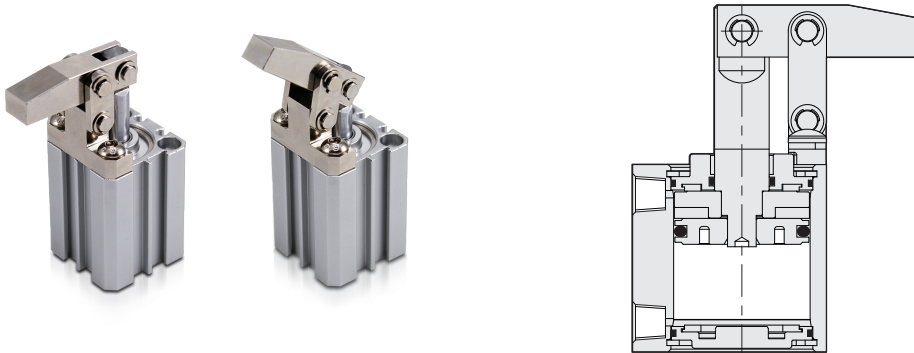


HCK series Lever Clamp Cylinder

Product features/ Code of order

CHELIC

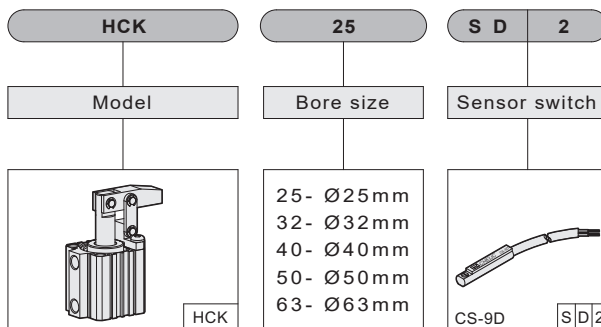
Internal structure



Specification

Item	Bore size (mm)	Ø25	Ø32	Ø40	Ø50	Ø63
Stroke		20	20	25	30	35
Action		Double acting				
Fluid		Air				
Pressure range	kgf/cm ² (kPa)	1~7 (100~700)				
Max. operating pressure	kgf/cm ² (kPa)	9 (900)				
Ambient and fluid temperature	°C	-10 ~ 60				
Lubrication		Lubrication free type				
Port size		M5x0.8	RC 1/8		RC 1/4	
Sensing device		Option (-S: indicates with magnet embedded)				

Code of order



HCK: Lever Clamp Cylinder

None : Without sensor switch

[S] : With magnet

[D] : Sensor switch code (CS-9D)

[B] : Sensor switch code (CS-9D)

[2] : Number of sensor switch

1 = 1 PCS

2 = 2 PCS

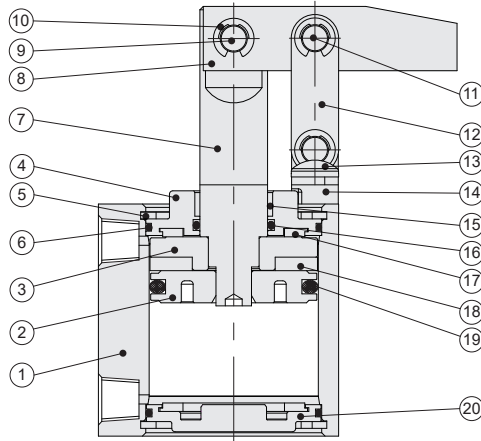
[Note] : "-S" indicates with magnet embedded

HCK series Lever Clamp Cylinder

Product features

CHELIC

Internal structure



No.	Item	Material	No.	Item	Material
01	Body	Aluminum alloy	11	Lever pin	Carbon steel
02	Piston	Aluminum alloy	12	Connector	Carbon steel
03	Magnet cap	Aluminum alloy	13	Button type screw	Alloy steel
04	Front cover	Aluminum alloy	14	Lever holder	Carbon steel
05	C Clip	Spring steel	15	Oiless bearing	Teflon
06	O-ring	NBR	16	Shaft packing	NBR
07	Shaft	Carbon steel	17	Cushion gasket	NBR
08	Clamp plate	Carbon steel	18	Magnet	Plastic + Magnetic particle
09	Shaft pin	Carbon steel	19	Piston packing	NBR
10	E Clip	Spring steel	20	Rear cover	Aluminum alloy

