

# The variants – thread inserts for expansion anchoring **SPREDSERT® 1**



## Your advantages

- For thermoplastic parts
- Fast installation without a special tool
- Retaining flange and anchor rings ensure a high degree of locking against screwing and tensile load
- Screw-locking

## The principle

The SPREDSERT® 1 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® 1 is expanded by the screw so that the anchor rings penetrate the plastic material and ensure the interference fit of the thread insert.

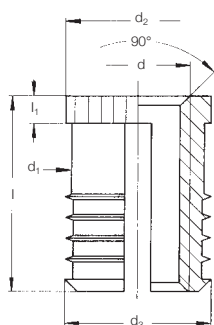
In this process, the screw is also locked. For the additional expansion force, the tightening torque must be increased by 10 %.



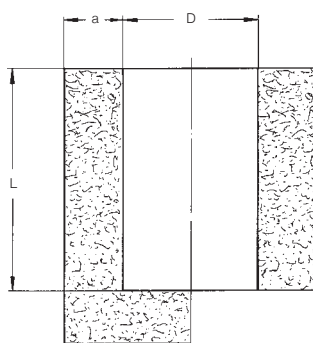
## Technical data

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

### Type 0831 – 0833



### Mounting hole<sup>①</sup>



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

d	Item code	Number of anchor	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	l <sup>③</sup>	l <sub>1</sub>	D <sup>+0,1①</sup>	L <sub>min.</sub>	a <sub>min.</sub>
M 2	0832 102 0004	3	3.15	3.70	3.6	4.0	0.60	3.2	4.5	2.0
M 2.5	0832 125 0005	3	3.90	4.50	4.4	5.0	0.75	4.0	5.5	2.5
M 3	0832 103 0005	3	3.90	4.50	4.4	5.0	0.75	4.0	5.5	3.0
M 3.5	0832 135 0065	3	4.70	5.30	5.2	6.5	1.00	4.8	7.1	3.2
M 4	0833 104 0008	4	5.35	6.00	5.9	8.0	1.30	5.5	8.7	3.5
M 5	0833 105 0095	5	6.35	7.00	6.9	9.5	1.30	6.5	10.3	4.0
M 6	0831 106 0011	5	7.85	8.50	8.4	11.0	2.00	8.0	12.0	5.0
M 8	0831 108 0013	5	9.50	9.95	9.9	13.0	2.00	9.6	14.0	7.0

Metric ISO thread according to DIN 13-6H. Technical changes reserved. Minimum quantity on request. All measures in mm.

<sup>①</sup> Guideline values: depend on the moulding material, may have to be changed after installation tests.

<sup>③</sup> Screw contact length = min. thread insert length (l) + 1p (pitch)

Other sizes and special designs on request.

**Sales@RivetNutUSA.com**

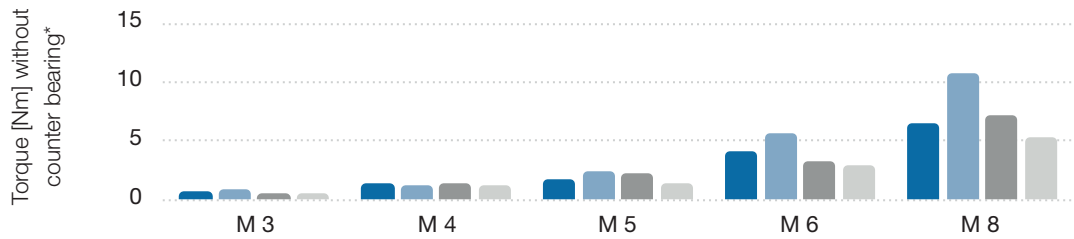
**ISO 9001 CERTIFIED**  
**www.RivetNutUSA.com**  
**(800) 236-3200**

Request your quote with Rivet Nut USA (an operating division of Cardinal Components, Inc.)  
 Cardinal Components, Inc. is your authorized preferred specialty fastener distributor.

