

Specifications



Type	Pneumatic (non-lube) type
Fluid	Air
Proof pressure	1.5MPa
Maximum operating pressure	1.0MPa
Minimum operating pressure	0.05MPa
Ambient and fluid temperature	Without auto switch: -10°C to 70°C (with no freezing) With auto switch : -10°C to 60°C (with no freezing)
Rod end threads	Female threads
Rod end thread tolerance	JIS class 2
Stroke length tolerance	$\begin{matrix} +1.0 \\ 0 \end{matrix}$
Mounting	Through hole
Piston speed	50 to 500mm/s

Standard Strokes

Bore size (mm)	Standard stroke (mm)
20, 25	15, 20, 25, 30, 40, 50
32, 40	20, 25, 30, 40, 50, 75, 100
50, 63	30, 40, 50, 75, 100
80, 100	40, 50, 75, 100

Manufacture of Intermediate Strokes

Method	Special body type	
Ordering	Refer to "How to Order" for standard part numbers.	
Method	Available in stroke increments of 1mm, using a special body for the specified stroke.	
Stroke range	Bore size	Stroke range
	20, 25	16 to 49
	32, 40	21 to 99
	50, 63	31 to 99
	80, 100	41 to 99
Example	Part number: RQB32-47 A special tube is manufactured for a 47mm stroke.	

Allowable kinetic energy

Refer to "Selection" on page 24 regarding the allowable kinetic energy.

Effective Cushion Length

Bore size (mm)	20	25	32	40	50	63	80	100
Effective cushion length (mm)	5.8	6.1	6.6	6.6	7.1	7	7.5	8

Mounting Bracket Part No.

Bore size (mm)	Note 1)		Note 3)
	Foot	Flange	Double clevis
20	CQS-L020	CQS-F020	CQS-D020
25	CQS-L025	CQS-F025	CQS-D025
32	CQ-L032	CQ-F032	CQ-D032
40	CQ-L040	CQ-F040	CQ-D040
50	CQ-L050	CQ-F050	CQ-D050
63	CQ-L060	CQ-F060	CQ-D060
80	CQ-L080	CQ-F080	CQ-D080
100	CQ-L100	CQ-F100	CQ-D100

Note 1) When ordering foot brackets, order 2 pieces per cylinder.

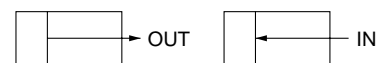
Note 2) The following parts are included with each bracket.

Foot/Flange : Body mounting bolts.

Double clevis: Clevis pins, C set ring for axis, and Body mounting bolts.

Note 3) Clevis pins and snap rings are included with the double clevis type.

Theoretical Output

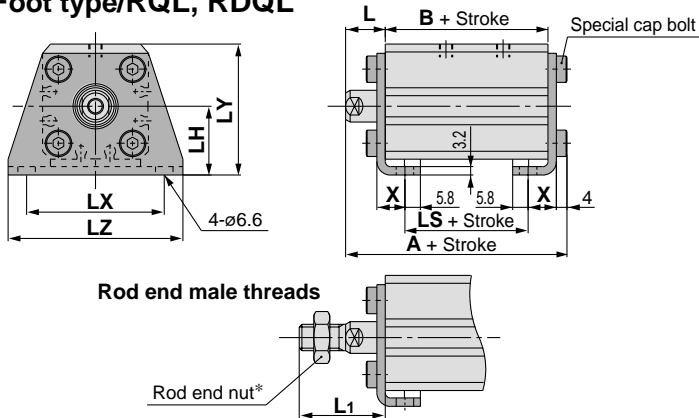


Unit: N

Bore size (mm)	Operating direction	Operating pressure (MPa)		
		0.3	0.5	0.7
20	IN	71	118	165
	OUT	94	157	220
25	IN	113	189	264
	OUT	147	245	344
32	IN	181	302	422
	OUT	241	402	563
40	IN	317	528	739
	OUT	377	628	880
50	IN	495	825	1150
	OUT	589	982	1370
63	IN	841	1400	1960
	OUT	935	1560	2180
80	IN	1360	2270	3170
	OUT	1510	2510	3520
100	IN	2140	3570	5000
	OUT	2360	3930	5500

