

# HDQT series 3-Finger Through-hole Type Air Gripper

Product features/ Code of order

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## Feature

- Wedge slider type
- Hollow type
- Large output and good stability



## Specification

Item	Bore size (mm)	Ø25	Ø32	Ø40	Ø50
Action		Double acting			
Fluid		Air			
Pressure range	kgf / cm <sup>2</sup> (kPa)	3 ~ 6 ( 300 ~ 600 )			
Ambient and fluid temperature	°C	0 ~ 60			
Max. operating frequency	time/min	120	60		
Lubrication		Lubrication free type			
Gripping force	External grip N	37	62	95	159
	Internal grip N	42	65	103	164
Opening/ closing stroke	mm	6	8	8	12
Port size		M5X0.8P			
Sensing device		With magnet			

Note: Gripping force is with pressure 5kgf / cm<sup>2</sup> and gripping point = 20 mm.

HDQ

HDQT

HDQM

HMQ

HMT

HDL

HDT

HDF

RM

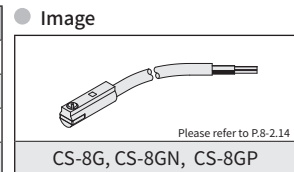
RB

## Code of order **HDQT 25 - 8G 2**

1 — 2 — 3

1	Mark	Bore size (mm)
	25	Ø25
	32	Ø32
	40	Ø40
	50	Ø50

2	Mark	Sensor switch
	None	Without sensor switch
	8G	CS-8G
	8GN	CS-8GN
	8GP	CS-8GP



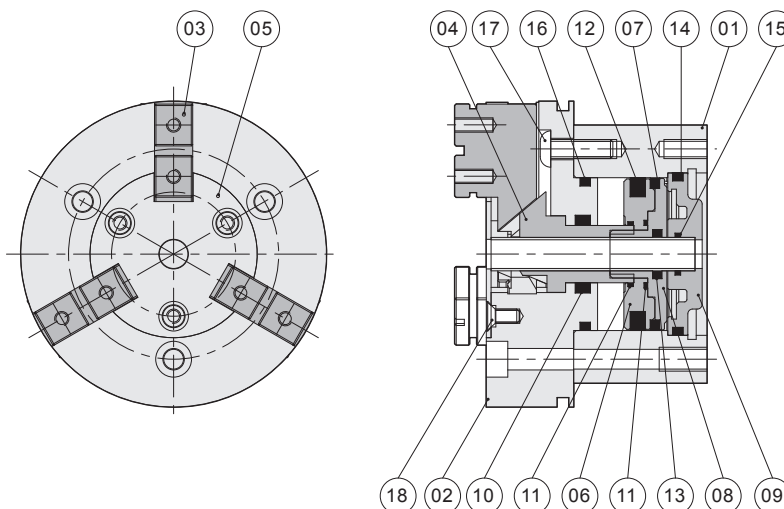
3	Mark	Sensor quantity
	1	With 1 sensor switch
	2	With 2 sensor switches

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## Internal structure



## Components and material list

No.	Item	Material	No.	Item	Material
01	Body	Aluminum alloy	10	Shaft packing	NBR
02	Top cover	Aluminum alloy	11	Shaft O-ring	NBR
03	Finger	Alloy steel	12	Piston Packing	NBR
04	Sliding rod	Alloy steel	13	Magnet base O-ring	NBR
05	Finger cap	Stainless steel	14	Rear cover O-ring	NBR
06	Piston	Aluminum alloy	15	Hollow tube o-ring	NBR
07	Magnetic	Rare earth material/plastic	16	Top cover O-ring	NBR
08	Magnetic cap	Aluminum alloy	17	Screw	Alloy steel
09	Rear cover	Aluminum alloy	18	Hexagon screw	Alloy steel

## Packing and O-ring material list

Unit: mm

Model	Item	Piston packing	Shaft packing	Rear cover O-ring	Shaft O-ring	Top cover O-ring
HDQT Ø25		PZ-2518	MY-10A	Ø22xØ1.5	Ø4xØ1	Ø22xØ1.5
HDQT Ø32		APA-32	MYA-12	Ø28.5xØ2	Ø6xØ1.5	Ø28xØ2
HDQT Ø40		APA-40	MYA-14	Ø38.5xØ2	Ø6xØ1.5	Ø36xØ2
HDQT Ø50		APA-50	MYA-16	Ø48xØ2	Ø6xØ1.5	Ø46xØ2

