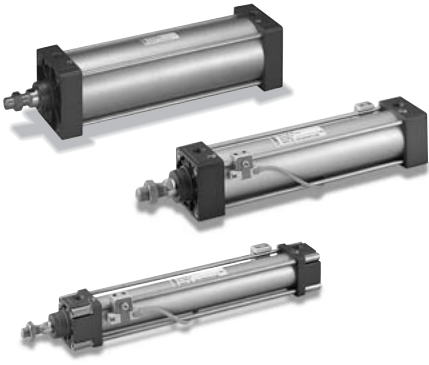


Full-type change for expansion of use

- Use of new type cushion valves
- Use of floating seal in cushion block
- Use of large-size oil-impregnated sintered copper alloy bearings
- Use of rods having diameters generally used in Japan
- Use of rod seals and piston seals conforming to JPAS



Cylinder Specifications/Standard

Series variations		Double acting single rod		Double acting double rod	
Type		Standard type	VAL Set	Standard type	VAL Set
Series		10A-6	10A-6V	10A-6D	10A-6VD
Cylinder bore (mm)		φ 32 · φ 40 · φ 50 · φ 63 φ 80 · φ 100 · φ 125	φ 40 · φ 50 · φ 63 · φ 80 φ 100	φ 32 · φ 40 · φ 50 · φ 63 φ 80 · φ 100 · φ 125	φ 40 · φ 50 · φ 63 · φ 80 φ 100
Working fluid		Air			
Lubrication		Unnecessary			
Working pressure range		0.05 to 1 MPa	0.17 to 0.7 MPa	0.1 to 1 MPa	0.17 to 0.7 MPa
Proof test pressure		1.5 MPa	1.05 MPa	1.5 MPa	1.05 MPa
Note 1) Working speed range		φ32 : 30 to 800mm/s φ40 to φ125: 30 to 700mm/s		φ32 : 50 to 800mm/s φ40 to φ125: 50 to 700mm/s	
Working temperature range		−10 to +70℃ (No freezing)	+5 to +50℃	−10 to +70℃ (No freezing)	+5 to +50℃
Structure of cushioning		With cushions on both ends (with stoppers)			
Cushion stroke (cushion ring parallel part length)		φ 32 · φ 40: 16mm φ 50 · φ 63: 20mm φ 80 · φ 100 · φ 125: 25mm			
Tolerance for thread		JIS 6g/6H			
Tolerance of stroke		0 to 250 mm: $\begin{smallmatrix} +1.0 \\ 0 \end{smallmatrix}$ 251 to 1000 mm: $\begin{smallmatrix} +1.5 \\ 0 \end{smallmatrix}$ 1001 mm or more: $\begin{smallmatrix} +2.0 \\ 0 \end{smallmatrix}$			
Mounting style		SD · LA · LB · FA · FB CA · CC · CB · TC		SD · LA · LB · FA · TC	
Accessories	Note 2) Boots	Standard: Nylon tarpaulin Semi-standard: Chloroprene, Conex			
	Rod end attachments	Rod eye with spherical bearing (S-end), rod eye (T-end), rod clevis (Y-end) with pin, floating joint (F-end)			
	Others	CB bracket, TC bracket		TC bracket	

Notes) 1. When a sensor is mounted in an intermediate position, set the cylinder maximum speed to 300 mm/s or less for reasons of the load relay response speed, etc.
2. Conex, material of the boots, is the registered trademark of Teijin Limited.

⚠CAUTION Note that the accessories for previous 10A-5 Series cannot be attached to 10A-6 Series.

Cylinder Specifications/Non-rotating type

Series variations		Double acting single rod		Double acting double rod	
Type		Standard type	VAL Set	Standard type	VAL Set
Series		10A-6G	10A-6VG	10A-6GD	10A-6VGD
Cylinder bore (mm)		φ 40 · φ 50 · φ 63 · φ 80 · φ 100			
Working fluid		Air			
Lubrication		Unnecessary			
Working pressure range		0.1 to 1 MPa	0.17 to 0.7 MPa	0.15 to 1 MPa	0.17 to 0.7 MPa
Proof test pressure		1.5 MPa	1.05 MPa	1.5 MPa	1.05 MPa
Note 1) Working speed range		50 to 500mm/s			
Working temperature range		−10 to +70℃ (No freezing)	+5 to +50℃	−10 to +70℃ (No freezing)	+5 to +50℃
Structure of cushioning		With cushions on both ends (with stoppers)			
Cushion stroke (cushion ring parallel part length)		φ40: 16mm φ50·φ63: 20mm φ80·φ100: 25mm			
Note 3) Allowable rotating angle		φ 40: ±1° φ 50 · φ 63: ±0.8° φ 80 · φ 100: ±0.5°			
Allowable torque		φ 40: 1N·m φ 50 · φ 63: 3.4N·m φ 80 · φ 100: 10N·m			
Tolerance for thread		JIS 6g/6H			
Tolerance of stroke		0 to 250 mm: $\begin{smallmatrix} +1.0 \\ 0 \end{smallmatrix}$ 251 to 1000 mm: $\begin{smallmatrix} +1.5 \\ 0 \end{smallmatrix}$ 1001 mm or more: $\begin{smallmatrix} +2.0 \\ 0 \end{smallmatrix}$			
Mounting style		SD · LA · LB · FA · FB CA · CC · CB · TC		SD · LA · LB · FA · TC	
Accessories	Note 2) Boots	Standard: Nylon tarpaulin Semi-standard: Chloroprene, Conex			
	Rod end attachments	Rod eye (T-end), rod clevis (Y-end) with pin			
	Others	CB bracket, TC bracket		TC bracket	

