TN Series Dual Rod Cylinder



1.Ordering Code:

25	Х	50	-	S
↑		↑		\uparrow
Bore		Stroke		Blank: Without magnet
10mm		10~200mm		S: Magnet inside
16mm				
20mm				
25mm				
32mm				
	↑ Bore 10mm 16mm 20mm	† Bore 10mm 16mm 20mm	↑ ↑ ↑ Bore Stroke 10mm 10~200mm 16mm 20mm 25mm	↑ ↑ Bore Stroke 10mm 10~200mm 16mm 20mm 25mm

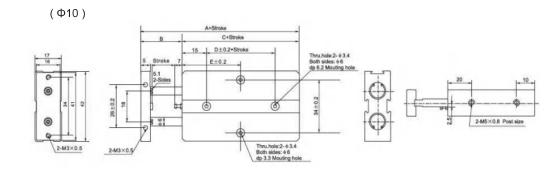
2.Characteristics:

- 1) Small size and light weight.
- 2) Double shaft can bear higher side loads and no rotation.
- 3) There are more mounting holes on the fixed board
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

3.Specification:

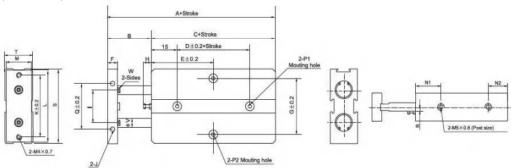
Bore(mm)	10	16	20	25	32
Motion Pattern			Double action		
Working Medium			Air		
Operating Voltage Range			1~9kgf/cm²		
Ensured Pressure Resistance			10.5kgf/cm²		
Operating Temperature Range			-5~+70°C		
Operating Speed Range			100~500mm/s		
Adjustable Stroke			-10~0mm		
Cushion Type			Adjustable Cushion		
Non-rotating Precision	0.4°C		0.37	2	
Port Size		M5>	<0.8		G1/8

4. Overall and Dimension Sheet:



Bore size											
Item	A	В	С	" [10	20	30	40	50	60	70
10	63	12	51	10	30	30	35	40	45	50	55





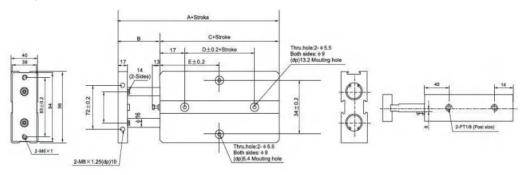
Bore size		0	_																	
Item	A	В	١,٠		10	20	30	40	50	60	70	80	90	100	125	150		٥	14	
16																		47		
20	78	20	58	20	35	35	40	45	50	55	60	65	70	75	87.5	100	10	55	9	28
25	81	19	62	30	40	40	45	50	55	60	65	70	75	80	92.5	105	10	66	8	34

Bore size/item			-	IM	N.I.	N2	FL	P2	14	153	9		N.	VV
16	M4×0.7/dp 5	47	53	20	22	11	Both sides : \$7.5(dp) 7.2mm Thru.hole: \$4.5	Both sides: ϕ 8(dp) 4.4mm Thru.hole: ϕ 4.5	34	3	54	21	8	6.1
20	M4×0.7/dp 5	55	61	24	25	12	Both sides: ϕ 7.5(dp) 7.2mm Thru.hole: ϕ 4.5	Both sides: Φ8(dp) 4.4mm Thru.hole: Φ4.5	44	3.5	62	25	10	8.1
25	M4×0.7/dp 6	66	72	29	27	12	Both sides: \$7.5(dp) 7.2mm Thru.hole: \$4.5	Both sides: ϕ 8(dp) 4.4mm Thru.hole: ϕ 4.5	56	7	73	30	12	10.2





(**43**2)



Bore size										E						
Item	^	В	6	ا تا ا	10	20	30	40	50	60	70	80	90	100	125	150
32	108	30	78	35	45	50	55	60	65	70	75	80	85	90	102.5	115

MSQ Series Rotary Table



1.Ordering Code:

MSQ	В -	20	Α -	M9N
1	↑	1	↑	↑
Model	B:Basic type	Size code	A:with adjustable	Magnet switch type
Rotary table	A:High precision	10~200	angle screw	M9N
with magnet insi	de		B:with shock absorber	М9В
				M9P

2.Characteristics:

- 1) Magnetic ring inside, can be used for magnetic switch.
- 2) Better design for free installation.
- 3) Range for adjustable angle can be 0~190°
- 4) Ball rolling bearing guarantee high precision.
- 5) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 6) Needn't lubricate on piston rod by oil

3. Specification:

	Bore(mm)	10	20	30		70	100	200
	Fluid				Air(non-lube)			
Max.pressure	With adjustment bole			11	Mpa(10.2kgf/cr	m²)		
Max.pressure	R:With Shock Absorber			0.6 MP	a (6.1kgf/cm²)	注/Note		
Min.pressure	Basic type			0.1	Mpa(1.0kgf/c	m²)		
wiin.pressure	High precision type	0.2 Mg	pa	0.1	Мра		•	
Ambient	t and fluid temperature			0~	60℃(No freezi	ng)		
Cushion	With adjustment bole				Rubber bumpe	r		
Cushion	R:With Shock Absorber				Shock absorbe	r		
Angle	adjustment range				0~190°C			
Ma	aximum rotation				190°C			
	Piston bore	ф15	♦18	ф21	ф25	Ф28	ф32	φ40
Dani sina	End ports	M5×0	0.8			RC1/8"		
Port size	Side ports				M5×0.8			

[■] Note:The maximum operating pressure of the actuator is restricted by the maximun allowable thrust of the shock absorber.

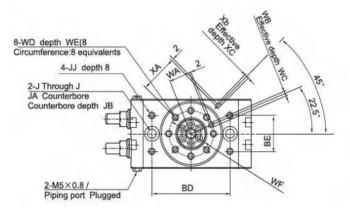
Allowable Kinetic Energy and Rotation Time Adjustmeent Range:

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

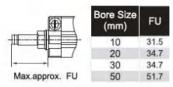
■ Note:Be careful if a type with internal absorber is used below the minimum speed, the energy absorption ability will decrease drastiacally.

4. Overall and Dimension Sheet:

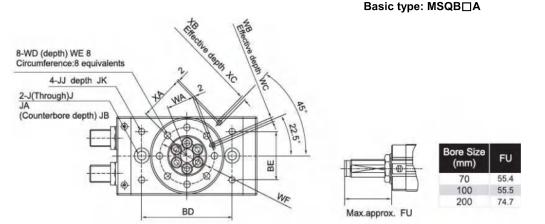
1) Φ10,Φ20,Φ30,Φ50



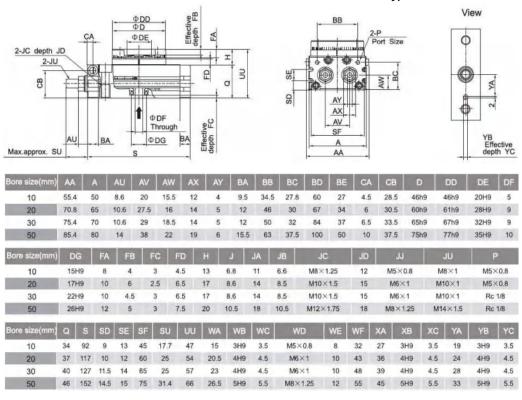
Basic type: MSQB ☐ A



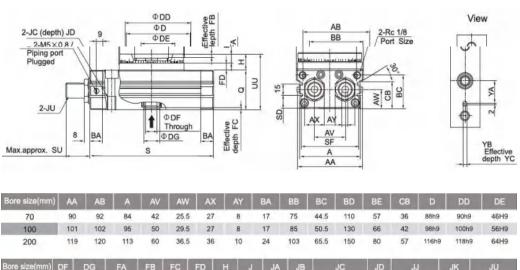
2) Φ70,Φ100,Φ200



With internal shock absorber type: MSQB□R



With internal shock absorber type: MSQB□R



Bore size(mm)	DF	D	3	FA	FB	FC	FD	H		JA	JB		JC	JD		JJ	JK		JU
70	16	22F	19	12.5	5	3.5	6	22	10.4	17.5	10.5	M1	2×1.75	18	M	8×1.25	10	M2	20×1,5
100	19	241	19	14.5	6	3.5	12	27	10.4	17.5	10.5	M1	2×1.75	18	M	8×1.25	10	M2	20×1.5
200	24	32H	19	16.5	9	5.5	15	32	14.2	20	12.5	M	116×2	25	M	12×1.75	13	M2	27×1.5
Bore size(mm)	Q	S	SD	SF	SU	UU	WA	WB	WC	WI)	WE	WF	XA	XB	XC	YA	YB	YC
70	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	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	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



Cushion

Blank: With air cushion C: With air cushion

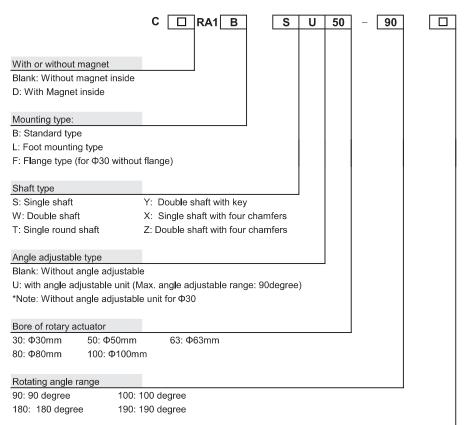
*Note: without air cushion for Angle adjustable type and Φ30 actuator

FESCOLO

CRA1 Series Gear-rack pendular cylinder



1.Ordering Code:



2.Characteristics:

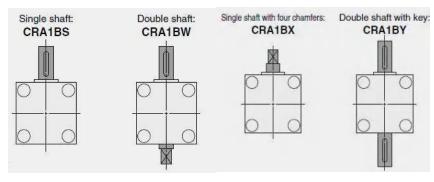
- 1) Compact, lightweight
- 2) Flexible mounting: Top, bottom, or side mounting is possible.
- 3) Front or side ported is selectable.
- 4) With air cushion, Easy adjustment of cushion valve
- 5) With auto switch (CRA1 series: M9N, M9P,M9B etc.)

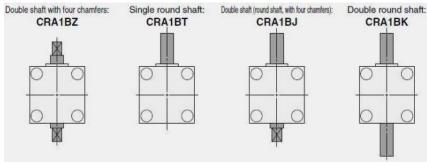


3. Reed switches type:

		Fig. 1	5	160.5		Load volta	ige	Auto swite	ch model	Lead	wire	engt	h [m]	b		
Туре	Special function	Electrical entry	Indicator light	Wiring (Output)	4	DC	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)	Pre-wired connector	Applicat	ole load
5				3-wire (NPN)		EW any		M9NV	M9N			•	0	.0	to shows	
switch	-			3-wire (PNP)		5 V. 12 V		M9PV	M9P			•	0	0	IC circuit	
S				2-wire		12 V		M9BV	M9B				0	0	_	
auto	Manager Laborator			3-wire (NPN)		5 V. 12 V		M9NWV	M9NW				0	0	IC circuit	
8	Diagnosis indication (2-color indicator)	Grommet	Yes	3-wire (PNP)	24 V	5 V, 12 V	-	M9PWV	M9PW			•	0	.0	IG CIrcuit	Relay, PLC
state	(2-color malcator)			2-wire		12 V		M9BWV	M9BW				0	0	_	FEG
100	iii.			3-wire (NPN)		5 V. 12 V		M9NAV*1	M9NA*1	0	0		0	0	10 10 10	
Solid	Water resistant (2-color indicator)			3-wire (PNP)		5 V, 12 V		M9PAV*1	M9PA*1	0	0	•	0	0	IC circuit	
Š	(2-color malcator)			2-wire		12 V		M9BAV*1	M9BA*1	0	0		0	0	_	
Reed auto switch			Yes	3-wire (NPN equivalent)	-	5 V	1-1	A96V	A96	•	-	•	-	-	IC circuit	-
art	_	Grommet		District	0111	4014	100 V	A93V*2	A93		•		•	-	-	Relay,
Rea			No	2-wire	24 V	12 V	100 V or less	A90V	A90		-		-	-	IC circuit	PLC

4. Many variations of shaft type:

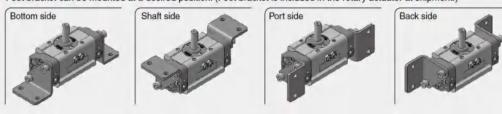






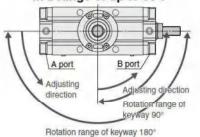
5. Mounting suitable for operating conditions is possible:





6. Angle adjustable type:

Angle can be adjusted to a desired level in a range of up to 90°.



