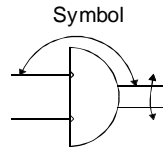
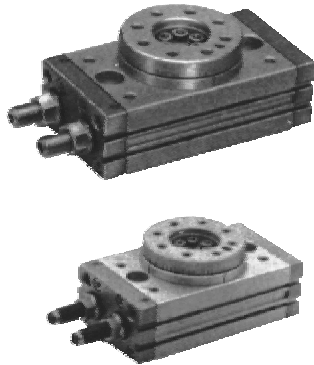


Rotary Table:Basic Type
Rack & Pinion Style
Series MSQ

◆ How to Order

MSQ B 10 A - M9B



Number of auto switches

Nil	2 pcs.	S	1 pc.
n	"n" pcs.		

Auto switch

Nil	Without auto switch(Built-in magnet)
-----	--------------------------------------

* Lead wire length symbols:
0.5m.....Nil(Example)M9B
3m.....L(Example)M9BL
5m.....Z(Example)M9BZ

A	With adjustment bolt
R	With internal shock absorber

Size

10	20	30	50	70	100	200
----	----	----	----	----	-----	-----

◆ Specifications

Size	10	20	30	50	70	100	200
Fluid	Air(non-lube)						
Maximum operating pressure	With adjustment bole		1 MPa				
	With internal shock absorber		0.6 MPa ^(Note 1)				
Minmum operating pressure	Basic type		0.1 MPa				
	High precision type		0.2 MPa	0.1 MPa		-	
Ambient and fluid temperature	0~60°C (No freezing)						
Cushion	With adjustment bole		Rubber bumper				
	With internal shock absorber		Shock absorber				
	Shock absorber model		RBA0805-X692	RBA1006-X692	RBA1414-X692	RBA2015-X821	RBA2725-X821
Angle adjustment range	0~190° ^(Note 2)						
Maximum rotation	190°						
Cylinder bore size	Φ 15	Φ 18	Φ 21	Φ 25	Φ 28	Φ 32	Φ 40
Port size	End ports		M5×0.8		Rc 1/8		
	Side ports		M5×0.8				

Note(1): The maximum operating pressure of the actuator is restricted by the maximum allowable thrust of the shock absorber.

Note(2): Be careful if the rotation angle of a type with internal shock absorber is set below the value in the table below, the piston stroke will be smaller than the shock absorber's effective stroke, resulting in decreased energy absorption ability.

◆ Allowable Kinetic Energy and Rotation Time Adjustment Range

Size	Allowable kinetic energy (mJ)		Rotation time adjustment range for stable operation(s/90°)	
	With adjustment bolt	With internal shock absorber	With adjustment bolt	With internal shock absorber ^(Note)
10	7	39	0.2 to 1.0	0.2 to 0.7
20	25	116		
30	48	116		
50	81	294	0.2 to 1.5	0.2 to 1.0
70	240	1100		
100	320	1600	0.2 to 2.0	
200	560	2900	0.2 to 2.5	

Note: Be careful if a type with internal absorber is used below the minimum speed, the energy absorption ability will decrease drastically.

Rotary Table: Basic Type

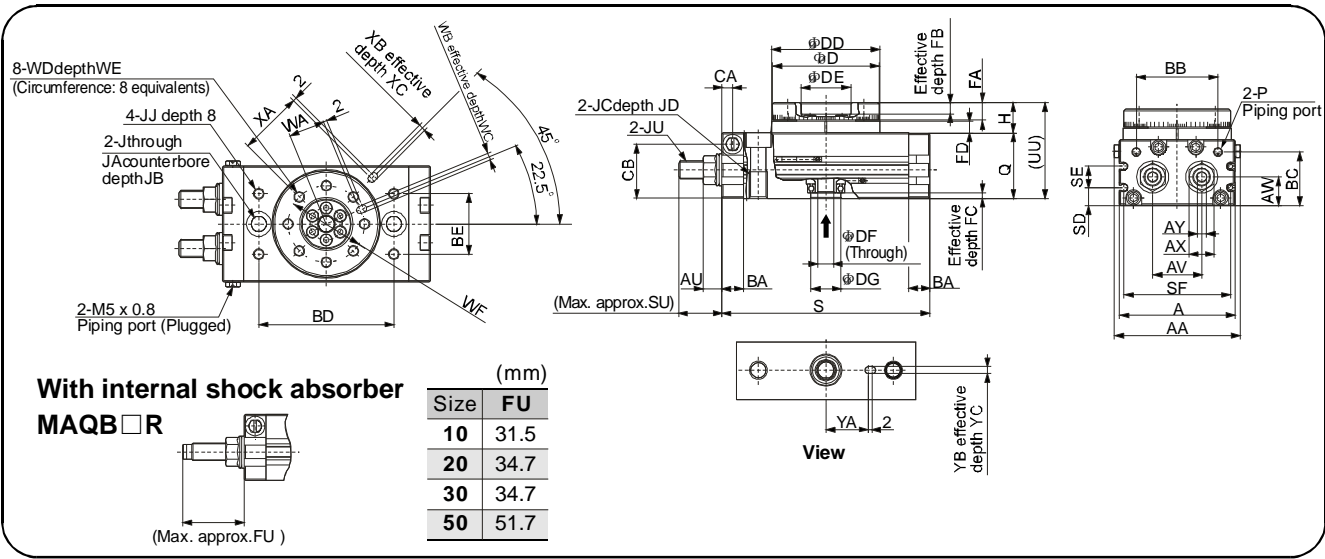
Rack & Pinion Style

Series MSQ

GRIPPER
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◆ Dimensions (Size:10,20,30,50)

Basic type: MSQB □ A

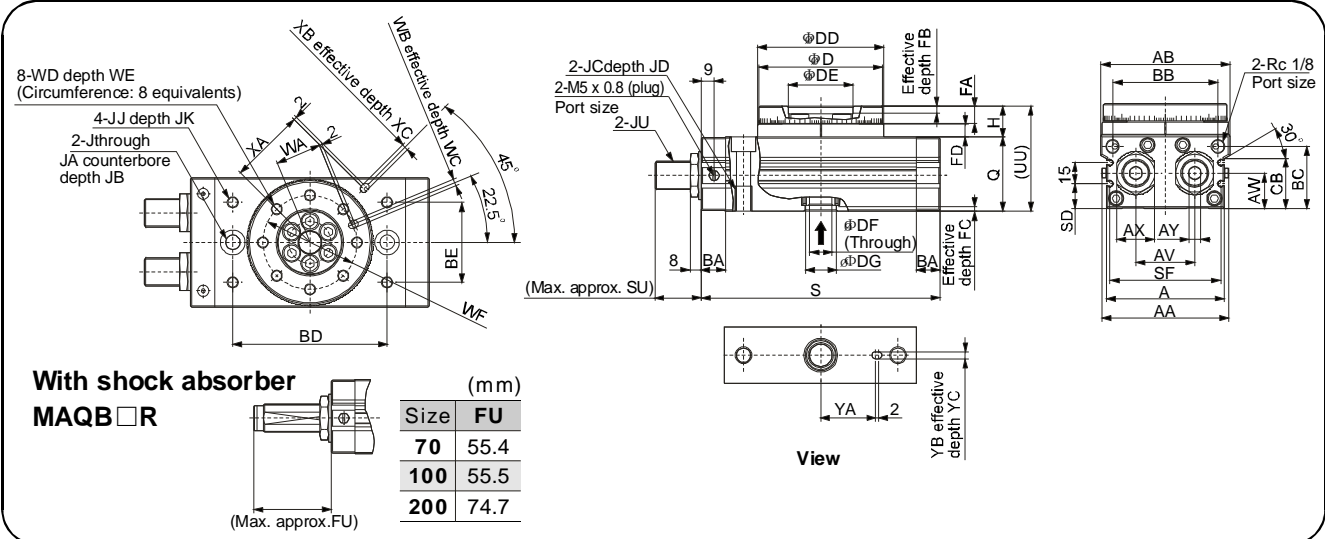


Size	AA	A	AU	AV	AW	AX	AY	BA	BB	BC	BD	BE	CA	CB	D	DD	DE	DF	DG	FA	FB	FC	FD	H	J	JA	JB
10	55.4	50	8.6	20	15.5	12	4	9.5	34.5	27.8	60	27	4.5	28.5	46h9	46h9	20H9	5	15H9	8	4	3	4.5	13	6.8	11	6.5
20	70.8	65	10.6	27.5	16	14	5	12	46	30	76	34	6	30.5	60h9	61h9	28H9	9	17H9	10	6	2.5	6.5	17	8.6	14	8.5
30	75.4	70	10.6	29	18.5	14	5	12	50	32	84	37	6.5	33.5	65h9	67h9	32H9	9	22H9	10	4.5	3	6.5	17	8.6	14	8.5
50	85.4	80	14	38	22	19	6	15.5	63	37.5	100	50	10	37.5	75h9	77h9	35H9	9	26H9	12	5	3	7.5	20	10.5	18	10.5

Size	JC	JD	JJ	JU	P	Q	S	SD	SE	SF	SU	UU	WA	WB	WC	WD	WE	WF	XA	XB	XC	YA	YB	YC
10	M8×1.25	12	M5×0.8	M8×1	M5×0.8	34	92	9	13	45	17.7	47	15	3H9	3.5	M5×0.8	8	32	27	3H9	3.5	19	3H9	3.5
20	M10×1.5	15	M6×1	M10×1	M5×0.8	37	117	10	12	60	25	54	20.5	4H9	4.5	M6×1	10	43	36	4H9	4.5	24	4H9	4.5
30	M10×1.5	15	M6×1	M10×1	Rc 1/8	40	127	11.5	14	65	25	57	23	4H9	4.5	M6×1	10	48	39	4H9	4.5	28	4H9	4.5
50	M12×1.75	18	M8×1.25	M14×1.5	Rc 1/8	46	152	14.5	15	75	31.4	66	26.5	5H9	5.5	M8×1.25	12	55	45	5H9	5.5	33	5H9	5.5

◆ Dimensions (Size:70,100,200)

