

c **91**0 u ZMVV2 ZMVV8 F12988

Wire Size, AWG or MCM Assigned Torque



install

To be used with "Conditions of Acceptability"

(+) No intermixing of wire sizes. No intermixing of stranded and solid wire, i.e., or two No. 14 solid, two No. 14 stranded, two N 12 solid, two No. 12 stranded, two No. 10 so and two No. 10 stranded. (#) FLEX - covers stranding classes within G, H, I/DLO, K/MTV for AWG sizes: and class 5 for metric mm2

	Urs c744us	COPPER	(#)	ALUMINUM	Rating
ulics Inc. ZMVV2 om™ ZMVV8		2-3	-	2-3	50in-lb
	E129884	4-6	•	4-6	45in-lb
l		8	-	8	40in-lb
	Pressure Terminal Connectors	10-14 (1) or (2)(+)	-	10-12 (1) or (2)(+)	35in-lb
	NRTL Cat. No.	-	25mm2-6mm2 4-10 AWG	-	50in-lb
	<b>B2D</b>	-	4mm2 12 AWG	-	25in-lb
ons of Acceptability" sizes. No d solid wire, i.e., only 14 stranded, two No. ded, two No. 10 solid (#) FLEX - covers i, H, I/DLO, K/MTW		25mm <sup>2</sup> -6mm <sup>2</sup> 4-10 AWG WITH FERRULE (%)(uncrimped)	25mm <sup>2</sup> -6mm <sup>2</sup> 4-10 AWG WITH FERRULE (%)(uncrimped)	-	50in-lb
		4mm2-1.5mm2 12-16 AWG WITH FERRULE (%) (uncrimped)	4mm2-1.5mm2 12-16 AWG WITH FERRULE (%) (uncrimped)	-	25in-lb
	5 for metric mm2	D O O II I K	DIO MENAGES AN	NO -!	20R2

sizes. (%) Torque Table when using stranded class B, C, G, H, I, K, DLO, MTW for AWG sizes; and class 2, Class 5 for metric mm2 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 No. 10630005 and retaining the wire and ferrule. Factory or field install permitted. www.ihiconnectors.com/patent.html

# Conditions of Acceptability COA

### Cat No. B2D

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#### CONSTRUCTION DETAILS:

The products shall be constructed in accordance with the following description.

## Conditions of Acceptability

1. The adequacy of the mounting means shall be determined in the end-use application.

#### Marking -

Refer to Section General or current applicable UL486AB standard marking options which may include QR codes..

# IHI Connectors Cat. Numbers **B2D** 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

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

U	0 0	•	,	'	O
				Bare Ferrules Length L1	Covered Ferrules Length L2
Nom. Size mm <sup>2</sup> cross section	AWG	Inside Dia. (mm) D1	Wall Thickness S (mm)	S D1	L2 D1
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	12/15	12/16

- Patent No. 10630005 https://ihiconnectors.com/patent.html
- 2. Unscrew the wire binding screw provided with the B2D wire connector until the wire hole is completely unobstructed by the screw.
- 3. 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.
- 4. 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.
- 5. Insert the wire and ferrule assembly into the wire hole of the B2D connector, so that the copper ferrule tube and bare wire is fully inside the wire hole.
- 6. 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.
- 7. The required torque on the screw should be maintained until stable. A standard practice is to maintain peak torque value for 5 seconds.
- 8. 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
- 2. The <u>bare</u> ferrule is <u>not required to be listed by the manufacturer of the ferrule</u>.
- 3. Tin plating and copper properties shall meet those published in UL486F
- 4. The <u>covered</u> ferrules shall be listed under <u>UL486F or UL486A-B</u> \*\*
- 5. Plastic color: any color that meets the end use requirements.

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\*\*The ferrule itself does not have to be listed for the flex wire already rated for use with the B2D connector

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.

#### **B2D LISTED SPLICER REDUCER LUG AWG 2-14 (AWG 16 ferrule)**

	Wire Size, AWG or	Assigned		
Cat. Nos.	Copper	(#)Copper FLEX	Aluminum	Torque Rating
B2D (+)	2 - 3	-	2 - 3	50 in-lb
	4 - 6	-	4 - 6	45 in-lb
	8	(2=)	8	40 in-lb
	10-14 (1) or (2)	-	10-12(1) or (2)	35 in-lb
	-	25mm <sup>2</sup> - 6mm <sup>2</sup> 4-10 AWG	-	50 in-1b
		4mm2 12 AWG	-	25 in-lb
	25mm <sup>2</sup> - 6mm <sup>2</sup> 4-10 AWG with ferrule (%)	25mm <sup>2</sup> - 6mm <sup>2</sup> 4-10 AWG with ferrule (%)	-	50 in-lb
	4mm2 - 1.5mm2 12 - 16 AWG	4mm2 - 1.5mm2 12 - 16 AWG	-	25 in-1b
	with ferrule (%)	with ferrule (%)		

- (+) No intermixing of wire sizes. No intermixing of stranded and solid wire, i.e., only two No. 14 solid, two No. 12 stranded, two No. 12 solid, two No. 12 stranded, two No. 10 solid and two No. 10 stranded.
- (#) FLEX covers stranding classes within G, H, I/DLO, K/MTW for AWG sizes; and class 5 for metric mm2 sizes. (%) Torque Table when using stranded class B, C, G, H, I, K, DLO, MTW for AWG sizes; and class 2, Class 5 for metric mm2 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.