CU/CDU Series Cylinder

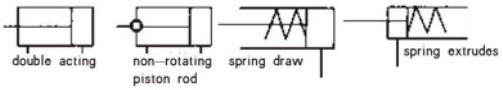
Free Mounting Type

(ϕ 12– ϕ 25)

Features

It is a space-saving cylinder and can be mounted directly on multiple sides of a machine.

Graphics Sign



Choosen Type

Basic Type: CU	□	—	10	10	S
Magnetic Type: CDU	K	—	20	30	D
	Kinds		Bore	Stroke	Acting

Kinds
No Mark – Basic type
K–non–rotating piston rod

Bore
6– ϕ 6mm
10– ϕ 10mm
16– ϕ 16mm
20– ϕ 20mm
25– ϕ 25mm
32– ϕ 32mm

Stroke

Acting
D–Double acting
S–Single acting (Draw)
T–Single acting (spring extrudes)

Order Example

1)Bore:6,Stroke:10,Double acting,Un–rotate piston rod type, Code:CUK6–10D
2)Bore:25,Stroke:25,Double acting(Draw),Within magnet, Code:CDU25–25S

Standard Specification

Type(mm)	6	10	16	20	25	32
Applicable medium	Air					
Action	Double acting Single acting:Drawing/Extrusion					
Proof pressure	1.0Mpa(10.5kgf/cm²)					
Highest pressure	0.7Mpa(7.1kgf/cm²)					
Environment and fluid temperature	–10～ 60°C(No Freeze)					
Cushion	Rubber Cushion					
Stroke tolerance	+1.0,0					
* Lubrication	No Required					
Mounting	Free(Multifaces Mounting)					
Non rotating accuracy (Only CUK/CDUK)	±0.8°			±0.5°		
Pipe Size	M5×0.8					1/8

*If Lubricate plese use ISOVG32

■ Stroke/Magnetic Switch

(ϕ 12– ϕ 25)

Bore	Standard Stroke		Orbit Mounting type
(mm)	double acting	Singel acting	* Magnetic switch
6	5,10,15, 20,25,30	5,10,15	D–A90L D–A93L D–A96L D–A80L D–F9NL D–F9BL
10			
16			
20	5,10,15, 20,25,30, 40,50		
25			
32			

* Magnet switch specification refer to magnet switch series

Installation with strong adaptability/Rectangle cylinder

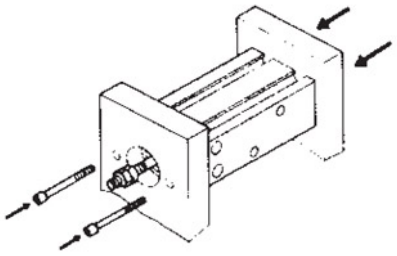
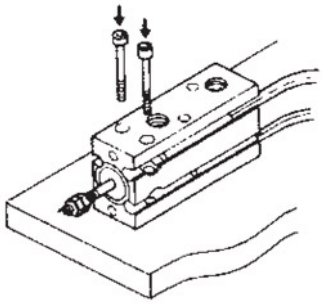
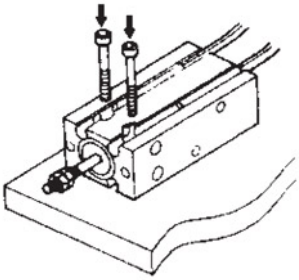
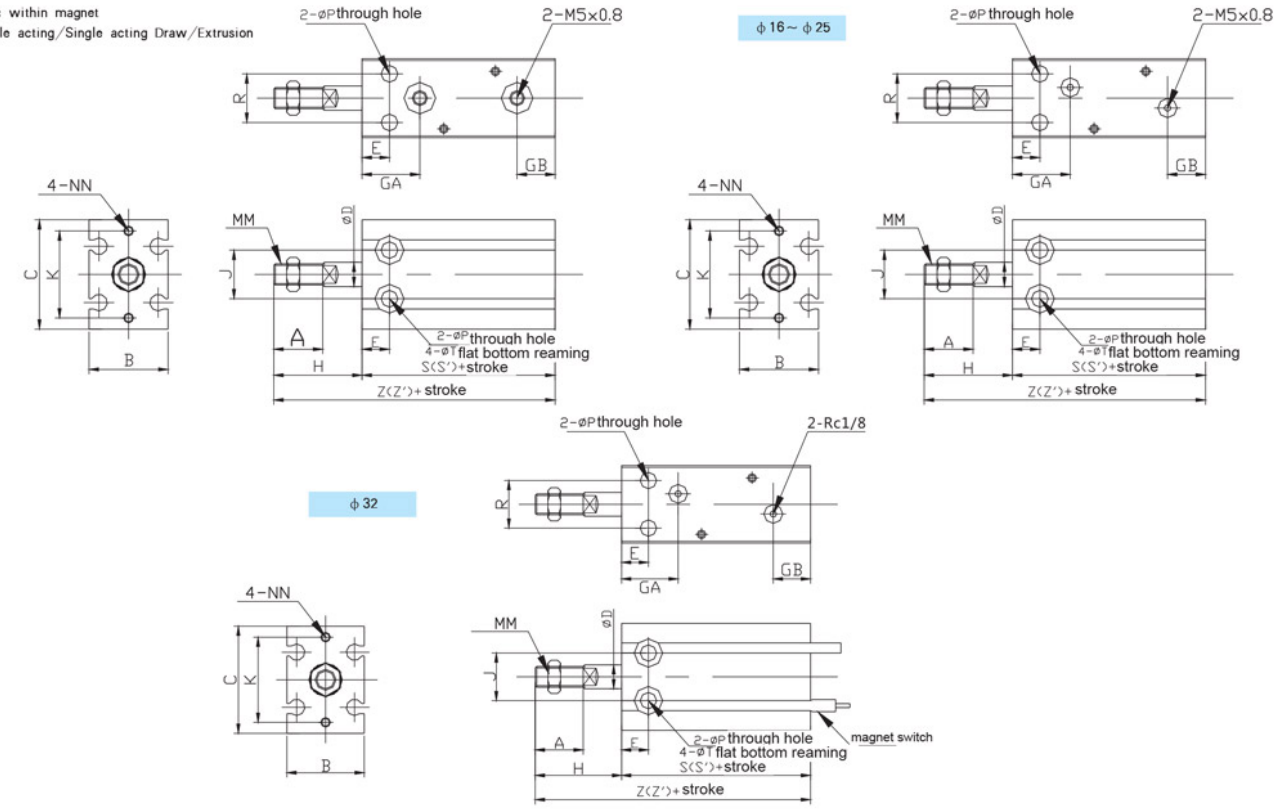
Mounting	Axis parallel(Body divide)	Axis Vertical(through hole)	Flank mount(through hole)
			

Figure Dimension(mm)

(ϕ12–ϕ25)

Basic within magnet
Double acting/Single acting Draw/Extrusion



Dimension sheet

Type	A	A'	B	C	ϕD	E	GA	GB	J	K	L	MM	NN	ϕP	Q	R	ϕT
C□U6	7	–	13	22	3	7	14.5	10	10	17	–	M3×0.5	M3×0.5depth5	3.4	–	7	6depth4.8
C□U10	10	–	15	24	4	7	15.5	10	11	18	–	M4×0.7	M3×0.5depth5	3.4	–	9	6depth5
C□U16	11	12.5	20	32	6	7	16.5	11.5	14	25	5	M5×0.8	M4×0.7depth6	4.5	4	12	7.5depth6.5
C□U20	12	14	26	40	8	9	19	12.5	16	30	6	M6×1	M5×0.8depth8	5.5	9	16	9.5depth8
C□U25	15.5	18	32	50	10	10	21	13	20	38	8	M8×1.25	M5×0.8depth8	5.5	9	20	9.5depth9
C□U32	19.5	22	40	62	12	11	22	13	24	48	10	M10×1.25	M6×1.0depth9	6.6	13.5	24	11depth11.5

Double acting dimension sheet

Type	H	Basic type		Magnetic Type		
		S	Z	W	S'	Z'
C□U6–□D	13	33	46	2.5	33	46
C□U10–□D	16	36	52	1	36	52
C□U16–□D	16	30	46	0	40	56
C□U20–□D	19	36	55	1	46	65
C□U25–□D	23	40	63	–1	50	73
C□U32–□D	27	42	69	–4	52	79

Single acting(Spring draw)dimension sheet

Type	H	Basic type						Magnetic Type								
		S			Z			W	S			Z'				
		5st	10st	15st	5st	10st	15st		5st	10st	15st	5st	10st	15st		
C□U6–□S	13	38	43	48	51	56	61	2.5	38	43	48	51	56	61		
C□U10–□S	16	41	46	56	57	62	72	1	41	46	56	57	62	72		
C□U16–□S	16	35	40	50	51	56	66	0	45	50	60	61	66	76		
C□U20–□S	19	41	46	56	60	65	75	1	51	56	66	70	75	85		
C□U25–□S	23	45	50	60	58	73	83	–1	55	60	70	78	83	93		
C□U32–□S	27	47	52	62	74	79	89	–4	57	62	72	84	89	99		

Single acting(Spring extruse)dimension sheet

Type	H			Basic type						Magnetic Type							
				S			Z			W	S			Z'			
	5st	10st	15st	5st	10st	15st	5st	10st	15st		5st	10st	15st	5st	10st	15st	
C□U6–□T	18	23	28	38	43	48	56	66	76	2.5	38	43	48	56	61	76	
C□U10–□T	21	266	31	41	46	56	62	72	87	1	41	46	56	62	72	87	
C□U16–□T	21	26	31	35	40	50	66	76	91	0	45	50	60	66	76	91	
C□U20–□T	24	29	34	41	46	56	65	75	90	1	51	56	66	75	85	100	
C□U25–□T	28	33	38	45	50	60	73	83	98	–1	55	60	70	83	93	108	
C□U32–□T	32	37	42	47	52	62	79	89	104	–4	57	62	72	89	99	114	

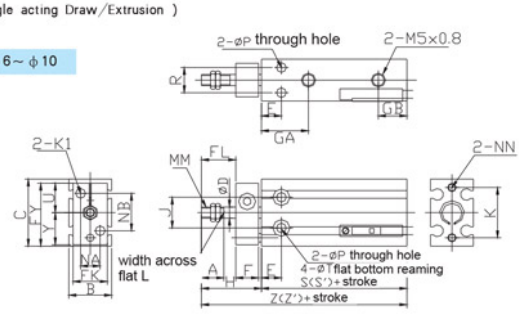
*SY+Stroke

Figure Dimension(mm)

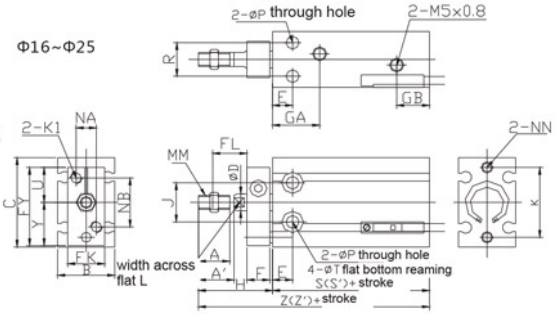
Non–rotating piston rod type with magnetic

(Double acting/Single acting Draw/Extrusion)

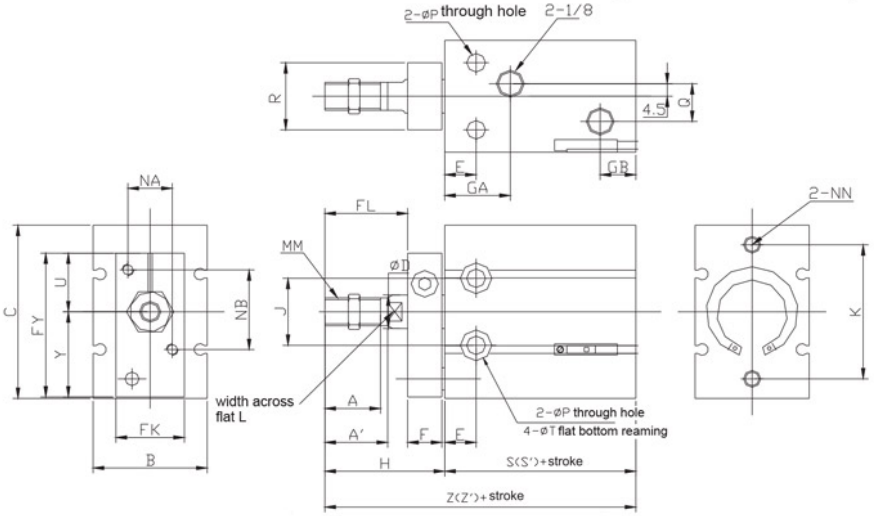
ϕ 6~ ϕ 10



Φ16~Φ25



ϕ 32



Dimension sheet

Type	A	A'	B	C	ϕD	E	F	FL	FK	FY	GA	GB	H	J	K	KI	L	MM	NA	NB	NN	ϕP	Q	R	ϕT	U	Y
C□UK6	7	–	13	22	3	7	8	9	11	20.5	14.5	10	18	10	17	M3×0.5	–	M3×0.5	6	14	M3×0.5 depth5	3.4	–	7	6 depth4.8	10	10.5
C□UK10	10	–	15	24	4	7	8	12	12	22	15.5	10	21	11	18	M3×0.5	–	M4×0.7	7	15	M3×0.5 depth5	3.4	–	9	6 depth5	10.5	11.5
C□UK16	11	12.5	20	32	6	7	8	17	13	28	16.5	11.5	26	14	25	M4×0.7	5	M5×0.8	6	18	M4×0.7 depth6	4.5	4	12	7.5 depth6.5	12.5	15.5
C□UK20	12	14	26	40	8	9	8	20	16	33	19	12.5	29	16	30	M4×0.7	6	M8×1.25	8	20	M5×0.8 depth8	5.5	9	16	9.5 depth8	13.5	19.5
C□UK25	15.5	18	32	50	10	10	10	22	20	43.5	21	13	33	20	38	M5×0.8	8	M8×1.25	10	28	M5×0.8 depth8	5.5	9	20	9.5 depth9	19	24.5
C□UK32	19.5	22	40	62	12	11	12	29	24	51.5	22	13	42	24	48	M5×0.8	10	M10×1.25	12	32	M6×1.0 depth9	6.6	13.5	24	11 depth11.5	21	30.5

Double acting dimension sheet

Type	H	No magnet		Magnetic Type		
		S	Z	W	S'	Z'
C□K6–□D	13	33	46	2.5	33	46
C□K10–□D	16	36	52	1	36	52
C□K16–□D	16	30	46	0	40	56
C□K20–□D	19	36	55	1	46	65
C□K25–□D	23	40	63	–1	50	73
C□K32–□D	27	42	69	–4	52	79

Single acting(Spring draw)dimension sheet

Type	H	No magnet						Magnetic Type									
		S			Z			W	S			Z'					
		5st	10st	15st	5st	10st	15st		5st	10st	15st	5st	10st	15st			
C□UK6–□S	13	38	43	48	56	61	66	2.5	38	43	48	56	61	66			
C□UK10–□S	16	41	46	56	62	72	77	1	41	46	56	62	72	77			
C□UK16–□S	16	35	40	50	56	66	76	0	45	50	60	66	76	86			
C□UK20–□S	19	41	46	56	65	75	85	1	51	56	66	75	85	95			
C□UK25–□S	23	45	50	60	73	83	93	–1	55	60	70	83	93	103			
C□UK32–□S	27	47	52	62	7	89	104	–4	57	62	72	89	99	114			

Single acting(Spring extrusion)dimension sheet

*SY+Stroke

Type	H			ϕT	U	Y	No magnet						Magnetic Type						
							S			Z			W	S			Z'		
	5st	10st	15st				5st	10st	15st	5st	10st	15st		5st	10st	15st	5st	10st	15st
C□UK6–□T	23	28	33	6 depth4.8	10	10.5	38	43	48	61	71	81	2.5	38	43	48	61	71	81
C□UK10–□T	266	31	36	6 depth5	10.5	11.5	41	46	56	67	77	92	1	41	46	56	67	77	92
C□UK16–□T	26	31	41	7.5 depth6.5	12.5	15.5	35	40	50	76	86	101	0	45	50	60	76	86	101
C□UK20–□T	29	34	44	9.5 depth8	13.5	19.5	41	46	56	75	85	100	1	51	56	66	85	95	110
C□UK25–□T	33	38	48	9.5 depth9	19	24.5	45	50	60	83	93	108	–1	55	60	70	93	103	118
C□UK32–□T	37	42	57	11 depth11.5	21	30.5	47	52	62	94	104	119	–4	57	62	72	104	114	129

CUJB/CDUJB Series Cylinder

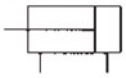
Mini Free Mounting Type

(ϕ 4– ϕ 10)

Column type/Rolling type/Oblate type/Lever-type Rolling/ Wheel(within absorber)

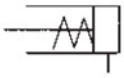
Graphics Sign

Double acting



Single acting

Drawing



Standard Specification

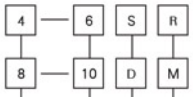
Bore(mm)		4	6	8	10
Applicable medium		Air			
Action		Double acting/Single acting(Draw)			
Proof pressure		1.05Mpa(10.7kgf/cm²)			
Highest pressure		0.7Mpa(7.1kgf/cm²)			
Max pressure Mpa{kgf/cm2}	Double acting	0.15{1.5}			0.1{1.0}
	Single acting	0.35{3.5}	0.3{3.1}		0.2{2.1}
Environment and fluid temperature		-10 ~ 60°C(No Freeze)			
Cushion		No			
Stroke tolerance		+0.5,0			
* Lubrication		No			
Mounting		Free(Multi faces Mounting)			
Pipe Size		M3×0.5			

*If Lubricate please use ISOVG32

Choosen Type

Basic Type: CUJB

Magnetic Type: CDUJB



Bore
4– ϕ 4mm
6– ϕ 6mm
8– ϕ 8mm
10– ϕ 10mm
* ϕ 4mm cylinder without Magnetic Type

Stroke

Acting
D–Double acting
S–Single acting (Draw)

Piston rod kind
No Mark – Rod end femalee thread (ϕ 4mm non thread)
M–Rod end male thread

■ Order Example

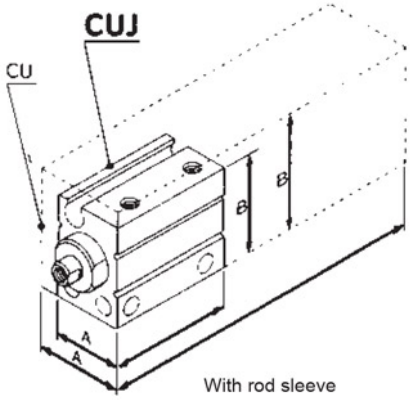
1)Bore:6,Stroke:8,Double acting Cod:CDJB6–8D

2)Bore:10,Stroke:10,Single acting(Draw),within magnet
Code:CDUJB10–10S

Stroke/Magnetic Switch

Bore (mm)	Standard Stroke(mm)		Channel Mounting
	Double Acting	Single Acting	*Magnetic switch
4	4,6,8,10	4,6,	D–F8NL D–F8PL D–F8BL
6	4,6,8,10,15	4,6,8	
8	4,6,8, 10,15,20	4,6,8,10	
10			

*The specification and feature of magnetic switch should refer their series



Length: Max cut 64%
Space size: Max cut 79%
(Compare with CU series)

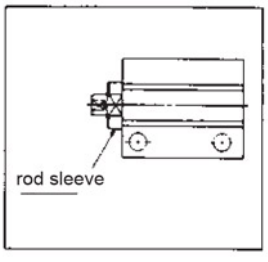
Mini free Mounting cylinder

Small size
Minimum Bore ϕ 4mm

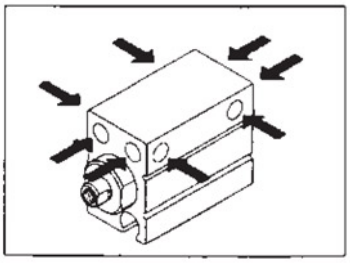
Bore(mm)	A	B	C
4	10	15	13
6	13(13)	19(22)	13(33)
8	13	21	13
10	13.5(15)	22(24)	13(36)

(): In bracket is CU series dimension

With rod sleeve
(Strengthen piston rod)



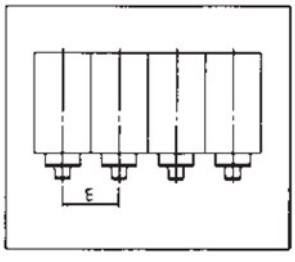
Cach faces can be mounted
(Convenient for mounting)



Less spacing

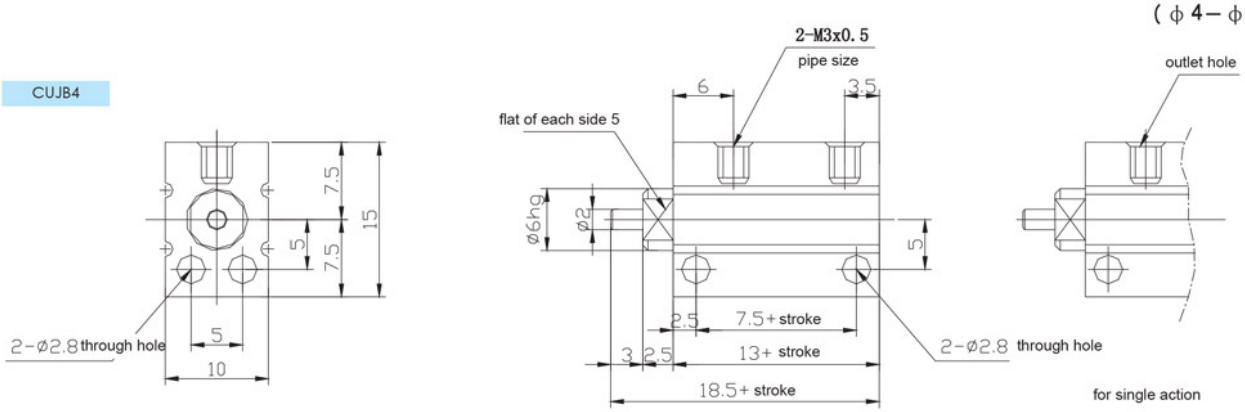
(Convenient for abreast mounting)
(4mm)

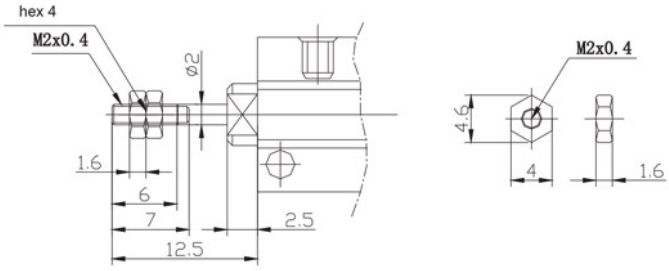
Bore (mm)	E
4	10
6	13
8	13
10	13.5



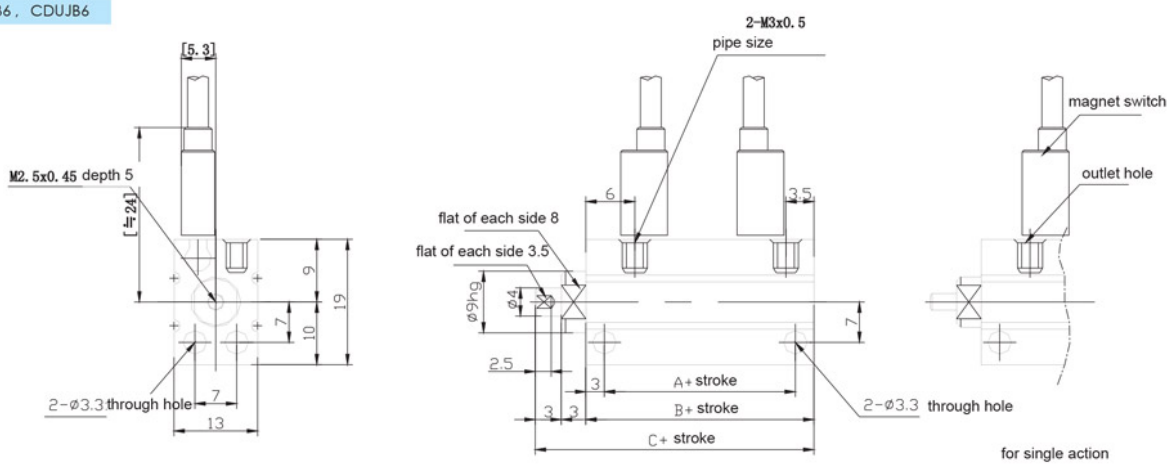
(ϕ 4– ϕ 10)

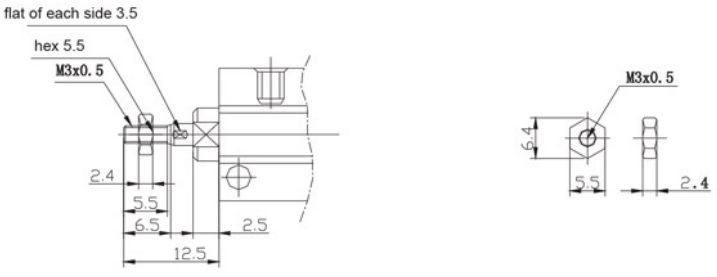
CUJB4





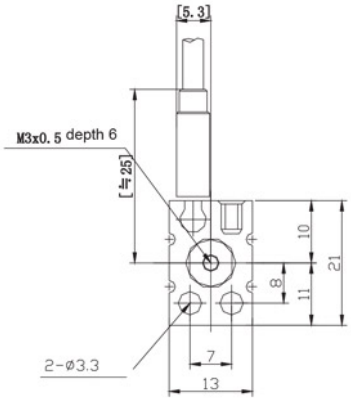
CUJB6, CDUJB6

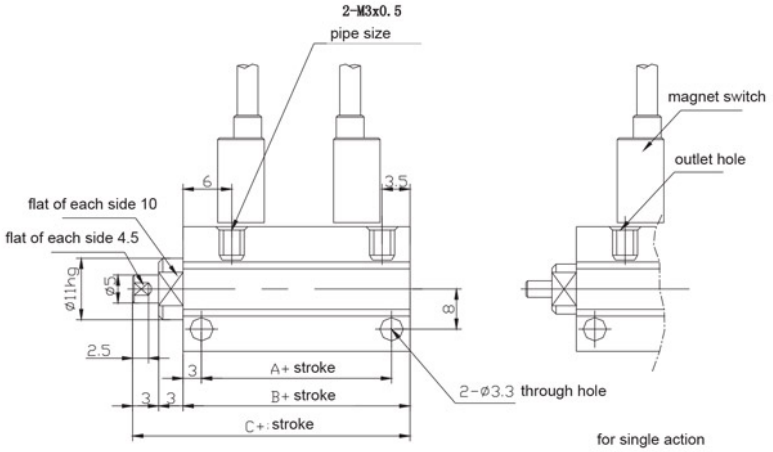


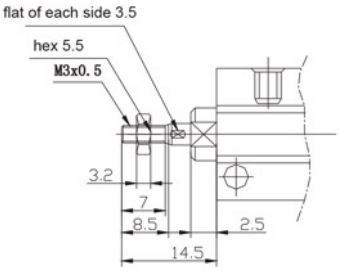


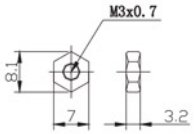
Type	A	B	C
CUJB6	6.5	13	19
CDUJB6-S	11.5	18	24

CUJB8, CDUJB8



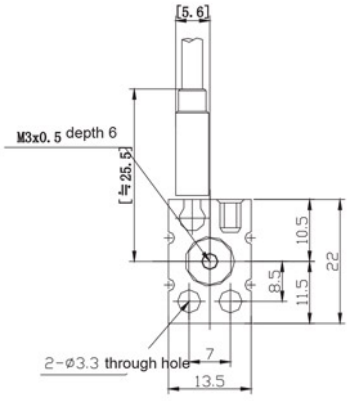


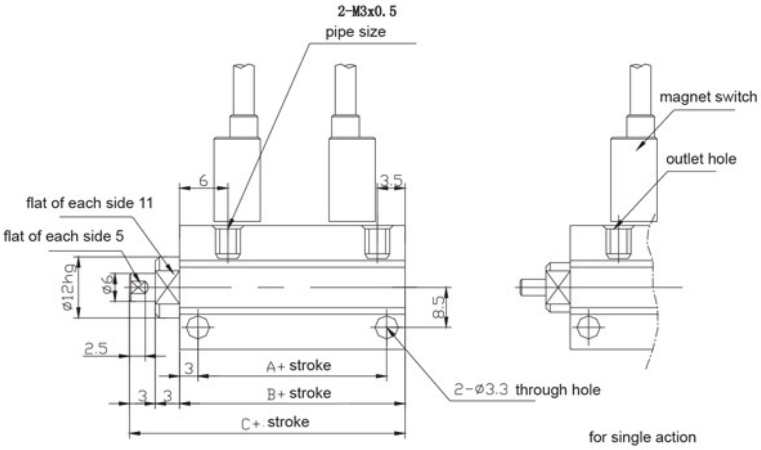


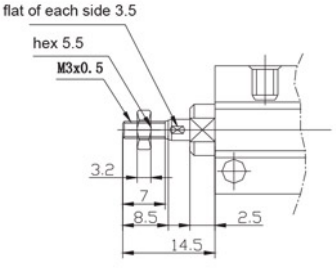


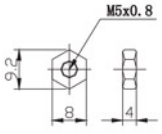
Type	A	B	C
CUJB8	6.5	13	19
CDUJB8–S	11.5	18	24

CUJB10, CDUJB10









Type	A	B	C
CUJB10	6.5	13	19
CDUJB10–S	11.5	18	24

TN Series Twin-rod Cylinder

(ϕ 6– ϕ 32)

Features

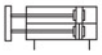
Thin twin rod cylinder structure, non-rotation, high precision, double output force and strong resistance to the side load.

Choosen Type TN 32 — 100

Bore: 10 Φ10mm; 16 Φ16mm; 20 Φ20mm; 25 Φ25mm; 32 Φ32mm

Stroke

Graphics Sign



Specification

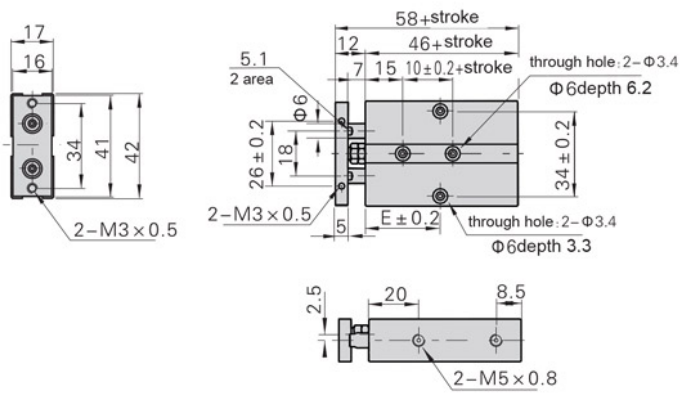
Bore (mm)	12	16	20	25	32
Action	Double Acting				
Applicable medium	Air				
Using pressure range	0.1～1.0MPa				
Proof pressure MPa	1.5MPa				
Using temperature range	−10～60℃				
Using Speed range	30～500mm/s				
Stroke adjustable range	−10～0mm				
Cushion	Rubber cushion on both end				
Non-rotating Accuracy	±0.40	±0.30			
Pipe Size	M5X0.8				Rc1/8

Standard Stroke

Bore (mm)	Standard Stroke	Max. Stroke
10	10 20 30 40 50 60 70 80 90 100	100
16	10 20 30 40 50 60 70 80 90 100 125 150 175 200	200
20	10 20 30 40 50 60 70 80 90 100 125 150 175 200	200
25	10 20 30 40 50 60 70 80 90 100 125 150 175 200	200
32	10 20 30 40 50 60 70 80 90 100 125 150 175 200	200

Figure Dimension(mm)

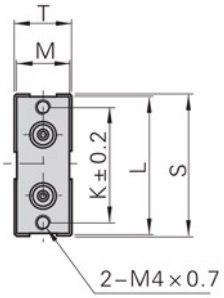
ϕ 10

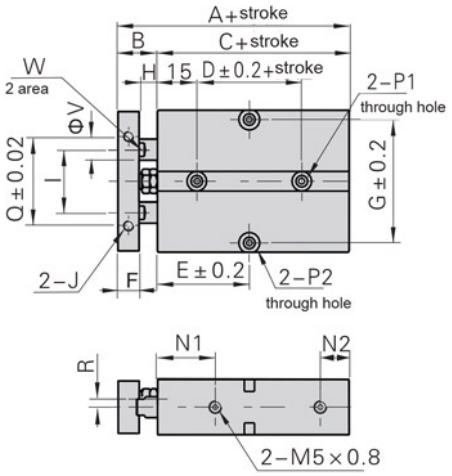


Stroke	10	20	30	40	50	60	70	80	90	100
E	30	30	35	40	45	50	55	60	65	70

Figure Dimension(mm)

ϕ16～ϕ25

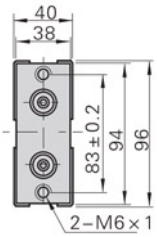


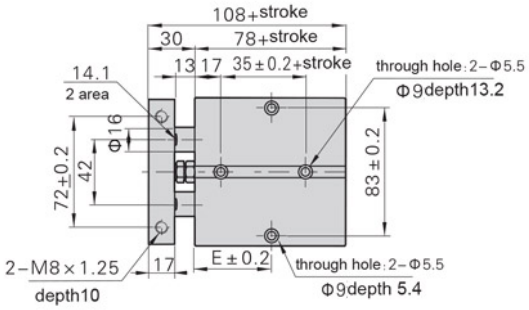


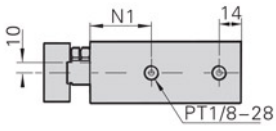
Stroke / Bore≤	A	B	C	D	E													F	G	H	I	K
					10	20	30	40	50	60	70	80	90	100	125	150	175	200					
16	68	15	53	20	30	35	40	45	50	55	60	65	70	75	87.5	100	112.5	125	8	47	7	24	47
20	78	20	58	20	35	35	40	45	50	55	60	65	70	75	87.5	100	112.5	125	10	55	10	28	55
25	81	19	62	30	40	40	45	50	55	60	65	70	75	80	92.5	105	117.5	130	10	66	9	34	66

Stroke	J	L	M	N1	N2	P1	P2	Q	R	S	T	V	W
16	M4X0.7 depth5	53	20	22	11	Φ7.5 depth 7.2 through hole Φ4.5	Φ8 depth 4.5 through hole Φ4.5	34	3	54	21	8	6.1
20	M4X0.7 depth5	61	24	25	12	Φ7.5 depth 7.2 through hole Φ4.5	Φ8 depth 4.5 through hole Φ4.5	44	3.5	62	25	10	8.1
25	M4X0.7 depth6	72	29	27	12	Φ7.5 depth 7.2 through hole Φ4.5	Φ8 depth 4.5 through hole Φ4.5	56	6	73	30	12	10.1

ϕ32







Stroke	10	20	30	40	50	60	70	80	90	100	125	150	175	200
E	45	50	55	60	65	70	75	80	85	90	102.5	15	127.5	140
N1	35	40												

CXS Series Twin-rod Cylinder

(φ 6– φ 32)

Double–shaft construction and standardization of high lateral load resitance and high accuracy

Specification

Bore(mm)		6	10	15	20	25	32
Applicable medium		Air					
Action		Double acting					
Proof pressure MPa{kgf/cm2}		1.05{10.7}					
Max pressure MPa{kgf/cm2}		0.7{7.1}					
Min pressure MPa{kgf/cm2}		0.15{1.5}	0.1{1.0}		0.05{0.51}		
Environment and fluid temperature		5 ~ 60°C(No Freeze)					
Cushion		Rubber cushion on both end					
Construction		Double cylinder (2 times of force)					
*Lubrication		Not required					
Stroke adjustable range		Retraction distance 0 ~ 5mm					
Bearing		Slide bearing/Ball guide bearing					
Non–rotating Accuracy		±0.1	±0.15	±0.13	±0.11	±0.1	±0.08
		±0.1	±0.1	±0.07	±0.06	±0.05	±0.04
Pipe Size RC(PT)		M4×0.8					

*ISOVG32, if required lubrication

Choosen Type

Magnetic Type: CXS [M] [20] [R]

Bearing type
M–Slide bearing
L–Ball guide bearing

Bore
6– φ 6mm
10– φ 10mm
15– φ 15mm
20– φ 20mm
25– φ 25mm
32– φ 32mm

Stroke

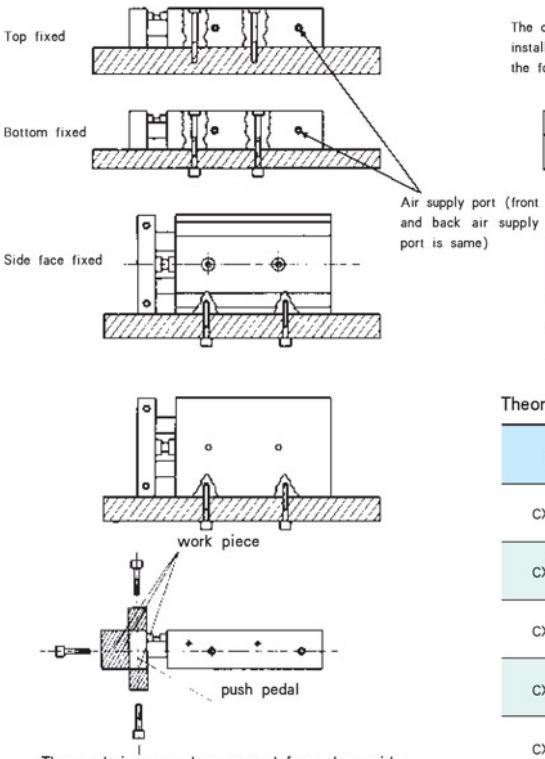
Stroke/Magnetic Switch

Bore (mm)	Standard Stroke	orbit Mounting
		Sensor switch
6	10,20,30,40,50	CS1–M
10	10,15,20,25,30,35,40,45,50,60,70,75	
15	10,15,20,25,30,35,40,45, 50,60,70,75,80,90,100	
20		
25		
32		

Order Example

1)Bore:15,Stroke:30,Ball guide bearing,Code:CXSL15–30
2)Bore:32,Stroke:100,Slide bearing,Code:CXSM32–100

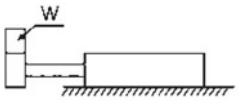
The cylinder body can be fixed by bolt in 4 directions, and the air supply position is optional.



