

PFISTERER

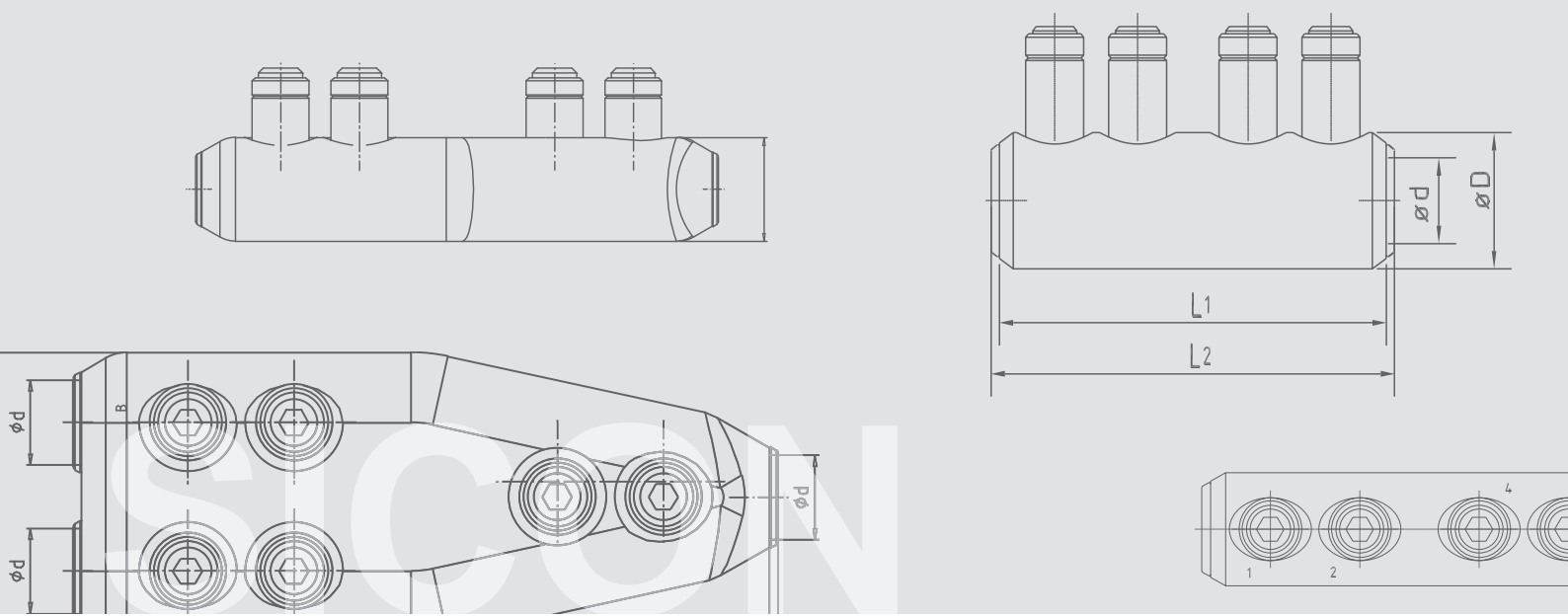


LV- AND MV-NETWORKS

SICON

**The first cable connector system
with stepless shear bolts.**

THE POWER CONNECTION



The Better is the Enemy of the Good.

Terminals, connectors and cable lugs using screw technology have been on the advance for years. And with good reason. Bolted connections offer technical and practical advantages that compression connections cannot provide. For instance, a large cross-section range and easy handling. This clamping technology perfectly complements the new multi-range cable accessories. Fitting requires only a simple tool.

