

RVTB™

PEM® CAPTIVATED THREADED RIVET BUSHES



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High performance fasteners designed for use in sheet metal

PEM® RAB™ and RABS™ round rivet bushes provide strong reusable threads in panels too thin to be tapped. They can be installed into any material hardness in sheets as thin as 0.5 mm, and can be installed closer to the edge with no panel distortion. They can be easily installed on a Haeger® or PEMSERTER® machine and offer high pushout and torque resistance thanks to their serrated shank.

PEM® Type RMAB™ and RMABS™ mini rivet bushes work in the same way as the round type, but have smaller body dimensions for applications where space is restricted.

Both the round and mini style rivet bushes are available in thread sizes from M3 though M5 in mild steel and stainless steel.

Benefits include:

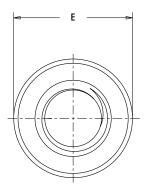
- Torque-resistant and capable of withstanding loads applied from both sides.
- Can be installed into any material hardness.
- Can be installed close to the edge with no panel distortion.
- Can be installed in painted chassis materials.
- · High pushout performance.
- Custom designed in a wide range of sizes and profiles
- Can be installed into laminate material and non-ductile materials.

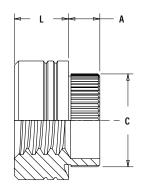
Fastener drawings and models are available at www.pemnet.com. Custom sizes are available on special order. Contact us for more information.



View the installation animation View full product information

RAB™ and RABS™ Round Rivet Bushes





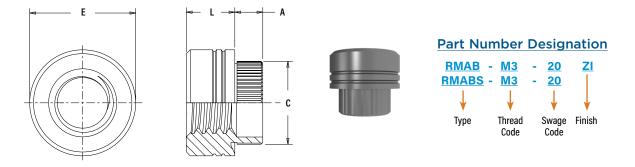


Part Number Designation 20 **RAB M3** ΖI **RABS M3** 20 Type Thread Swage Finish

All dimensions are in millimeters.

| | | Thread Size x Pitch | Туре | | Thread Code | Swage Code | Hole Size in Sheet +0.08 | A C ±0.13 Max | C Max. | E Nom. | L ±0.25 |
|--|--------|---------------------------|----------|-----------------|----------------|---------------|--------------------------------|---------------|-----------|-----------|------------|
| | | 11011 | Steel | Stainless Steel | | | 1 0100 | | | | |
| | | M3 x 0.5 | RAB RA | | М3 | 16 | | 1.95 | 5.98 | 7.9 | |
| | | | | RABS | | 18 | 6 | 1.85 | | | 3.2 |
| | Metric | | | | | 20 | | 1.45 | | | |
| | Ĭ | M4 x 0.7 RAB | | | | 16 | | 1.95 | | | |
| | | | RABS | M4 | 18 | 7 | 1.85 | 6.98 | 9.5 | 3.8 | |
| | | | | | 20 | | 1.45 | | | | |
| | | M5 x 0.8 | RAB RABS | | | 16 | | 1.95 | | | |
| | | | | M5 18 | 18 | 8.4 | 1.85 8.38 | 8.38 | 11.1 | 4.4 | |
| | | | | | | 20 | | 1.45 | 1 | | |

RMAB™ and RMABS™ Round Mini Rivet Bushes



All dimensions are in millimeters.

| | Thread Size x Pitch | Туре | | Thread Code | Swage Code | Hole Size in Sheet +0.08 | A ±0.13 | C Max. | E Nom. | L ±0.25 |
|--------|---------------------------|---------------|-----------------|----------------|---------------|--------------------------------|------------|-----------|-----------|------------|
| | | Steel | Stainless Steel | | | | | - | | |
| | M3 x 0.5 | RMAB | RMABS | | 16 1.95 | | | | | |
| 10 | | | | M3 | 18 | 4.2 | 1.85 4.18 | 4.18 | 5.5 | 2.8 |
| Metric | | | | | 20 | | 1.45 | | | |
| ğ | M4 x 0.7 RMAB | | | | 16 | | 1.95 | | | |
| | | RMABS | M4 | 18 | 5.5 | 1.85 | 5.48 | 7 | 3.2 | |
| | | | | | 20 | 1.45 | 1.45 | | | |
| | M5 x 0.8 | RMAB RMABS M5 | | | 16 | | 1.95 | | | |
| | | | M5 | 18 | 6.5 | 1.85 | 6.48 | 8.5 | 3.8 | |
| | | | | 20 | | 1.45 | | | | |