The workpiece can be mounted from three sides

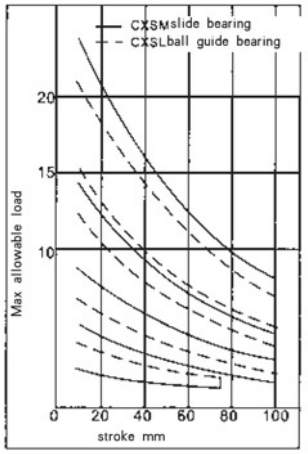
Max allowable load

The cylinder that is fixed according to the following installation type, its allowable load should lower than the follows



Stroke/Magnetic Switch

Type	Stand Stroke(mm)				
	10	20	30	40	50
CXSM6	0.80	0.66	0.54	0.46	0.40
CSXL6	1.08	0.88	0.69	0.59	0.49



Theoretical output force

(N)

Type	Rod dia (mm)	Direction	Effective area (mm²)	Service Pressure Air(MPa) 0.1	0.2	0.3	0.4	0.5	0.6	0.7
CXS□6	4	Push	56	*0.8	11.2	16.8	22.1	28.0	33.6	39.2
		Pull	31	*4.6	6.2	9.3	12.4	15.5	18.6	21.7
CXS□10	6	Push	157	15.7	31.4	47.1	62.8	75.5	94.2	110
		Pull	100	10.0	20.0	30.0	40.0	50.0	60.0	70.0
CXS□15	8	Push	353	35.3	70.6	106	141	177	212	247
		Pull	252	25.2	50.4	75.6	101	126	151	176
CXS□20	10	Push	628	62.8	126	188	251	314	377	440
		Pull	471	47.1	94.2	141	188	236	283	330
CXS□25	12	Push	982	98.2	196	295	393	491	589	687
		Pull	756	75.6	151	227	302	378	454	529
CXS□32	16	Push	1608	161	322	482	643	804	965	1126
		Pull	1206	121	241	362	482	603	724	844

*Under the pressure of 0.15 MPa

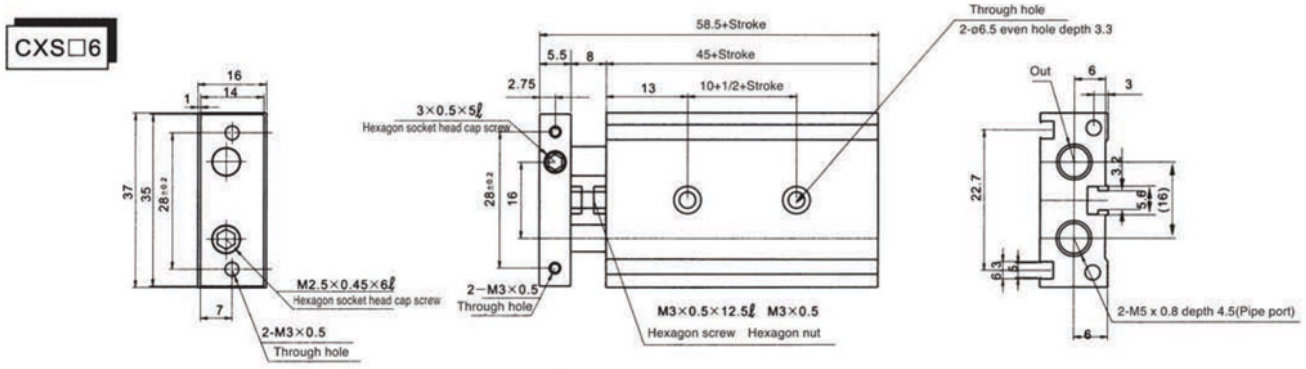
■ Figure Dimension

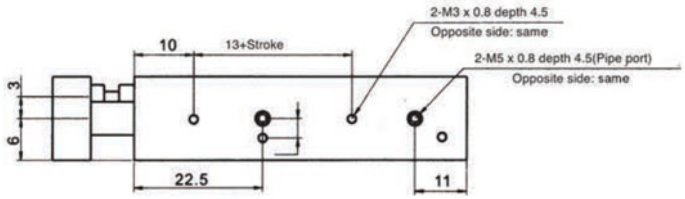
(kg)

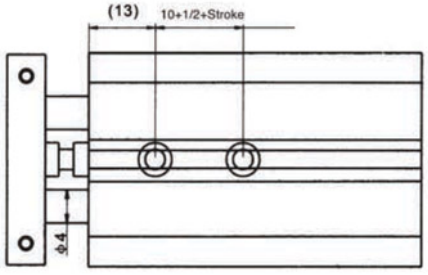
Type	Stroke(mm)														
	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100
CXS□6	0.081	–	0.095	–	0.108	–	0.122	–	0.135	–	–	–	–	–	–
CXSM10	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.25	0.27	0.28	–	–	–
CXSL10	0.16	0.165	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.25	0.27	0.28	–	–	–
CXSM15	0.25	0.265	0.28	0.29	0.30	0.315	0.33	0.345	0.36	0.39	0.42	0.435	0.45	0.48	0.51
CXSL15	0.27	0.285	0.30	0.31	0.32	0.335	0.35	0.365	0.38	0.41	0.44	0.455	0.47	0.50	0.53
CXSM20	0.40	0.42	0.44	0.46	0.48	0.495	0.51	0.53	0.53	0.585	0.62	0.64	0.66	0.70	0.74
CXSL20	0.43	0.445	0.46	0.48	0.50	0.515	0.53	0.55	0.55	0.605	0.64	0.66	0.68	0.715	0.75
CXSM25	0.61	0.635	0.66	0.69	0.72	0.745	0.77	0.80	0.80	0.89	0.95	0.97	0.995	1.06	1.10
CXSL25	0.62	0.645	0.67	0.70	0.73	0.755	0.78	0.81	0.81	0.895	0.955	0.98	1.005	1.065	1.11
CXSM32	1.15	1.19	1.23	1.275	1.32	1.36	1.40	1.45	1.45	1.58	1.665	1.71	1.755	1.84	1.93
CXSL32	1.16	1.205	1.25	1.295	1.34	1.38	1.42	1.465	1.465	1.595	1.68	1.72	1.765	1.855	1.94

Figure Dimension(mm)

CXS□6





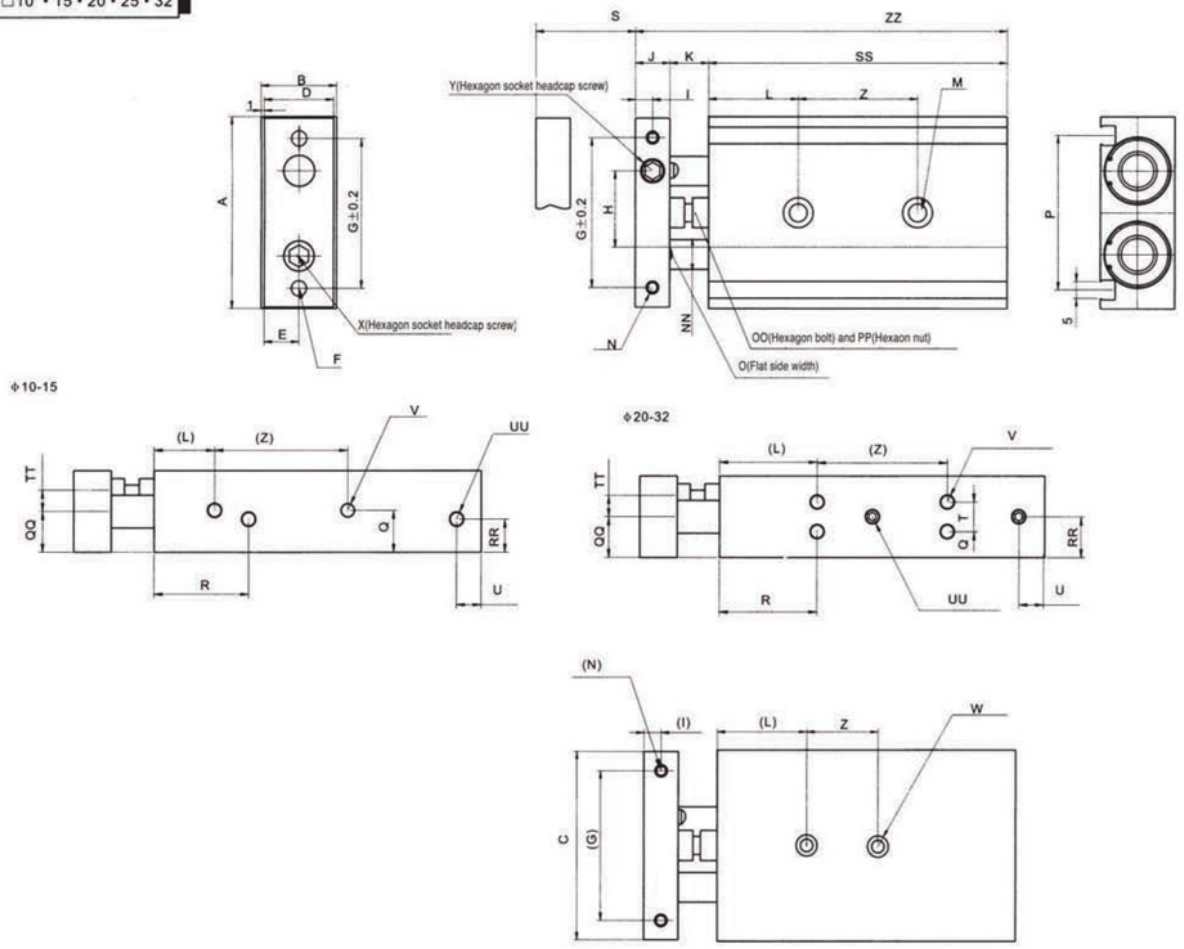


(kg)

Type	Stroke	10+1/2 Stroke	13+ Stroke	45+ Stroke	10+1/2Stroke
CXS□6–10	10	15	23	55	68.5
CXS□6–20	20	20	33	65	78.5
CXS□6–30	30	25	43	75	88.5
CXS□6–40	40	30	53	85	98.5
CXS□6–50	50	35	63	95	108.5

Figure Dimension(mm)

CXS□10 · 15 · 20 · 25 · 32



Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	NN	O	OO	P	PP	Q	QQ	R	RR	S	SS	T	TT	U	UU	V	W	X	Y	Z	ZZ
CXS□10–10													2–ϕ3.4	2–M3			M4							10	65				4–M5×0.8	4–M3		M3	M3	30	82
CXS□10–20						2–M4							Through hole	×0.5			×		M4					20	75				depth	×0.8	2–M4	×	×		92
CXS□10–30	46	17	44	15	7.5	×0.7	35	20	4	8	9	20	2–ϕ5.5	depth	ϕ6	5	0.7	33.6	×	8.5	7	30	7	30	85	–	5	8	4.5	depth	×0.7	0.5	0.5		102
CXS□10–40						(Through hole)							Counterboe rdepth	5			×		0.7					40	95				(Connector hole)	4.5	depth 7	X	X	40	112
CXS□10–50													3.3				14.5L							50	105				(Same as oppoiseside)	(Same as oppoiseside)		10L	5L		122
CXS□15–10													2–ϕ3.4				M4							10	70				4–M5×0.8	4–M4		M5	M5	25	89
CXS□15–20						2–M5							Through hole	2–M4			×		M4					20	80				depth	×0.7	2–M5	×	×		99
CXS□15–30	58	20	56	18	9	×0.8	45	25	5	10	9	30	2–ϕ8	×0.7	ϕ8	6	0.7	48	×	10	10	38.5	10	30	90	–	5	8	4.5	depth	×0.8	0.8	0.7		109
CXS□15–40						(Through hole)							Counterboe rdepth	depth			×		0.7					40	100				(Connector hole)	5	depth 8	X	X	35	119
CXS□15–50													4.4	6			14.5L							50	110				(Same as oppoiseside)	(Same as oppoiseside)		10L	4L		129
CXS□20–10																								10	80									30	104
CXS□20–20													2–ϕ5.5	2–M4			M6							20	90				4–M5×0.8	8–M4		M6	M5		114
CXS□20–30						2–M5							Through hole	×0.7			×		M6					30	100				depth	×0.7	2–M4	×	×		124
CXS□20–40	64	25	62	23	11.5	×0.8	50	28	6	12	12	30	2–ϕ9.5	depth	ϕ10	8	1.0	53	×	7.75	12.5	45	12.5	40	110	9.5	6.5	8	4.5	depth	×0.7	1.0	0.8	40	134
CXS□20–50						(Through hole)							Counterboe rdepth	6			×		1.0					50	120				(Connector hole)	6	depth 7	X	X		144
CXS□20–75													5.3				18.5L							75	145				(Same as oppoiseside)	(Same as oppoiseside)		12L	5L	60	169
CXS□20–100																								100	170										194
CXS□25–10																								10	82									30	106
CXS□25–20													2–ϕ6.9	2–M5			M6							20	92				4–1/8	8–M5		M6	M6		116
CXS□25–30						2–M6							Through hole	×0.8			×		M6					30	102				depth	×0.8	2–M8	×	×		126
CXS□25–40	80	30	78	28	14	×1.0	60	35	6	6	12	30	2–ϕ11	depth	ϕ12	10	1.0	64	×	8.5	15	46	15	40	112	13	9	9	4.5	depth	×1.25	1.0	1.0	40	136
CXS□25–50						(Through hole)							Counterboe rdepth	7.5			×		1.0					50	122				(Connector hole)	7.5	depth 10	X	X		146
CXS□25–75													6.3				18.5L							75	147				(Same as oppoiseside)	(Same as oppoiseside)		14L	5L	60	171
CXS□25–100																								100	172										196
CXS□32–10																								10	92									40	122
CXS□32–20													2–ϕ6.9	2–M5			M8							20	102				4–1/8	8–M5		M8	M8		132
CXS□32–30						2–M6							Through hole	×0.8			×		M8					30	112				depth	×0.8	2–M8	×	×		142
CXS□32–40	98	38	96	36	18	×1.0	75	44	8	16	14	30	2–ϕ11	depth	ϕ16	13	12.5	76	×	9	19	16	19	40	122	20	11.5	10	4.5	depth	×1.25	1.25	1.25	50	152
CXS□32–50						(Through hole)							Counterboe rdepth	8			×		1.25					50	132				(Connector hole)	7.5	depth 12	X	X		162
CXS□32–75													6.3				23L							75	157				(Same as oppoiseside)	(Same as oppoiseside)		16L	8L	70	187
CXS□32–100																								100	182										212

CXSW Series Through Twin-rod Cylinder

(φ6–φ32)

Bigger allowable load range
Double shaft the ouput force
Higher not-rotatiing precision
With adjustable seting 0–10mm

Stardard Specification

Bore(mm)	6	10	15	20	25	32
Applicable medium	Air					
Action	Double acting					
Proof pressure MPa{kgf/cm2}	1.05{10.7}					
Max pressure MPa{kgf/cm2}	0.7{7.1}					
Min pressure MPa{kgf/cm2}	0.15{1.5}			0.1{1.0}		
Environment and fluid temperature	–10 ~ 60°C(No Freeze)					
Cushion	Rubber cushion on both end					
Construction	Double –sheft					
*Lubrication	Not required					
Stroke adjustable rang	Pull Stroke0 ~ –10mm					
Bearing	Slide bearing/Ball bushing bearing					
Pipe SizeRC(PT)	M4×0.8			Rc(PT)1/8		

*ISOVG32, if required lubrication

Choosen Type

Magnetic Type: CXSW [M] [20] [50] [ ]

Bearing type
M–Slide bearing
L–Ball guide bearing

Bore
6–φ6mm
10–φ10mm
15–φ15mm
20–φ20mm
25–φ25mm
32–φ32mm

Stroke

Long stroke
No Mark – Standard Stroke
XB11–Long Stroke

If order the long stroke cylinder please add–XB11 code in rear, also check the right table

■ Order Example

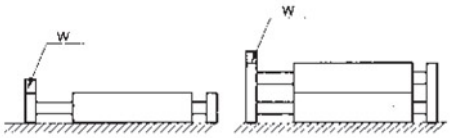
1)Bore:15,Stroke:30,Ball bushing bearing,Code:CXSWL15–30

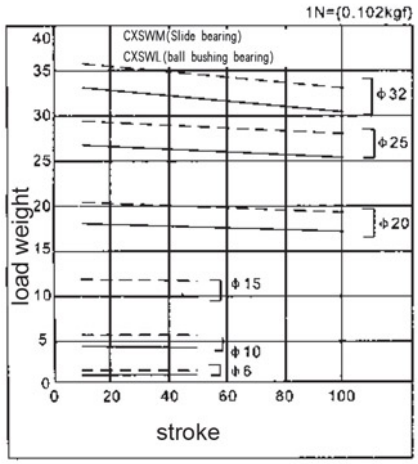
2)Bore:32,Stroke:200,Slide bearing,Code:CXSWM32–20–XB11

Stroke/Magnetic Switch

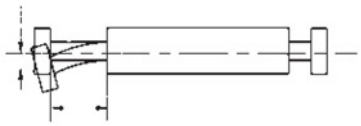
Bore (mm)	Standard Stroke(mm)	Long stroke(mm)[–XB11]	Channel Mounting Sensor switch
6	10,20,30,40,50		D–Z73L D–Z76L D–Z80L D–Y59AL D–Y59BL
10	10,20,30,40,50	75,100,125,150	
15			
20	10,20,30,40,50,75,100	125,150,175,200	
25			
32			

Max Allowable Load Weight



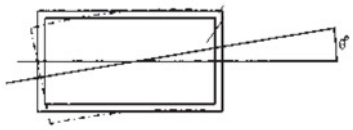


The Load Weight Of Rod End



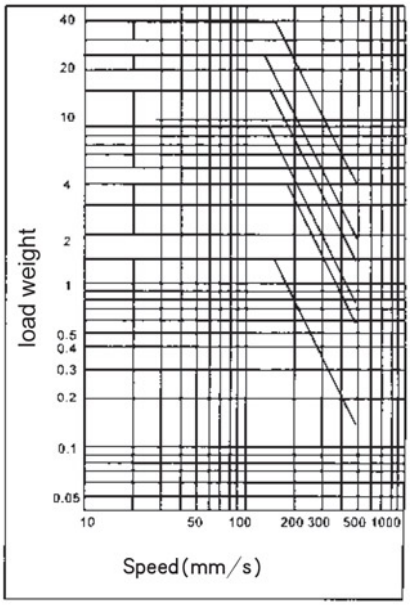
Bore(mm)	6~32
CXSWM(Slide bearing)	±0.03mm
CXSWL(Ball bushing bearing)	

Not cranking precision



Bore(mm)	6~32
CXSWM(Slide bearing)	±0.1°
CXSWL(Ball bushing bearing)	

Allowable Function

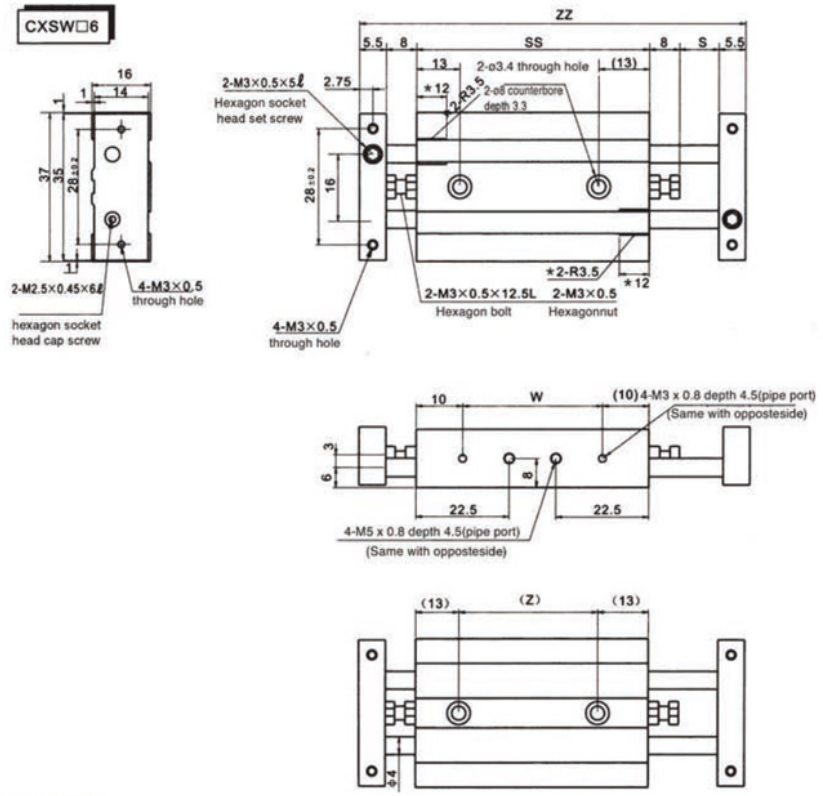


CXSW Series Through Twin-rod Cylinder

(ϕ 6– ϕ 32)

Figure Dimension(mm)

CXSW□6

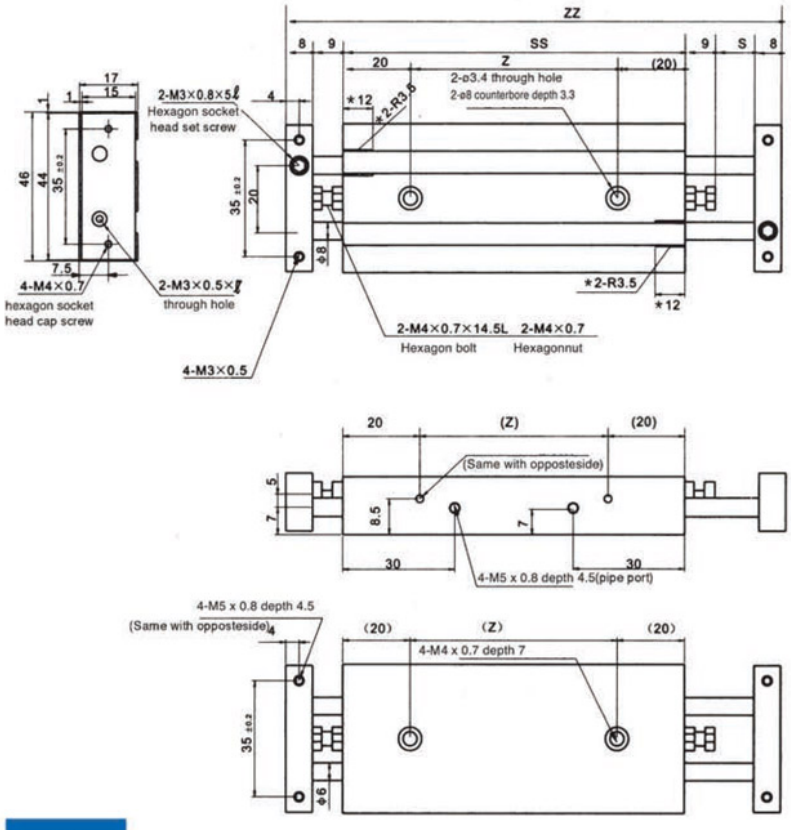


(mm)

Type	S	SS	ZZ	Z	W
CXSW□6–10	10	66	103	40	46
CXSW□6–20	20	76	123	50	56
CXSW□6–30	30	86	143	60	66
CXSW□6–40	40	96	163	70	76
CXSW□6–50	50	106	183	80	86

Cutting away the part of senser switch channel, for mounting the sensor switch of CXSW □ 10–10 and CXSW □ 10–20

CXSW□10



(mm)

	Type	S	SS	ZZ	Z
Standard Stroke	CXSW□10–10	10	92	136	52
	CXSW□10–20	20	102	156	62
	CXSW□10–30	30	112	176	72
	CXSW□10–40	40	122	196	82
	CXSW□10–50	50	132	216	92
	CXSW□10–75	75	157	266	117
Long Stroke (–XB11)	CXSW□10–100	100	182	316	142
	CXSW□10–125	125	207	366	167
	CXSW□10–150	150	232	416	192

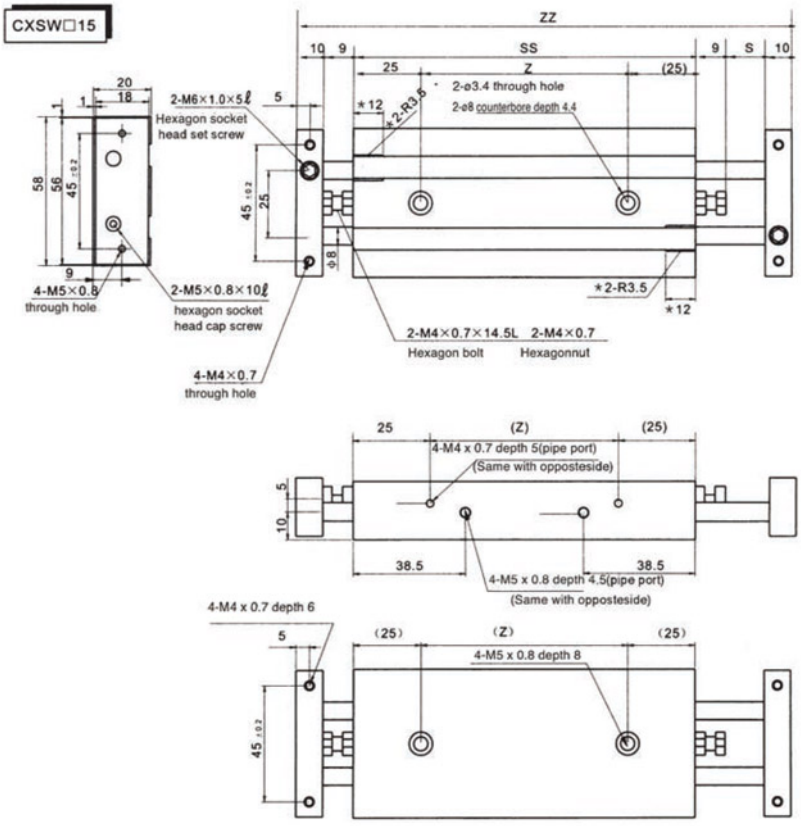
Cutting away the part of senser switch channel, for mounting the sensor switch of CXSW □ 10–10 and CXSW □ 10–20

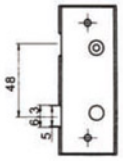
CXSW Series Through Twin-rod Cylinder

(ϕ 6– ϕ 32)

Figure Dimension(mm)

CXSW□15



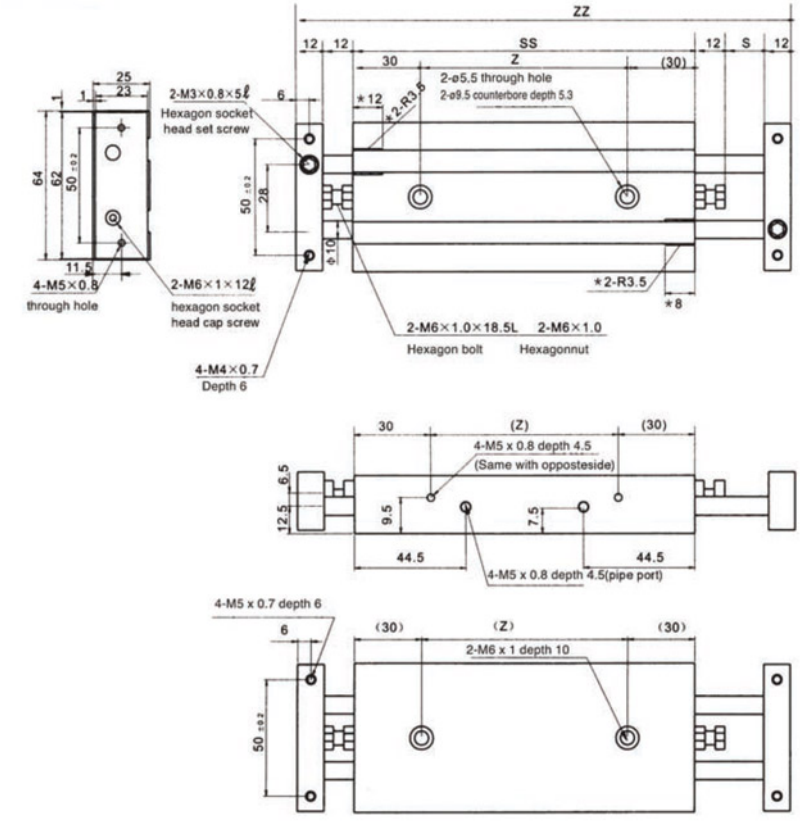


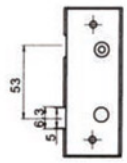
(mm)

	Type	S	SS	ZZ	Z
Standard Stroke	CXSW□15–10	10	106	153	55
	CXSW□15–20	20	115	173	65
	CXSW□15–30	30	125	193	75
	CXSW□15–40	40	135	213	85
	CXSW□15–50	50	145	233	95
	CXSW□15–75	75	170	283	120
Long Stroke (–XB11)	CXSW□15–100	100	195	333	145
	CXSW□15–125	125	220	383	170
	CXSW□15–150	150	245	433	195

Cutting away the part of senser switch channel, for mounting the sensor switch of CXSW □ 15–10 and CXSW □ 15–20

CXSW□20





(mm)

	Type	S	SS	ZZ	Z
Standard Stroke	CXSW□20–10	10	120	178	60
	CXSW□20–20	20	130	198	70
	CXSW□20–30	30	140	218	80
	CXSW□20–40	40	150	238	90
	CXSW□20–50	50	160	258	100
	CXSW□20–75	75	185	308	125
	CXSW□20–100	100	210	358	150
Long Stroke (–XB11)	CXSW□20–125	125	235	408	175
	CXSW□20–150	150	260	458	200
	CXSW□20–175	175	285	508	225
	CXSW□20–200	200	310	558	250

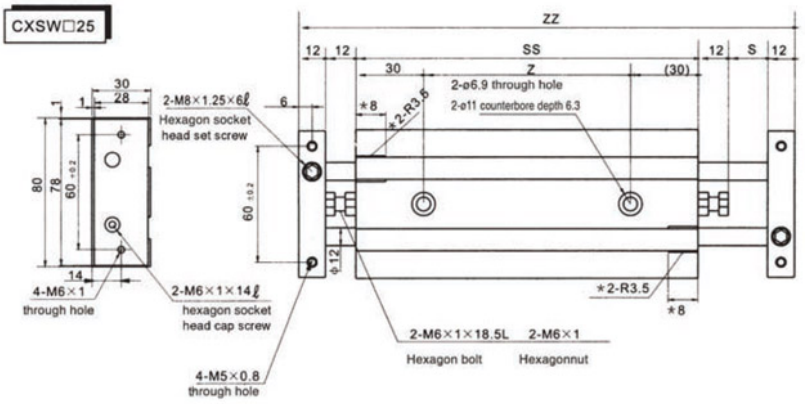
Cutting away the part of senser switch channel, for mounting the sensor switch of CXSW □ 20–10

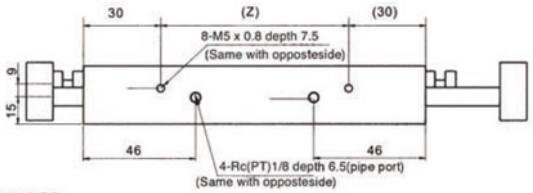
CXSW Series Through Twin-rod Cylinder

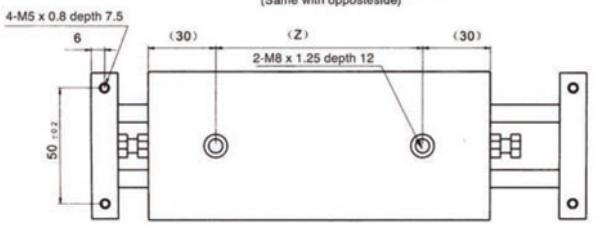
(ϕ 6– ϕ 32)

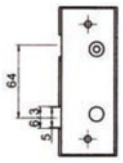
Figure Dimension(mm)

CXSW□25







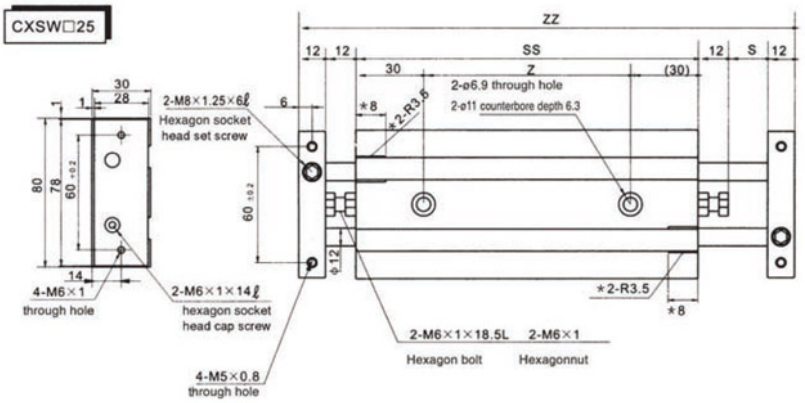


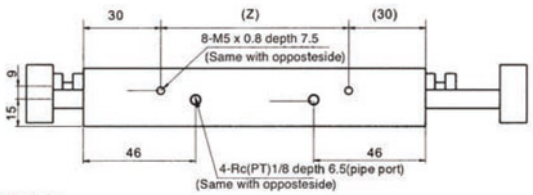
(mm)

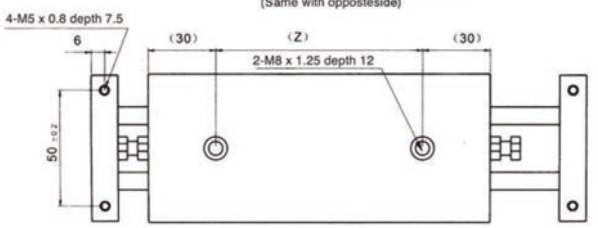
	Type	S	SS	Z	ZZ
Standard Stroke	CXSW□25–10	10	122	180	62
	CXSW□25–20	20	132	200	72
	CXSW□25–30	30	142	220	82
	CXSW□25–40	40	152	240	92
	CXSW□25–50	50	162	260	102
	CXSW□25–75	75	187	310	127
	CXSW□25–100	100	212	360	152
Long Stroke (–XB11)	CXSW□25–125	125	237	410	177
	CXSW□25–150	150	262	460	202
	CXSW□25–175	175	287	510	227
	CXSW□25–250	200	312	560	252

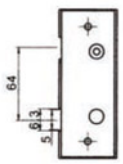
Cutting away the part of senser switch channel, for mounting the sensor switch of CXSW □ 15–10 and CXSW □ 15–20

CXSW□25









(mm)

	Type	S	SS	Z	ZZ
Standard Stroke	CXSW□32–10	10	143	213	83
	CXSW□32–20	20	153	233	93
	CXSW□32–30	30	163	253	103
	CXSW□32–40	40	173	273	113
	CXSW□32–50	50	183	293	123
	CXSW□32–75	75	208	343	148
	CXSW□32–100	100	233	393	173
Long Stroke (–XB11)	CXSW□32–125	125	258	443	198
	CXSW□32–150	150	283	493	223
	CXSW□32–175	175	308	543	248
	CXSW□32–320	200	333	593	273

Cutting away the part of senser switch channel, for mounting the sensor switch of CXSW □ 20–10

MGP Series Compact Guide Cylinder

(φ12–φ100)

Small volume, compact
High side load resistance
Strong resistance to torque force
High non–rock–over precision
Choose the sliding bearing or ball guide bearing for the bearing of guide rod
Easy for installation and use
The position of two–surface connecting pipe is optional

Bore (mm)		20	25	32	40	50
Applicable Fluide		Air				
Acting type		Double Acting				
Proof pressure		1.5MPa{15.3kgf/cm2}				
Max Pressure		1.0MPa{10.2kgf/cm2}				
Minimum pressure		0.12MPa{10.2kgf/cm2}		0.12MPa{1.2kgf/cm2}		
Environment fluid temperature		–10°C 60°C (No Freeze)				
Piston speed		50 550mm/s		50 400mm/s		
Cushion		Rubber cushion				
Stroke tolerance		+1.5, 0mm				
* Lubrication		No				
Bearing		Sliding/Ball guide bearing				
Non–rotating rate for piston rod	Sliding	±0.08°	±0.07°	±0.06°	±0.05°	±0.04°
	Ball guide bearing	±0.10°	±0.09°	±0.08°	±0.08°	±0.05°
		M5×0.8	1/8		1/4	3/8

* If lubricate please use ISOVG32

Type Select

Within magnet: MGP M 25 — 40

Bearing type
M–Sliding bearing
L–Ball guide bearing

Bore
12–φ12mm
16–φ16mm
20–φ20mm
25–φ25mm
32–φ32mm
40–φ40mm
50–φ50mm
63–φ63mm
80–φ80mm
100–φ100mm

Stroke

Order

1)Bore:12, Stroke:50, Sliding bearing.
Code:MGPM12–50

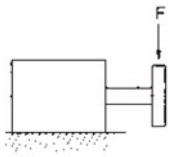
2)Bore:40, Stroke:100, Ball guide bearing.
Code:MGPL40–100

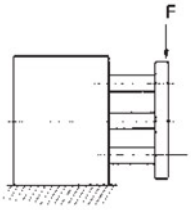
Stoke/Magnetic switch

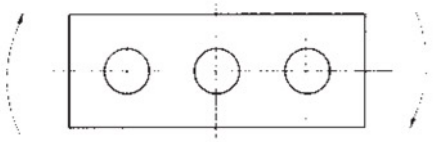
Bore (mm)	note1) Standard Stroke (mm)	Channel mounting 1)Magnetic switch
12,16	10,20,30,40,50,75,100	D–Z73L D–Z76L
20,25	20,30,40,50,75,100,125,150,175,200	D–Z80L D–Y59AL
32,40,50,63,80,100	25,50,75,100,125,150,175,200	D–Y59BL

*1:The stroke:5,10,15,20,30,35#, is made from mounting 5,10,20mm thickness pad.
*2:The specification and feature of magnetic switch should refer their series. Example:MGPM50–10 means 15mm thickness pad within MGPM50–25.