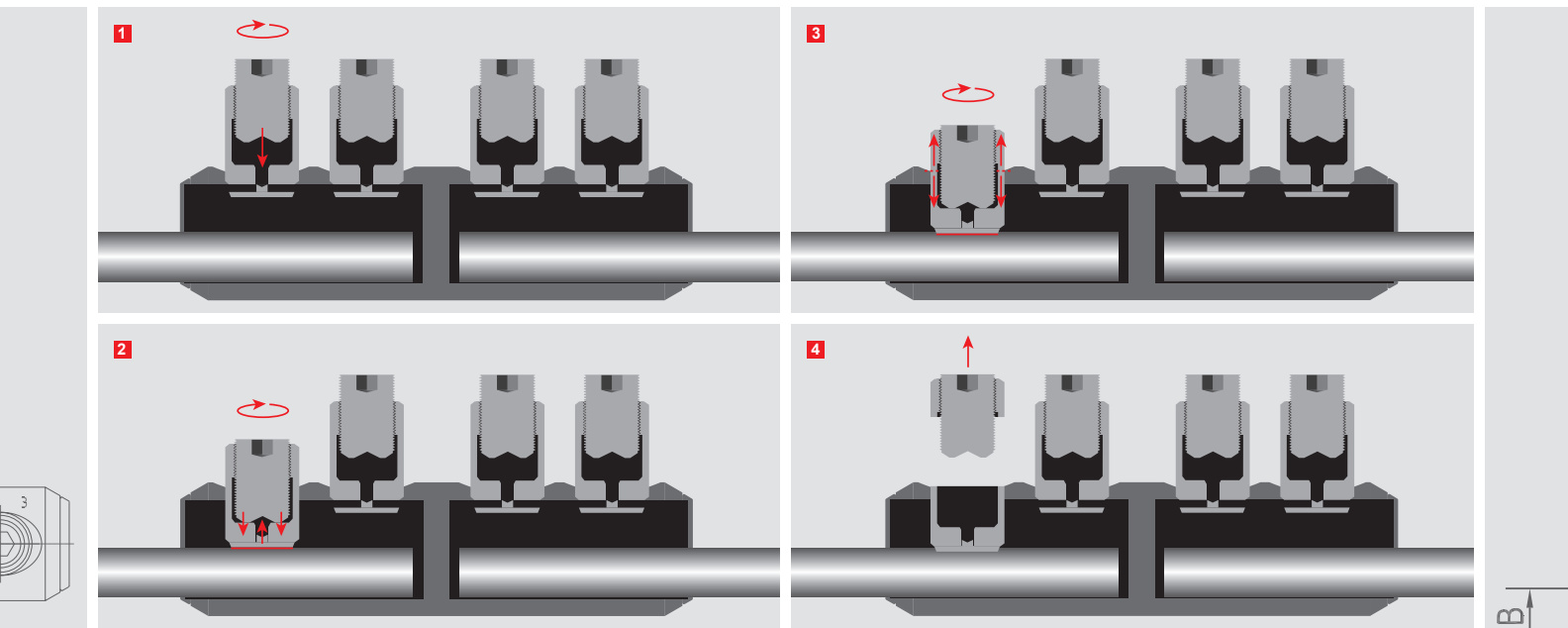
Until now, the “multi-stage shear bolt” has been the state of the art in screw technology. The design strength of the multi-stage shear bolt – the integral predetermined breaking points – is at the same time its decisive weakness. Each breaking point forms a discontinuity in the loadbearing thread, and the maximum clamping force cannot be achieved. A further disadvantage: The stages must be very accurately matched to the conductor of the cable used – otherwise the bolt will break at the wrong position.

From PFISTERER: Stepless shear bolts. Special design feature: No predetermined breaking points in the

thread. This ensures the optimum thread load for any range of cross-sections. The bolt always breaks even with the surface of the clamp body.