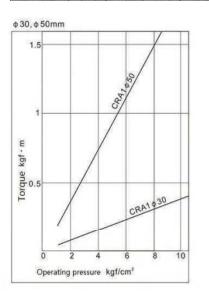


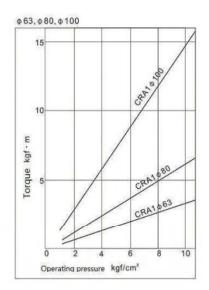
7.Specification:

Bore (mm) of rot	nm) of rotary actuator 30 50 63 80 100										
Fluid				Compressed air							
Max. operating	pressure			1.0 MPa							
Min. operating	pressure			0.1 Mpa							
Ambient and fluid	temperature		0°0	ວົ60 <i>℃</i> (no freezing	g)						
Cushion Not attached, Air cushion											
Backla	sh	None		Withir	າ 1 °						
Tolerance in rot	ating angle	ı		0 to +	- 4 °						
Lubricat	tion		No	t need (or ISOVG3	2)						
Allowable kinetic	With	0.01	0.05	0.12	0.16	0.54					
energy(J)	energy(J) CNSHen - 0.98 1.5 2.0 2.9										
Rotating time	range (s)	0.2~1	0.2~2	0.2~3	0.2~4	0.2~5					
Port siz	ze	M5x0.8	1/8"PT	1/8"PT	1/4"PT	3/8"PT					

8. Effective Torque(N.m):

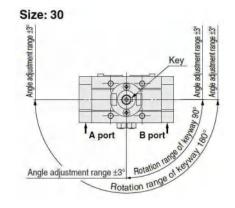
Cino				Op	erating	pressure	[MPa]			
Size	0.1	0.2	0,3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
30	0.38	0.76	1.14	1.53	1.91	2.29	2.67	3.05	3.44	3.82
50	1.85	3.71	5.57	7.43	9.27	11.2	13.0	14.9	16.7	18.5
63	3.44	6.88	10.4	13.8	17.2	20.6	24.0	27.5	31.0	34.4
80	6.34	12.7	19.0	25.3	31.7	38.0	44.4	50.7	57.0	63.4
100	14.9	29.7	44.6	59.4	74.3	89.1	104	119	133	149

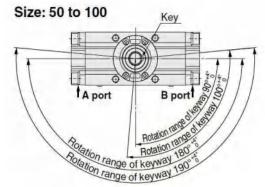




9. Rotating range of keyway:

The shaft rotates clockwise when the pressure is applied from the A port while it rotates counterclockwise when the pressure is applied from the B port

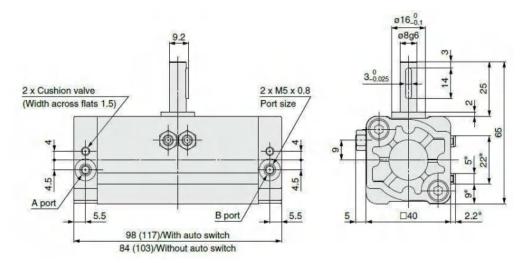


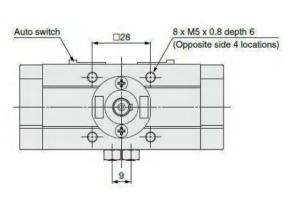


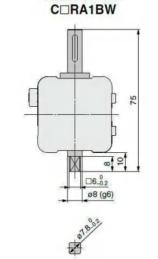


10. Overall and Dimension Sheet (Basic type):

Bore : Ф30

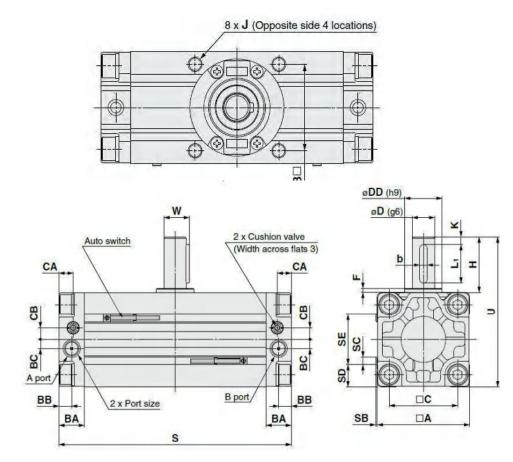






Double shaft:

Воге: Ф50,Ф63,Ф80,Ф100



Size	Note 1) Port	A	В	С	D	DD	F	н	J	K	W	ith a	rto s	witch		Without auto switch	U	w	ВА	вв	вс	* CA	* CB	Key dimens	
	size				(g6)	(h9)					S	SB	SC	SD	SE	S		700	1			CA	CB	b	Lı
50	Rc1/8	62	48	46	15	25	2.5	36	M8 x 1.25 depth 8	5	156 (189)	1.5	5	14.5	33	144 (177)	98	17	17	8.5	6	9.5	7.5	5_0.030	25
63	Rc1/8	76	60	57	17	30	2.5	41	M10 x 1.5 depth 12	5	175 (213.5)	1.5	5	21.5	33	163 (201.5)	117	19.5	20	10	7	11	8	6_0,030	30
80	Rc1/4	92	72	70	20	35	3	50	M12 x 1.75 depth 13	5	199 (243)	1.5	5	29.5	33	186 (230)	142	22.5	23.5	12	8	13	9	6_0.030	40
100	Rc3/8	112	85	85	25	40	4	60	M12 x 1.75 depth 14	5	259 (325)	1.5	5	39.5	33	245 (311)	172	28	25	12.5	8	14	10	8_0,036	45

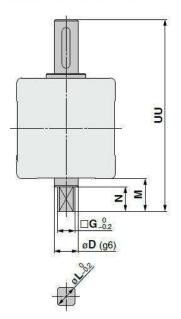
Note 1) In addition to Rc, G, NPT and NPTF are also available.

Note 2) A parallel key is included in the same package, (but not assembled).

★ For model with air cushion



Double shaft: C□RA1BW

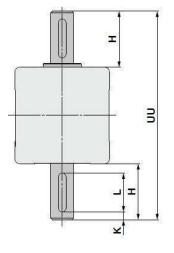


øD is the shaft dimension.

Note) Other dimensions are the same as the single shaft type.

Size	D (g6)	G	M	N	υυ	[mr
50	15	11	20	15	118	14
63	17	13	22	17	139	16
80	20	15	25	20	167	19
100	25	19	30	25	202	24

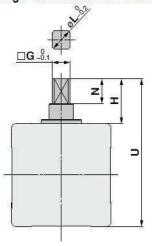
Double shaft with key: C□RA1BY



				[mm]
Size	H	K	UU	L
30	25	3	90	14
50	36	5	134	25
63	41	5	158	30
80	50	5	192	40
100	60	5	232	45

Note) Dimension parts different from the standard conform to the general tolerance.

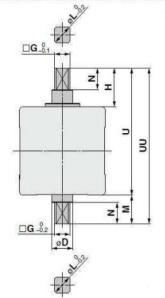
Single shaft with four chamfers: C□RA1BX



					[mm]
Size	G	Н	N	U	L
30	6	13	8	53	7.8
50	11	27	15	89	14
63	13	29	17	105	16
80	15	38	20	130	19
100	19	44	25	156	24

Note) Dimension parts different from the standard conform to the general tolerance.

Double shaft with four chamfers: C□RA1BZ



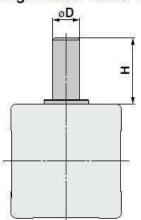
								[mm]
Size	D (g6)	G	Н	M	N	U	UU	L
30	8	6	13	10	8	53	63	7.8
50	15	11	27	20	15	89	109	14
63	17	13	29	22	17	105	127	16
80	20	15	38	25	20	130	155	19
100	25	19	44	30	25	156	186	24

Note) Dimension parts different from the standard conform to the general tolerance.

69



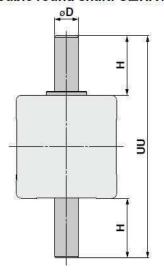
Single round shaft: C□RA1BT



		[mm]
Size	D (g6)	Н
30	8	25
50	15	36
63	17	41
80	20	50
100	25	60

Note) Dimension parts different from the standard conform to the general tolerance.

Double round shaft: C□RA1BK

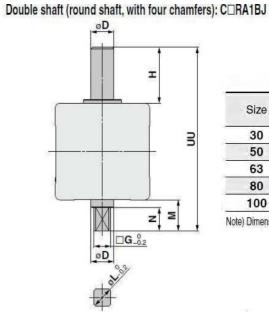


			[mm]
Size	D (g6)	н	UU
30	8	25	90
50	15	36	134
63	17	41	158
80	20	50	192
100	25	60	232

Note) Dimension parts different from the standard conform to the general tolerance.

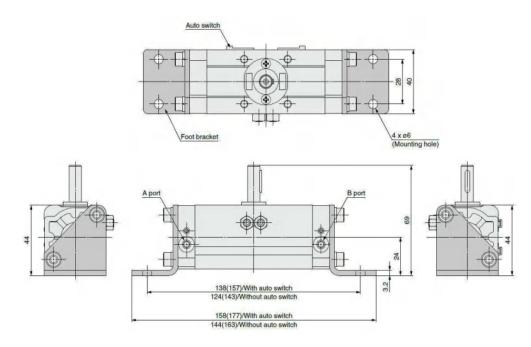
11. Overall and Dimension Sheet (Foot type) :

Bore : **□**30

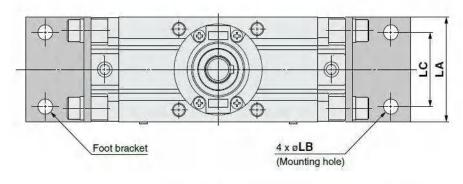


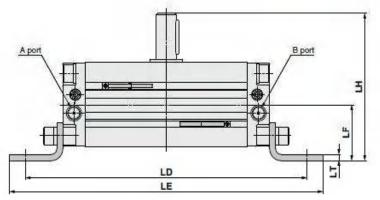
							[mm
Size	D (g6)	G	н	M	N	UU	L
30	8	6	25	10	8	75	7.8
50	15	11	36	20	15	118	14
63	17	13	41	22	17	139	16
80	20	15	50	25	20	167	19
100	25	19	60	30	25	202	24

Note) Dimension parts different from the standard conform to the general tolerance.