Notes) 1. When a sensor is mounted in an intermediate position, set the cylinder maximum speed to 300 mm/s or less for reasons of the load relay response speed, etc.
2. Conex, material of the boots, is the registered trademark of Teijin Limited.
3. The allowable rotation angle refers to the clearance in the piston rod rotating direction at the stroke end.
4. When using it together with another guide, use a round rod.

Specifications for Valves for VAL Set

Rated voltage		100 V AC		200 V AC	24 V DC
Working voltage range (V)		90 to 132		180 to 264	21.6 to 26.4
Current value (when rated voltage is applied)	Frequency (Hz)	50	60	50	60
	Starting mA (r.m.s)	34	32	17	16
	Exciting mA (r.m.s)	22	20	11	10
Allowable circuit leakage current (mA)		4		2	4
Type of insulation		Class B			
Insulation resistance (MΩ)		100 or more			
Protective circuit		—		Flywheel diode	
DIN terminal type	Indicator lamp	Yellow	Green	Red	
	Terminal No.	No.1, No.2		No.1(−), No.2(+)	
Lead wire type		Color of lead wire	Yellow	White	Black(−), Red(+)

Product Lineup

Unit: mm

Series Variations		Type	φ32	φ40	φ50	φ63	φ80	φ100	φ125
Standard	Double acting single rod	Standard type Switch Set 10A-6	●	●	●	●	●	●	●
		VAL Set SV Set 10A-6V		●	●	●	●	●	
	Double acting double rod	Standard type Switch Set 10A-6D	●	●	●	●	●	●	●
		VAL Set SV Set 10A-6VD		●	●	●	●	●	
	With adjustable retracted stroke	Standard type Switch Set 10A-6A2	●	●	●	●	●	●	●
		VAL Set SV Set 10A-6VA2		●	●	●	●	●	
	With adjustable extended stroke	Standard type Switch Set 10A-6A1	●	●	●	●	●	●	●
		VAL Set SV Set 10A-6VA1		●	●	●	●	●	
	Dual stroke (order made)	Single rod 10A-6Q1		●	●	●	●	●	
		Double rod 10A-6Q2	●	●	●	●	●	●	●
Non-rotating	Double acting single rod	Standard type Switch Set 10A-6G		●	●	●	●	●	
		VAL Set SV Set 10A-6VG		●	●	●	●	●	
	Double acting double rod	Standard type Switch Set 10A-6GD		●	●	●	●	●	
		VAL Set SV Set 10A-6VGD		●	●	●	●	●	
	With adjustable retracted stroke	Standard type Switch Set 10A-6GA2		●	●	●	●	●	
		VAL Set SV Set 10A-6VGA2		●	●	●	●	●	
	With adjustable extended stroke	Standard type Switch Set 10A-6GA1		●	●	●	●	●	
		VAL Set SV Set 10A-6VGA1		●	●	●	●	●	

- Order made
- Non-standard rod end screw

● Heat proof type (120℃ or less)

● Non-standard cushion valve position

● Non-copper ion type

● Dual stroke type

● Low hydraulic pressure type

● Iron tube type

● Stainless steel rod type

Weight Table

Unit: kg

Bore mm	Double acting single rod						Double acting double rod					
	Standard			Non-rotating			Standard			Non-rotating		
	Basic weight		Additional weight per mm of stroke	Basic weight		Additional weight per mm of stroke	Basic weight		Additional weight per mm of stroke	Basic weight		Additional weight per mm of stroke
	Standard type	VAL Set		Standard type	VAL Set		Standard type	VAL Set		Standard type	VAL Set	
φ32	0.57	—	0.00218	—	—	—	0.68	—	0.00306	—	—	—
φ40	0.65	0.89	0.00300	0.65	0.89	0.00276	0.84	1.08	0.00457	0.84	1.08	0.00433
φ50	1.02	1.26	0.00428	1.02	1.26	0.00425	1.35	1.59	0.00673	1.35	1.59	0.00670
φ63	1.36	1.61	0.00515	1.36	1.61	0.00512	1.86	2.11	0.00760	1.86	2.11	0.00757
φ80	2.32	2.15	0.00834	2.32	2.15	0.00810	3.16	3.41	0.01217	3.16	3.41	0.01193
φ100	2.94	3.22	0.01061	2.94	3.22	0.00869	4.22	4.50	0.01612	4.22	4.50	0.01420
φ125	4.43	—	0.01490	—	—	—	9.48	—	0.02240	—	—	—

