

# Parallel Gripper

## Characteristics

- The Parallel Lever Gripper has realized both compact size and large gripping power by applying a compact elliptic cylinder.
- Lightweight plastic type and durable die-cast alloy type are available.
- As for e sensor equipped type, the jaw operation and the clamping condition can be simply checked by the LED which goes on and off. The proximity switch can be moved in the lateral direction. By adjusting the location of the proximity switch according to the work pieces, the work piece's clamping condition can be checked.

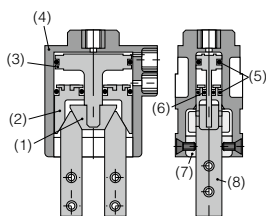
## Specifications

Series	HP15P	HP20P	HP20D	HP30D
Actuating method	Double acting type			
Fluid medium	Compressed air (oilless)			
Operating pressure range	43 ~ 102psi (0.3 ~ 0.7MPa)		36.3 ~ 131psi (0.25 ~ 0.9MPa)	
Operating temp. range	14 ~ 140°F (-10 ~ 60°C) (no freezing)			
Port size	M5×0.8mm			
Cylinder sectional area	1.7cm²	3.3cm²		7.2cm²
Repeated accuracy	±0.05mm (at the center of the jaws)			
Cycle per minute	100C.P.M			
Option	With bracket (B)	○	○	—
	With Sensor (S)	○	○	○

## Sensor Specification

Power voltage	12 ~ 24VDC
Power consumption	Max. 15mA
Output	NPN transistor open collector Max. current: 100mA Applied voltage: 30VDC max.
Operation indicator lamp	Red LED (Lights when turned on)
Ambient	14 ~ 131°F (-10 ~ +55°C)
Cable	0.085SQ 3 cores, 1m

## Construction



No	Parts	Material
(1)	Cam b	POM
(2)	Cam a	POM
(3)	Piston	POM
(4)	Cylinder	polyamide resin or zinc die casting
(5)	Piston packing	NBR
(6)	Rod packing	NBR
(7)	Slider	phosphor bronze
(8)	Jaw	chromium-molybdenum steel

## Model Designation (Example)

HP **15** **P** **-S**  
(1) (2) (3)

(1) Cylinder area

Code	15	20	30
Cylinder area	2.1cm <sup>2</sup>	4.3cm <sup>2</sup>	8.8cm <sup>2</sup>

(2) Body material

Code (material)	P (plastic)	D (die cast)
HP15	○	—
HP20	○	○
HP30	—	○

(3) Option

Code	-B (with bracket)	-S (with sensor (with bracket))	No code (without option)
HP15P	○	○	
HP20P	○	○	
HP20D	—	○	
HP30D	—	○	



The products listed in this page are ECO-friendly products.  
\* Please refer to page 4 for the details of ECO-friendly products.

HP	Model code	HP	Model code
Without Option	HP15P	With Bracket	HP15P-B
	HP20P		HP20P-B
	HP20D		
	HP30D		
With Sensor	HP15P-S		
	HP20P-S		
	HP20D-S		
	HP30D-S		



Package specification  
1 pc. in a bag



Caution  
\* Make-to-order production

## Detailed Safety Instructions

1. Use clear and dry air as supply air to Gripper.
2. By grabbing as softly as possible, Gripper works accurately and repeat accuracy is stable.
3. Avoid use having lateral load on jaws part.
4. Use lightest and shortest possible finger tool attached to jaws part.



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## Option Parts

### Model code of Sensor Set (\*1)

Model code	Gripper type	Note
D1002	HP15P	• Set Item
D1102	HP20P	Sensor, Sensor Fixing Screw, Limit
D1112	HP20D	Dog, Dog Fixing Screw, Sensor
D1202	HP30D	Bracket, Sensor Bracket Fixing Screw

### Model code of Limit Dog for Sensor (Dog only)

Model code	Gripper type	Note
D100903	HP15P	Dog only
D110903	HP20P	
D111903	HP20D	
D120903	HP30D	

### Model code of Sensor Bracket only

Model code	Gripper type	Note
D100902	HP15P	Bracket with sensor mount only
D110902	HP20P	
D111902	HP20D	
D120902	HP30D	

### Model code of Fixing Bracket only (not a sensor mount type) (\*2)

Model code	Gripper type	Note
D100901	HP15P	Fixing Screw Size: M3x0.5,
D110901	HP20P	Depth 5mm, 4 holes



#### Caution

- \*1. The sensor is NPN Open collector output.
- \*2. No screw is included. Prepare Attaching Screw by yourself.



#### Package specifications

- 1 pc. in a bag: Limit Dog Fixing Screw for Sensor
- Limit Dog for Sensor (Dog only)
- Sensor Bracket only
- Sensor Bracket Fixing Screw
- Bracket only (not a sensor mount type)
- 1 set / bag: Sensor Set
- Sensor only

### Model code of Sensor only (\*1)

Model code	Gripper type	Note
D000907	All types	Sensor 1 pc. + Fixing Screw 1 pc.

### Model code of Limit Dog Fixing Screw for Sensor

Model code	Gripper type	Note
/100613	HP15P	For fixing, 2 pcs. required.
/100813	HP20P	
	HP20D	
/101015	HP30D	

### Model code of Sensor Bracket Attaching Screw

Model code	Gripper type	Note
/110613	HP15P	For fixing, 4 pcs. required.
	HP20P	
/000304	HP20D	For fixing, 2 pcs. required.
/000505	HP30D	For fixing, 4 pcs. required.