Theoretical output



Bore size (mm)	Shaft size (mm)	Theoretical clamping force	Operating	Piston area (cm ²)	Air pressure (kgf/cm ²)						
					1	2	3	4	5	6	7
25	10	20	Push	4.91	—	9	14	19	24	29	34
			Pull	4.12	—	8	12	16	20	24	28
32	12	31	Push	8.04	—	16	24	32	40	48	56
			Pull	6.91	—	13	20	27	34	41	48
40	16	56	Push	12.57	12	25	37	50	62	75	87
			Pull	10.56	10	21	31	42	52	63	73
50	20	91	Push	19.63	19	39	58	78	98	117	137
			Pull	16.49	16	32	49	65	82	98	115
63	20	169	Push	31.16	31	62	93	124	155	187	218
			Pull	28	28	56	84	112	140	168	196

Note: Above are theoretical data for reference. While applying the product, please do consider the frictional resistance and the mechanical efficiency of value should be added calculation before using.

SCR(L)

HER

HGR(L)

HSR(L)

HBR(L)

HFR(L)

HFK

HCK

HLK

HUR(L)

HUK

HN

HS

HCF

HCS

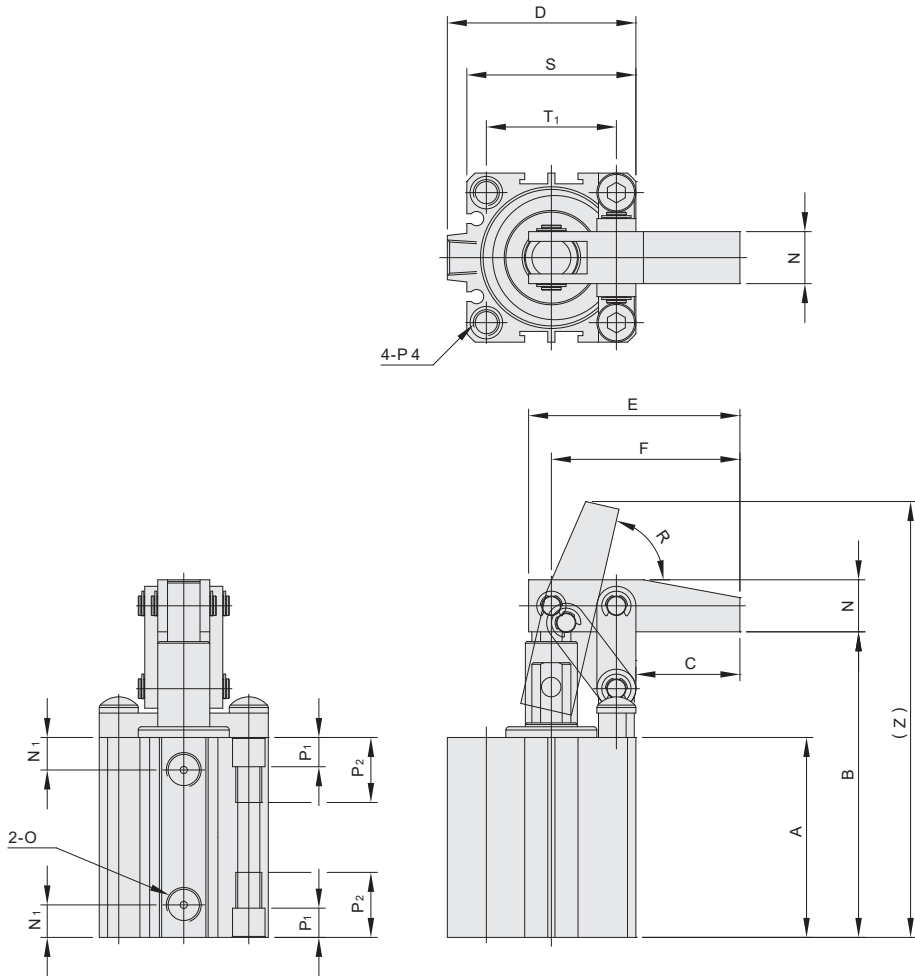
Hcq

HCK series Lever Clamp Cylinder

Dimensions

CHELIC

● HCK 25 ~ HCK 63



NO. Bore size (mm)	A	B	C	D	E	F	N	N1	O	R
25	51.2	78.2	25	—	50	45	12.5	8	M5x0.8P	82°
32	54	82.5	33	50	60	55	16	9	PT 1/8	73°
40	61.5	94	32	58	65	58	16	10	PT 1/8	77°
50	68.6	108	35	71	75	66	19	10.85	PT 1/4	80°
63	76.5	121.5	38.5	84.5	85	76	22	11	PT 1/4	72°

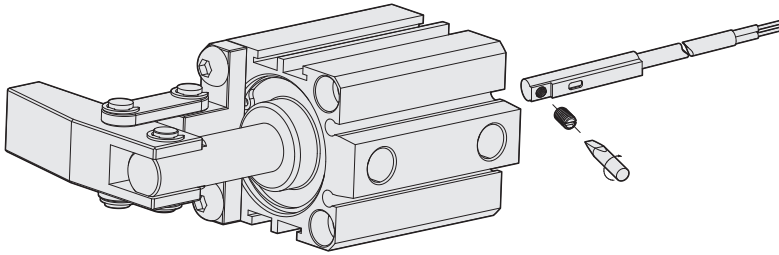
NO. Bore size (mm)	P4 (Mounting hole)	P1	P2	S	T1	Z
25	Thru-hole Ø5.1, Thread M6x1.0Px8dp, Counterbore Ø8.7x6 dp, (Both sides)	6	14	40	28	110