Basic type: MSQB □ A



Size	AA	AB	A	AV	AW	AX	AY	BA	BB	BC	BD	BE	CB	D	DD	DE	DF	DG	FA	FB	FC	FD	H	J	JA	JB
70	90	92	84	42	25.5	27	8	17	75	44.5	110	57	36	88h9	90h9	46H9	16	22H9	12.5	5	3.5	6	22	10.4	17.5	10.5
100	101	102	95	50	29.5	27	8	17	85	50.5	130	66	42	98h9	100h9	56H9	19	24H9	14.5	6	3.5	12	27	10.4	17.5	10.5
200	119	120	113	60	36.5	36	10	24	103	65.5	150	80	57	116h9	118h9	64H9	24	32H9	16.5	9	5.5	15	32	14.2	20	12.5

Size	JC	JD	JJ	JK	JU	Q	S	SD	SF	SU	UU	WA	WB	WC	WD	WE	WF	XA	XB	XC	YA	YB	YC
70	M12×1.75	18	M8×1.25	10	M20×1.5	53	170	18	79	34.2	75	32.5	5H9	5.5	M8×1.25	12.5	67	54	5H9	3.5	39	5H9	3.5
100	M12×1.75	18	M8×1.25	10	M20×1.5	59	189	22	90	34.3	86	37.5	6H9	6.5	M10×1.55	14.5	77	59	6H9	4.5	49	6H9	4.5
200	M16×2	25	M12×1.75	13	M27×1.5	74	240	29	108	40.2	106	44	8H9	8.5	M12×1.75	16.5	90	69	8H9	4.5	54	8H9	6.5

- I
- CJP
- CJ1
- CS1,CS51
- SI
- MB,MBW
- SU
- SC
- CJ2
- CM2
- MA
- MAL
- CQ2,CQ2
- CQS
- SDA
- CU
- CUJ
- MD
- MK
- CXS
- CXSW
- TN
- CXWM
- STM
- CRA1
- CRQ2
- MSQ**
- MGP
- MGG
- MGC
- CY1B
- CY1R
- CY1S
- CY1L
- MHZ2
- MHZJ2
- MHL2
- MHT2
- MHY2
- RSQ
- CS Auto switch
- D Auto switch
- AC,AD
- HR
- RB
- RBL
- RBQ

Compact Cylinder: Standard Type

Double Acting, Single Rod

Series CQ2, CDQ2

GRIPPER

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◆ How to Order

CQ2 **B** **20** **30** **D**

CDQ2 **B** **20** **30** **D** **J79W** **S**

Without auto switch

With auto switch

Number of auto switches

Nil	2 pcs.	S	1 pc.	n	"n" pcs.
-----	--------	----------	-------	----------	----------

Auto switch

Nil	without auto switch (Built-in magnet)
-----	---------------------------------------

* Lead wire length symbols: 0.5m.....Nil (Example) J79W
 3m.....L (Example) J79WL
 5m.....Z (Example) J79WZ
 None.....N (Example) J79WN

Body option

Nil	Standard (Rod end female thread)
F	With boss in head side
C	With rubber bumper
M	Rod end male thread (Note)

* Combination of body options ("CM", "FC", "FM", "FCM") is available.

Action

D	Double acting
----------	---------------

Standard stroke

* Refer to "Standard stroke" below.

Piping

Nil	Screw-in piping
-----	-----------------

Bore size

12	12mm	16	16mm	20	20mm	25	25mm
32	32mm	40	40mm	50	50mm	63	63mm
80	80mm	100	100mm				

Mounting style

B	Through-hole (Standard)	F	Rod side flange style
A	Both ends tapped style	G	Head side flange style
L	Foot style	D	Double clevis style

Built-in magnet

- I
- CJP
- CJ1
- CS1,CDS1
- SI
- MB,MBW
- SU
- SC
- CJ2
- CM2
- MA
- MAL**
- CQ2,CDQ2**
- CQS
- SDA
- CU
- CUJ
- MD
- MK
- CXS
- CXSW
- TN
- CXWM
- STM
- CRA1
- CRQ2
- MSQ
- MGP
- MGG
- MGC
- CY1B
- CY1R
- CY1S
- CY1L
- MHZ2
- MHZJ2
- MHL2
- MHT2
- MHY2
- RSQ
- CS
- Auto switch
- D
- Auto switch
- AC,AD
- HR
- RB
- RBL
- RBQ

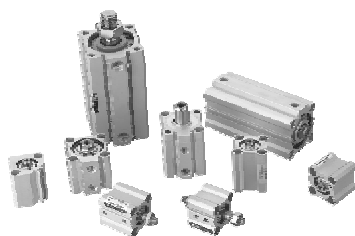
◆ Specifications

Type	Pneumatic (Non-lube)
Fluid	Air
Proof pressure	1.5 MPa
Maximum operating pressure	1.0 MPa
Ambient and fluid temperature	Without auto switch: -10~70°C (No freezing) With auto switch: -10~60°C (No freezing)
Rubber bumper	None
Rod end thread	Female thread
Rod end thread tolerance	Class 2
Stroke length tolerance	+1.0 0
Mounting	Through-hole
Piston speed	50-500 mm/s

◆ Standard Stroke (Pneumatic)

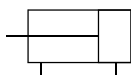
Bore size (mm)	Standard stroke (mm)
12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50 to 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

* When stroke exceeds the standard range, Please contact with AIRBEST.

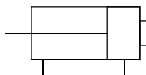


Symbol

Double acting,
Single rod



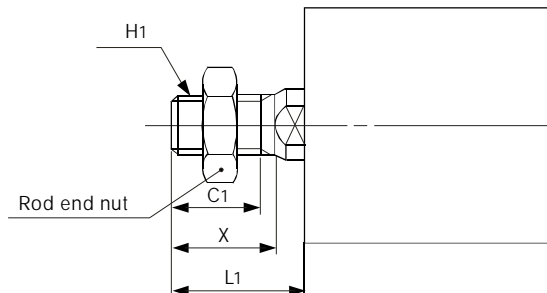
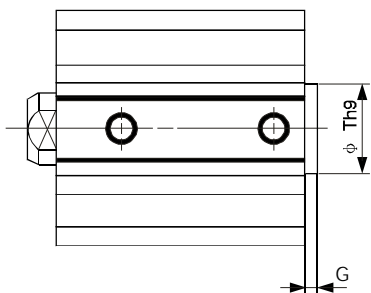
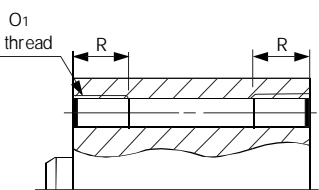
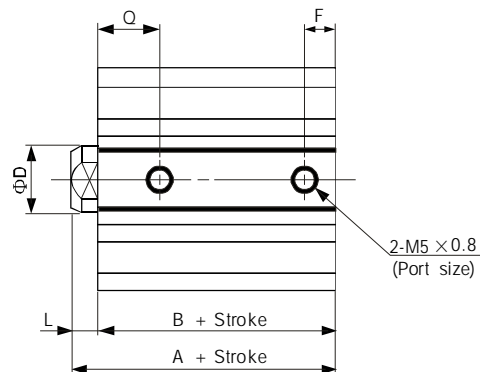
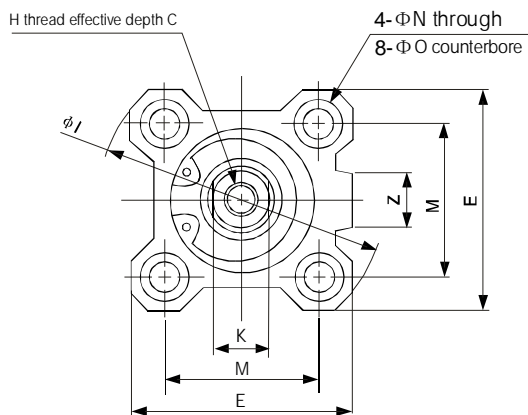
With boss in
head side



Compact Cylinder: Standard Type
Double Acting, Single Rod
Series CQ2, CDQ2

◆ **Dimensions: $\Phi 12$ to $\Phi 25$**

Basic style (Through-hole): CQ2B



Both ends tapped style

Bore size (mm)	O1	R
12	M4 x 0.7	7
16	M4 x 0.7	7
20	M6 x 1.0	10
25	M6 x 1.0	10

With boss in head side

Bore size(mm)	G	Th9
12	1.5	15 ⁰ _{-0.043}
16	1.5	20 ⁰ _{-0.052}
20	2	13 ⁰ _{-0.043}
25	2	15 ⁰ _{-0.043}

Rod end male thread

Bore size(mm)	C1	X	H1	L1
12	9	10.5	M5 x 0.8	14
16	10	12	M6 x 1.0	15.5
20	12	14	M8 x 1.25	18.5
25	15	17.5	M10 x 1.25	22.5

Basic Style

Bore size (mm)	Stroke range (mm)	A	B	C	D	E	F	H	I	K	L	M	N	O	Q	Z
12	5 to 30	20.5	17	6	6	25	5	M3 x 0.5	32	5	3.5	15.5	3.5	6.5 depth 3.5	7.5	-
16	5 to 30	22	18.5	8	8	29	5.5	M4 x 0.7	38	6	3.5	20	3.5	6.5 depth 3.5	8	10
20	5 to 50	24	19.5	7	10	36	5.5	M5 x 0.8	47	8	4.5	25.5	5.5	9 depth 7	9	10
25	5 to 50	27.5	22.5	12	12	40	5.5	M6 x 1.0	52	10	5	28	5.5	9 depth 7	11	10

Note) External dimensions with rubber bumper are same as standard type as shown above.

