

Angular Gripper

HARMO Robot Parts

⚠ Safety instructions for this product

Safety instructions, Common safety instructions for each product category and Detailed safety instructions for each product are in the end of this catalog and our website.

Model Designation (Example)



(1) HARMO Angular Gripper

(2) Cylinder area

Code	15	20	30
Cylinder area (cm ²)	2.1	4.3	8.8

(3) Gripper action

Code	A	B	C
Gripper action	Double-acting	Single-acting, normally open	Single-acting, normally closed

*Finger tools (body material code: RX/MX) are selectable only with "Single-acting, normally open" B type.

(4) Body material (○: Available)

Code	R	M	RX	MX
Material	Plastic	Die cast	Plastic, with finger tool	Die cast, with finger tool
HC15	○	—	○	—
HC20	○	○	○	○
HC30	—	○	—	—

(5) Options (○: Available)

■ Without Finger tool (Body material code: R, M)

Code	No code	-S	-B
Type	No option	Sensor (with bracket)	With bracket
HC15	○	○	○
HC20	○	○	○
HC30	○	○	—

■ With Finger tool (Body material code: RX, MX)

Code	No code	-WS	-B	-BS
Type	No option	Finger sensor	With bracket	Finger sensor + Bracket
HC15	○	○	○	○
HC20	○	○	○	○

Characteristics

- The elliptic cylinder contributes to the reduction of body size and weight.
- Light-weight plastic type and durable die-cast alloy type are available.
- A sensor equipped type allows easy checking of the jaw operation and the clamping condition by the flashing LED lamp.
As to the gripper w/o finger tool, the proximity switch can be moved horizontally to adjust its position according to workpieces.
- With finger tool, no need to machine custom attachments. It is most suitable to take out plastic injection molded products (sprues).

NEW "With bracket" option is now available for HC20 die cast type.

NEW Sensor for HC20 finger tool equipped type has been replaced with Finger sensor for easier adjustment.

NEW "Finger sensor" option is now available for HC15 finger tool equipped type.

Specifications

Type	HC15□R	HC20□R	HC20□M	HC30□M
Gripper action	Double-acting type, Single-acting type			
Fluid medium	Compressed air (oilless)			
Operating pressure range	0.2 to 0.6 MPa		0.2 to 0.7 MPa	
Operating temp. range	-10 to 60°C (No freezing)			
Port size	M5×0.8			
Cylinder area	2.1 cm ²	4.3 cm ²		8.8 cm ²
Repeatability	±0.1 mm (at the center of the jaws)			
Max. cycle per minute	100 C.P.M.			

Sensor Specification

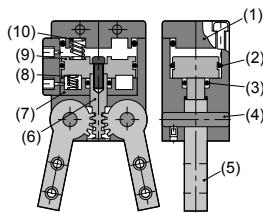
■ Sensor for type without Finger tool

Power voltage	12 to 24 VDC +10%/-15% Ripple (P-P) 10% max.
Current consumption	15 mA or less
Output	NPN open collector Max. current: 100 mA Applied voltage: 30 VDC max.
Operation indicator	Red LED (Lights when turned on)
Operating ambient temp.	-25 to 70°C
Cable	0.08SQ 3 cores, 1 m

■ Sensor for type with Finger tool

Power voltage	4.5 to 28 VDC
Current consumption	8 mA Max. (24 VDC)
Output	NPN open collector
Operation indicator	Red LED indicator turns on at operation
Operating ambient temp.	0 to 60°C
Cable	PCCV 0.15SQ 3 cores (Brown, Blue, Black) x 1 m

Sectional drawing



No.	Parts	Material
(1)	Top cover	Aluminum die casting
(2)	Piston packing	NBR
(3)	Rod packing	NBR
(4)	Fulcrum shaft	Stainless steel
(5)	Jaw	No Finger tool type: Carbon steel Finger tool type: Chromium-molybdenum steel
(6)	Rack	HC15, HC30: Carbon steel HC20: Chromium-molybdenum steel
(7)	Body (Cylinder)	Polyamide resin or zinc die casting
(8)	Spring	SWP (Single-acting normally close type)
(9)	Piston	POM
(10)	Spring	SWP (Single-acting normally open type)

RoHS2 (2011/65/EU+EU2015/863) compliant

Without Finger tool

Type	Model code	Type	Model code	Type	Model code
Without Option HC	HC15[3]R HC20[3]R HC20[3]M HC30[3]M	With Sensor HC	HC15[3]R-S HC20[3]R-S HC20[3]M-S HC30[3]M-S	With bracket HC	HC15[3]R-B HC20[3]R-B HC20[3]M-B

With Finger tool

Type	Model code	Type	Model code	Type	Model code
Without Option HC	HC15BRX HC20BRX HC20BMX	With Sensor HC	HC15BRX-WS HC20BRX-WS HC20BMX-WS	With bracket HC	HC15BRX-B HC20BRX-B HC20BMX-B

Type	Model code
With Finger sensor and bracket HC	HC15BRX-BS HC20BRX-BS HC20BMX-BS

Option Parts

Sensor Set			Bracket for gripper (Bracket alone)		
Model code	Applicable gripper type	Set Item	Model code	Applicable gripper type	Supplied
KE01EE03	HC15 ^③ R	Sensor, Sensor Fixing Screw,	KE01EE04	All HC15 models	Fixing Screw
KE02JE03	HC20 ^③ R	Limit Dog, Dog Fixing Screw,	KE02JE04	All HC20 models	Fixing Screw
KE02ME03	HC20 ^③ M	Sensor Bracket, Sensor			
KE03DE03	HC30 ^③ M	Bracket Fixing Screw			
Sensor					
Model code	Applicable gripper type	Supplied			
K*ZE155A	With Finger tool type	—			
*K9GX-F8A	No Finger tool type	Sensor, Bracket, Sleeve			



Notes

*1 Please select a gripper action code for ^③ from the Model Designation (Example) on page 780.
*2 Finger sensor cannot be post-installed.



CAD data is available

at PISCO website.



Packaging specifications



Notes

*1 Please select a gripper action code for [3] from the Model Designation (Example) on page 780.

*2 Finger sensor cannot be post-installed.



CAD data is available at PISCO website.



Packaging specifications

1 pc./bag: Angular Gripper and Sensor only as option parts
1 set/bag: Sensor set as option parts.