

XHZ Series Style Air Gripper



MHZ2-25D

Ordering Code

XHZ **2** — **16** **D** — **1**

Model
XHZ: Parallel fingers
XHZL: Long stroke finger

Finger Quantity
2PCS

Bore Size
6mm~40mm

Action Type
D: Double Action
S: Single Action (Normally open)
C: Single-Action (Normally closed)

Claw Form
Blank: Standard Basic Type
1: Side screw installation
2: Opening and closing direction through-hole installation
N: Narrow basic type
N1: Side screw hole installation
N2: Opening and closing direction through hole installation

Graphic Symbol



Double-acting internal grip



Double-acting External grip



Single acting normally closed Internal grip



Single acting normally closed External grip

Specification

Bore(mm)	6	10	16	20	25	32	40
Working Medium	Air (to be filtered by 40 μm filter element)						
Operating pressure	Double-action	0.15~0.7	0.2~0.7	0.1~0.7		0.1~0.7	
	Single-action	0.3~0.7	0.35~0.7	0.25~0.7		0.25~0.7	
Ambient fluid temperature	-10~60°C						
Repeatability(mm)	±0.01			±0.02			
The highest frequency of use	180(XHZL Series 120)(c.p.m)					60(c.p.m)	
Lubrication	Not required						
Action type	Double acting Single acting						
Auto switch(optional)	Solid state auto switch						
Port size	M3×0.5			M5×0.8			

Gripping force

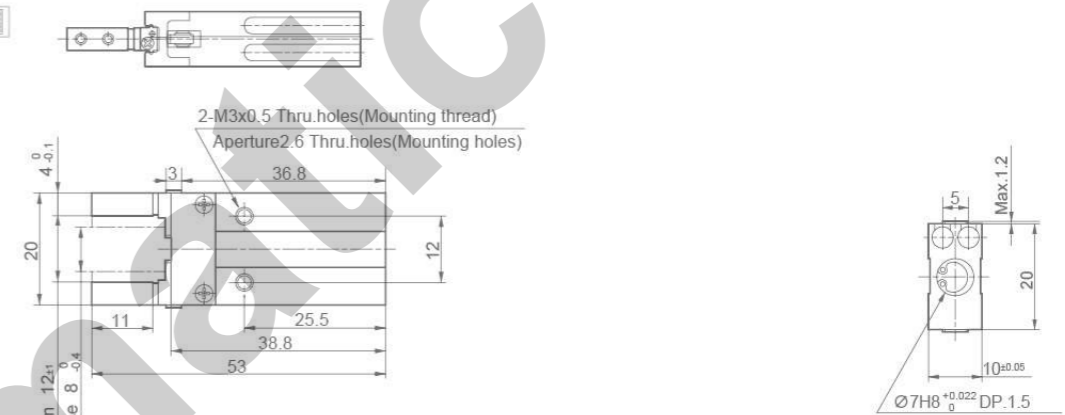
Model	Gripping force N					Opening/Closing (Both sides)mm
	RMS each finger gripping force					
	Double-acting		Single acting			
	External	Internal	External	Internal		
XHZ-6□	3.3	6.1	1.9	3.7	4	
XHZ-10□	11	17	7.1	13	4	
XHZ-16□	34	45	27	38	6	
XHZ-20□	42	66	33	57	10	
XHZ-25□	65	104	45	83	14	
XHZ-32□	158	193	131	161	22	
XHZ-40□	254	318	217	267	30	

Model	Gripping force N					Opening/ Closing (Both sides)mm
	RMS each finger gripping force					
	Double-acting		Single acting			
	External	Internal	External	Internal		
XHZL-10□	11	17	7.1	13	8	
XHZL-16□	34	45	27	38	12	
XHZL-20□	42	66	33	57	18	
XHZL-25□	65	104	50	85	22	

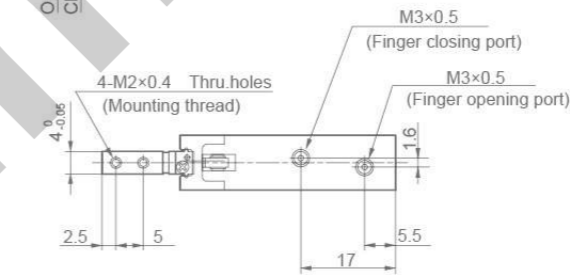
□ =Express D=Double-acting S=Single acting(normally closed) C=Single acting(normally open)

