

## MPP

### PISTONE MONOBLOCCO TIPO MPP

#### Descrizione

Il pistone monoblocco tipo MPP è realizzato in gomma nitrilica di durezza 75 Shore A vulcanizzata su inserto metallico.

Si usa normalmente in applicazioni pneumatiche nei cilindri a semplice e a doppio effetto. Il profilo a labbri di tenuta arrotondati facilita lo scorrimento ed evita il fenomeno di stick-slip. La camera portalubrificante tra i due labbri di tenuta garantisce nel tempo la linearità al movimento assiale. In caso di carichi radiali forti, i distanziali in senso dello scorrimento autoallineano il pistone alla camicia. Nella parte interna, il pistone presenta da entrambi i lati alcuni bassorilievi che facilitano il primo distacco durante l'inversione di marcia.

#### Dati tecnici

Pressione: < 20 bar  
Velocità: < 1 m/s  
Temperatura: da - 30° C a + 100° C  
Fluidi: aria (lubrificata e non), grasso, ecc.(v. tabella 3 a p.14)

#### Materiale

Il materiale utilizzato è la combinazione di gomma NBR 75 Shore A con inserto acciaio. È possibile realizzare il pistone in FKM per impieghi ad alte temperature.

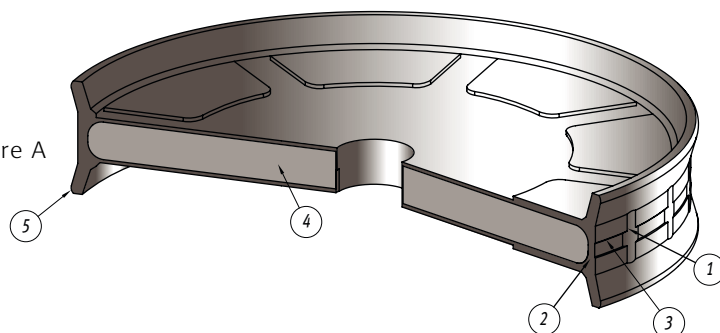
#### Montaggio

Eliminare spigoli vivi all'imbocco camicia-cilindro per evitare di compromettere la guarnizione. Ingrassare il pistone prima del montaggio. Eseguire uno smusso sulla camicia del cilindro (v. p. 245).

**Importante: si raccomanda di utilizzare rondella di fissaggio**

Fig.43:

- 1 - distanziale per autoallineamento
- 2 - mescola in NBR 75 Shore A
- 3 - gola porta lubrificante
- 4 - inserto metallico
- 5 - raggio



### MONOBLOCK PISTON TYPE MPP

#### Description

The MPP type mono-block piston type MPP is made of NBR nitrile rubber hardness 75 Shore A vulcanized on a metal insert.

It is normally used in pneumatic applications, in single and double effect cylinders. The profile with rounded edges improves the sliding and avoids Stick-Slip. The groove leads lubricant through the two sealing lips, ensuring the axial movements linearity for long time.

The sliding direction spacers, self-align piston and sleeve in case of heavy radial loads. The piston presents, on both sides of the internal part, some grooves helping breakaway during the first reverse gear.

#### Technical data

Pressure: < 20 bar  
Speed: < 1 m/s  
Temperature: from - 30° C up to + 100° C  
Fluids: air (lubricated or not), grase, etc. (see table 3, page 14)

#### Material

The material used is a combination of nitrile rubber NBR 75 Shore A and steel insert. For high temperature application we could also provide FKM compound instead of NBR compound.

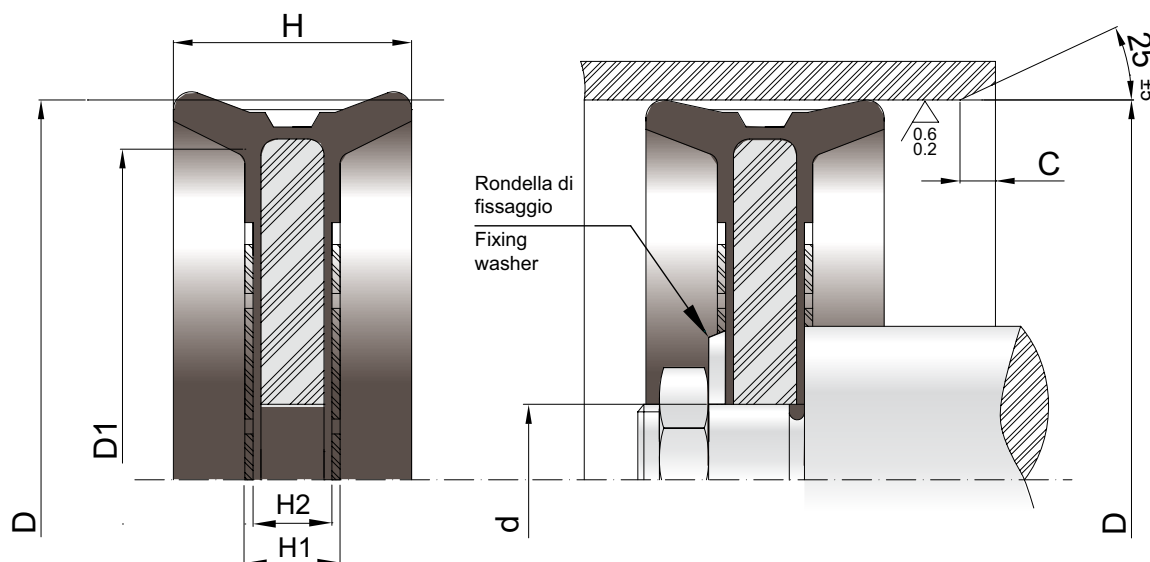
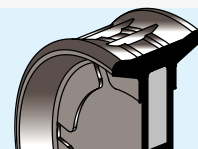
#### Assembling

Remove sharp edges at the Bore-Cylinder entry to avoid seal damages. Grease the piston before installation. The bore must present a lead-in chamfer (see page 245).