Load and twist power





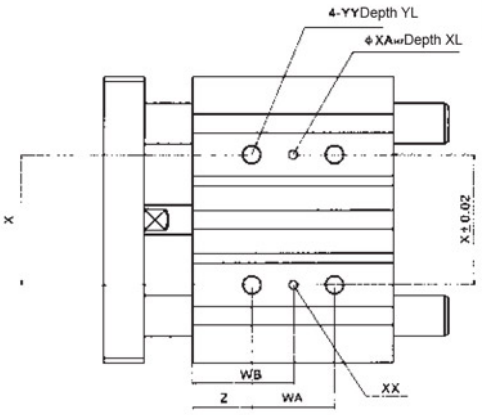


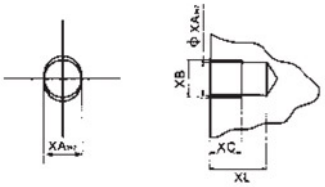
Bore (mm)	Type	Max load on the flank F(N) Stroke(mm)												Max anti–twist power(N.m) Stroke(mm)										
		10	20	25	30	40	50	75	100	125	150	175	200	10	20	25	30	40	50	75	100	125	150	175	200
12	MPGM	24	19	–	17	14	13	26	22	–	–	–	–	0.39	0.32	–	0.27	0.24	0.21	0.43	0.36	–	–	–	–
	MPGL	37	27	–	22	35	30	23	18	–	–	–	–	0.78	0.66	–	0.57	0.93	0.85	0.69	0.58	–	–	–	–
16	MPGM	38	31	–	27	23	21	37	32	–	–	–	–	0.69	0.58	–	0.49	0.43	0.38	0.69	0.58	–	–	–	–
	MPGL	54	40	–	32	54	47	35	28	–	–	–	–	1.23	1.06	–	0.92	1.53	1.40	1.16	0.99	–	–	–	–
20	MPGM	–	49	–	43	38	35	87	75	66	59	54	49	–	1.05	–	0.93	0.83	0.75	1.88	1.63	1.44	1.28	1.16	1.06
	MPGL	–	58	–	48	101	90	70	58	62	54	48	43	–	1.70	–	1.52	3.06	2.87	2.47	2.17	2.38	2.16	1.98	1.82
25	MPGM	–	69	–	60	54	49	116	100	88	79	71	65	–	1.76	–	1.55	1.38	1.25	2.96	2.57	2.26	2.02	1.83	1.67
	MPGL	–	82	–	68	132	118	93	77	80	70	62	55	–	2.80	–	2.53	4.67	4.39	3.81	3.36	3.65	3.31	3.02	2.78
32	MPGM	–	–	203	–	–	164	182	159	142	127	116	106	–	–	6.35	–	–	5.13	5.69	4.97	4.42	3.98	3.61	3.31
	MPGL	–	–	113	–	–	78	130	107	130	114	101	90	–	–	4.76	–	–	3.86	6.53	5.75	7.10	6.46	5.92	5.47
40	MPGM	–	–	203	–	–	164	182	159	142	127	116	106	–	–	7.00	–	–	5.66	2.27	5.48	4.87	4.38	3.98	3.65
	MPGL	–	–	113	–	–	78	129	106	130	114	101	90	–	–	5.24	–	–	4.25	7.19	6.33	7.81	7.11	6.52	6.02
50	MPGM	–	–	296	–	–	245	273	241	216	195	179	164	–	–	13.00	–	–	10.8	12.0	10.6	9.50	8.60	7.86	7.24
	MPGL	–	–	120	–	–	83	178	148	148	129	114	102	–	–	7.02	–	–	5.76	12.3	10.9	11.2	10.2	9.40	8.69
63	MPGM	–	–	296	–	–	245	273	241	216	195	179	164	–	–	14.70	–	–	12.1	13.5	12.0	10.7	9.69	8.86	8.16
	MPGL	–	–	117	–	–	81	176	145	145	126	111	99	–	–	7.77	–	–	6.35	13.7	12.2	12.5	11.4	10.5	9.65
80	MPGM	–	–	352	–	–	297	368	329	298	272	251	232	–	–	22.00	–	–	18.6	22.9	20.5	18.6	17.0	15.6	14.5
	MPGL	–	–	125	–	–	99	281	240	208	184	163	147	–	–	10.30	–	–	9.35	24.8	22.7	20.9	19.4	18.0	16.9
100	MPGM	–	–	515	–	–	445	498	450	410	377	349	325	–	–	38.80	–	–	33.5	37.5	33.8	30.9	28.4	28.2	24.4
	MPGL	–	–	138	–	–	108	395	340	297	263	235	211	–	–	13.60	–	–	12.2	41.1	37.9	35.1	32.7	30.5	28.6

MGP Series Compact Guide Cylinder

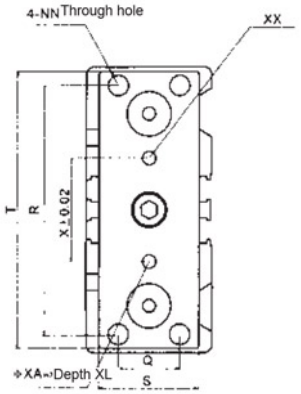
(ϕ 12– ϕ 100)

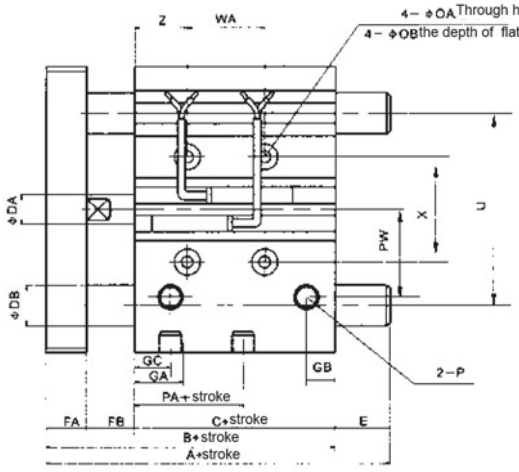
ϕ 12~ ϕ 25

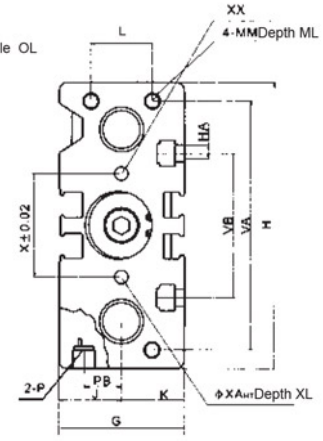




XXDetail drawing







MGPM, MGPL Dimension (ϕ 12 ϕ 25)

Bore (mm)	Stander Stroke	B	C	DA	FA	FB	G	GA	GB	H	HA	J	K	L	MM	ML	NN	OA	OB	OL	P	PA	PB	PW	Q
12	10,20,30,40,50,75,100	42	29	6	8	8	5	26	11	58	M4	13	13	18	M4×0.7	10	M4×0.7	4.3	8	4.5	M5×0.8	13	8	18	14
16		46	33	8	8	8	5	30	11	64	M4	15	15	22	M5×0.8	12	M5×0.8	4.3	8	4.5	M5×0.8	15	10	19	16
20	20,30,40,50,75,100, 125,150,175,200	53	37	10	10	10	6	36	10.5	83	M5	18	18	24	M5×0.8	13	M5×0.8	5.6	9.5	5.5	Rc 1/8	12.5	10.5	25	18
25		53.5	37.5	12	10	10	6	42	11.5	93	M5	21	21	30	M6×1.0	15	M6×1.0	5.6	9.5	5.5	Rc 1/8	12.5	13.5	28.5	26

Bore (mm)	Stander Stroke	R	S	T	U	VA	VB	WA			WB			X	XA	XB	XC	XL	YY	YL	Z
								⩽30st	40st–100st	⩾125st	⩽30st	40st–100st	⩾125st								
12	10,20,30,40,50,75,100	48	22	56	41	50	37	20	40	–	15	25	–	23	3	3.5	3	6	M5×0.8	10	5
16		54	25	62	46	56	38	24	44	–	17	27	–	24	3	3.5	3	6	M5×0.8	10	5
20	20,30,40,50,75,100, 125,150,175,200	70	30	81	54	72	44	24	44	120	29	39	77	28	3	3.5	3	6	M6×1.0	12	17
25		78	38	91	64	82	50	24	44	120	29	39	77	34	4	4.5	3	6	M6×1.0	12	17

MGPM (Sliding bearing)

Bore (mm)	A			DB	E		
	50st⩾	50st<100st⩾	100st<		50st⩾	50st<100st⩾	100st<
12	42	42	85	8	42	42	85
16	46	46	95	10	46	46	95

MGPL (Ball guide bearing)

Bore (mm)	A			DB	E		
	30st⩾	30st<100st⩾	100st<		30st⩾	30st<100st⩾	100st<
12	43	55	85	6	1	13	43
16	49	65	95	8	3	19	49

MGPM (Sliding bearing)

Bore (mm)	A			DB	E		
	50st⩾	50st<200st⩾	200st<		50st⩾	50st<100st⩾	100st<
20	53	84.5	122	16	0	31.5	69
25	53.5	85	122	20	0	31.5	68.5

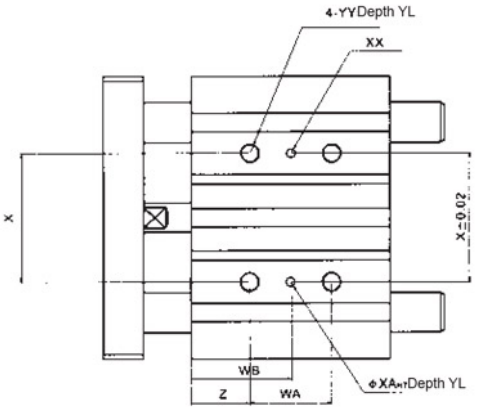
MGPL (Ball guide bearing)

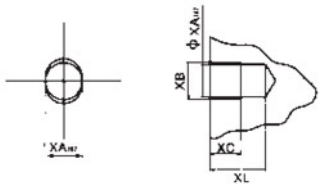
Bore (mm)	A				DB	E			
	30st⩾	30st<100st⩾	50st<200st⩾	200st<		30st⩾	30st<100st⩾	50st<200st⩾	200st<
20	63	80	104	122	10	10	27	51	69
25	69.5	80.5	104.5	122	13	16	32	51	68.5

MGP Series Compact Guide Cylinder

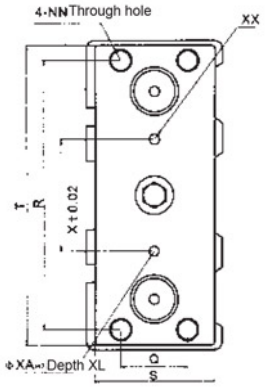
ϕ32~ϕ63

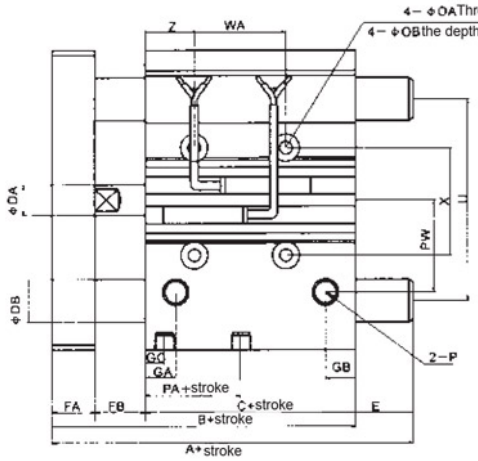
(ϕ12~ϕ100)

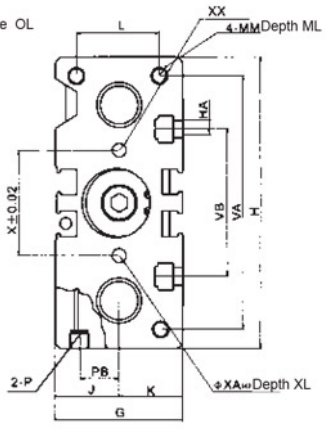




XX Detail drawing







MGPM,MGPL Dimension

Bore (mm)	Stander Stroke	B	C	DA	FA	FB	G	GA	GB	H	HA	J	K	L	MM	ML	NN	OA	OB	OL	P	PA	PB	PW	Q
32	25,50,75,100, 125,150,175,200	59.5	37.5	16	12	10	48	12.5	9	112	M6	24	24	34	M8×1.25	20	M8×1.25	6.6	11	7.5	Rc1/8	7	15	34	30
40		66	44	16	12	10	54	14	10	120	M6	27	27	40	M8×1.25	20	M8×1.25	6.6	11	7.5	Rc1/8	13	18	38	30
50		72	44	20	16	12	64	14	11	148	M8	32	32	46	M10×1.5	22	M10×1.5	8.6	14	9	Rc1/8	9	21.5	47	40
63		77	49	20	16	12	78	16.5	13.5	162	M10	39	39	58	M10×1.5	22	M10×1.5	8.6	14	9	Rc1/8	14	28	55	50

Bore (mm)	Stander Stroke	R	S	T	U	VA	VB	WA			WB			X	XA	XB	XC	XL	YY	YL	Z
								25st	50,75,100st	100st	25st	50,75,100st	100st								
32	25,50,75,100, 125,150,175,200	96	44	110	78	98	63	24	48	124	33	45	83	42	4	4.5	3	6	M8×1.25	16	21
40		104	44	118	86	106	72	24	48	124	34	46	84	50	4	4.5	3	6	M8×1.25	16	22
50		130	60	146	110	130	92	24	48	124	36	48	86	66	5	6	4	8	M10×1.5	20	24
63		130	70	158	124	142	110	28	52	128	38	50	88	80	5	6	4	8	M10×1.5	20	24

MGPM (Sliding bearing)

Bore (mm)	A			DB	E		
	50st≥	50st<200st≥	200st<		50st≥	50st<200st≥	200st<
32	97	102	140	20	37.5	42.5	80.5
40	97	102	140	20	31	36	74
50	106.5	118	161	25	34.5	46	89
63	106.5	118	161	25	29.5	41	84

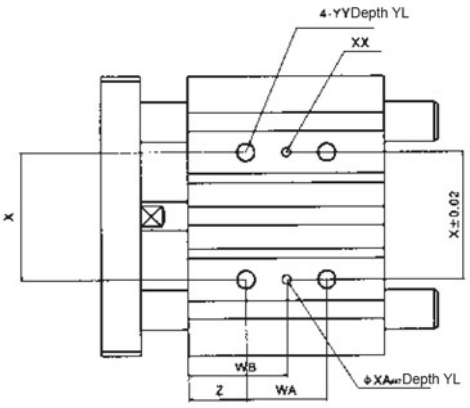
MGPL (Ball guide bearing)

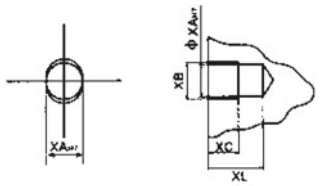
Bore (mm)	A				DB	E			
	50st≥	50st<100st≥	100st<200st≥	200st<		50st≥	50st<100st≥	100st<200st≥	200st<
32	81	98	140	140	16	21.5	38.5	58.5	80
40	81	98	140	140	16	15	32	52	74
50	93	114	161	161	20	21	42	62	89
63	93	114	161	161	20	16	37	57	84

Figure Dimension(mm)

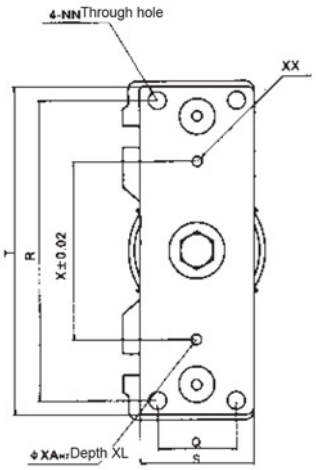
(φ12–φ100)

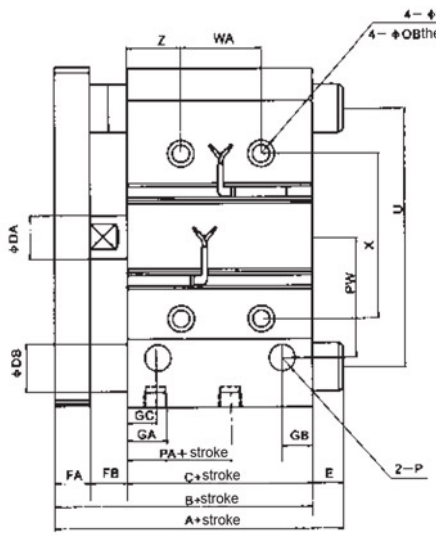
φ80~φ100

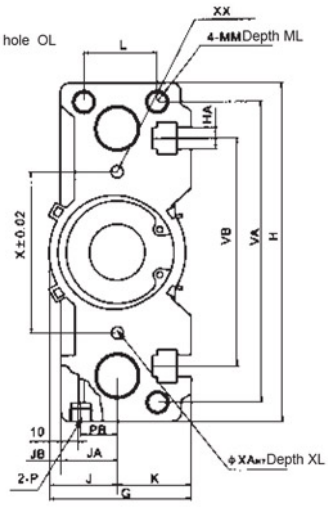




XX Detail drawing







MGPM,MGPL Dimension

Bore (mm)	Stander Stroke	B	C	DA	FA	FB	G	GA	GB	H	HA	J	JA	JB	K	L	MM	ML	NN	OA	OB	OL	P	PA	PB	PW
80	25,50,75,100, 125,150,175,200	96.5	56.5	25	22	18	91.5	19	15.5	202	M12	45.5	38	7.5	46	54	M12×1.75	30	M12×1.75	10.6	17.5	8	Rc3/8	14.5	25.5	74
100		116	66	30	25	25	111.5	23	19	240	M14	55.5	45	10.5	56	62	M14×2.0	32	M14×2.0	12.5	20	8	Rc3/8	17.5	32.5	89

Bore (mm)	Stander Stroke	Q	R	S	T	U	VA	VB	WA			WB			X	XA	XB	XC	XL	YY	YL	Z
									25st	50,75,100st	100st	25st	50,75,100st	100st								
80	25,50,75,100, 125,150,175,200	52	174	75	198	156	180	140	28	52	128	42	54	92	100	6	7	5	10	M12×1.75	24	28
100		64	210	90	236	188	210	166	48	72	148	35	47	85	124	6	7	5	10	M14×2.0	28	11

MGPM (Sliding bearing)

Bore (mm)	A			DB	E		
	50st≥	50st<200st≥	200st<		50st≥	50st<200st≥	200st<
80	115	142	193	30	18.5	45.5	96.5
100	137	162	203	36	21	46	87

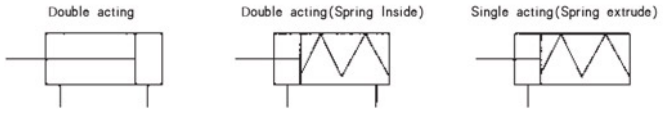
MGPL (Ball guide bearing)

Bore (mm)	A				DB	E			
	25st≥	25st<50st≥	50st<200st≥	200st<		25st≥	25st<50st≥	50st<200st≥	200st<
80	109.5	130	160	193	25	13	33.5	63.5	96.5
100	121	147	180	203	30	5	31	64	87

RSQ Series Stopper Cylinder

ϕ 20– ϕ 50

Sign



Standard Specification

Bore(mm)	20	32	40	50
Action	Doubla acting(Spring inside)、Single acting(Spring extrude)			
Fired rod type	Cylinderical、Bian columnar、Idler wheel	Round pde、Flat pole、Roller lever、Lever roller(Shock absorber inside)		
Fluid	Air			
Proof Pressure	1.5Mpa(15.3kgf/cm²)			
Max pressure	1.0Mpa(10.2kgf/cm²)			
Envienrnent and flerid ternper atcce	–10～70℃(No Freeze)			
Cushion type	Two end cushion			
Cushion stroke	+1.4(mm)、0			
* Lubrication	No			
Installation	through hole、Both ends femal hread(General purpose)			
Pipe Size	Rc(PT)1/8			

*If Lubrication、please use ISOVG32

Choosen Type

Basic Type：RSQ　B | 20 | — | 15 | D | R

Magnet inside Type：RSDQ　B | 20 | — | 15 | D | R

Install
B–Through
A–Both ends femal thread

Bore
20– ϕ 20mm
32– ϕ 32mm
40– ϕ 40mm
50– ϕ 50mm

Stroke

Acting
D–Double Act
B–Double Act (Spring inside)
T–Single Act (Spring extrude)

Bore
No Mark – Round pde (ϕ 20 – ϕ 50mm)
K–Flat pole (ϕ 20 – ϕ 50mm)
R–Roller lever (ϕ 20 – ϕ 50mm)
L–Lever roller (Shock absorber inside) (ϕ 32 – ϕ 50mm)
B–Lever roller (Absorber inside) (ϕ 32 – ϕ 50mm)
C–Lever roller (Absorber inside、Adjustable absorber inside) (ϕ 32 – ϕ 50mm)
D–Lever roller (Shock absorber inside、Autolock) (ϕ 32 – ϕ 50mm)
E–Lever roller (Absorber inside、Adjustable absorber inside and autolock) (ϕ 32 – ϕ 50mm)

■ Order Example

1)Bore.20、Stroke.15、through hole、double acting(Spring inside)、Flat pole
Code.RSQB20–15BK
2)Bore.40、Stroke.30、Magnet inside、Both ends femal thread、single acting(Spring extrude)、Lever roller(Shock absorber inside)
Code.RSDQA40–30TC

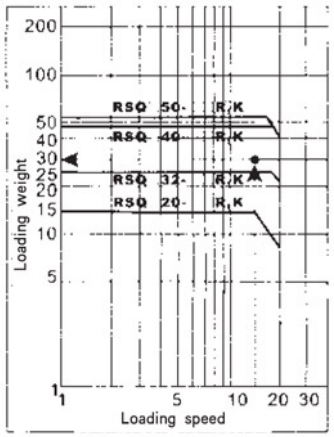
Stroke/Magnetic Switch Opition

Bore (mm)	Standard Stroke	Magnetic Switch
		Tunnel instllation type
12	10、15、20	D–A72L D–F79L
16		D–A73L D–J79L
20	10、15、20	D–A76HL
25		D–A80L

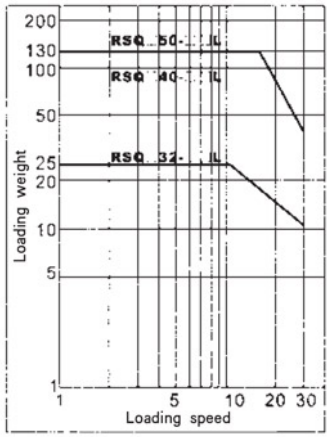
*Magnetic switch and channcterstin please refer to th magnetic switch

Fix–rod eperating range

Round pde、Flat pole、Roller lever

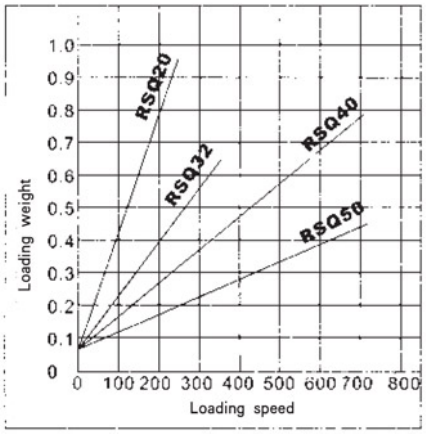


Lever Roller (shock absorber inside)



Transverse loading & Operating

Round pole、Flat pole、Roller lever

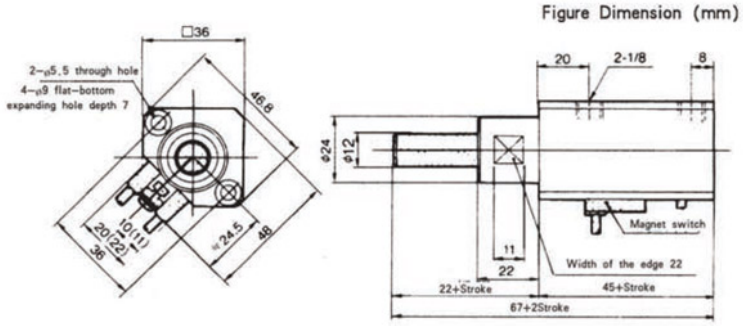


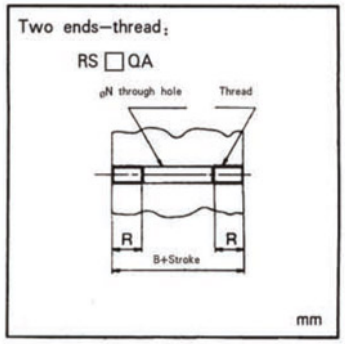
RSQ Series Stopper Cylinder

ϕ 20– ϕ 50

(Bore ϕ20/RS□QB20-□ □)

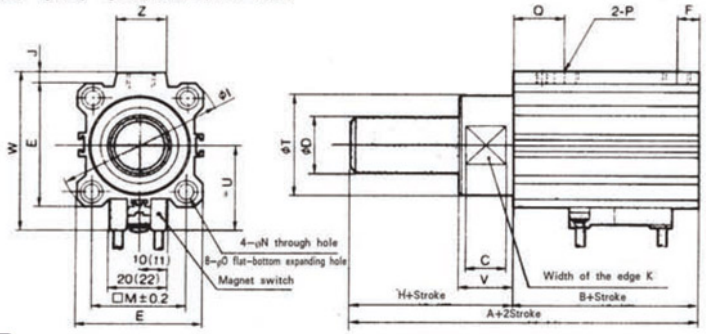
Figure Dimension (mm)





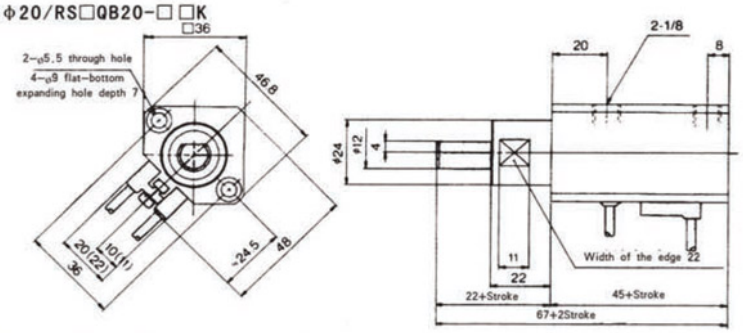
Bore(mm)	B	N	O	R
20	45	5.5	M6×1.0	10
32	48	5.5	M6×1.0	10
40	52.5	5.5	M6×1.0	10
50	54	6.6	M8×1.25	14

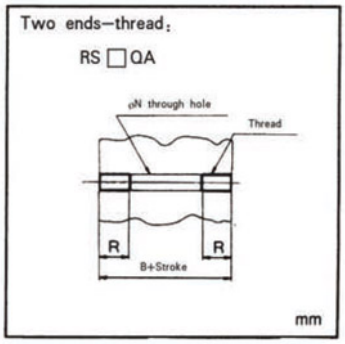
Bore ϕ32, ϕ40, ϕ50/RS□QB□-□ □



Flat Pole

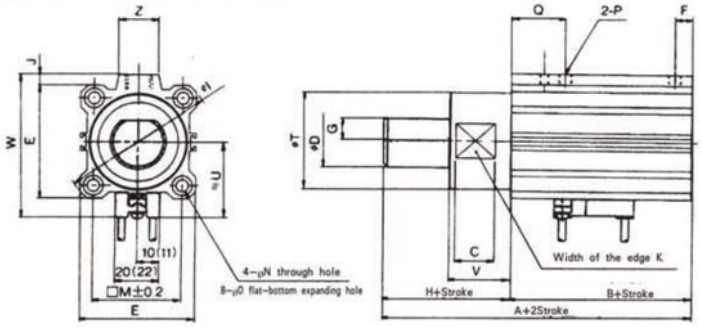
Bore ϕ20/RS□QB20-□ □K





Bore(mm)	B	N	O	R
20	45	5.5	M6×1.0	10
32	48	5.5	M6×1.0	10
40	52.5	5.5	M6×1.0	10
50	54	6.6	M8×1.25	14

Bore ϕ20, ϕ40, ϕ50/RS□QB□-□ □K



mm

Bore(mm)	A	B	C	D	E	F	G	H	I	J	K	M	N	ϕO	P	Q	R	T	U	V	W	Z
32	68	48	15	20	45	7.5	8	20	60	4.5	32	34	5.5	9 Depth7	1/8	20	10	36	31.5	20	58.5	18
40	80.5	52.5	18	25	52	8	10	28	69	5	41	40	5.5	9 Depth7	1/8	24.5	10	44	35	28	66	18
50	82	54	21	25	64	8	10	28	86	7	50	50	6.6	11 Depth8	1/8	24.5	14	56	41	28	80	22

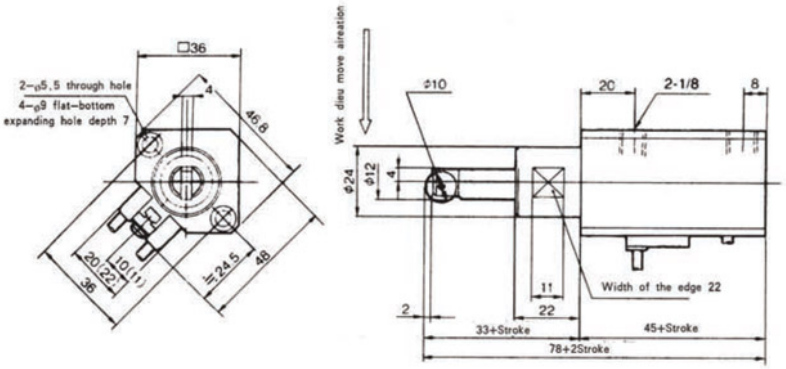
Note 1) Non-magnetic switch figure dimensionsaw as the above
Note 2) D-A7 and D-A8 dimension as above
Note 3) D-A7 □ H,D-A80H,D-F79 and D-J79 dimension in brackets as bove
Note 4) Extended piston rod dimension as above

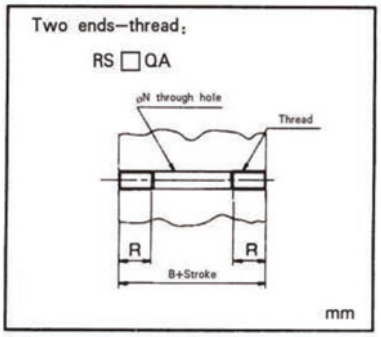
RSQ Series Stopper Cylinder

φ 20– φ 50

Rdler Lever

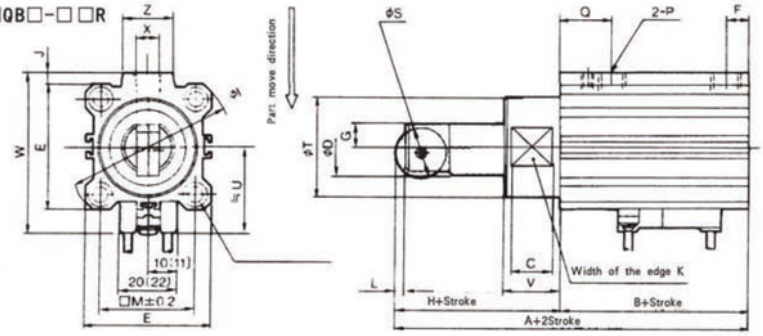
Figure Dimension (mm)





Bore(mm)	B	N	O	R
20	45	5.5	M6×1.0	10
32	48	5.5	M6×1.0	10
40	52.5	5.5	M6×1.0	10
50	54	6.6	M8×1.25	14

Bore φ32, φ40, φ50/RS□QB□-□ □R



Note 1) Non–magnetic switch figure dimension same with above draw.
Note 2) D–A7 and D–A8 dimension as above
Note 3) D–A7 □H, D–A80H, D–F79 and D–J79 dimension in brackets as bove
Note 4) Extended piston rod dimension as above

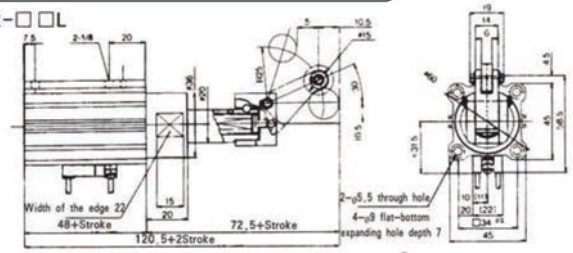
mm

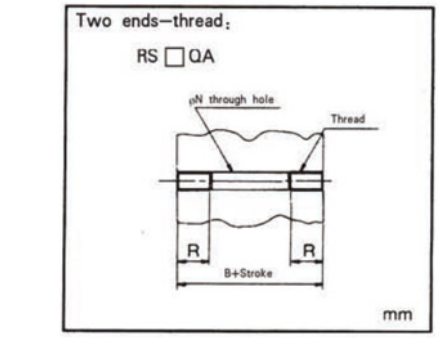
Bore(mm)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	φO	P	Q	R	S	T	U	V	W	X	Z
32	87	48	15	20	45	7.5	8	20	60	4.5	32	3	34	5.5	9 Depth7	1/8	20	10	18	36	31.5	20	58.5	8	18
40	105.5	52.5	18	25	52	8	10	28	69	5	41	4	40	5.5	9 Depth7	1/8	24.5	10	24	44	35	28	66	9	18
50	107	54	21	25	64	8	10	28	86	7	50	4	50	6.6	11 Depth 8	1/8	24.5	14	24	56	41	28	80	9	22

Note 1) Non–magnetic switch figure dimensionsaw as the above
Note 2) D–A7 and D–A8 dimension as above
Note 3) D–A7 □ H,D–A80H,D–F79 and D–J79 dimension in brackets as bove
Note 4) Extended piston rod dimension as above

Leverage Pulley type(Shock obsovber inside)

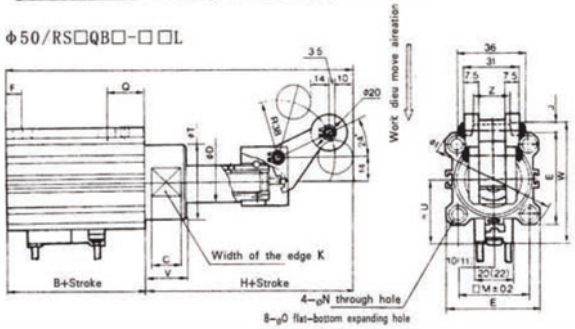
Bore φ32/RS□QB32-□ □L





Bore (mm)	B	N	O	R
32	48	5.5	M6×1.0	10
40	52.5	5.5	M6×1.0	10
50	54	6.6	M8×1.25	14

Bore φ40, φ50/RS□QB□-□ □L



mm

Bore(mm)	A	B	C	D	E	F	G	H	I	J	K	M	N	φO	P	Q	R	T	U	V	W	Z
40	80.5	52.5	18	25	52	8	10	28	69	5	41	40	5.5	9 Depth7	1/8	24.5	10	44	35	28	66	18
50	82	54	21	25	64	8	10	28	86	7	50	50	6.6	11 Depth 8	1/8	24.5	14	56	41	28	80	22

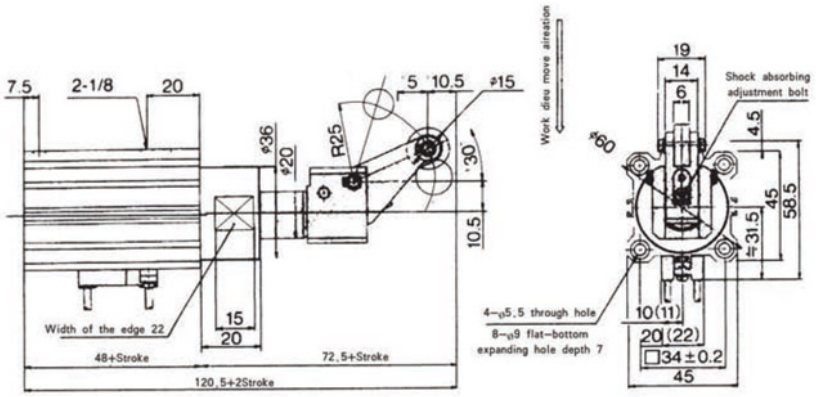
Note 1) Non–magnetic switch figure dimensionsaw as the above
Note 2) D–A7 and D–A8 dimension as above
Note 3) D–A7 □ H,D–A80H,D–F79 and D–J79 dimension in brackets as bove
Note 4) Extended piston rod dimension as above

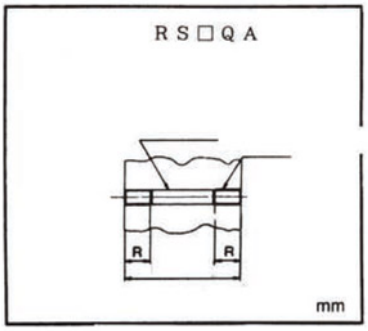
Leverage pulley type(Adjustable strok absorver anisde and self–locking deviles)

φ 20– φ 50

φ32/RS□QB32-□ □B

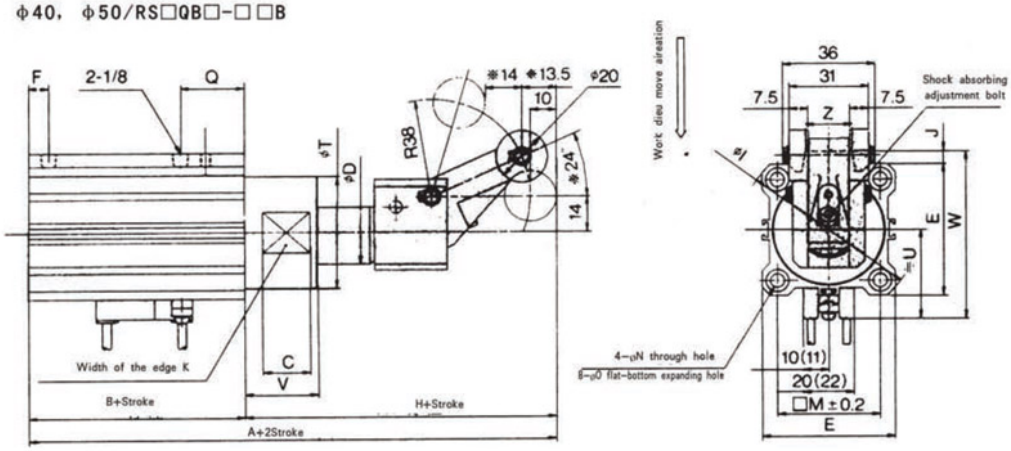
Figure Dimension (mm)





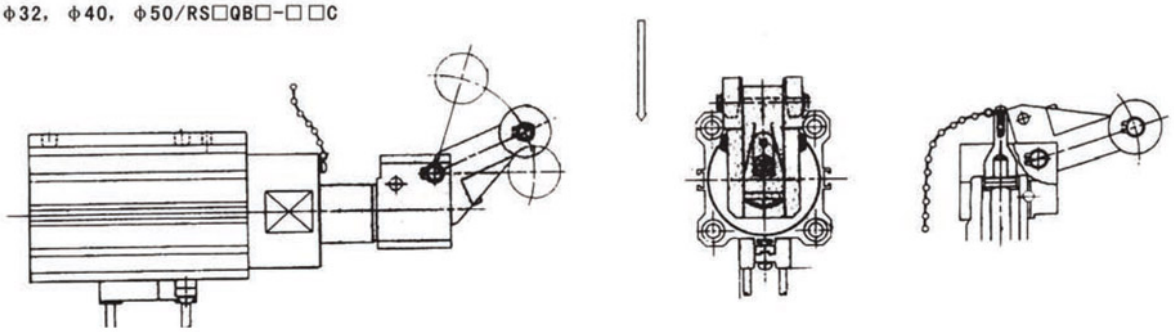
Bore(mm)	B	N	O	R
32	48	5.5	M6 1.0	10
40	52.5	5.5	M6 1.0	10
50	54	6.6	M8 1.25	14

