



International Hydraulics Inc.

ihconnectors.com™

Wire Size	Rated Torque
10-14 AWG	35 IN. LBS.
8 AWG	40 IN. LBS.
4-6 AWG	45 IN. LBS.
2-3 AWG	50 IN. LBS.

CU9 2-14

AL9 2-8

**IF USING 1/32" (.031") THICK BUS
MAX CURRENT IS 50A**

C  US
ZMVV2 ZMVV8

To be used with
"Conditions of Acceptability"
File E129884

**Pressure Terminal
Connectors**

NRTL Cat. No.

4513-1

MARKED 4513

Installation Instructions



[ihconnectors.com /4513-1.htm](http://ihconnectors.com/4513-1.htm)

IHI Connectors™ B2A9-PCB Series Wire Connectors UL File E129884 CONDITIONS OF ACCEPTABILITY FOR UL RECOGNIZED UNR (USA) & CNR (CANADA) RATINGS.

UL486A-B THIRD EDITION TABLE 21
TIGHTENING TORQUES

USER TORQUES FOR SOCKET OR SLOTTED
SCREWS ARE THE SAME BASED ON WIRE SIZE

File E129884 Vol. 1 Sec. 2 Page 1 Issued: 1990-04-13
and Report Revised: 2004-02-13

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - pressure cable connector, Cat. No. 4513-1, -2,
1000-1, -2, B2A1 and B2A2.

WIRE RANGE:

Test conductor size installed in connector	Tightening torque				
	Slotted head No. 10 and larger ^a				
	Slot width - 1.2 mm (0.047 in) or less and slot length - 6.4 mm (1/4 in) or less		Slot width - over 1.2 mm (0.047 in) or slot length - over 6.4 mm (1/4 in)		
AWG or kcmil	(mm ²)	A	B	A	B
30 - 10	(0.05 - 5.3)	1.7 (15)	2.3 (20)	2.8 (25)	4.0 (35)
8	(8.4)	2.3 (20)	2.8 (25)	3.4 (30)	4.5 (40)
6 - 4	(13.2 - 21.2)	2.8 (25)	4.0 (35)	4.0 (35)	5.4 (45)
3	(26.7)	2.8 (25)	4.0 (35)	4.5 (40)	5.6 (50)
2	(33.6)	3.4 (30)	4.5 (40)	4.5 (40)	5.6 (50)

Cat. Nos.	Wire Size (AWG)	Assigned Torque Value for recessed hex head socket	
		AWG	In. -lbs.
4513-1, -2, B2A1	2-14 Copper,	2-3	50
	2-8 Aluminum	4-6	45
1000-1, -2, B2A2	6-16 Copper,	8	40
	6-10 Aluminum	10-16	35

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - These components are for use only in equipment where the acceptability
of the combination is determined by Underwriters Laboratories Inc.

CNR indicated investigation to Canadian Standard, C22.2 No. 65-93, "Wiring
Products."

Conditions of Acceptability -

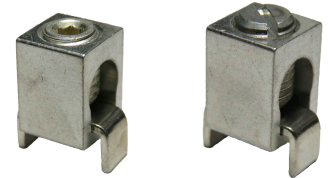
1. Copper bus cross section and temperature rating:

Cat. Nos.	Alternate Cat. No.	Minimum Cross Section	Temperature Rating, °C
4513-1 (1000-1)	B2A1	1/4 by 3/64 in.	90
4513-2 (1000-2)	B2A2	1/4 by 1/32 in.	90

2. The connectors shall be prevented from turning by close fitting walls
or the equivalent.

3. Cat. Nos. 4513-1, -2 or 1000-1, -2 have the capability of using either
a slotted or recessed hex head screw. The tightening torque marking on the end
product shall correspond to that required for the type of screw design being used.

MS/SMP:slr
DMS



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C US
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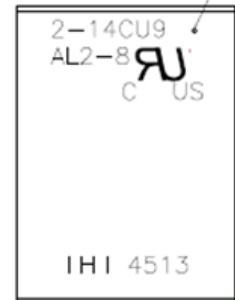
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http://www.lugsdirect.com/High_Amp_Wide_Trace_PCB_Wire_Connection.html
<http://www.lugsdirect.com/SMT-Surface-Mount-Technology-PrintedCircuitBoard-PCB-WireTerminalLugs-IHI.html>



3. Bus - Not supplied by manufacturer.

* Alternate - Supplied by manufacturer - Plated copper, "U" shaped. Measures
0.240 in. wide and 0.050 in. thick. Opposite ends of the length bend downward
for securement purposes.

4. Marking - USR Marking - Cat. Nos. 4513-1, -2, and 1000-1, -2. Die-stamped
in connector body, applicant's name or trademark, Cat. No. "4513" or "1000"
wire range, "Cu 9 Al". The smallest unit container shall be marked as above,