

RUBBER-METAL ELEMENT TYPE GMA-1, GMA-2

STOPPER BUFFER, CYLINDRICAL CROSS SECTION



STRUCTURE TYPE GMA-1, GMA-2 METAL PARTS / RUBBER ELEMENT

- **Type GMA-1** one side with threaded bolt (male thread)
- **Type GMA-2** one side with nut thread (female thread)
- Material: 1.0038 (S235JR) / 8.8
- Corrosion protection: oiled or electrogalvanized
- Cylindrical rubber element with metal plate vulcanized onto one side

| | |
|------------------------|-----------------------------------|
| Rubber grade | NBR |
| Rubber hardness | medium – 60 Shore A |
| Possible uses | Water, gas, fuel oil, mineral oil |

DIMENSIONS / STRESS TYPE GMA-1

| Ø D | H | h | s | G | I | Compressive stress | | Art. No.. | Pck. qty. |
|-----|------|------|----|------|------|---------------------------|-----------------------|-----------|-----------|
| mm | mm | mm | mm | mm | mm | Spring rate c_z N/mm | Load F_{tol}^* N | | |
| 18 | 7.5 | 5.5 | 2 | M 6 | 16.0 | 350 | 240 | 51873300 | 100 |
| 20 | 13.5 | 11.5 | 2 | M 6 | 16.0 | 150 | 260 | 51873400 | 100 |
| 25 | 17.0 | 14.0 | 3 | M 6 | 16.0 | 180 | 380 | 51873500 | 100 |
| 30 | 17.0 | 14.0 | 3 | M 8 | 21.0 | 360 | 760 | 51883900 | 60 |
| 40 | 27.0 | 24.0 | 3 | M 8 | 21.0 | 270 | 970 | 51884000 | 50 |
| 50 | 21.0 | 18.0 | 3 | M 10 | 26.5 | 650 | 1760 | 51884100 | 20 |
| 75 | 25.0 | 22.0 | 3 | M 12 | 39.0 | 1400 | 4620 | 51884200 | 8 |
| 100 | 40.0 | 37.0 | 3 | M 16 | 44.0 | 1400 | 7770 | 51873600 | 4 |

DIMENSIONS / STRESS TYPE GMA-2

| Ø D | H | h | s | G | I | Compressive stress | | Art. No.. | Pck. qty. |
|-----|------|------|-----|------|------|---------------------------|-----------------------|-----------|-----------|
| mm | mm | mm | mm | mm | mm | Spring rate c_z N/mm | Load F_{tol}^* N | | |
| 20 | 13.5 | 12.0 | 1.5 | M 6 | 9.5 | 220 | 230 | 51873700 | 100 |
| 30 | 17.0 | 14.0 | 3.0 | M 8 | 9.5 | 550 | 620 | 51885400 | 80 |
| 40 | 27.0 | 24.0 | 3.0 | M 8 | 9.5 | 350 | 920 | 51873800 | 40 |
| 50 | 21.0 | 18.0 | 3.0 | M 10 | 10.5 | 700 | 1100 | 51885500 | 20 |
| 75 | 25.0 | 22.0 | 3.0 | M 12 | 12.5 | 1700 | 3200 | 51885600 | 20 |
| 100 | 40.0 | 37.0 | 3.0 | M 16 | 16.5 | 1400 | 4950 | 51885700 | 12 |
| 150 | 75.0 | 70.0 | 5.0 | M 20 | 17.5 | 1350 | 11650 | 51873900 | 4 |

* F_{tol} is the **tolerable static permanent load**: a dynamic alternating load can be superimposed.
The stated tolerable loads are only approximate indications for the static load.
Delivery only possible in the stated packaging quantities (far-right column).

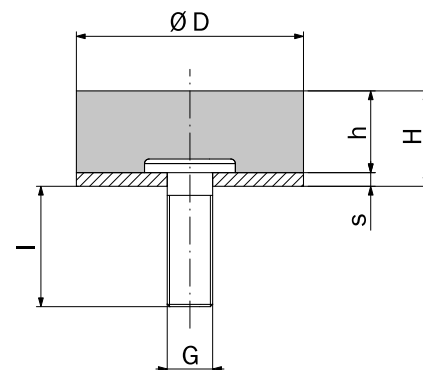
NOTE

Please comply with general technical instructions. Subject to technical alterations and deviations resulting from the manufacturing process.

APPLICATIONS

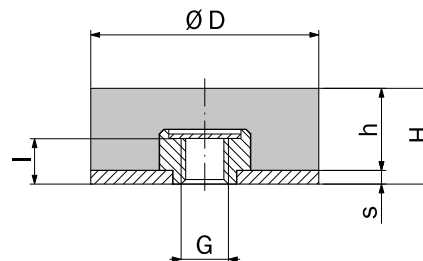
- as shock buffer stopper
- to limit impact in machinery on elastic bearings
- to limit spring excursion in vehicles
- for machines which are not firmly anchored on susceptible flooring
- for damping sound and vibration
- for compressive stress
- for superimposed compressive/shearing stress

VERSIONS



Type GMA-1

One side with male thread



Type GMA-2

One side with female thread