φ40, φ50/RS□QB□-□ □B



Leverage pulley type(Adjustable shock absorver inside and autolock device

Bore φ32, φ40, φ50/RS□QB□-□ □C



* Inside suspended device dimenson same as above

mm

Bore(mm)	A	B	C	D	E	F	G	H	I	J	K	M	N	φO	P	Q	R	T	U	V	W	Z
40	80.5	52.5	18	25	52	8	10	28	69	5	41	40	5.5	9 Depth7	1/8	24.5	10	44	35	28	66	18
50	82	54	21	25	64	8	10	28	86	7	50	50	6.6	11 Depth8	1/8	24.5	14	56	41	28	80	22

Note 1) Non–magnetic switch figure dimension same as the above

Note 2) D–A7 and D–A8 dimension as above

Note 3) D–A7 □ H,D–A80H,D–F79 and D–J79 dimension in brackets as bove

Note 4) Extended piston rod dimension as above

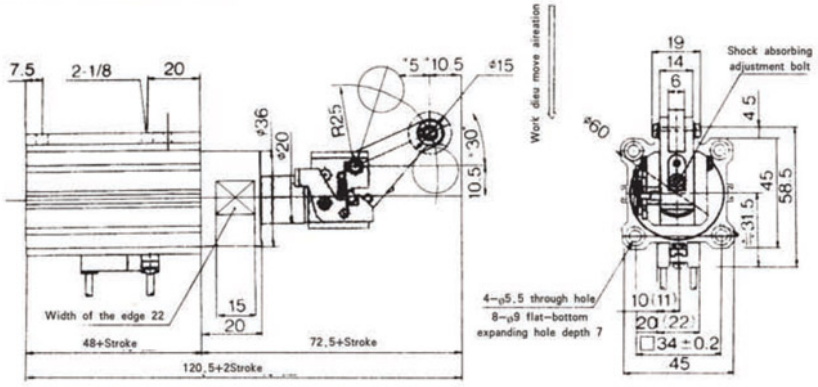
Note 5) The dimension with * adjust ment of shock absorber with changing the dimension then shock–absorbing effect reaching maximal as shown above

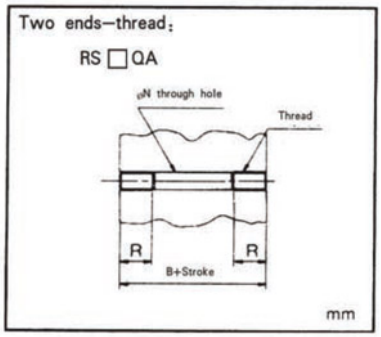
Leverage pulley type(Adjustable strok absorver anisde and self–locking deviles)

ϕ 20– ϕ 50

Bore ϕ32/RS□QB32-□ □D

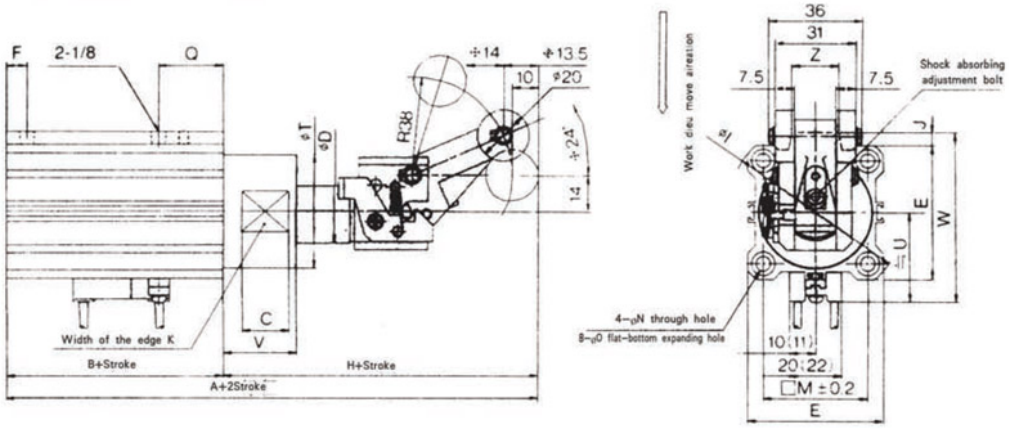
Figure Dimension (mm)





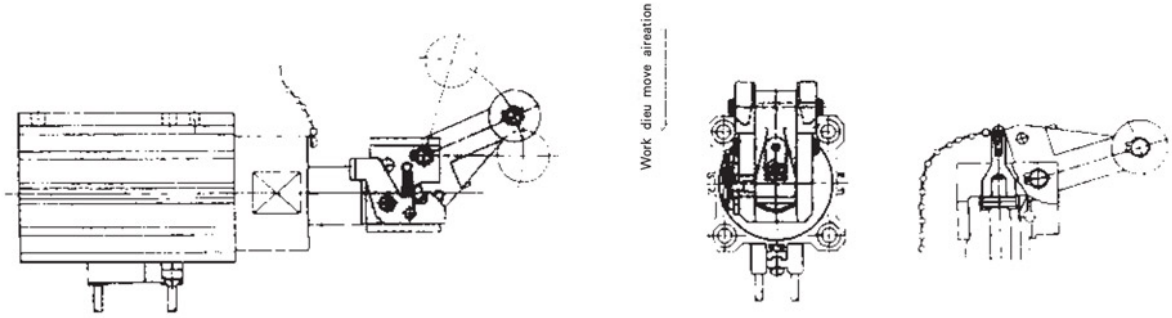
Bore (mm)	B	N	O	R
32	48	5.5	M6×1.0	10
40	52.5	5.5	M6×1.0	10
50	54	6.6	M8×1.25	14

Bore ϕ40, ϕ50/RS□QB□-□ □D



Leverage pulley type(Adjustable shock absorver inside and autolock device

Bore: ϕ32, ϕ40, ϕ50/RS□QB□-□ □E



* Inside suspended device dimenson same as above

mm

Bore(mm)	A	B	C	D	E	F	G	H	I	J	K	M	N	ϕO	P	Q	R	T	U	V	W	Z
40	80.5	52.5	18	25	52	8	10	28	69	5	41	40	5.5	9 Depth7	1/8	24.5	10	44	35	28	66	18
50	82	54	21	25	64	8	10	28	86	7	50	50	6.6	11 Depth8	1/8	24.5	14	56	41	28	80	22

Note 1) Non–magnetic switch figure dimension same as the above

Note 2) D–A7 and D–A8 dimension as above

Note 3) D–A7 □ H, D–A80H, D–F79 and D–J79 dimension in brackets as bove

Note 4) Extended piston rod dimension as above

Note 5) The dimension with * adjust ment of shock absorber with changing the dimension then shock–absorbing effect reaching maximal as shown above

TGH Series Stopper Cylinder

φ6– φ63

• Product characteristic

This cylinder is usually used on the transport belt system. When the piston rod protrude, it will stop the work piece on the belt instead of stop the belt system, and when the piston rod retract the belt will transport the work piece again.
Thicker piston rod can increase the power and also append shock absorber, and lever trolley can make it more conveniently.

■ Graphics Sign

Choosen Type

TGH — 20 X 15

TGH: standard double acting

20 X 15: bore X stroke

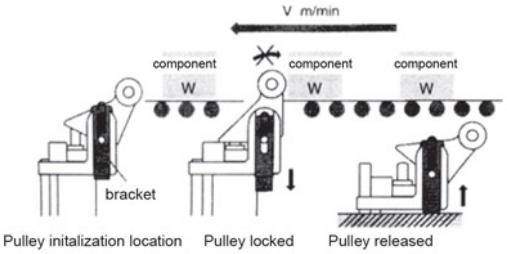
■ Specification

Bore(mm)	50	63
Acting	Doubla acting (Spring inside) 、Single acting (Spring extrude)	
Applicable medium	Air	
Lever	Lever trolley	
Pressure range	1.0MPa	
Proof pressure	1.5MPa	
Temperature range	−10 ~60°C (No Freeze)	
Cushion type	Rubber cushion (Stangard)	
Cushion stroke	+1.4 mm	0 mm
Lubricating	Not required	
Port size	M5x0.8	G1/8

Note:If lubricating,please use ISOVG32.

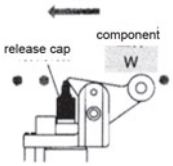
Random choose

With lock



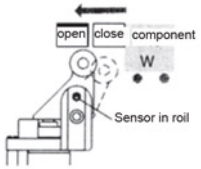
The lock set can avoid the work piece bounce after hit to pulley or shock absorber.

With release cap



work piece can pass the cylinder but won't be stopped by the pulley.

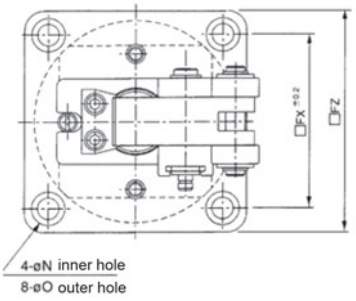
Inductor for locating the trolley



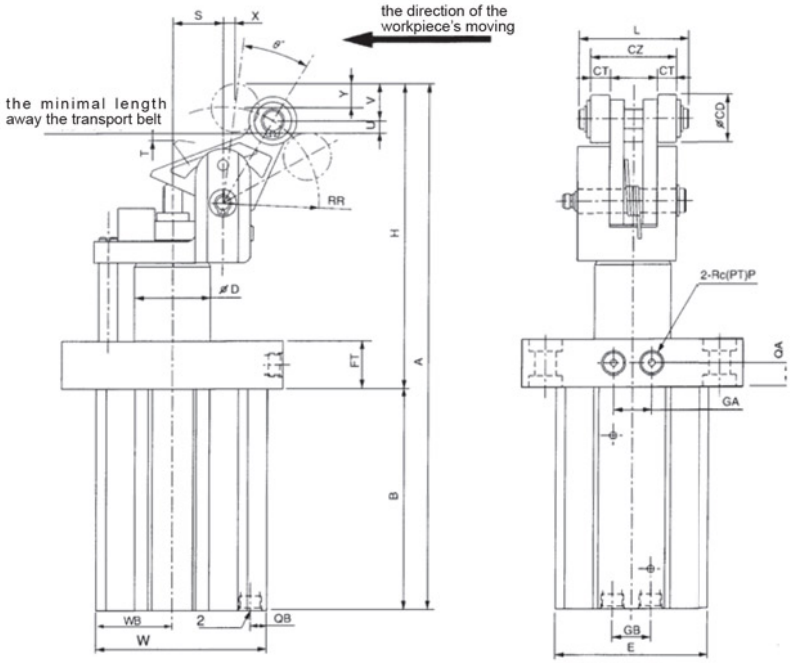
When the pulley is on the vertical place, the inductor can indicate that the work piece is on the right place.

■ Figure Dimension

● TGH50–



● TGH63–



Bore	Stroke	A	B	CD	CT	CZ	D	E	FT	FX	FZ	GA	GB	H	øI	L	N	O	P	QA	QB
ø50	30	221	93	20	8	36	32	64	20	73	93	16	16	128	85	45	9	14 Depth 5	1/8	10	7
ø63	30	251.5	107	20	10	45	40	77	25	90	114	24	24	144.5	103	54	11	18 Depth 6	1/4	12.5	8.5

Bore	Stroke	R	S	T	U	V	W	WB	X	Y	θ°
ø50	30	40	21	2	5.5	15.5	72	49	5	10	24
ø63	30	47	24.5	3.5	6.4	16	87.5	38.5	5	10	24

Note: the dimention are the same for cylinder with magnet switch or without.
Note: the dimenstion is in the case of that the piston rod protrude.

MK/MK2 Series Rotary Clamp Cylinder

MK series is standard type.
MK2 series is high load type.(Φ20~Φ63)
With the same bore, it can load greater inertia.

Technical parameters

Bore(mm)	12	16	20	25	32	40	50	63
Working medium	Double action							
Action type	Air							
Max using pressure	1.0MPa							
Min using pressure	0.1MPa							
Environment and fluid temperature	Switch with magnet:−10~+60℃, Switch with no magnet:−10~+70℃							
Using speed range	50~200mm/s							
Cushion	Rubber cushion							
Stroke tolarance	$^{+0.6}_{-0.4}$							
Oil supply	No need							
Rotary angle	90° ±10°							
Rotary direction	Left Right							
Rotary stroke	7.5		9.5		15		19	
Clamping stroke	10 / 20						20 / 50	
Allowable torque	1	3.8	7	13	27	47	107	182
Clamping force	40	75	100	185	300	525	825	1400
Piston rod no rotary precision	±1.4°	±1.2°			±0.9°		±0.7°	
Piping size	M5×0.8				Rc1/8		Rc1/4	

Choosen Type

High load type	MK2	B	20	— 10	R	F
Standard type	MK	A	20	— 10	R	F

Assembling type
(ꀀNXU MNlNURKGTJ HUZNKTJ YULZNK
IUS S UTYIXK YZGTJGX lllY ZGHRK
HUXK
Z UKTJ YZNXU MNlNURK
- 4 UTXUJ YOKlRGTMKZ VKlllY ZGHRK
HUXKd

Bore
12: ϕ 12mm
16: ϕ 16mm
20: ϕ 20mm
25: ϕ 25mm
32: ϕ 32mm
40: ϕ 40mm
50: ϕ 50mm
63: ϕ 63mm

Clamping stroke
10:10mm Suitable bore(12~40)
20:20mm Suitable bore(12~63)
50:50mm Suitable bore(50,63)

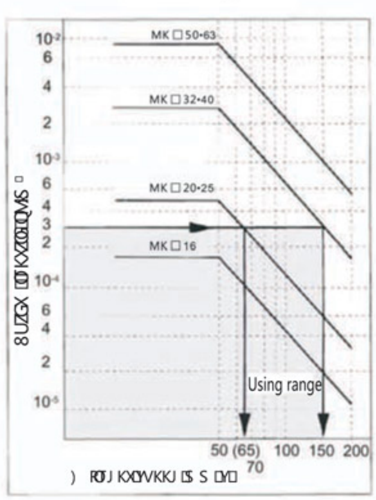
Rotary direction
RUUYKTZUIRGS V
8 IRUIQ YK
rotary
2 GTZIRUIQ YK
rotary

9 HKIZUVZUTY
TUS GXQYZGTJGX XUJKTJ
ZKXTGRZNXKGJ
3 XUJKTJS GROMlRGZUT
HUZNYOKY
F: non rod side with convex
ZGHRK
4 ZNZNKGXS

Overloaded type with no "M"

Characteristic curve

Standard type



Overloaded type

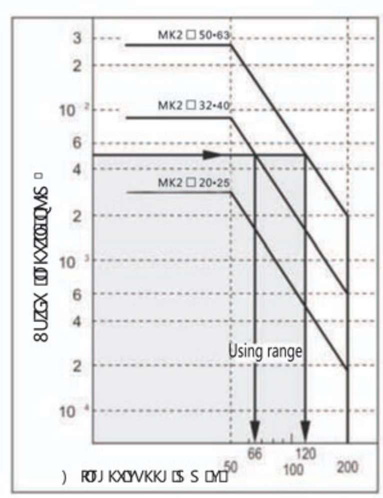
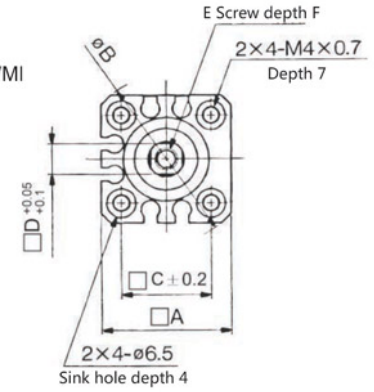
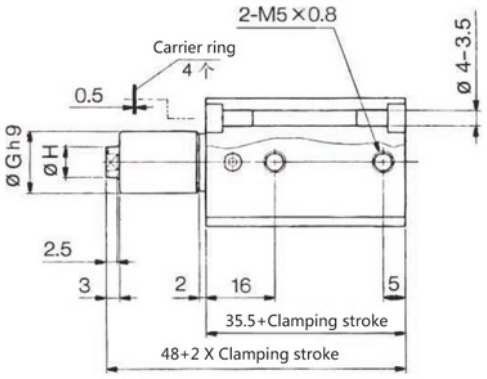


Figure Dimension

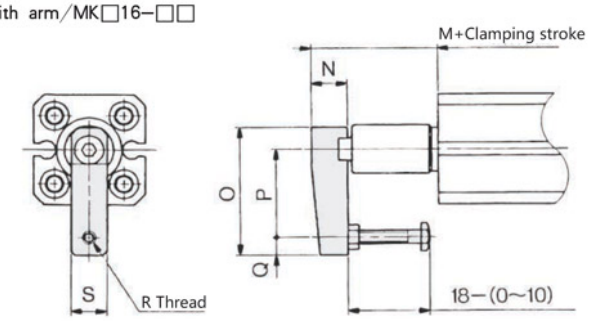
Through hole (basic type)/MI

Φ16mm





With arm/MK□16-□□



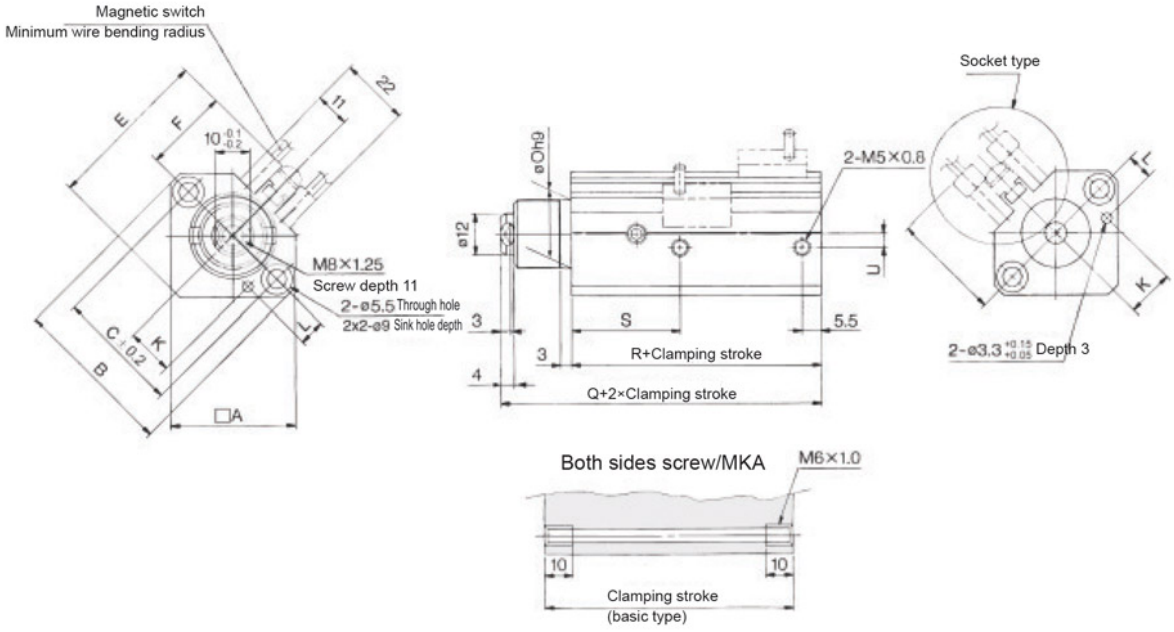
Through hole (basic type)

Model	A	B	C	D	E	F	Gh9	H
MKB16	29	38	20	7	M5X0.8	6.5	14	8

With arm

Model	M	N	O	P	Q	R	S
MK□16-□□	21.5	11	36	25	5	M4x0.7	11

Through hole (basic type)/MKB Φ20mm Φ25mm



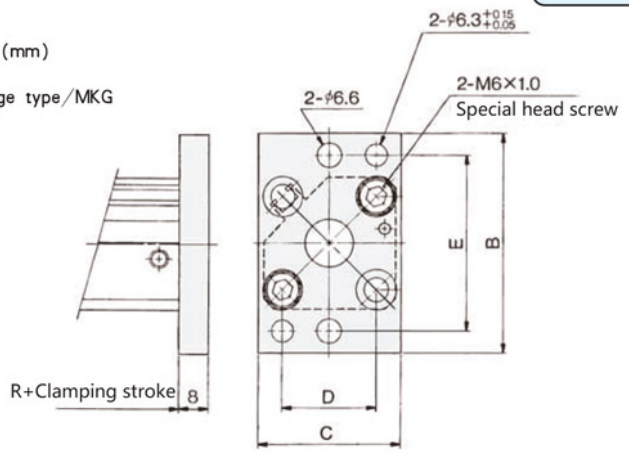
With arm

Model	A	B	C	E	F	K	L	OH9	Q	R	S	U
MKB20	36	46.8	36	48	24.5	13.5 ±0.15	7.5 ±0.15	20 0 -0.052	72.5	62	31	4
MKB25	40	52	40	53.8	27.5	16 ±0.15	8 ±0.15	23 0 -0.052	73.5	63	32	5

Remark:When the piston rod is fully extended, the clamping stroke and rotary stroke are added to the appropriate size.

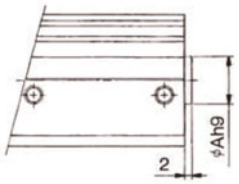
■ Figure Dimension(mm)

Non rod side flange type/MKG



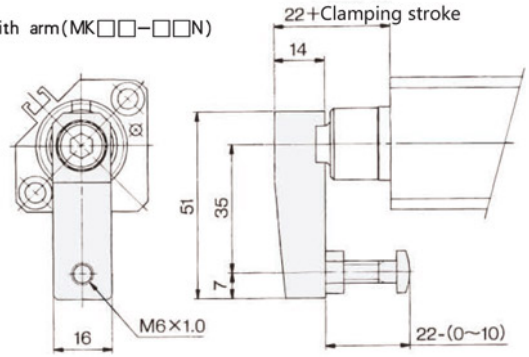
Model	B	C	D	E
MKG20	60	39	25.5 ±0.1	48 ±0.15
MKG25	64	42	28 ±0.1	52 ±0.15

Non rod side with convex table

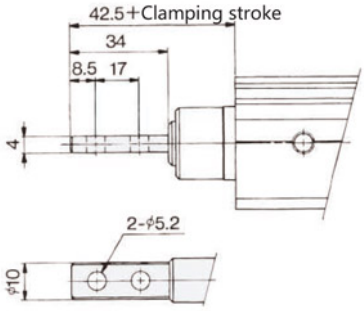


Model	Ah9
MK□20-□□F	13 0 -0.043
MK□25-□□F	15 0 -0.043

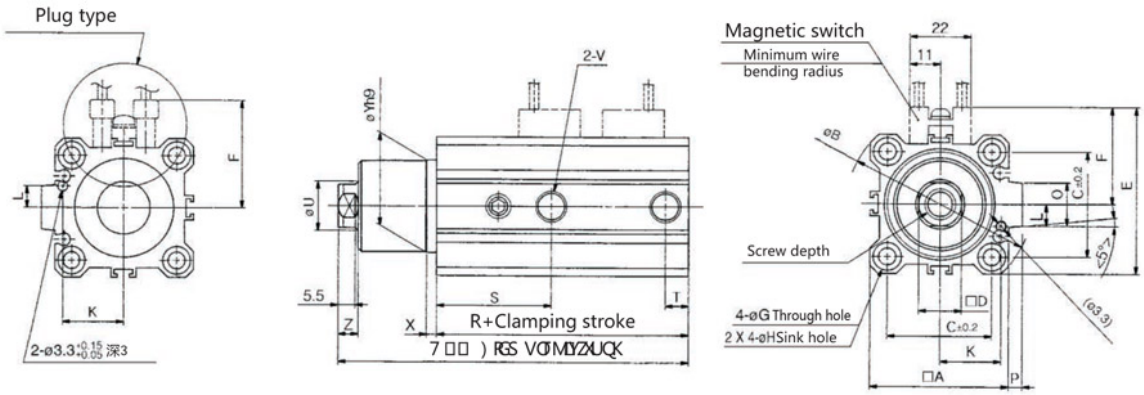
With arm(MK□□−□□N)



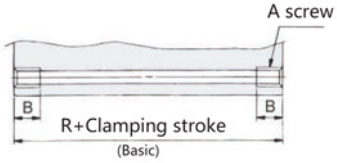
Rod end mill(MK□□−□□M)



Through hole (basic type)/MKB Φ32 Φ40 Φ50 Φ63



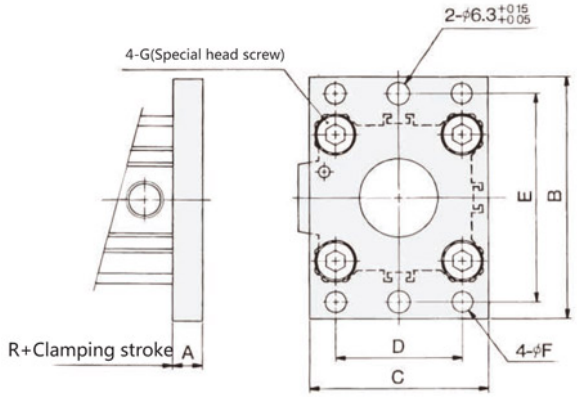
Model	A	B
MKA32	M6X1.0	10
MKA40	M6X1.0	10
MKA50	M8X1.25	14
MKA63	M10X1.5	18



■ Figure Dimension(mm)

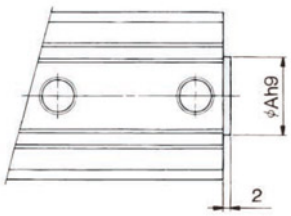
Model	A	B	C	D	E	F	G	H	I	J	K	L	O	P	Q	R	S	T	U	V	X	Yh9	Z
MKB32	45	60	34	$14^{-0.1}_{-0.2}$	54	13.5	5.5	9 Depth 7	M10X1.5	12	$20^{\pm0.15}$	$7^{\pm0.15}$	18	4.5	93.5	71.5	37	7.5	16	Rc1/8	3	$30^{0}_{-0.062}$	6.5
MKB40	52	69	40	$14^{-0.1}_{-0.2}$	61	35	5.5	9 Depth 7	M10X1.5	12	$24^{\pm0.15}$	$7^{\pm0.15}$	18	5	94.5	65	29.5	8	16	Rc1/8	3	$30^{0}_{-0.062}$	6.5
MKB50	64	86	50	$17^{-0.1}_{-0.2}$	73	41	6.6	11 Depth 8	M12X1.75	15	$30^{\pm0.15}$	$8^{\pm0.15}$	22	7	112	76.5	34	10.5	20	Rc1/4	3.5	$37^{0}_{-0.062}$	7.5
MKB63	77	103	60	$17^{-0.1}_{-0.2}$	86	47.5	9	14 Depth 10.5	M12X1.75	15	$35^{\pm0.15}$	$9^{\pm0.15}$	22	7	115	80	35	10.5	20	Rc1/4	3.5	$48^{0}_{-0.062}$	7.5

Non rod side flange type/MKG



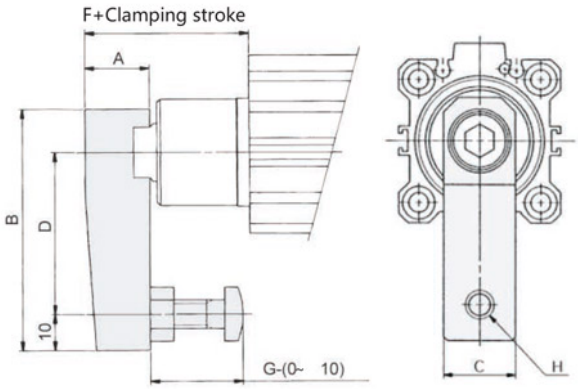
Model	A	B	C	D	E	F	C
MKG32	8	65	48	$34^{\pm0.1}$	$56^{\pm0.15}$	5.5	M6X1.0
MKG40	8	72	54	$40^{\pm0.1}$	$62^{\pm0.15}$	5.5	M6X1.0
MKG50	9	89	67	$50^{\pm0.1}$	$76^{\pm0.15}$	6.6	M8X1.25
MKG63	9	08	80	$60^{\pm0.1}$	$92^{\pm0.15}$	9	M10X1.5

Non rod side with convex table



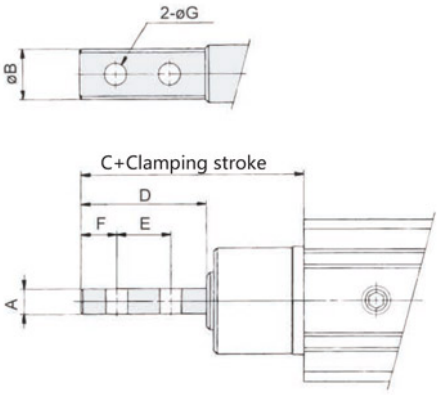
Model	Ah9
MK□32-□□F	$21^{0}_{-0.052}$
MK□40-□□F	$28^{0}_{-0.052}$
MK□50-□□F	$35^{0}_{-0.062}$
MK□63-□□F	$35^{0}_{-0.062}$

With arm



Model	A	B	C	D	F	G	H
MK□32-□□N	18	67	20	45	5.5	25	M8X1.25
MK□40-□□N	18	67	20	45	43	25	M8X1.25
MK□50-□□N	22	88	22	65	53	40	M10X1.5
MK□63-□□N	22	88	22	65	2.5	40	M10X1.5

Rod end mill



Model	A	B	C	D	E	F	G
MK□32-□□M	6	14	53.5	36	18	9	6.2
MK□40-□□M	6	14	61	36	18	9	6.2
MK□50-□□M	8	18	77	46	23	11.5	8.2
MK□63-□□M	8	18	76.5	46	23	11.5	8.2

TMN Series Clamp Cylinder

ϕ 50– ϕ 63

TMN Series
(Integral type)

TMQ Series
(Split type)

Choosen Type

Basic Type: TMN (Integral type) / TMQ (Split type)

Magnet inside Type: TMNS (Integral type) / TMQS (Split type)

		50	—	100
B		50	—	100

Ear width of the hinge
Blank–16.5mm
B–19.5mm

Bore
40– ϕ 40mm
50– ϕ 50mm
63– ϕ 63mm

Stroke

■ Welding equipment for automotive use

1、For demolition 2、Compact and light weight 3、Without lubrication
4、Built–in speed controller 5、No dust jacket
6、Electromagnetic fields can be used to generate welding equipment

■ Order Example

1)Bore:50,Stroke :100,Basic,Earring Width:16.5mm
Code:TMN50–100

2)Bore:63,Stroke:50,Built–in ring–type ,Earring Width:19.5mm
Code :TMNSB63–50K

■ Standard Specification

Ear width of the hinge	16.5mm	TMN	TMQ
	19.5mm	TMNB	TMQB

Type				A
TMN63	TMQ63	TMN50	TMQ50	16.5
TMNB63	TMQB63	TMNB50	TMQB50	19.5

■ Specification

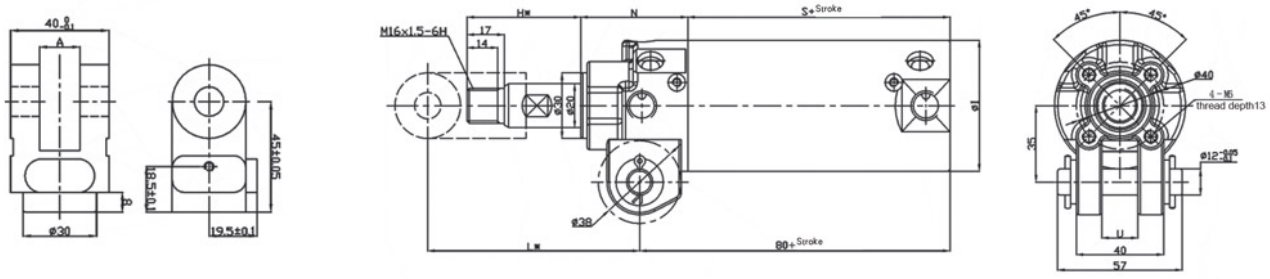
Bore(mm)	40	50	63
fluid	compressed air after filtration		
pressure–proof	1.5Mpa(15kgf/cm2)		
max operating pressure	1.0Mpa(10kgf/cm2)		
min operating pressure	0.1Mpa(1kgf/cm2)		
environment and fluid temperature	–5～60℃		
piston speed	50～500 mm/s		
air cushion	yes		
lubrication	unnecessary		
thread tolerance	6H		
stroke tolerance	+1.5(mm),0		
speed adjusting	yes		
mounting and fixed way	double earbob		
connecting size	G1/4		

TMN Series Clamp Cylinder

ϕ 50– ϕ 63

■ Figure Dimension(mm)

TMN Series

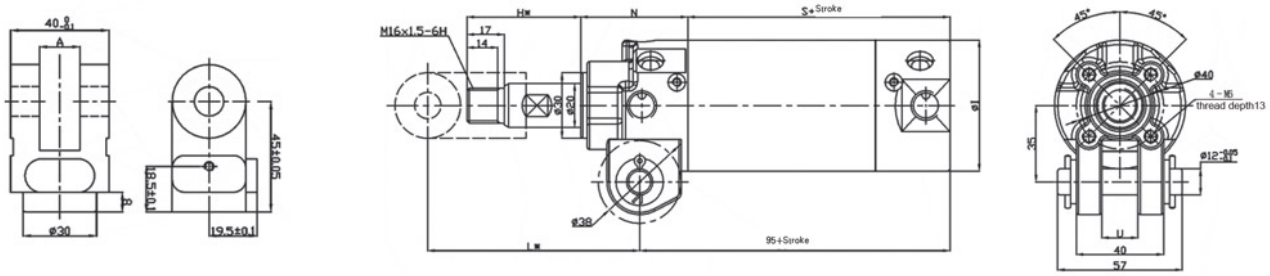


Bore(mm)	H	ϕ I	L	N	S
50	52	58	97	49	58
63	52	72	97	49	58

N(standard)

symbol / stroke / bore(mm)	H					L				
	50	75	100	125	150	50	75	100	125	150
50	52	62	70	83	83	97	107	115	128	128
63	52	62	70	83	83	97	107	115	128	128

TMQ Series



Bore(mm)	H	ϕ I	L	N	S
50	52	58	97	49	72
63	52	72	97	49	72

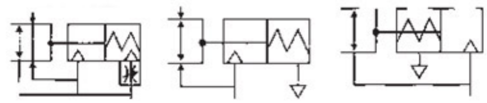
N(standard)

symbol / stroke / bore(mm)	H					L				
	50	75	100	125	150	50	75	100	125	150
50	52	62	70	83	83	97	107	115	128	128
63	52	62	70	83	83	97	107	115	128	128

STNC®

MHZ2 Series Air Gripper

Parallel Type



Specification

Bore(mm)		6	10	16	20	25	32	40
Medium		Air						
Action way		Double Acting, Single Acting, Normally Open/Normally Close						
Max Operating pressure Mpa		0.7						
Min Operating pressure Mpa	Double Acting	0.15	0.2	0.1				
	Single Acting	3	0.35	0.25				
Environment temperature		−10～60°C(No Freeze)						
Highest operating frequency								
Repeat precision(mm)								
Magnet inside cylinder		With(Standard)						
Lubrication		Needless						
Pipe Size		M3×0.5		M3×0.8				

*If lubricating, please use NO.ISOVG32

Model No

Parallel switch: MHZ2−6 [10]

(Mini type——Bore Size: φ6)

[10] [D] [ ]

(Standard——Bore Size: φ10～40)

Parallel switch: MHZJ2− [25] [C] [ ]

(Dustproof——Bore Size: φ10～25)

Pivot switch type: MHC2 [20] [S]

(Bore: φ10～25)

Finger type
No Mark−Standard
N − Narrow
Note)Narrow(N) donot suitable for bore size 32mm

Dustproof rubber cover material
No Mark−Neoprene
F−Neoprene(FKM)
S−silicagel(si)

Bore
6−φ6mm
10−φ10mm
16−φ16mm
20−φ20mm
25−φ25mm
32−φ32mm
40−φ40mm

Acting
D−Double acting
S−Single acting (Normally Open)
C−Single acting (Normally Close)

Ordering Code

1)Bore:16,Parallel switch type(Standard),Single operating way(Normally Open).

Code:MHZ2−16S

2)Bore:25,Pivot switch type, Double acting.

Code:MHC2−25D

Stroke/Magnet switch(For choose)

Bore (mm)	Standard Stroke		Magnet switch
	Double acting	Single acting	Channel mounting
6	4	−	D−F9NL D−F8NL D−F9BL D−F8BL
10	4	30～10°	D−Y59AL D−Y59BL
16	6		D−Y59AL D−Y59BL D−Y9NL D−F9BL
20	10		
25	14		
32	22	−	
40	30		

*Magnet switch specification refer to magnet switch series

Type	Bore (mm)	Action way	Retentvity(N) Open	Retentvity(N) Close	Weight(g)
MHZ2−6D	6	Doubale Acting	6.1	3.3	27
MHZ2−10D	10		17	9.9	55
MHZ2−16D	16		40	30	115
MHZ2−20D	20		66	42	235
MHZ2−25D	25		104	65	430
MHZ2−32D	32		193	158	715
MHZ2−40D	40		318	254	1275
MHZ2−6S	6	Single Acting (Normally Open)	−	1.9	27
MHZ2−10S	10		−	6.3	55
MHZ2−16S	16		−	24	115
MHZ2−20S	20		−	28	240
MHZ2−25S	25		−	45	435
MHZ2−32S	32		−	131	760
MHZ2−40S	40		−	137	1370

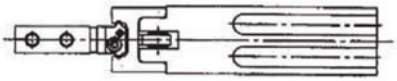
Type	Bore(mm)	Action way	Retentvity(N)Switch	Retentivity(N·cm)	Weight(g)
MHZ2−6C	6	Single acting (Normally Close)	3.7	−	27
MHZ2−10C	10		12	−	55
MHZ2−16C	16		31	−	115
MHZ2−20C	20		56	−	240
MHZ2−25C	25		83	−	430
MHZ2−32C	32		161	−	760
MHZ2−40C	40		267	−	1370
MHC2−10D	10	Double acting	−	9.8	39
MHC2−16D	16		−	39.2	91
MHC2−20D	20		−	69.7	180
MHC2−25D	25		−	136	311
MHC2−10S	10	Single acting (Normally Open)	−	6.9	39
MHC2−16S	16		−	31.4	92
MHC2−20S	20		−	54	183
MHC2−25S	25		−	108	316

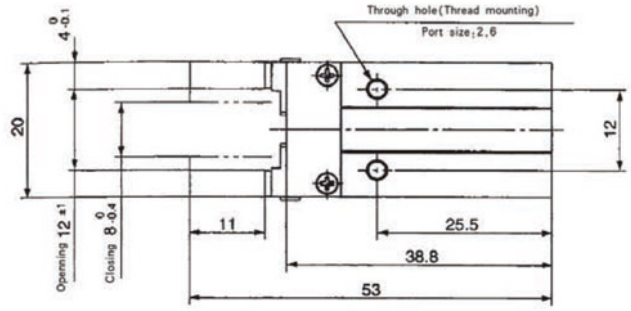
* Under 0.5MPA pressure, 200mm finger length, and different finger annex, retentivity or square retemtivity different.