Compact Cylinder: Standard Type

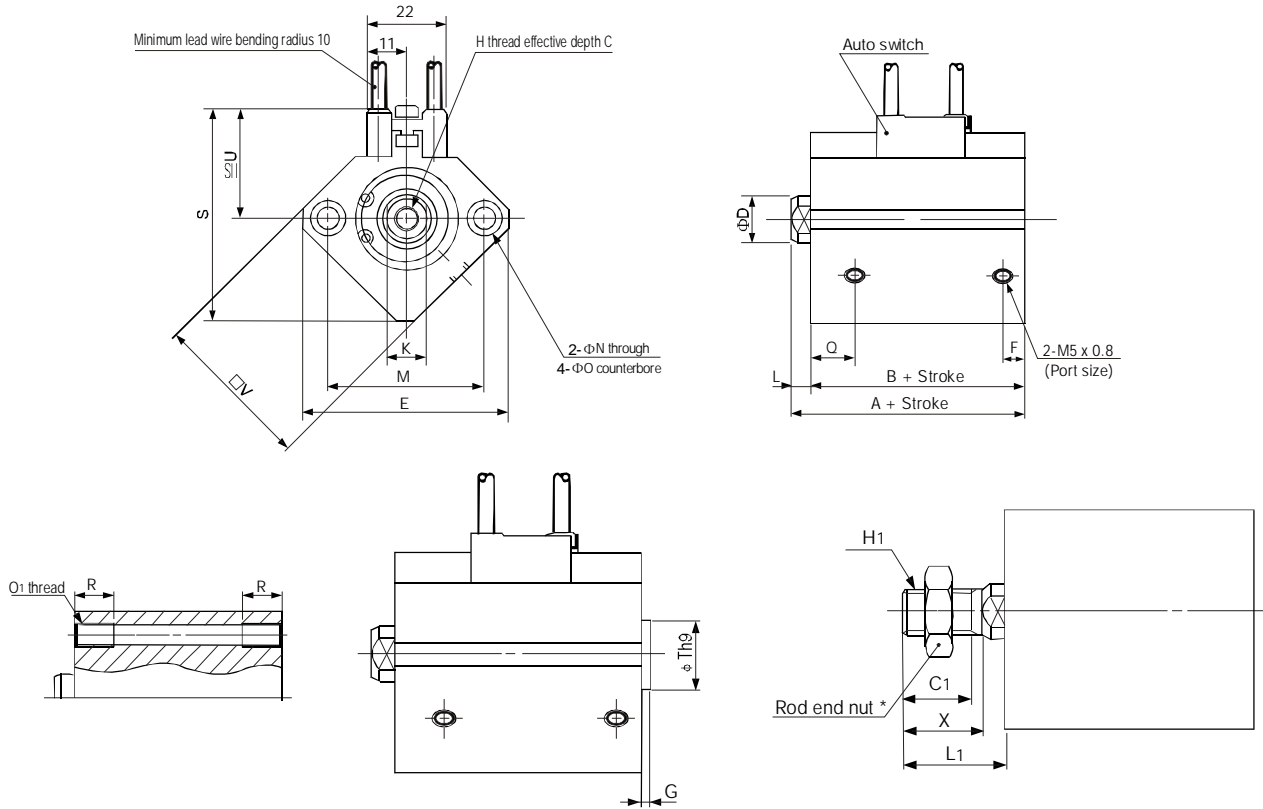
Double Acting, Single Rod

Series CQ2, CDQ2

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Φ 12 to Φ 25/with Auto Switch

Basic style (Through-hole): CDQ2B



Both ends tapped style

Bore size (mm)	O1	R
12	M4 x 0.7	7
16	M4 x 0.7	7
20	M6 x 1.0	10
25	M6 x 1.0	10

With boss in head side

Bore size(mm)	G	Th9
12	1.5	15 ⁰ _{-0.043}
16	1.5	20 ⁰ _{-0.052}
20	2	13 ⁰ _{-0.043}
25	2	15 ⁰ _{-0.043}

Rod end male thread

Bore size(mm)	C1	X	H1	L1
12	9	10.5	M5 x 0.8	14
16	10	12	M6 x 1.0	15.5
20	12	14	M8 x 1.25	18.5
25	15	17.5	M10 x 1.25	22.5

Basic Style

Bore size (mm)	Stroke range (mm)	A	B	C	D	E	F	H	K	L	M	N	O	Q	S	U	V
12	5 to 30	31.5	28	6	6	32	6.5	M3 x 0.5	5	3.5	22	3.5	6.5 depth 3.5	11	35.5	19.5	25
16	5 to 30	34	30.5	8	8	38	5.5	M4 x 0.7	6	3.5	28	3.5	6.5 depth 3.5	10	41.5	22.5	29
20	5 to 50	36	31.5	7	10	47	5.5	M5 x 0.8	8	4.5	36	5.5	9 depth 7	10.5	48	24.5	36
25	5 to 50	37.5	32.5	12	12	52	5.5	M6 x 1.0	10	5	40	5.5	9 depth 7	11	53.5	27.5	40

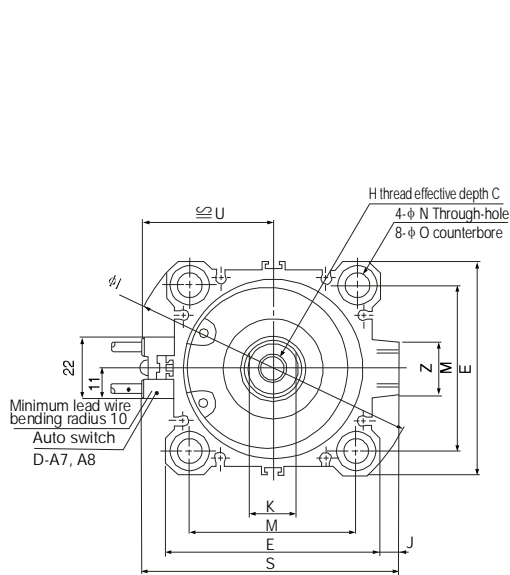
Note 2) External dimensions with rubber bumper are same as standard type as shown above.

- I
- CJP
- CJ1
- CS1,CS51
- SI
- MB,MBW
- SU
- SC
- CJ2
- CM2
- MA
- MAL
- CQ2,CDQ2**
- CQS
- SDA
- CU
- CUJ
- MD
- MK
- CXS
- CXSW
- TN
- CXWM
- STM
- CRA1
- CRQ2
- MSQ
- MGP
- MGG
- MGC
- CY1B
- CY1R
- CY1S
- CY1L
- MHZ2
- MHZJ2
- MHL2
- MHT2
- MHY2
- RSQ
- CS
- Auto switch
- D
- Auto switch
- AC,AD
- HR
- RB
- RBL
- RBQ

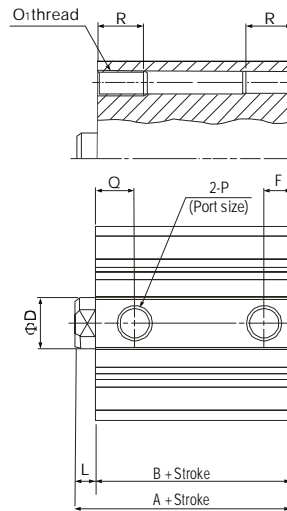
Compact Cylinder: Standard Type
Double Acting, Single Rod
Series CQ2, CDQ2

Φ32 to Φ50

Basic style (Through-hole): CQ2B/CDQ2B

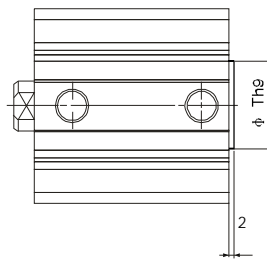
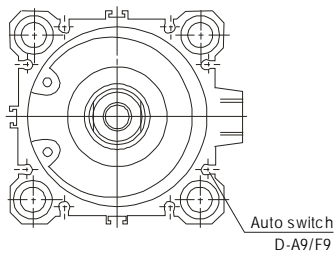


Both Ends Tapped Style



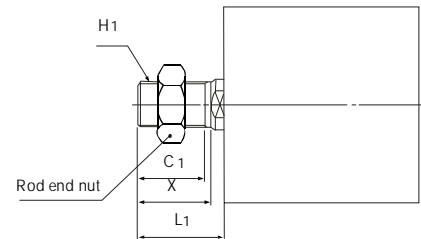
Both Ends Tapped Style

Bore size (mm)	O1	R
32	M6 x 1.0	10
40	M6 x 1.0	10
50	M8 x 1.25	14



With boss in head side

Bore size (mm)	Th9
32	21 ⁰ _{-0.052}
40	28 ⁰ _{-0.052}
50	35 ⁰ _{-0.062}



Rod end male thread

Bore size (mm)	C1	X	H1	L1
32	20.5	23.5	M14 x 1.5	28.5
40	20.5	23.5	M14 x 1.5	28.5
50	26	28.5	M18 x 1.5	33.5

Basic Style Auto switch shown above is D-A73 type and D-A80 type.

Bore size (mm)	Stroke range (mm)	Without auto switch					With auto switch					C	D	E
		A	B	F	P	Q	A	B	F	P	Q			
32	5	30	23	5.5	M5 x 0.8	11.5	40	33	7.5	Rc 1/8	10.5	13	16	45
	10 to 50			7.5	Rc 1/8	10.5								
	75, 100	40	33											
40	5 to 50	36.5	29.5	8	Rc 1/8	11	46.5	39.5	8	Rc 1/8	11	13	16	52
	75, 100	46.5	39.5											
50	10 to 50	38.5	30.5	10.5	Rc 1/4	10.5	48.5	40.5	10.5	Rc 1/4	10.5	15	20	64
	75, 100	48.5	40.5											

Bore size (mm)	H	I	J	K	L	M	N	O	S	U	Z
32	M8 x 1.25	60	4.5	14	7	34	5.5	9 depth 7	58.5	31.5	14
40	M8 x 1.25	69	5	14	7	40	5.5	9 depth 7	66	35	14
50	M10 x 1.5	86	7	17	8	50	6.6	11 depth 8	80	41	19

Compact Cylinder: Standard Type

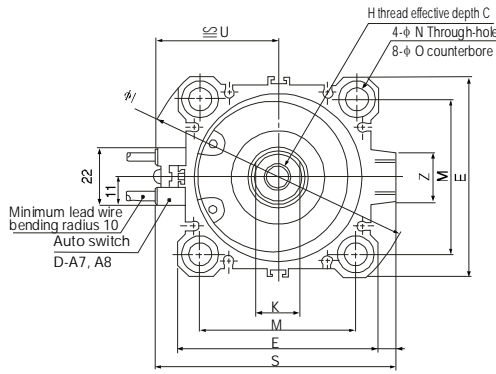
Double Acting, Single Rod

Series CQ2, CDQ2

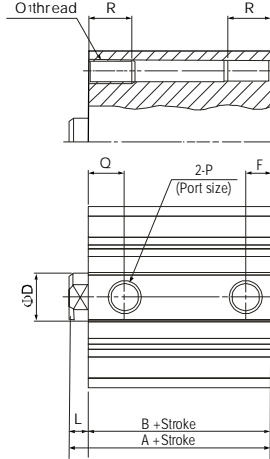
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Φ 63 to Φ 100