Additional Weight Table

Unit: kg

Bore mm	Mounting accessory weight							Bracket weight		Rod end attachment weight			Valve additional weight		
	LA	LB	FA FB	CA	CC	CB	TC	For CB	For TC	Rod eye (S-end)	Rod eye (T-end)	Rod clevis (Y-end)	Energized extending type Energized retracting type	Self-retaining type	3-position closed center type 3-position exhaust center type
φ32	0.14	0.11	0.20	0.12	—	0.19	0.30	0.46	0.44	0.08	0.16	0.22	—	—	—
φ40	0.20	0.13	0.37	0.18	0.38	0.27	0.48	0.70	1.00	0.11	0.16	0.27	0.51	0.59	0.63
φ50	0.32	0.17	0.39	0.26	0.50	0.39	0.55	0.70	1.00	0.20	0.21	0.34			
φ63	0.52	0.23	0.53	0.42	0.67	0.48	0.70	0.70	1.00	0.20	0.21	0.34	0.52	0.60	0.64
φ80	0.85	0.38	1.60	1.08	1.76	0.92	1.16	0.72	1.44	0.36	0.62	0.87			
φ100	1.28	0.47	2.22	1.39	2.04	1.24	1.53	0.72	1.44	0.36	0.62	0.87	0.55	0.63	0.67
φ125	1.38	0.47	2.87	2.45	—	1.97	3.41	2.81	3.10	—	1.24	1.47	—	—	—

Note) For VAL Set, add the valve additional weight according to the operating method.

Sensor Additional Weight Table

Unit: kg

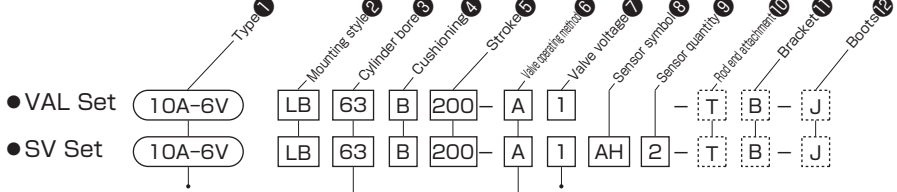
Bore	Sensor	AX type			SR type
		Cord length 1.5 m	Cord length 5 m	Connector type	Cord length 5 m
φ32		0.05	0.13	0.04	0.22
φ40					
φ50					
φ63					
φ80					
φ100					
φ125		0.07	0.14	0.06	

- Calculation formula
- Cylinder weight (kg)=basic weight+(additional weight per mm of stroke×cylinder stroke (mm))
+(sensor additional weight×sensor quantity)+mounting accessory weight+valve additional weight
- Calculation example
- Standard double acting type
VAL Set, bore φ80, cylinder stroke 200 mm, 2 pcs of AX215 (cord length 5 m), LB, energized retracting type
2.15+(0.00834×200)+(0.13×2)+0.38+0.52=4.978kg

● How to order

Standard

The item enclosed by broken line needs not to be entered, if unnecessary.



VAL Set/SV Set
10A-6V : Double acting single rod
10A-6VD: Double acting double rod
VAL Set/SV Set with adjustable stroke
10A-6VA1: Adjustable extended stroke
10A-6VA2: Adjustable retracted stroke

Cylinder bore (mm)
φ40·φ50·φ63·φ80·φ100

DIN terminal type
A Energized extending type (return type)
B Energized retracting type (return type)
D Detent type
C 3-position closed center type
E 3-position exhaust center type

Lead wire type
M Energized extending type (return type)
N Energized retracting type (return type)
P Self-retaining type (detent type)
Q 3-position closed center type
R 3-position exhaust center type

Non-rotating



VAL Set/SV Set
10A-6VG : Double acting single rod
10A-6VGD: Double acting double rod
VAL Set/SV Set with adjustable stroke
10A-6VGA1: Adjustable extended stroke
10A-6VGA2: Adjustable retracted stroke

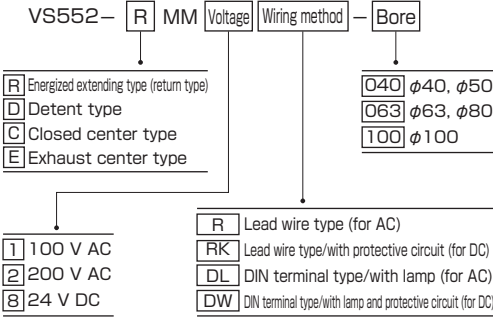
Cylinder bore (mm)
φ40 · φ50 · φ63 · φ80 · φ100

T Rod eye (T-end)
Y Rod clevis (Y-end) with pin

For explanation of other types, refer to the standard type.

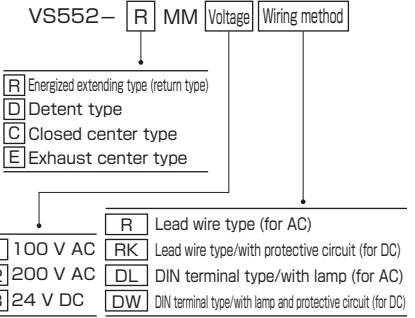
How to order valve for VAL Set

● How to order valve assembly



Note) The valve assembly includes valve, speed controller muffler, piping block, joint and tube (1 m). The assembly is supplied without the valve and piping block mounted. Note that the energized extending/retracting type is changed according to the valve mounting direction.

