO	18 – 2	2 or more	.030 Plastic▲	.060 Plastic▲	60	75, 90, 105	600
SV	18	2 or 3††	.015 Rubber	.030 Rubber	60	75, 90	300
SVE	18 – 17	2 or 3††	.015 Elastomer	.030 Elastomer	105		300
SVEO	18 – 17	2 or 3††	.015 Elastomer	.030 Elastomer	105		300
SVO	18	2 or 3††	.015 Rubber	.030 Oil-Resistant Rubber	60	75, 90	300
SVT	18 – 17	2 or 3††	.015 Plastic	.030 Plastic	60	75, 90, 105	300
SVTO	18 – 17	2 or 3††	.015 Plastic	.030 Plastic	60	75, 90, 105	300
TPT	27 (Tinsel)	2	.030 Plastic		60		300
TST	27 (Tinsel)	2	.015 Plastic	.030 Rubber	60		300

* Types SVO, SVTO, SJO, SJTO, SO, STO and HSJO have jackets which are also recognized for oil resistance at maximum temperature of 60°C. Types SJ, SJO, SJT, SJTO, S, SO, ST and STO may also be made for outdoor use and will be indicated by adding a "W" suffix to the cord type. Similarly, types SJ, SJTO, SJO, SJT, S, SO, ST and STO may also be made in water-resistant grades with "Water-Resistant" printed on the jacket. 3-wire SJT may be made in special low-leakage constructions for medical equipment cords.

** Where no jacket is shown, the construction is integral or flat style with insulation also serving as jacket.

† For cordage ratings higher than 60°C, the temperature limit is printed on the outside of the jacket. This does not apply to heater cordage type HPN, rated 90°C, or 105°C.

†† Recognized in three conductors when third or center conductor (with Green or Green/Yellow stripe) is used for equipment grounding.

▲ Insulation and jacket thickness depend on cordage size. Thickness as shown are for 18 and 16 AWG.

♦ Insulation and jacket thickness depend on cordage size.
No. 12 AWG requires .030" conductor insulation thickness and .045" jacket thickness.
No. 10 AWG requires .045" conductor insulation thickness and .060" jacket thickness.

The term Elastomer refers to thermoplastic elastomer.