Advantages

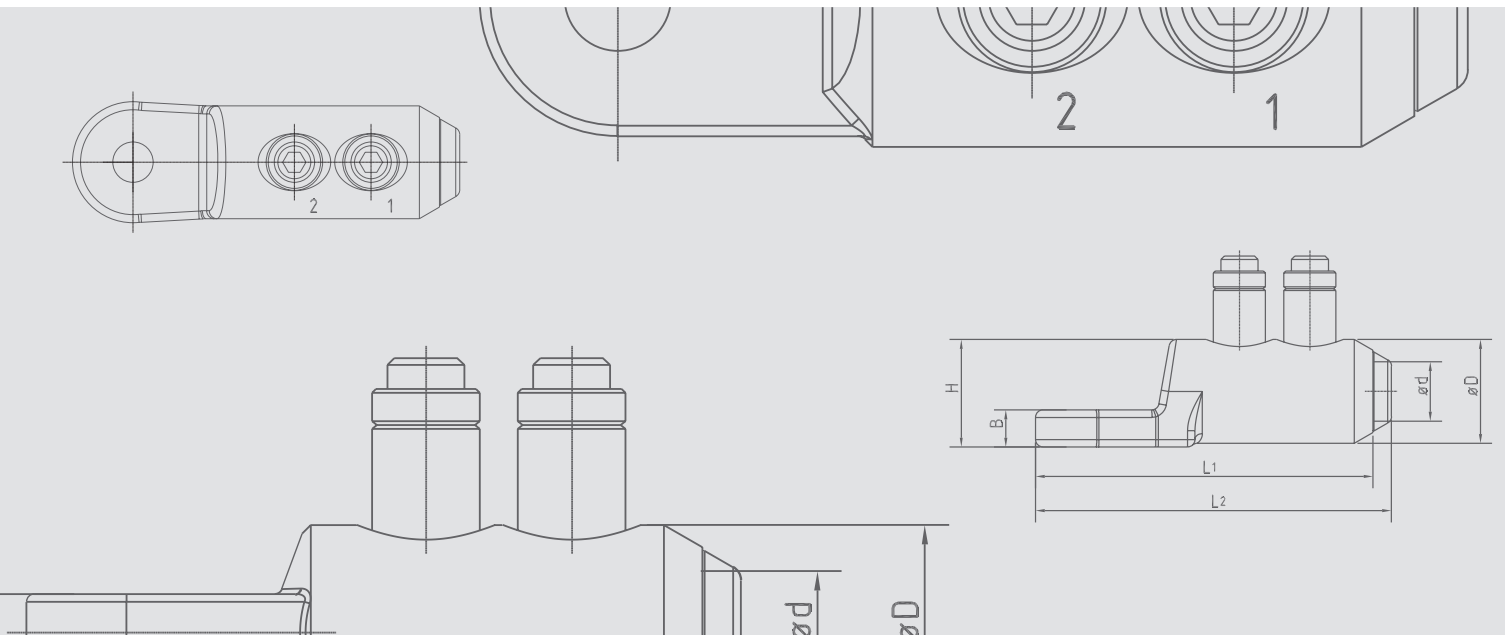
- Up to 30 % increased contact force on Al conductors compared with conventional type terminals
- Bolt base plate for uniform friction and without damage on the conductor
- Full utilisation of the thread loading for any size of conductor
- No special tool needed
- Smooth breakage of the shear bolt simplifies tightening process
- The remains of the bolt stay on the tool and can be disposed safely
- Technical verification is required for class 5 fine stranded conductors



SICON – the first stepless shear bolt.

- 1 A standard hexagon key is used to screw a threaded stud into the hole in the stepless thrust bolt. The force closure is not interrupted by any steps or notches in the bolt.
- 2 As the SICON bolt is screwed in, the pressure plate at the base of the bolt breaks away. The bolt now turns on this plate; unlike with conventional bolts, no tip friction occurs on the conductor. The bolt's torque generates the contact pressure almost independently of the conductor material. This way, significantly higher contact pressures are achieved with aluminium conductors.
- 3 The SICON bolt continues to turn until the shear torque is reached. The thrust bolt is tensioned as it is screwed in and, on reaching the shear torque, it stretches axially and breaks off. Compared with conventional shear bolts, the bolt breaks very smoothly.
- 4 The SICON bolt always breaks even with the surface of the clamp body. This ensures that the minimum possible protrusion is achieved every time irrespective of the size of the conductor to be connected.