Воге: Ф50,Ф63,Ф80,Ф100

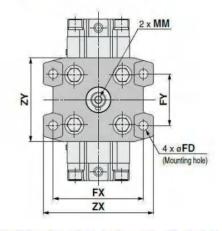


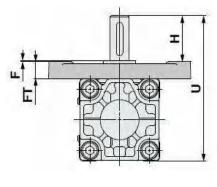


01		I D	10	With au	to switch	Without a	uto switch	15	111	17
Size	LA	LB	LC	LD	LE	LD	LE	LF	LH	LT
50	62	9	44	212 (245)	236 (269)	200 (233)	224 (257)	41	108	4.5
63	76	11	55	247 (285.5)	275 (313.5)	235 (273.5)	263 (301.5)	48	127	5
80	92	13	67	287 (331)	329 (373)	274 (318)	316 (360)	58	154	6
100	112	13	87	347 (413)	389 (455)	333 (399)	375 (441)	73.5	189.5	6

12. Overall and Dimension Sheet (Flange type):

Single shaft: C□RA1FS



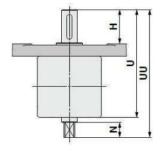


Note) Other dimensions are the same as the basic type

					[mn
Size	F	Н	MM	U	FD
50	4	39	M6 x 1.0 depth 12	114	9
63	5	45	M6 x 1.0 depth 12	136	11.5
80	5	55	M8 x 1.25 depth 16	165	13.5
100	5	60	M10 x 1.5 depth 20	190	13.5

Size	FT	FX	FY	zx	ZY
50	13	90	50	110	81
63	15	105	59	130	101
80	18	130	76	160	119
100	18	150	92	180	133

Double shaft: C□RA1FW

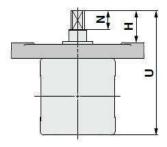


Note) Other dimensions are the same as the single shaft type. [mm]

1110 01	ingio on	air typ	0.	firming
Size	H	N	U	UU
50	39	15	114	134
63	45	17	136	158
80	55	20	165	190
100	60	25	190	220

Single shaft with four chamfers: C□RA1FX

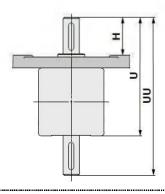




Note) Other dimensions are the same as the single shaft type. [mm]

Size	Н	N	U
50	30	15	105
63	33	17	124
80	43	20	153
100	44	25	174

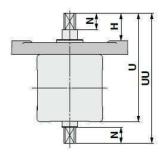
Double shaft with key: C□RA1FY



Note) Other dimensions are the same as the single shaft type. [mm]

		and type	friid
Size	H	U	UU
50	39	114	150
63	45	136	177
80	55	165	215
100	60	190	250

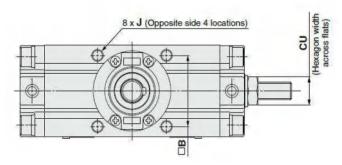
Double shaft with four chamfers: C□RA1FZ

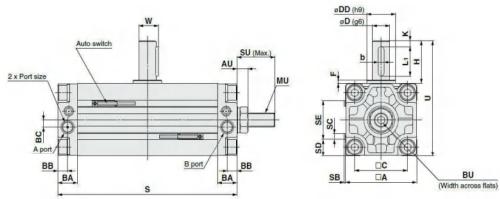


Note) Other dimensions are the same as the single shaft type. [mm]

tile of	ingic sin	an typ	o.	firming
Size	Н	N	U	UU
50	30	15	105	125
63	33	17	124	146
80	43	20	153	178
100	44	25	174	204

13. Overall and Dimension Sheet (Angle adjustable type):





Size	Note 1) Port	A	В	С	D	DD	DD F H J		J	J K	With auto switch				Without auto switch	U	w	ВА	ВВ	ВС	
	size	100	1		(g6)	(n9)				130	S	SB	SC	SD	SE	S			211		
50	Rc1/8	62	48	46	15	25	2.5	36	M8 x 1.25 depth 8	5	156 (189)	1.5	5	14.5	33	144 (177)	98	17	17	8.5	6
63	Rc1/8	76	60	57	17	30	2.5	41	M10 x 1,5 depth 12	5	175 (213.5)	1.5	5	21.5	33	163 (201.5)	117	19.5	20	10	7
80	Rc1/4	92	72	70	20	35	3	50	M12 x 1.75 depth 13	5	199 (243)	1.5	5	29.5	33	186 (230)	142	22.5	23.5	12	8
100	Rc3/8	112	85	85	25	40	4	60	M12 x 1.75 depth 14	5	259 (325)	1.5	5	39.5	33	245 (311)	172	28	25	12.5	8

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Size	AU	BU	cu	su	MU	Key	Note 2
10001		7		00		b	Lı
50	9.5	6	19	33	M12 x 1.75	5_0.030	25
63	10.5	6	22	35.5	M14 x 2	6_0,000	30
80	12.5	8	24	44	M16 x 2	6_0,030	40
100	14.5	10	30	56	M20 x 2.5	8_0.036	45

The dimensions of the shaft type (W: Double shaft, X: Single shaft with four chamfers, Y: Double shaft with key, Z: Double shaft with four chamfers, T: Single round shaft, J: Double shaft (round shaft, with four chamfers), K: Double round shaft), foot type, and flange type are the same as the standard type.

Note 1) In addition to Rc, G, NPT and NPTF are also available.

Note 2) A parallel key is included in the same package, (but not assembled).



1.Ordering Code:



CRQ2 Series Compact Rotary Actuator Rack&Pinion Type



C RQ2 B S 20 90 With or without magnet Blank: Without magnet inside D: With Magnet inside Mounting type: B: Standard type Shaft type S: Single shaft W: Double shaft Bore of rotary actuator 10: Φ10mm 15: Ф15mm 20: Φ20mm 30: Ф30mm 40: Φ40mm Rotating angle range 90: 90 degree 180: 180 degree Cushion

Blank: With air cushion C: With air cushion

*Note: without air cushion for Φ10, Φ15 actuator

2.Characteristics:

- 1) Compact, lightweight
- 2) Flexible mounting: Top, bottom, or side mounting is possible.
- 3) Front or side ported is selectable.
- 4) With air cushion, Easy adjustment of cushion valve
- 5) With auto switch (CRQ2 series: M9N, M9P,M9B etc)

3. Reed switches type:

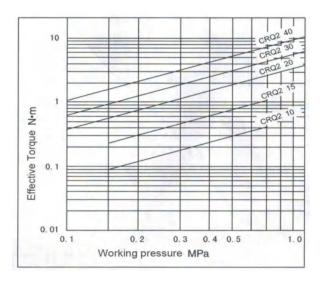
		en and	orlight	1880-5-1		Load volta	ige	Auto swite	ch model	Lead	wire	lengt	h [m]	B		
Туре	Special function	Electrical entry	Indicator	(Output)	4	DC	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)	Pre-wired connector	Applicat	ole load
=				3-wire (NPN)		FW 48W		M9NV	M9N			•	0	.0	10	
switch	-			3-wire (PNP)		5 V. 12 V		M9PV	M9P			•	0	0	IC circuit	
S				2-wire		12 V		M9BV	M9B				0	0	_	
auto	March 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			3-wire (NPN)		FW 403/		M9NWV	M9NW				0.	0	10 0000	
	Diagnosis indication (2-color indicator)	Grommet	Yes	3-wire (PNP)	24 V	5 V, 12 V	-	M9PWV	M9PW			•	0	.0	IC circuit	Relay, PLC
state	(2-color mulcator)			2-wire		12 V		M9BWV	M9BW				0	0	_	FLC
ts	iii.			3-wire (NPN)		5 V, 12 V		M9NAV*1	M9NA*1	0	0		0	0	10 10 10	
Solid	Water resistant (2-color indicator)			3-wire (PNP)				M9PAV*1	M9PA*1	0	0		0	0	IC circuit	
Š	(2-color indicator)			2-wire		12 V	1	M9BAV*1	M9BA*1	0	0		0	0	_	
Reed auto switch			Yes	3-wire (NPN equivalent)	-	70.00	-	A96V	A96	•	-	•	-	-	IC circuit	-
ag .	_	Grommet		n ata		4014	100 V	A93V*2	A93				•	-	-	Relay,
Ree		N	No	2-wire	24 V 12	12 V	100 V or less	A90V	A90		-		-	-	IC circuit	PLC

4.Specification:

Bore (mm) of rot	ary ac tuator	10	15	20	30	40				
Fluid			-	Compressed air						
Action t	уре			Double acting						
Max. operating	pressure	0.7	MРа		1.0 MPa					
Min. operating	pressure	0.15	MPa		0.1 MPa					
Ambient and fluid	temperature		0°0	$^{\circ}$ 60 $^{\circ}$ 60 (no freezing	g)					
Cushio	Cushion Tolerance in rotating angle		ushion	Not attached, Air cushion						
Tolerance in rot	ating angle			−5 °to + 5 °						
Lubricat	tion		No	t need (or ISOVG3	2)					
Effective Tord	que (N.m)	0.3	0.75	1.8	3.1	5.3				
Allannala Ininatia	None	-	_	0.025	0.048	0.081				
Allowable kinetic energy (J)	Pad cushion	0.25x10 ⁻³	0.25x10 ⁻³	-	-	-				
energy (3)	Air cushion	-	-	0.12	0.25	0.40				
Rotating time	range (s)	0.2	0.7	0.2~1.0						
Port si	ze	M5×	0.8	1/8"PT						

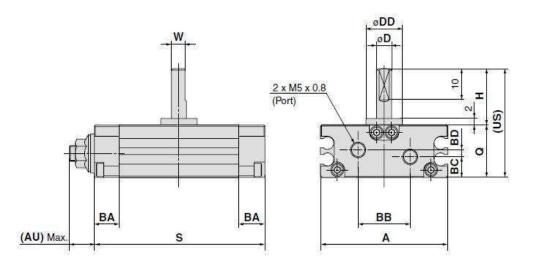


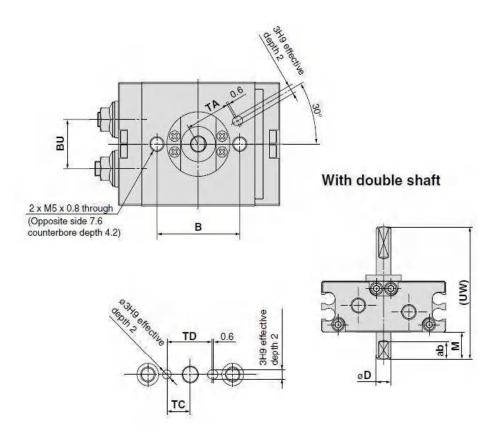
5. Effective Torque(N.m):



6. Overall and Dimension Sheet:

Воге: Ф10,Ф15





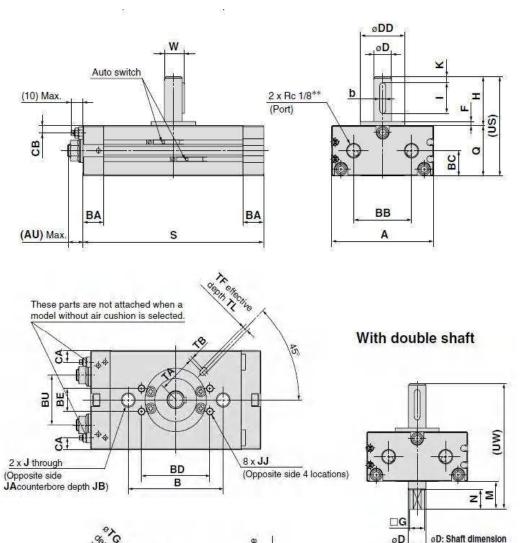
												(mm)
Size	Rotating angle	A	AU*	В	ВА	ВВ	вс	BD	BU	D (g6)	DD (h9)	н
10	90°, 180°, 360°	42	(8.5)	29	8.5	17	6.7	2.2	16.7	5	12	18
15	90°, 180°, 360°	53	(9.5)	31	9	26.4	10.6	-	23.1	6	14	20

Size	Rotating angle	W	Q	S	US	UW	ab	M	TA	TC	TD
	90°		1000	56		-			100		
10	180°	4.5	17	69	35	44	6	9	15.5	8	15.4
	360°	T .		97							
	90°			65							
15	180°	5.5	20	82	40	50	7	10	16	9	17.6
	360°			116							

^{*} AU dimension is not the dimension at the time of shipment, since its dimension is for adjustment parts.

S: Upper 90°, Middle 180°, Lower 360°

Воге: Ф20,Ф30,Ф40



Fescolo Pneumatic

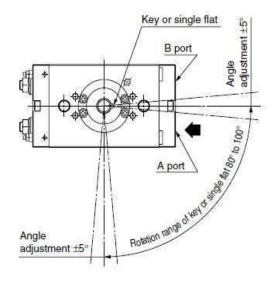
Size	Rotating angle	A	AU*	В	ВА	вв	вс	BD	BE	BU	CA	СВ	D (g6)	DD (h9)	F	н	J	JA	JB
20	90°, 180°, 360°	63	(11)	50	14	34	14.5	-	-	30.4	7	4.7	10	25	2.5	30	M 8 x 1.25	11	6.5
30	90°, 180°, 360°	69	(11)	68	14	39	16.5	49	16	34.7	8.1	4.9	12	30	3	32	M10 x 1.5	14	8.5
40	90°, 180°, 360°	78	(13)	76	16	47	18.5	55	16	40.4	8.3	5.2	15	32	3	36	M10 x 1.5	14	8.6

Olean	Rotating	- 11	V	-		101	Key dim	ensions	IIIC.	TA	TD	TO	TD	TF	TG	т.	HW)	**	NI.			
Size	angle	77	K	Q	S	W	b	1	US	TA	ТВ	TC	TD	(H9)	(H9)	TL	UW	G	M	N	L		
	90°				104																		
20	180°	-	3	29	130	11.5	4_0.00	20	.59	24.5	1	13.5	27	4	4	2.5	74	8-01	15	11	9.6 -01		
	360°				180																		
	90°				122																		
30	180°	M5 x 0.8 depth 6	4	33	153	13.5	4.00	4 0 20	65	27	2	2 19	9 36	4	4	2.5	83	10.01	18	13	11.4 0		
	360°	depuiro			216																		
	90∘	140			139																		
40	180°	M6 x 1 depth 7	5	37	177	17	5-0.03	25	73	32.5	2	20	39.5	5	5	3.5	93	11_01	20	15	14 -01		
	360°	aspin /			253			-		10 00.0	02.0	-2.0											

^{*} AU dimension is not the dimension at the time of shipment, since its dimension is for adjustment parts. ** In addition to Ro 1/8, G 1/8, NPT 1/8, NPTF 1/8 are also available.