Material and Finish Specifications

| | Compone | nt Material | Standard Finishes | | |
|-------------------------|-----------------|-------------------------|--|--|--|
| Туре | Carbon Steel | 300 Series Stainless | Zinc Plated per ASTM B633, SCI (5µm), Type III, Colorless ⁽¹⁾ | Passivated and/or Tested per ASTM A380 | |
| RAB • | | | • | | |
| RABS | | • | | • | |
| RMAB | • | | • | | |
| RMABS | | • | | • | |
| Part Number Code for Fi | nished | ZI | None | | |

(1) See PEM® <u>Technical Support</u> section of our website for related plating standards and specifications.

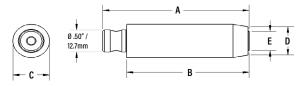
Custom sizes are available on special order. Contact us for more information.

Installation Tooling

- 1. Prepare properly sized mounting hole in the sheet. Do not perform any secondary operations such as deburring.
- 2. Place the shank of the fastener into the mounting hole
- 3. With the installation punch and anvil surfaces parallel, apply squeezing force to flare the shank of the fastener.

| Tuno | Thread | HAEGER® Pa | art Number | PEMSERTER® Part Number | | |
|------------|--------|------------|------------|------------------------|---------|--|
| Туре | Size | Anvil | Punch | Anvil | Punch | |
| | M3 | 10-00286 | 10-00679 | 8026876 | 8026875 | |
| RAB/RABS | M4 | 10-00288 | 10-00681 | 8026878 | 8026877 | |
| | M5 | 10-00289 | 10-00682 | 8026880 | 8026879 | |
| | M3 | 10-00286 | 10-00686 | 8026882 | 8026881 | |
| RMAB/RMABS | M4 | 10-00288 | 10-00687 | 8026884 | 8026883 | |
| | M5 | 10-00289 | 10-00688 | 8026886 | 8026885 | |

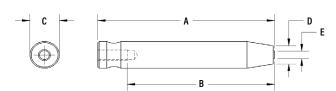
Haeger® Punch Dimensions - RAB™ and RABS™(1)



| Haeger® Punch Part # | Thread Code | A mm | B mm | Dia. C mm | Dia. D mm | Dia. E mm |
|-------------------------|----------------|---------|---------|--------------|--------------|--------------|
| 10-00679 | M3 | 6.2 | 63.5 | 12.7 | 7.5 | 4.17 |
| 10-00681 | M4 | 76.2 | 63.5 | 12.7 | 8.7 | 5.13 |
| 10-00682 | M5 | 76.2 | 63.5 | 12.7 | 10.3 | 6.63 |

(1) The Pin Style Nut Tooling is recommended for use with these tools.

Haeger® Punch Dimensions - RMAB™ and RMABS™(1)



| Haeger® Punch Part # | Thread Code | A mm | B mm | Dia. C mm | Dia. D mm | Dia. E mm |
|-------------------------|----------------|---------|---------|--------------|--------------|--------------|
| 10-00686 | М3 | 76.2 | 63.5 | 12.7 | 5.5 | 3.1 |
| 10-00687 | M4 | 76.2 | 63.5 | 12.7 | 7.5 | 4.3 |
| 10-00688 | M5 | 7 6.2 | 63.5 | 12.7 | 8.7 | 5.31 |

Installation Notes

- For best results we recommend using a HAEGER® machine to install PEM® rivet bushes. See our website for more information.
- View the installation animation on www.pemnet.com.

All PEM® products meet our stringent quality standards. If you require additional industry or other specific <u>quality certifications</u>, special procedures and/or part numbers are required. Please contact your local sales office or representative for further information.

Regulatory <u>compliance information</u> is available in Technical Support section of our website. Specifications subject to change without notice. See our website for the most current version of this bulletin.



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