Basic style (Through-hole)

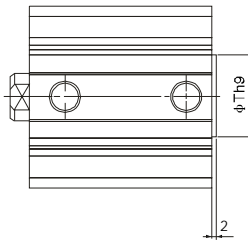
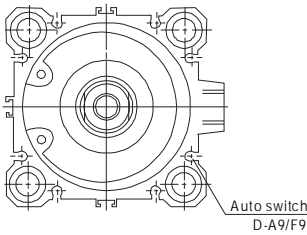


Both ends tapped style: CQ2A/CDQ2A



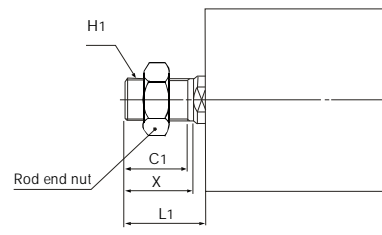
Both Ends Tapped Style

Bore size (mm)	O1	R
63	M10 x 1.5	18
80	M12 x 1.75	22
100	M12 x 1.75	22



With boss in head side

Bore size (mm)	Th9
63	35 ⁰ _{-0.062}
80	43 ⁰ _{-0.062}
100	59 ⁰ _{-0.074}



Rod end male thread

Bore size (mm)	C1	X	H1	L1
63	26	28.5	M18 x 1.5	33.5
80	32.5	35.5	M22 x 1.5	43.5
100	32.5	35.5	M26 x 1.5	43.5

Basic Style Auto switch shown above is D-A73 type and D-A80 type.

Bore size (mm)	Stroke range (mm)	Without auto switch		With auto switch		C	D	E	F	H	I	J	K	M	N	O	P	Q	S	U	Z
		A	B	A	B																
63	10 to 50	44	36	54	46	15	20	77	10.5	M10 x 1.5	103	7	17	60	9	14 depth 10.5	Rc 1/4	15	93	47.5	19
	75, 100	54	46																		
80	10 to 50	53.5	43.5	63.5	53.5	21	25	98	12.5	M16 x 2.0	132	6	22	77	11	17.5 depth 13.5	Rc 3/8	16	112.5	57.5	26
	75, 100	63.5	53.5																		
100	10 to 50	65	53	75	63	27	30	117	13	M20 x 2.5	156	6.5	27	94	11	17.5 depth 13.5	Rc 3/8	23	132.5	67.5	26
	75, 100	75	63																		

Note 2) External dimensions with rubber bumper are same as standard type as shown above.

- I
- CJP
- CJ1
- CS1, CDS1
- SI
- MB, MBW
- SU
- SC
- CJ2
- CM2
- MA
- MAL
- CQ2, CDQ2**
- CQS
- SDA
- CU
- CUJ
- MD
- MK
- CXS
- CXSW
- TN
- CXWM
- STM
- CRA1
- CRQ2
- MSQ
- MGP
- MGG
- MGC
- CY1B
- CY1R
- CY1S
- CY1L
- MHZ2
- MHZJ2
- MHL2
- MHT2
- MHY2
- RSQ
- CS Auto switch
- D Auto switch
- AC, AD
- HR
- RB
- RBL
- RBQ

Guide Rod Compact Cylinder

Double Acting, Single Rod

Series CQM

◆ How to Order

C **D** QM **B** **20** - **10**

Cylinder stroke(mm)

*Refer to "Standard stroke" .

Thread type

Symbol	Port thread	Mounting thread	Bore size
Nil	M thread	M thread	φ 12 to φ 25
	Rc		
TN	NPT		φ 32 to φ 50
TF	G		
NN	M thread	Inch thread	φ 12 to φ 25
	NPT		φ 32 to φ 50

Note): M thread to be used for without auto switch type of φ 32, 5 stroke exceptionally.

Bore size(mm)

12	16	20	25	32	40	50
----	----	----	----	----	----	----

Mounting

B	Through-hole (standard)
A	Both end tapped style (φ 32 to φ 50)

Note): A type is only available for φ 32,40,50.

Magnet

Nil	Without magnet	D	Built-in magnet
-----	----------------	----------	-----------------



◆ Specifications

Bore size(mm)	12	16	20	25	32	40	50
Action	Double acting, single rod						
Fluid	Filtered compressed air						
Proof pressure	1.5 Mpa						
operating pressure range	0.12~1.0 Mpa		0.1~1.0 Mpa				
Ambient and fluid temperature	-10°C to 70°C (No freezing)						
Port size (Rc, G, NPT)	M5×0.8			1/8		1/4	
Cushion	Rubber bumper						

⚠ Caution

This product should not be used as a stopper.

Symbol

CDQMB□-□



◆ Standard Stroke

Bore size(mm)	Standard stroke (mm)
12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 63, 75, 80, 100
50	10, 15, 20, 25, 30, 35, 40, 45, 50, 63, 75, 80, 100

Guide Rod Compact Cylinder

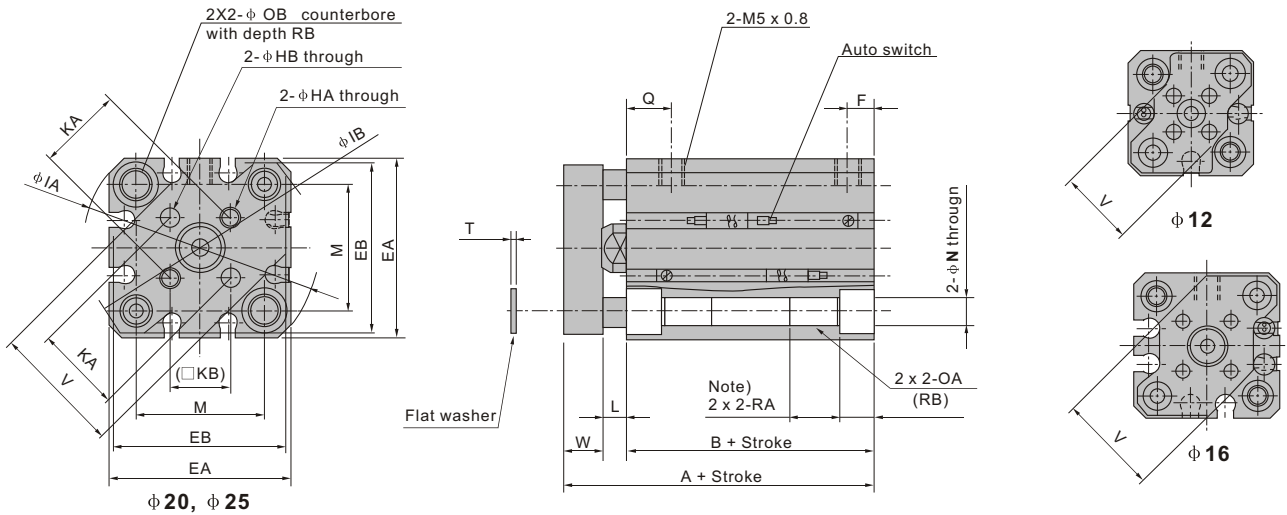
Double Acting, Single Rod

Series CQM

◆ Dimensions

C(D)QM □ □ ϕ 12 to 25
(Basic style, through hole)

ϕ 12, 25, 32mm

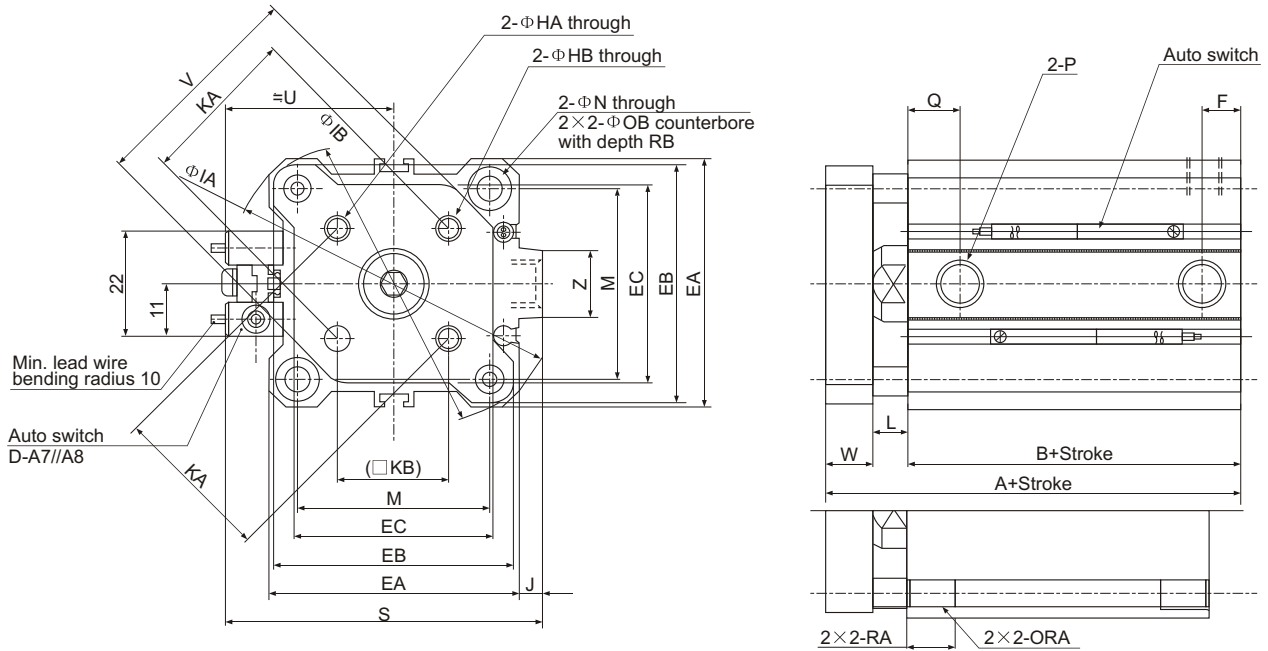


Bore size (mm)	Stroke range (mm)	Without magnet		Built-in magnet		EA	EB	F	HA		QA		HB	IA	HB
		A	B	A	B				-	NN	-	NN			
12	5 to 30	26.5	17	31.5	22	25	24	5	M3X0.5	4-40UNC	M4X0.7	8-32UNC	3	32	31.5
16	5 to 30	26.5	17	31.5	22	29	28	5	M3X0.5	4-40UNC	M4X0.7	8-32UNC	3	38	37
20	5 to 50	32	19.5	42	29.5	36	34	5.5	M4X0.7	6-32UNC	M6X1.0	1/4-20UNC	4	47	45.5
25	5 to 50	35.5	22.5	45.5	32.5	40	38	5.5	M5X0.8	10-32UNC	M6X1.0	1/4-20UNC	5	52	50.5