7. Rotation range:

Rotating angle: 90°



TC

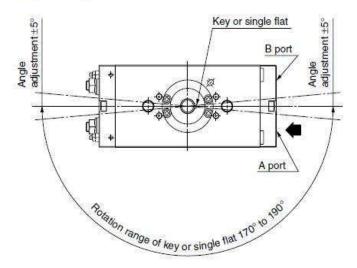
S: Upper 90°, Middle 180°, Lower 360°





83

Rotating angle: 180°



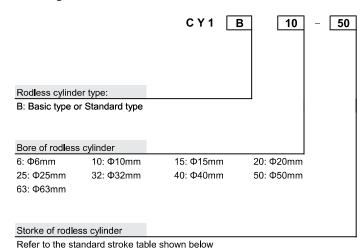


Magnetically Coupled Rodless Cylinder

a) CY1B Series Type Rodless Cylinder



1.Ordering Code:



2.Characteristics:

- 1) Save space, lightweight and has a wide range of applications.
- 2) Can be used in diversified environments because there is no external leakage
- 3) Long strokes available
- 4) NPT thread and G thread are available as standard

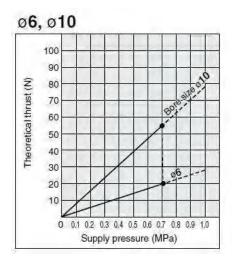
3. Specification:

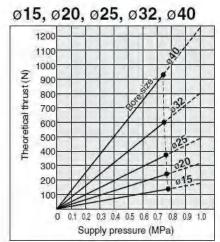
Bore size (mm)	6	10	15	20	25	32	40	50	63
Fluid					Air				
Proof pressure				1	.05 MF	'a			
Max. operating pressure				().7 MP	a			
Min. operating pressure	0.16	0.16	0.16	0.16	0.15	0.14	0.12	0.12	0.12
Ambient and fluid temperature			-1	0 to 60	°C (No	freezi	ng)		
Piston speed				50 to	500 n	nm/s			
Cushion				Rub	ber bur	mper			
Lubrication			N	ot requ	ired (N	lon-lub	e)		
Stroke length tolerance (mm)	0	to 250	st: +1.0	, 251 t	0 1000	st: +1.4	, 1001	st to: +	-1.8 0
Mounting orientation			Horizo	ontal, Ir	clined,	Vertic	al Note)		
Mounting nut (2 pcs.)			Stand	ard equ	uipmen	t (acce	ssory)		
Magnet holding force (N)	19.6	53.9	137	231	363	588	922	1471	2256

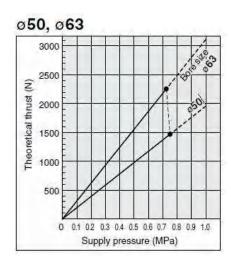
4. Standard Stroke:

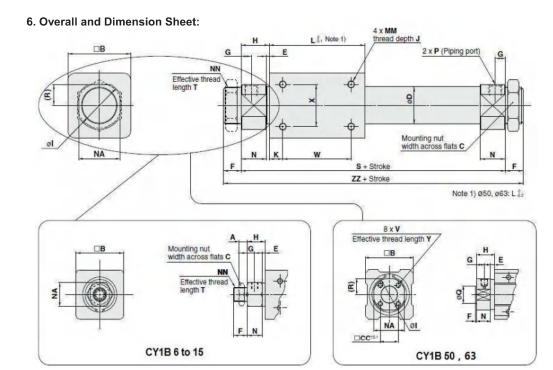
Bore size (mm)	Standard stroke (mm)	Maximum available stroke (mm)
6	50, 100, 150, 200	300
10	50, 100, 150, 200, 250, 300	500
15	50, 100, 150, 200, 250, 300, 350, 400, 450, 500	1000
20	and the second s	1500
25	100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800	
32	700, 800	3000
40	THE RESERVE AND ADDRESS OF THE PROPERTY OF THE	3000
50	100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000	F000
63	700, 000, 300, 1000	5000

5. Theoretical cylinder thrust:

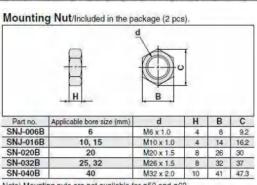








																						(mm)
Model	A	В	C	CC	D	E	F	G	Н	1	J	K	L	MM	N	NA	NN	Q	R	S	T	V
CY1B6	4	17	8	-	7.6	4	9	5	14	-	4.5	5	35	M3 x 0.5	10	14	M10 x 1	-	4	63	6.5	-
CY1B10	4	25	14	-	12	1.5	9	5	12.5	-	4.5	4	38	M3x05	11	14	M10 x 1	-	-	63	7.5	-
CY1B15	4	35	14	-	17	2	10	5.5	13	10-	6	11	.57	M4 x 0.7	11	17	M10 x 1	-	-	83	8	-
CY1B20	8	36	26	-	22.8	2	13	8	20	28	6	8	86	M4 x 0.7	15	24	M20 x 1.5	-		106	10	-
CY1B25	8	46	32	-	27.8	2	13	8	20.5	34	8	10	70	M5 x 0.8	15	30	M26 x 1.5	-		111	10	-
CY1B32	8	60	32	-	35	2	16	9	22	40	В	15	80	M6 x 1	17	36	M26 x 1.5	100		124	13	-
CY1B40	10	70	41	-	43	3	16	11	29	50	10	16	92	M6 x 1	21	46	M32 x 2	-		150	13	
CY1B50	-	86	-	32	53	8	2	14	33	58.2	12	25	110	M8 x 1,25	25	55	-	30 000		176	-	M8 x 1.25
CY1B63	-	100	_	38	66	8	2	14	33	72.2	12	26	122	MB x 1.25	25	69	-	32 300		188	_	M10 x 1.5



Note) Mounting nuts are not available for ø50 and ø63.

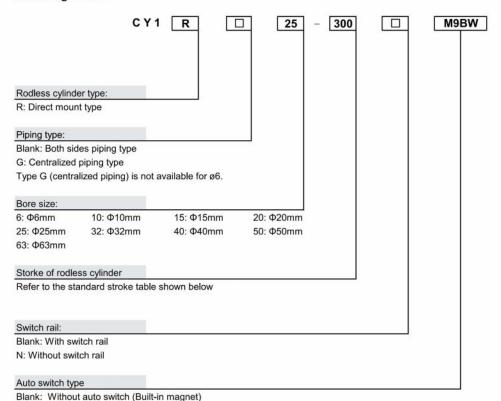




b) CY1R Series Direct Mount Type Rodless Cylinder



1.Ordering Code:



2.Characteristics:

- 1) Save space, lightweight and has a wide range of applications.
- 2) Can be used in diversified environments because there is no external leakage
- 3) Long strokes available
- 4) NPT thread and G thread are available as standard

3. Applicable auto switch:

		Floodifical	tor	Median	ä	Load volta	ge	Auto	Lead	wire le	ngth	(m)	D		
Туре	Special function	Electrical entry	Indicator	Wiring (output)	ι	oc	AC	switch model	0.5 (Nil)	1 (M)	3 (L)	5 (Z)	Pre-wired connector	Applica	ble load
				3-wire (NPN)		5 W 10 W		M9N	•	•	•	0	0		
	-			3-wire (PNP)		5 V, 12 V		M9P	•	•	•	0	0	IC circuit	
a =				2-wire		12 V		M9B	•	•	•	0	0	-	
switch	Diagnostic	7		3-wire (NPN)		5W 40W		M9NW	•		•	0	0	10 -1	
	indication	Grommet	Yes	3-wire (PNP)	24 V	5 V, 12 V	- 1	M9PW	•	•		0	0	IC circuit	Relay, PLC
Solid auto s	(2-color display)			2-wire		12 V	1 1	M9BW			•	0	0	_	FLO
on a				3-wire (NPN)		EW 4011		M9NA*1	0	0	•	0	0	10 1	
	Water resistant			3-wire (PNP)		5 V, 12 V		M9PA*1	0	0	•	0	0	IC circuit	
	(2-color display)			2-wire		12 V		M9BA*1	0	0	•	0	0	-	
Reed auto switch	=1		Yes	3-wire (NPN equiv.)	_	5 V	_	A96	•	-	•	_	s==:	IC circuit	_
Reed to swi	-	Grommet	30308		0414	514 4014	100 V	A93	•	•	•	•	-	-	Relay,
a a			No	2-wire	24 V	5 V, 12 V	100 V or less	A90	•	-		-		IC circuit	PLC

4.Specification:

Bore size (mm)	6	10	15	20	25	32	40	50	63
Fluid					Air		•	,	•
Proof pressure				1	.05 MF	a			
Max. operating pressure				().7 MP	a			
Min. operating pressure	0.16	0.16	0.16	0.16	0.15	0.14	0.12	0.12	0.12
Ambient and fluid temperature			-1	0 to 60	°C (No	freezir	ng)		
Piston speed				50 to	500 n	nm/s			
Cushion				Rubi	ber bur	nper			
Lubrication			N	ot requ	ired (N	lon-lub	e)		
Stroke length tolerance (mm)	0	to 250	st: +1.0	, 251 to	1000	st: +1.4	, 1001	st to: +	1.8
Mounting orientation			Horizo	ontal, In	clined,	Vertic	al Note)		
Mounting nut (2 pcs.)			Stand	ard equ	uipmen	t (acce	ssory)		
Magnet holding force (N)	19.6	53.9	137	231	363	588	922	1471	2256

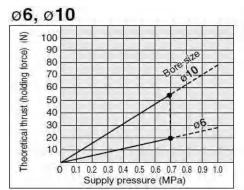


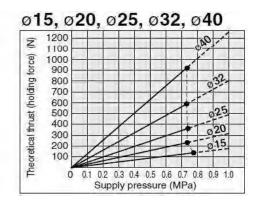


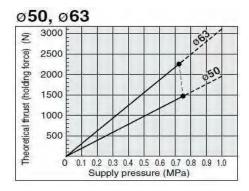
5. Standard Stroke:

Bore size (mm)	Standard stroke (mm)	Max. stroke without switch (mm)	Max. stroke with switch (mm)
6	50, 100, 150, 200	300	300
10	50, 100, 150, 200, 250, 300	500	500
15	50, 100, 150, 200, 250, 300 350, 400, 450, 500	1000	750
20		4500	1000
25	100, 150, 200, 250, 300, 350 400, 450, 500, 600, 700, 800	1500	1200
32	400, 430, 300, 600, 700, 800		
40	100, 150, 200, 250, 300, 350	2000	1500
50	400, 450, 500, 600, 700, 800	2000	1500
63	900, 1000		

6. Theoretical cylinder thrust:

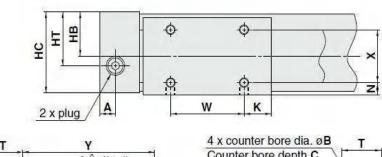


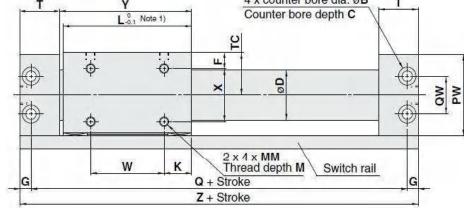


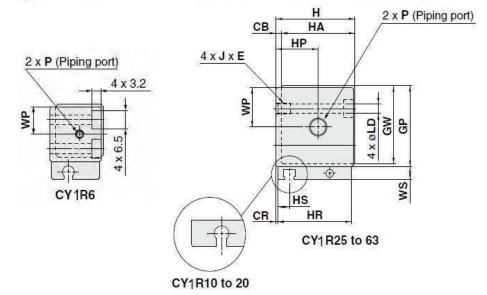


7. Overall and Dimension Sheet:

Both sides piping type(CY1R): Φ6 ~ Φ63







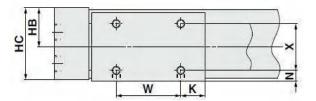


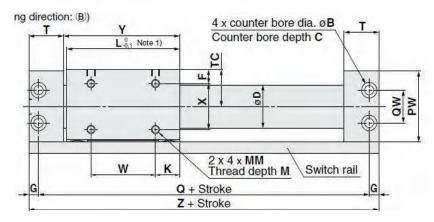
Centralized piping type(CY1RG): ø10 ~ ø63