● How to order only valve

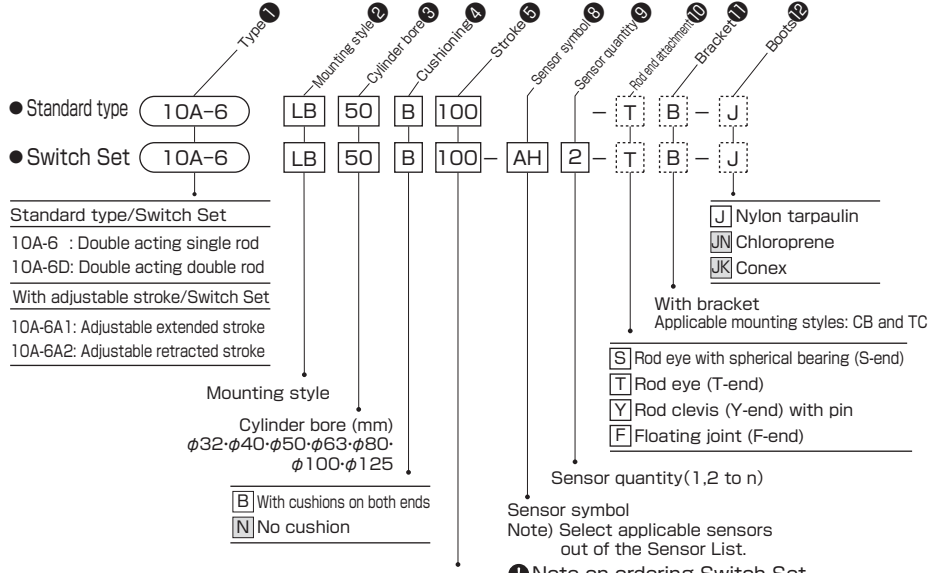


Note) When only a valve is ordered, the valve will come with a mounting bolt and a gasket.

● How to order

Standard

The item enclosed by broken line needs not to be entered, if unnecessary. Semi-standard specification



Non-rotating

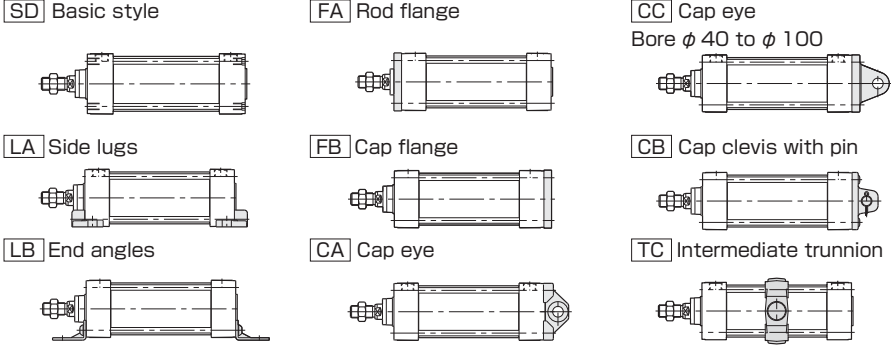


Standard type/Switch Set
10A-6G : Double acting single rod
10A-6GD: Double acting double rod
With adjustable stroke/Switch Set
10A-6GA1: Adjustable extended stroke
10A-6GA2: Adjustable retracted stroke

Cylinder bore (mm)
φ40 · φ50 · φ63 · φ80 · φ100

T Rod eye (T-end)
Y Rod clevis (Y-end) with pin

Mounting style



Sensor List

■ Semi-standard specification

Type	Sensor symbol	Load voltage range	Load current range	Max. switching capacity	Protective circuit	Indicating lamp	Wiring method	Cord length	Applicable load	
Reed sensor	 AX101CE	DC: 5 to 30V AC: 5 to 120V	DC: 5 to 40mA AC: 5 to 20mA	DC: 1.5W AC: 2VA	None	LED (Lights in red when sensing)	0.3 mm ² , 2-core, outer dia. φ4 mm, rear wiring	1.5m	Small relay, programmable controller	
	 AX105CE				5m					
	 AX111CE				1.5m					
	 AX115CE				5m					
	 AX125CE	DC: 30V or less AC: 120V or less	DC: 40mA or less AC: 20mA or less		None	None	5m			
	 AX11ACE	AC: 5 to 120V	5 to 20mA		Provided	LED (Lights in red when sensing)	4-pin connector type, rear wiring	0.5m		
	 AX11BCE	DC: 5 to 30V	5 to 40mA	1.5W				0.5m		
	 AX135CE	AC: 90 to 240V DC: 90 to 240V	5 to 300mA	B contact output	Provided	LED (Lights in red when not sensing)	0.3 mm ² , 2-core, outer dia. φ4 mm, rear wiring	5m		
	 SR405	AC: 80 to 220V	2 to 300mA	30VA	Provided	Neon lamp (Lights in red when not sensing)	0.5 mm ² , 2-core, outer dia. φ6 mm, rear wiring	5m		Small relay, programmable controller, small solenoid, pilot lamp
	Solid state sensor	 AX201CE-1	DC: 5 to 30V	5 to 40mA	—	Provided	LED (Lights in red when sensing)	0.3 mm ² , 2-core, outer dia. φ4 mm, rear wiring		1.5m
 AX205CE-1		5m								
 AX211CE-1		1.5m								
 AX215CE-1		5m								
 AX211CE-1		LED (2-LED type in red/green)					0.3 mm ² , 2-core, outer dia. φ4 mm, rear wiring	1.5m		
 AX215CE-1								5m		
 AX21BCE-1								4-pin connector type, rear wiring	0.5m	
 AZ211CE-1								0.3 mm ² , 2-core, outer dia. φ4 mm, upper wiring	1.5m	
 AZ215CE-1									5m	
 AZ21BCE-1									4-pin connector type, upper wiring	0.5m

