

# Pneumatic O-Ring Grippers

## OPR - PM 6-Finger

OPR and PM are innovative multi-finger grippers for handling and assembling O-rings

### Advantages

- They are specifically designed with an independent device which expands the gasket and another which subsequently ejects it for assembling.
- Ability to assemble particularly thick gaskets and to position them in seats which are located at a distance from the ends of the housing.
- Adjustable stroke suitable for different O-ring sizes.
- Robust lightweight housing made of hard-coated aluminum alloy.
- OPR50 includes specially designed fingers.

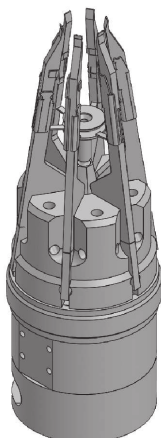


## SPECIFICATIONS

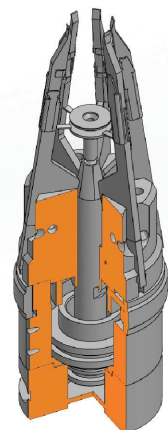
| Model             | Nr. of Jaws | Stroke Per Jaw                  | Ejector Stroke    | Theoretical opening couple/force per jaw @ 6 bar | Ejector force @ 6 bar | Weight             | Repeatability           |
|-------------------|-------------|---------------------------------|-------------------|--|-----------------------|--------------------|-------------------------|
| <b>OPR 50 - 1</b> | 6           | 9°                              | 7.5 mm<br>0.29 in | 23.5 Nm<br>208.0 in lb                           | 118 N<br>26.5 lb      | 0.7 Kg<br>1.54 lb  | ± 0.05 mm<br>±0.0020 in |
| <b>OPR 50 - 2</b> | 6           | 9°                              | 7.5 mm<br>0.29 in | 23.5 Nm<br>208.0 in lb                           | 118 N<br>26.5 lb      | 0.77 Kg<br>1.69 lb | ± 0.05 mm<br>±0.0020 in |
| <b>PM06</b>       | 6           | 1.85 - 5 mm<br>0.07 - 0.19 in   | 5 mm<br>0.2 in    | 540 N<br>121 lb                                  | 570 N<br>128 lb       | 1 kg<br>2.2 lb     | ± 0.05 mm<br>±0.0020 in |
| <b>PM06 - 1</b>   | 6           | 3.35 - 6.5 mm<br>0.13 - 0.26 in | 5 mm<br>0.2 in    | 540 N<br>121 lb                                  | 570 N<br>128 lb       | 1 kg<br>2.2 lb     | ± 0.05 mm<br>±0.0020 in |
| <b>PM06 - 2</b>   | 6           | 4.85 - 8 mm<br>0.19 - 0.31 in   | 7.5 mm<br>0.29 in | 540 N<br>121 lb                                  | 570 N<br>128 lb       | 1.3 kg<br>2.86 lb  | ± 0.05 mm<br>±0.0020 in |

Opening Pressure 4 - 8 bar (58 - 116 psi)  
Working Temperature 5 - 60 °C (41 - 140 °F)  
Noise Emission (Sound Pressure) <= 70 db(A) in any direction

