

HFK series 3-Position Lever Clamp Cylinder

Product features/ Code of order

CHELIC

Internal structure



Specification

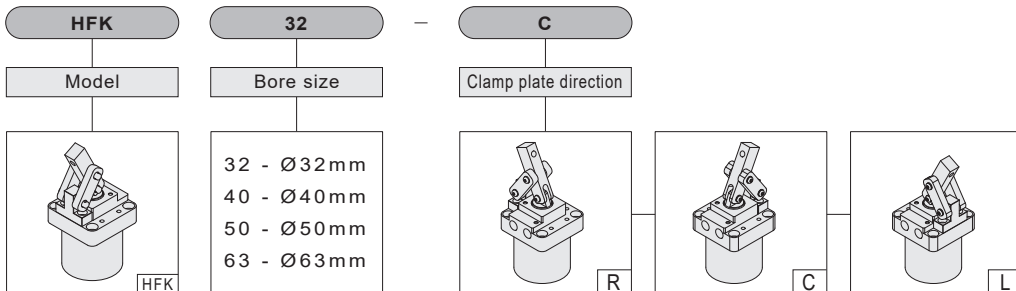
Item	Bore size (mm)	Ø32	Ø40	Ø50	Ø63
Piston diameter		Ø16	Ø16	Ø16	Ø20
Total stroke		23	24.5	28.5	34
Clamp stroke		3			
Action		Double acting			
Fluid		Air			
Max. operating pressure	kgf/cm ² (kPa)	10.3 (1030)			
Pressure range	kgf/cm ² (kPa)	2 ~ 7 (200 ~ 700)			
Theoretical clamp force	N(6 kgf/cm ²)	470	570	855	1578

Product weight

Unit: kg

Bore size	Ø32	Ø40	Ø50	Ø63
weight	0.4	0.55	1.0	1.4

Code of order



HFK: 3-Position Lever Clamp Cylinder

SCR(L)

HER

HGR(L)

HSR(L)

HBR(L)

HFR(L)

HFK

HCK

HLK

HUR(L)