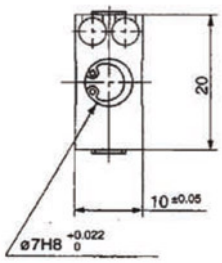
Figure Dimension(mm)

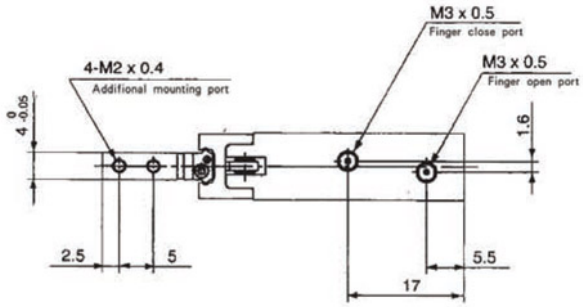
Small way:MHZ2

(Parallel switch type: ϕ6)

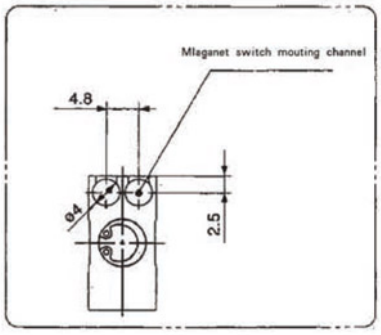






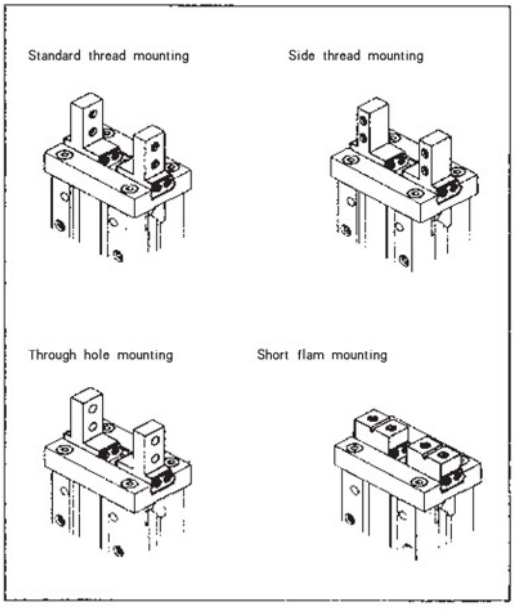


Maganet switch mounting channel size



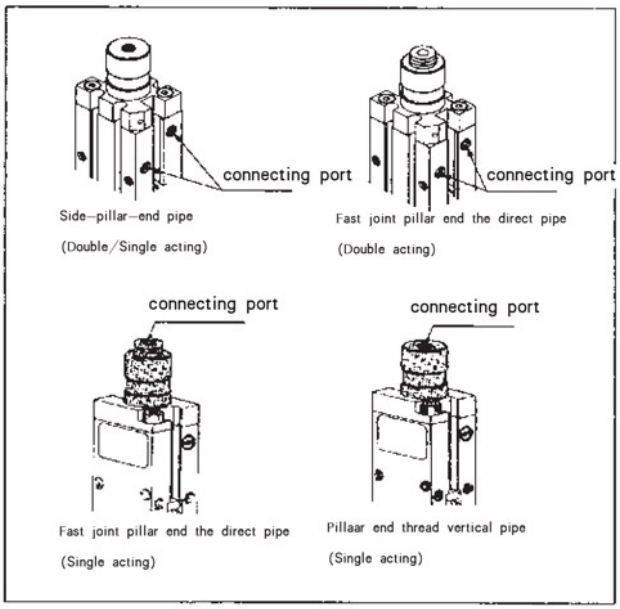
Other gripper and tube connecting pattern

* Finger type



Note: it only use the standard thread in stallation for flulcrum switch type.

** Tube connecting way



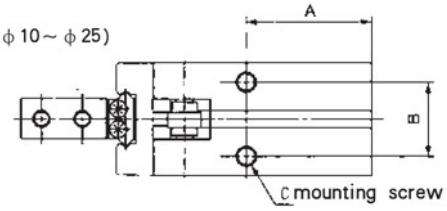
MHZ2 Series Air Gripper

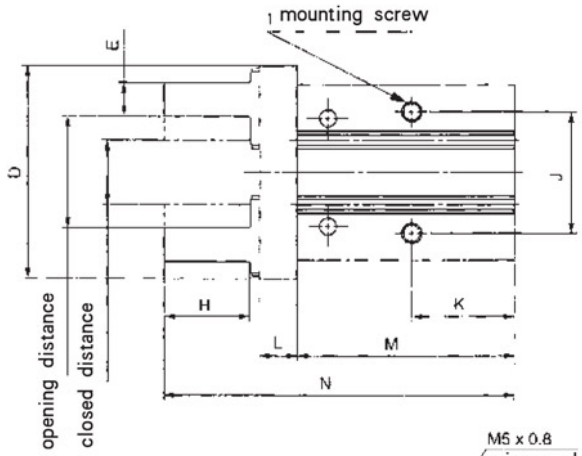
Parallel Style

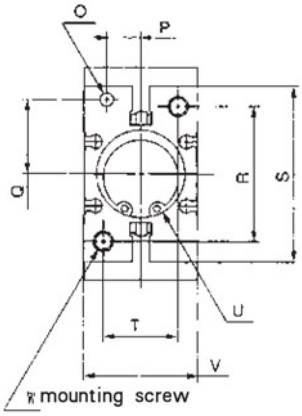
Standerd：MHZ2

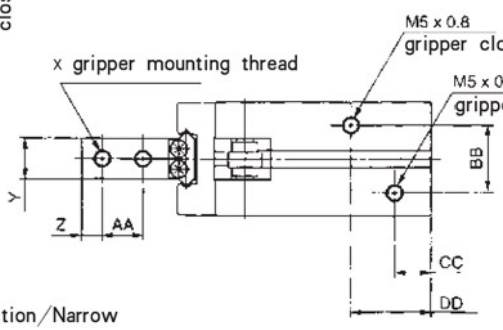
Figure Dimension(mm)

(Parallel switch type：ϕ10～ϕ25)

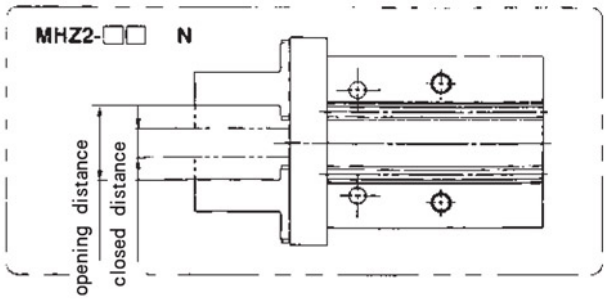




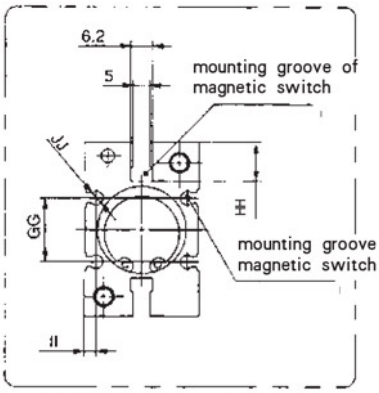




Finger position／Narrow

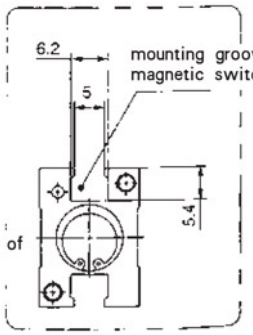


Magnet switch mounting size



Note) About D-Y59 or D-Y69 Magnet switch, through hole cann't be allowed

ØBore size diagraph



Note) About D-Y59 or D-Y69 Magnet switch, through hole cann't be allowed

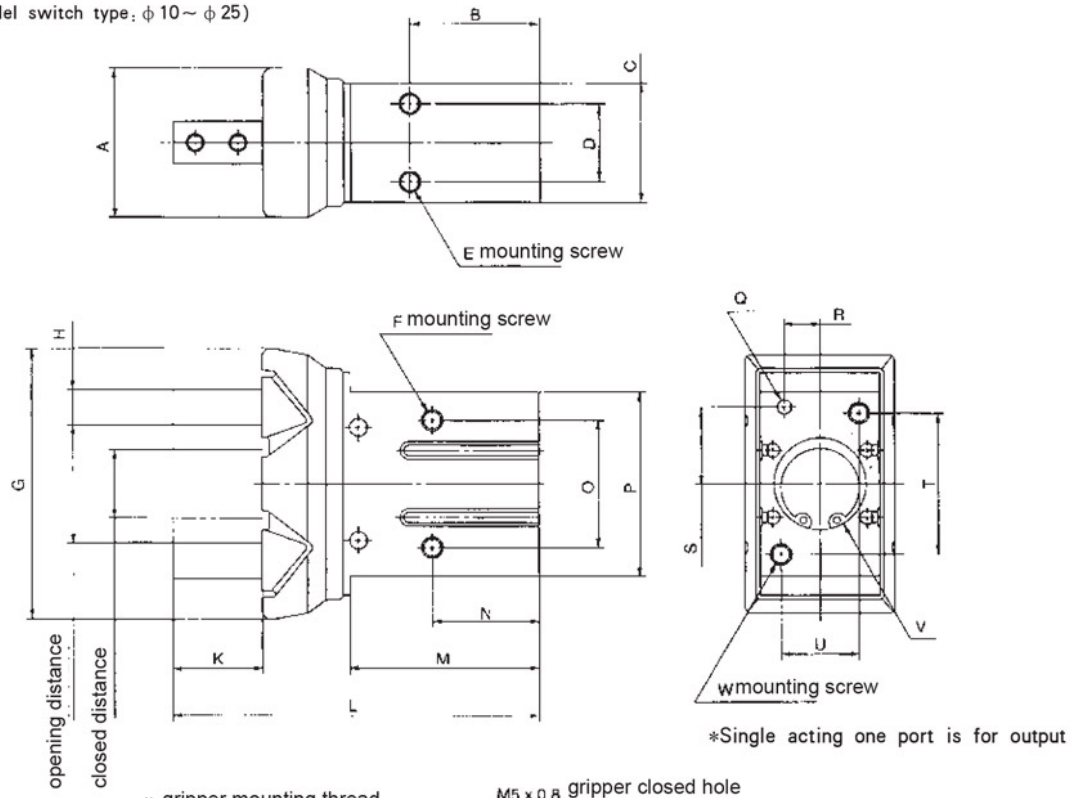
type(mm)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	N
10	27	11.4	M3×0.5 depth6	29	$4^{0}_{-0.1}$	$15.2^{+2.2}_{0}$	$11.2^{0}_{-0.7}$	12	M3×0.5 depth5.5	16	23	6	37.8	57	$\phi 2H9^{+0.025}_{0}$ depth3	5.2±0.02	7.6±0.02	18	23	12	$\phi 11H9^{+0.043}_{0}$ depth2
16	30	16	M4×0.7 depth4.5	38	$5^{0}_{-0.1}$	$20.9^{+2.2}_{-0.2}$	$14.9^{0}_{-0.7}$	15	M4×0.7 depth8	24	24.5	7.5	42.5	67.3	$\phi 3H9^{+0.025}_{0}$ depth3	6.5±0.02	11±0.02	22	30.6	15	$\phi 17H9^{+0.043}_{0}$ depth2
20	35	18.6	M5×0.8 depth8	50	$8^{0}_{-0.1}$	$26.3^{+2.2}_{-0.2}$	$16.3^{0}_{-0.7}$	20	M5×0.8 depth10	30	29	9.5	52.8	84.8	$\phi 4H9^{+0.030}_{0}$ depth4	7.5±0.02	16.8±0.02	32	42	18	$\phi 21H9^{+0.052}_{0}$ depth3
25	36.5	22	M6×1 depth10	63	$10^{0}_{-0.1}$	$33.3^{+2.5}_{0.2}$	$19.3^{0}_{-0.8}$	25	M6×1 depth12	36	30	11	63.6	102.7	$\phi 4H9^{+0.030}_{0}$ 4	10±0.02	21.8±0.02	40	52	22	$\phi 26H9^{+0.052}_{0}$ depth3.5
32	48/57	26	M6×1 depth10	97	$12^{0}_{-0.1}$	$48^{+2.5}_{0}$	$26^{0}_{-0.5}$	29	M6×1 depth13	46	40/49	12	67/76	12	$\phi 5H9^{+0.030}_{0}$ depth5	12±0.02	23±0.02	46	60	26	$\phi 34H9^{+0.030}_{0}$ depth5
40	58/71	32	M8×1.25 depth13	110	$14^{0}_{-0.1}$	$60^{+2.7}_{0}$	$30^{0}_{-0.5}$	36	M8×1.25 depth16	56	49/62	15	83/96	15	$\phi 5H9^{+0.030}_{0}$ depth5	14±0.02	29±0.02	56	72	32	$\phi 42H9^{+0.030}_{0}$ depth5

type(mm)	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ
10	16.4±0.05	M3×0.5 depth6	M2×0.45	$5^{0}_{-0.05}$	3	5.7	11	9	19	$9.7^{+2.2}_{0}$	$5.7^{0}_{-0.7}$	–	5.4	–	–
16	23.6±0.05	M4×0.7 depth8	M3×0.5	$8^{0}_{-0.05}$	4	7	13	7.5	19	$12.6^{+2.2}_{0}$	$6.6^{0}_{-0.7}$	11.6	5.8	2.1	ϕ4
20	27.6±0.05	M5×0.8 depth10	M4×0.7	$10^{0}_{-0.05}$	5	9	15	10	23	$17.2^{+2.2}_{0}$	$7.2^{0}_{-0.7}$	14	9	2.1	ϕ4
25	33.6±0.05	M6×1 depth12	M5×0.8	$12^{0}_{-0.05}$	6	12	20	10.7	23.5	$22.8^{+2.5}_{0}$	$8.8^{0}_{-0.8}$	19	11.5	3.5	ϕ4
32	40±0.1	M6×1 depth13	M6×1	$15^{0}_{-0.05}$	7	14	24	11	31/37	$48^{+2.5}_{0}$	$26^{0}_{-0.5}$	24	11.5	3.3	ϕ4
40	48±0.1	M8×1.25 depth17	M8×1.25	$18^{0}_{-0.05}$	9	17	28	12	38/45	$60^{+2.7}_{0}$	$30^{0}_{-0.5}$	29.4	13	3.7	ϕ4

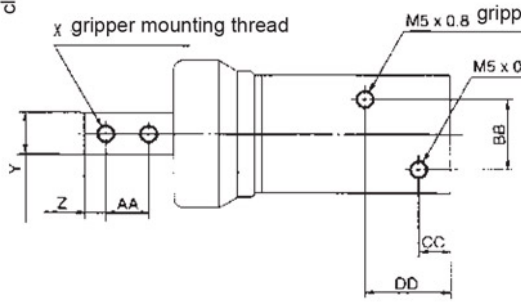
Dust proof type:MHZJ2

Figure Dimension(mm)

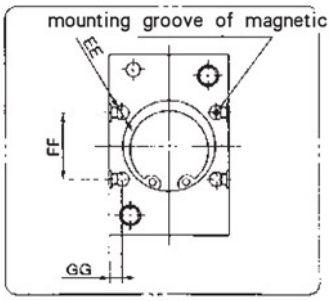
(Parallel switch type: ϕ10～ϕ25)



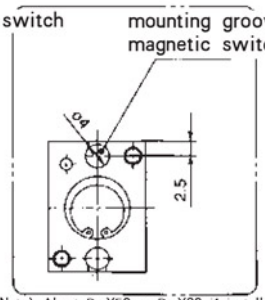
*Single acting one port is for output



Magnet switch mounting size



Bore size diagraph



Note) About D-Y59 or D-Y69 if install the magnet, the through hole installation can't be allowed.

type(mm)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
10	21	27	16.4±0.05	11.4	M3×0.5 depth6	M3×0.5 depth5.5	34	$4^{0}_{-0.1}$	$15.2^{+2.2}_{0}$	$11.2^{0}_{-0.7}$	12	57	31	23	16	23	ϕ2H9 $^{+0.025}_{0}$ depth3	5.2±0.02	7.6±0.02	18	12
16	29.6	30	23.6±0.05	16	M4×0.7 depth4.5	M4×0.7 depth8	45	$5^{0}_{-0.1}$	$20.9^{+2.2}_{-0.2}$	$14.9^{0}_{-0.7}$	15	67.3	34.8	24.5	24	30.6	ϕ3H9 $^{+0.025}_{0}$ depth3	6.5±0.02	11±0.02	22	15
20	34.6	35	27.6±0.05	18.6	M5×0.8 depth8	M5×0.8 depth10	58	$8^{0}_{-0.1}$	$26.3^{+2.2}_{-0.2}$	$16.3^{0}_{-0.7}$	20	84.8	43.5	29	30	42	ϕ4H9 $^{+0.030}_{0}$ depth4	7.5±0.02	16.8±0.02	32	18
25	42	36.5	33.6±0.05	22	M6×1 depth10	M6×1 depth12	73	$10^{0}_{-0.1}$	$33.3^{+2.5}_{0.2}$	$19.3^{0}_{-0.8}$	25	102.7	53	30	36	52	ϕ4H9 $^{+0.030}_{0}$ depth4	10±0.02	21.8±0.02	40	22

type (mm)	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ
10	16.4±0.05	M3×0.5 depth6	M2×0.45	$5^{0}_{-0.05}$	3	5.7	11	9	19	$9.7^{+2.2}_{0}$	$5.7^{0}_{-0.4}$	–	5.4	–	–
16	23.6±0.05	M4×0.7 depth8	M3×0.5	$8^{0}_{-0.05}$	4	7	13	7.5	19	$12.6^{+2.2}_{0}$	$6.6^{0}_{-0.4}$	11.6	5.8	2.1	ϕ4
20	27.6±0.05	M5×0.8 depth10	M4×0.7	$10^{0}_{-0.05}$	5	9	15	10	23	$17.2^{+2.2}_{0}$	$7.2^{0}_{-0.4}$	14	9	2.1	ϕ4
25	33.6±0.05	M6×1 depth12	M5×0.8	$12^{0}_{-0.05}$	6	12	20	10.7	23.5	$22.8^{+2.5}_{0}$	$8.8^{0}_{-0.4}$	19	11.5	3.5	ϕ4

MHC2 Series Air Gripper

Angular Style

Model No MHC2– 10 D

Bore
6– ϕ 6mm
10– ϕ 10mm
16– ϕ 16mm
20– ϕ 20mm
25– ϕ 25mm

Acting
D–Double acting
S–Single acting (Normally Open)

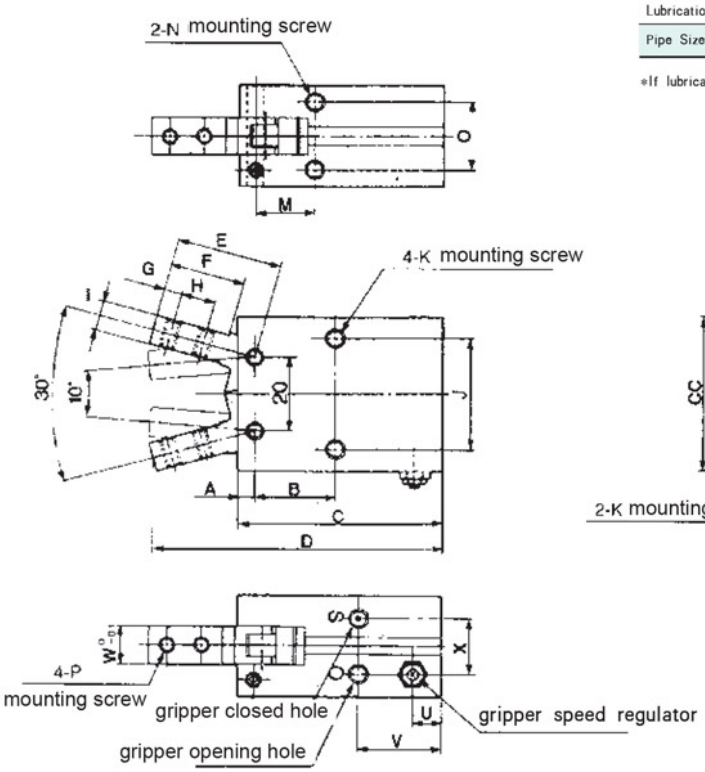
Specification

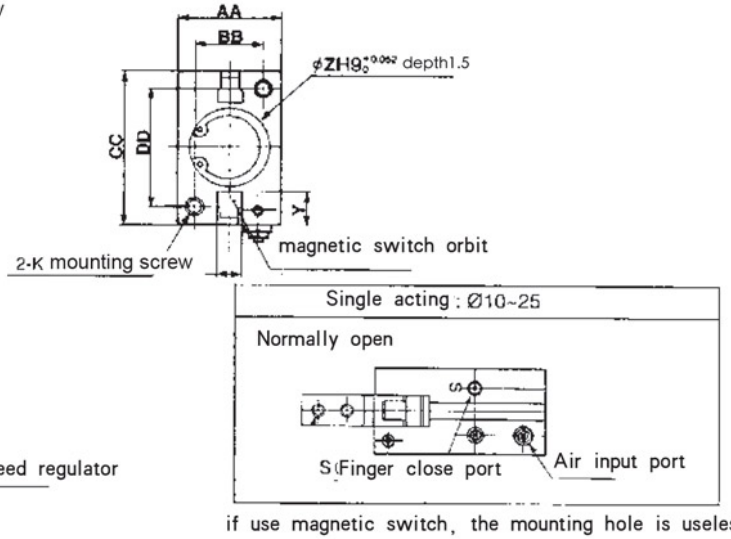
Bore(mm)		6	10	16	20	25	32	40
Medium		Air						
Action way		Double Acting,Single Acting:Normally Open/Normally Close						
Min Operating pressure Mpa	Double Acting	0.15–0.7	0.2–0.7	0.1–0.7			0.1–0.7	
	Single Acting	0.3–0.7	0.35–0.7	0.25–0.7			0.25–0.7	
Environment temperature		–10～60°C(No Freeze)						
Highest operating frequency								
Repeat precision(mm)								
Magnet inside cylinder		With(Standard)						
Lubrication		Needless						
Pipe Size		M3×0.5		M3×0.8				

*If lubricating, please use NO.ISOVG32

Pivot switch type: MHC2 (ϕ10～ϕ25)

Figure Dimension(mm)



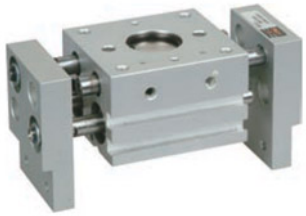


if use magnetic switch, the mounting hole is useless

type (mm)	A	B	C	D	E	F	G	H	I	J	K	ϕL	M	N	O	P	Q	R	Pipe size S / T	U	V	W	X	Y	ϕZ	AA	BB	CC	DD
10	2.8	12.8	38.6	52.4	17.2	12	3	5.7	4	16	M3×0.5 depth 5	2.6	8.8	M3×0.5 depth6	11.4	M2.5×0.45	3	5.7	M3×0.5	7.2	18.8	6.4	10.4	5.4	11	16.4	12	23	18
16	3.9	16.2	44.6	62.5	22.6	16	4	7	7	24	M4×0.7 depth8	3.4	10.7	M4×0.7 depth 8	16	M3×0.5	4	7	M5×0.8	7	18.3	8	13	5.8	17	23.6	15	30.6	22
20	4.5	21.7	55.2	78.7	28	20	5.2	9	8	30	M5×0.8 depth10	4.3	15.7	M5×0.8 depth8	18.6	M4×0.7	5	9	M5×0.8	7.5	22.2	10	15	9	21	27.6	18	42	32
25	4.6	25.8	60.2	92	37.5	27	8	12	10	36	M6×1 depth12	5.1	19.3	M6 depth10	22	M5×0.8	6	12	M5×0.8	7	23.5	12	20	11.5	26	33.6	22	52	40

MHL2 Series Air Gripper

Parallel Style Wide Type



* Long finger stroke, suitable for large objects
* Double piston design can increase the maintain power
* Using tooth rod operation make finger open mean while close
* Using special seal, good dust-proof

Specification

Bore(mm)	10	16	20	25	32	40
Medium	Air					
Action	Double acting					
Max Operating pressure Mpa	0.6{6.1}					
Min Operating pressure Mpa	0.1{1.0}					
Environment temperature	-10~60°C(No Freeze)					
Repeat precision(mm)	±0.1mm					
1) RetentvityN{Kgf}	14{1.4}	45{4.6}	74{7.5}	131{13.4}	228{23.4}	396{40.4}
Pipe Size	M5×0.8				Rc(PT)1/8	

Note 1) 0.5MPa{5.1kgf/cm2} pressure, and the distance of maintain
40mm(ϕ10 ~ ϕ25) 80mm(ϕ32/ϕ40)

Ordering Code

Parallel switch type:MHL2- [16] D [10]

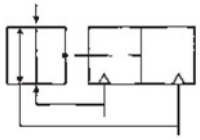
Bore
10- ϕ10mm
16- ϕ16mm
20- ϕ20mm
25- ϕ25mm
32- ϕ32mm
40- ϕ40mm

Finger Open/Close Stroke

mark	ϕ10	ϕ16	ϕ20	ϕ25	ϕ32	ϕ40
within mark	20	30	40	50	70	100
1	40	60	80	100	120	160
2	60	80	100	120	160	200

■ Ordering Code

1)Bore: ϕ16,Stroke 30mm
Code:MHL2-16D
2)Bore: ϕ25,Stroke 120mm
Code:MHL2-25D2

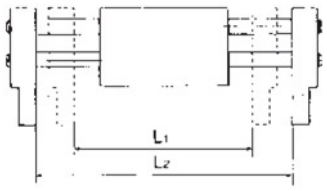


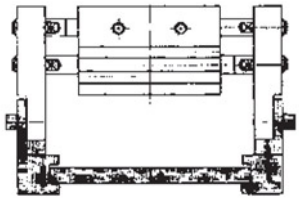
Stroke/Magnet switch(For choose)

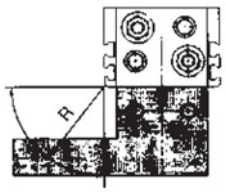
Bore(mm)	Channel Mounting
10	
16	D-Y59AL
20	D-Y59BL
25	D-Y69AL
32	D-Y69BL
40	

*Magnet switch specification refer to magnet switch series.

Stroke/Weight List







The distance of maintain power(mm)

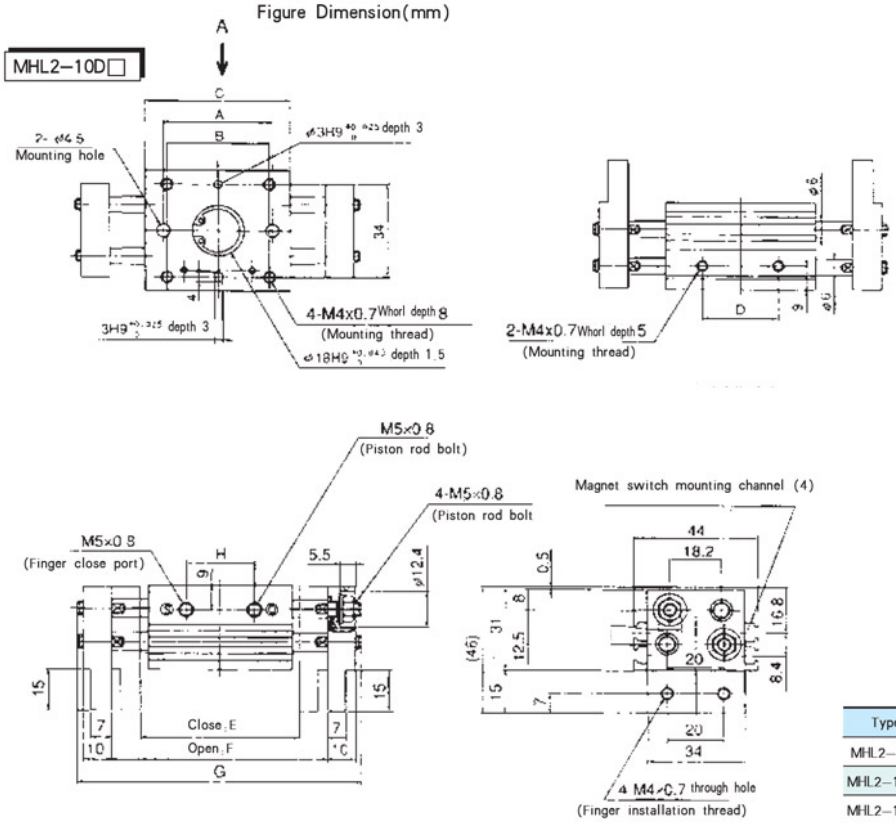
Type	Bore (mm)	Highest operating frequency c.p.m	Open/Close Stroke mm(L2-L1)	Width(close) mm(L1)	Width(open) mm(L2)	Weight g
MHL2-10D	10	60	20	56	76	280
MHL2-10D1		40	40	78	118	345
MHL2-10D2			60	96	156	425
MHL2-16D	16	60	30	68	98	585
MHL2-16D1		40	60	110	170	795
MHL2-16D2			80	130	210	935
MHL2-20D	20	60	40	82	122	1025
MHL2-20D1		40	80	142	222	1495
MHL2-20D2			100	162	262	1690
MHL2-25D	25	60	50	100	150	1690
MHL2-25D1		40	100	182	282	2560
MHL2-25D2			120	200	320	2775
MHL2-32D	32	30	70	150	220	2905
MHL2-32D1		20	120	198	318	3820
MHL2-32D2			160	242	402	4655
MHL2-40D	40	30	100	188	288	5270
MHL2-40D1		20	160	246	406	6830
MHL2-40D2			200	286	486	7905

MHL2 Series Air Gripper

Parallel Style Wide Type

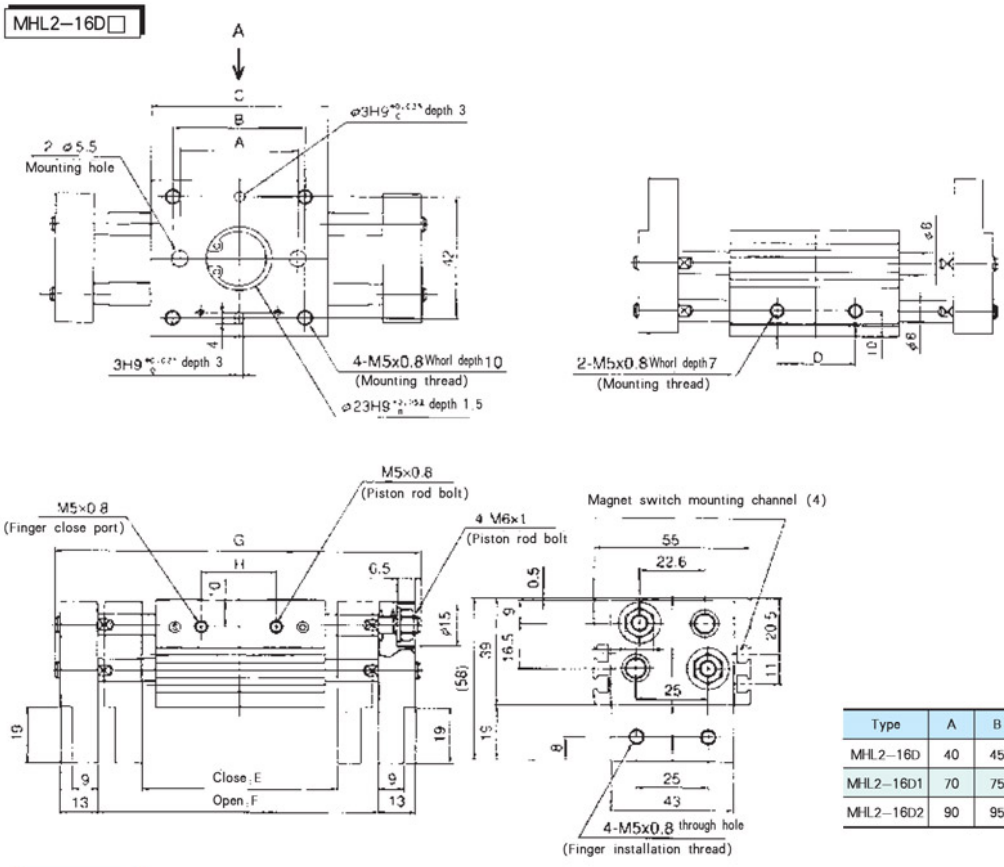
Figure Dimension(mm)

MHL2–10D□



Type	A	B	C	D	E	F	G	H
MHL2–10D	38	36	51	26	56	76	100	24
MHL2–10D1	54	52	67	42	78	118	142	39
MHL2–10D2	72	70	85	60	96	156	180	57

MHL2–16D□



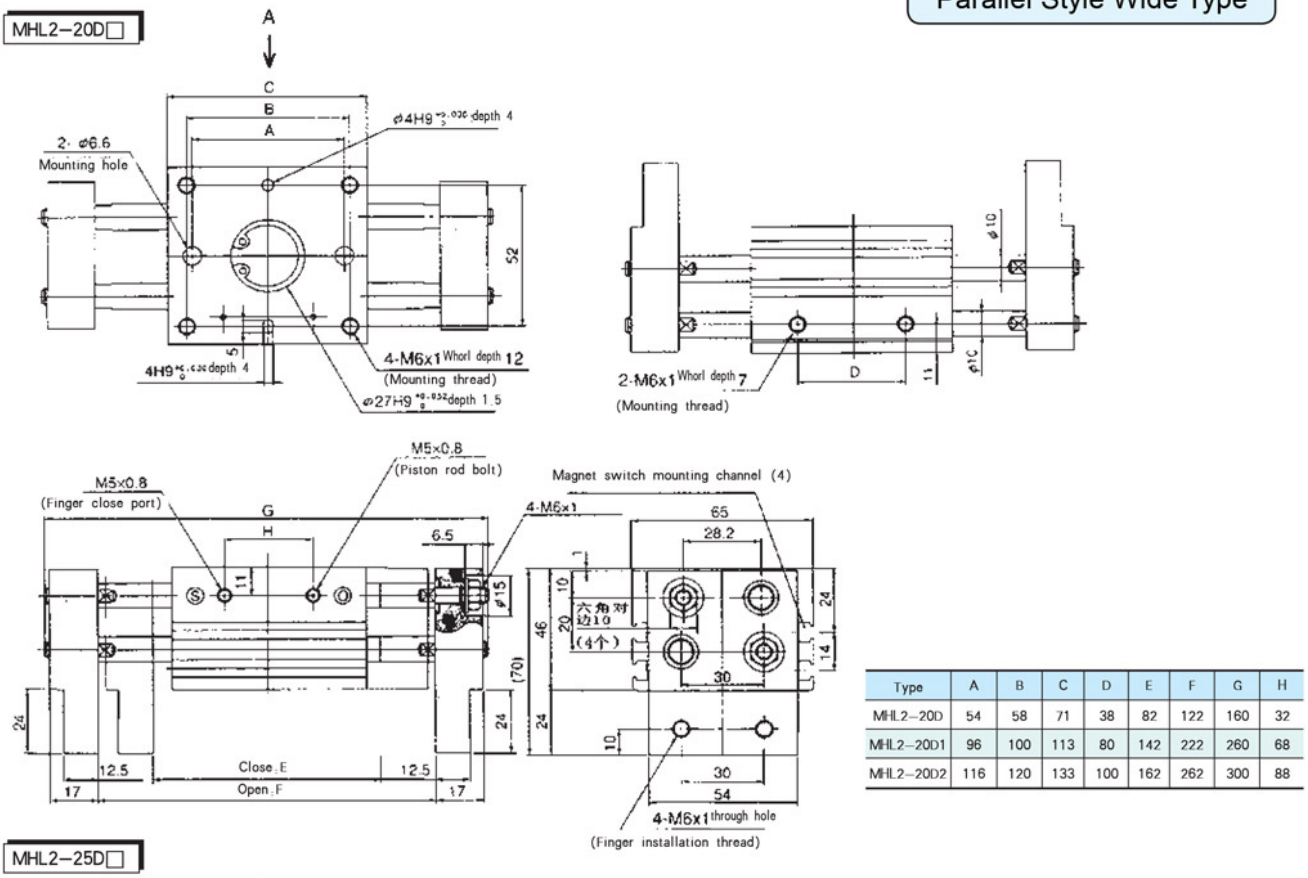
Type	A	B	C	D	E	F	G	H
MHL2–16D	40	45	60	28	68	98	128	26
MHL2–16D1	70	75	90	58	110	170	200	50
MHL2–16D2	90	95	110	78	130	210	240	70

MHL2 Series Air Gripper

Parallel Style Wide Type

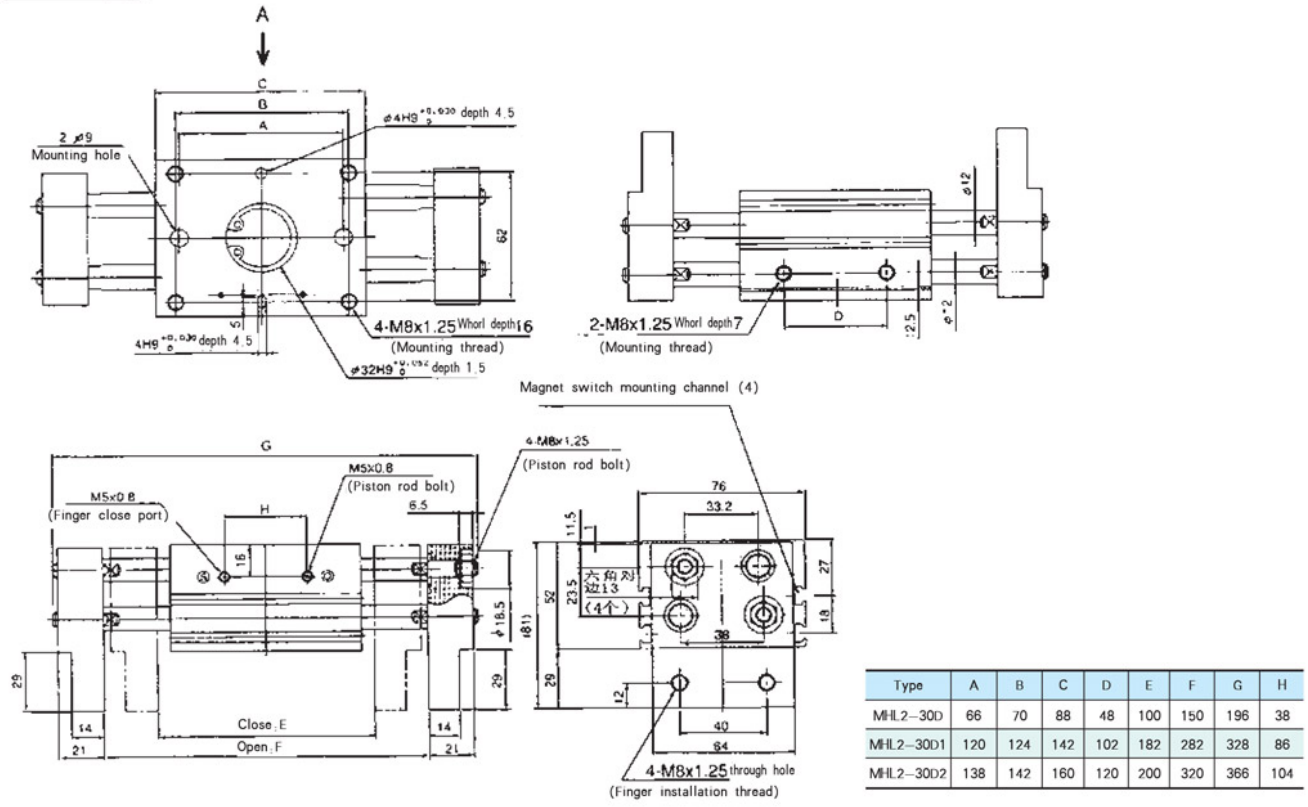
Figure Dimension(mm)