## Product weight

Model	HDQT Ø25	HDQT Ø32	HDQT Ø40	HDQT Ø50
Weight (kg)	0.14	0.29	0.37	0.55

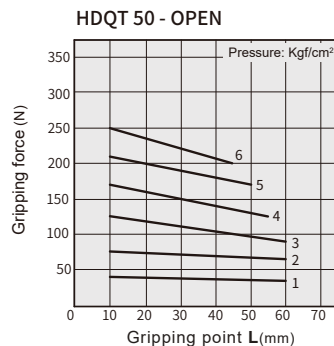
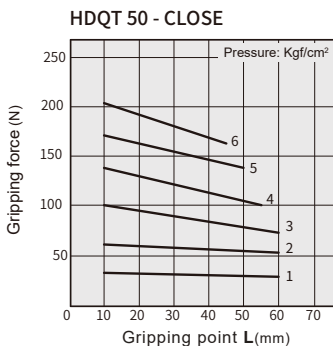
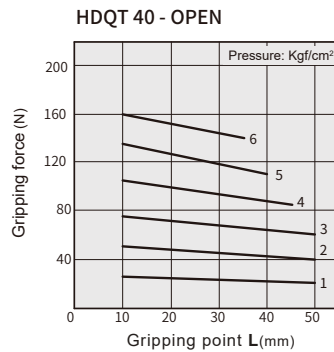
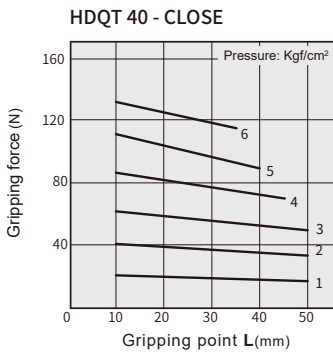
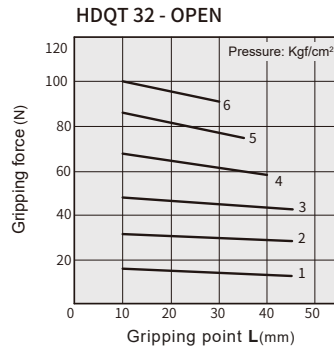
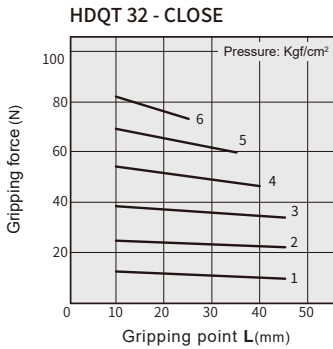
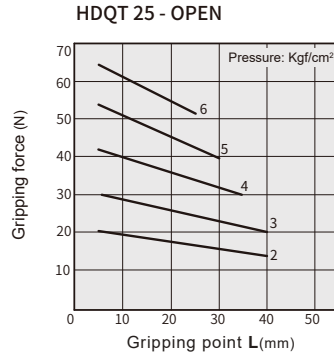
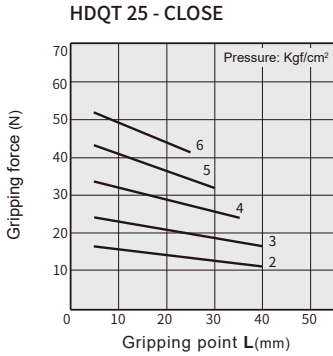
Note: All of above are theoretical data. Weight tolerance about ±5%

# HDQT series 3-Finger Through-hole Type Air Gripper

## Characteristics graph

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### Characteristics graph



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# HDQT series 3-Finger Through-hole Type Air Gripper

Operating type and data, Mounting type

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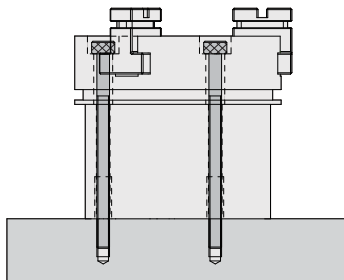
## Operating type and data

Action	Model	Bore size (mm)	The smallest operating pressure (kgf/cm <sup>2</sup> )	Thread port (mm)	Effective gripping force (N)	
Double acting	HDQT 25	25	2.2	6-M3x0.5P	Open	42
					Close	37
	HDQT 32	32	1.5	6-M4x0.7P	Open	65
					Close	62
	HDQT 40	40	1.5	6-M4x0.7P	Open	103
					Close	95
	HDQT 50	50	1.5	6-M5x0.8P	Open	164
					Close	159

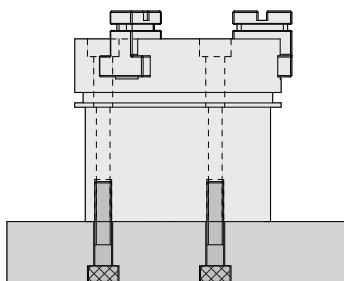
Note: The gripping force is the force of open and close gripper which in the length of gripping point is 20mm and acting pressure is 5 kgf/cm<sup>2</sup>.