HUK

HN

HS

HCF

HCS

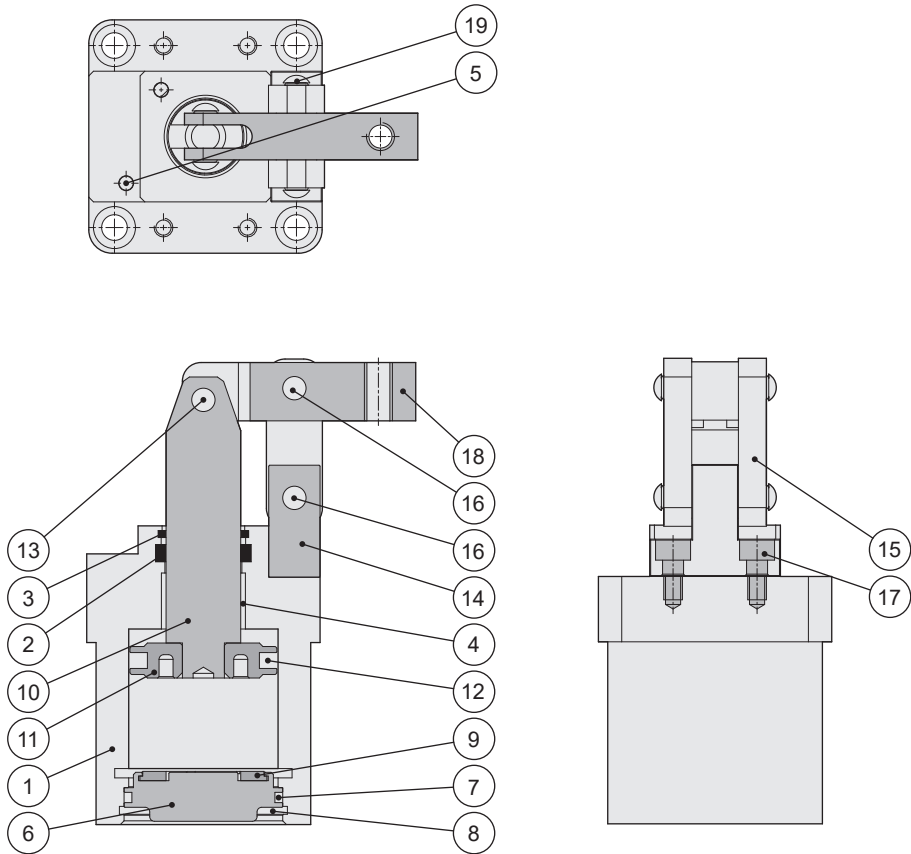
HQC

HFK series 3-Position Lever Clamp Cylinder

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No.	Item	Material
01	Body	Aluminum alloy
02	Shaft packing	NBR
03	Scrap ring	Phosphor copper
04	Oiless bearing	Teflon
05	Stainless steel bead	Phosphor copper
06	Rear cover	Aluminum alloy
07	O-ring	NBR
08	C Clip	Spring steel
09	Cushion gasket	Rubber
10	Shaft	Carbon steel

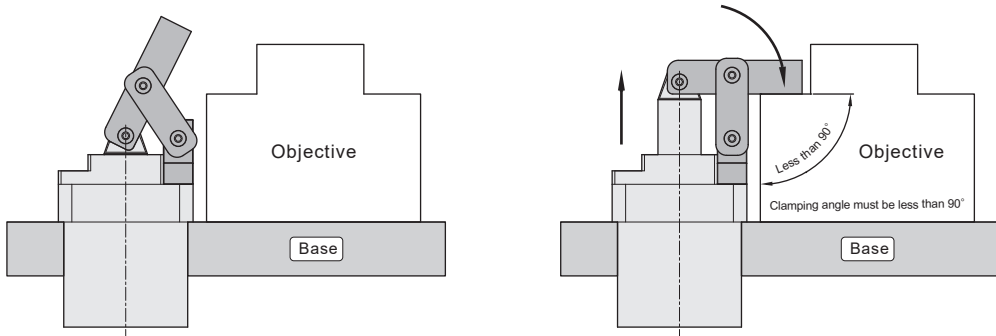
No.	Item	Material
11	Piston	Aluminum alloy
12	Piston packing	NBR
13	Rod pin	Carbon steel
14	Leverage base	Carbon steel
15	Connector	Carbon steel
16	Leverage base pin	Carbon steel
17	Leverage base screw	Alloy steel
18	Clamp plate	Carbon steel
19	Pin screw	Alloy steel

HFK series 3-Position Lever Clamp Cylinder

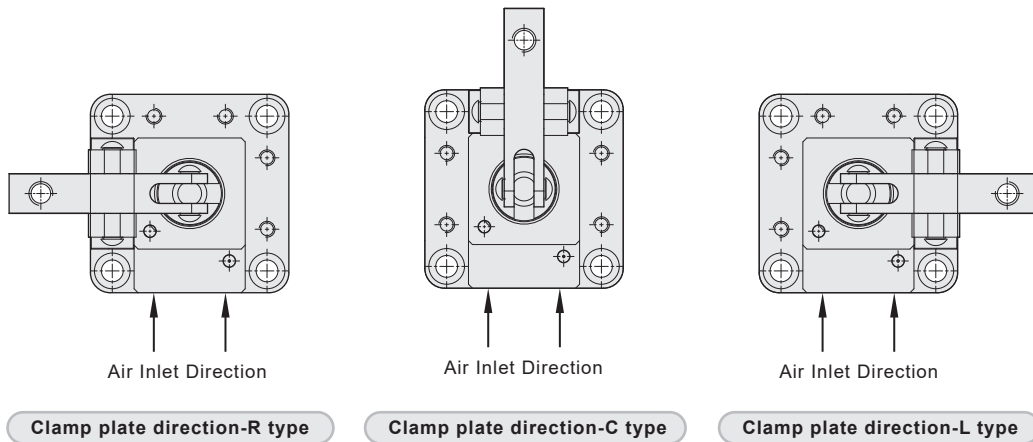
Design • Installation

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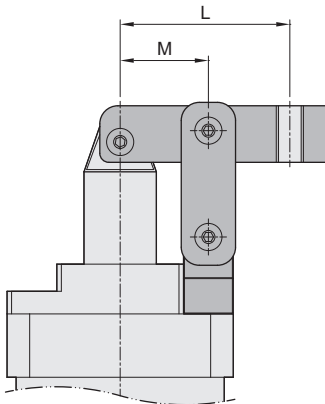
Clamping action