Bore size (mm)	KA	KB	L	M	N	OB	Q	RA	RB	T	V	W
12	10	7.1	3.5	15.5	3.5	6.5	7.5	7	4	0.5	14.9	6
16	14	9.9	3.5	20	3.5	6.5	7.5	7	4	0.5	20	6
20	17	12	4.5	25.5	5.4	9	9	10	7	1	26	8
25	22	15.6	5	28	5.4	9	11	10	7	1	30	8

Note): For the following bore/stroke sizes, the through-hole is threaded.
Standard without auto switch: ϕ 12 and ϕ 16; 5 stroke, ϕ 25; 5 to 10 stroke.
Built-in magnet with auto switch: ϕ 20; 5stroke.

C(D)QM□-□ Φ 32 to 50
(Basic style, through hole)



Both ends tapped style (CQMA)

Bore size (mm)	Stroke range (mm)	Without auto switch								With auto switch								EA	EB	EC
		A	B	F	Q	P				A	B	F	Q	P						
						-	TN	TF	NN					-	TN	TF	NN			
32	5	40	23	5.5	11.5	M5×0.8	-	-	M5×0.8	50	33	7.5	10.5	Rc1/8	NPT1/8	G1/8	NPT1/8	45	43	34.4
	10 to 50	50	33	7.5	10.5	10.5	Rc1/8	G1/8	NPT1/8					Rc1/8	NPT1/8	G1/8	NPT1/8			
	75, 100	56.5	39.5	8	11	11	Rc1/8	G1/8	NPT1/8					Rc1/8	NPT1/8	G1/8	NPT1/8			
40	5 to 50	46.5	29.5	8	11	11	Rc1/8	G1/8	NPT1/8	56.5	39.5	8	11	Rc1/8	NPT1/8	G1/8	NPT1/8	52	50	41.4
	75, 100	56.5	39.5																	
50	10 to 50	50.5	30.5	10.5	10.5	10.5	Rc1/4	G1/4	NPT1/4	60.5	40.5	10.5	10.5	Rc1/4	NPT1/4	G1/4	NPT1/4	64	62	53.4
	75, 100	60.5	40.5																	

Bore size (mm)	HA		QA		HB	IA	IB	J	KA	KB	L	M	N	OB	RA	RB	S	U	V	W	Z
	-,TN,TF	NN	-,TN,TF	NN																	
32	M5×0.8	10-32UNF	M6×1.0	1/4-20UNC	5	60	58.5	4.5	28	19.8	7	34	5.5	9	10	7	58.5	31.5	38	10	14
40	M5×0.8	10-32UNF	M6×1.0	1/4-20UNC	5	69	67.5	5	33	23.3	7	40	5.5	9	10	7	66	35	46	10	14
50	M6×1.0	1/4-20UNF	M8×1.25	5/16-18UNC	6	86	84.5	7	42	29.7	8	50	6.6	11	14	8	80	41	58	12	19

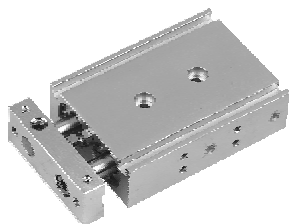
Dual Rod Cylinder: Standard Type

Series CXS

◆ How to Order

CXS **M** **20** **100** **Y7BW** **S**

Nil	2 pcs.	S	1 pc.	n	"n" pcs.
Number of auto switches					
Auto switch					
Nil	Without auto switch (Built-in magnet)				
* Lead wire length symbols: 0.5m.....Nil (Example) Y59A 3m.....L (Example) Y59AL 5m.....Z (Example) Y59AZ					
Standard stroke					
* Refer to "Standard stroke" below.					
Bore size					
6	6mm	10	10mm	15	15mm
20	20mm	25	25mm	32	32mm
Bearing type					
M	Slide bearing				
L	Ball bushing bearing				



◆ Specifications

Bore size	6mm	10mm	15mm	20mm	25mm	32mm
Fluid	Air (Non-lube)					
Proof pressure	1.05 MPa					
Maximum operating pressure	0.7 MPa					
Minimum operating pressure	0.15 MPa	0.1 MPa		0.05 MPa		
Ambient and fluid temperature	-10~60°C (No freezing)					
Piston speed	30~300 mm/s	30~800 mm/s	30~700 mm/s		30~600 mm/s	
Cushion	Rubber bumper					
Stroke adjustable range	0~5 mm compared to the standard stroke					
Port size	M5×0.8				Rc 1/8	
Bearing type	Slide bearing, Ball bushing bearing (Same dimensions for both)					

*The maximum piston speed shown in the table above is for extension.
The maximum piston speed for retraction is approximately 70% that of extension.

◆ Standard Stroke

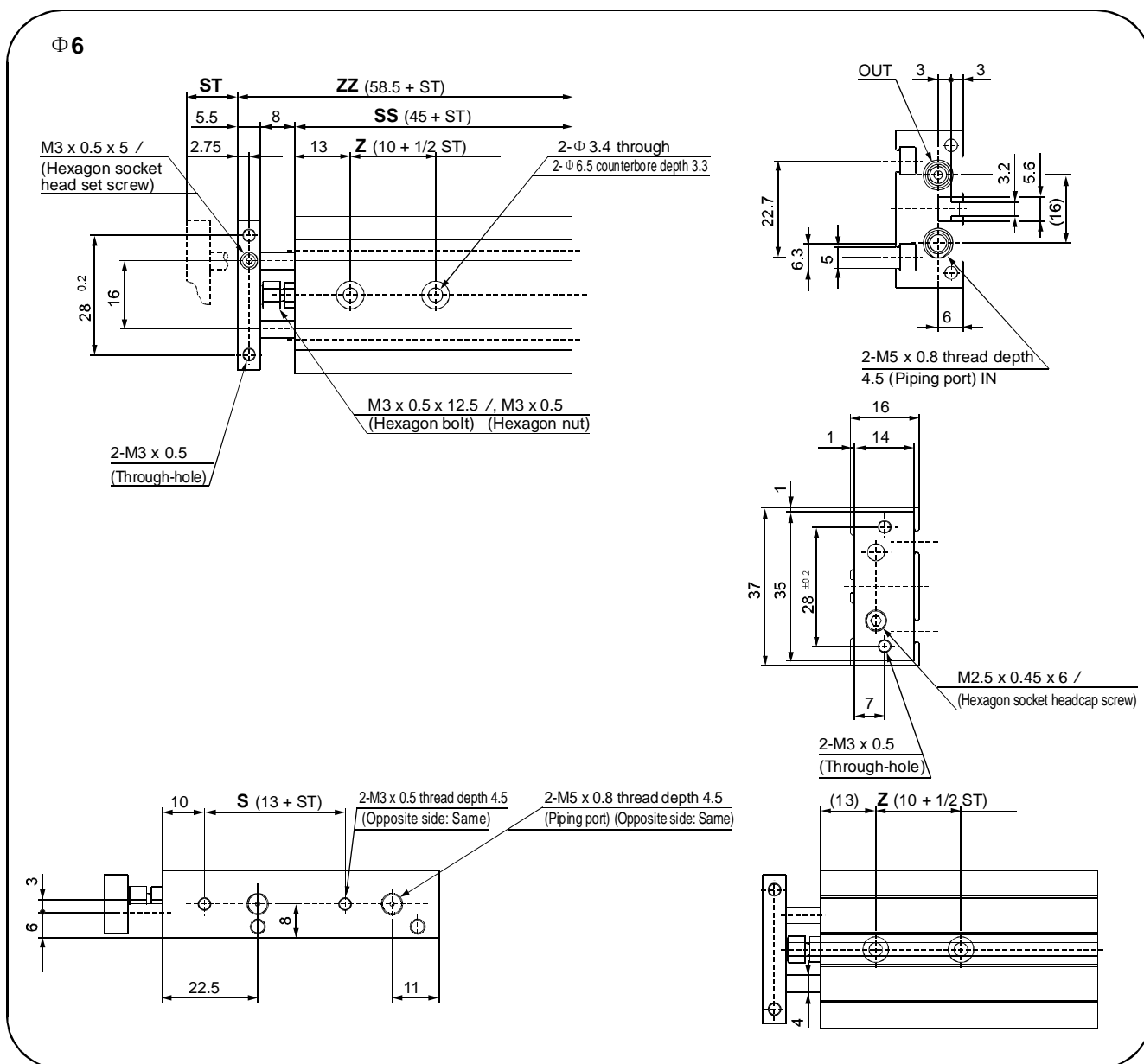
Model	Standard stroke(mm)	Manufacturable stroke range
CXS□6	10, 15, 20, 25, 30, 35, 40, 45, 50,	60 to 100
CXS□10	60, 70, 75, 80, 90, 100	80 to 150
CXS□15		110 to 150
CXS□20	10, 20, 30, 40, 50	110 to 200
CXS□25	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75	
CXS□32		

Dual Rod Cylinder: Standard Type

Series CXS

GRIPPER
SYSTEMS S.R.O.