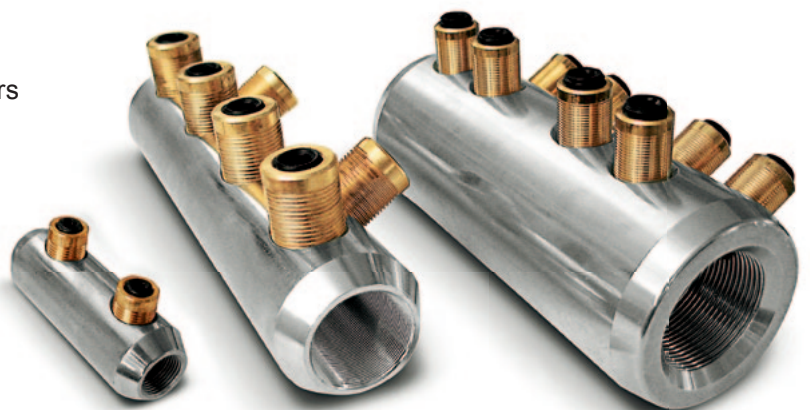




**No predetermined breaking points,
no weak points.**

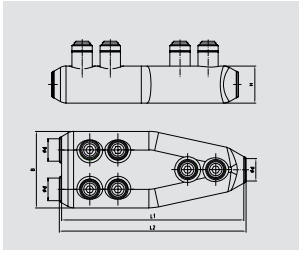
Technical features

- Large clamping range: 10–95 mm²;
25–150 mm²; 50–240 mm²; (70) 95–300 mm²;
185–400 mm²; 300–630 mm²
(others on request)
- Conductor channels with transverse grooves
and protection against conductor oxidation
- Blind hole designed as pressure-resistant oil
barrier for oil cable
- Contact technology type-tested electrically
and mechanically according to IEC 61238-1
- Compact design: rounded edges and
flat transitions, suitable for slide-on and
shrink sleeves
- Suitable for aluminium- and copper conductors
- Centric cable guide with different
centring rings



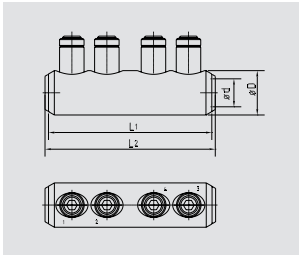
Technical data.

Tap connectors



No. (Al + Cu)						In accordance with DIN EN 60228 (VDE 0295)					
	mm ²	mm ²	mm ²	mm ²	mm ²	mounting hole	across flats	No. of bolts	L1 mm	DØ mm	dØ mm
332 447 010	50–240	50–185	50–185	50–150	50–240	–	SW 6	6	162	68/33	20
332 631 010	70–300	70–240	70–240	70–185	70–300	–	SW 6	6	158	71.5/35	22

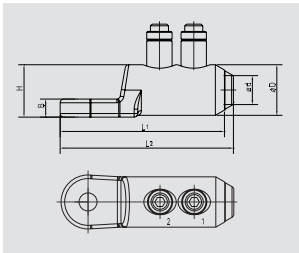
Connectors with blind hole



332 601 010	10–95	10–95	50–95	35–70	10–95	–	SW 5	2	65	24	13
332 607 010	25–150	25–150	35–120	35–120	25–150	–	SW 5	2	68	28	16.3
332 593 010	25–150	25–150	35–120	35–120	25–150	–	SW 5	4	102	28	16.3
332 592 010	50–240	50–185	50–185	50–150	50–240	–	SW 6	4	126	33	20
332 614 010	50–240	50–240	50–240	50–240	50–240	–	SW 6	4	126	35	21
332 632 010	70–400	70–240	70–240	70–185	70–300	–	SW 6	6	126	35	22
332 602 010	95–400	95–300	95–240	95–240	95–300	–	SW 8	4	140	38	24
332 617 010	185–500	185–400	185–240	185–240	185–400	–	SW 8	6	170	42	26
332 603 010	300–800	300–630	–	300–400	300–630	–	SW 8	6	230	52	33.3

Transitional screw connector upon request

Screw cable lugs



332 604 010	10–95	10–95	50–95	35–70	10–95	13	SW 5	1	70	24	13
332 599 010	25–150	25–150	35–120	35–120	25–150	13	SW 5	2	91	28	16.3
332 599 011	25–150	25–150	35–120	35–120	25–150	16.5	SW 5	2	91	28	16.3
332 595 010	50–240	50–185	50–185	50–150	50–240	13	SW 6	2	115	33	20
332 595 011	50–240	50–185	50–185	50–150	50–240	16.5	SW 6	2	115	33	20
332 605 010	95–400	95–300	95–240	95–240	95–300	13	SW 8	2	120	38	24
332 605 011	95–400	95–300	95–240	95–240	95–300	16.5	SW 8	2	120	38	24
332 625 010	185–500	185–400	185–240	185–240	185–400	13	SW 8	3	138	42	26
332 625 011	185–500	185–400	185–240	185–240	185–400	16.5	SW 8	3	138	42	26
332 606 010	300–800	300–630	–	300–400	300–630	16.5	SW 8	3	180	52	33.3
332 606 011	300–800	300–630	–	300–400	300–630	13	SW 8	3	180	52	33.3