Mounting Bracket Dimensions

Foot type/RQL, RDQL



Foot type

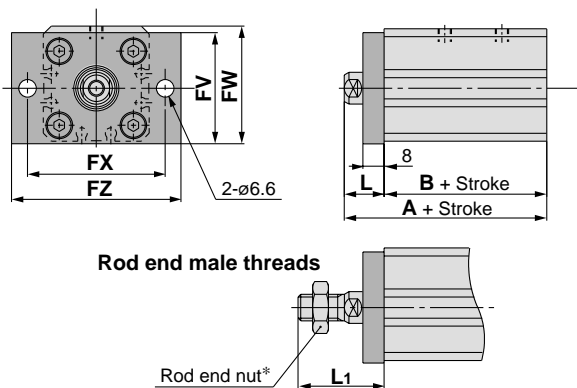
Bore size (mm)	Stroke range (mm)	A	LS	L	L ₁
20	15 to 50	53.7	20	14.5	28.5
25	15 to 50	58.7	21.5	15	32.5

Bore size (mm)	B	LH	LX	LY	LZ	X
20	32	24	48	45	62	9.2
25	36.5	26	52	49.5	66	10.7

(All dimensions but A, LS, L and L₁ are identical to those of the standard type.)

Foot bracket material: Carbon steel

Front flange type/ RQF, RDQF



Front flange type

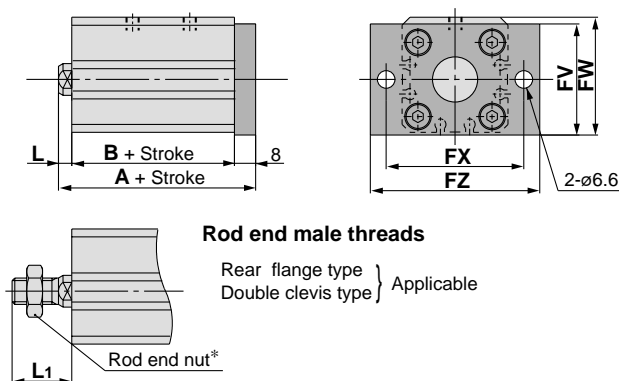
Bore size (mm)	Stroke range (mm)	A	L	L ₁
20	15 to 50	46.5	14.5	28.5
25	15 to 50	51.5	15	32.5

Bore size (mm)	B	FV	FW	FX	FZ
20	32	39	40.5	48	60
25	36.5	42	44.5	52	64

(All dimensions but A, L and L₁ are identical to those of the standard type.)

Flange material: Carbon steel

Rear flange type/RQG, RDQG



Rear flange type

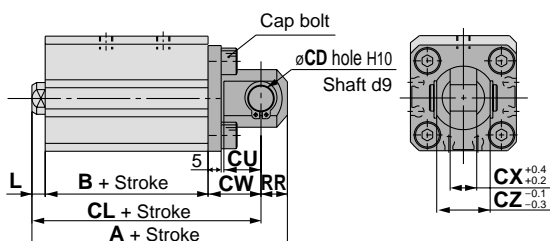
Bore size (mm)	Stroke range (mm)	A
20	15 to 50	44.5
25	15 to 50	49.5

Bore size (mm)	B	L	FV	FW	FX	FZ
20	32	4.5	39	40.5	48	60
25	36.5	5	42	44.5	52	64

(All dimensions but A is identical to those of the standard type.)

Flange material: Carbon steel

Double clevis/RQD, DQD



Double clevis type

Bore size (mm)	Stroke range (mm)	A	CL
20	15 to 50	63.5	54.5
25	15 to 50	71.5	61.5

Bore size (mm)	B	L	L ₁	CD	CU	CW	CX	CZ	RR
20	32	4.5	18.5	8	12	18	8	16	9
25	36.5	5	22.5	10	14	20	10	20	10

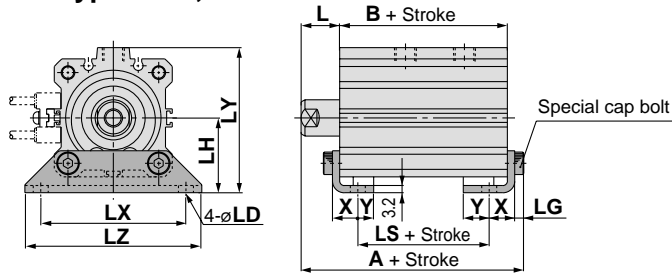
(All dimensions but A and CL are identical to those of the standard type.)

*Refer to page 11 for details on rod end nut and accessories.