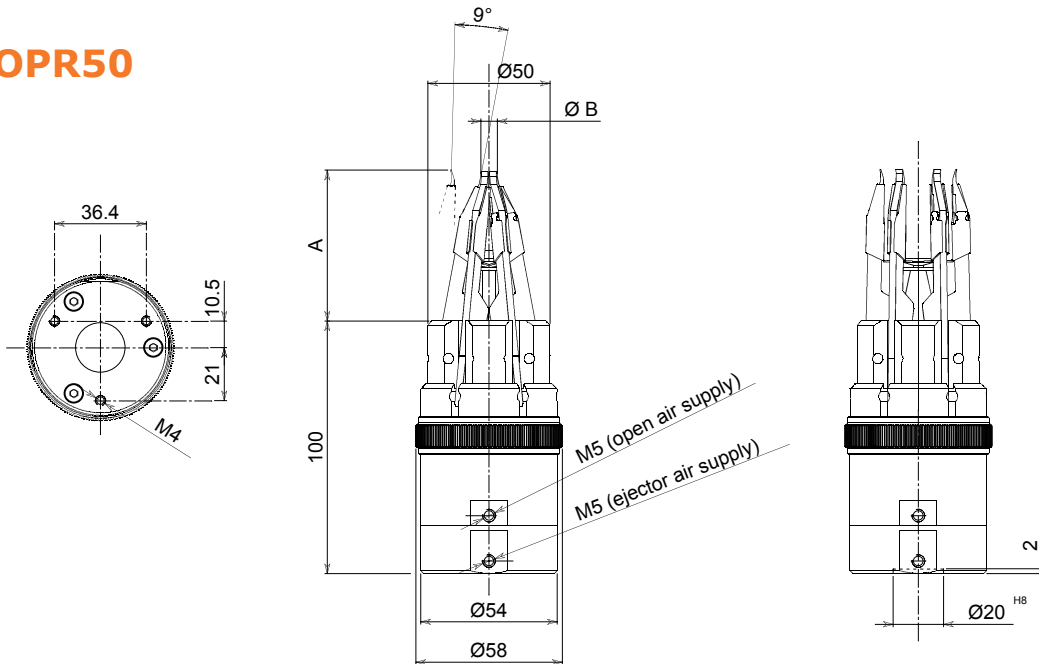
## SECTIONAL DIAGRAM



**Guidelines for the selection of a gripper model**  
Selection of the correct gripper model depends on the workpiece's weight, the friction coefficient between the fingers and the workpiece and the required motion of the application. Due to inertial forces associated with motion, we recommend that the holding force of the gripper model should be from 10 to 20 times the workpiece's weight. If the application presents high acceleration/deceleration or impacts during the motion, then a further safety margin should be considered.

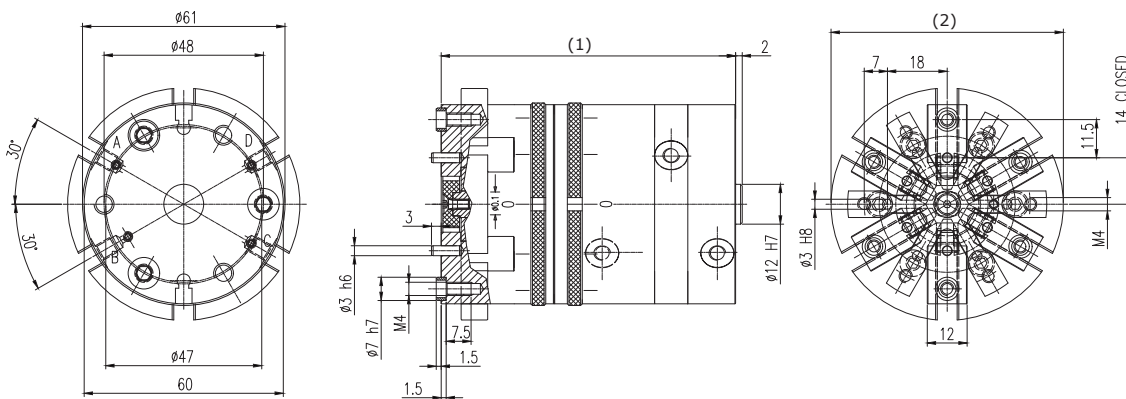


OPR50



|          | A              | B             |
|----------|----------------|---------------|
| OPR 50-1 | 60.0<br>(2.36) | >10<br>(0.39) |
| OPR 50-2 | 75.0<br>(2.95) | >10<br>(0.39) |

PM06



(1) PM06: 86 mm (3.39 in) - PM06-1: 88.7 mm (3.5 in) - PM06-2: 96.5 mm (3.80 in)  
 (2) PM06: Ø70 mm (2.76 in) - PM06-1: Ø70 mm (2.76 in) - PM06-2: Ø75 mm (2.95 in)

\* Dimensions are in millimeters (inches).

\*\* All dimensions are descriptive and subject to variation for technical upgrading. We reserve the right to make variations without prior notification



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