(Notes) ● For the sensors without a protective circuit, be sure to provide a protective circuit (SK-100) with the load when using any induction load (relay, etc.).
● The output logic of AX135CE is a B contact. When the piston is detected, the sensor contact turns off (the lamp turns on).
● For the detailed specifications and handling of sensors, see the sensor specifications at the end of this catalog.
● The AX type sensors can be mounted on any type in addition to the above types. See the sensor specifications at the end of this catalog.
● We recommend AND Unit (AU series) for multiple sensors connected in series.
For details, refer to AND Unit at the end of this catalog.

● AX type sensor

Cord type



Connector type

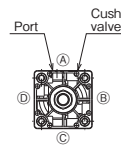


● SR type sensor



Ordering procedures

★ Standard specifications



- With cushions on both ends
- Port position (A) and cushion valve position (B)
- (Notes) ● When specifying port and cushion valve positions other than (A), consult us.
- In the case of VAL Set, the cushion valve on the cap side is positioned on (B).

★ Semi-standard range

- Double rod cylinders, cylinders with boots, and cylinders without cushions
- Change of piston rod end (dimensional symbol: WF, A, KK)
- Change of TC accessory position (dimensional symbol: PH)
- (Note) ● Contact us for specifications not stated above.

Stroke Limit

Unit: mm

Bore	Double acting single rod		Double acting double rod	
	Round rod (standard)	Non-rotating	Round rod (standard)	Non-rotating
φ32	700	—	500	—
φ40	1000	500	800	500
φ50	1500		1000	
φ63				
φ80				
φ100				
φ125		—	—	

Sensor Mountable Minimum Stroke

Unit: mm

Type	AX type		SR type	
	Switch Set	SV Set	Switch Set	SV Set
With 1 sensor	25	50	15 (25)	50
2 pcs. on one surface	25	50	Note 3 15 (25)	50
2 pcs. on opposite surfaces	25	50	15 (25)	50
Trunnion (TC style)	120	120	90 (130)	125

(Notes) 1. The minimum stroke for the trunnion (TC) is the value obtained when the trunnion is located in the center.
2. The parenthesized values are the minimum strokes of cylinders with bores from 80 to 125 mm.
3. The minimum stroke of the 32 mm bore SR type cylinder is 50.

Readily Available Cylinder Size

Unit: mm

Bore	Stroke of readily available cylinder											
	50	75	100	125	150	200	250	300	350	400	450	500
φ32	○	○	○	○	○	○	○	○	○	○	○	○
φ40	○	○	○	○	○	○	○	○	○	○	○	○
φ50	○	○	○	○	○	○	○	○	○	○	○	○
φ63	○	○	○	○	○	○	○	○	○	○	○	○
φ80	○	○	○	○	○	○	○	○	○	○	○	○
φ100	○	○	○	○	○	○	○	○	○	○	○	○

(Note) The cylinders shown in the above table are double acting single rod cylinders except the TC style.

Dimensional Table

Symbol	A	B	B ₁	BB	D	DD	E	EE	H	K	KK	LL	MG
Bore	MM	P	RD	RR	VF	WF	YP	YV	ZJ	ZM	ZP	ZV	h
φ32	22(19)	φ24	17	14	10	M6×1	□44	Rc1/8	31	31	M10×1.25	93	—
φ40	24(21)	φ30	19	14	14	M6×1	□50	Rc1/4	31	31	M12×1.25	93	14
φ50	32(29)	φ34	22	14	17	M6×1	□62	Rc1/4	31	31	M16×1.5	93	19
φ63	32(29)	φ34	22	14	17	M8×1.25	□75	Rc3/8	32	32	M16×1.5	96	19
φ80	40(37)	φ39	27	15	21	M10×1.5	□94	Rc3/8	36	36	M20×1.5	108	23
φ100	40(37)	φ46	27	15	26	M10×1.5	□112	Rc1/2	36	36	M20×1.5	108	23
φ125	54(50)	φ55	36	15	32	M12×1.75	□136	Rc1/2	42	36	M27×2	114	—

