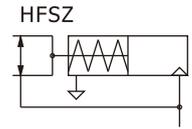
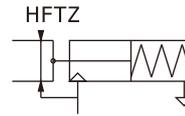




# Air gripper—HFZ Series

## Parallel style with guide track—Ball bearing



### Ordering code

**HFZ 20**

①      ②      ③

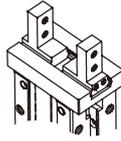
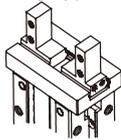
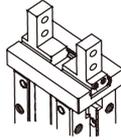
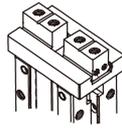
#### ① Model

HFZ: Air finger(Double acting)  
 HFSZ: Air finger  
 (Single acting and normally closed)  
 HFTZ: Air finger  
 (Single acting and normally opened)

#### ② Bore size

6 10 16 20 25 32 40  
 HFZ series are all attached with magnet.

#### ③ Finger type

Bore size	Finger type	
6 10 16 20 25 32 40	Blank: Standard 	
6	B: Side mounting type 	N: Thru.hole mounting type 
	F: Bottom mounting type 	

### Specification

Bore size (mm)		6	10	16	20	25	32	40
Acting type		Double acting		Single acting				
Fluid		Air(to be filtered by 40μm filter element)						
Operating pressure	Double acting	Φ6, Φ10	28~100psi(0.2~0.7MPa)					
	Others		22~100psi(0.15~0.7MPa)					
Single acting	Φ6, Φ10	50~100psi(0.35~0.7MPa)						
	Others	36~100psi(0.25~0.7MPa)						
Temperature		-20~70℃						
Lubrication		Not required						
Repeatability mm		±0.01					±0.02	
Max. frequency		180(c.p.m)					60(c.p.m)	
Sensor switches		DMSH(S), CMSH		CMSG, DMSG(S),DMSH(S),CMSH				
Port size		M3×0.5			M5×0.8			



# Air gripper(parallel style——Ball bearing)



## HFZ Series

Bore size:  $\Phi 6$ ,  $\Phi 10$ ,  $\Phi 16$ ,  $\Phi 20$ ,  $\Phi 25$ ,  $\Phi 32$ ,  $\Phi 40$

### Gripping force and stroke

Acting type		Double acting(HFZ)							Single acting_NO (HFTZ)							Single acting_NC (HFSZ)						
Bore size		6	10	16	20	25	32	40	6	10	16	20	25	32	40	6	10	16	20	25	32	40
Gripping force per finger Effective value(N)	External	3.3	11	34	45	69	160	255	1.9	7	27	35	55	133	220	-	-	-	-	-	-	-
	Internal	6.1	17	45	68	102	195	320	-	-	-	-	-	-	-	3.7	13	38	59	87	163	270
Opening/Closing stroke(Both sides)(mm)		3	4	6	10	14	22	30	3	4	6	10	14	22	30	3	4	6	10	14	22	30
Weight (g)	F Type	24	-	-	-	-	-	-	25	-	-	-	-	-	-	25	-	-	-	-	-	-
	Others	25	56	124	236	428	729	1268	26	57	125	238	430	778	1365	26	57	125	238	430	778	1365

[Note] The gripping force in the above table is in the working pressure of 75psi, and with a gripping point of L=20mm.

Add) Please refer to page 386 for the definition of "L".



# Air gripper(parallel style—Ball bearing)

**AIRTAC**

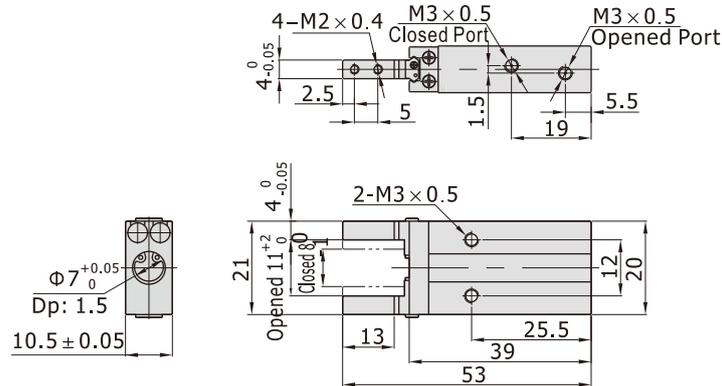
## HFZ Series

Bore size:  $\Phi 6$ ,  $\Phi 10$ ,  $\Phi 16$ ,  $\Phi 20$ ,  $\Phi 25$ ,  $\Phi 32$ ,  $\Phi 40$