MHL2–20D□



Type	A	B	C	D	E	F	G	H
MHL2–20D	54	58	71	38	82	122	160	32
MHL2–20D1	96	100	113	80	142	222	260	68
MHL2–20D2	116	120	133	100	162	262	300	88

MHL2–25D□



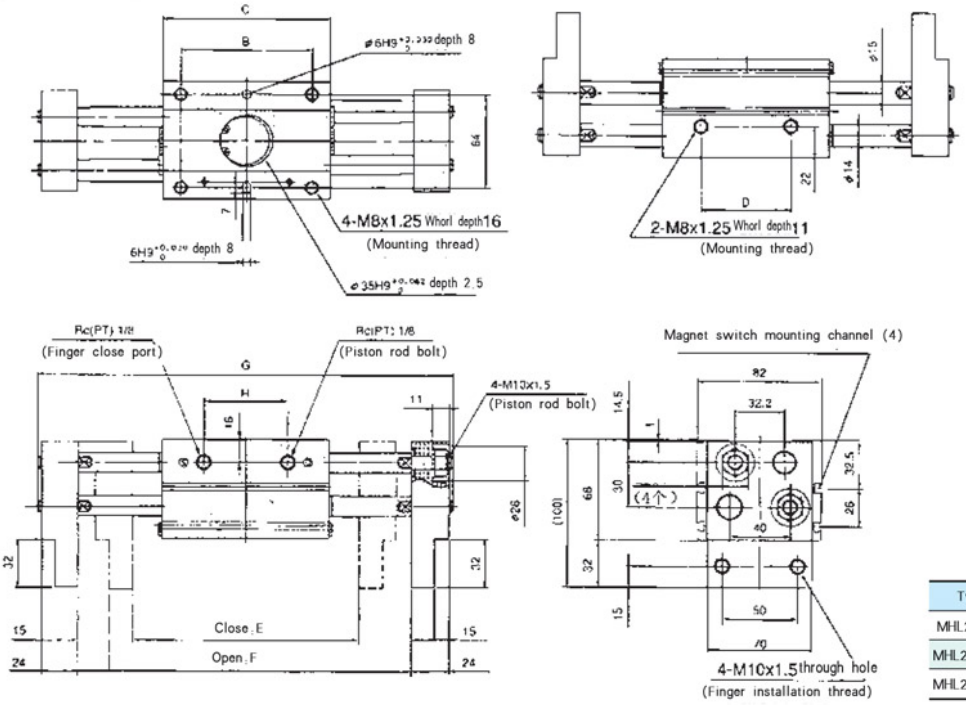
Type	A	B	C	D	E	F	G	H
MHL2–30D	66	70	88	48	100	150	196	38
MHL2–30D1	120	124	142	102	182	282	328	86
MHL2–30D2	138	142	160	120	200	320	366	104

MHL2 Series Air Gripper

Parallel Style Wide Type

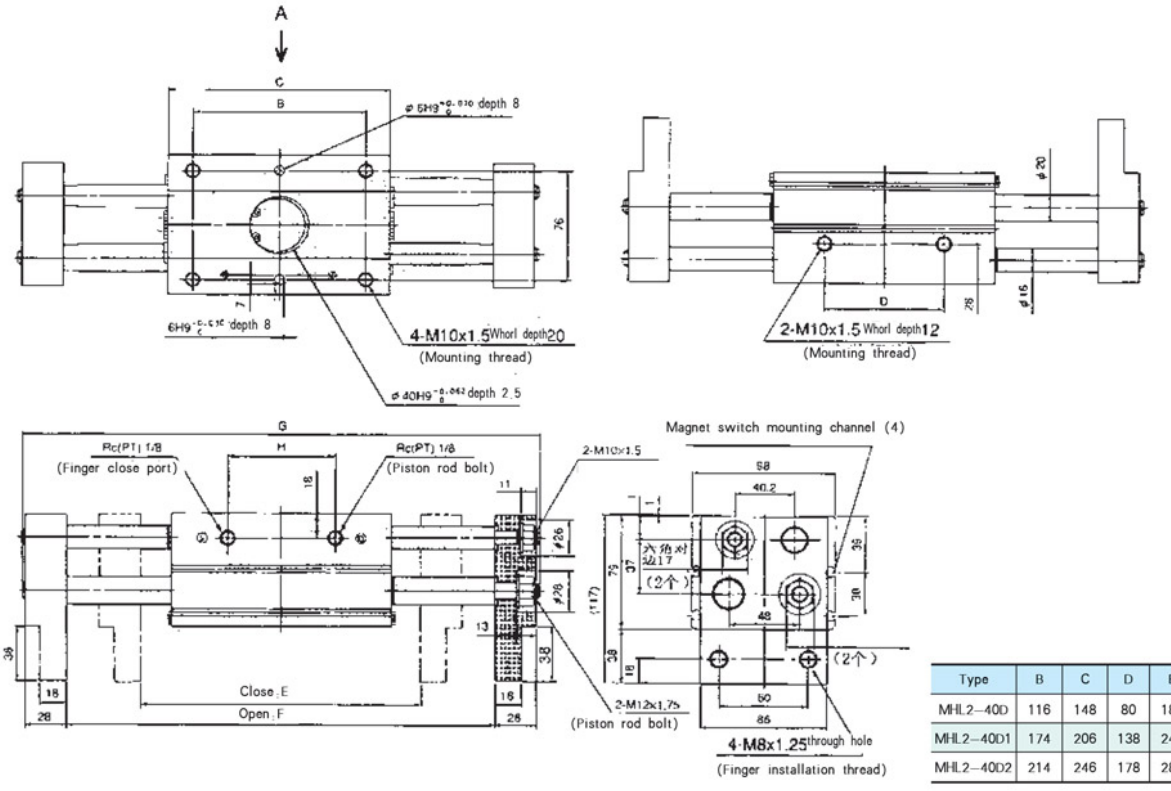
Figure Dimension(mm)

MHL2–32D□



Type	B	C	D	E	F	G	H
MHL2–32D	86	110	60	150	220	272	56
MHL2–32D1	134	158	108	198	318	370	104
MHL2–32D2	178	202	152	242	402	454	148

MHL2–40D□

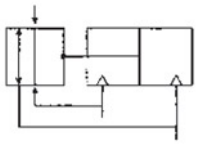


Type	B	C	D	E	F	G	H
MHL2–40D	116	148	80	188	288	348	72
MHL2–40D1	174	206	138	246	406	466	130
MHL2–40D2	214	246	178	286	486	546	170

MHY2 Series Air Gripper

180° Angular Style

ϕ10～ϕ25



* Magnet inside, can be fixed with magnetic switch
* The fingers suit 108 simple action.
* It can be used in the special environment special design, stop small things in
* Convenient to be fixed

Specification

Type	MHY2-10D	MHY2-16D	MHY2-20D	MHY2-25D
Medium	Air			
Action way	Double acting			
Max Operating pressure MPa{kgf/cm2}	0.6{6.1}			
Min Operating pressure MPa{kgf/cm2}	0.1{1.0}			
Environment temperature	-10～60°C(No Freeze)			
Highest operating frequency	60c.p.m			
Repeat precision	±0.2mm			
1)RetentvityN.m{kgf/cm2}	0.16{1.6}	0.54{5.5}	1.10{11.2}	2.28{23.3}
Weight(kg)	70	150	320	560
2)Lubrication	No need			
Pipe Size	M5×0.8			

1) User 0.5MPa{5.1kgf/cm2}

2) If Lubrication,please use ISOVG32

Ordering Code

Magnetinside:MHY2 — 20 D

Bore
10—ϕ10mm
16—ϕ16mm
20—ϕ20mm
25—ϕ25mm

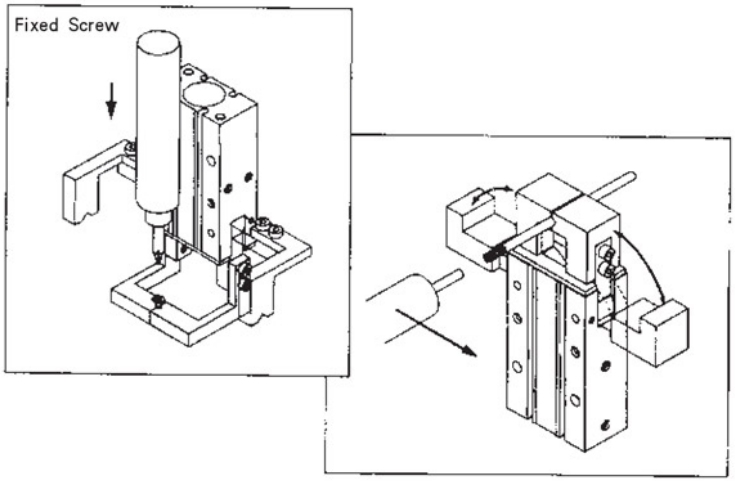
■ Ordering Code

1)Bore: ϕ16mm
Code:MHY2-16D
2)Bore: ϕ25mm
Code:MHY2-25D

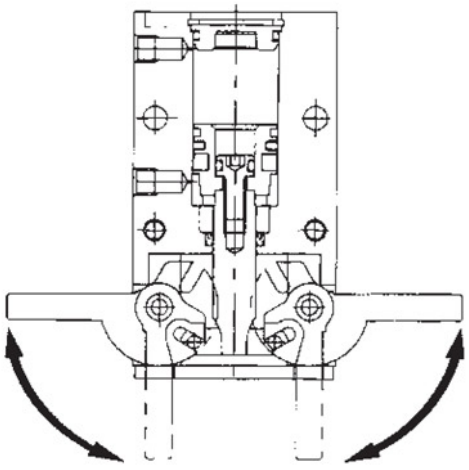
Stroke/Magnet switch(For choose)

Bore (mm)	Channel Installation		Magnet Switch (Channel Installation)
	Open	Close	
10	180°	-3°	D-F9NL D-F9BL
16			
20			
25			

Exsample

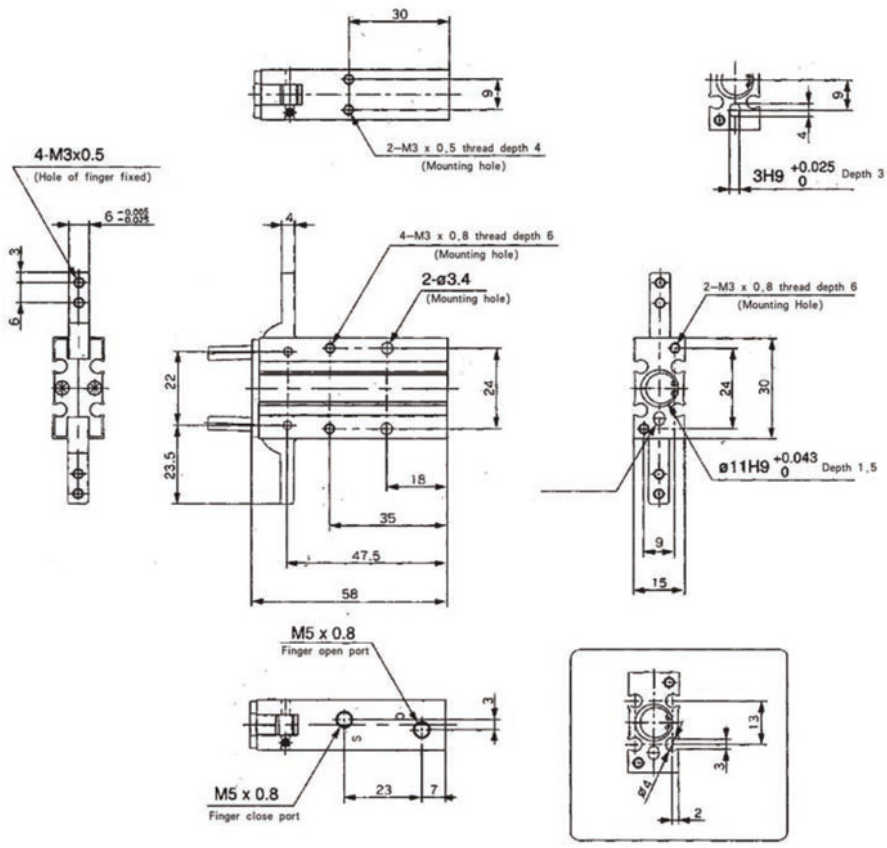


Structure

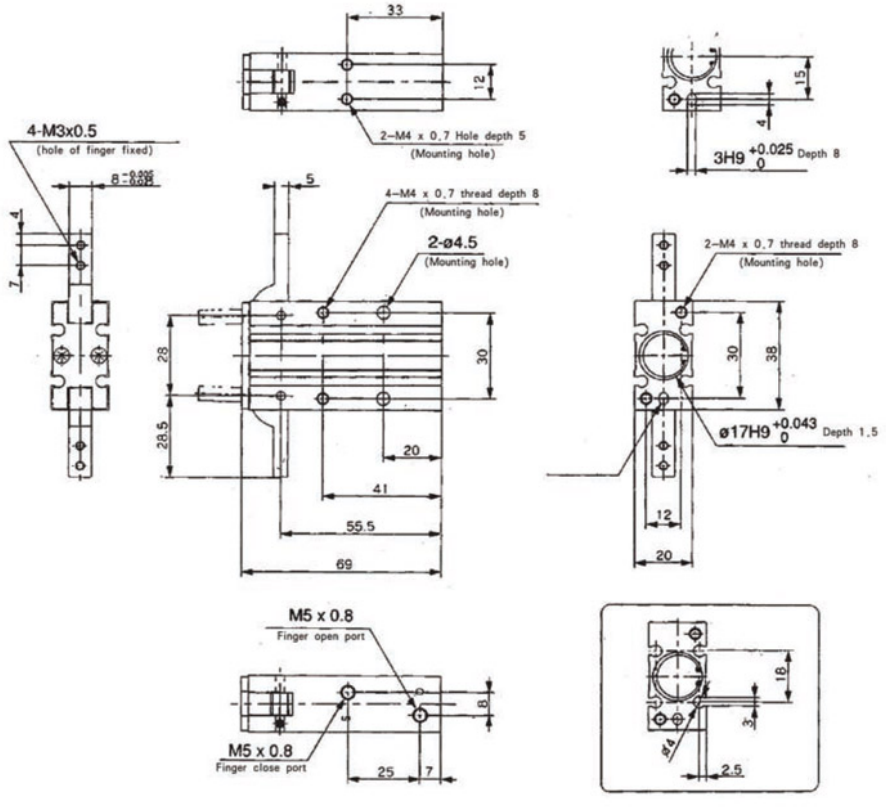


MHY2–10D□

Figure Dimension(mm)

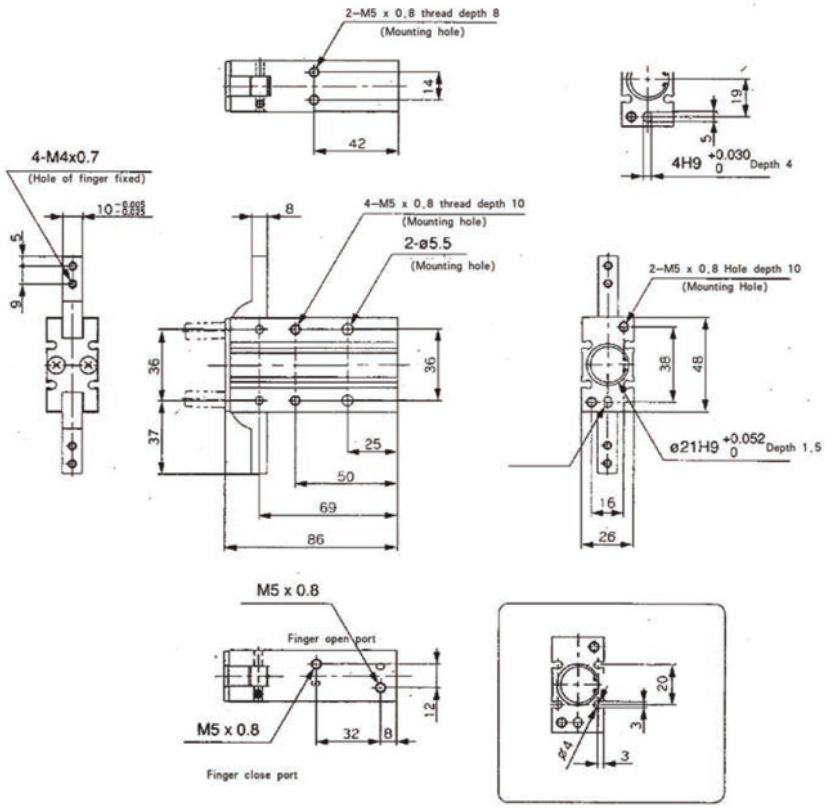


MHY2–16D□

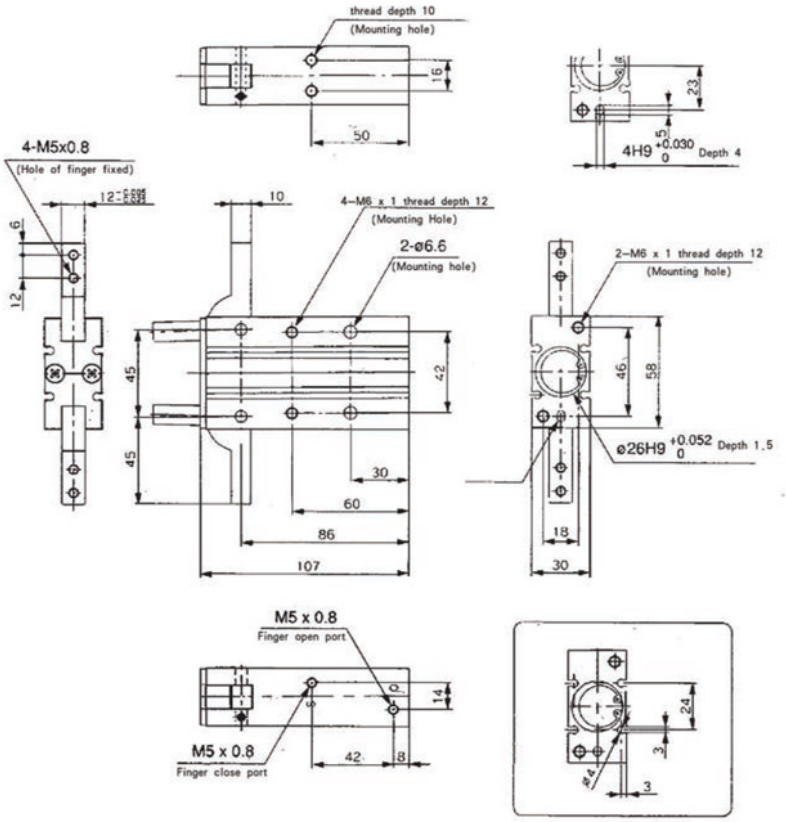


MHY2–20D□

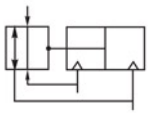
Figure Dimension(mm)

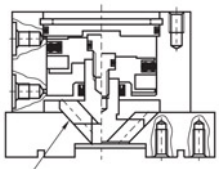


MHY2–25D□



QQ2 / MHS2 Series Cylindrical Air Gripper (2 Fingers, Parallel Type)





Wedge cam structure can increase the clamping force

Specification

Model		QQ2-16D	QQ2-20D	QQ2-25D	QQ2-32D	QQ2-40D	QQ2-50D	QQ2-63D
Bore		Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63
Using fluid		Air						
Use pressure range		0.2~0.6MPa			0.1~0.6M			
Use temperature range		-10~+60° C						
Repeat precision		±0.01mm						
Max action frequency		120c.p.m			60c.p.m		1	
Oil supply		No need						
Action type		Double Action						
note)Gripping force	Outside diameter clip	21	37	63	111	177	280	502
N pressure0.5Mpa	Inside diameter clip	23	42	71	123	195	306	537
Finger stroke(mm)		4	4	6	8	8	12	16
Magnet switch		M3x0.5	M5x0.8					
Pipe Size		Built-in magnetic ring type						

Note: clamping diameter of clamping force, Ø16~Ø25 clamping distance L=20mm, Ø32~Ø63 clamping distance L=30mm,Ø80~Ø125 clamping distance L=50mm

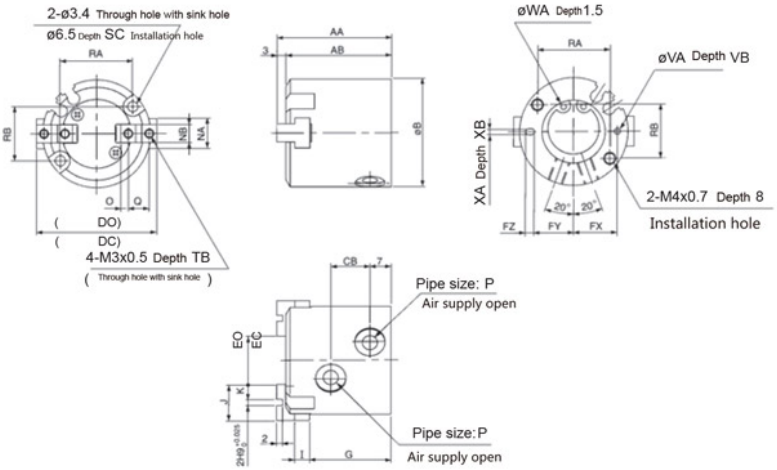
Choosen Type

QQ2 — 20 — D — 2

- 20: Bore
  - 16— ϕ 16mm
  - 20— ϕ 20mm
  - 25— ϕ 25mm
  - 32— ϕ 32mm
  - 40— ϕ 40mm
  - 50— ϕ 50mm
  - 63— ϕ 63mm
- D: Double Action
- 2: Switch quantity
  - 1 : 1
  - 2 : 2

Figure Dimension(mm)

QQ2-16D~25D



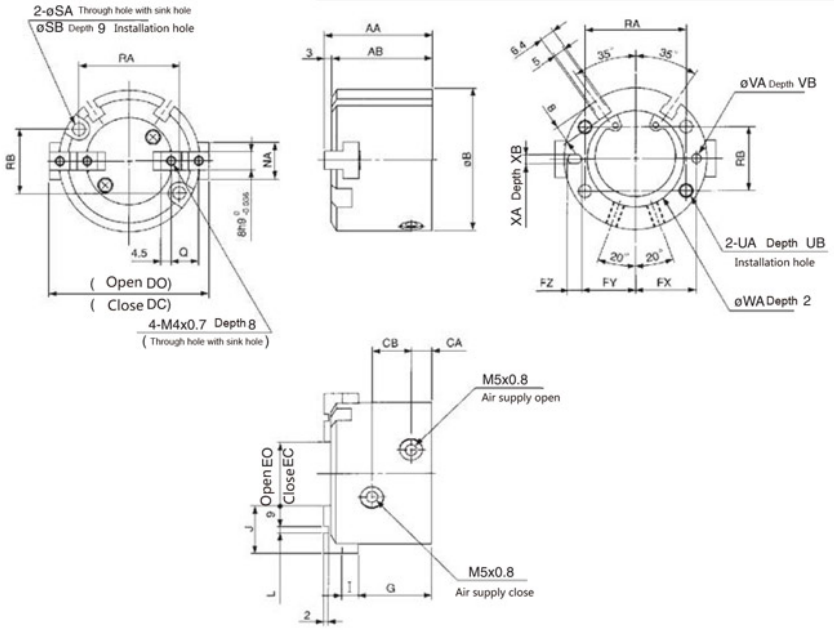
Model	AA	AB	B	CB	DC	DO	EC	EO	FX	FY	FZ	G	I	J	K	NA	NB	O	P	Q
QQ2-16D	35	32	30	11	30	34	10	14	12.5	11	3	25	4	10	4	8	5h9 $^{0}_{-0.030}$	2	M3 x 0.5	6
QQ2-20D	38	35	36	13	36	40	12	16	14.5	13	3	27	5	12	5	10	6h9 $^{0}_{-0.030}$	2.5	M5 x 0.8	7
QQ2-25D	40	37	42	15	42	48	14	20	17	14.5	5	28	5	14	6	12	6h9 $^{0}_{-0.030}$	3	M5 x 0.8	8

Model	RA	RB	SC	TB	VA	VB	WA	XA	XB
QQ2-16D	18	16	8	5	2h9 $^{+0.025}_{0}$	2	17h9 $^{+0.043}_{0}$	2h9 $^{+0.025}_{0}$	2
QQ2-20D	24	18	9.5	6	2h9 $^{+0.025}_{0}$	2	21h9 $^{+0.052}_{0}$	2h9 $^{+0.025}_{0}$	2
QQ2-25D	26	22	10	6	3h9 $^{+0.025}_{0}$	3	26h9 $^{+0.052}_{0}$	3h9 $^{+0.025}_{0}$	3

QQ2 / MHS2 Series Cylindrical Air Gripper (2 Fingers, Parallel Type)

■ Figure Dimension(mm)

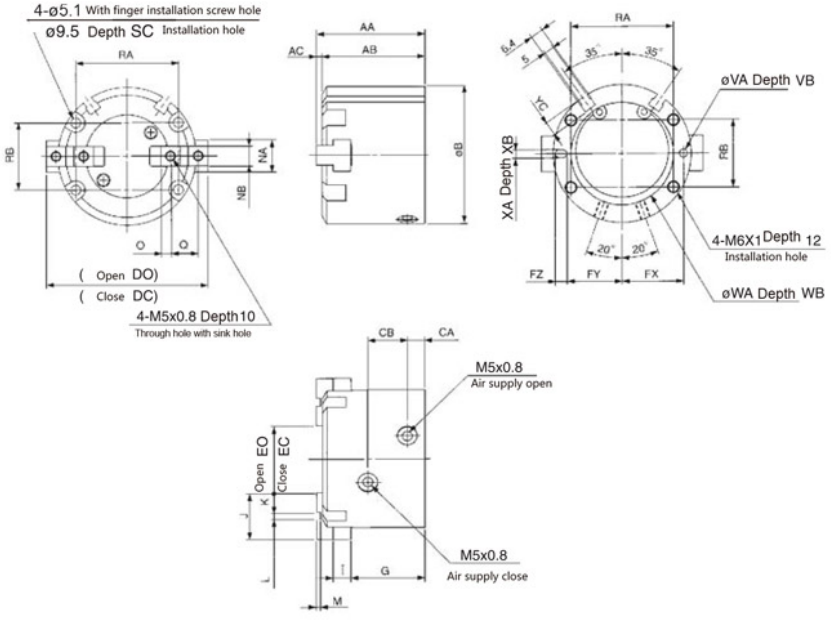
QQ2 -32D~40D



Model	AA	AB	AC	B	CA	CB	DC	DO	EC	EO	FX	FY	FZ	G	I	J	L	NA	Q	RA	RB	SA
QQ2-32D	44	41	3	56	8	16	56	64	16	24	23	20.5	5	30.5	6	20	2h9 $^{+0.025}_{0}$	14	11	38	25	4.5
QQ2-40D	47	44	4	62	9	17	62	70	20	28	26.5	23.5	6	32	7	21	3h9 $^{+0.025}_{0}$	16	12	44	28	5.5

Model	SB	UA	UB	VA	VB	WA	XA	XB
QQ2-32D	8	M5 x 0.8	10	3h9 $^{+0.025}_{0}$	3	34h9 $^{+0.062}_{0}$	34h9 $^{+0.025}_{0}$	3
QQ2-40D	9.5	M6 x 1	12	4h9 $^{+0.025}_{0}$	4	42h9 $^{+0.062}_{0}$	4h9 $^{+0.025}_{0}$	4

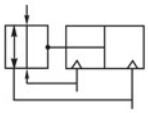
QQ2 -50D~63D

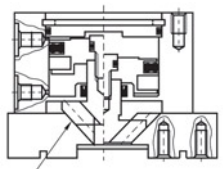


Model	AA	AB	AC	B	CA	CB	DC	DO	EC	EO	FX	FY	FZ	G	I	J	K	NB	M	NA	NB
QQ2-50D	55	52	3	70	9	20	70	82	22	34	31	28	6	37.5	9	24	10	4h9 $^{+0.030}_{0}$	2	18	10h9 $^{0}_{-0.036}$
QQ2-63D	66	62	4	86	12	22	86	102	30	46	38	34.5	7	44	11	28	11	6h9 $^{+0.030}_{0}$	3	24	12h9 $^{0}_{-0.043}$

Model	O	Q	RA	RB	SC	VA	VB	WA	WB	XA	XB	YC
QQ2-50D	5	14	52	34	12	4h9 $^{+0.030}_{0}$	4	52h9 $^{+0.074}_{0}$	2	4h9 $^{+0.030}_{0}$	4	7
QQ2-63D	5.5	17	66	38	14	5h9 $^{+0.030}_{0}$	5	65h9 $^{+0.074}_{0}$	2.5	5h9 $^{+0.030}_{0}$	5	7.5

QQ3 / MHS3 Series Cylindrical Air Gripper (3 Fingers, Parallel Type)





Wedge cam structure can increase the clamping force

Specification

Model	QQ3-16D	QQ3-20D	QQ3-25D	QQ3-32D	QQ3-40D	QQ3-50D	QQ3-63D	QQ3-80D	QQ3-100D	QQ3-125D
Bore	Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100	Ø125
Using fluid	Air									
Use pressure range	0.2~0.6MPa			0.1~0.6M						
Use temperature range	-10~+60° C									
Repeat precision	±0.01mm									
Max action frequency	120c.p.m			60c.p.m				30c.p.m		
Oil supply	No need									
Action type	Double Action									
note)Gripping force Outside diameter clip	14	25	42	74	118	187	335	500	750	1270
N pressure0.5Mpa Inside diameter clip	16	28	47	82	130	204	359	525	780	1320
Finger stroke(mm)	4	4	6	8	8	12	16	20	24	32
Magnet switch	M3x0.5	M5x0.8						1/8	1/4	3/8
Pipe Size	Built-in magnetic ring type									

Note: clamping diameter of clamping force, Ø16~Ø25 clamping distance L=20mm, Ø32~Ø63 clamping distance L=30mm,Ø80~Ø125 clamping distance L=50mm

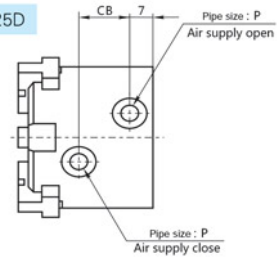
Choosen Type

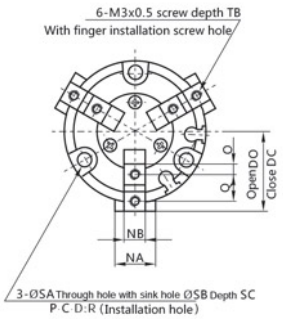
QQ3 — 20 — D — 2 — SD32

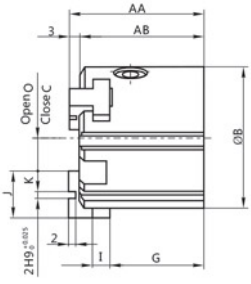
- 20: Bore — 16— ϕ 16mm, 20— ϕ 20mm, 25— ϕ 25mm, 32— ϕ 32mm, 40— ϕ 40mm
- D: Double Action
- 2: Switch quantity — 1：1, 2：2
- SD32: Switch model — No mark：no switch, SR32, SD32, SN32, SP32

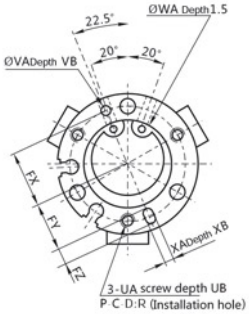
Figure Dimension(mm)

QQ3-16D~25D









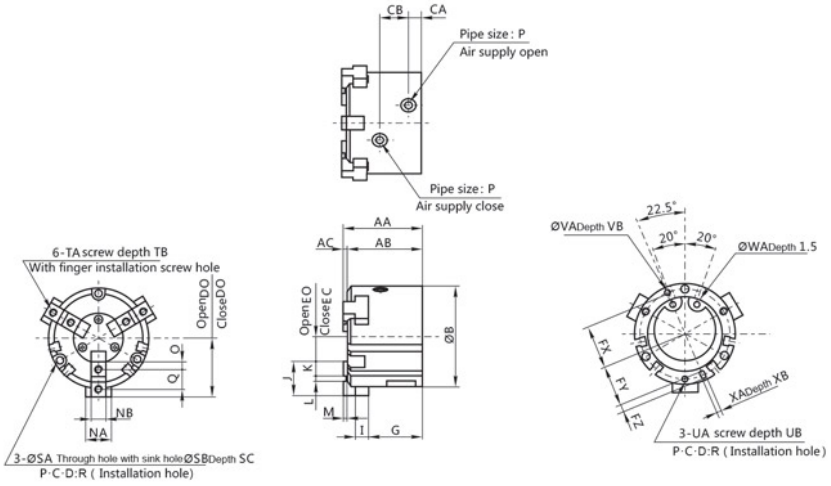
Model	A	AB	B	CB	DC	DO	EC	EO	FX	FY	FZ	G	I	J	K	NA	NB	O	P	Q	R
QQ3-16D	35	32	30	11	15	17	5	7	12.5	11	3	25	4	10	4	8	5h9 $^{0}_{-0.030}$	2	M3x0.5	6	25
QQ3-20D	38	35	36	13	18	20	6	8	14.5	13	3	27	5	12	5	10	6h9 $^{0}_{-0.030}$	2.5	M5x0.8	7	29
QQ3-25D	40	37	42	15	21	24	7	10	17	14.5	5	28	5	14	6	12	6h9 $^{0}_{-0.030}$	3	M5x0.8	8	34

Model	SA	SB	SC	TB	UA	UB	VA	VB	WA	XA	XB
QQ3-16D	3.4	6.5	8	5	M3x0.5	4.5	2H9 $^{+0.025}_{0}$	2	17H9 $^{+0.043}_{0}$	2H9 $^{+0.025}_{0}$	2
QQ3-20D	3.4	6.5	9.5	6	M3x0.5	6	2H9 $^{+0.025}_{0}$	2	21H9 $^{+0.052}_{0}$	2H9 $^{+0.025}_{0}$	2

QQ3 / MHS3 Series Cylindrical Air Gripper (3 Fingers, Parallel Type)

Figure Dimension(mm)

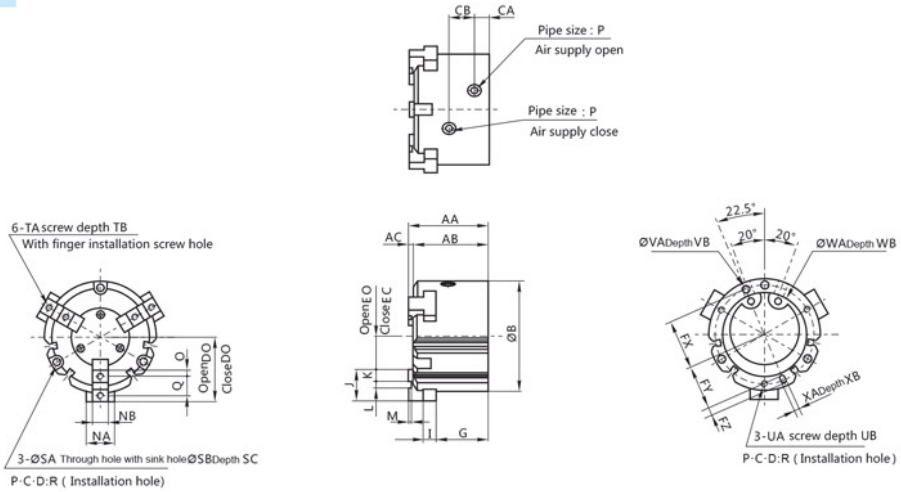
QQ3 -32D~80D



Model	AA	AB	AC	B	CA	CB	DC	DO	EC	EO	FX	FY	FZ	G	I	J	K	L	M	NA	NB
QQ3-32D	44	41	3	52	8	16	28	32	8	12	22	19.5	5	30.5	6	20	9	2H9 $^{+0.025}_{0}$	2	14	8h9 $^{0}_{-0.036}$
QQ3-40D	47	44	3	62	9	17	31	35	10	14	26.5	23.5	6	32	7	21	9	3H9 $^{+0.025}_{0}$	2	16	8h9 $^{0}_{-0.036}$
QQ3-50D	55	52	3	70	9	20	35	41	11	17	31	28	6	37.5	9	24	10	4H9 $^{+0.030}_{0}$	2	18	10h9 $^{0}_{-0.036}$
QQ3-63D	66	62	4	86	12	22	43	51	15	23	38	34.5	7	44	11	28	11	6H9 $^{+0.030}_{0}$	3	24	12h9 $^{0}_{-0.043}$
QQ3-80D	82	77	5	106	13.5	27	53.5	63.5	21.5	31.5	47.5	43.5	8	56	12	32	12	8H9 $^{+0.036}_{0}$	4	28	14h9 $^{0}_{-0.043}$