Symbol	MM	P	RD	RR	VF	WF	YP	YV	ZJ	ZM	ZP	ZV	h
φ32	φ12	61	φ26	□33	15	25	16	25.5	118	143	3	7	6
φ40	φ16	57	φ32	□37	15	25	18	25.5	118	143	4	10	7
φ50	φ20	57	φ38	□47	15	25	18	24	118	143	7	12	10
φ63	φ20	60	φ38	□56	15	25	18	25	121	146	8	12	10
φ80	φ25	68	φ44	□70	21	35	20	29	143	178	11	16	12
φ100	φ30	68	φ50	□84	21	35	20	29	143	178	12	18	12
φ125	φ35	74	φ60	□104	21	35	20	29	149	184	14	20	16

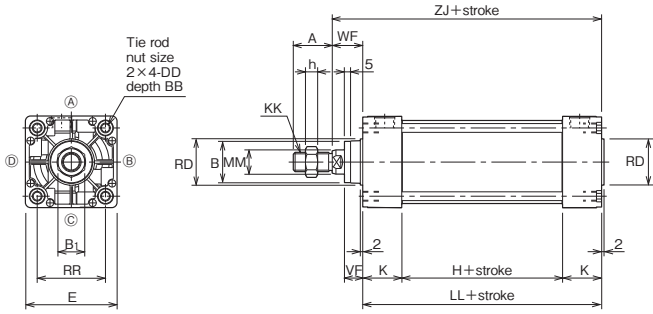
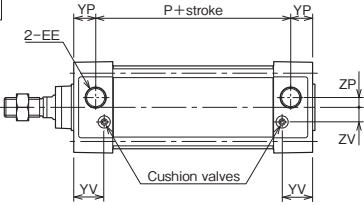
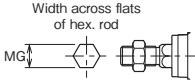
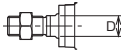
* The parenthesized values of dimension A indicate the screw length.

CAD/DATA
10A-6/TA6 Bore A is available.

SD

Double acting single rod Standard 10A-6 SD Bore B Stroke
Non-rotating 10A-6G SD Bore B Stroke

- Standard φ 32 to φ 125
- Non-rotating φ 40 to φ 100



- For dimensions not shown here, refer to the SD style (basic style).
- The non-rotating cylinders have the same dimensions as the standard cylinders except dimensions of the rod end.
- For dimensional drawings of rod end attachments, refer to the accessories.
- For the mounting of sensors, see the dimensional drawings of Switch Set.
- For the mounting of valves, see the dimensional drawings of VAL Set.

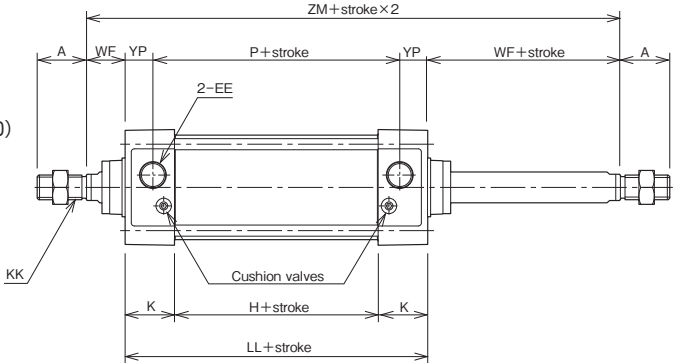
Double acting double rod Standard 10A-6D SD Bore B Stroke
Non-rotating 10A-6GD SD Bore B Stroke

10A-6/TA6 Bore B

- Non-rotating(φ 40 to φ 100)



Note) Hex. rod on one side, and round rod on one side



- For dimensions not shown here, refer to the double acting single rod cylinder.

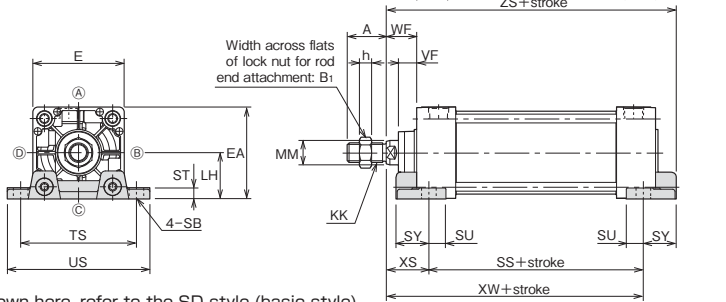
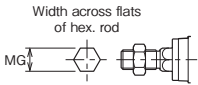
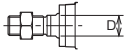
LA

Double acting single rod

- Standard10A-6 LA Bore B Stroke
- Non-rotating10A-6G LA Bore B Stroke

●Standard ϕ 32 to ϕ 125

●Non-rotating ϕ 40 to ϕ 100



- For dimensions not shown here, refer to the SD style (basic style).
- The non-rotating cylinders have the same dimensions as the standard cylinders except dimensions of the rod end.
- For dimensional drawings of rod end attachments, refer to the accessories.
- For the mounting of sensors, see the dimensional drawings of Switch Set.
- For the mounting of valves, see the dimensional drawings of VAL Set.