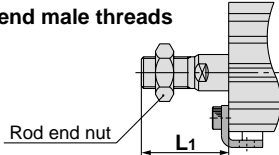
Double clevis bracket material: Carbon steel

Mounting Bracket Dimensions

Foot type/RQL, RDQL



Rod end male threads



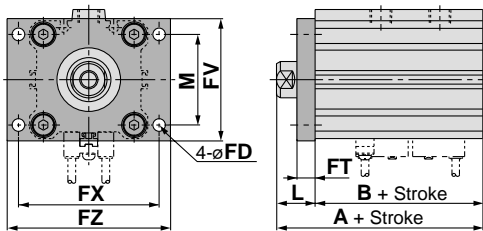
Foot type

Bore size (mm)	Stroke range (mm)	A	B	LS	L	L1	LD
32	20 to 100	61.2	37	21	17	38.5	6.6
40	20 to 100	68.2	44	28	17	38.5	6.6
50	30 to 100	75.7	49.5	26.5	18	43.5	9

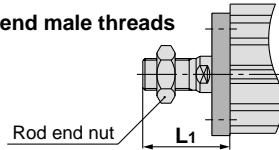
Bore size (mm)	LG	LH	LX	LY	LZ	X	Y
32	4	30	57	57	71	11.2	5.8
40	4	33	64	64	78	11.2	7
50	5	39	79	78	95	14.7	8

Foot bracket material: Carbon steel

Front flange type/RQF, RDQF



Rod end male threads



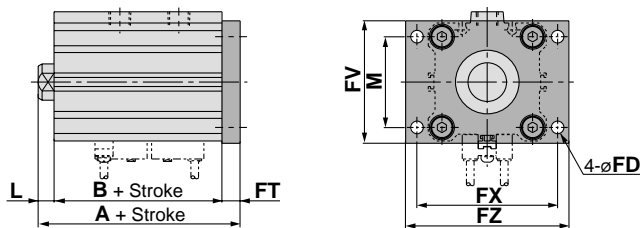
Front flange type

Bore size (mm)	Stroke range (mm)	A	B	FD	FT	FV
32	20 to 100	54	37	5.5	8	48
40	20 to 100	61	44	5.5	8	54
50	30 to 100	67.5	49.5	6.6	9	67

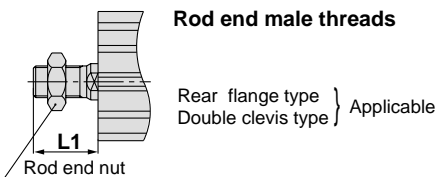
Bore size (mm)	FX	FZ	L	L1	M
32	56	65	17	38.5	34
40	62	72	17	38.5	40
50	76	89	18	43.5	50

Flange material: Carbon steel

Rear flange type/RQG, RDQG



Rod end male threads



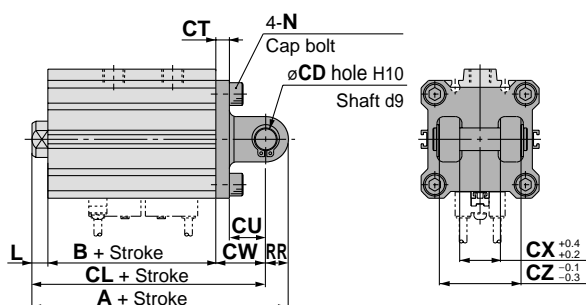
Rear flange type

Bore size (mm)	Stroke range (mm)	A	L	L1
32	20 to 100	52	7	28.5
40	20 to 100	59	7	28.5
50	30 to 100	66.5	8	33.5

(*All dimensions but A, L and L1 are identical to those of the front flange type.)

Flange material: Carbon steel

Double clevis type/RQD, RDQD



Double clevis type

Bore size (mm)	Stroke range (mm)	A	B	CL	CD	CT	CU
32	20 to 100	74	37	64	10	5	14
40	20 to 100	83	44	73	10	6	14
50	30 to 100	99.5	49.5	85.5	14	7	20

Bore size (mm)	CW	CX	CZ	L	L1	N	RR
32	20	18	36	7	28.5	M6 x 1.0	10
40	22	18	36	7	28.5	M6 x 1.0	10
50	28	22	44	8	33.5	M8 x 1.25	14

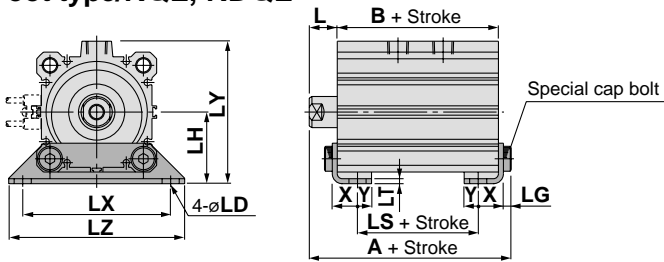
*Refer to page 11 for details on rod end nut and accessories.

