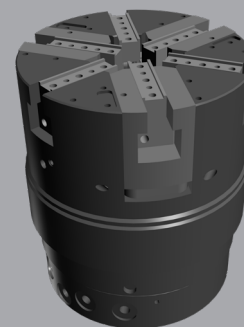


# Pneumatic O-Ring Grippers PMIE 6-Finger

PMIE are innovative multi-finger grippers for handling and assembling internal and external O-rings

## Advantages

- 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.



## SPECIFICATIONS

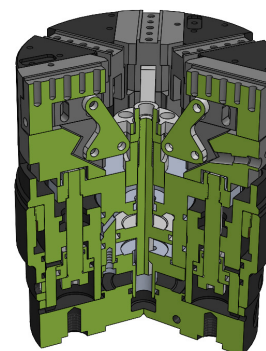
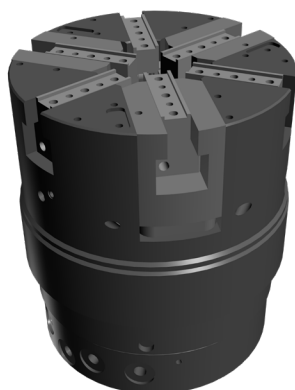
Model	Nr. of Jaws	Stroke Per Jaw	Ejector Stroke	Opening force per jaw @ 6 bar	Opening force per jaw @ 6 bar	Ejector force @ 6 bar	Weight	Repeatability
PMIE6	6	"A" fingers 17.0 mm	5 mm	"A" fingers 31.6 N	"A" fingers 30.0 N	"A" down 200 N "A" up 385 N	1.95 kg	± 0.05 mm ±0.0020 in
		"B" fingers 13.5 mm		"B" fingers 50.0 N				
		"A" fingers 0.67 in	0.2 in	"A" fingers 1.24 lb	"A" fingers 1.18 lb	"A" down 7.87 lb "A" up 15.16 lb	4.30 lb	
		"B" fingers 0.53 in		"B" fingers 1.97 lb				

Operating 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



# PRODUCT INFORMATION

# PMIE 6-Finger

- The opening stroke of the jaws is adjustable:
  - Triple "A" jaws adjustment with central nut
  - Triple "B" adjustment jaws with knurled external sleeve
- The closing stroke of the jaws is fixed.
- The force value at the jaws is the arithmetic sum at about 20 mm from the finger fixing plane.
- The gripper must be used in clean work environments, typically in assembly environments.
- The gripper is suitable for external or internal mounting of seals.

Operation description (by means of customized gripping fingers applied on the jaws):

• External assembly:

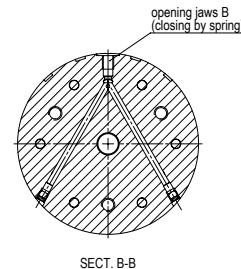
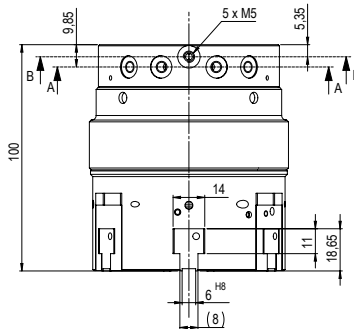
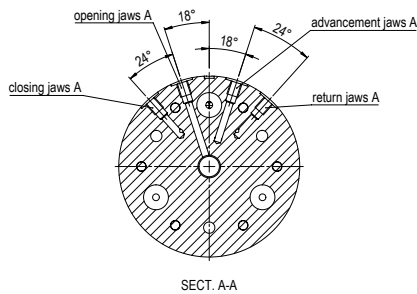
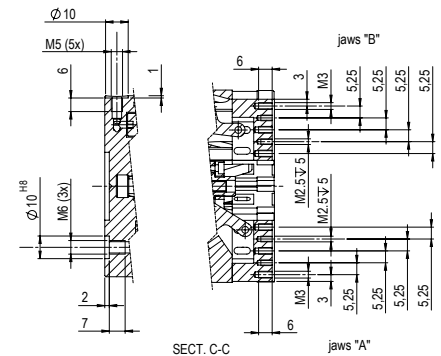
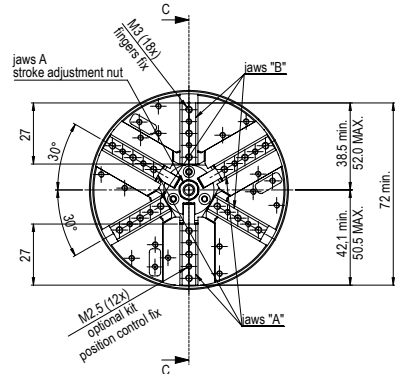
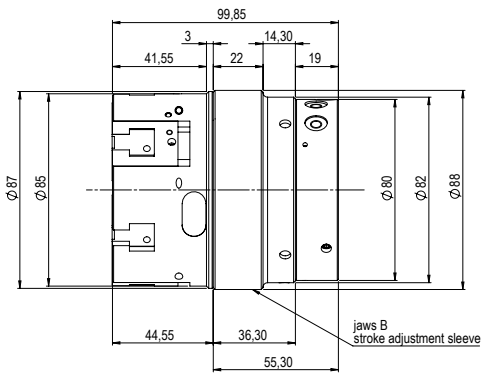
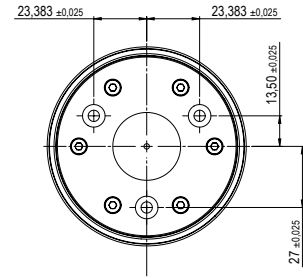
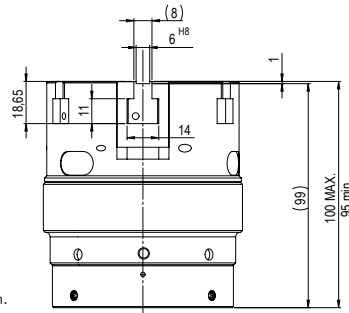
The entire gripper is brought into the pick up position of the o-ring.  
 The o-ring is dilated (expansion) by all 6 jaws (opening)  
 The entire PMIE6 gripper is placed on the shaft groove.  
 The three triple jaws "A" are retracted with the linear stroke (ejector) and the O-ring is pre-fitted with triangular shape in the seat.  
 The gripper is now retracted and the O-ring is fully assembled in the seat.  
 The 6 jaws are closed for a new cycle.

• Internal assembly:

The entire gripper is brought into the pick up position of the o-ring.  
 The 3 triple "B" jaws are in the closed position, while the 3 triple "A" jaws are open.  
 The o-ring is shaped in the shape of a "clover" thanks to the shape of the fingers mounted on the jaws.  
 Triple "B" in combination with triple "A" jaw closure.  
 The entire collet is placed on the groove of the cylinder.  
 The opening movement of the triple "B" jaws pushes part of the seal into the groove.  
 The 3 triple jaws "A" are retracted with the linear stroke (ejector) and all the gasket enters the seat.

• Additional optional operations:

- The 3 triple "A" jaws are advanced with the linear stroke (ejector), then the jaws are opened ensuring that the gasket is fully seated.
- The 3 triple jaws "A" are closed, then retracted with the linear stroke and opened again.



The use of functional fittings is necessary to regulate the speed of movements. Impacts at the end of the movement are not allowed. The speed regulation missing can cause breakage of the gripper mechanisms.

\* Dimensions are in millimeters.

\*\* 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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