◆ Dimensions

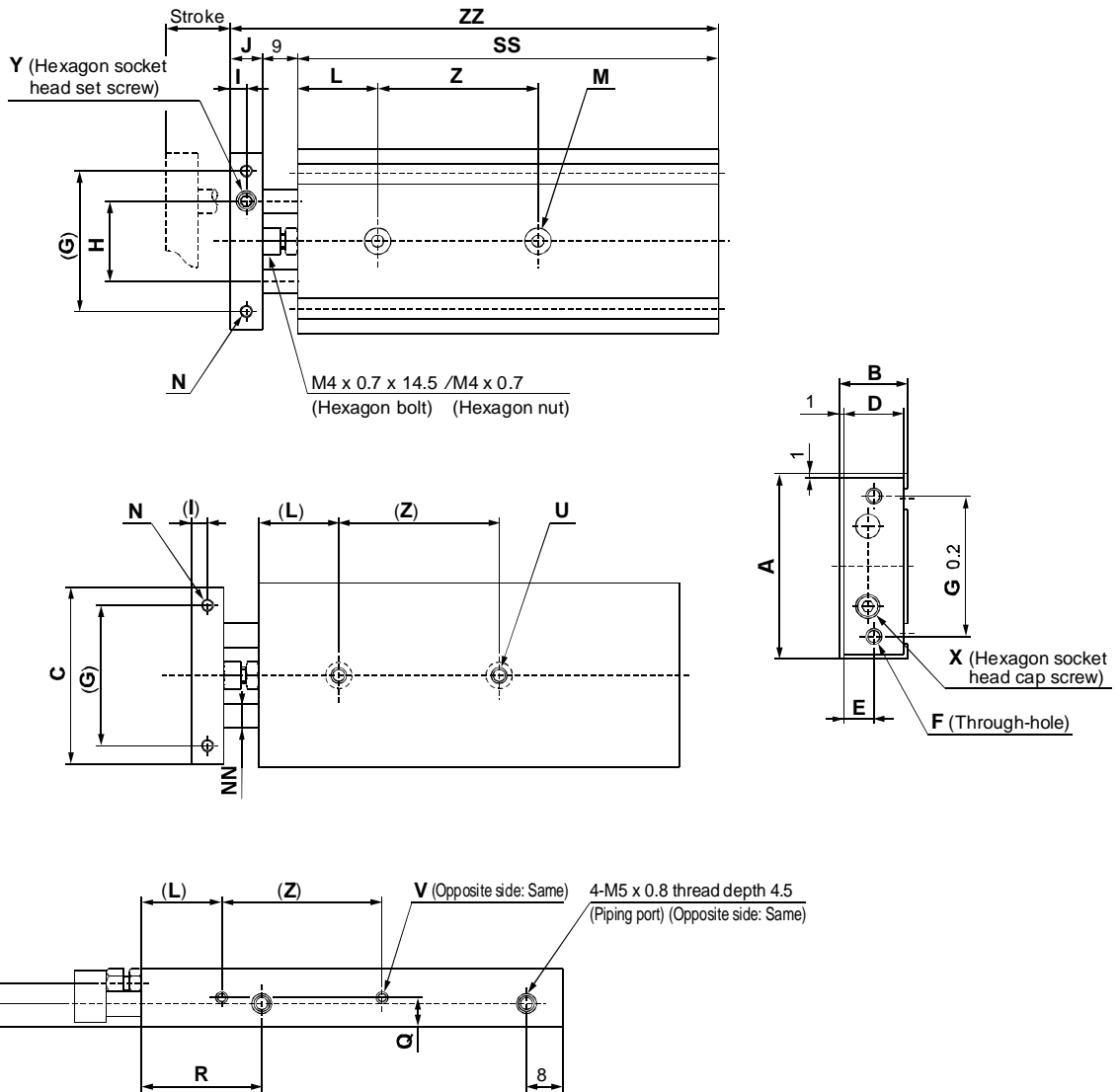


(mm)

Model	Stroke	Z	S	SS	ZZ
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

- I
- CJP
- CJ1
- CS1,CDS1
- SI
- MB,MBW
- SU
- SC
- CJ2
- CM2
- MA
- MAL
- CQ2,CQ2
- CQS
- SDA
- CU
- CUJ
- MD
- MK
- CXS**
- CXSW
- TN
- CXWM
- STM
- CRA1
- CRQ2
- MSQ
- MGP
- MGG
- MGC
- CY1B
- CY1R
- CY1S
- CY1L
- MHZ2
- MHZJ2
- MHL2
- MHT2
- MHY2
- RSQ
- CS
- Auto switch
- D
- Auto switch
- AC,AD
- HR
- RB
- RBL
- RBQ

Φ 10, Φ 15



(mm)

Model	A	B	C	D	E	F	G	H	I	J	L	M	N	NN	P	Q	QQ	R	U	V	X	Y
CXS□10	46	17	44	15	7.5	2-M4 x 0.7	35	20	4	8	20	2-Φ 3.4 through 2-Φ 6.5 counterbore depth 3.3	2-M3 x 0.5 thread depth 5	Φ6	33.6	8.5	7	30	2-M4 x 0.7 thread depth 7	4-M3 x 0.5 thread depth 4.5	M3 x 0.5 x 10 /	M5 x 0.8 x 5 /
CXS□15	58	20	56	18	9	2-M5 x 0.8	45	25	5	10	30	2-Φ 4.3 through 2-Φ 8 counterbore depth 4.4	2-M4 x 0.7 thread depth 6	Φ8	48	10	10	38.5	2-M5 x 0.8 thread depth 8	4-M4 x 0.7 thread depth 5	M5 x 0.8 x 10 /	M6 x 1.0 x 5 s /

◆ Dimensions by Stroke

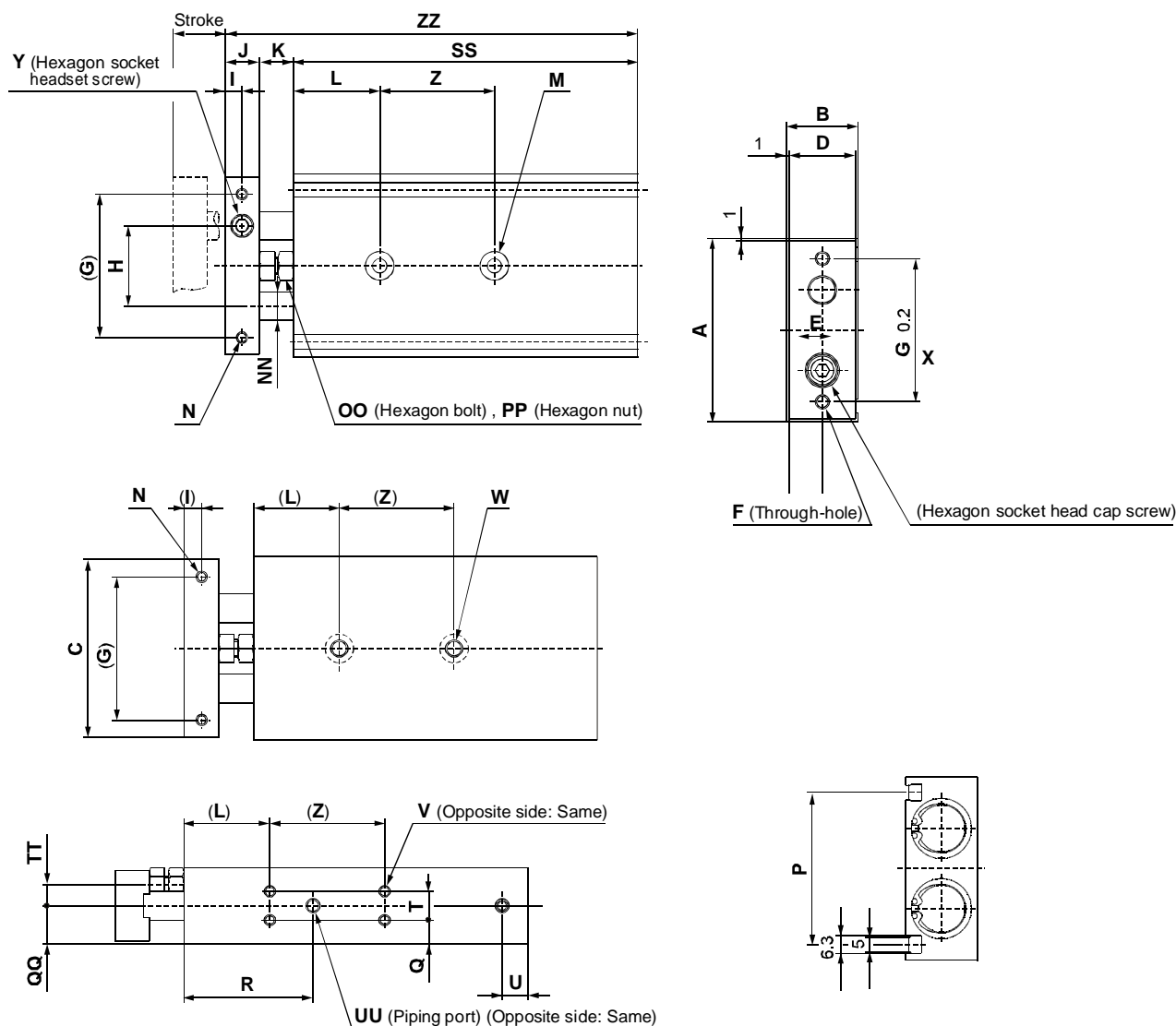
(mm)

Symbol Stroke Model	SS										Z					ZZ																								
	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100	10,15	20,25	30,35	40,45	50	60,70	75	80	90	100	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100
CXS□10	65	70	75	80	85	90	95	100	105	115	125	130	—	—	—	30	40	50	—	—	—	—	—	—	82	87	92	97	102	107	112	117	122	132	142	147	—	—		
CXS□15	70	75	80	85	90	95	100	105	110	120	130	135	140	150	160	25	35	45	45	55	—	—	—	—	—	89	94	99	104	109	114	119	124	129	139	149	154	159	169	179

Dual Rod Cylinder: Standard Type

Series CXS

Φ 20, Φ 25, Φ 32



- I
- CJP
- CJ1
- CS1, CDS1
- SI
- MB, MBW
- SU
- SC
- CJ2
- CM2
- MA
- MAL
- CQ2, CDQ2
- CQS
- SDA
- CU
- CUJ
- MD
- MK
- CXS**
- CXSW
- TN
- CXWM
- STM
- CRA1
- CRQ2
- MSQ
- MGP
- MGG
- MGC
- CY1B
- CY1R
- CY1S
- CY1L
- MHZ2
- MHZJ2
- MHL2
- MHT2
- MHY2
- RSQ
- CS
Auto switch
- D
Auto switch
- AC, AD
- HR
- RB
- RBL
- RBQ