## Mounting type

1. Apply the screw to through-holes of body



2. Apply the screw from bottom thread hole

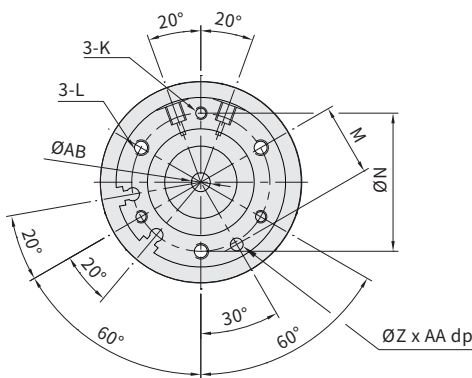
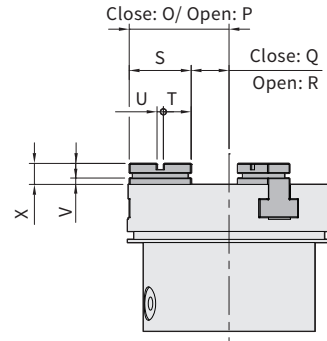
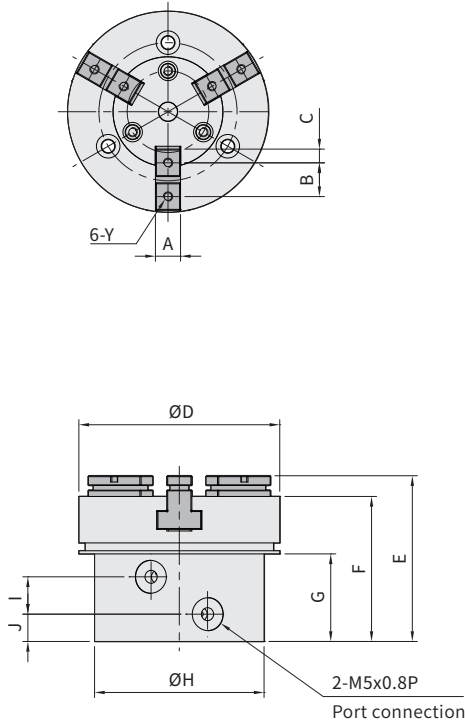


# HDQT series 3-Finger Through-hole Type Air Gripper

Dimensions

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## HDQT 25 ~ 50



Unit: mm

Model	Mark	A	B	C	D	E	F	G	H
HDQT 25		6.2	8	3	49	50	43.4	27.2	44
HDQT 32		8	11	4.5	64	52.8	46.2	27.9	54
HDQT 40		8	12	4.5	72	57.8	51.3	30.3	62
HDQT 50		10	14	5	83	65	57.5	34	74

Unit: mm

Model	Mark	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	X	Y	Z	AA	AB
HDQT 25		10.9	9	M3x0.5Px10dp	M4x0.7Px12dp	18	35.5	23.5	26.5	9.5	12.5	14	6	2	2.2	6.6	M3x0.5Px8dp	3	3	4
HDQT 32		11.9	8.7	M4x0.7Px10dp	M5x0.8Px10dp	22	44	31.5	35.5	11.5	15.5	19.6	8.7	2	2	6.6	M4x0.7Px8dp	4	4	6
HDQT 40		13.5	9.5	M4x0.7Px10dp	M5x0.8Px10dp	26.25	52.5	35.5	40	14.5	19	21	9	3	2	6.5	M4x0.7Px9dp	4	4	10
HDQT 50		18	10	M5x0.8Px10dp	M6x1.0Px12dp	32	63	41.7	48	17.7	24	24	10	4	2.2	7.5	M5x0.8Px11dp	5	5	12

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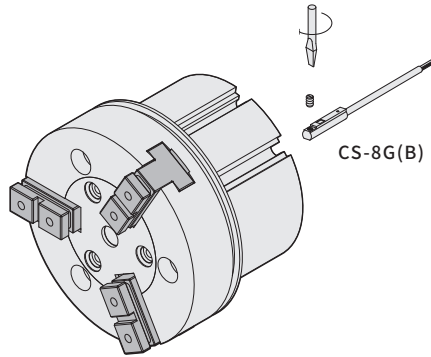
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# HDQT series 3-Finger Through-hole Type Air Gripper

Mounting type and operation of sensor switch

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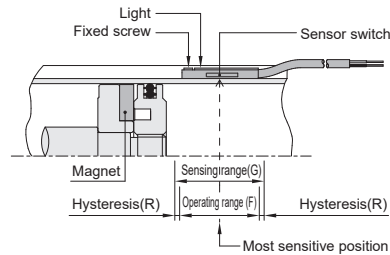
## ■ Sensor switch mounting type



## ■ Sensing range

Sensor switch is fixed on the cylinder body. The magnetic piston head will activate the sensor switch when it enters the operating range. It has 0.5mm differential.

## ■ Sensor switch setting and operating range



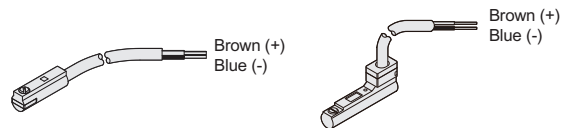
## ■ Operating range

When piston head moves the switch setting and adjustment will be based on the responding range generated by the magnetic field and the switch. (Please refer to the below table)

## ■ Sensor switch introduction

● CS-8G

● CS-8B



Voltage: DC 5~30V

Unit: mm

Model	CS-8G(B)	
Bore size	Operating range (F)	Hysteresis(R)
25	7 (3)	1
32	10 (7)	1
40	12 (9)	1
50	14 (12)	1