*Clevis pins and snap rings are included in the package.

Double clevis bracket material: carbon steel

Mounting Bracket Dimensions

Foot type/RQL, RDQL



Foot type

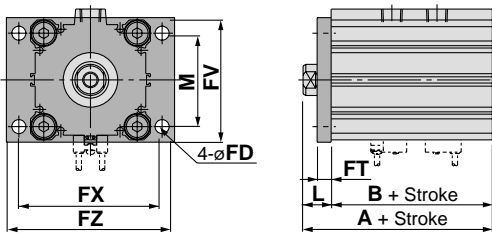
Bore size (mm)	Stroke range (mm)	A	B	LS	L	L1	LD	LG	LH	LT
63	30 to 100	81.2	55	29	18	43.5	11	5	46	3.2
80	40 to 100	95	63.5	33.5	20	53.5	13	7	59	4.5
100	40 to 100	111	76	42	22	53.5	13	7	71	6

Bore size (mm)	Stroke range (mm)	LX	LY	LZ	X	Y
63	10 to 50	95	91.5	113	16.2	9
	75, 100					
80	10 to 50	118	114	140	19.5	11
	75, 100					
100	10 to 50	137	136	162	23	12.5
	75, 100					

Rod end male threads

Rod end nut

Front flange type/RQF, RDQF



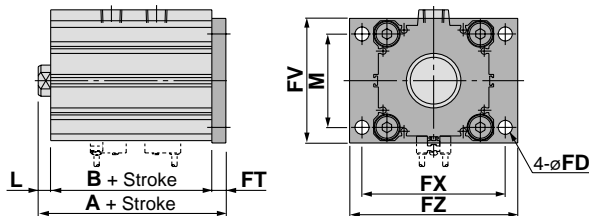
Front flange type

Bore size (mm)	Stroke range (mm)	A	B	FD	FT	FV	FX	FZ	L	L1	M
63	30 to 100	73	55	9	9	80	92	108	18	43.5	60
80	40 to 100	83.5	63.5	11	11	99	116	134	20	53.5	77
100	40 to 100	98	76	11	11	117	136	154	22	53.5	94

Rod end male threads

Rod end nut

Rear flange type/RQG, RDQG



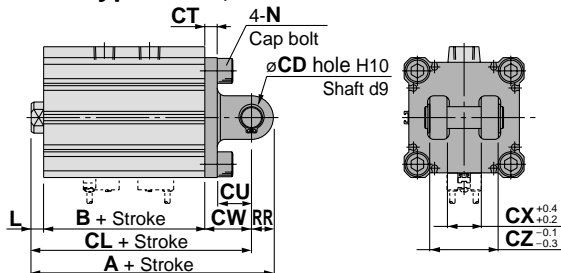
Rear flange type

Bore size (mm)	Stroke range (mm)	A	L	L1
63	30 to 100	72	8	33.5
80	40 to 100	84.5	10	43.5
100	40 to 100	99	12	43.5

Rod end male threads

Rod end nut

Double clevis type/RQD, RDQD



Double clevis type

Bore size (mm)	Stroke range (mm)	A	B	CL	CD	CT	CU	CW	CX	CZ	L
63	30 to 100	107	55	93	14	8	20	30	22	44	8
80	40 to 100	129.5	63.5	111.5	18	10	27	38	28	56	10
100	40 to 100	155	76	133	22	13	31	45	32	64	12

Bore size (mm)	Stroke range (mm)	L1	N	RR
63	10 to 50	33.5	M10 x 1.5	14
	75, 100			
80	10 to 50	43.5	M12 x 1.75	18
	75, 100			
100	10 to 50	43.5	M12 x 1.75	22
	75, 100			

Rod end male threads

Rod end nut

*Refer to page 11 for details on rod end nut and accessories.
*Clevis pins and snap rings are included in the package.