



ALUMINUM SHEARBOLT SPLICE CONNECTORS (METRIC) CONDUCTOR RANGE 25 mm² - 400 mm²

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) 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 25 mm² to 400 mm². The primary application of Aluminum ShearBolt connectors is for underground splices up to 36 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 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 inside the connector ensures proper conductor positioning and eliminates oil leakage when connecting oil impregnated conductors. Tested according to IEC 61238-1

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	Only five solid center stop connectors needed to accommodate all cable sizes from 25 mm ² to 400 mm ²	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)

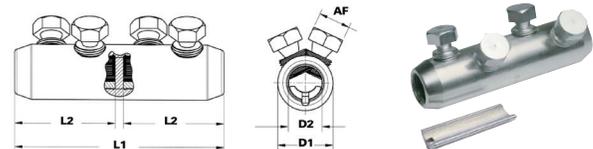
Description/ Part Number	Equivalent BSM Series Connectors	Conductor Range/Type	Aluminum Circular Stranded	Aluminum Circular Solid	Aluminum Sector Stranded	Aluminum Sector Solid	Copper Circular Stranded	Copper Circular Solid	Copper Sector Stranded
ASBSM 25-95 1974164-1	BSM-25/95	Cross-sectional range (mm ²)	25 - 95	16 - 95	25 - 70		10 - 95	10 - 50	25 - 70
		Cross-sectional range (mm ²)			95*				
		Conductor diameter (mm)	5.6 - 12.5	4.1 - 11			3.6 - 12.5	3.6 - 8	
ASBSM 35-150 1974173-1	BSMB-35/150	Cross-sectional range (mm ²)	35 - 150	35 - 150	50 - 95	50 - 120	35 - 150	35 - 50	50 - 95
		Conductor diameter (mm)	6.8 - 15	6.5 - 14			6.6 - 14	6.5 - 8	
ASBSM 95-240 1974171-1	BSM-95/240	Cross-sectional range (mm ²)	70 - 240	95 - 300	95 - 150	95 - 150	70 - 240		95 - 150
		Cross-sectional range (mm ²)			185*	185 (90°)			185*
		Conductor diameter (mm)	9.3 - 19.2	10.5 - 19			9.3 - 19.2		
ASBSM 120-300 1974159-1	BSMB-120/300	Cross-sectional range (mm ²)	120 - 300	150 - 300	120 - 185	120 - 240	120 - 300		120 - 185
		Cross-sectional range (mm ²)			240*				240*
		Conductor diameter (mm)	12.7 - 23.1	12.9 - 19.8			12.7 - 22.6		
ASBSM 185-400 1974166-1	BSM-185/400	Cross-sectional range (mm ²)	185 - 400	185 - 400	185 - 240	185 - 240	185 - 400		185 - 240
		Cross-sectional range (mm ²)				300 (90°)			
		Conductor diameter (mm)	15.6 - 24.6	14.8 - 24.6			15.6 - 24.6		

* - pressed round (1) IEC 61238-1 tests conducted on BSM series. ASBSM series are of identical material, dimension, construction and include solid oil stops.

CONNECTOR DIMENSIONS

Description	Cross-Sectional Conductor Range (mm ²)	Dimensions (mm)				Contact Bolts	
		L1	L2	D1	D2	Quantity	Head Size AF (mm)
ASBSM 25-95	25 - 95	65	30.5	24	12.8	2	13
ASBSM 35-150	35 - 150	80	37	28	15.8	2	17
ASBSM 95-240	95 - 240	125	60	33	19.5	4	19
ASBSM 120-300	120 - 300	140	66	37	24	4	22
ASBSM 185-400	185 - 400	170	80	42	25.5	6	22

Instruction Sheet 408-320



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