



DESCRIPTION

Piston seal for pneumatic cylinders

MATERIAL

Type: Polyurethane
 Designation: SEALPUR 93
 Hardness: 93 °ShA

MAIN FEATURES

The GPM is a single acting piston seal with guiding element particularly suitable for short stroke cylinders and magnetic piston. Two GPM can be mounted “back to back” to get the double acting effect and the magnet is protected between them.

The material used to produce this seal is a polyurethane compound, specifically developed for the production of pneumatic seals, that ensures excellent properties on wear-resistance, extended service life and low permanent deformation.

Thanks to its design, the seal type GPM offers the following advantages:

- The guiding element of the piston is integrated
- Radial and axial slots ensure the retention of grease
- Inside the seal there is the space for magnet in case of “back to back” double acting assembly
- Low friction at all usage pressure
- Excellent wear-resistance

- Extended service life
- Geometry of the sealing lips is designed to operate with air lubricated and dry

FIELD OF APPLICATION

| | |
|-------------|---|
| Pressure | ≤ 20 bar |
| Speed | ≤ 1 m/s |
| Temperature | $-35^{\circ}\text{C} \div +80^{\circ}\text{C}$ |
| Fluids | Air with or without lubrication, grease, mineral oils, non-aggressive gases, etc. |

SURFACE ROUGHNESS

| | | |
|-----------------|-----------------------------|----------------------------|
| Dynamic surface | $R_a \leq 0.25 \mu\text{m}$ | $R_t \leq 2.5 \mu\text{m}$ |
| Static surface | $R_a \leq 0.8 \mu\text{m}$ | $R_t \leq 6.3 \mu\text{m}$ |

LEAD-IN CHAMFERS

| D | S MIN | Angle |
|------------|-------|------------------------------|
| • less 20 | 3 mm | $15^{\circ} \div 20^{\circ}$ |
| • 20÷50 | 4 mm | $15^{\circ} \div 20^{\circ}$ |
| • 51÷150 | 5 mm | $15^{\circ} \div 20^{\circ}$ |
| • over 150 | 6 mm | $15^{\circ} \div 20^{\circ}$ |

- to avoid damaging the sealing lips during installation, housing must have rounded chamfers. Sharp edges and burrs within the installation area of the seal must be removed

| Part. | D ^{H10} | A | M | dm | G | ds ^{h7} | R | h |
|--------------------|------------------|----|---|------|-----|------------------|-----|---|
| GPM 12 6 6 | 12 | 12 | 3 | 10.5 | 3.5 | 6 | 0.4 | 6 |
| GPM 16 8 6 | 16 | 12 | 3 | 14.5 | 3.5 | 8 | 0.4 | 6 |
| GPM 20 10 6 | 20 | 12 | 3 | 18 | 3.5 | 10 | 0.5 | 6 |
| GPM 25 10 6 | 25 | 12 | 3 | 23 | 3.5 | 10 | 0.5 | 6 |