

Pressure Terminal  
Connectors  
NRTL Cat. No.  
**S2**

2-14 AL9CU | 90°

(#) FLEX - covers stranding classes within G, H, I/DLO, Metric class 5 and K/MTW. (##) mm<sup>2</sup> sizes within AWG/kcmil ranges are included (+++) No intermixing of wire sizes. No intermixing of stranded and solid wire, i.e., only two No.14 solid, two No.14 stranded, two No.12 solid, two No.12 stranded, two No.10 solid and two No.10 stranded. (+++++) Torque Table when using stranded class B, C, G, H, I, DLO, class K, MTW for AWG sizes; and class 2, Class 5 for metric mm<sup>2</sup> sizes, copper wire with a user supplied standard copper tubular ferrule (constructed in accordance with UL486F dimensional tables) mounted on the stripped wire without crimping. Assigned Torque Rating include crimping and retaining the wire and ferrule. Factory or field install permitted. Ferrule Installation Instructions inside package.

[lugsdirect.com/GuideToFlexFlexibleFineStrandedWireCableMechanicalLugsFAQ.htm](http://lugsdirect.com/GuideToFlexFlexibleFineStrandedWireCableMechanicalLugsFAQ.htm)

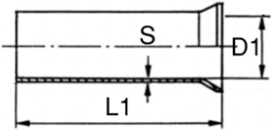
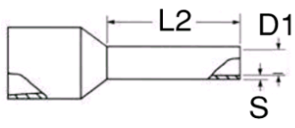
Wire Size <b>COPPER</b> (solid to semi-rigid stranded and metric mm <sup>2</sup> , ##)	All Torque in in-lbs. For N-M divide by 8.85.		
	Wire Size <b>FLEX COPPER</b> (#)	Wire Size <b>ALUMINUM</b>	Torque (all drive means)
2-4 AWG 6-10 AWG 12-14 AWG	-	2-4 AWG 6-10 AWG 12 AWG	50 40 15
(1) or (2) 10-14 AWG (+++)	-	-	25
-	25mm <sup>2</sup> -6mm <sup>2</sup> 4-10 AWG	-	50
-	4mm <sup>2</sup> 12 AWG	-	25
25mm <sup>2</sup> -6mm <sup>2</sup> 4-10 AWG <b>WITH FERRULE(++++)</b> (uncrimped)	-	-	45
4mm <sup>2</sup> -1.5mm <sup>2</sup> 12-16 AWG <b>WITH FERRULE(++++)</b> (uncrimped)	-	-	25

**IHI Connectors Cat. Numbers S2 Ferrule Installation Instructions with no pre-crimping of the ferrule to wire.  
Copper stranded wire AWG class B to K & mm<sup>2</sup> class 2 to 5**



Patent No. 10630005  
<https://ihiconnectors.com/patent.html>

1. Knowing the wire gauge in AWG or mm<sup>2</sup>, look up the correct ferrule size and length in the table below:

Nom. Size mm <sup>2</sup> cross section	AWG	Inside Dia. (mm) D1	Wall Thickness S (mm)	Bare Ferrules Length L1	Covered Ferrules Length L2
					
1.5	16	1.7	0.15	12	12
2.5	14	2.2	0.15	12	12
4	12	2.8	0.20	12	12
6	10	3.5	0.20	12	12
10	8	4.5	0.20	12	12
16	6	5.8	0.20	12	12
25	4	7.3	0.20	15	16

REV. 4 05/18/2020

- Unscrew the wire binding screw provided with the S2 wire connector until the wire hole is completely unobstructed by the screw.
- Strip the wire insulation to allow the wire to exit the end of the ferrule by approximately 0.5mm (.02"). Make sure to use a strip method that does not cut or nick any strands.
- Insert the wire into the flared end of the ferrule until the wire is protruding through the small end of the ferrule by about 0.5mm. Make sure all of the strands of wire are inside the ferrule.
- Insert the wire and ferrule assembly into the wire hole of the S2 connector, so that the copper ferrule tube and bare wire is fully inside the wire hole.
- Tighten the wire binding screw to the appropriate torque on the torque label (below), which is provided with the package of connectors, for the specific gauge of wire being used with the ferrule. There is sufficient force from the screw to crimp ferrule and retain the crimped wire and ferrule.
- The required torque on the screw should be maintained until stable. A standard practice is to maintain peak torque value for 5 seconds.
- Inspect that the secured wire and ferrule are in the correct location in the wire hole as intended.

**Ferrule construction details**

- Copper tube of the ferrules to be manufactured to the dimensions and tolerances published in UL486F as shown in the table above
- The bare ferrule is not required to be listed by the manufacturer of the ferrule.
- Tin plating and copper properties shall meet those published in UL486F
- The covered ferrules shall be listed under UL486F or UL486A-B \*\*
- Plastic color: any color that meets the end use requirements.

\*\*The ferrule itself does not have to be listed for the flex wire already rated for use with the S2 and P2 connectors

Sleeve (**Bare ferrule**) – Copper or a copper alloy containing at least 80% copper and be coated with tin. See above for dimension details. To be used with Copper FLEX conductors as shown in the WIRE RANGE RATING table.

Alternate Sleeve (**Covered ferrule**)– UL486A-B Recognized (ZMVV2) or UL486F Listed (ZMLF).

Copper or a copper alloy containing at least 80% copper and be coated with tin. See above for dimension details. To be used with Copper FLEX conductors as shown in the WIRE RANGE RATING table below.

**S2 Listed AWG 2-14 (16 AWG with ferrule)**

Cat. No.	Wire Size Copper (solid to semi-rigid stranded and metric mm <sup>2</sup> , ##)	Wire Size FLEX Copper (#)	Wire size aluminum	Torque (all drive means)
S2	2-4 6-10 12-14		2-4 6-10 12	50 40 15
	(1) or (2) 10-14 AWG (+++)	-	-	25
	-	25mm <sup>2</sup> - 6mm <sup>2</sup> 4-10 AWG	-	50
	-	4mm <sup>2</sup> 12 AWG	-	25
	25mm <sup>2</sup> - 6mm <sup>2</sup> 4-10 AWG with ferrule (++++)		-	45
	4mm <sup>2</sup> - 1.5mm <sup>2</sup> 12 - 16 AWG with ferrule (++++)		-	25

(#) FLEX covers stranding classes within G, H, I/DLO, K/MTW for AWG sizes. Metric Class 5 for metric mm<sup>2</sup> sizes. (##) mm<sup>2</sup> sizes within AWG/kcmil ranges are included. (+++) - No intermixing of wire sizes. No intermixing of stranded and solid wire, i.e., only two No. 14 solid, two No. 14 stranded, two No. 12 solid, two No. 12 stranded, two No. 10 solid and two No. 10 stranded. (++++) Torque Table when using stranded class B, C, G, H, I, DLO, class K, MTW for AWG sizes; and class 2, Class 5 for metric mm<sup>2</sup> sizes, copper wire with a user supplied standard copper tubular ferrule (constructed in accordance with UL486F dimensional tables) mounted on the stripped wire **without crimping**. Assigned Torque Rating include crimping and retaining the wire and ferrule. Factory or field install permitted.