XHZ Series Style Air Gripper

Overall Dimensions

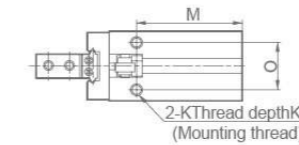
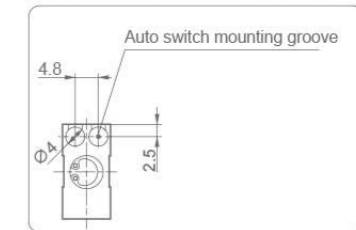


XHZ-6 □ (Φ6)
Double acting
Single acting

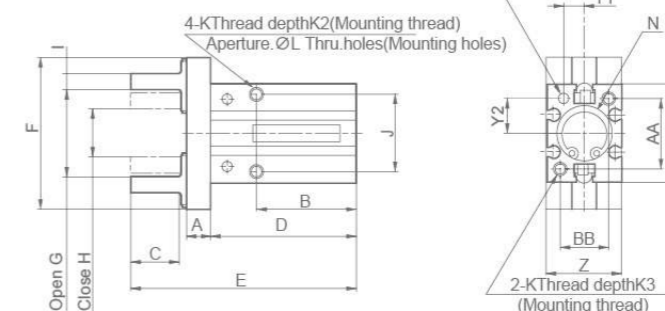
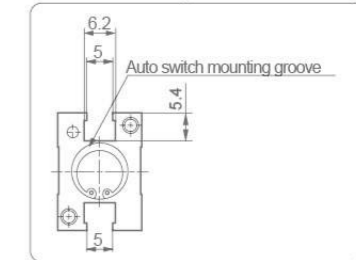


For single acting, the port on one side will turn into breathing hole.

Auto switch mounting groove dimensions

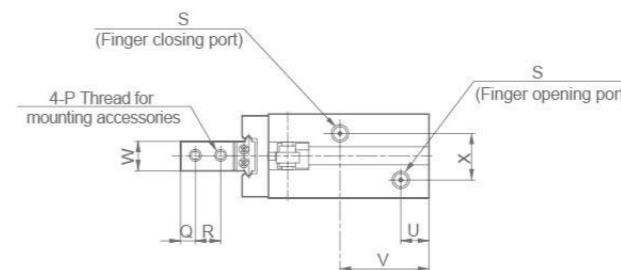


XHZ-10□
Auto Switch Mounting Groove Dimensions

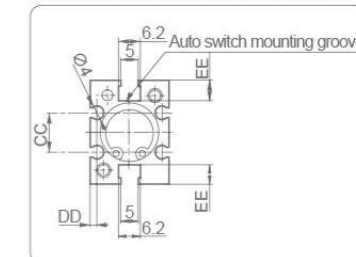


XHZ-10 □ (Φ10~Φ40)
Double acting
Single acting

Note) Through-hole mounting is not possible when using the auto switch at the square groove.



XHZ-10□
Auto Switch Mounting Groove Dimensions



Note) Through-hole mounting is not possible when using the auto switch at the square groove.

For single acting, the port on one side will turn into breathing hole.