# The variants – thread inserts for expansion anchoring **SPREDSERT® 1** and **2**

## Technical data

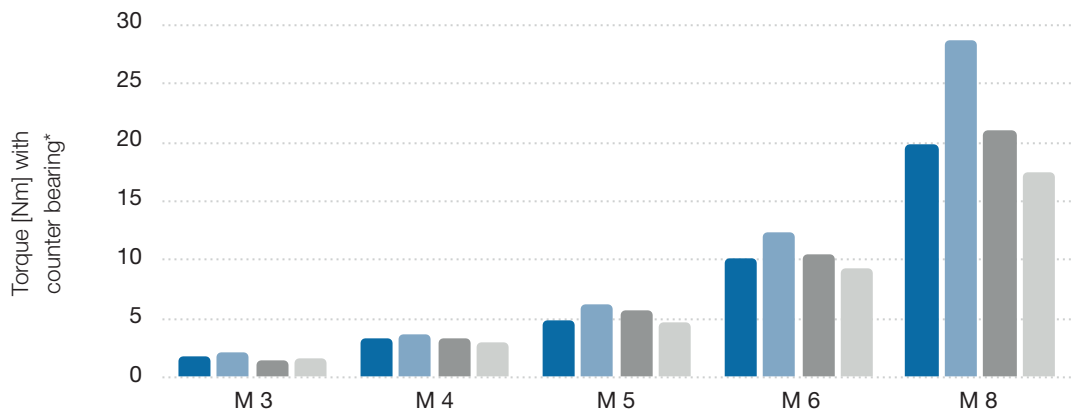
### Torque values for SPREDSERT® 1 and 2 / M 3 to M 8 tested in different materials



\*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

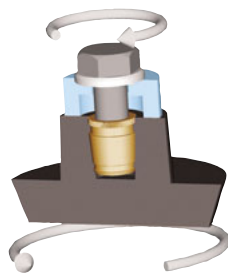
All measures in mm.



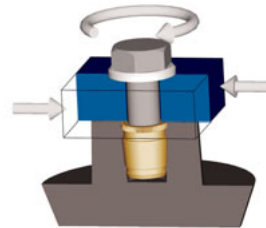
\*Guideline values from laboratory tests where the joint is subjected to overstress.

		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.

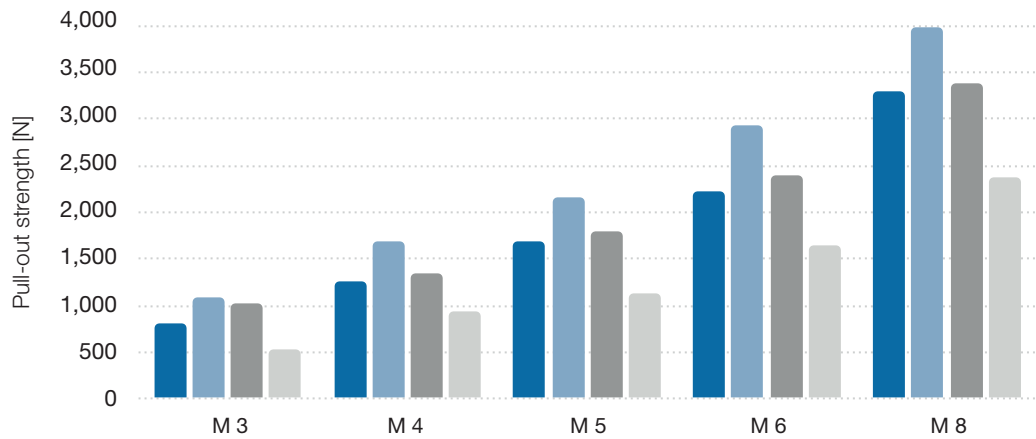
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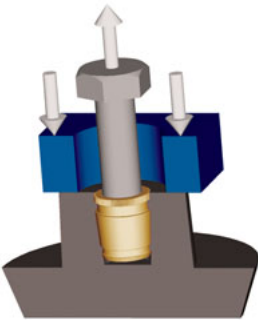
**(800) 236-3200**

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.