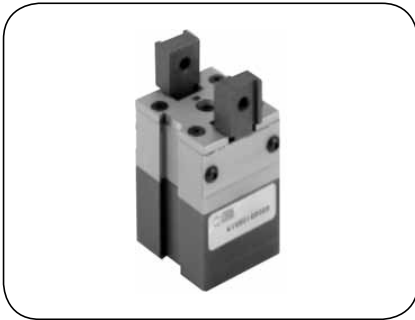
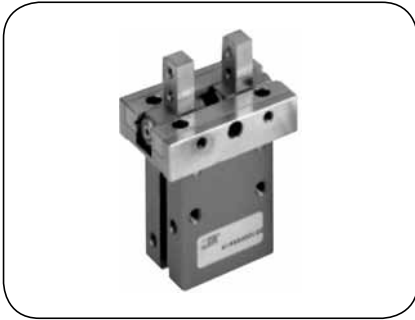


## Grippers



### Grippers with 2 parallel jaws - P1 series

- Gripper type: two-jaw, with jaws in parallel arrangement
- Construction: double-acting, with magnetic position sensors (on request)
- Piston diameter: 16 - 20 - 32 mm
- Seals: NBR



### Grippers with parallel jaws - P2 series

- Gripper type: two-jaw, with jaws in parallel arrangement
- Construction: double-acting, with magnetic position sensors (except for the smallest size), for internal and external gripping
- Piston diameter: 6 - 10 - 16 - 20 - 25 mm
- Maximum operating frequency: 2 cycle/sec
- Single jaw stroke:  $2 \pm 7$  mm (depends on size)



### Grippers with parallel jaws - P3 series

- Gripper type: two-jaw, with jaws in parallel arrangement
- Construction: double-acting, with structural reinforcement, for internal and external gripping, with jaws position control
- Piston diameter: 50 - 64 - 80 - 100 - 125 mm
- Gripping force (per jaw at 6 bar):  $50 \pm 750$  N (depends on size)
- Repeatability:  $0.01 \pm 0.02$  mm (depends on size)
- Operation of 1 500 000 cycles without any maintenance is guaranteed
- Max. jaw length:  $50 \pm 125$  mm (depends on size)
- Special versions: on request



### Grippers with parallel jaws - P4 series

- Gripper type: two-jaw, with jaws in parallel arrangement, with long stroke
- Construction: double-acting, for gripping bulky objects, for internal and external gripping, with jaws position control (except for the smallest size)
- Piston diameter: 10 - 12 - 16 - 25 - 30 mm
- Single jaw stroke:  $5 \pm 60$  mm (depends on version)
- Maximum operation frequency: 1 cycle/sec



### Grippers with parallel jaws - P5 series TECNO

- Gripper type: two-jaw, with jaws in parallel arrangement, with long stroke
- Construction: double-acting, for gripping bulky objects, for internal and external gripping, with jaws position control, made of polymer materials, for operations with TECNO series actuators
- Operation of 1 500 000 cycles without any maintenance is guaranteed
- Single jaw stroke: 5 mm
- Repeatability: 0.05 mm
- Weight: 0.15 kg

## Grippers



### Grippers with angular jaws - P6 series

- Gripper type: two-jaw, with jaws in angular arrangement
- Construction: double-acting, with magnetic position sensors (on request), for internal and external gripping
- Piston diameter: 16 - 20 - 32 mm
- Seals: NBR
- Gripping force (per jaw at 6 bar): 15 ÷ 70 N (depends on the size)
- Jaw opening angle: 30°, 160°
- Service life: over 10 million cycles



### Grippers with angular jaws - P7 series

- Gripper type: two-jaw, with jaws in angular arrangement
- Construction: double-acting, with magnetic position sensors, and a slot to fit the position sensors in
- Piston diameter: 16 - 20 - 32 - 50 mm
- Gripping force (per jaw at 6 bar): 30 ÷ 225 N (depends on size)
- Jaw opening angle: 30°
- Seals: NBR, polyurethane



### Grippers with angular jaws - P8 series

- Gripper type: two-jaw, with jaws in angular arrangement
- Construction: single-acting, normally open, with magnetic position sensors, corrosion resistant, made of diamagnetic material
- Piston diameter: 32 - 40 - 50 mm
- Gripping force (per jaw at 6 bar): 25 ÷ 80 N (depends on the size)
- Jaw opening angle: 8°
- Service life: over 2 million cycles



### Grippers with angular jaws - P9 series

- Gripper type: two-jaw, with jaws in angular arrangement
- Construction: double-acting, with magnetic position sensors (on request), for internal and external gripping
- Piston diameter: 16 - 20 - 32 mm
- Seals: NBR
- Gripping force (per jaw at 6 bar): 15 ÷ 70 N (depends on size)
- Jaw opening angle: max. 160°, opening angle can be adjusted
- Service life: over 10 million cycles



### Grippers with angular jaws - P10 series

- Gripper type: two-jaw, with jaws in angular arrangement
- Construction: with magnetic position sensors, for external gripping
- Piston diameter: 34 - 44 - 54 - 80 mm
- Gripping force (per jaw at 6 bar): 32 ÷ 275 N (depends on size)
- Jaw opening angle: 20° ÷ 180°, opening angle can be adjusted with 1° accuracy (for each jaw)
- Service life: over 2 million cycles without any maintenance
- Repeatability: 0.1 mm

## Grippers



### Grippers with parallel jaws - P11 series

- Gripper type: three-jaw, with jaws in parallel arrangement
- Construction: double-acting, with magnetic position sensors, for internal and external gripping, version with four self-centering jaws available on request
- Piston diameter: 16 - 20 - 25 - 40 - 60 - 80 mm
- Closing force (per jaw at 6 bar):  $58 \div 1500$  N (depends on size)
- Opening force (per jaw at 6 bar):  $65 \div 1700$  N (depends on size)
- Max. operation frequency: 1.5 to 1.2 cycle/sec. (depends on size)



### Gripper with parallel jaws - P12 series

- Gripper type: three-jaw, with jaws in parallel arrangement
- Construction: double-acting, with magnetic position sensors, for internal and external gripping, with self-centering jaws, of excellent accuracy
- Piston diameter: 50 - 64 - 80 - 100 - 125 mm
- Single jaw stroke:  $4 \div 10$  mm (depending on size)
- Gripping force (per jaw at 6 bar):  $85 \div 1930$  N (depends on size)
- Service life: over 1 500 000 cycles without any maintenance
- Repeatability:  $0.01 \div 0.05$  mm (depends on size)