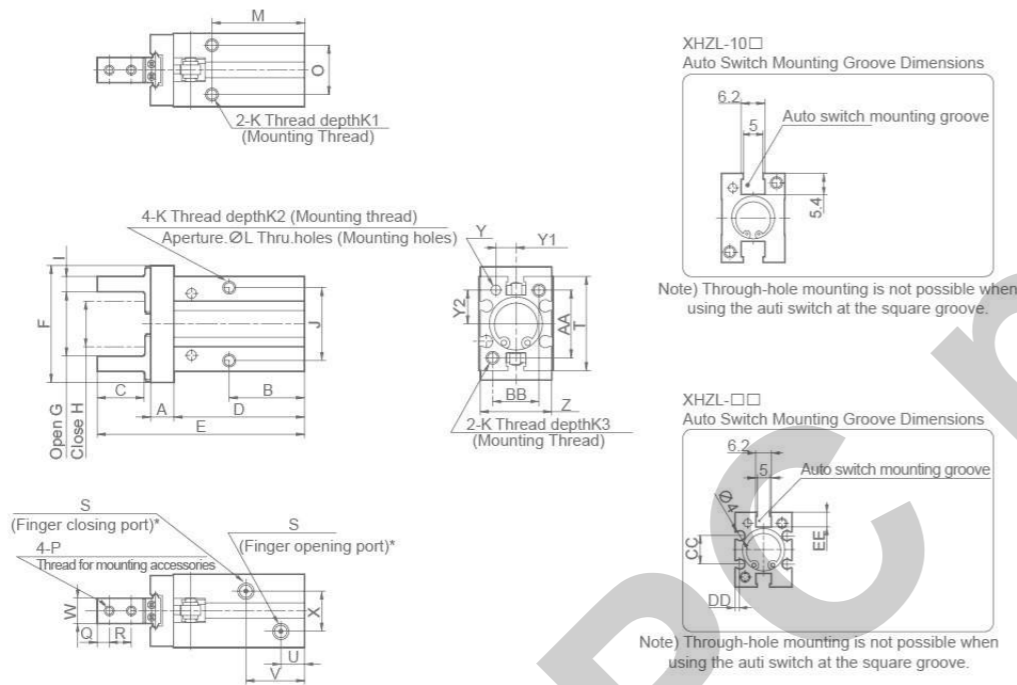
XHZ Series Style Air Gripper

Dimension Sheet

Bore(mm)	A	B	C	D	E	F	G	H	I	J	K	K1	K2	K3	ΦL	M	N	O	P	Q	
10	6	23	12	37.8	57	29	15.2 ^{+2.2} ₀	11.2 ⁰ _{-0.7}	4 ⁰ _{-0.1}	16	M3×0.5	6	5.5	6	2.6	27	Φ11H9 ^{0.043} ₀	Dp:2	11.4	M2.5×0.45	3
16	7.5	24.5	15	42.5	67.3	38	20.9 ^{+2.2} _{0.2}	14.9 ⁰ _{-0.7}	5 ⁰ _{-0.1}	24	M4×0.7	4.5	8	8	3.4	30	Φ17H9 ^{0.043} ₀	Dp:2	16	M3×0.5	4
20	9.5	29	20	52.8	84.8	50	26.3 ^{+2.2} _{0.2}	16.3 ⁰ _{-0.7}	8 ⁰ _{-0.1}	30	M5×0.8	8	10	10	4.3	35	Φ21H9 ^{0.052} ₀	Dp:3	18.6	M4×0.7	5
25	11	30	25	63.6	102.7	63	33.3 ^{+2.5} _{0.2}	19.3 ⁰ _{-0.8}	10 ⁰ _{-0.1}	36	M6×1	10	12	12	5.1	36.5	Φ26H9 ^{0.052} ₀	Dp:3.5	22	M5×0.8	6
32	12	40(49)	29	67(76)	113(122)	97	48 ^{+2.5} ₀	26 ⁰ _{-0.5}	12 ⁰ _{-0.1}	46	M6×1	10	13	13	5.1	48(57)	Φ34H9 ^{0.052} ₀	Dp:4	26	M6×1	7
40	15	49(62)	36	83(96)	139(152)	119	60 ^{+2.7} ₀	30 ⁰ _{-0.5}	14 ⁰ _{-0.1}	56	M8×1.25	13	16	17	6.6	58(71)	Φ42H9 ^{0.052} ₀	Dp:4	32	M8×1.25	9

Bore(mm)	R	S	T	U	V	W	X	Y	Z	Y1	Y2	AA	BB	CC	DD	EE	
10	5.7	M3×0.5	23	9	19	5 ⁰ _{-0.05}	11	Φ2H9 ^{+0.025} ₀	Dp:3	16.4±0.05	5.2±0.02	7.6±0.02	18	12	-	-	
16	7	M5×0.8	30.6	7.5	19	8 ⁰ _{-0.05}	13	Φ3H9 ^{+0.025} ₀	Dp:3	23.6±0.05	6.5±0.02	11±0.02	22	15	11.6	2.1	5.8
20	9	M5×0.8	42	10	23	10 ⁰ _{-0.05}	15	Φ4H9 ^{+0.03} ₀	Dp:4	27.6±0.05	7.5±0.02	16.8±0.02	32	18	14	2.1	9
25	12	M5×0.8	52	10.7	23.5	12 ⁰ _{-0.05}	20	Φ4H9 ^{+0.03} ₀	Dp:4	33.6±0.05	10±0.02	21.8±0.02	40	22	19	3.5	11.5
32	14	M5×0.8	60	11	31(37)	15 ⁰ _{-0.05}	24	Φ5H9 ^{+0.03} ₀	Dp:5	40±0.1	12±0.02	23±0.02	46	26	24	3.3	11.5
40	17	M5×0.8	72	12	38(45)	18 ⁰ _{-0.05}	28	Φ5H9 ^{+0.03} ₀	Dp:5	48±0.1	14±0.02	29±0.02	56	32	29.4	3.7	13