Direction of clamp plate can be changed according to working requirement



Gripping force



Gripping force calculation:
$$\frac{A \times P}{L - M}$$

Model	HFK 32	HFK 40	HFK 50	HFK 63
A	14.1	23.75	44.16	84.16
M	19.5	21.0	25.0	30.0

P = Pressure (MPa)

L = Distance from center of main rod to clamping point

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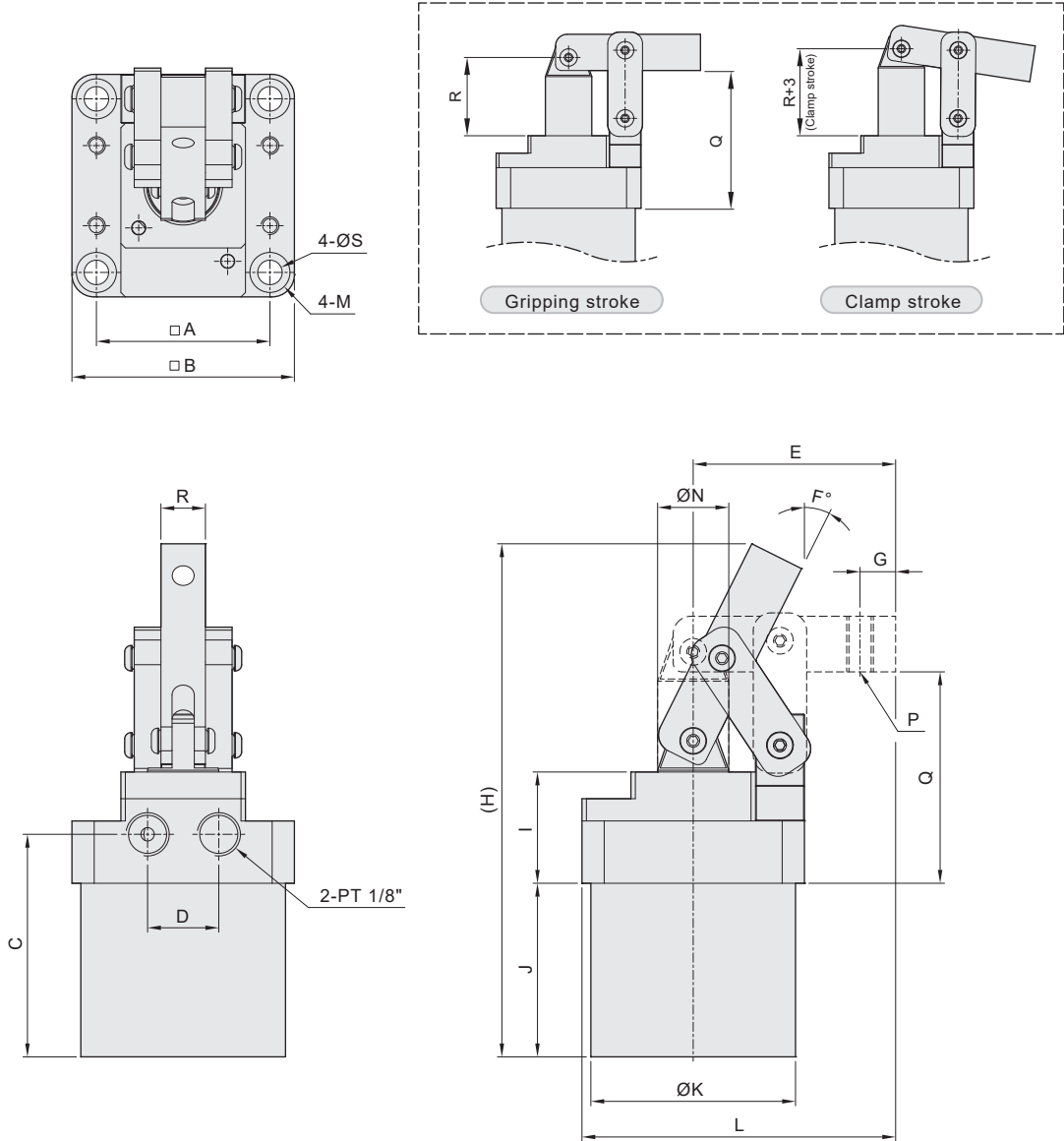
HCQ