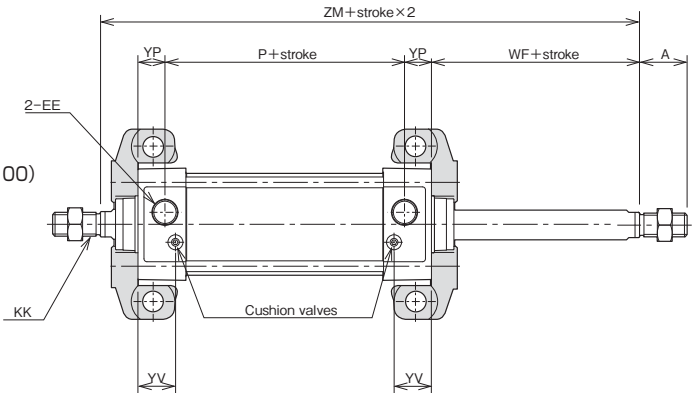
Double acting double rod

- Standard10A-6D LA Bore B Stroke
- Non-rotating10A-6GD LA Bore B Stroke

●Non-rotating(ϕ 40 to ϕ 100)



Note) Hex. rod on one side, and round rod on one side



- For dimensions not shown here, refer to the double acting single rod cylinder.

Dimensional Table

Symbol Bore	A	B ₁	D	E	EA	EE	KK	LH	MG	MM	P	SB	SS	ST
ϕ 32	22 (19)	17	10	□44	44	Rc1/8	M10×1.25	22	—	ϕ 12	61	ϕ 9	73	8
ϕ 40	24 (21)	19	14	□50	50	Rc1/4	M12×1.25	25	14	ϕ 16	57	ϕ 12	73	8
ϕ 50	32 (29)	22	17	□62	62	Rc1/4	M16×1.5	31	19	ϕ 20	57	ϕ 12	73	9
ϕ 63	32 (29)	22	17	□75	75.5	Rc3/8	M16×1.5	38	19	ϕ 20	60	ϕ 12	76	9
ϕ 80	40 (37)	27	21	□94	94	Rc3/8	M20×1.5	47	23	ϕ 25	68	ϕ 14	82	13
ϕ 100	40 (37)	27	26	□112	113	Rc1/2	M20×1.5	57	23	ϕ 30	68	ϕ 14	82	14
ϕ 125	54 (50)	36	32	□136	137	Rc1/2	M27×2	69	—	ϕ 35	74	ϕ 18	80	18

Symbol Bore	SU	SY	TS	US	VF	WF	XS	XW	YP	YV	ZM	ZP	ZS	ZV	h
ϕ 32	14	23	63	81	15	25	35	108	16	25.5	143	3	131	7	6
ϕ 40	14	23	70	92	15	25	35	108	18	25.5	143	4	131	10	7
ϕ 50	14	25	83	105	15	25	35	108	18	24	143	7	133	12	10
ϕ 63	14	27	95	117	15	25	35	111	18	25	146	8	138	12	10
ϕ 80	18	34	121	147	21	35	48	130	20	29	178	11	164	16	12
ϕ 100	18	38	140	168	21	35	48	130	20	29	178	12	168	18	12
ϕ 125	21	46	175	213	21	35	52	132	20	29	184	14	178	20	16

* The parenthesized values of dimension A indicate the screw length.

CAD/DATA
10A-6/TA6 Bore A is available. 

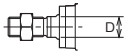
LB

Double acting single rod

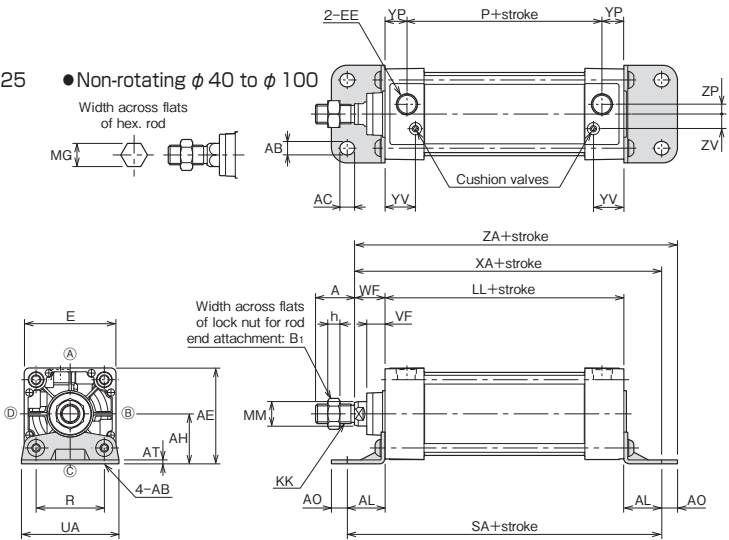
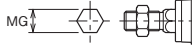
Standard 10A-6 LB Bore B Stroke
Non-rotating 10A-6G LB Bore B Stroke

● Standard ϕ 32 to ϕ 125

● Non-rotating ϕ 40 to ϕ 100



Width across flats
of hex. rod



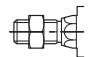
- For dimensions not shown here, refer to the SD style (basic style).
- The non-rotating cylinders have the same dimensions as the standard cylinders except dimensions of the rod end.
- For dimensional drawings of rod end attachments, refer to the accessories.
- For the mounting of sensors, see the dimensional drawings of Switch Set.
- For the mounting of valves, see the dimensional drawings of VAL Set.

