

# **ALUMINUM SHEARBOLT SPLICES - UL/CSA LISTED** #2 AWG COMPACT TO 1000 kcmil CONCENTRIC

## **KEY FEATURES**

- Design made from seamless, high conductivity, high strength, tin-plated aluminum alloy for heavyduty utility applications
- Compact and smooth body design
- Dual rated for aluminum and copper conductors
- Provides long service life under normal operating conditions with reserve capacity for emergency loading conditions
- Compatible with heat shrink and cold applied splices providing an engineered system with years of trouble-free performance

TE Connectivity's (TE) line of UL Listed Aluminum ShearBolt Splices (ASBS-xx-U) are range-taking mechanical connectors that accommodate a conductor range from #2 compact to 1000 kcmil concentric, stranded Class B. The primary application of Aluminum ShearBolt Connectors is for underground splices up to 35 kV. ShearBolt connectors are ideally suited for aluminum to aluminum, aluminum to copper and copper to copper applications, making them the universal connector solution.

The solid center stop inside the connector ensures proper positioning and eliminates oil leakage when connecting oil impregnated conductors. The bore of the connector body has a grooved surface to enhance electrical contact and minimize resistance at the interface between the connector and conductor. The cable entry area is chamfered inside to provide easy cable insertion. The connector design incorporates shear head bolts, which ensures that the correct torque is applied to each bolt and the optimal contact force is generated to minimize connection resistance.

The primary tool required to install the connector is a standard ratchet wrench with the appropriate hexagonal sockets. A holding tool is recommended to avoid core bending of conductors and can be ordered from TE (#IT-1000-019). The TE cordless impact wrench (#T25446-000) can also be used to install the connector.

Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.







FEATURE	ADVANTAGE	BENEFIT		
Wide application range	Six connectors needed to accommodate all cable sizes from #2 AWG compact strand to 1,000 kcmil concentric stranded in both aluminum and copper	Reduces inventory and prevents accidental use of the wrong connector		
Hexagonal shear head bolts	Installs with simple ratchet-type socket wrench	Installs easily and quickly in confined areas		
No crimp tooling or dies required	Installs easily using readily available tools	Ease of installation. Installation tool is no longer a source of failure. Reduces tool and die inventory, maintenance and cost		
Torque-controlled shear head bolts	Sheared head gives positive indication of correct installation	Low contact resistance gives superior electrical performance		
Centering inserts for small diameter conductors	Properly positions small conductors for proper connection	Minimizes voltage stresses at transition from connector body to cable installation		
Knurled inner bore	Unique profile breaks through conductor oxides and grips conductor strands	Generates low contact resistance and increases pullout rating		
Solid center stop	Eliminates oil leakage and insures proper conductor position	Accommodates transition applications from polymeric to oil impregnated conductors		

Please request Data Sheet #3-1773453-0 for our Cordless Impact Wrench

### PRODUCT SELECTION GUIDE: DIMENSIONS IN INCHES (mm)

Description	Part Number	Conductor Range	Conductor OD Range	Connector Length	Connector OD	Strip Length	Number of Bolts	Socket Size	Insert Used
ASBS-2-U	1974155-1	2 AWG compact to 2 AWG concentric	0.268 - 0.292 (6.81 - 7.42)	2.6 (65)	0.94 (24)	1 1/8 (28.5)	2	1/2 (13)	Yes (**)
ASBS-2-4/0-U	1974138-1	2 AWG compact to 4/0 AWG concentric	0.268 - 0.528 (6.81 - 13.41)	3.9 (100)	1.22 (31)	1 3/4 (44.4)	4	11/16 (17)	No
ASBS-250-350-U	1974139-1	250 compact to 350 kcmil concentric	0.520 - 0.681 (13.21 - 17.30)	3.9 (100)	1.22 (31)	1 3/4 (44.4)	4	11/16 (17)	No
ASBS-350-500-U	1974144-1	350 compact to 500 kcmil concentric	0.616 - 0.813 (15.65 - 20.65)	6.7 (170)	1.67 (42.5)	3 1/8 (80)	6	7/8 (22)	Yes (**)
ASBR-350-500/ 600-750-U	1974146-1	Insert Side: 350 kcmil compact to 500 kcmil concentric Non-Insert Side: 600kcmil compact to 750 kcmil concentric	Insert Side: 0.616 - 0.813 (15.65 - 20.65) Non-Insert Side: 0.813 - 0.998 (20.65 - 25.35)	6.7 (170)	1.67 (42.5)	3 1/8 (80)	6	7/8 (22)	Yes (**)
ASBS-600-750-U	1974145-1	600 kcmil compact to 750 kcmil concentric	0.813 - 0.998 (20.65 - 25.35)	6.7 (170)	1.67 (42.5)	3 1/8 (80)	6	7/8 (22)	No
ASBS-1000-U	1974151-1	1000 kcmil compact to 1000 kcmil concentric	1.060 - 1.152 (26.92 - 29.26)	8.0 (203)	1.75 (44.5)	3 7/8 (98)	6	7/8 (22)	No

\*\* DO NOT remove insert. Please contact your TE representative for conductor sizes or types not listed in this data sheet.

An oxide-inhibiting joint compound is factory applied in the connector barrel to maintain a reliable connection for the life of the installation. The connectors have been successfully tested to UL 486A-486B and CSA C22.2 No. 65-03. ShearBolt connectors are designed to be compatible with most TE's Raychem cable accessories and insulation products. Please consult your local TE sales representative for applicable products. For other applications, please consult the manufacturer's installation instructions for compatibility. For a complete list of Raychem Cable Accessories please visit our web site, http://energy.te.com



Listed by Underwriters Laboratories Inc., File No. E13288 Certified by Canadian Standards Association, File No. LR7189

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Aluminum Shearbolt Connector installed on EPR insulated 350 kcmil 15 kV cable.



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