Model	O	P	Q	R	SA	SB	SC	TA	TB	UA	UB	VA	VB	WA	WB	XA	XB	YC
QQ3-32D	4.5	M5x0.8	11	44	4.5	8	9	M4x0.7	8	M4x0.7	6	3H9 $^{+0.025}_{0}$	3	34H9 $^{+0.062}_{0}$	2	3H9 $^{+0.025}_{0}$	3	6
QQ3-40D	4.5	M5x0.8	12	53	5.5	9.5	9	M4x0.7	8	M5x0.8	7.5	4H9 $^{+0.030}_{0}$	4	42H9 $^{+0.062}_{0}$	2	4H9 $^{+0.030}_{0}$	4	8
QQ3-50D	5	M5x0.8	14	62	5.5	9.5	12	M5x0.8	10	M5x0.8	10	4H9 $^{+0.030}_{0}$	4	52H9 $^{+0.074}_{0}$	2	4H9 $^{+0.030}_{0}$	4	7
QQ3-63D	5.5	M5x0.8	17	76	6.6	11	14	M5x0.8	10	M6x1	9	5H9 $^{+0.030}_{0}$	5	65H9 $^{+0.074}_{0}$	2.5	5H9 $^{+0.030}_{0}$	5	7.5
QQ3-80D	6	Rc 1/8	20	95	6.6	11	19	M6x1	12	M6x1	12	6H9 $^{+0.030}_{0}$	6	82H9 $^{+0.087}_{0}$	3	6H9 $^{+0.030}_{0}$	6	8

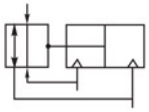
QQ3 -100D•125D

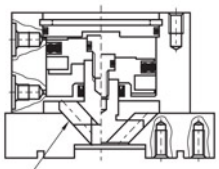


Model	AA	AB	AC	B	CA	CB	DC	DO	EC	EO	FX	FY	FZ	G	I	J	K	L	M	NA	NB
QQ3-100D	96	90	6	134	18	30.6	66	78	28	40	59	54	10	63	15	38	15	8H9 $^{+0.036}_{0}$	4	34	18h9 $^{0}_{-0.043}$
QQ3-125D	122	114	8	166	23.5	38	82	98	30	46	74	68	12	84	18	52	21	10H9 $^{+0.036}_{0}$	6	40	22h9 $^{0}_{-0.052}$

Model	O	P	Q	R	SA	SB	SC	TA	TB	UA	UB	VA	VB	WA	WB	XA	XB
QQ3-100D	7.5	Rc 1/4	23	118	9	14	21	M8x1.25	16	M8x1.25	16	8H9 $^{+0.036}_{0}$	6	102H9 $^{+0.087}_{0}$	4	8H9 $^{+0.036}_{0}$	6
QQ3-125D	10.5	Rc 3/8	31	148	11	17.5	34	M10x1.5	20	M10x1.5	20	10H9 $^{+0.036}_{0}$	8	130H9 $^{+0.100}_{0}$	6	10H9 $^{+0.036}_{0}$	8

QQ4 / MHS4 Series Cylindrical Air Gripper (4 Fingers, Parallel Type)





Wedge cam structure can increase the clamping force

Specification

Model	QQ4-16D	QQ4-20D	QQ4-25D	QQ4-32D	QQ4-40D	QQ4-50D	QQ4-63D
Bore	Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63
Using fluid	Air						
Use pressure range	0.2~0.6MPa			0.1~0.6M			
Use temperature range	-10~+60° C						
Repeat precision	±0.01mm						
Max action frequency	120c.p.m			60c.p.m		1	
Oil supply	No need						
Action type	Double Action						
note)Gripping force Outside diameter clip	10	19	31	55	88	140	251
N pressure0.5Mpa Inside diameter clip	12	21	35	61	97	153	268
Finger stroke(mm)	4	4	6	8	8	12	16
Magnet switch	M3x0.5	M5x0.8					
Pipe Size	Built-in magnetic ring type						

Note: clamping diameter of clamping force, Ø16~Ø25 clamping distance L=20mm, Ø32~Ø63 clamping distance L=30mm,Ø80~Ø125 clamping distance L=50mm

Choosen Type

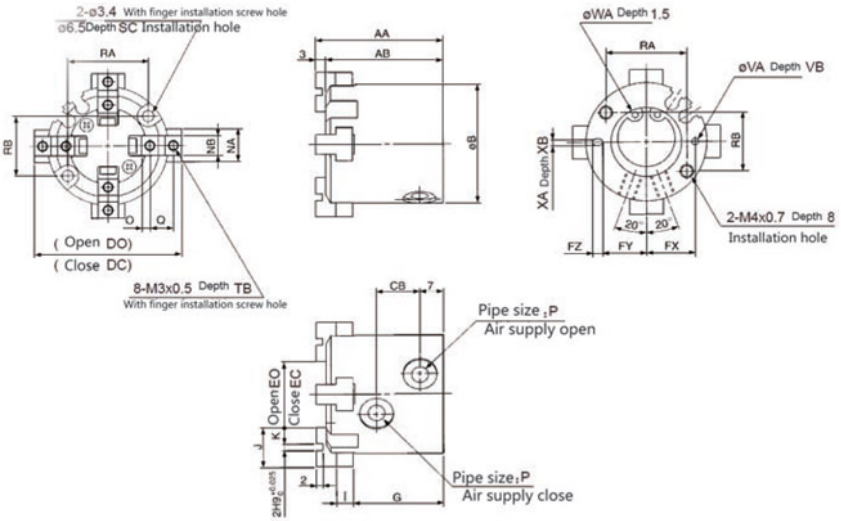
QQ4 — 20 — D — 2

缸径
16– ϕ 16mm　40– ϕ 40mm
20– ϕ 20mm　50– ϕ 50mm
25– ϕ 25mm　63– ϕ 63mm
32– ϕ 32mm

双作用

开关数量
1 : 1 个
2 : 2 个

Figure Dimension(mm)　QQ4-16D~25D



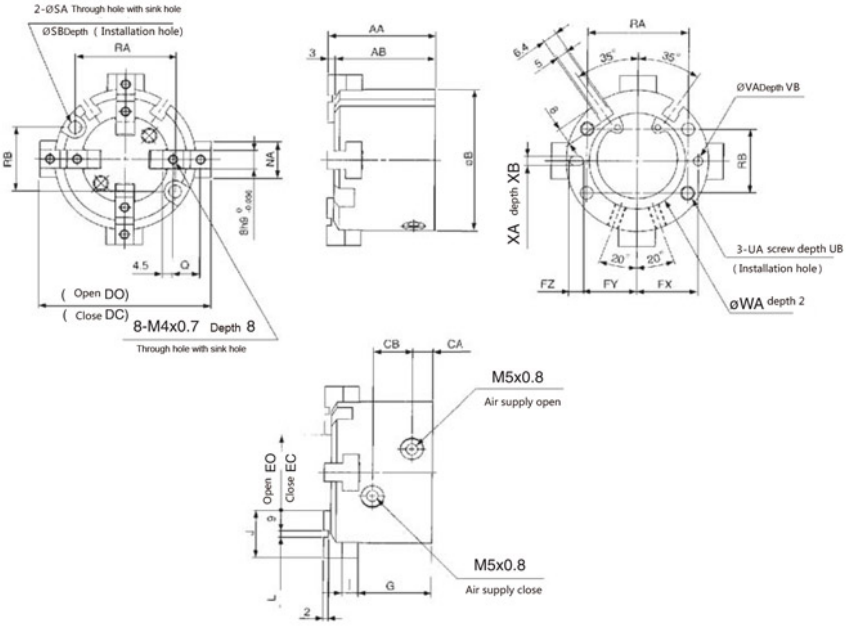
Model	AA	AB	B	CB	DC	DO	EC	EO	FX	FY	FZ	G	I	J	K	NA	NB	O	P	Q
QQ4-16D	35	32	30	11	33	37	13	17	12.5	11	3	25	4	10	4	8	5h9 $^{0}_{-0.030}$	2	M3 x 0.5	6
QQ4-20D	38	35	36	13	39	43	15	19	14.5	13	3	27	5	12	5	10	6h9 $^{0}_{-0.030}$	2.5	M5 x 0.8	7
QQ4-25D	40	37	42	15	48	54	20	26	17	14.5	5	28	5	14	6	12	6h9 $^{0}_{-0.030}$	3	M5 x 0.8	8

Model	RA	RB	SC	TB	VA	VB	WA	XA	XB
QQ4-16D	18	16	8	5	2h9 $^{+0.025}_{0}$	2	17h9 $^{+0.043}_{0}$	2h9 $^{+0.025}_{0}$	2
QQ4-20D	24	18	9.5	6	2h9 $^{+0.025}_{0}$	2	21h9 $^{+0.052}_{0}$	2h9 $^{+0.025}_{0}$	2
QQ4-25D	26	22	10	6	3h9 $^{+0.025}_{0}$	3	26h9 $^{+0.052}_{0}$	3h9 $^{+0.025}_{0}$	3

QQ4 / MHS4 Series Cylindrical Air Gripper (4 Fingers, Parallel Type)

■ Figure Dimension(mm)

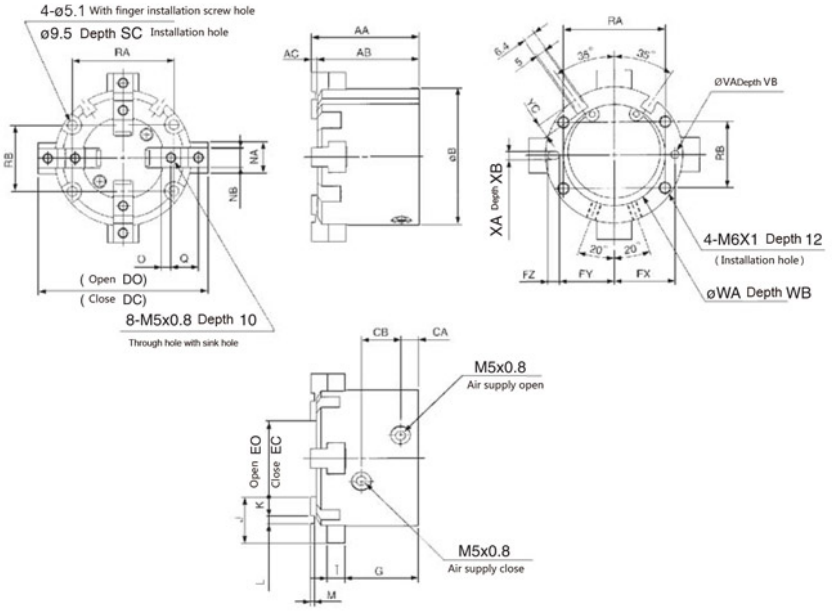
QQ4 -32D~40D



Model	AA	AB	B	CA	CB	DC	DO	EC	EO	FX	FY	FZ	G	I	J	L	NA	Q	RA	RB	SA
QQ4-32D	44	41	56	8	16	60	68	20	28	23	20.5	5	30.5	6	20	2h9 $^{+0.025}_{0}$	14	11	38	25	4.5
QQ4-40D	47	44	62	9	17	66	74	24	32	26.5	23.5	6	32	7	21	3h9 $^{+0.025}_{0}$	16	12	44	28	5.5

Model	SB	UA	UB	VA	VB	WA	XA	XB
QQ4-32D	8	M5 x 0.8	10	3h9 $^{+0.025}_{0}$	3	34h9 $^{+0.062}_{0}$	34h9 $^{+0.025}_{0}$	3
QQ4-40D	9.5	M6 x 1	12	4h9 $^{+0.025}_{0}$	4	42h9 $^{+0.062}_{0}$	4h9 $^{+0.025}_{0}$	4

QQ4 -50D~63D



Model	AA	AB	AC	B	CA	CB	DC	DO	EC	EO	FX	FY	FZ	G	I	J	K	NB	M	NA	NB
QQ4-50D	55	52	3	70	9	20	74	86	26	38	31	28	6	37.5	9	24	10	4h9 $^{+0.030}_{0}$	2	18	10h9 $^{0}_{-0.036}$
QQ4-63D	66	62	4	86	12	22	91	107	35	51	38	34.5	7	44	11	28	11	6h9 $^{+0.030}_{0}$	3	24	12h9 $^{0}_{-0.043}$

Model	O	Q	RA	RB	SC	VA	VB	WA	WB	XA	XB	YC
QQ4-50D	5	14	52	34	12	4h9 $^{+0.030}_{0}$	4	52h9 $^{+0.074}_{0}$	2	4h9 $^{+0.030}_{0}$	4	7
QQ4-63D	5.5	17	66	38	14	5h9 $^{+0.030}_{0}$	5	65h9 $^{+0.074}_{0}$	2.5	5h9 $^{+0.030}_{0}$	5	7.5

MSQ Series Rotary Table Cylinder (Rack & Pinion Style)

ϕ 10– ϕ 200

Ordering Code

Built–in ring–type: MSQ B [10] [A]

- Basic
- Bore
  - 10– ϕ 10mm
  - 20– ϕ 20mm
  - 30– ϕ 30mm
  - 50– ϕ 50mm
  - 70– ϕ 70mm
  - 100– ϕ 100mm
  - 200– ϕ 200mm
- A–With the angle adjustment bolt
- B–Device with hydraulic shock absorbers

Specification

Bore (mm)		10	20	30	50	70	100	200
Medium		Air						
Action way		Double acting						
Working Pressure	Adjustment Bolts	1.0MPa{10.2kgf/cm²}						
	Shock Absorber	0.6MPa{6.1kgf/cm²}						
Minimum Operating Pressure		0.1MPa{1.0kgf/cm²}						
Environment and fluid temperature		0 ~ 60 °C						
Buffer		Rubber Buffer (standard) / hydraulic shock–absorbing device (optional)						
Allow the force	Adjustment Bolts	0.007J	0.025J	0.048J	0.081J	0.24J	0.32J	0.56J
	Shock Absorber	0.039J	0.116J	0.116J	0.294J	1.1J	1.6J	2.9J
Angle adjustment range		0 ~ 190 °						
Maximum swing angle		190 °						
Swing range and stable time	Adjustment Bolts	0.2~1.0 s/90 °				0.2~1.5 s/90 °	0.2~2.0 s/90 °	0.2~2.5 s/90 °
	Shock Absorber	0.2~0.7 s/90 °				0.2~1.0 s/90 °		
Piston diameter		ϕ 15	ϕ 18	ϕ 21	ϕ 25	ϕ 28	ϕ 32	ϕ 40
Pipe size		M5 x 0.8	Rc(PT)1/8					

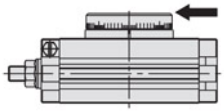
Character

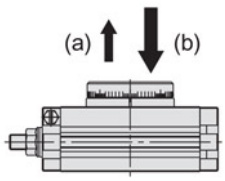
Rotating platform type, workpiece easy installation .
Roller bearing design, the load as large as CRQ Series 3 to 4 times.
Swing smoothly; accurately.
Hollow shaft can be used for the introduction of wire or climate.
Standard device with a transfer point, adjust the angle range.
Built–in magnetic ring, magnetic switch can be installed.

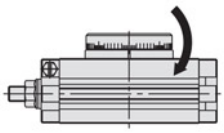
Ordering Code

1) Need moment: 0.8Nm(under 0.5mpa)。 Code: MSQB10A
2) Need load: 180N(b), within shock absorber。 Code: MSQB30R

Allow the load



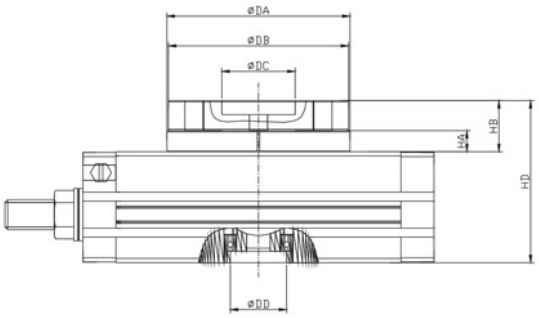




Type	Allow radial load(N)		Axial load permitted (N)				Allow the Bay from(N•m)		Effective output torque (N·m) (0.5MPa)
			(a)		(b)				
	Basic	Precision type	Basic		Precision type		Basic	Precision type	
MSQ□10□	78	86	74	74	78	107	2.4	2.9	0.89
MSQ□20□	147	166	137	137	137	197	4.0	4.8	1.84
MSQ□30□	196	233	197	197	363	398	5.3	6.4	2.73
MSQ□50□	314	378	296	286	451	517	9.7	12	4.64
MSQ□70□	333	–	296	–	476	–	12.0	–	6.79
MSQ□100□	390	–	493	–	708	–	18.0	–	10.1
MSQ□200□	543	–	740	–	1009	–	25.0	–	19.8

Figure Dimension(mm)

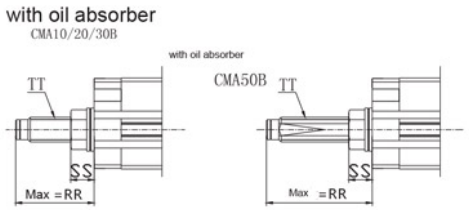
ϕ 10— ϕ 200

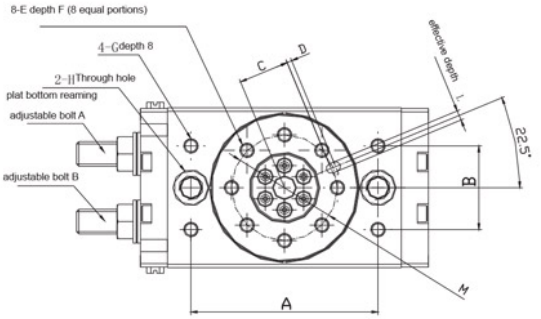


Type	DA	DB	DC	DD	HA	HB	HD
MSQA10□	46h8	45h8	45h8	15H8	10	18.5	52.5
MSQA20□	61h8	60h8	60h8	17H8	15.5	26	63
MSQA30□	67h8	65h8	65h8	22H8	16.5	27	67
MSQA50□	77h8	75h8	75h8	26H8	17.5	30	76

Figure Dimension(mm)

MSQB10,20,30,50

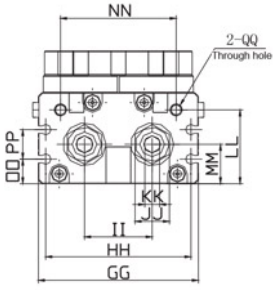


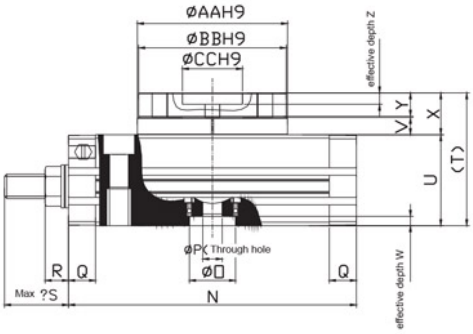


Every turning circle's adjusting angle

Type	Every turning circle's adjusting angle
MSQB10□	About 10.2°
MSQB20□	About 7.2°
MSQB30□	About 6.5°
MSQB50□	About 8.2°

Angle adjusting screw or hydraulic cushion per turning 1 circle

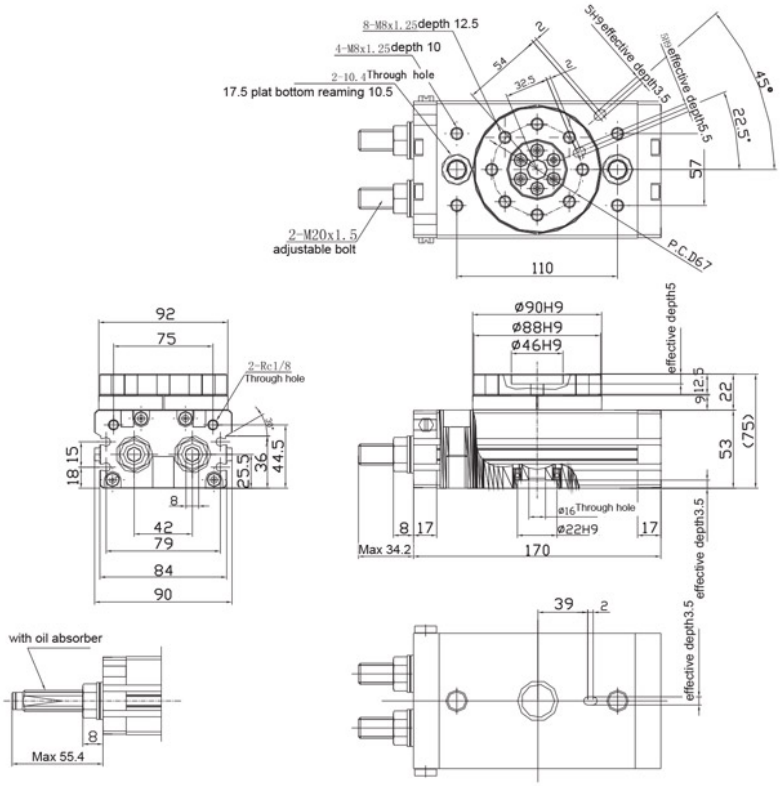




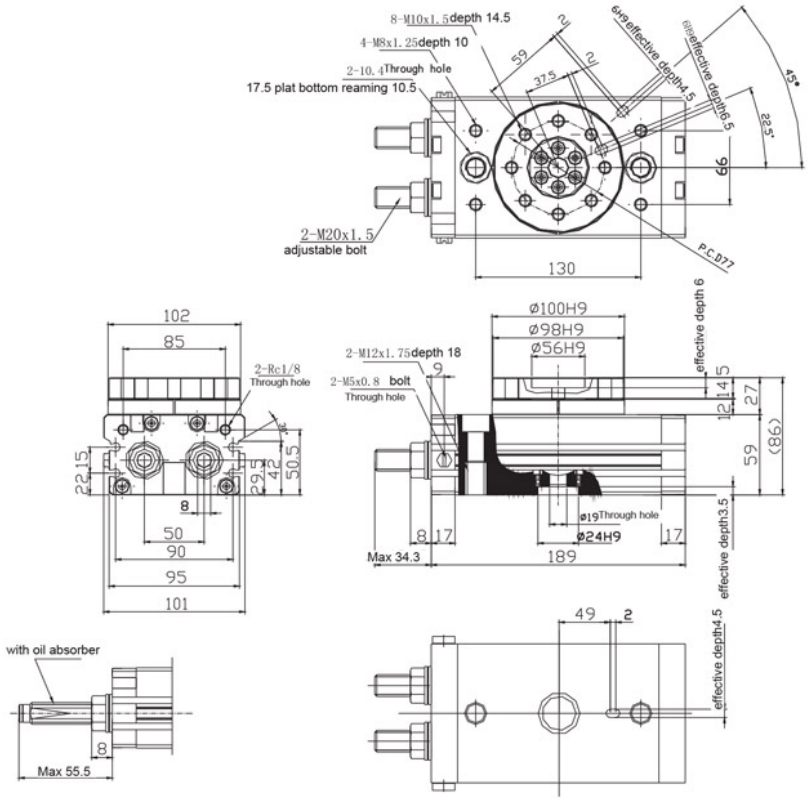
Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
MSQB10□	60	27	15	2	M5x0.8	8	M5x0.8	6.8	11	6.5	3H9	3.5	32	92	15H9	5	9.5	8.6	17.7	47	34	4.5	3	13	8	4
MSQB20□	76	34	20.5	2	M6x1	10	M6x1	8.6	14	8.5	4H9	4.5	43	117	17H9	9	12	10.6	25	54	37	6.5	2.5	17	10	6
MSQB30□	84	37	23	2	M6x1	10	M6x1	8.6	14	8.5	4H9	4.5	48	127	22H9	9	12	10.6	25	57	40	6.5	3	17	10	4.5
MSQB50□	100	50	26.5	2	M8x1.25	12	M8x1.25	10.5	18	10.5	5H9	5.5	55	152	26H9	10	15.5	14	31.4	66	46	7.5	3	20	12	5

Type	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT
MSQB10□	46	45	20	M8x1.25	12	M8x1	50	45	20	12	4	27.8	15.5	34.5	9	13	M5x0.8	31.5	8.6	M8x1
MSQB20□	61	60	28	M10x1.5	15	M10x1	65	60	27.5	14	5	28.5	16	51	10	12	M5x0.8	34.7	10.6	M10x1
MSQB30□	67	65	32	M10x1.5	15	M10x1	70	65	29	14	5	32	18.5	50	11.5	14	1/8	34.7	10.6	M10x1
MSQB50□	77	75	35	M12x1.75	18	M14x1.5	80	75	38	19	6	37.5	22	63	14.5	15	1/8	51.7	14	M14x1.5

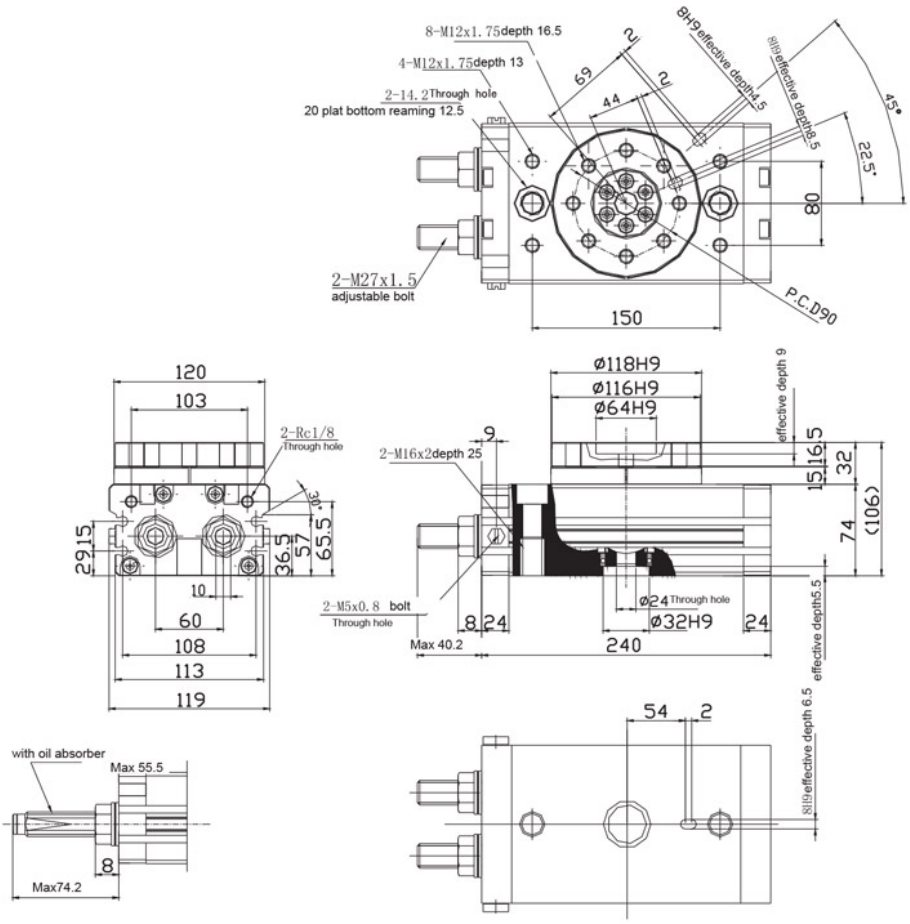
MSQB70



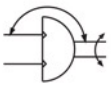
MSQB100



MSQB200


8-M12x1.75depth 16.5
4-M12x1.75depth 13
2-14.2Through hole
20 plat bottom reaming 12.5
2-M27x1.5
adjustable bolt
8H9effective depth4.5
8H9effective depth8.5
45°
22.5°
69
44
80
150
P.C.D90
120
103
2-Rc1/8
Through hole
30°
29
15
36.5
57
65.5
10
60
108
113
119
ø118H9
ø116H9
ø64H9
effective depth 9
2-M16x2depth 25
9
15
16.5
32
74
(106)
2-M5x0.8 bolt
Through hole
8
24
ø24 Through hole
ø32H9
24
Max 40.2
240
effective depth5.5
effective depth 6.5
8H9effective depth 6.5
54
2
with oil absorber
Max 55.5
8
Max74.2

ROT Series Turnable Cylinder



Product feature

High precision type use ball bearing, so the vertical and horizontal position accuracy increased to + 0.01mm.

Rotary table type, easy installation.

Rolling bearing design, strong load bearing capacity.

Swing smoothly and accurately.

The hollow shaft can be used for the introduction of a wire or a pipe.

Standard angle adjustment device, adjusting the angle range of large (0 to 190).

The built-in magnetic ring, magnetic switch can be installed.

Specification

Model	ROT10-□R	OT20-□	ROT30-□	ROT50-□	ROT70-□	ROT100-□
Action type	Double action					
Using fluid	Air					
Torque force N.m	1.5	2.2	3.2	5.5	7.5	9.8
Bore	Φ15	Φ18	Φ20	Φ25	Φ28	Φ32
Swing angle	90° , 180°					
Adjusting angle	Swing end ± 3°					
Pipe Size	M5 × 0.8		Rc(P T 1 / 8 ")			
Use pressure kgf/cm²(kpa)	1.5~7(150~700)					
Use temperature range ℃	0~50					

Choosen Type

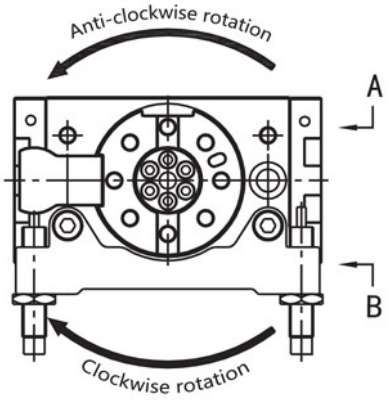
ROT [20] — [B] — [90] — [2] [SR07]

- 20 — Bore
  - 10：1.5Nm
  - 20：2.2Nm
  - 30：3.2Nm
  - 50：5.5Nm
  - 70：7.5Nm
  - 100：9.8Nm
- B — Angle adjustment type
  - B：With hydraulic cushion 2pcs
- 90 — Turning angle
  - 90：90°
  - 180：180°
- 2 — Switch quantity
  - 1：1个
  - 2：2个
  - N：N个
- SR07 — Switch model
  - No mark：no switch
  - SR07
  - SD07
  - SN07
  - SP07

Hydraulic cushion matching

Cylinder specification	Cushion model	Max absorption capacity
ROT10	AC-1008-N	2 kgf.m
ROT20	AC-0806-N	4 kgf.m
ROT30	AC-1412-N	4 kgf.m
ROT50	AC-1008-N	20 kgf.m
ROT70	AC-2020-N	40 kgf.m
ROT100	AC-2020-N	40 kgf.m

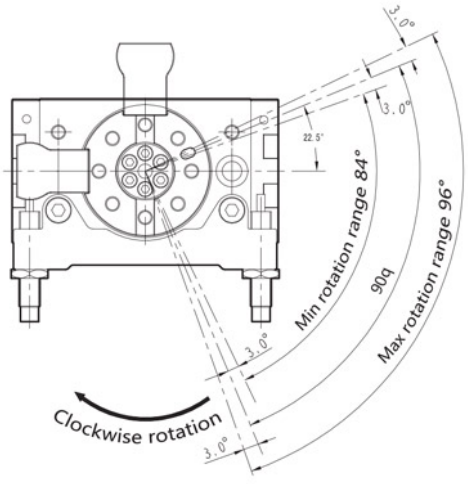
Rotary direction



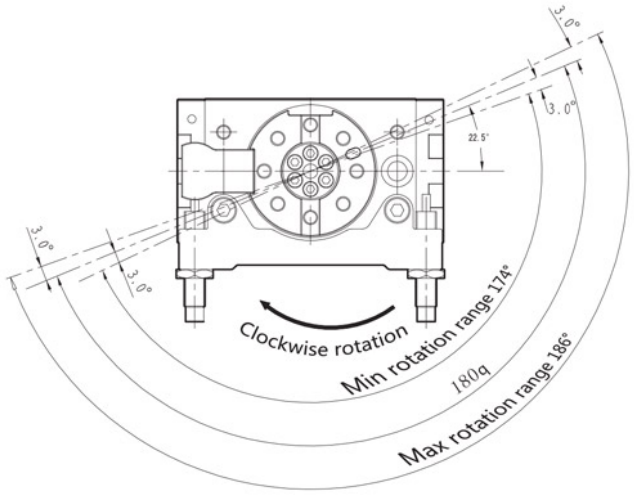
Instruction:

when hole A is input pressure, turntable will be anti-clockwise rotation. When the stop block is close to the end of the rotary stroke, the shock absorption of the cushion on the external fixator is absorbed. This part of the cushion can be adjusted in the right amount, when anti hole B is input pressure, the turntable will be clockwise rotation, it can also achieve the same effect.

turning angle range setting



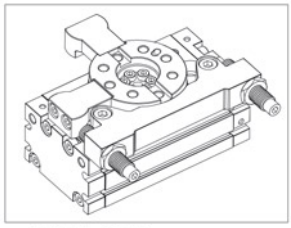
•90qRotation



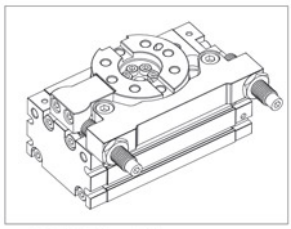
•180qRotation

Figure Dimension(mm)

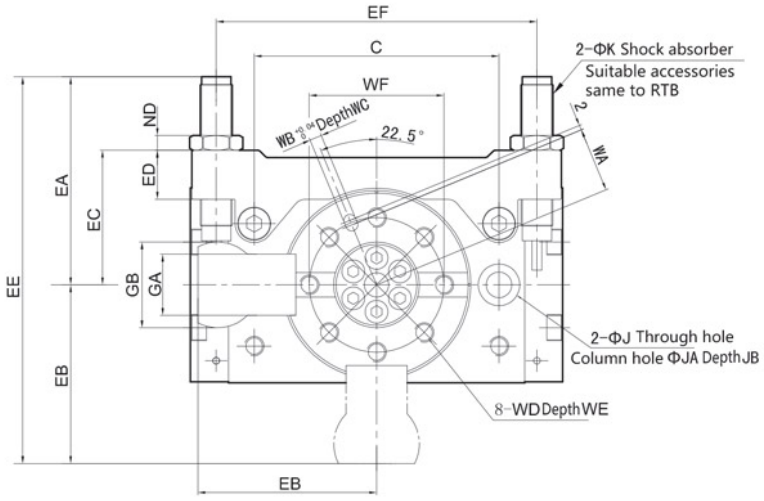
ROT □-90° (180°)

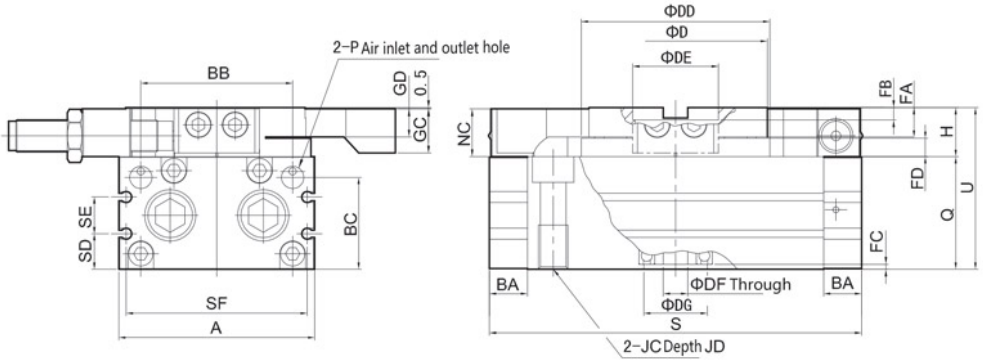


ROT □-90°



ROT □-180°





Item / Bore	A	BA	BB	BC	C	D	DD	DE	DF	DG	EA	EB	EC	ED	EE	EF	FA	FB	FC	FD	FA	GB	GC	GD	H
Φ10	50	9.5	35	28.2	60	45	46	20	5	15	51.6	44.5	34	14	96.1	80	8	4	2.5	4.5	15	20	12	7.5	13
Φ20	65	12	50.8	28.6	76	60	61	28	9	17	56	57	43	18	113	101	9.7	6.5	2.5	6.6	19	25	9	15	17
Φ30	70	12	52	33	84	65	67	32	9	22	59	62	46	18	121	110	10	4.5	3	6.5	20	28	16	9	17
Φ50	80	15.5	62	37.5	100	75	77	35	10	26	85	73	55	20	158	131	12	5	2	7.5	25	35	18	11.5	20
Φ70	92	17	70	50.3	110	88	90	46	16	22	93	81	61	20	174	144	12.5	5	3.5	9	29	40	19.5	11.5	22
Φ100	102	14	82	50.3	130	98	100	56	19	24	100	88	71	23	188	158	14.5	6	3.5	12	36	47	18	13.5	27

Item / Bore	J	JA	JB	JC	JD	K	NA	NB	NC	ND	P	Q	S	SD	SE	SF	U	WA	WB	WC	WD	WE	WF
Φ10	6.8	11	6.5	M8×1.25	12	M8×1	11	6	12.5	3	M5×0.8	34	92	9	13	44	47	15	3	3.5	M5×0.8	8	32
Φ20	8.6	14	8.5	M10×1.5	15	M10×1	12.7	7.5	16.5	3	M5×0.8	37	117	10	12	59	54	20.5	4	5	M6×1	10	43
Φ30	8.6	14	8.5	M10×1.5	15	M10×1	12.7	8.5	16.5	3	Rc 1/8	40	127	11.5	14	64	57	23	4	4.5	M6×1	10	48
Φ50	10.5	17	10.5	M12×1.75	18	M14×1.5	19	8.5	19.5	6	Rc 1/8	46	152	14.5	15	74	66	26.6	5	5.5	M8×1.25	12	55
Φ70	10.5	17	10.5	M12×1.75	18	M14×1.5	19	10	21.5	6	Rc 1/8	53	170	14.5	24	78	75	32.5	5	5.5	M8×1.25	12.5	67
Φ100	10.5	17	10.5	M12×1.75	18	M20×1.5	26	11.5	26.5	8	Rc 1/8	59	189	16	27	89	86	37.5	6	6.5	M10×1.5	14.5	77

CRY / CY1B / CY1R Series Rodless Cylinder

(ϕ 15– ϕ 40)

Product feature

Magnetic coupling structure, good axial load resistance ability, save space.