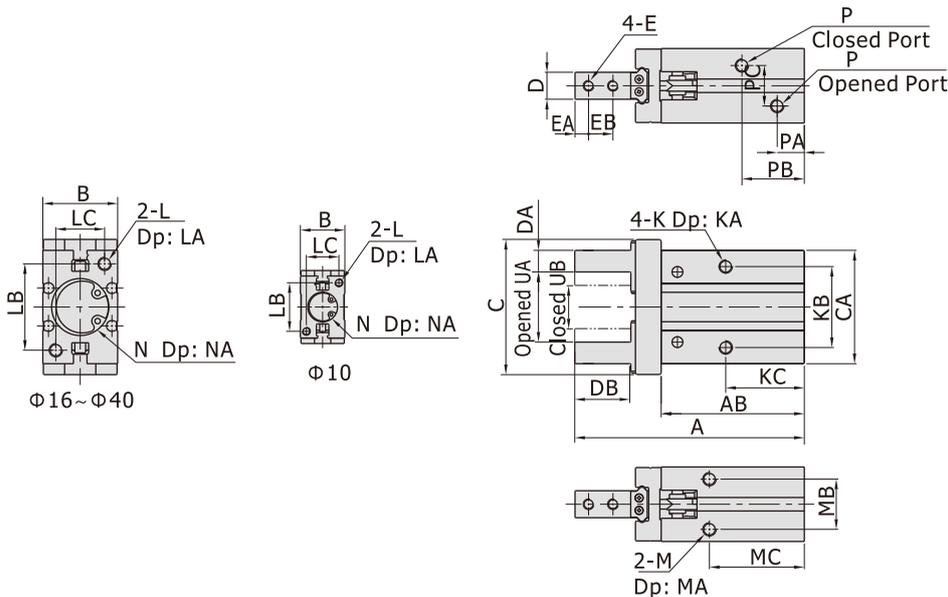
### Dimensions

#### Standard

$\Phi 6$



$\Phi 10 \sim \Phi 40$



[Unit: mm]

Model\Item	A	AB	B	C	CA	D	DA	DB	E	EA	EB	K	KA	KB	KC	L
HFZ10	57	37.5	16.5	30	23	5 <sup>-0.05/0</sup>	4 <sup>-0.05/0</sup>	12	M2.5×0.45	3	5.7	M3×0.5	5	16	23	M3×0.5
HFZ16	67.5	42.5	23.5	39	30.5	8 <sup>-0.05/0</sup>	5 <sup>-0.05/0</sup>	15	M3×0.5	4	7	M4×0.7	7	24	24.5	M4×0.7
HFZ20	85	53	27.5	53	42	10 <sup>-0.05/0</sup>	8 <sup>-0.05/0</sup>	20	M4×0.7	5	9	M5×0.8	8	30	29	M5×0.8
HFZ25	103	64	33.5	71	52	12 <sup>-0.05/0</sup>	10 <sup>-0.05/0</sup>	25	M5×0.8	6	12	M6×1.0	10	36	30	M6×1.0
HFZ32	113(122)	67(76)	40	106	60	15 <sup>-0.05/0</sup>	12 <sup>-0.05/0</sup>	29	M6×1.0	7	14	M6×1.0	10	46	40(49)	M6×1.0
HFZ40	139(152)	83(96)	48	132	72	18 <sup>-0.05/0</sup>	14 <sup>-0.05/0</sup>	36	M8×1.25	9	17	M8×1.25	12	56	49(62)	M8×1.25

