



## ALUMINUM SHEARBOLT SPLICE CONNECTORS #2 AWG COMPACT TO 1000 KCMIL CONCENTRIC

### KEY FEATURES

- Heavy-duty design made of high strength, tin-plated aluminum alloy
- 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 Raychem heat-shrink and cold applied splices providing an engineered system with years of trouble-free performance

TE Connectivity's (TE) Raychem new line of Aluminum ShearBolt connectors are range taking mechanical connectors. Just five solid center stop connectors will accommodate a wide range of aluminum and copper conductors from #2 AWG compact stranded 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. Please refer to test report matrix on back. The only tool required to install the connector is a standard ratchet wrench with the appropriate sized hexagonal sockets.

The connector design incorporates shear head bolts, which ensures that the correct torque is applied to each bolt and consequently the optimal contact force is generated to minimize connection resistance. 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. This convenient and quick tool has been tested and qualified to install ShearBolt connectors. The solid center stop (available on all sizes) inside the connector ensures proper conductor positioning and eliminates oil leakage when connecting oil impregnated conductors.

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

# Aluminum Shearbolt Connectors



FEATURE	ADVANTAGE	BENEFIT
Wide application range	Only five solid center stop connectors needed to accommodate all cable sizes from #2 AWG compact strand to 1,000 kcmil concentric stranded	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 insulation
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

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

Description	Part Number	Conductor Range	Conductor OD Range	Connector Length	Connector OD	Remove Insert for Conductor Size Greater Than	Stop
ASBS-2-3/0	CL8618-000	2 AWG compact to 3/0 AWG concentric	.268 - .470 (6.8 - 11.9)	2.56 (65)	.94 (24)	1/0 AWG compact	Disc
ASBS-2-3/0-S	1974178-1	2 AWG compact to 3/0 AWG concentric	.268 - .470 (6.8 - 11.9)	2.56 (65)	.94 (24)	1/0 AWG compact	Solid
ASBS-2-350	694472-000	2 AWG compact to 350 kcmil concentric	.268 - .681 (6.8 - 17.3)	3.94 (100)	1.22 (31)	4/0 AWG concentric	Solid
ASBS-3/0-500	CL8619-000	3/0 AWG compact to 500 kcmil concentric	.423 - .813 (10.7 - 20.6)	4.9 (125)	1.34 (34)	300 kcmil concentric	Disc
ASBS-3/0-500-S	CU2713-000	3/0 AWG compact to 500 kcmil concentric	.423 - .813 (10.7 - 20.6)	4.9 (125)	1.34 (34)	300 kcmil concentric	Solid
ASBS-500-750	E89931-000	500 kcmil compact to 750 kcmil concentric	.736 - .998 (18.7 - 25.3)	5.9 (150)	1.52 (38.6)	600 kcmil compact	Solid
ASBS-350-750	CL7947-000	350 kcmil compact to 750 kcmil concentric	.616 - .998 (15.6 - 25.3)	6.7 (170)	1.67 (42.5)	600 kcmil compact	Solid
ASBS-600-1000	C68131-000	600 kcmil compact to 1000 kcmil concentric	.813 - 1.152 (20.6 - 29.2)	8.0 (203)	1.75 (44.5)	750 kcmil concentric	Solid

Two removable inserts in the connector body centralize smaller conductor sizes. For larger size conductors inserts are not required and are easily removed with a standard screwdriver. The connectors have been electrically tested to the class A requirements of ANSI C119.4 and exceed the mechanical requirements of a Class 3 connector by a large margin of safety. ShearBolt connectors are designed to be compatible with TE's Raychem cable accessories and insulation products. For other applications, please consult the manufacturer's installation instructions for compatibility.

## INSTALLATION INFORMATION

Description	Installation Instruction Number	Socket Size (in.)	Test Reports	Conductor Combination
ASBS-2-3/0	408-8990	1/2	Note 1	Note 1
ASBS-2-3/0-S	408-10429	1/2	Note 1	Note 1
ASBS-2-350	408-8990	11/16	502-47292 (I) 502-47300 (I) 502-47340 (I)	4/0 Cu to 350 kcmil AAC 350 kcmil AAC to 350 kcmil AAC 350 kcmil Cu to 350 kcmil Cu
ASBS-3/0-500	408-8990	3/4	502-47331 (I) 502-47331 (I)	500 kcmil AAC to 500 kcmil AAC 500 kcmil Cu to 500 kcmil Cu
ASBS-3/0-500-S	408-10429	3/4	502-47331 (I) 502-47331 (I)	500 kcmil AAC to 500 kcmil AAC 500 kcmil Cu to 500 kcmil Cu
ASBS-350-750	408-8990	7/8	502-47329 (I)	750 kcmil AAC to 750 kcmil AAC
ASBS-500-750	408-8990	3/4	502-47288 (I) 502-47294 (I) 502-47357 (I)	500 kcmil Cu to 750 kcmil AAC 750 kcmil AAC to 750 kcmil AAC 750 kcmil AAC strandfill to 750 kcmil AAC strandfill
ASBS-600-1000	408-8990	7/8	502-47289 (I) 502-47344 (I) 502-47305 (I)	750 kcmil Cu to 1000 kcmil AAC 1000 kcmil Cu to 1000 kcmil Cu 1000 kcmil AAC to 1000 kcmil AAC

Note 1: This part number was not tested, as ANSI C119.4 allows a smaller size connector of the same design to be added without additional testing.

Aluminum ShearBolt connector installed on EPR insulated 350 kcmil 15 kV cable



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