**Important: fixing washer is recommended**

Pic.43:

- 1 - aligning spacer
- 2 - NBR 75 Sh A compound
- 3 - lubricant groove
- 4 - metal insert
- 5 - radius

**MPP**

PSP  
PSP/N  
MPS  
MPM  
SPS  
SPS/N  
PLF  
**MPP**  
PSN

| D <sub>H11</sub> | d <sub>f8</sub> | H    | H1   | H2   | D1     | C    | ART / ITEM |      |      |        |
|------------------|-----------------|------|------|------|--------|------|------------|------|------|--------|
| 25,0             | 8,0             | 12,0 | 6,0  | 4,0  | 14,50  | 3,00 | MPP        | 0250 | 0080 | 120 N2 |
| 32,0             | 8,0             | 15,0 | 6,0  | 4,0  | 16,00  | 3,00 | MPP        | 0320 | 0080 | 150 N2 |
| 40,0             | 10,0            | 18,0 | 7,0  | 5,0  | 23,00  | 3,00 | MPP        | 0400 | 0100 | 180 N2 |
| 50,0             | 10,0            | 18,0 | 7,0  | 5,0  | 29,00  | 4,00 | MPP        | 0500 | 0100 | 180 N2 |
| 60,0             | 12,0            | 22,0 | 9,0  | 6,0  | 37,50  | 4,00 | MPP        | 0600 | 0120 | 220 N2 |
| 63,0             | 12,0            | 22,0 | 9,0  | 6,0  | 40,50  | 4,00 | MPP        | 0630 | 0120 | 220 N2 |
| 63,0             | 14,0            | 22,0 | 9,0  | 6,0  | 40,50  | 4,00 | MPP        | 0630 | 0140 | 220 N2 |
| 63,0             | 16,0            | 22,0 | 9,0  | 6,0  | 40,50  | 4,00 | MPP        | 0630 | 0160 | 220 N2 |
| 70,0             | 12,0            | 22,0 | 9,0  | 6,0  | 47,00  | 4,00 | MPP        | 0700 | 0120 | 220 N2 |
| 75,0             | 12,0            | 25,0 | 9,0  | 6,0  | 49,00  | 4,50 | MPP        | 0750 | 0120 | 250 N2 |
| 80,0             | 12,0            | 25,0 | 9,0  | 6,0  | 55,00  | 4,50 | MPP        | 0800 | 0120 | 250 N2 |
| 80,0             | 14,0            | 25,0 | 9,0  | 6,0  | 55,00  | 4,50 | MPP        | 0800 | 0140 | 250 N2 |
| 80,0             | 16,0            | 25,0 | 9,0  | 6,0  | 55,00  | 4,50 | MPP        | 0800 | 0160 | 250 N2 |
| 80,0             | 18,0            | 25,0 | 9,0  | 6,0  | 60,00  | 4,50 | MPP        | 0800 | 0180 | 250 N2 |
| 90,0             | 12,0            | 25,0 | 9,0  | 6,0  | 65,00  | 4,50 | MPP        | 0900 | 0120 | 250 N2 |
| 95,0             | 12,0            | 25,0 | 9,0  | 6,0  | 70,00  | 4,50 | MPP        | 0950 | 0120 | 250 N2 |
| 100,0            | 18,0            | 25,0 | 9,0  | 6,0  | 75,00  | 4,50 | MPP        | 1000 | 0180 | 250 N2 |
| 100,0            | 20,0            | 25,0 | 9,0  | 6,0  | 75,00  | 4,50 | MPP        | 1000 | 0200 | 250 N2 |
| 110,0            | 12,0            | 25,0 | 9,0  | 6,0  | 95,00  | 4,50 | MPP        | 1100 | 0120 | 250 N2 |
| 125,0            | 18,0            | 30,0 | 12,0 | 9,0  | 90,00  | 5,00 | MPP        | 1250 | 0180 | 300 N2 |
| 125,0            | 20,0            | 30,0 | 12,0 | 9,0  | 90,00  | 5,00 | MPP        | 1250 | 0200 | 300 N2 |
| 160,0            | 20,0            | 30,0 | 14,0 | 12,0 | 115,00 | 6,00 | MPP        | 1600 | 0200 | 300 N2 |
| 160,0            | 24,0            | 30,0 | 14,0 | 12,0 | 115,00 | 6,00 | MPP        | 1600 | 0240 | 300 N2 |
| 200,0            | 20,0            | 30,0 | 14,0 | 12,0 | 150,00 | 6,00 | MPP        | 2000 | 0200 | 300 N2 |
| 200,0            | 24,0            | 30,0 | 14,0 | 12,0 | 150,00 | 6,00 | MPP        | 2000 | 0240 | 300 N2 |
| 250,0            | 30,0            | 35,0 | 18,0 | 16,0 | 200,00 | 6,00 | MPP        | 2500 | 0300 | 350 N2 |