Your advantages

- For thermoset parts
- Fast installation without special tools
- Retaining flange and diamond knurl ensure a high degree of locking against screwing and tensile load
- Screw-locking

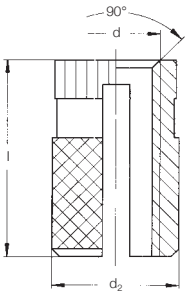
The principle

The SPREDSERT® 2 is pressed flush into the mounting hole until the retaining flange has been completely anchored in the plastic material. In that process, the slotted area is compressed. The radially locked SPREDSERT® 2 is expanded by the screw so that the diamond knurl penetrates the plastic material and ensures the interference fit of the thread insert.
In this process, the screw is also locked. For the additional expansion force, the tightening torque must be increased by 10 %.

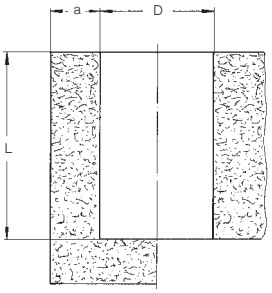
Technical data

Material: **brass CuZn38Pb2** (compliant with EU 2000/53) / **brass CuZn39Pb3.**

Type 0837



Mounting hole①



For installation tools and machines, please see pages 48–49

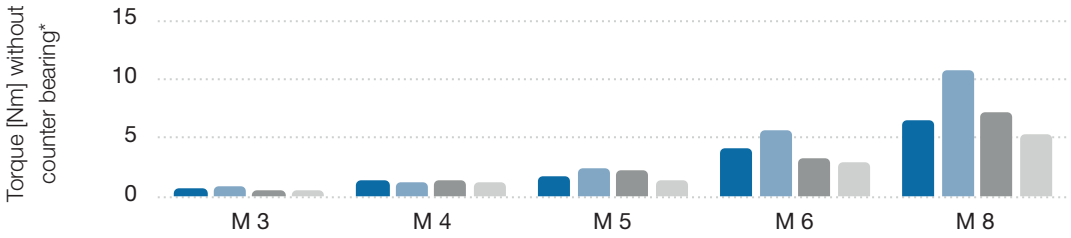
d	Item code②	l ③	d_2	$D^{+0.1①}$	$L_{min.}$	$a_{min.}$
M 3	0837 103 0005	5.0	4.3	3.9	5.5	3.0
M 3.5	0837 135 0064	6.4	5.1	4.7	7.0	3.3
M 4	0837 104 0008	8.0	6.0	5.5	8.5	3.5
M 5	0837 105 0095	9.5	6.8	6.3	10.0	4.0
M 6	0837 106 0127	12.7	8.4	7.9	13.5	5.0

Metric ISO thread according to DIN 13-6H. Technical changes reserved. All measures in mm.
① Guideline values: depend on the moulding material, may have to be changed after installation tests.
② Minimum quantity on request.
③ Screw contact length = min. thread insert length (l) + 1p (pitch)

Other sizes and special designs on request.

Technical data

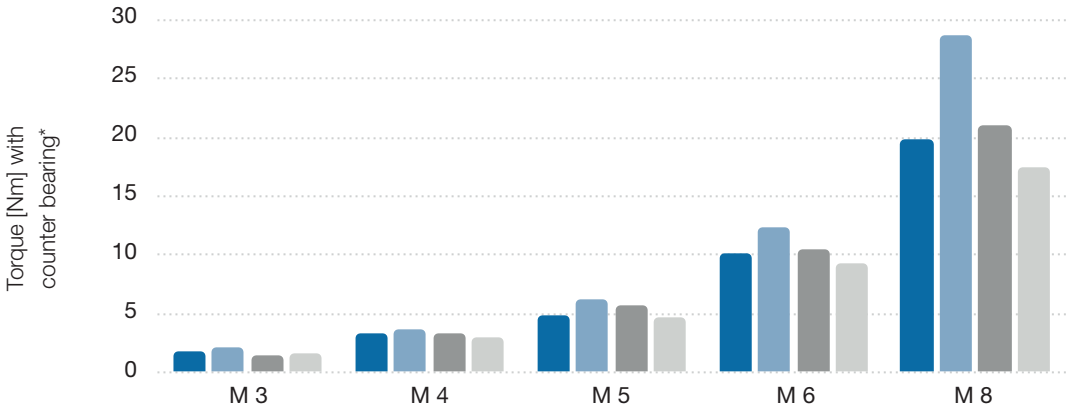
Torque values for SPREDSERT® 1 and 2 / M 3 to M 8 tested in different materials



*Guideline values from laboratory tests where the joint is subjected to overstress.