Axial bolted cable lugs on request

Accessories



305 917 013	Cordless impact screwdriver for trouble-free assembly of screwed connectors and terminal lugs, comes with storage case, replacement battery, charger, tool set (Allen nut SW 5, SW 6, SW 8)
305 917 106	Replacement hex socket for the cordless impact screwdriver 1/2", SW 6 bit length 9 mm
305 917 107	Replacement hex socket for the cordless impact screwdriver 1/2", SW 6 bit length 19 mm

Individual tools upon request



331 901 900	Holding arm for screw connector with exterior diameters between 14 mm and 35 mm
331 901 902	Holding arm for screw connector with exterior diameters between 25 mm and 52 mm

Subject to change as required by technical progress. Other designs available on request

PFISTERER worldwide

PFISTERER S.A.
Av. Velez Sarsfield 464
C1282AFR Buenos Aires
Argentina
Phone +54 11 4306 3595
pfisterer@pfisterer.com.ar

PFISTERER Ges.m.b.H.
Augasse 17
1090 Wien
Austria
Phone +43 1 3176531 0
info@pfisterer.at

**PFISTERER Power Connection
Systems (Beijing) Co., Ltd.**
Unit 518, Landmark Tower 2
8 North Dongsanhuan Road
Chaoyang District
100004 Beijing
China
Phone +86 10 6590 6272 0
info@pfisterer.cn

**PFISTERER
Representative Office**
Budova Mediahall
Bidlaky 20
63900 Brno
Czech Republic
Phone +420 533 337 190
dialog@pfisterer.cz

PFISTERER SAS
35 avenue d'Italie
BP 10045
68311 Illzach Cedex
France
Phone +33 389 319029
info@pfisterer.fr

**PFISTERER
Kontaktsysteme GmbH**
Rosenstraße 44
73650 Winterbach
Germany
Phone +49 7181 7005 0
info@pfisterer.de

**PFISTERER
Representative Office**
Bég u. 3-5.
1022 Budapest
Hungary
Phone +36 1 251 3441
office@pfisterer.hu

PFISTERER s.r.l.
Via Sirtori 45 d
20017 Passirana di Rho (MI)
Italy
Phone +39 02 93158 11
pfisterer@pfisterer.it

**PFISTERER
Korea Branch**
Room 1930,
Kwanghwamun Official Building
163 Shinmunro-1ga, Jongno-Gu
Seoul 110-999
Korea
Phone +82 2 3276 2630
info@pfisterer.kr

PFISTERER Sp. z o.o.
ul. Pogodna 10
05-850 Piotrkówek Mały
Poland
Phone +48 22 72241 68
info@pfisterer.pl

**PFISTERER
Representative Office**
Krasnopresnenskaya nab., 12
Entrance № 6, office № 921
123610 Moscow
Russia
Phone +7 495 258 1350
info.ru@pfisterer.com

PFISTERER (Pty.) Ltd.
9 Willowton Road
Pietermaritzburg 3201
South Africa
Phone +27 33 397 5400
pfisterer@iafrica.com

PFISTERER UPRESA S.A.U.
Calle Industria 90-92
08025 Barcelona
Spain
Phone +34 93 4367409
pfisterer.upresa@pfistererupresa.eu

**PFISTERER
Komponent & System AB**
Flygfältsgatan 2
12830 Skarpnäck
Sweden
Phone +46 8 7240 150
info.se@pfisterer.com

PFISTERER SEFAG AG
Werkstrasse 7
6102 Malters, Luzern
Switzerland
Phone +41 41 4997 272
connect@sefag.ch

**PFISTERER
Representative Office**
P.O. Box 184090,
Gate 7, Floor 3
Hamarain Center,
Dubai
United Arab Emirates
Phone +971 4 2690147
info@pfisterer.ae

PFISTERER Ltd.
Unit 9, Ellesmere Business Park
Off Swingbridge Road
Grantham NG31 7XT
Lincolnshire
United Kingdom
Phone +44 1476 578657
info.uk@pfisterer.com

**PFISTERER
Representative Office**
7625 Wisconsin Avenue, Suite 306
Bethesda, MD, 20814
Maryland
USA
Phone +1 240 482 4955
fabrice.jedrej@pfisterer.us