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	NN	OO	P
CXS □20	64	25	62	23	11.5	2-M5 x 0.8	50	28	6	12	12	30	2-Φ9.5 through 2-Φ5.5 counterbore depth 5.3	2-M4 x 0.7 thread depth 6	Φ10	M6x1.0x18.5 /	53
CXS □25	80	30	78	28	14	2-M6 x 1.0	60	35	6	12	12	30	2-Φ11 through 2-Φ6.9 counterbore depth 6.3	2-M5 x 0.8 thread depth 7.5	Φ12	M6x1.0x18.5 /	64
CXS □32	98	38	96	36	18	2-M6 x 1.0	75	44	8	16	14	30	2-Φ11 through 2-Φ6.9 counterbore depth 6.3	2-M5 x 0.8 thread depth 8	Φ16	M8x1.25x23 /	76

Model	PP	Q	QQ	R	T	TT	U	UU	V	W	X	Y
CXS □20	M6 x 1.0	7.75	12.5	45	9.5	6.5	8	4-M5 x 0.8 thread depth 4.5	8-M4 x 0.7 thread depth 5.5	2-M6 x 1.0 thread depth 10	M6 x 1.0 x 12 /	M8 x 1.25 x 6 /
CXS □25	M6 x 1.0	8.5	15	46	13	9	9	4-Rc 1/8 thread depth 6.5	8-M5 x 0.8 thread depth 7.5	2-M8 x 1.25 thread depth 12	M6 x 1.0 x 14 /	M8 x 1.25 x 6 /
CXS □32	M8 x 1.25	9	19	56	20	11.5	10	4-Rc 1/8 thread depth 6.5	8-M5 x 0.8 thread depth 7.5	2-M8 x 1.25 thread depth 12	M8 x 1.25 x 16 /	M10 x 1.5 x 8 /

◆ Dimensions by Stroke

Symbol Stroke Model	SS										Z			ZZ																			
	10	16	20	25	30	35	40	45	50	60	70	75	80	90	100	10, 15, 20, 25	30, 35, 40, 45, 50	60, 70, 75, 80, 90, 100	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100
CXS □20	80	85	90	95	100	105	110	115	120	130	140	145	150	160	170	30	40	60	104	109	114	119	124	129	134	139	144	154	164	169	174	184	194
CXS □25	82	87	92	97	102	107	112	117	122	132	142	147	152	162	172	30	40	60	106	111	116	121	126	131	136	141	146	156	166	171	176	186	196
CXS □32	92	97	102	107	112	117	122	127	132	142	152	157	162	172	182	40	50	70	122	127	132	137	142	147	152	157	162	172	182	187	192	202	212

Compact Cylinder: Standard Type

Double Acting, Single Rod / Single Acting, Single Rod, Spring Return / Extend

Series SDA, SSA, STA

◆ How to Order

SDA – S – 20 × 30 – B

Rod type

Nil	Female thread	B	Male thread	N	No thread
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* The length of no thread's rod is the same as the rod as with female thread.

Standard stroke

* Refer to "Standard stroke" below.

Bore size

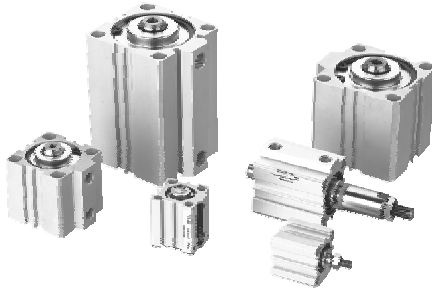
SDA Series									
12	12mm	16	16mm	20	20mm	25	25mm	32	32mm
40	40mm	50	50mm	63	63mm	80	80mm	100	100mm
SSA, STA Series									
12	12mm	16	16mm	20	20mm	25	25mm	32	32mm
40	40mm								

Magnet

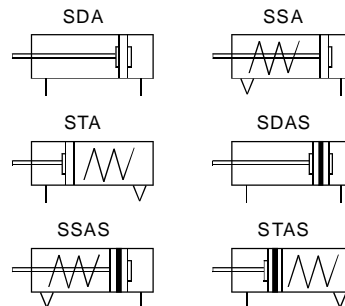
S	With magnet	Nil	Without magnet
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Model

SDA	Double-acting	SSA	Single acting, Spring return
STA	Single acting, Spring extend		



Symbol



◆ Specifications

Bore size		12mm	16mm	20mm	25mm	32mm	40mm	50mm	63mm	80mm	100mm	
Action		Double acting type										
		Single acting						-				
Fluid		Air										
Operating pressure range	Double actings	0.1~0.9 MPa										
	Single acting	0.2~0.9 MPa						-				
Proof pressure		1.35 MPa										
Ambient and fluid temperature		-5~70°C (No freezing)										
Speed range	Double actings	30~500 mm/s						30~350 mm/s		30~250 mm/s		
	Single acting	100~500 mm/s						-				
Cushion		Bumper										
Port size		M5×0.8				1/8		1/4		3/8		

◆ Standard Stroke

Bore size (mm)		12	16	20	25	32	40	50	63	80	100	
Double actings	Standard	5~60mm Per5mm	5~85mm Per5mm	5~90mm Per5mm	100~100mm Per5mm	5~90mm Per5mm	100~130mm Per10mm					
	With magnet	5~50mm Per5mm	5~75mm Per5mm	5~90mm Per5mm	100mm	5~90mm Per5mm	100~120mm Per10mm					
Maximum stroke		60mm	100mm	120mm								
Single acting	Standard	5~30mm Per5mm	5~30mm Per5mm	5~30mm Per5mm			5~30mm Per5mm	-				
	With magnet	5~30mm Per5mm	5~30mm Per5mm	5~30mm Per5mm			5~30mm Per5mm	-				
Maximum stroke		30mm										

Compact Cylinder: Standard Type

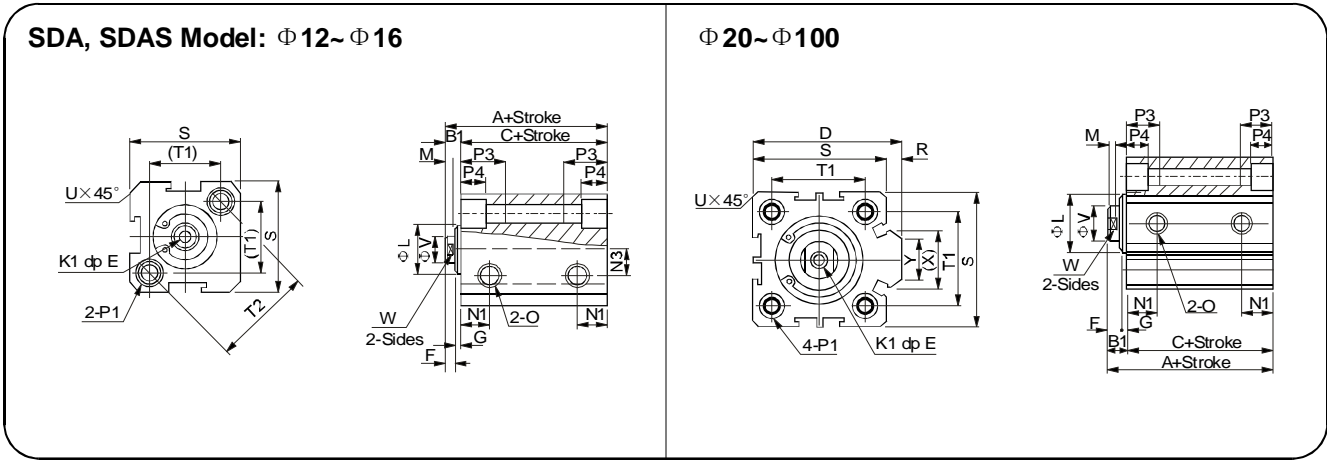
Double Acting, Single Rod / Single Acting, Single Rod, Spring Return / Extend

Series SDA, SSA, STA

GRIPPER

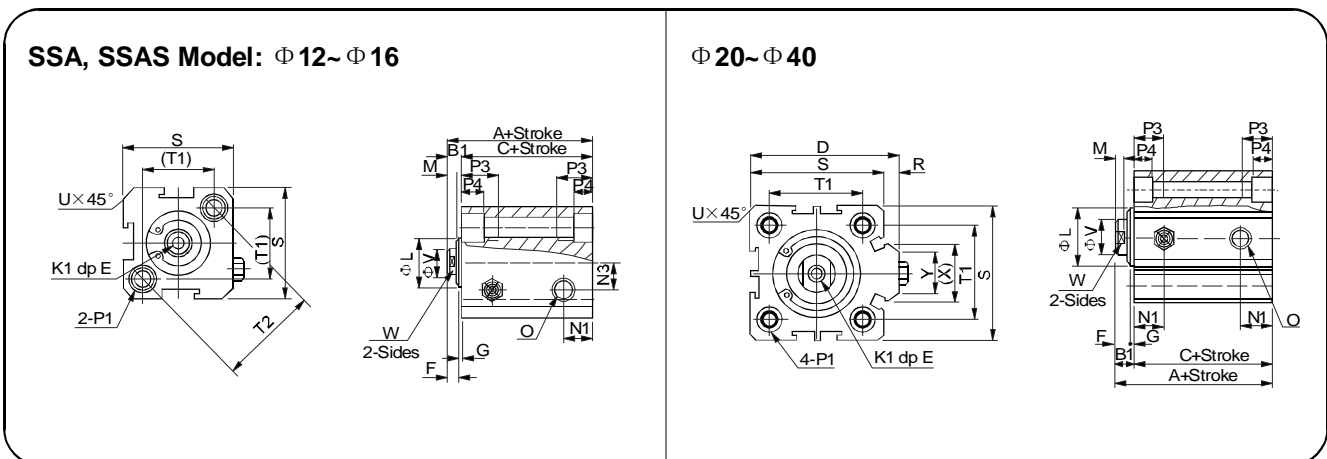
SYSTEMS S.R.O.