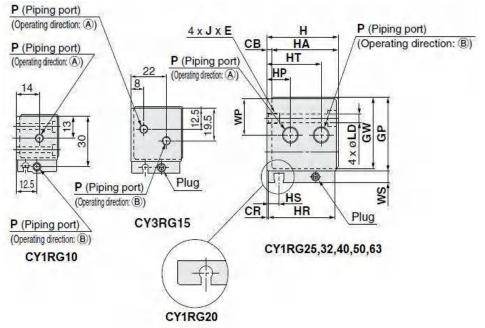
Model	A	В	C	CB	CR	D	F	G	GP	GW	H	HA	HB	HC	HP	HR	HS	H	JXE	K
CY1R6	9	6.5	3.2	2	0.5	7.6	5.5	4	20	18.5	19	17	10.5	18	9	17	6	7	M4 x 0.7 x 6	7
CY1R10	9	6.5	3.2	2	0.5	12	6.5	4	27	25.5	26	24	14	25	14	24	5	14	M4 x 0.7 x 6	9
CY1R15	10.5	8	4.2	2	0.5	17	8	5	33	31.5	32	30	17	31	17	30	8,5	17	M5 x 0.8 x 7	14
CY1R20	9	9.5	5.2	3	1	22.8	9	6	39	37.5	39	36	21	38	24	36	7.5	24	M6 x 1 x 8	11
CY1R25	8.5	9.5	5.2	3	1	27.8	8.5	6	44	42.5	44	41	23.5	43	23.5	41	6,5	23.5	M6 x 1 x 8	15
CY1R32	10.5	11	6,5	3	1.5	35	10,5	7	55	53.5	55	52	29	54	29	51	7	29	M8 x 1.25 x 10	13
CY1R40	10	1.1	6.5	5	2	43	13	7	65	63.5	67	62	36	66	36	62	8	36	M8 x 1.25 x 10	15
CY1R50	14	14	8.2	5.	2	53	17	8.5	83	81.5	85	80	45	84	45	80	9	45	M10 x 1.5 x 15	25
CY1R63	15	14	8.2	5	3	66	18	8.5	95	93.5	97	92	51	96	51	90	9.5	51	M10 x 1.5 x 15	24

Model	L	LD	M	MM	N	PW	Q	QW	T	TC	W	WP	WS	X	Υ	Z
CY1R6	34	3.5	3.5	M3 x 0.5	3.5	19	64	10	17.5	10.5	20	9.5	6	10	35.5	72
CY1R10	38	3,5	4	M3 x 0.5	4.5	26	68	14	17.5	14	20	13	8	15	39.5	76
CY1R15	53	4.3	5	M4 x 0.7	6	32	84	18	19	17	25	16	7	18	54.5	94
CY1R20	62	5,4	5	M4 x 0.7	7	38	95	17	20.5	20	40	19	7	22	64	107
CY1R25	70	5.4	6	M5 x 0,8	6.5	43	105	20	21.5	22.5	40	21.5	7	28	72	117
CY1R32	76	7	7	M6 x 1	8.5	54	116	26	24	28	50	27	7	35	79	130
CY1R40	90	7	8	M6 x 1	11	64	134	34	26	33	60	32	7	40	93	148
CY1R50	110	8.6	10	M8 x 1.25	15	82	159	48	30	42	60	41	10	50	113	176
CY1R63	118	8.6	10	M8 x 1.25	16	94	171	60	32	48	70	47	10	60	121	188

Madel	F	(Piping port	
Model	Nil	TN	TF
CY1R6	M5 x 0.8	_	-
CY1R10	M5 x 0.8	_	-
CY1R15	M5 x 0.8	_	-
CY1R20	Rc 1/8	NPT 1/8	G 1/8
CY1R25	Rc 1/8	NPT 1/8	G 1/8
CY1R32	Rc 1/8	NPT 1/8	G 1/8
CY1R40	Rc 1/4	NPT 1/4	G 1/4
CY1R50	Rc 1/4	NPT 1/4	G 1/4
CY1R63	Rc 1/4	NPT 1/4	G 1/4











Model	В	C	CB	CR	D	F	G	GP	GW	H	HA	HB	HC	HP	HR	HS	HT	JxE	K	L
CY1RG10	6.5	3.2	2	0.5	12	6.5	4	27	25.5	26	24	14	25	(4)	24	5	-	M4 x 0.7 x 6	9	38
CY1RG15	8	4.2	2	0.5	17	8	5	33	31.5	32	30	17	31	120	30	8.5	-	M5 x 0.8 x 7	14	53
CY1RG20	9.5	5.2	3	1	22.8	9	6	39	37.5	39	36	21	38	11	36	7.5	28	M6 x 1 x 8	11	62
CY1RG25	9.5	5.2	3	1	27 B	8.5	6	44	42.5	44	41	23.5	43	14.5	41	6.5	33.5	M6 x 1 x 8	15	70
CY1RG32	11	6.5	3	1.5	35	10.5	7	55	53.5	55	52	29	54	20	51	7	41	M8 x 1.25 x 10	13	76
CY1RG40	11	6.5	5	2	4.3	13	7	65	63.5	67	62	36	66	25	62	8	50	M8 x 1.25 x 10	15	90
CY1RG50	14	8.2	5	2	53	17	8.5	83	81.5	85	80	45	84	32	80	9	56	M10 x 1.5 x 15	25	110
CY1RG63	14	8.2	5	3	66	18	8,5	95	93.5	97	92	51	96	35	90	9.5	63.5	M10 x 1.5 x 15	24	118

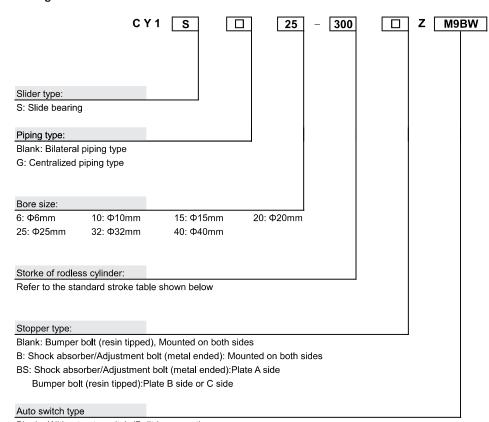
Model	LD	M	MM	N	PW	Q	QW	T	TC	W	WP	WS	Х	Υ	Z
CY1RG10	3.5	4	M3 x 0.5	4.5	26	68	14	17.5	14	20	13	8	15	39.5	76
CY1RG15	4.3	5	M4 x 0.7	6	32	84	18	19	17	25	16	7	18	54.5	94
CY1RG20	5.4	5	M4 x 0.7	7	38	95	17	20.5	20	40	19	7	22	64	107
CY1RG25	5.4	6	M5 x 0.8	6.5	43	105	20	21.5	22,5	40	21.5	7	28	72	117
CY1RG32	7	7	M6 x 1	8.5	54	116	26	24	28	50	27	7	35	79	130
CY1RG40	7	8	M6 x 1	11	64	134	34	26	33	60	32	7	40	93	148
CY1RG50	8.6	10	M8 x 1.25	15	82	159	48	30	42	60	41	10	50	113	176
CY1RG63	8.6	10	M8 x 1.25	16	94	171	60	32	48	70	47	10	60	121	188

****		P (Piping port))
Model	Nil	TN	TF
CY1RG10	M5 x 0.8	_	_
CY1RG15	M5 x 0.8	-	_
CY1RG20	Rc 1/8	NPT 1/8	G 1/8
CY1RG25	Rc 1/8	NPT 1/8	G 1/8
CY1RG32	Rc 1/8	NPT 1/8	G 1/8
CY1RG40	Rc 1/4	NPT 1/4	G 1/4
CY1RG50	Rc 1/4	NPT 1/4	G 1/4
CY1RG63	Rc 1/4	NPT 1/4	G 1/4

c) CY1S Series Slider Type (Slide bearing) Rodless Cylinder



1.Ordering Code:



Blank: Without auto switch (Built-in magnet)
*Note: without air cushion for Φ10, Φ15 actuator



2.Characteristics:

- 1) Reduced in weight
- 2) Reduced in length
- 3) Lube-retainers are mounted on the internal and external surfaces of the cylinder tube to maintain the lubrication.
- 4) Adjustment bolt improves stroke accuracy/repeatability. Stroke position can be maintained with the adjustment bolt positioned next to the shock absorber, so stroke adjustment not necessary.
- 5) NPT thread and G thread are available as standard

3.Specification:

Bore size (mm)	6	10	15	20	25	32	40
Fluid				Air			*
Proof pressure				1.05 MPa	ı		
Maximum operating pressure				0.7 MPa			
Minimum operating pressure				0.18 MPa	ı		
Ambient and fluid temperature			-10 to 6	0°C (No t	freezing)		
Piston speed*			50	to 400 mi	m/s		
Cushion		R	ubber bur	nper/Sho	ck absort	er	
Lubrication				Non-lube			
Stroke length tolerance (mm)	0 to	250 st: +1.	, 251 to	1000 st: +1	⁴ , 1001st	or longer	+1.8
Magnetic holding force (N)	19.6	53.9	137	231	363	588	922

4. Standard Stroke:

Bore size (mm)	Standard stroke (mm)	Maximum manufacturable stroke (mm)
6	50, 100, 150, 200	300
10	50, 100, 150, 200, 250, 300	500
15	50, 100, 150, 200, 250, 300, 350, 400, 450, 500	750
20	100 150 000 050 000 050 100 150	1000
25	100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800	1500
32	300, 000, 700, 000	1500
40	100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000	1500

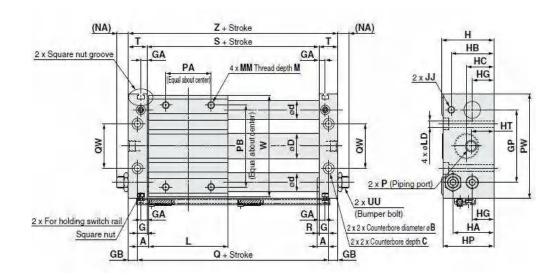
5. Shock absorber specification:

Applicable cylinder	CY1S□6	CY1S□10	CY1S⊡15	CY1S⊡20	CY1S□25	CY1S□32	CY1S□40
Shock absorber model	RJ0604	RJ0806H	RJ0806L	RJ1007L	RJ1412L	RJ2015H	RJ2015L
Max. absorbed energy (J)	0.5	- 3		3	10	3	0
Stroke absorption (mm)	4	(3	7	12	1	5
Collision speed (m/s)	0.05 to 1	0.05 to 2	0.05 to 1	0.05 to 1	0.05 to 1	0.05 to 2	0.05 to 1
Max. operating frequency (cycle/min)	80	8	0	70	45	2	5
Max. allowable thrust (N)	150	24	45	422	814	19	61
Ambient temperature (°C)			-10 to 6	60°C (No f	reezing)		

Note) The maximum absorbed energy and maximum operating frequency was measured at ordinary temperature (approximately 20 to 25°C.)

