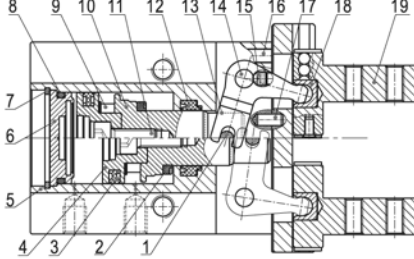




HFZ Series Air gripper(Parallel style)

Inner structure and material of major parts



NO.	Item	Material
1	Pin	Stainless steel
2	Bumper	TPU
3	Piston seal	NBR
4	Piston	Aluminum alloy/Stainless steel
5	Body	Aluminum alloy
6	Back cover	Aluminum alloy
7	C clip	Spring steel
8	O-ring	NBR
9	Magnet	Sintered metal(Neodymium-iron-boron)
10	Piston rod	Aluminum alloy/Stainless steel
11	Screw	Carbon steel
12	Rod packing	NBR
13	Curved bar	Stainless steel
14	Pin	Stainless steel
15	Countersink screw	Carbon steel
16	Hexagon screw	Carbon steel
17	Pin	Stainless steel
18	Guide sleeve	Stainless steel
19	Assembly of clamping jaw and guide rail	Stainless steel

Gripping force and stroke

Acting	Model	Gripping force per finger Effective valve(N)		Opening/Closing stroke (Both sides)(mm)	Weight (g)	
		External	Internal		F Type	Others
Double acting	HFZ6	3.3	6.1	4	24	25
	HFZ10	11	17	4	56	56
	HFZ16	34	45	6	124	124
	HFZ20	45	68	10	236	236
	HFZ25	69	102	14	418	428
	HFZ32	160	195	22	750	729
Single acting	HFZ40	255	320	30	1340	1268
	HFTZ6	1.9	-	4	25	26
	HFTZ10	7	-	4	57	57
	HFTZ16	27	-	6	125	125
	HFTZ20	35	-	10	238	238
	HFTZ25	55	-	14	420	430
	HFTZ32	133	-	22	799	778
	HFTZ40	220	-	30	1437	1365
	HFSZ6	-	3.7	4	25	26
	HFSZ11	-	13	4	57	57
	HFSZ16	-	38	6	125	125
	HFSZ20	-	59	10	238	238
Normally closed	HFSZ25	-	87	14	420	430
	HFSZ32	-	163	22	799	778
	HFSZ40	-	270	30	1437	1365

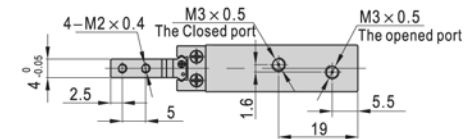
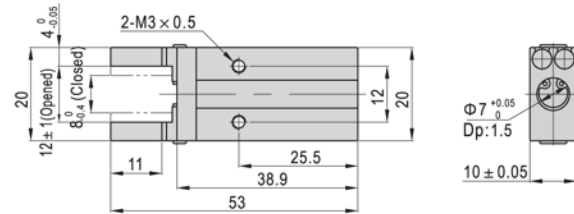
Note) The gripping force in the above table is in the working pressure of 0.5MPa, and with a gripping point of L=20mm.

Add) Please refer to page 381 for the definition of "L".

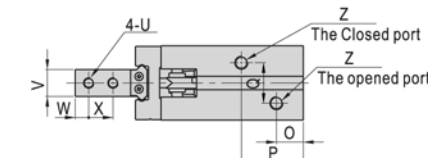
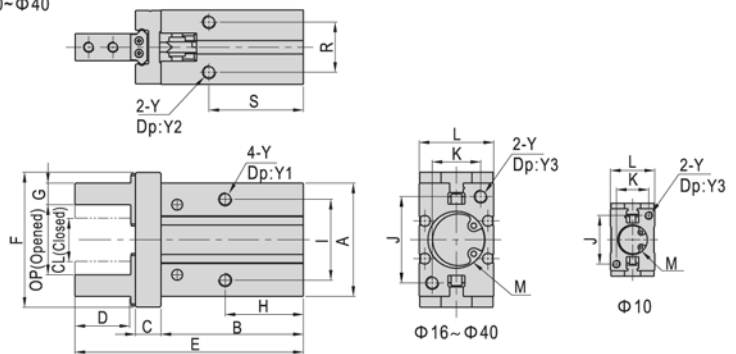
Dimensions

Standard type

Φ6



Φ10~Φ40



Model\Item	A	B	C	D	E	F	G	H	I	J
HFZ10	23	37.6	6	12	57	29	4 ⁰ _{-0.05}	23	16	18
HFZ16	30.6	42.5	7.5	15	67.3	38	5 ⁰ _{-0.05}	24.5	24	22
HFZ20	42	52.8	9.5	20	84.7	50	8 ⁰ _{-0.05}	29	30	32
HFZ25	52	63.6	11	25	102.7	63	10 ⁰ _{-0.05}	30	36	40
HFZ32	60	67(76)	12	29	113(122)	97	12 ⁰ _{-0.05}	40(49)	46	46
HFZ40	72	83(96)	15	36	139(152)	119	14 ⁰ _{-0.05}	49(62)	56	56

Model\Item	K	L	M		O	P	Q	R	S	U	W
HFZ10	12	16.4	Φ11 ^{+0.05} ₀	Dp:2	7.5	19	10	11.4	27	M2.5×0.45	3
HFZ16	15	23.6	Φ17 ^{+0.05} ₀	Dp:2	7.5	19	13	16	30	M3×0.5	4
HFZ20	18	27.6	Φ21 ^{+0.05} ₀	Dp:3	9.7	23	15	18.6	35	M4×0.7	5
HFZ25	22	33.6	Φ26 ^{+0.05} ₀	Dp:3.5	10	23.8	20	22	36.5	M5×0.8	6
HFZ32	26	40	Φ34 ^{+0.05} ₀	Dp:4	11	31(40)	24	26	48(57)	M6×1.0	7
HFZ40	32	48	Φ42 ^{+0.05} ₀	Dp:4	12	38(50)	28	32	58(71)	M8×1.25	9

Model\Item	V	X	Y	Y1	Y2	Y3	Z	OP	CL
HFZ10	5 ⁰ _{-0.05}	5.7	M3×0.5	5.5	6	6	M3×0.5	15.2 ⁺² ₀	11.2 ⁰ _{-0.7}
HFZ16	8 ⁰ _{-0.05}	7	M4×0.7	8	4.5	8	M5×0.8	20.9 ⁺² ₀	14.9 ⁰ _{-0.7}
HFZ20	10 ⁰ _{-0.05}	9	M5×0.8	10	8	10	M5×0.8	26.3 ⁺² ₀	16.3 ⁰ _{-0.7}
HFZ25	12 ⁰ _{-0.05}	12	M6×1.0	12	10	12	M5×0.8	33.3 ^{+2.5} ₀	19.3 ⁰ _{-0.8}
HFZ32	15 ⁰ _{-0.05}	14	M6×1.0	13	10	13	M5×0.8	48 ^{+2.5} ₀	26 ⁰ _{-0.5}
HFZ40	18 ⁰ _{-0.05}	17	M8×1.25	16	13	17	M5×0.8	60 ^{+2.5} ₀	30 ⁰ _{-0.5}

Note) The values in "(I)" in the above table are single acting type sizes.