Model\Item	LA	LB	LC	M	MA	MB	MC	N	NA	P	PA	PB	PC	UA(Opened)	UB(Closed)
HFZ10	6	18	12	M3×0.5	6	11.5	27	$\Phi 11^{+0.05/0}$	1.5	M3×0.5	7	19	10	15.5 <sup>+2/0</sup>	11.5 <sup>0/-1</sup>
HFZ16	8	22	15	M4×0.7	4.5	16	30	$\Phi 17^{+0.05/0}$	1.5	M5×0.8	7.5	19	13	21 <sup>+2/0</sup>	15 <sup>0/-1</sup>
HFZ20	10	32	18	M5×0.8	8	18.5	35	$\Phi 21^{+0.05/0}$	2	M5×0.8	9.5	23	15	26.5 <sup>+2/0</sup>	16.5 <sup>0/-1</sup>
HFZ25	12	40	22	M6×1.0	10	22	36.5	$\Phi 26^{+0.05/0}$	2	M5×0.8	9	24	20	33.5 <sup>+2/0</sup>	19.5 <sup>0/-1</sup>
HFZ32	12	46	26	M6×1.0	10	26	48(57)	$\Phi 34^{+0.05/0}$	2.5	M5×0.8	9.5	31(40)	24	48 <sup>+2.5/0</sup>	26 <sup>0/-1</sup>
HFZ40	16	56	32	M8×1.25	12	32	58(71)	$\Phi 42^{+0.05/0}$	2.5	M5×0.8	10.5	38(50)	28	60 <sup>+2.5/0</sup>	30 <sup>0/-1</sup>

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



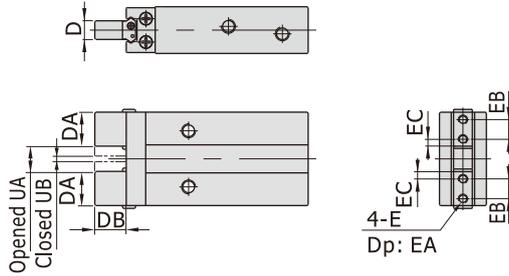
# Air gripper(parallel style—Ball bearing)

## HFZ Series

Bore size:  $\Phi 6$ ,  $\Phi 10$ ,  $\Phi 16$ ,  $\Phi 20$ ,  $\Phi 25$ ,  $\Phi 32$ ,  $\Phi 40$

### Bottom mounting type(F type)

$\Phi 6$



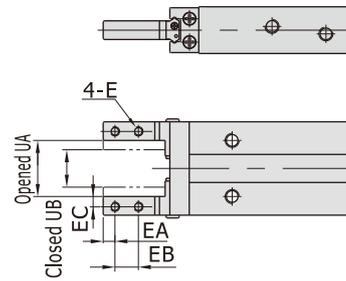
[Unit: mm]

Model\Item	D	DA	DB	EA	EB	E
HFZ6-F	4 <sup>0</sup> <sub>-0.05</sub>	7.5	7	3	3.5	M2×0.4

Model\Item	UA(Opened)	UB(Closed)
HFZ6-F	4 <sup>+1.5</sup> <sub>0</sub>	1.8 <sup>0</sup> <sub>-0.5</sub>

### Side mounting type(B type)

$\Phi 6$



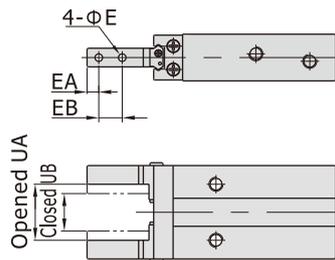
[Unit: mm]

Model\Item	E	EA	EB	EC
HFZ6-B	M2×0.4	2.5	5	2

Model\Item	UA(Opened)	UB(Closed)
HFZ6-B	11 <sup>+2</sup> <sub>0</sub>	8 <sup>0</sup> <sub>-1</sub>

### Thru.hole mounting type(N type)

$\Phi 6$



[Unit: mm]

Model\Item	E	EA	EB
HFZ6-N	2.3	2.5	5

Model\Item	UA(Opened)	UB(Closed)
HFZ6-N	11 <sup>+2</sup> <sub>0</sub>	8 <sup>0</sup> <sub>-1</sub>

[Note] The other dimensions are the same as standard type.

## How to select product \ Installation and application

Please refer to HFK series for details.