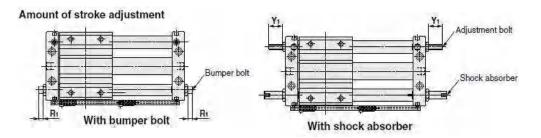
6. Overall and Dimension Sheet:

Bilateral piping type(CY1S)





HB 2 x NN (NC) (NB) (NB) (NC) (NB)

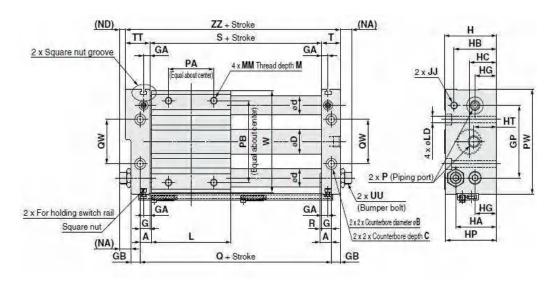


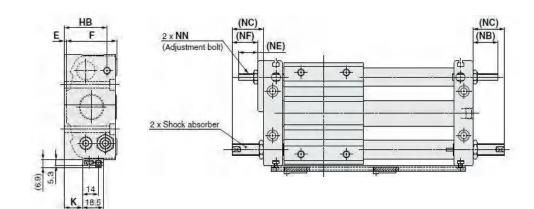
Model	A	В	C	D	d	E	F	G	GA	GB	GP	H	HA	HB	HC	HG	HP	HT	JJ	K	L	LD	M	MM	NA	NB	NC
CY1S6-Z	6	6.5	3.3	7.6	8	2	25	5	5	5	30	27	20.5	20,5	15.5	8	26	15,5	M4 x 0.7	3	40	35	6	M4 x 0.7	11	14	19
CY1S10-Z	7.5	8	4.4	12	10	25	31.5	6.5	5	6	40	34	25	27	17	13.5	33	17.	M4 x 0.7	6	45	4.6	6	M4 x 0.7	10.5	16.5	28
CY1S15-Z	7.5	9.5	5.4	16.6	12	2	38	6.5	5	6	52	40	28	29.5	20.5	15	39	20,5	M4 x 0.7	11	60	5.8	8	M5 x 0.8	10.5	16.5	28
CY1520-Z	10	9.5	5.4	216	16	2	44	8.5	5.5	8	62	46	36	37.5	24	19	45	20	M6 x 1	16	70	5.8	10	Mexi	10.5	22	28
CY1S25-Z	10	11	6.5	26.4	16	2	52	8.5	5.5	8	70	54	40.5	40,5	27.5	21,5	53	21	M6 x 1	20	70	7	10	M6 x 1	12.5	22	49
CY1532-Z	12.5	14	8.6	33.6	20	2	64	9.5	5.5	9	86	66	50	50	33	26	64	24	M8 x 1.25	26	85	9	12	M8 x 1.25	11.5	23.5	52
CY1S40-Z	12.5	14	8.6	41.6	25	2	74	10.5	5.5	10	104	76	55.5	55.5	38	27	74	27.	M8 x 1.25	28	95	9	12	M8 x 1.25	10.5	22.5	51

Model	NN -		P		PA	pp	PW	0	QW	D	D.	Bumper bot adjustable rance	0	-	UU	w	Ye	Adjustment both adjustable range	7	Shock
Model	1414	Nii	TN	TF	7	PB	- **	4	GW	-	1000	Both sizes R x 2			00	**	100	Both states Yi v 2	-	absorber
CY1S6-Z	M4 x 0.7	M3×0.5	-	-	25	25	49	52	16	1	7.5	15	42	10	M6 x 0.75	46	11.5	23	62	RJ0604N
CY1510-Z	M4 x 0.7	M5×0,8	-	-	25	38	61	60	24	1	5.5	11	47	12.5	M8 x 1	58	14	28	72	RJ0806HN
CY1S15-Z	M4 x 0.7	M5×0.8	140	-	30	50	76	75	30	1	5.5	111	62	12.5	M8 x 1	73	14	28	87	RJ0806LN
CY1S20-Z	M6 x 1	Rc1/8	NPT1/8	G1/8	40	70	90	90	38	1,5	4.5	9	73	16.5	M10 x 1	87	18.5	37	106	RJ1007LN
CY1S25-Z	M6 x 1	Rc1/8	NPT1/8	G1/8	40	70	99	90	42	1.5	4.5	9	73	16.5	M14 x 1.5	96	18.5	37	106	RJ1412LN
CY1S32-Z	M8 x 1.25	Rc1/8	NPT1/8	G1/8	40	75	119	110	50	3	5.5	11	91	18.5	M20 x 1.5	116	18.5	37	128	RJ2015HN
CY1S40-Z	M8 x 1.25	Rc1/4	NPT1/4	G1/4	65	105	142	120	64	2	4.5	9	99	20.5	M20 x 1.5	139	17.5	35	140	RJ2015LN

Note) The above figures show the product with auto switches. Auto switch and switch spacer are shipped together with the product, but not assembled.

Centralized piping type(CY1SG)









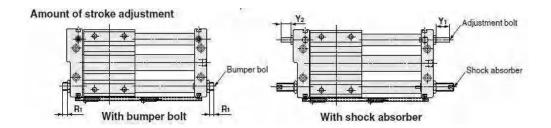
d) CY1L Series Slider Type (Ball bushing bearing) Rodless Cylinder



1.Ordering Code:

1.Ordering	Code .				
		CY1 L	25	- 300	A73
Slider type:					
L: Ball bushing	bearing		_		
Bore size:					
6: Ф6mm	10: Ф10mm	15: Ф15mm	20: Ф20mm		
25: Ф25mm	32: Ф32mm	40: Ф40mm			
Storke of rodle	ss cylinder:				
	andard stroke table	shown below			
Stopper type:					
Blank: Bumper	bolt (resin tipped),	Mounted on both sid	des		
B: Shock abso	rber/Adjustment bo	lt (metal ended): Mo	unted on both si	ides	
BS: Shock abs	orber/Adjustment b	oolt (metal ended):Pl	ate A side		
Bumper bo	lt (resin tipped):Pla	te B side or C side			
Auto quitale tura					
Auto switch typ	t and and take (Duilt				

Blank: Without auto switch (Built-in magnet)



Mandal	1.	n	-	-	-	1-1	-		~	00	on	10		un	110	uc	un	HT			V					. 1		MIS	NO		mm
Model	A	В	C	D	d	E	F	G	GA	GB	GP	Н	HA	HB	HC	HG	HP	HT	4	J	K	L	LD	M	M	M	NA	MR	NC	MD	NE
CY1SG6-Z	6	0.5	3.3	7.6	8	2	25	5	5	5	30	27	20,5	20,5	155	8	26	15.5	M41	x 0,7	3	40	3.5	6	M4 x	0.7	11	14	19	7	10
CY1SG10-Z	7,5	B	4.4	12	10	2.5	31.5	6.5	5	6	40	34	25	27	17	13.5	33	17	M4:	x 0.7	6	45	4.6	6	M4.x	0.7	10.5	16.5	28	6.5	125
CY1SG15-Z	7.5	9.5	5.4	16.6	12	2	38	6.5	5	6	52	40	28	29.5	20.5	15	39	20.5	M4:	x 0.7	11	60	5.8	8	M5 x	8.0	10.5	16.5	28	5.5	11.5
CY1SG20-Z	10	9.5	5.4	21.6	16	2	44	8.5	5.5	8	62	46	36	37.5	24	19	45	20	M6	x 1	16	70	5.8	10	M6	x 1	10.5	22	28	5.5	17
CY1SG25-Z	10	11	6.5	26.4	16	2	52	8.5	5.5	8	70	54	40.5	40.5	27.5	21.5	53	21	M6	x 1	.20	70	7	10	M6	x 1	12.5	22	49	7,5	17
CY15G32-Z	125	14	8.6	32.6	20	2	64	9.5	5.5	9	86	66	50	50	33	20	64	24	M8 x	1.25	26	85	9	12	M8 x	1.25	11.5	23.5	52	5.5	17.5
CY1SG40-Z	125	14	8.6	41.6	25	2	74	10.5	5.5	10	104	76	55.5	55.5	38	27	74	27	M8 x	1.25	28	95	9	12	M8 x	1.25	10.5	22.5	51	4.5	16.5
Model	NF		IN			P			DA	РВ	nw	a	QW	R	Ri	Bump	200	s	т	TT	u		w	Yı		Adjustes		77	9	Shoc	k
Model	NIP	17	TV.	N	1	TN	1	TF	PA	PD	Pran	4	Ow.	H		Battack		3					W	**		Brisis		4	ab	sorb	er
CY1SG6-Z	15	M4	× 0.7	M3 x	0.5	-		_	25	25	49	52	16	1	7.5	- 1	5	42	10	14	Mêx	0.75	46	11.5	7.5	- 19	9	66	FJC	604	N
CY1SG10-Z	24	M4	£0.7	M5×	0.8	-	-	-	25	38	61	60	24	1	5.5	1	1	47	125	16.5	M8	x1	58	14	10	2	4	76	RJO	806	HN
CY1SG15-Z	23	M4	x 0.7	M5×	0.8	4		-	30	.50	76	75	30.	1	5.5	- 1	1	62	12.5	17.5	M8	x 1	73	14	9	2	3	92	RJO	808	N
CY1SG20-Z	23	M6	x 1	Rot	/8	NPT1/E	G	1/8	40	70	90	-90	38	1.5	4.5	13	9	73	16.5	21.5	M10	181	87	18.5	13.5	3	2	111	RJ1	0071	N
CY1SG25-Z	44	M6	81	Rc	/8	NPT1/8	G	1/8	40	70	99	90	42	1.5	4.5		9	73	16.5	21.5	M14	x 1.5	96	18.5	13.5	3	2	111	RJ1	412	N
CY1SG32-Z	46	Me	125	Rot	/8	NPTHE	G	1/8	40	75	119	110	50	3	5.5	1	1	91	18.5	24.5	M20	+1,5	116	18,5	12.5	3	1	134	RJS	015	HN.
CY1SG40-Z	45	MB	1.25	Ret	/4	NPT1/4	G	1/4	65	105	142	120	64	2	4.5		9	99	20.5	28.5	M20	×15	139	17.5	115	- 21	9	146	B.12	015	N

Note) The above figures show the product with auto switches. Auto switch and switch spacer are shipped together with the product, but not assembled.

Fescolo Pneumatic

100



2.Characteristics:

- 1) Hollow shafts are used, and centralization of ports on one side makes piping easy.
- 2) Auto switches can be mounted through the use of special switch rails.
- 3) Impacts at stroke end due to high speed use can be absorbed, and fine adjustment of the stroke is possible.
- 4) NPT thread and G thread are available as standard

3.Specification:

Bore size (mm)	6	10	15	20	25	32	40
Fluid					Air			
Proof pressure					1.05 MPa			
Maximum operatin	g pressure				0.7 MPa			
Minimum operating	g pressure				0.18 MPa			
Ambient and fluid t	temperature			-10 to 6	0°C (No f	reezing)		
Piston speed *				50	to 500 mr	n/s		
Cushion			R	ubber bun	nper/Shoo	ck absorb	er	
Lubrication				Not req	uired (No	n-lube)		
Stroke length tole	rance (mm)	0 to	250 st: +1	D, 251 to	1000 st: *	^{1,4} , 1001	st and up:	+1.8
Uniding favor (AD	Type H	19.6	53.9	137	231	363	588	922
Holding force (N)	Type L	-	-	81.4	154	221	358	569
Standard equipm	ent	*		Auto sw	itch mour	ting rail		

4. Standard Stroke:

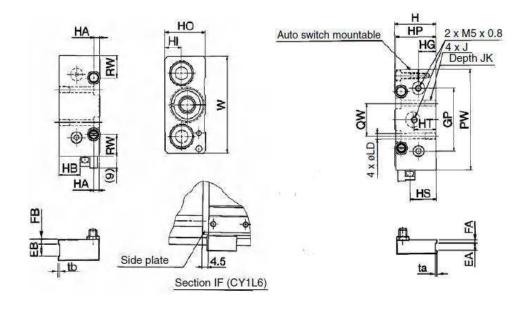
Bore size (mm)	Standard stroke (mm)	Maximum available stroke (mm)
6	50, 100, 150, 200	300
10	50, 100, 150, 200, 250, 300	500
15	50, 100, 150, 200, 250, 300, 350 400, 450, 500	750
20	100 150 000 050 000 050	1000
25	100, 150, 200, 250, 300, 350 400, 450, 500, 600, 700, 800	1500
32	400, 400, 500, 600, 700, 600	1300
40	100, 150, 200, 250, 300, 350 400, 450, 500, 600, 700, 800 900, 1000	1500

5. Shock absorber specification:

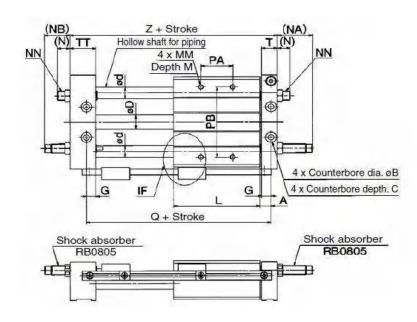
Applicable rodles	ss cylinder	CY1L10 15	CY1L20	CY1L25	CY1L32
Shock absorber i	model	RB0805	RB1006	RB1411	RB2015
Maximum energy a	bsorption: (J)	0.98	3.92	14.7	58.8
Stroke absorption	n: (mm)	5	6	11	15
Collision speed:	(m/s)		0.05	to 5	
Max. operating frequen	cy: (cycle/min) *	80	70	45	25
Ambient tempera	ture range		-10 to	80 °C	
Onder town (80	Extended	1.96	4.22	6.86	8.34
Spring force: (N)	Retracted	3.83	6.18	15.3	20,50

