

# SIS/XHHW-2 LSZH Industrial Wire

LSZH; 90°C\*, 600V; NEC Type XHHW-2, SIS; UL Listed; CEC Type RW90; CUL Listed Industrial Power Cable



PRODUCT DATA SHEET

SIS/XHHW-2 LSZH industrial wire is a one conductor, unjacketed, power cable utilizing flexible Class K conductor. Its tough, thermoset construction allows for its use in demanding applications without additional jacketing protection. It is intended for low voltage power and lighting functions and may be installed in trays, ducts and conduits.



**Design Number:** 10075

## FEATURES

- Low-Smoke Zero Halogen design
- Specially formulated, RoHS-compliant, thermoset insulation for superior long-term water resistance and enhanced thermal stability
- Superior flame retardance
- Excellent mechanical properties
- Tin-coated copper conductors for improved terminations and corrosion resistance
- Reduced size and weight for increased raceway capacity
- Easy strippability
- Low friction surface for reduced pulling tension

## CONSTRUCTION

**Conductor** Annealed, tin-coated copper, Flexible Class “K” strand per ASTM B-174, B172, and B-33 (#14 AWG and larger)

**Insulation** Flame retardant low Smoke Zero Halogen crosslinked polyolefin

**Assembly** Insulated conductors are assembled round

**Color** Gray; additional colors available

## PERFORMANCE STANDARDS

- Insulation in accordance with ICEA, UL, and CSA standards
- UL listed type XHHW-2 and SIS (UL 44) in accordance with NEC for #14 AWG and larger
- UL listed type RFHH-2 (UL 66) in accordance with NEC for #16 and #18 AWG
- CUL listed type RW90 (CSA 22.2 No. 38) in accordance with CEC (#14 AWG and larger)
- Passes IEEE 1202/FT4 vertical tray flame test and ICEA 70,000 BTU/hr vertical tray flame test (T-30-520)
- Passes UL VW-1 (#10 AWG and larger)
- Passes vertical flame test Type A as defined in ICEA S-95-658-1999 sec. 6.8.2
- UL and CUL listed Type ST1 (limited smoke) per UL 1685 and UL 2556
- UL Listed for sunlight resistance (Black Only)
- UL and CUL approved 90°C for both wet and dry locations
- UL and CUL Listed as gasoline and oil resistant
- Compliant to NFPA 130 and NFPA 502

\*Rated 90°C for normal operation in wet and dry locations, 130°C for emergency overload conditions, and 250°C for short circuit conditions.

Conductor Size	Number of Strands	Conductor OD		Insulation Thickness		Nominal OD		Approx. Net Weight (Lbs/M')	Ampacity <sup>†</sup>
		(Inch)	(mm)	(Inch)	(mm)	(Inch)	(mm)		
18 AWG <sup>‡</sup>	7	0.048	1.21	0.030	0.76	0.108	2.74	10	18
16 AWG <sup>‡</sup>	7	0.060	1.53	0.030	0.76	0.116	2.95	13	24
14 AWG	41	0.069	1.75	0.030	0.76	0.131	3.33	19	35
12 AWG	65	0.086	2.18	0.030	0.76	0.148	3.76	29	40
10 AWG	105	0.112	2.84	0.030	0.76	0.174	4.42	43	55
8 AWG	168	0.159	4.04	0.045	1.14	0.253	6.40	75	80
6 AWG	252	0.195	4.95	0.045	1.14	0.287	7.29	103	105
4 AWG	392	0.243	6.17	0.045	1.14	0.336	8.53	152	140
2 AWG	616	0.305	7.75	0.045	1.14	0.398	10.11	229	190

<sup>†</sup> Ampacities are based on NEC NFPA 70-2017 Table 310.15(B)(17) at 30°C ambient in free air.

<sup>‡</sup> #18 AWG: 7/26 stranding; #16 AWG: 7/24 stranding

NOTE: See NEC NFPA 70-2017 Table 310.15(B)(16) for Ampacities for not more than three current-carrying conductors in raceway, cable or earth (direct buried) at 30°C ambient

**Application:** Intended for use as a general purpose building wire or power cable in closed environments or populated spaces where specifications for smoke- and halogen-free material are necessary.

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Date	Rev	Description	By
2018/08/30	0	Spec created	JM
2019/03/29	1	Updated	HT
2019/04/01	2	Updated	JM
2019/07/24	3	Updated	JM

**Bristol** | Unit 61, Gazelle Rd., Weston Industrial Estate, Weston-super-Mare, North Somerset BS24 9ES UK

**Frankfurt** | Rudolf-Braas-Strasse 2, D-61381 Friedrichsdorf

**Milwaukee** | 5001 South Towne Dr. New Berlin, WI 53151 USA

**Suzhou** | B2-2 Weiting Town Industrial - Workshop A, No. 9 Weixin Rd., Suzhou Industrial Park, Jiangsu, China 215122