Choosen Type

Basic type	CRYB / CY1B			20	X	100	
Direct installation	CRYR / CY1R	G	—	20	X	100	— S

- Piping type: No mark: two sides Piping; G: concentrated piping
- Bore
- Stroke
- Magnet code: No mark: no magnet; S: with magnet

Standard Specification

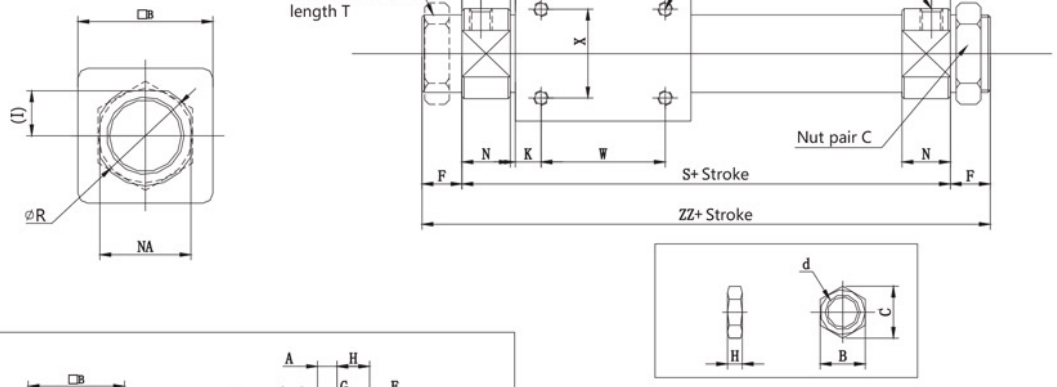
Bore(mm)	15	20	25	32	40
Working medium	Air(no oil)				
Max using pressure(MPa)	0.7				
Min using pressure(MPa)	0.16		0.15	0.14	0.12
Environment and fluid temperature	−10～+70℃ (not frozen)				
Piston speed mm/s	RYB:50～400;CRYR:50～500				
Cushion	Two ends with cushion				
Magnetic holding force N	137	231	363	588	922
Piping size	M5×0.8	1/8			

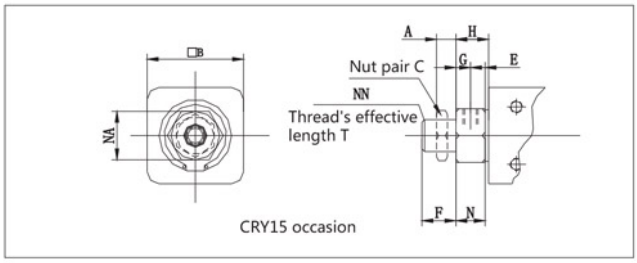
Stroke

Bore (mm)	Standard Stroke	Max. Stroke	
		without switch	with switch
15	50,100,150,200,250,300,350,400,450,500	1000	750
20	100,150,200,250,300,350,400,450,500,600,700,800	1500	1000
25	100,150,200,250,300,350,400,450,500,600,700,800	1500	1200
32	100,150,200,250,300,350,400,450,500,600,700,800	3000	1500
40	100,150,200,250,300,350,400,450,500,600,700,800,900,1000	3000	1500

Figure Dimension(mm)

CRY basic type(φ 15~ φ 40)





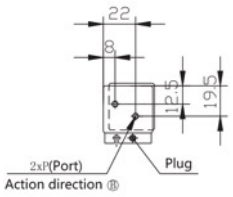
Part number	Bore (mm)	d	H	B	C
SNJ-016B	15	M10 x 1.0	4	14	16.2
SNJ-020B	20	M20 x 1.5	8	26	30
SNJ-032B	25.32	M26 x 1.5	8	32	37
SNJ-040B	40	M32 x 2.0	10	41	47.3

Model	B	D	E	F	G	H	I	J	K	L	MM	N	NA	NN	R	S	W	X	ZZ
CRYB15	35	16.6	3	10	5.5	13	–	6	11	57	M4 x 0.7	11	17	M10 x 1	–	83	35	19	102
CRYB20	36	21.6	2	13	7.5	20	12	6	8	66	M4 x 0.7	18	24	M20 x 1.5	28	106	50	25	133
CRYB25	46	26.4	2	13	7.5	20.5	15	8	10	70	M5 x 0.8	18.5	30	M26 x 1.5	34	111	50	30	132
CRYB32	60	33.6	2	16	8	22	18	8	15	80	M6 x 1	20	36	M26 x 1.5	40	124	50	40	157
CRYB40	70	41.6	3	16	11	29	23	10	16	92	M6 x 2	26	46	M32 x 2	50	150	60	40	186

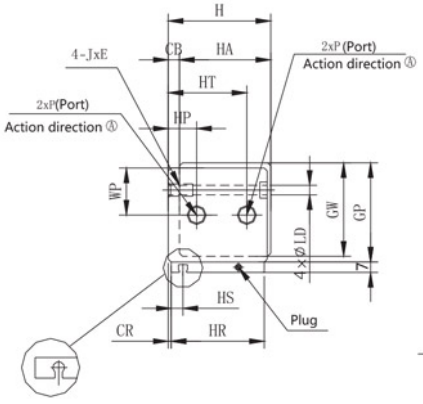
CRY Concentrated piping type(φ 15~ φ 40)

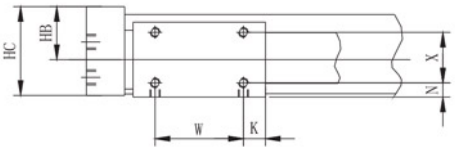
Model	HP	HT
CRYRG15	–	–
CRYRG20	11	28
CRYRG25	14.	33.5
CRYRG32	20	41
CRYRG40	25	50

Note: not with the same size on both sides of the piping.



CR3RG15 occasion





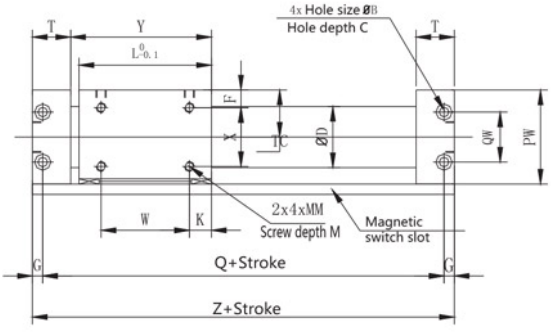
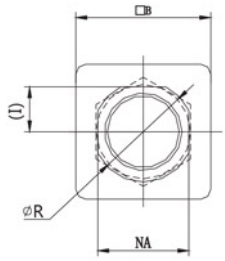
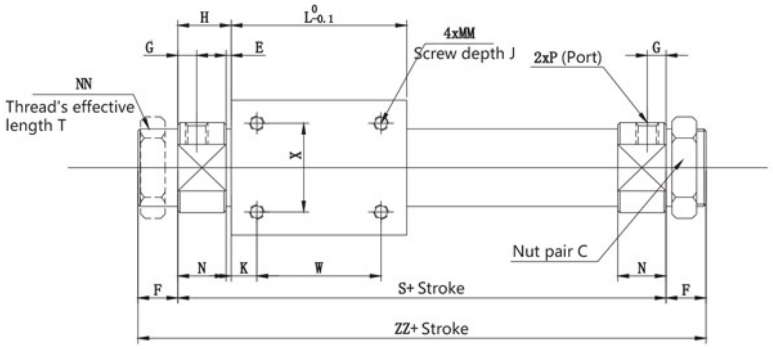
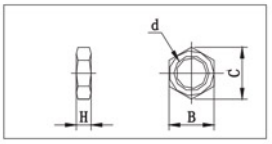


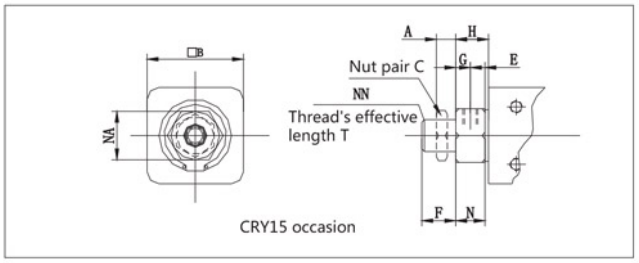
Figure Dimension(mm)

CRY basic type(φ 15~ φ 40)









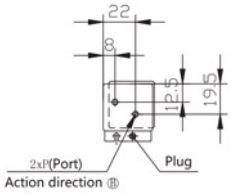
Part number	Bore (mm)	d	H	B	C
SNJ-016B	15	M10 x 1.0	4	14	16.2
SNJ-020B	20	M20 x 1.5	8	26	30
SNJ-032B	25.32	M26 x 1.5	8	32	37
SNJ-040B	40	M32 x 2.0	10	41	47.3

Model	B	D	E	F	G	H	I	J	K	L	MM	N	NA	NN	R	S	W	X	ZZ
CRYB15	35	16.6	3	10	5.5	13	–	6	11	57	M4 x 0.7	11	17	M10 x 1	–	83	35	19	102
CRYB20	36	21.6	2	13	7.5	20	12	6	8	66	M4 x 0.7	18	24	M20 x 1.5	28	106	50	25	133
CRYB25	46	26.4	2	13	7.5	20.5	15	8	10	70	M5 x 0.8	18.5	30	M26 x 1.5	34	111	50	30	132
CRYB32	60	33.6	2	16	8	22	18	8	15	80	M6 x 1	20	36	M26 x 1.5	40	124	50	40	157
CRYB40	70	41.6	3	16	11	29	23	10	16	92	M6 x 2	26	46	M32 x 2	50	150	60	40	186

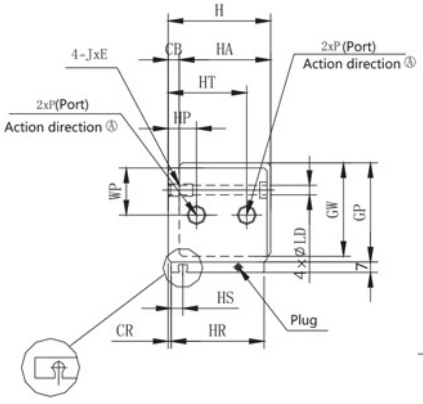
CRY Concentrated piping type(φ 15~ φ 40)

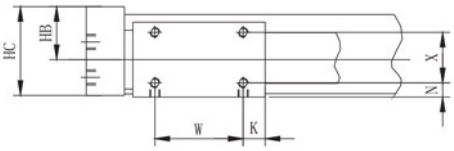
Model	HP	HT
CRYRG15	–	–
CRYRG20	11	28
CRYRG25	14.	33.5
CRYRG32	20	41
CRYRG40	25	50

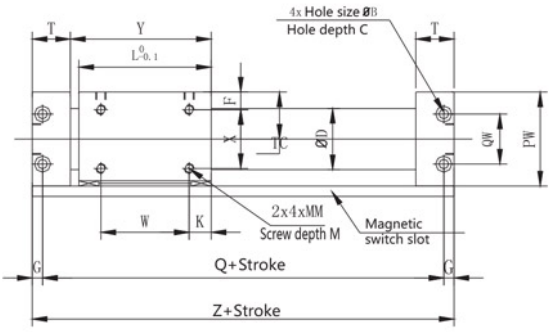
Note: not with the same size on both sides of the piping.



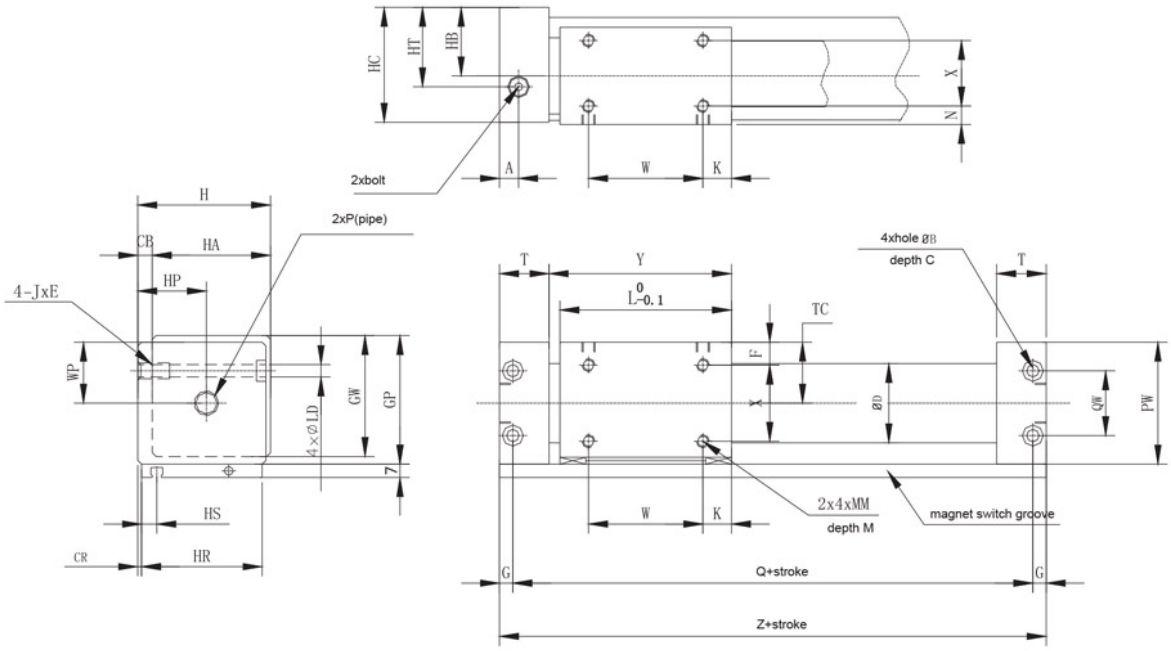
CR3RG15 occasion







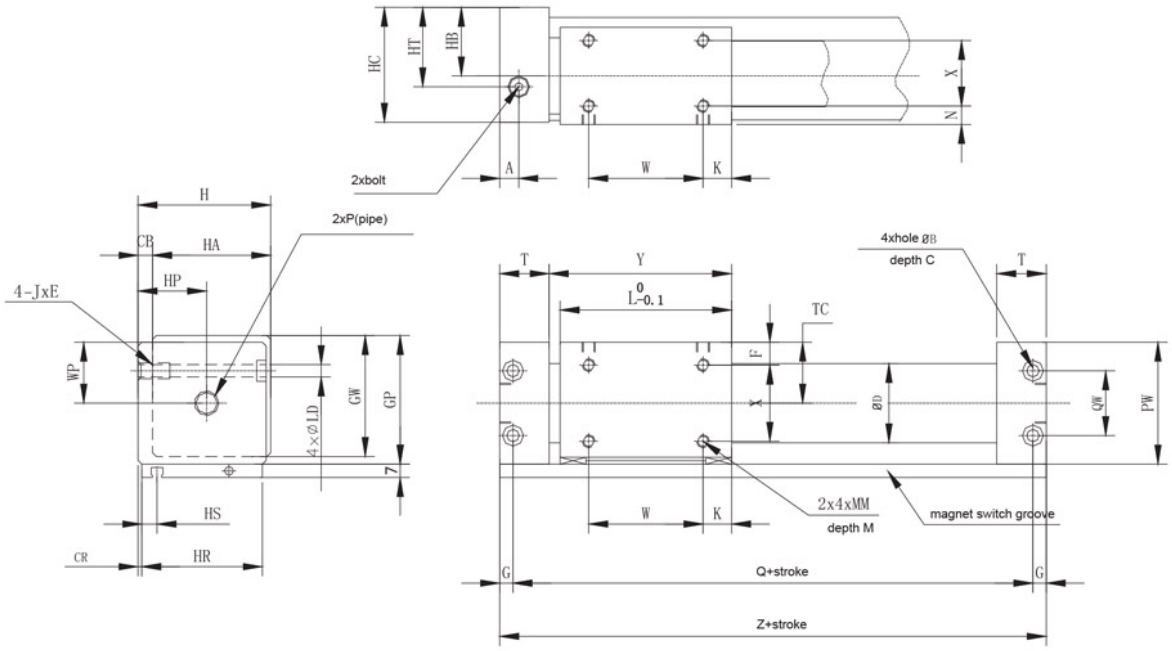
CRY two ends piping type(φ 15~ φ 40)



Model	A	B	C	CB	CR	D	F	G	GP	GW	H	HA	HB	HC	HP	HR	HS	HT	J x E	K
CRYB15	10.5	8	4.2	2	0.5	16.6	8	5	33	31.5	32	30	17	31	17	30	8.5	17	M5 x 0.8 x 7	14
CRYB20	9	9.5	5.2	3	1	21.6	9	6	39	37.5	39	36	21	38	24	36	7.5	24	M6 x 1 x 8	11
CRYB25	8.5	9.5	5.2	3	1	26.4	8.5	6	44	42.5	44	41	23.5	43	23.5	41	6.5	23.5	M6 x 1 x 8	15
CRYB32	10.5	11	6.5	3	1.5	33.6	10.5	7	55	53.5	55	52	29	54	29	51	7	29	M8 x 1.25 x 10	13
CRYB40	10	11	6.5	5	2	41.6	13	7	65	63.5	67	62	36	66	36	62	8	36	M8 x 1.25 x 10	15

Model	L	LD	M	MM	N	PW	Q	QW	T	TC	W	WP	X	Y	Z
CRYB15	53	4.3	5	M4 x 0.7	6	32	84	18	19	17	25	16	18	54.5	94
CRYB20	62	5.6	5	M4 x 0.7	7	38	95	17	20.5	20	40	19	22	64	107
CRYB25	70	5.6	6	M5 x 0.8	6.5	43	105	20	21.5	22.5	40	21.5	28	72	117
CRYB32	76	7	7	M6 x 1	8.5	54	116	26	24	28	50	27	35	79	130
CRYB40	90	7	8	M6 x 1	11	64	134	34	26	33	60	32	40	93	148

CRY two ends piping type(φ 15~ φ 40)



Model	A	B	C	CB	CR	D	F	G	GP	GW	H	HA	HB	HC	HP	HR	HS	HT	J x E	K
CRYB15	10.5	8	4.2	2	0.5	16.6	8	5	33	31.5	32	30	17	31	17	30	8.5	17	M5 x 0.8 x 7	14
CRYB20	9	9.5	5.2	3	1	21.6	9	6	39	37.5	39	36	21	38	24	36	7.5	24	M6 x 1 x 8	11
CRYB25	8.5	9.5	5.2	3	1	26.4	8.5	6	44	42.5	44	41	23.5	43	23.5	41	6.5	23.5	M6 x 1 x 8	15
CRYB32	10.5	11	6.5	3	1.5	33.6	10.5	7	55	53.5	55	52	29	54	29	51	7	29	M8 x 1.25 x 10	13
CRYB40	10	11	6.5	5	2	41.6	13	7	65	63.5	67	62	36	66	36	62	8	36	M8 x 1.25 x 10	15

Model	L	LD	M	MM	N	PW	Q	QW	T	TC	W	WP	X	Y	Z
CRYB15	53	4.3	5	M4 x 0.7	6	32	84	18	19	17	25	16	18	54.5	94
CRYB20	62	5.6	5	M4 x 0.7	7	38	95	17	20.5	20	40	19	22	64	107
CRYB25	70	5.6	6	M5 x 0.8	6.5	43	105	20	21.5	22.5	40	21.5	28	72	117
CRYB32	76	7	7	M6 x 1	8.5	54	116	26	24	28	50	27	35	79	130
CRYB40	90	7	8	M6 x 1	11	64	134	34	26	33	60	32	40	93	148

CRYS Series Magnetic Coupling Rodless Cylinder

Product feature

Magnetic coupling structure, no mechnical connection between the piston and the slider, excellent sealing performance, double guide rod structure, high guidance accuracy. It can withstand a certain lateral or eccentric load.

Block cylinder technical parameter

Bore(mm)	16	20	25	32	40
Working medium	Air (no oil)				
Max using pressure(MPa)	0.7				
Min using pressure(MPa)	0.18				
Environment and fluid temperature	–10~+60℃(not frozen)				
Piping size	50~400				
Cushion	Two ends rubber cushion / hydraulic cushion (Optional)				
Magnetic holding forceN	140	200	320	550	850
Piping size	M5x0.8	Rc1/8			Rc1/4

Stroke and magnetic switch model

Bore (mm)	Standard stroke	Max stroke	Magnetic switch
16	50 100 150 200 250 300 350 400 450 500	750	model
20	100 150 200 250 300 350 400 450 500 600 700 800	1000	
25			SR07
32			SD07
40	100 150 200 250 300 350 400 450 500 600 700 800 900 1000	1500	SN07
			SP07

Choosen Type

CRY S | 20 | H | 200 | B | 2 | SR07

- **20** — Bore
  - 16: Ø16mm
  - 20: Ø20mm
  - 25: Ø25mm
  - 32: Ø32mm
  - 40: Ø40mm
- **H** — Magnet holding force type
  - H: high holding force
- **200** — Stroke
- **B** — Adjusting type
  - No mark: with adjusting screw 2pcs
  - B: with hydraulic cushion 2pcs
- **2** — Switch quantity
  - 1:1 pc
  - 2:2 pc
  - N:N pc
- **SR07** — Switch model
  - No mark: no switch
  - SR07
  - SD07
  - SN07
  - SP07

CRYS / CY1S Series Magnetic Slide Bearing Rodless Cylinder

Block cylinder technical parameter

Bore(mm)	16	20	25	32	40
Working medium	Air (no oil)				
Max using pressure(MPa)	0.7				
Min using pressure(MPa)	0.18				
Environment and fluid temperature	−10~+60℃(not frozen)				
Piping size	50~400				
Cushion	Two ends rubber cushion / hydraulic cushion (Optional)				
Magnetic holding forceN	140	200	320	550	850
Piping size	M5x0.8	Rc1/8			Rc1/4

Stroke and magnetic switch model

Bore (mm)	Standard stroke	Max stroke	Magnetic switch
16	50 100 150 200 250 300 350 400 450 500	750	model
20	100 150 200 250 300 350 400 450 500 600 700 800	1000	
25			SR07
32			SD07
40	100 150 200 250 300 350 400 450 500 600 700 800 900 1000	1500	SN07
			SP07

Choosen Type

CRY S | 20 | H | 200 | B | 2 | SR07

- **20** — Bore
  - 16: Ø16mm
  - 20: Ø20mm
  - 25: Ø25mm
  - 32: Ø32mm
  - 40: Ø40mm
- **H** — Magnet holding force type
  - H: high holding force
- **200** — Stroke
- **B** — Adjusting type
  - No mark: with adjusting screw 2pcs
  - B: with hydraulic cushion 2pcs
- **2** — Switch quantity
  - 1:1 pc
  - 2:2 pc
  - N:N pc
- **SR07** — Switch model
  - No mark: no switch
  - SR07
  - SD07
  - SN07
  - SP07

Cylinder magnetic coupling force

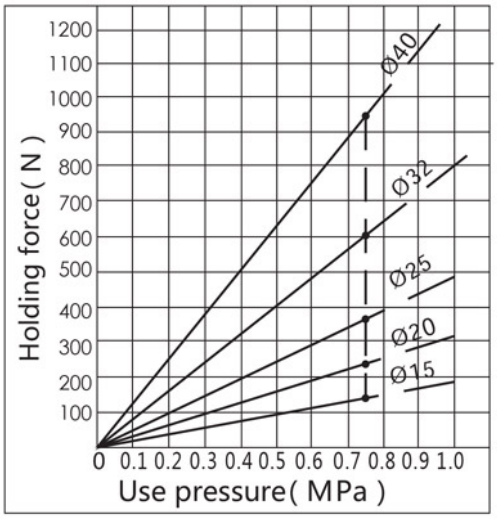
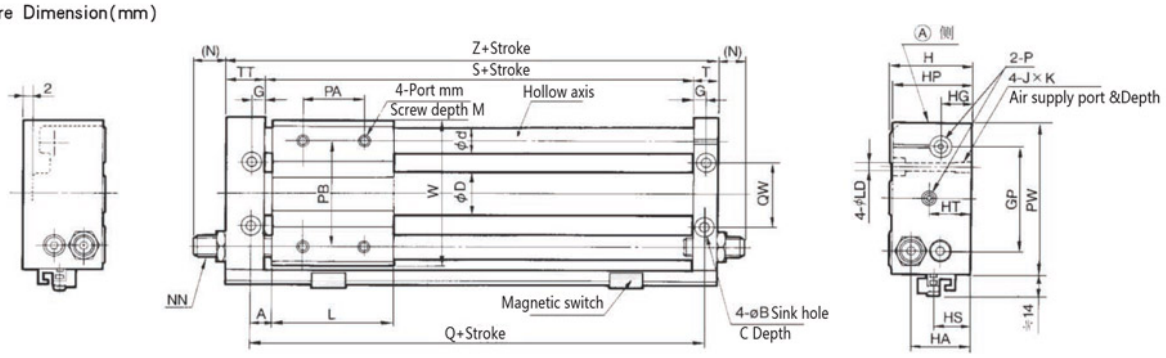


Figure Dimension(mm)



Model	Stroke range	D	d	A	B	C	HT	G	GP	H	HA	HG	HP	HS	T	JXK	L	LD	M
CRYS16	~750	16.6	12	7.5	9.5	5	21	6.5	52	40	29	13	39	15	12.5	M6X1.0X9.5	60	5.6	8
CRYS20	~1500	21.6	16	10	9.5	5.2	20	8.5	62	46	36	17	45	25.5	16.5	M6X1.0X9.5	70	5.6	10
CRYS25	~1500	26.4	16	10	11	6.5	20	8.5	70	54	40	20	53	23	16.5	M8X1.25X10	70	7	10
CRYS32	~1500	33.6	20	12.5	14	8	24	9.5	86	66	46	24	64	27	18.5	M10X1.5X15	85	8.7	12
CRYS40	~1500	41.6	25	12.5	14	8	25	10.5	104	76	57	25	74	30	20.5	M10X1.5X15	95	8.7	12

Model	MM	NN	(N)	P	PA	PB	PW	QW	Q	S	TT	Z	W
CRYS16	M5X0.8	M8X1.0	7.5	M5X0.8	30	50	75	30	75	62	22.5	97	72
CRYS20	M6X1.0	M10X1.0	9.5	Rc1/8	40	70	90	38	90	73	25.5	115	87
CRYS25	M6X1.0	M14X1.5	11	Rc1/8	40	70	100	42	90	73	25.5	115	97
CRYS32	M8X1.25	M20X1.5	11.5	Rc1/8	40	75	122	50	110	91	28.5	138	119
CRYS40	M8X1.25	M20X1.5	10.5	Rc1/8	65	105	145	64	120	99	35.5	155	142

![STNC]

CRYL Series Magnetic Coupling Rodless Cylinder

Product feature

[illegible]

Block cylinder's technical parameters

Bore(mm)	10	16	20	25	32	40
Working medium	Air (no oil)					
Max using pressure(MPa)	0.7					
Min using pressure(MPa)	0.18					
Environment and fluid temperature	-10~+60℃(not frozen)					
Piston speed mm/s	50~400					
Cushion	Two ends rubber cushion / hydraulic cushion (Optional)					
Magnetic holding forceN	140	200	320		550	850
Piping size	M5x0.8		Rc1/8			Rc1/4

Stroke and magnetic switch model

Bore (mm)	Standard stroke	Max stroke	Magnetic switch
10	50 100 150 200 250 300	500	
16	50 100 150 200 250 300 350 400 450 500	750	SR07 SD07 SN07 SP07
20	100 150 200 250 300 350 400 450 500 600 700 800	1000	
25			
32			
40	100 150 200 250 300 350 400 450 500 600 700 800 900 1000	1500	

Choosen Type

CRY L [20] — [H] — [200] — [B] — [2] [SR07]

- **20** — Bore: 10: Ø10mm, 16: Ø16mm, 20: Ø20mm, 25: Ø25mm, 32: Ø32mm, 40: Ø40mm
- **H** — Magnet holding force type: H: high holding force
- **200** — Stroke
- **B** — Adjusting type: No mark: with adjusting screw 2pcs; B: with hydraulic cushion 2pcs
- **2** — Switch quantity: 1:1 pc; 2:2 pc; N:N pc
- **SR07** — Switch model: No mark: no switch; SR07; SD07; SN07; SP07

CRYL / CY1L Series Magnetic Ball Bushing Rodless Cylinder

■ Block cylinder's technical parameters

Bore(mm)	10	16	20	25	32	40
Working medium	Air (no oil)					
Max using pressure(MPa)	0.7					
Min using pressure(MPa)	0.18					
Environment and fluid temperature	–10~+60℃(not frozen)					
Piston speed mm/s	50~400					
Cushion	Two ends rubber cushion / hydraulic cushion (Optional)					
Magnetic holding forceN	140		200	320	550	850
Piping size	M5x0.8	Rc1/8				Rc1/4

■ Stroke and magnetic switch model

Bore (mm)	Standard stroke	Max stroke	Magnetic switch
10	50 100 150 200 250 300	500	
16	50 100 150 200 250 300 350 400 450 500	750	
20	100 150 200 250 300 350 400 450 500 600 700 800	1000	SR07
25			SD07
32			SN07
40	100 150 200 250 300 350 400 450 500 600 700 800 900 1000	1500	SP07

Choosen Type

CRY L [20] — [H] — [200] — [B] — [2] — [SR07]

Bore
10: Ø10mm
16: Ø16mm
20: Ø20mm
25: Ø25mm
32: Ø32mm
40: Ø40mm

Magnet holding force type
H: high holding force

Stroke

Adjusting type
No mark: with adjusting screw 2pcs
B: with hydraulic cushion 2pcs

Switch quantity
1:1 pc
2:2 pc
N:N pc

Switch model
No mark: no switch
SR07
SD07
SN07
SP07

Max load and stroke

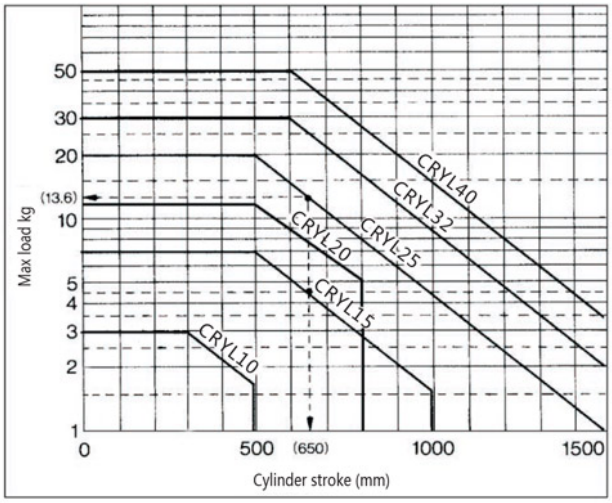
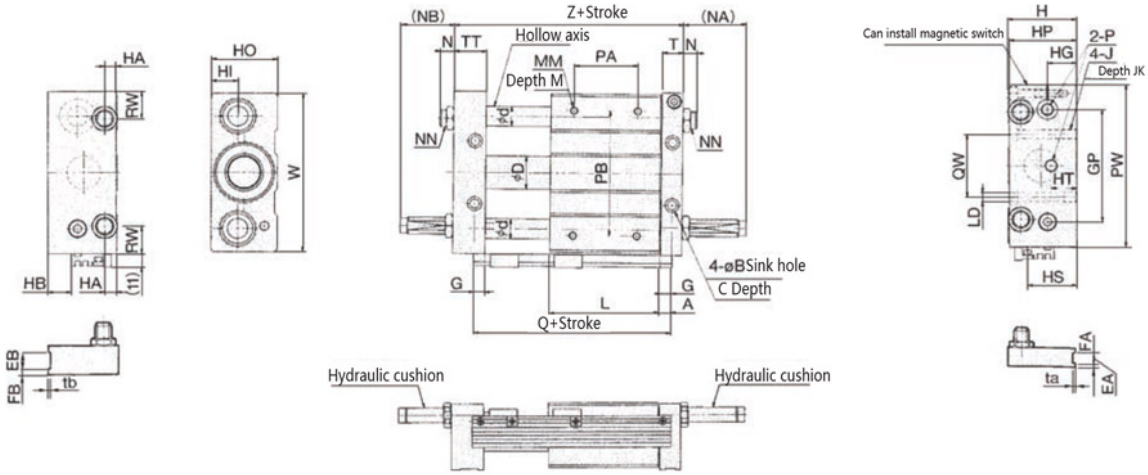


Figure Dimension(mm)



Model	Stroke range	A	B	C	D	d	EA	EB	FA	FB	G	GP	H	HA	HB	HG	HI	HO	HP	HS	HT	J	JK	L	LD
CRYL10	~500	8.5	8	4	12	10	6	12	3	5	7.5	50	34	6	17.5	14.5	13.5	33	33	21.5	18	M5X0.8	9.5	68	4.3
CRYL16	~750	7.5	9.5	5	16.6	12	6	13	3	6	6.5	65	40	6.5	4	16	14	38	39	25	16	M6X1.0	9.5	75	5.6
CRYL20	~1500	9.5	9.5	5.2	21.6	16	–	–	–	–	8.5	80	46	9	10	18	16	44	45	31	20	M6X1.0	10	86	5.6
CRYL25	~1500	9.5	11	6.5	26.4	16	8	14	4	7	8.5	90	54	9	18	23	21	52	53	39	20	M8X1.25	10	86	7
CRYL32	~1500	10.5	14	8	33.6	20	8	16	5	7	9.5	110	66	12	26.5	26.5	24.5	64	64	47.5	25	M10X1.5	15	100	9.2
CRYL40	~1500	11.5	14	8	41.6	25	10	20	5	10	10.5	130	78	12	35	30.5	28.5	76	74	56	30	M10X1.5	15	136	9.2

Model	M	MM	(N)	(NA)	(NB)	NN	P	PA	PB	PW	Q	QW	RW	T	ta	tb	TT	W	Z	Hydraulic cushion
CRYL10	8	M4X0.7	9.5	27	19	M8X1.0	M5X0.8	30	60	80	85	26	17.5	12.5	0.5	1.0	20.5	77	103	AC-0806
CRYL16	8	M5X0.8	7.5	27	17	M8X1.8	M5X0.8	45	70	95	90	30	15	12.5	0.5	1.0	22.5	92	112	AC-0806
CRYL20	10	M6X1.0	10	29	20	M10X1.0	Rc1/8	50	90	120	105	40	28	16.5	–	–	25.5	117	130	AC-1008
CRYL25	10	M6X1.0	11	49	40	M14X1.5	Rc1/8	60	100	130	105	50	22	16.5	0.5	1.0	25.5	127	130	AC-1412
CRYL32	12	M8X1.25	11.5	52	42	M20X1.5	Rc1/8	70	120	160	121	60	33	18.5	0.5	1.0	28.5	157	149	AC-2020
CRYL40	12	M8X1.25	10.5	51	36	M20X1.5	Rc1/4	90	140	190	159	84	35	20.5	1.0	1.0	35.5	187	194	AC-2020

Max load and stroke

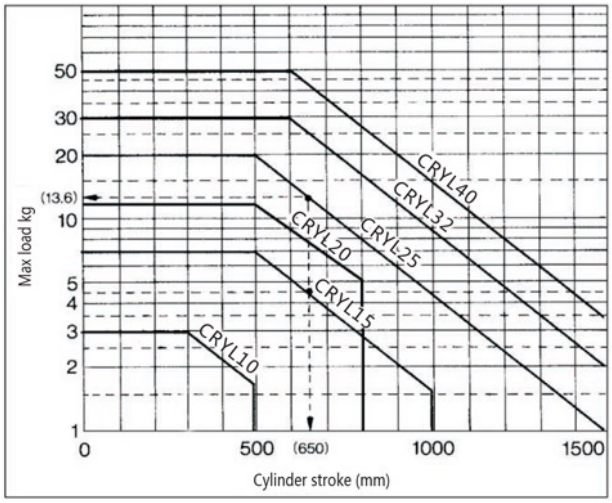
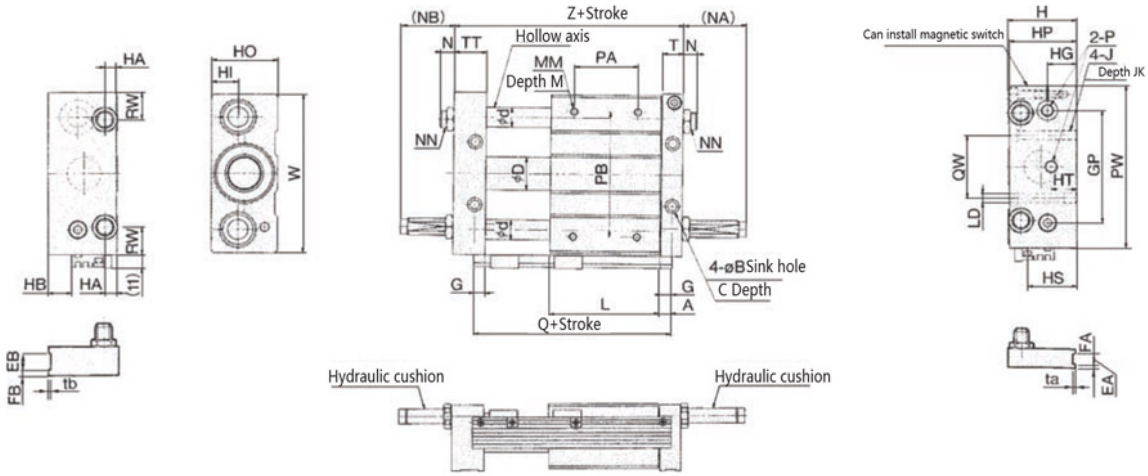


Figure Dimension(mm)



Model	Stroke range	A	B	C	D	d	EA	EB	FA	FB	G	GP	H	HA	HB	HG	HI	HO	HP	HS	HT	J	JK	L	LD
CRYL10	~500	8.5	8	4	12	10	6	12	3	5	7.5	50	34	6	17.5	14.5	13.5	33	33	21.5	18	M5X0.8	9.5	68	4.3
CRYL16	~750	7.5	9.5	5	16.6	12	6	13	3	6	6.5	65	40	6.5	4	16	14	38	39	25	16	M6X1.0	9.5	75	5.6
CRYL20	~1500	9.5	9.5	5.2	21.6	16	–	–	–	–	8.5	80	46	9	10	18	16	44	45	31	20	M6X1.0	10	86	5.6
CRYL25	~1500	9.5	11	6.5	26.4	16	8	14	4	7	8.5	90	54	9	18	23	21	52	53	39	20	M8X1.25	10	86	7
CRYL32	~1500	10.5	14	8	33.6	20	8	16	5	7	9.5	110	66	12	26.5	26.5	24.5	64	64	47.5	25	M10X1.5	15	100	9.2
CRYL40	~1500	11.5	14	8	41.6	25	10	20	5	10	10.5	130	78	12	35	30.5	28.5	76	74	56	30	M10X1.5	15	136	9.2

Model	M	MM	(N)	(NA)	(NB)	NN	P	PA	PB	PW	Q	QW	RW	T	ta	tb	TT	W	Z	Hydraulic cushion
CRYL10	8	M4X0.7	9.5	27	19	M8X1.0	M5X0.8	30	60	80	85	26	17.5	12.5	0.5	1.0	20.5	77	103	AC-0806
CRYL16	8	M5X0.8	7.5	27	17	M8X1.8	M5X0.8	45	70	95	90	30	15	12.5	0.5	1.0	22.5	92	112	AC-0806
CRYL20	10	M6X1.0	10	29	20	M10X1.0	Rc1/8	50	90	120	105	40	28	16.5	–	–	25.5	117	130	AC-1008
CRYL25	10	M6X1.0	11	49	40	M14X1.5	Rc1/8	60	100	130	105	50	22	16.5	0.5	1.0	25.5	127	130	AC-1412
CRYL32	12	M8X1.25	11.5	52	42	M20X1.5	Rc1/8	70	120	160	121	60	33	18.5	0.5	1.0	28.5	157	149	AC-2020
CRYL40	12	M8X1.25	10.5	51	36	M20X1.5	Rc1/4	90	140	190	159	84	35	20.5	1.0	1.0	35.5	187	194	AC-2020