6. Overall and Dimension Sheet:

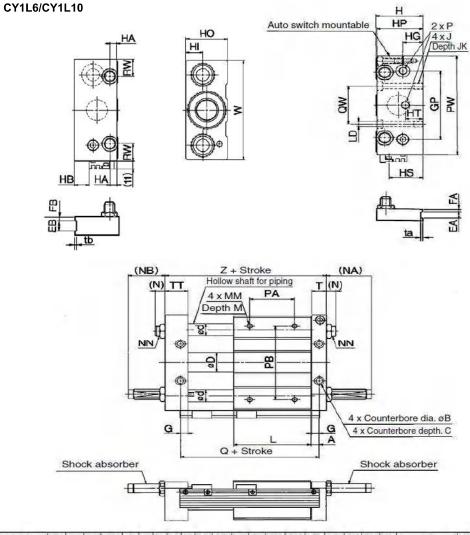
CY1L6/CY1L10







																							(mm
Model	Α	В	C	D	d	EA	EB	FA	FB	G	GP	Н	HA	HE	HO	H	H	H	HS	H		J	JK
CY1L6	7	6.5	3	7.6	8	-	-	-	-	6	36	27	5	10	11	9	25	5 26	14	16	M4	x 0.7	6.5
CY1L10	8.5	8	4	12	10	6	12	3	5	7.5	50	34	6	17.	5 14.	5 13	5 3	3 33	21.	5 18	MS	8.0 x	9.5
Model	L	LD	M	M	M	(N)	(NA)	(NB)		NN		PA*	PB	PW	Q	QW	RW	T	TT	ta	tb	W	Z
CY1L6	40	3.5	6	M4 x	0.7	11	30	24	1	MB x 1	.0	24	40	60	54	20	12	10	16	-	-	56	68
CY1L10	68	4.3	8	M4 x	0.7	10.5	27	19	1	1 x 8N	.0	30	60	80	85	26	17.5	12.5	20.5	0.5	1.0	77	103



Model	A	В	C	D	d	EA	EB	FA	FB	G	GP	H	HA	HB	HG	H	H	OH	1P	HS	HT		J		JK	L	LD
CY1L15	7.5	9.5	5	16.6	12	6	13	3	6	6.5	65	40	6,5	4	16.	14	3	8	39	25	16		M6 x 1	.0	9.5	75	5.6
CY1L20	9.5	9,5	5.2	21.6	16	-	-	-		8.5	80	46	9	10	18	16	4	4	45	31	20		M6 x 1	.0	10	86	5.6
CY1L25	9.5	11	6.5	26.4	16	8	14	4	7	8.5	90	54	9	18	23	21	5	2	53	39	20	- 1	M8 x 1.	25	10	86	7
CY1L32	10.5	14	8	33.6	20	8	16	5	7	9.5	110	66	12	26.	5 26.	5 24.	5 6	4	64	47,5	25	1	V10 x 1	5	15	100	9.2
CY1L40	11.5	14	8	41.6	25	10	20	5	10	10.5	130	78	12	35	30.	5 28.	5 7	6	74	56	30	- 1	V10 x 1	.5	15	136	9.2
Model	M	M	M	(N)	(NA)	(NB)	NN	1		P	PA	P	В	PW	0	QW	RW	1	T	la	tb	TT	W	Z	Shock a	mober
CY1L15	8	M5.x	8.0	8.5	27	17	Ty.	x 8N	1.0	M5:	8.0 x	45	7	70	95	90	30	15	1	2.5	0.5	1.0	22.5	92	112	RBC	805
CY1L20	10	M6 x	1.0	10,5	29	20	M	110 x	1.0	Ro	1/8	50	9	90	120	105	40	28	1	6.5	-	-	25.5	117	130	RB1	1006
CY1L25	10	M6 x	1.0	12.5	49	40	N	114 x	1,5	Ro	1/8	60	10	DO	130	105	50	22	1	6.5	0.5	1.0	25.5	127	130	RB1	1411
CY1L32	12	M8 x	1.25	13.5	52	42	M	120 x	1.5	Ro	1/8	70	12	20	160	121	60	33	1	8.5	0.5	1.0	28.5	157	149	DD	2015
CY1L40	12	M8 x	1.25	12.5	51	36	M	120 x	1.5	Ro	1/4	90	14	10	190	159	84	35	2	0.5	1.0	1.0	35.5	187	194	HDZ	:0 (5

105



STMB, STMS Series Slide Bearing Cylinder



1.Ordering Code:

STM	В -	16	Х	50
↑	↑	↑		↑
Model	Mounting Type	Bore		Stroke
STM: Sliding type	B: Body fixed type	10mm		0~250mm
	S: Sliding Block fixed	16mm		
		20mm		
		25mm		

2.Characteristics:

- 1) Double cylinder structure with high precision and dual output force.
- 2) No rotation.
- 3) Better performance against side loads.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

3.Specification:

Bore(mm)			20	
Motion Pattern		Double	action	
Working Medium		A	ir	
Operating Temperature Range		-5~+	70°C	
Operating VoltageRange		1.0~9.0	kgf/cm ²	
Ensured Pressure Resistance		13.5	Мра	
Operating Speed Range		50~20	0mm/s	
Buffer Type		Shock A	Absorter	
Lubrication		N	0	
Non-rotating Precision	±0.1°		±0.05°	
Port size		M5×0.8		G1/8"

4. Stroke:

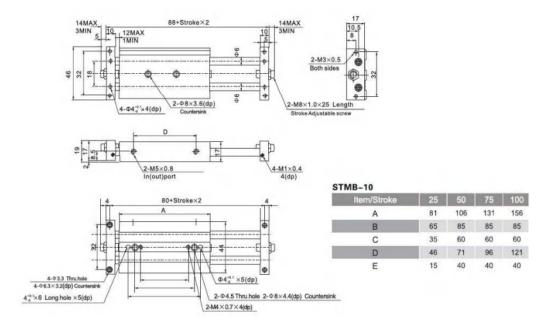
Bore size (mm)	Standard stroke (mm)				
10	25 50 75 100				
16	25 50 75 100 125 150 175 200				
20	25 50 75 100 125 150 175 200 250				
25	25 50 75 100 125 150 175 200 250				

5. Theoretical thrust:

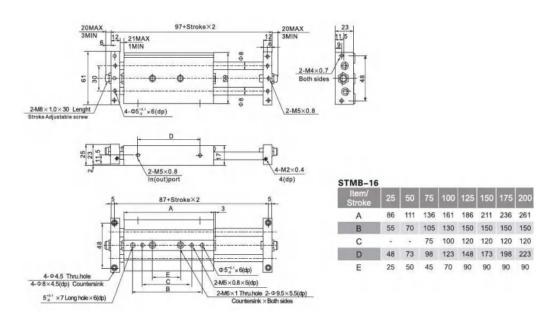
Bore size Rod size (mm)	Rod size	Pressure area	Operating pressure(Kgf/mm²)									
	(cm²)	1	2	3	4	5	6	7	8	9		
10mm	6	0.50	0.48	0.95	1.43	1.9	2.38	2.85	3.43	3.8	4.28	
16mm	8	1.51	1.43	2.87	4.30	5.74	7.17	8.61	10.04	11.48	12.91	
20mm	10	2.36	2.24	4.48	6.73	8.97	11.21	13.45	15.69	17.94	20.18	
25mm	12	3.78	3.51	7.18	10.77	14.36	17.96	21.55	25.14	28.73	32.32	

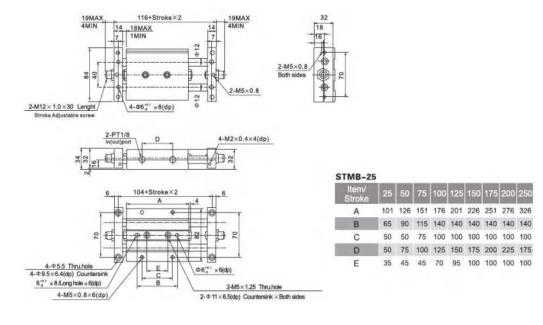
6. Overall and Dimension Sheet:

1) STMB (Body Fixed Type)

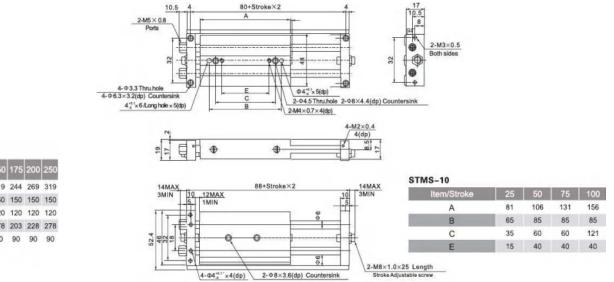


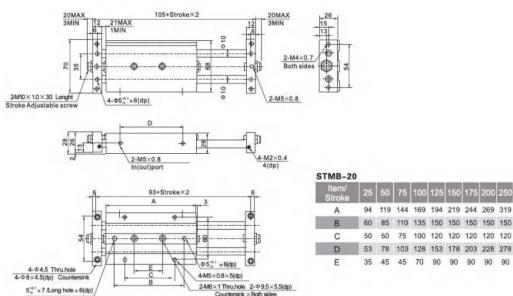






2) STMS (Sliding Block Fixed Type)

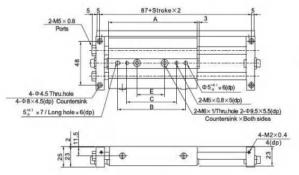




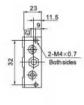
2-M8×1.0×30 Length

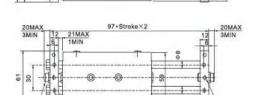
Stroke Adjustable screw





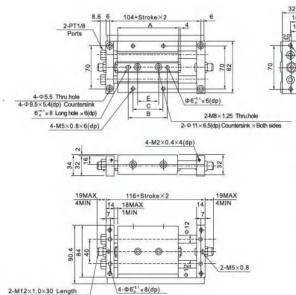
4-Φ5, ×6(dp)





STMS-16

Item/ Stroke	25	50	75	100	125	150	175	200
Α	86	111	136	161	186	211	236	261
В	55	70	105	130	150	150	150	150
C		-	75	100	120	120	120	120
E	25	50	45	70	90	90	90	90



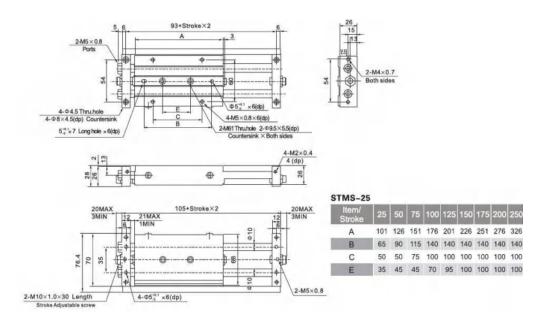


2-M5×0.8

STMS-20

2-M5×0.8 Both sides

Item/ Stroke	25	50	75	100	125	150	175	200	250
A	94	119	144	169	194	219	244	269	319
В	60	85	110	135	150	150	150	150	150
C	50	50	75	100	120	120	120	120	120
E	35	45	45	70	90	90	90	90	90



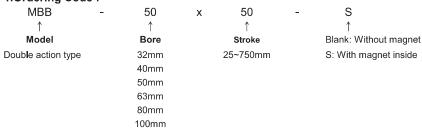
Stroke Adjustable screw



MBB Series Standard Cylinder (SMC standard)



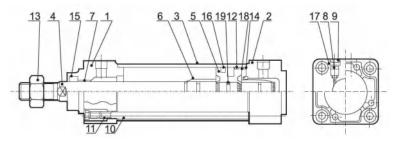
1.Ordering Code:



2. Characteristics:

- 1) This series of cylinder conforms to: SMC standard
- 2) There is an adjustable buffers at the terminals of the cylinder except for mounted cushion.
- 3) Different mounting type can be selected.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