		M 3	M 4	M 5	M 6	M 8
ABS	MA [Nm]	0.72	1.35	1.74	4.20	6.60
PC	MA [Nm]	0.96	1.32	2.46	5.70	10.80
PA	MA [Nm]	0.63	1.44	2.25	3.30	7.20
PE/PP	MA [Nm]	0.60	1.26	1.50	3.00	5.40

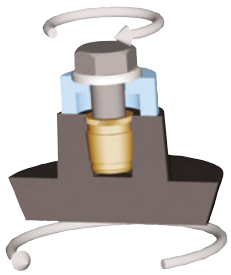
All measures in mm.



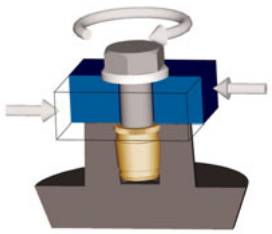
*Guideline values from laboratory tests where the joint is subjected to overstress.

		M 3	M 4	M 5	M 6	M 8
ABS	MR [Nm]	1.80	3.30	4.80	10.20	19.80
PC	MR [Nm]	2.10	3.66	6.30	12.30	28.80
PA	MR [Nm]	1.50	3.36	5.70	10.50	21.00
PE/PP	MR [Nm]	1.62	3.00	4.68	9.30	17.40

All measures in mm.



Torque without counter bearing (MA[Nm])**



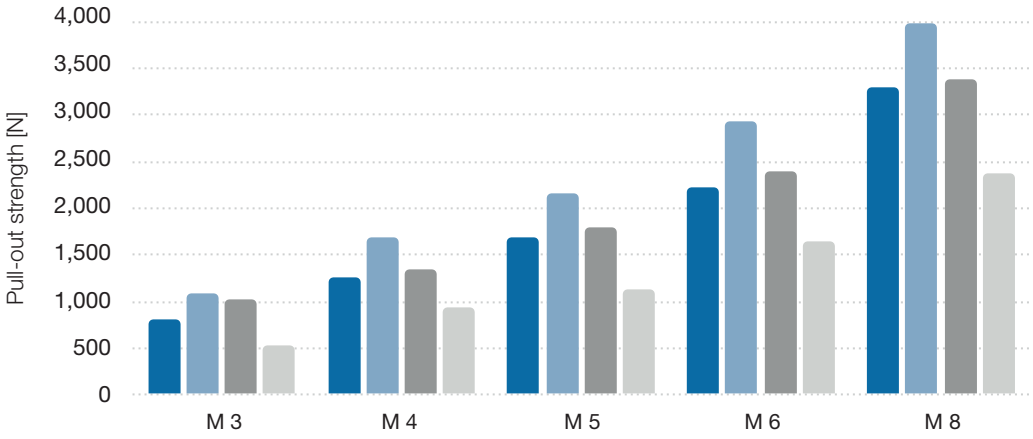
Torque with counter bearing (MR[Nm])***
Through hole as per DIN EN 20273 (medium)

**In the MA test, comparative values can be determined. The test is not recommended for real screw joints.

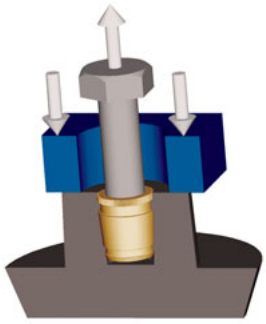
***The values for MR are usually limited by the screw fracture. For the design with counter bearing, tightening torques for property class 8.8 as per VDI 2230 can be applied.

Technical data

Pull-out values for SPREDSERT® 1 and 2 / M 3 to M 8 tested in different materials



		M 3	M 4	M 5	M 6	M 8
ABS	FA [N]	810	1,260	1,680	2,220	3,300
PC	FA [N]	1,080	1,680	2,160	2,940	3,990
PA	FA [N]	1,020	1,350	1,800	2,400	3,390
PE/PP	FA [N]	540	930	1,140	1,650	2,370



Pull-out strength (FA[N])

Technical information

The specified values are guideline values. We recommend an application-specific installation test.
To be on the safe side, for fibre-reinforced plastics, the strengths of the non-reinforced material are to be assumed.
When using brass thread inserts in plastics susceptible to stress cracks (e.g. polycarbonate), we recommend an additional surface treatment for the thread inserts (nickel plating or surface coating as required).
Strength values for other thread inserts on request.