32	Thru-hole Ø5.1, Thread M6x1.0Px8dp, Counterbore Ø8.7x6 dp, (Both sides)	6	14	44	34	123.8
40	Thru-hole Ø6.8, Thread M8x1.25Px10dp, Counterbore Ø10x8 dp, (Both sides)	8	18	52	40	134
50	Thru-hole Ø6.8, Thread M8x1.25Px10dp, Counterbore Ø11x8.5dp, (Both sides)	8.5	18.5	62	48	153
63	Thru-hole Ø6.8, Thread M8x1.25Px10dp, Counterbore Ø11x8.5dp, (Both sides)	8.5	18.5	75	60	171

HCK series Lever Clamp Cylinder

Sensor switch operating range and the setting

CHELIC

☛ Sensor switch mounting type



☛ Sensing range

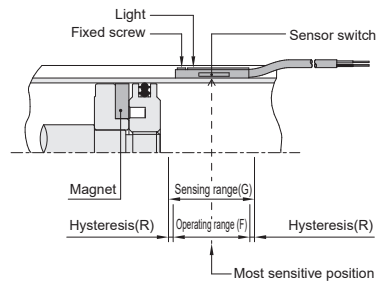
Sensor switch is fixed on the cylinder body. The magnetic piston head will activate the Sensor switch when it enters the operating range. It has 0.5mm differential.

☛ Operating range

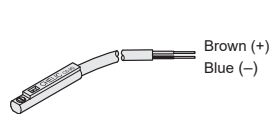
When piston head moves the switch setting and adjustment will be based on the responding range generated by the magnetic field and the switch. (Please refer to the below table)

☛ Sensor switch setting and operating range

● CS - 9D(B)

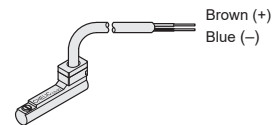


☛ Sensor switch introduction



CS - 9D

Voltage: DC 5 ~ 120 V
AC 5 ~ 120 V



CS - 9B

Voltage: DC 5 ~ 120 V
AC 5 ~ 120 V

Unit : mm

Model	CS-9D(B)	
Bore size	Operating range (F)	Hysteresis(R)
Ø 25	9	1
Ø 32	7	1
Ø 40	8	1
Ø 50	9	1.2
Ø 63	10.5	1.2

SCR(L)

HER

HGR(L)

HSR(L)

HBR(L)

HFR(L)

HFK

HCK

HLK

HUR(L)

HUK

HN

HS

HCF

HCS

Hcq