Overall Dimensions



Dimension Sheet

Bore(mm)	A	B	C	D	E	F	G	H	I	J	K	K1	K2	K3	ΦL	M	N	O	P	Q	
10	6	25(35)	12	37.8(47.8)	57(67)	35	19.2 ^{+2.2} ₀	11.2 ⁰ _{-0.7}	4 ⁰ _{-0.1}	16	M3×0.5	6	5.5	6	2.6	29(39)	Φ11H9 ^{0.043} ₀	Dp:2	11.4	M2.5×0.45	3
16	7.5	31(36)	15	45.2(50.2)	70(75)	47	26.9 ^{+2.2} _{0.2}	14.9 ⁰ _{-0.7}	5 ⁰ _{-0.1}	24	M4×0.7	4.5	8	8	3.4	36(41)	Φ17H9 ^{0.043} ₀	Dp:2	16	M3×0.5	4
20	9.5	36(42)	20	58(64)	90(96)	62	34.3 ^{+2.2} _{0.2}	16.3 ⁰ _{-0.7}	8 ⁰ _{-0.1}	30	M5×0.8	8	10	10	4.3	43(49)	Φ21H9 ^{0.052} ₀	Dp:3	18.6	M4×0.7	5
25	11	40(50)	25	66.9(76.9)	106(116)	75	41.3 ^{+2.5} _{0.2}	19.3 ⁰ _{-0.8}	10 ⁰ _{-0.1}	36	M6×1	10	12	12	5.1	48(58)	Φ26H9 ^{0.052} ₀	Dp:3.5	22	M5×0.8	6

Bore(mm)	R	S	T	U	V	W	X	Y	Z	Y1	Y2	AA	BB	CC	DD	EE	
10	5.7	M3×0.5	23	8	21(31)	5 ⁰ _{-0.05}	11	Φ2H9 ^{+0.025} ₀	Dp:3	16.4±0.05	5.2±0.02	7.6±0.02	18	12	-	-	
16	7	M5×0.8	30.6	8	25(30)	8 ⁰ _{-0.05}	13	Φ3H9 ^{+0.025} ₀	Dp:3	23.6±0.05	6.5±0.02	11±0.02	22	15	11.6	2.1	5.8
20	9	M5×0.8	42	10	30(36)	10 ⁰ _{-0.05}	15	Φ4H9 ^{+0.03} ₀	Dp:4	27.6±0.05	7.5±0.02	16.8±0.02	32	18	14	2.1	9
25	12	M5×0.8	52	10	33(43)	12 ⁰ _{-0.05}	20	Φ4H9 ^{+0.03} ₀	Dp:4	33.6±0.05	10±0.02	21.8±0.02	40	22	19	3.5	11.5

XHY Series Style Air Gripper



Ordering Code

XHY — 2 — 16 — D — 2

Series Code
XHY: 180° open and close your fingers

Finger Quantity
2PCS

Bore size
10mm~25mm

Action Type
D: Double Action

Claw form
Blank: Standard thread installation
2: Opening and closing direction through-hole installation

XHY2-25D



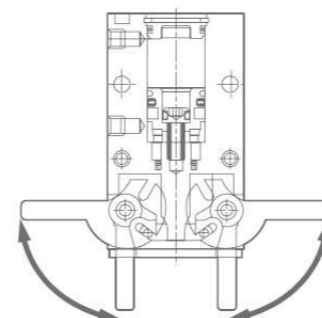
- Auto switch is attachable.
- 180° Retractable simplify pick and place operation.
- May be suitable for use under special circumstances, the finger opening and closing part specifically designed to prevent small items from entering.
- Easy to install, with positioning holes.

Specification

Bore(mm)	10	16	20	25
Working Medium	Air(to be filtered by 40µm filter element)			
Action Type	Double-acting			
Max.operating Pressure(Mpa)	0.6			
Min.operating Pressure(Mpa)	0.1			
Ambient Fluid Temperature	-10~+60°C			
Max.operating Frequency	60c.p.m			
Repeatability(Mm)	±0.2mm			
Holding Torque N·m Note1)	0.16	0.54	1.10	2.28
Lubrication Note2)	Not required			
Port Size	M5×0.8			

Note 1) At the pressure of 0.5 Mpa
Note 2) If you need lubrication, use turbine No.1 oil ISO VG32.

Chart



Function Example