HFK series 3-Position Lever Clamp Cylinder

Dimensions

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☉ HFK 32 ~ HFK 63



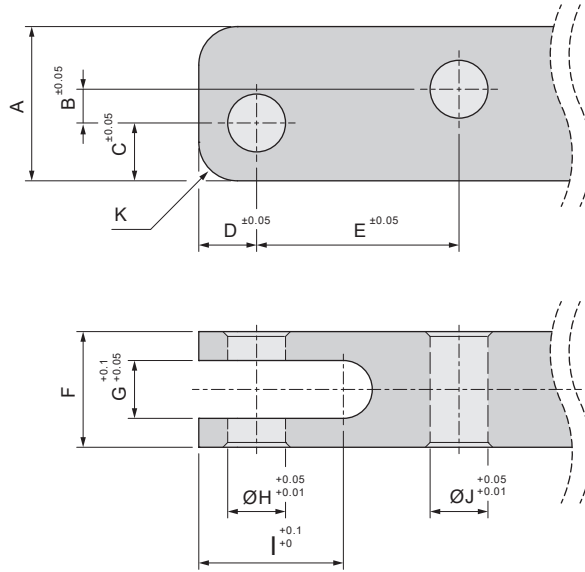
Model	A	B	C	D	E	F°	G	H	I	J	ØK	L	M	ØN	P	Q	R	ØS
HFK 32	39	50	50	16	45.5	26.6	8	115.3	25	39	46	70.5	Ø9x5.5dp	16	M6x1.0P	47.5	27	5.5
HFK 40	45	56	52	20	54	26.4	8	127.4	25	41	54	82	Ø9x5.5dp	16	M8x1.25P	49	30	5.5
HFK 50	53	66	56	24	64	26.1	8	148.3	30	47	64	97	Ø11x6.5dp	16	M8x1.25P	58	34	6.5
HFK 63	65	78	67	24	72	25.2	10	170	30	56	77	111	Ø11x6.5dp	20	M10x1.5P	64.5	42.5	6.8

HFK series 3-Position Lever Clamp Cylinder

Accessory and clamping plate dimension

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Clamping plate dimension



Model	A	B	C	D	E	F	G	ØH	I	ØJ	K
HFK 32	12.5	2.5	4.5	4.5	19.5	10.0	5.0	5.0	12.0	5.0	2.0
HFK 40	16.0	3.5	6.0	6.0	21.0	12.0	6.0	6.0	15.0	6.0	4.0
HFK 50	20.0	6.0	6.0	6.0	25.0	16.0	8.0	6.0	15.0	8.0	4.0
HFK 63	25.0	7.5	8.0	8.0	30.0	19.0	10.0	8.0	20.0	10.0	4.0

※ If the length of clamping plate is too long, the object will have collision with clamping plate when pick and place

Please be aware that if the length of clamping plate is too long, the object will be hard to pick and place.

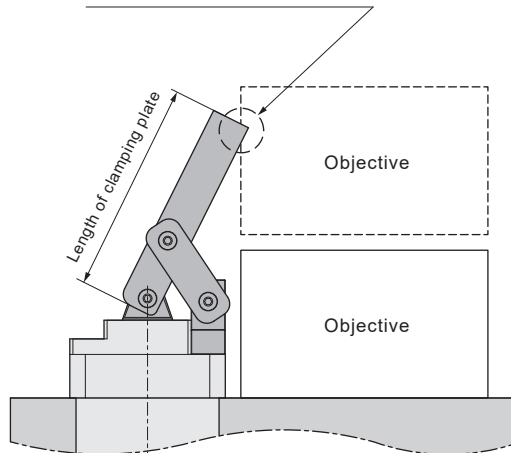


Diagram of length of clamping plate and pick & place object

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