3. Internal Structure:



NO	Designation	NO	Designation	NO	Designation
1	Front cover	6	Buffer ring	11	Tie rod nut
2	Back Cover	7	Bearing	12	Wear ring
3	Barrel	8	Cushion Screw	13	Piston rod nut
4	Piston rod	9	Cushion Seal	17	Buffer seal ring
5	Piston	10	Tie rod	19	Piston O-ring

4.Specification:

Bore (mm)

Dore (mm)											
Bore (mm)	32	40	50	63	80	100					
Action	Double Action										
Applicable medium	Filered Air										
Pressure range			0.1~1	1.0 MPa							
Proof pressure	1.5 MPa										
Temperature range			-5□	□~70 □							
Speed range			50~10	00 mm/s							
Cushion style			Adjustab	le Air Buffer							
Stroke tolerance		0~250)+10, 251~10	000+14, 1001~	1500+18	·					
Port size	G1/8 G1/4 G3/8 G1/2										

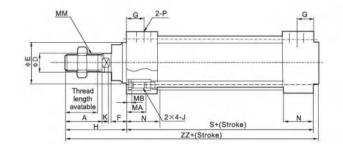
5. Stroke:

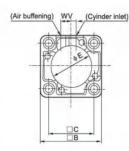
Bore (mm)

Bore (mm)	Standard Stroke
32	25,50,75,100,125,150,175,200,250,300,350,400,450,500
40	25,50,75,100,125,150,175,200,250,300,350,400,450,500
50	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600
63	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600
80	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600,700,750
100	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600,700,750

6. Overall and Dimension Sheet:

Ф32~Ф100





Diameter	Stroke range			ПВ	□с		ΦE			MA	MB		к	MM			s				ZZ
32	~500	19.5	22	46	32.5	12	30	13	13	16	4	M6×1.0	6	M10×1.25	27	1/8	84	4	6.5	47	135
40	-500	27	30	52	38	16	35	13	14	16	4	M6×1.0	6	M14×1.5	27	1/4	84	4	9	51	139
50	-600	32	35	65	46.5	20	40	14	15.5	16	5	M8×1.25	7	M18×1.5	31.5	1/4	94	5	10.5	58	156
63	-600	32	35	75	56.5	20	45	14	16.5	16	5	M8×1.25	7	M18×1.5	31.5	3/8	94	9	12	58	156
80	-750	37	40	95	72	25	45	20	19	16	5	M10×1.5	10	M22×1.5	38	3/8	114	11,5	14	72	190
100	-750	37	40	114	89	30	55	20	19	16	5	M10×1.5	10	M26×1.5	38	1/2	114	17	15	72	190



CA1 Series Standard Cylinder



1.Ordering Code:

CA1B ↑	-	40 ↑	X	100 ↑
Model		Bore		Stroke
CA1B: Normal	type	40mm		25~750mm
CDA1B: with m	agnet	insid 5 0mm		
		63mm		
		80mm		
		100mm		

2. Characteristics:

- 1) Pulling level enhance the strength of the cylinder
- 2) There is an adjustable buffers at the terminals of the cylinder except for mounted cushion.
- 3) With magnet ring inside the cylinder.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

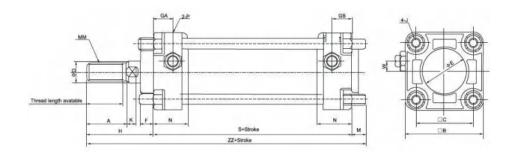
3. Specification:

Bore (mm)	40	50	63	80	100						
Action	Double Action										
Applicable medium	Filered Air										
Pressure range			0.1~1	1.0 MPa							
Proof pressure			1.5	i MPa							
Temperature range			5°C	~60 <i>℃</i>							
Speed range			50~50	00 mm/s							
Cushion style			Adjustab	le Air Buffer							
Stroke tolerance		0~250)+10, 251~1(000+14,1001~1	1500+18						
Port size	G1/4 G3/8 G1/2										

4. Stroke:

Bore (mm)	Standard Stroke
40	25,50,75,100,125,150,175,200,250,300,350,400,450,500
50	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600
63	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600
80	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600,700,750
100	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600,700,750

5. Overall and Dimension Sheet:



Diameter	Stroke range	Thread length available	A	□В	□с	φD	ΦE	F	GA	GB	J	к	М	ММ	N	P	s	w	н	zz
40	~500	27	30	60	44	16	32	10	15	15	M8×1.25	6	11	M14×1.5	27	1/4	84	8	51	146
50	~600	32	35	70	52	20	40	10	17	17	M8×1.25	7	11	M18×1.5	30	3/8	90	0	58	159
63	~600	32	35	85	64	20	40	10	17	17	M10×1.25	7	14	M18×1.5	31	3/8	98	0	58	170
80	-750	37	40	102	78	25	52	14	21	21	M12×1.75	11	17	M22×1.5	37	1/2	116	0	71	204
100	~750	37	40	116	92	30	52	14	21	21	M12×1.75	11	17	M26×1.5	40	1/2	126	0	72	215



RSQ Series Stopper Cylinder



1.Ordering Code:

RSQ - ↑ Model	B ↑ Installation	-	40 ↑ Bore	X	15 ↑ Stroke	- D ↑ Action
RSQ:Normal type	B: hole		12mm		10~30mm	D:double action
RSDQ: with	A: Internal threa	ad	16mm			S:single action
magnet inside	e on both ends	3	20mm			with spring return
			32mm			T:single action
			40mm			with spring extent
			50mm			

↑ Rod end type

R

Blank: round bar type(Φ20~Φ50)
K:chamfored type(Φ20~Φ50)
L:level type with shock absorber
(Φ32~Φ50)
B:level type with adjustable shock
absorber (Φ32~Φ50)
C:level type with adjustable shock
absorber,cancel cap (Φ32~Φ50)
D:level type with adjustable shock
absorber,lock mechanism(Φ32~Φ50)
E:level type with adjustable shock
absorber,cancel cap&lock(Φ32~Φ50)

2.Characteristics:

- 1) Small size and light weight.
- 2) Flexible and precision.
- 3) There are more mounting holes on the fixed board
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

3. Specification:

Bore (mm)	12	16	20	32	40	50					
Motion Pattern		D	ouble Actio	n,Sing l e Acti	on						
Applicable medium	Filered Air										
Pressure range	0.1~1.0 MPa										
Proof pressure			1.5	MPa							
Temperature range	-10°C~70° c with auto switchNo freezing +60° c										
Lubrication			Not r	equired							
Buffering			Rubbe	r bumper							
Stroke tolerance			0~1	.4mm							
Mounting	Through-hole,Tapped common on both ends										
Port size	M5	k 0.8		1/8	"PT						

4. Model instruction:

Bore s	ize (mm)	12	16	20	32	40	50
Mounting	Through-hole	•	•	•	•	•	•
Woulding	Both ends tapped style	•	•	•	•	•	•
Built-in	magnet	•	•	•	•	•	•
Dieles	Screw-in type	M5>	< 0.8		Rc	1/8	
Piping	Built-in One-touch fitings		•		Φ 6/4		Ф 8/6
A	ction	Double	acting Single a	acting(Single ex	tend),Double ac	ting with spring	loaded
	Round bar		•			•	
Rod end configuration	Chamfered		•			•	
Rod end configuration	Roller type		•			•	
	Lever type					•	

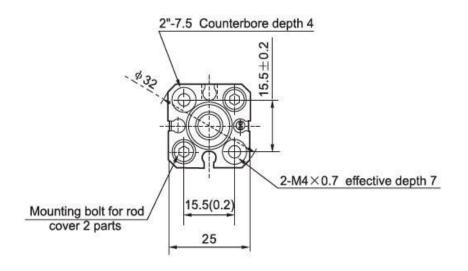
Φ12 tubes can have both through-hole and tap mountings in the same tube.

5. Standard Stroke:

Bara siza (mm)		Rod end configuration	
Bore size (mm)	Round bar, Chamfered type	Roller type	Lever type with shock absorber
12	10	10	-
16	10,15	10,15	-
20	10,15,20	10,15,20	
32	10,15,20	10,13,20	10,15,20
40	20,25,30	20,25,30	20,25,30
50	20,25,30	20,25,30	20,25,30

6. Overall and Dimension Sheet:

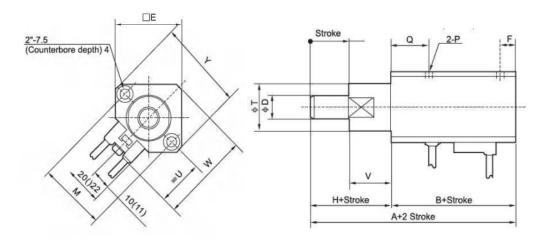
1) RSQB12-10 (Bore: Ф12) Basic Type





Auto switch 2-M5×0.8 Minimum lead wire bending radius 10 Stroke 18.5 4- 43.5 Through Flat washer 4 parts ф 14 ф 8 4Φ6.5 7.5 Counterbore depth 4 0.5 17.5 43.5 61 4-M4×0.7 effective depth 7 15.5(0.2)

2) RSQB16/20-□ (Bore: Φ16,Φ20) Basic Type

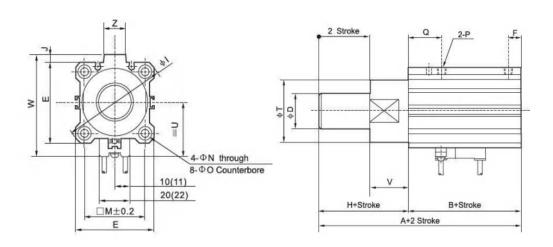


Bore size (mm)	A	В	D	E	F	G	н	1		M	N	O Counerbore	Р	Q	T	U	٧	w	Y	Z
16	59.5	41.5	10	29	6	3	18	-	2	28	3.5	6.5 depth 4	M5×0.8	17	20	22.5	18	41.5	38	4
20	67	45	12	36	8	4	22	-		36	5.5	9 depth 7	Rc 1/8	20	24	24.5	22	48	47	-2
32	68	48	20	45	7.5	8	20	60	4.5	34	5.5	9 depth 7	Rc 1/8	20	36	31.5	20	58.5	-	14
40	80.5	52.5	25	52	8	10	28	69	5	40	5.5	9 depth 7	Rc 1/8	24.5	44	35	28	66	-	14
50	82	54	25	64	8	10	28	86	7	50	6.6	11 depth 8	Rc 1/8	24.5	56	41	28	80	4	15

Note1)Dimensions without auto switch are the same as drawing above. Note2)These figures show the dimensions when equipped with D-A 73 or D-A 80 auto switches.

Note3)These figures show the piston rod extened.

3) RSQB32/40/50-□ (Bore: Φ32,Φ40,Φ50) Basic Type



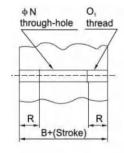
Bore size (mm)	A	В	D	E	F	G	Н	-		M	N	O Counerbore	Р	Q	T	u	٧	w	Υ	Z
16	59.5	41.5	10	29	6	3	18	2	4	28	3.5	6.5 depth 4	M5×0.8	17	20	22.5	18	41.5	38	2
20	67	45	12	36	8	4	22		-	36	5.5	9 depth 7	Rc 1/8	20	24	24.5	22	48	47	-
32	68	48	20	45	7.5	8	20	60	4.5	34	5.5	9 depth 7	Rc 1/8	20	36	31.5	20	58.5	-	14
40	80.5	52.5	25	52	8	10	28	69	5	40	5.5	9 depth 7	Rc 1/8	24.5	44	35	28	66	-	14
50	82	54	25	64	8	10	28	86	7	50	6.6	11 depth 8	Rc 1/8	24.5	56	41	28	80	+	19

Note 1)Dimensions without auto switch are the same as drawing above.

Note2)These figures show the dimensions when equipped with D-A 73 or D-A 80 auto switches.

Note3)These figures show the piston rod extened.

4) RSQA (Bore: Φ16,Φ20,Φ32,Φ40,Φ50) Internal thread on both ends type



Screw mounting	style:Both	n ends	tapped style	(mm)
A A II -		100	04	D

Modle	В	N	Q1	R
RS□QA16	41.5	3.5	M4×0.7	7
RS□QA20	45	5.5	M6×1	10
RS□QA32	48	5.5	$M6 \times 1$	10
RS□QA40	52.5	5.5	M6×1	10
RS□QA50	54	6.6	M8×1.25	14