◆ Dimensions

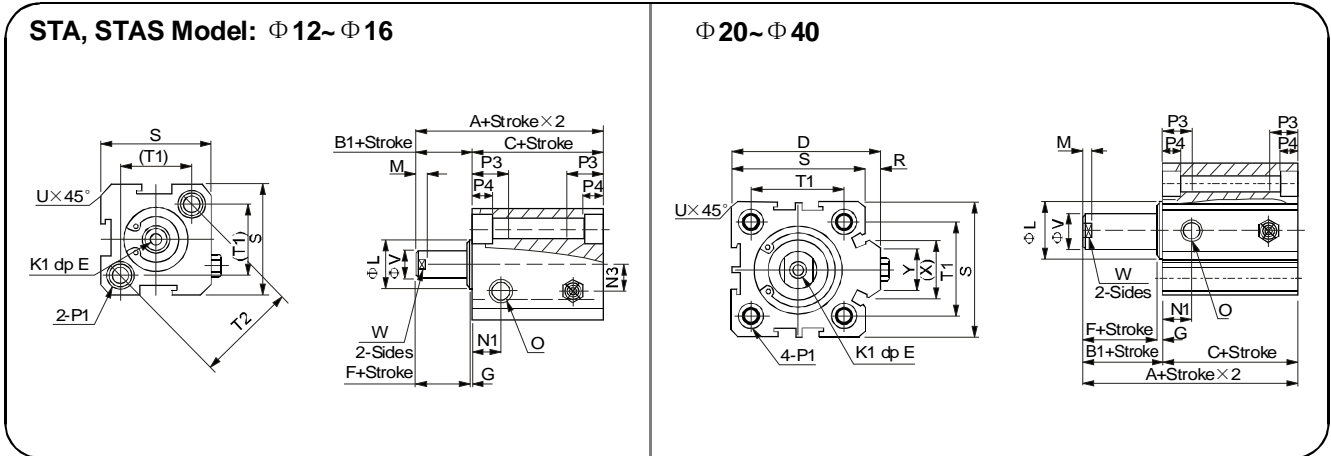


Type	Without magnet			With magnet			D	E		F	G	K1	L	M	N1	N3
	A	B1	C	A	B1	C		Stroke ≤ 10	Stroke > 10							
12	22	5	17	32	5	27	-	6	4	1	M3×0.5	10.2	2.8	6.3	6	
16	24	5.5	18.5	34	5.5	28.5	-	6	4	1.5	M3×0.5	11	2.8	7.3	6.5	
20	25	5.5	19.5	35	5.5	29.5	36	8	4	1.5	M4×0.7	15	2.8	7.5	-	
25	27	6	21	37	6	31	42	10	4	2	M5×0.8	17	2.8	8	-	
32	31.5	7	24.5	41.5	7	34.5	50	12	4	3	M6×1	22	2.8	9	-	
40	33	7	26	43	7	36	58.5	12	4	3	M8×1.25	28	2.8	10	-	
50	37	9	28	47	9	38	71.5	15	5	4	M10×1.5	38	2.8	10.5	-	
63	41	9	32	51	9	42	84.5	15	5	4	M10×1.5	40	2.8	11.8	-	
80	52	11	41	62	11	51	104	15	6	5	M14×1.5	45	4	14.5	-	
100	63	12	51	73	12	61	124	18	7	5	M18×1.5	55	4	20.5	-	

Bore size/Item	O	P1	P3	P4	R	S	T1	T2	U	V	W	X	Y
12	M5×0.8	Both sides: Φ 6.5 Thread: M5×0.8 Thru.hole: Φ 4.2	12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	M5×0.8	Both sides: Φ 6.5 Thread: M5×0.8 Thru.hole: Φ 4.2	12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	M5×0.8	Both sides: Φ 6.5 Thread: M5×0.8 Thru.hole: Φ 4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	M5×0.8	Both sides: Φ 8.2 Thread: M6×1.0 Thru.hole: Φ 4.6	15	5.5	2	40	28	-	3.1	10	8	12	10
32	1/8	Both sides: Φ 8.2 Thread: M6×1.0 Thru.hole: Φ 4.6	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	1/8	Both sides: Φ 10 Thread: M8×1.25 Thru.hole: Φ 6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16
50	1/4	Both sides: Φ 11 Thread: M8×1.25 Thru.hole: Φ 6.5	25	8.5	9.5	62	48	-	4.15	20	17	30	20
63	1/4	Both sides: Φ 11 Thread: M8×1.25 Thru.hole: Φ 6.5	25	8.5	9.5	75	60	-	3.15	20	17	28.7	20
80	3/8	Both sides: Φ 14 Thread: M12×1.75 Thru.hole: Φ 9.2	25	10.5	10	94	74	-	3.65	25	22	36	26
100	3/8	Both sides: Φ 17.5 Thread: M14×2 Thru.hole: Φ 11.3	30	13	10	114	90	-	3.65	32	27	35	26



- I
- CJP
- CJ1
- CS1,CS51
- SI
- MB,MBW
- SU
- SC
- CJ2
- CM2
- MA
- MAL
- CQ2,CQ2
- CQS
- SDA**
- CU
- CUJ
- MD
- MK
- CXS
- CXSW
- TN
- CXWM
- STM
- CRA1
- CRQ2
- MSQ
- MGP
- MGG
- MGC
- CY1B
- CY1R
- CY1S
- CY1L
- MHZ2
- MHZJ2
- MHL2
- MHT2
- MHY2
- RSQ
- CS
Auto switch
- D
Auto switch
- AC,AD
- HR
- RB
- RBL
- RBQ

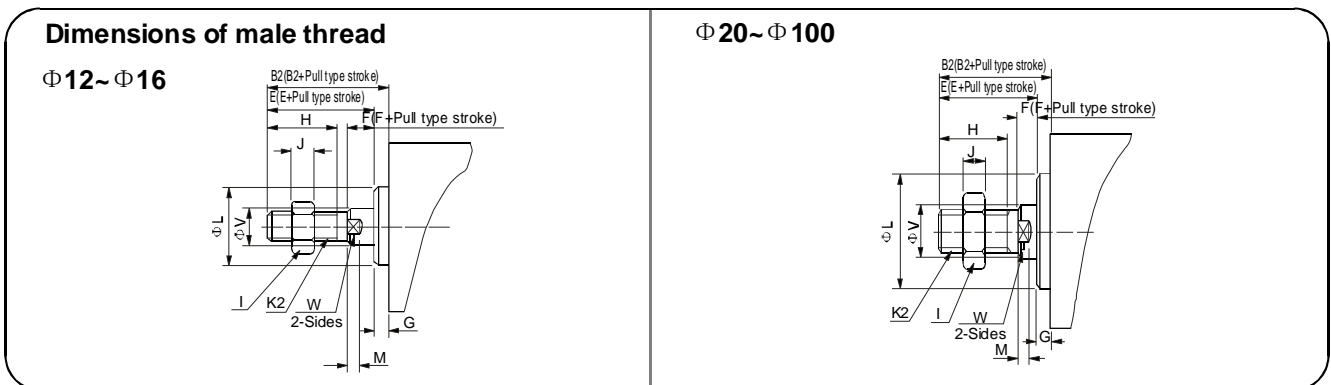


SSA, SSAS, STA, STAS

Type	Without magnet						With magnet						D	E	F	G	K1	L	M	N1	N3
	A		B1	C		A		B1	C												
	≤10	>10		≤10	>10	≤10	>10		≤10	>10											
12	32	42	5	27	37	42	52	5	37	47	-	6	4	1	M3×0.5	10.2	2.8	6.3	6		
16	34	44	5.5	28.5	38.5	44	54	5.5	38.5	48.5	-	6	4	1.5	M3×0.5	11	2.8	7.3	6.5		
20	35	45	5.5	29.5	39.5	45	55	5.5	39.5	49.5	36	8	4	1.5	M4×0.7	15	2.8	7.5	-		
25	37	47	6	31	41	47	57	6	41	51	42	10	4	2	M5×0.8	17	2.8	8	-		
32	41.5	51.5	7	34.5	44.5	51.5	61.5	7	44.5	54.5	50	12	4	3	M6×1	22	2.8	9	-		
40	43	53	7	36	46	53	63	7	46	56	58.5	12	4	3	M8×1.25	28	2.8	10	-		

Bore size/Item	O	P1										P3	P4	R	S	T1	T2	U	V	W	X	Y
		B2		E		F		G		H												
12	M5×0.8	Both sides: Φ 6.5 Thread: M5×0.8 Thru.hole: Φ 4.2										12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	M5×0.8	Both sides: Φ 6.5 Thread: M5×0.8 Thru.hole: Φ 4.2										12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	M5×0.8	Both sides: Φ 6.5 Thread: M5×0.8 Thru.hole: Φ 4.2										14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	M5×0.8	Both sides: Φ 8.2 Thread: M6×1.0 Thru.hole: Φ 4.6										15	5.5	2	40	28	-	3.1	10	8	12	10
32	1/8	Both sides: Φ 8.2 Thread: M6×1.0 Thru.hole: Φ 4.6										16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	1/8	Both sides: Φ 10 Thread: M8×1.25 Thru.hole: Φ 6.5										20	7.5	6.5	52	40	-	2.25	16	14	21.3	16

* Max.stroke up to 30mm, For longer stroke, Please consult us.



Bore size/Item	B2	E	F	G	H	I	J	K2	L	M	V	W
12	17	16	4	1	10	8	4	M5×0.8	10.2	2.8	6	5
16	17.5	16	4	1.5	10	8	4	M5×0.8	11	2.8	6	5
20	20.5	19	4	1.5	13	10	5	M6×1.0	15	2.8	8	6
25	23	21	4	2	15	12	6	M8×1.25	17	2.8	10	8
32	25	22	4	3	15	17	6	M10×1.25	22	2.8	12	10
40	35	32	4	3	25	19	8	M14×1.5	28	2.8	16	14
50	37	33	5	4	25	27	11	M18×1.5	38	2.8	20	17
63	37	33	5	4	25	27	11	M18×1.5	40	2.8	20	17
80	44	39	6	5	30	32	13	M22×1.5	45	4	25	22
100	50	45	7	5	35	36	13	M26×1.8	55	4	32	27