Double acting double rod

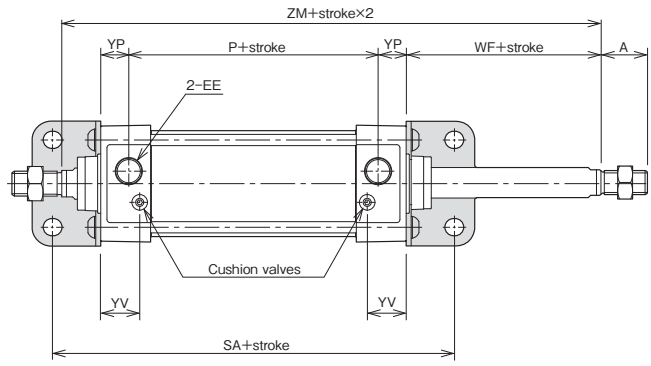
Standard 10A-6D LB Bore B Stroke
Non-rotating 10A-6GD LB Bore B Stroke

10A-6/TA6 Bore B 

● Non-rotating (ϕ 40 to ϕ 100)



Note) Hex. rod on one side, and
round rod on one side



● For dimensions not shown here, refer to the double acting single rod cylinder.

Dimensional Table

Symbol Bore	A	AB	AC	AE	AH	AL	AO	AT	B ₁	D	E	EE	H	K	KK
ϕ 32	22(19)	9	11	50	28	20.5	9.5	3.2	17	10	$\square$ 44	Rc1/8	31	31	M10×1.25
ϕ 40	24(21)	11	13	55	30	23.5	12.5	3.2	19	14	$\square$ 50	Rc1/4	31	31	M12×1.25
ϕ 50	32(29)	11	13	67.5	36.5	28	12	3.2	22	17	$\square$ 62	Rc1/4	31	31	M16×1.5
ϕ 63	32(29)	11	13	78.5	41	31	13	3.2	22	17	$\square$ 75	Rc3/8	32	32	M16×1.5
ϕ 80	40(37)	14	16	96	49	30	16	4	27	21	$\square$ 94	Rc3/8	36	36	M20×1.5
ϕ 100	40(37)	14	16	113	57	30	16	4	27	26	$\square$ 112	Rc1/2	36	36	M20×1.5
ϕ 125	54(50)	18	20	138	70	35	18	6	36	32	$\square$ 136	Rc1/2	42	36	M27×2

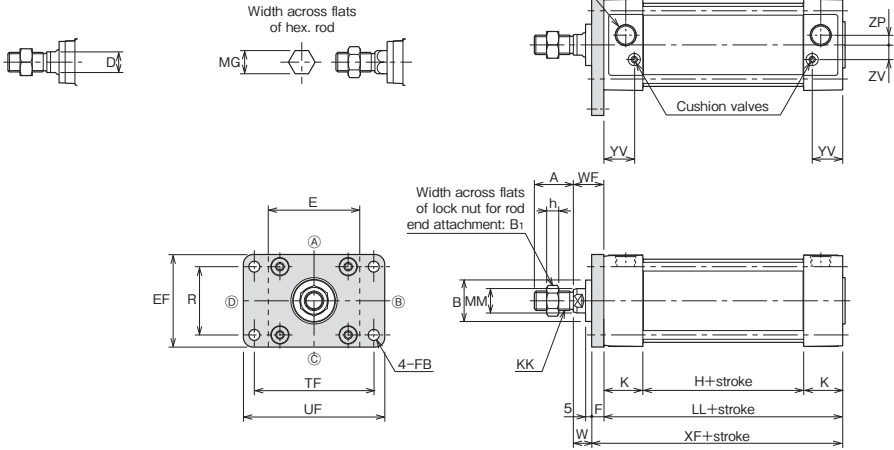
Symbol Bore	LL	MG	MM	P	R	SA	UA	VF	WF	XA	YP	YV	ZA	ZM	ZP	ZV	h
ϕ 32	93	—	ϕ 12	61	33	134	50	15	25	138.5	16	25.5	148	143	3	7	6
ϕ 40	93	14	ϕ 16	57	36	140	57	15	25	141.5	18	25.5	154	143	4	10	7
ϕ 50	93	19	ϕ 20	57	47	149	68	15	25	146	18	24	158	143	7	12	10
ϕ 63	96	19	ϕ 20	60	56	158	80	15	25	152	18	25	165	146	8	12	10
ϕ 80	108	23	ϕ 25	68	70	168	97	21	35	173	20	29	189	178	11	16	12
ϕ 100	108	23	ϕ 30	68	84	168	112	21	35	173	20	29	189	178	12	18	12
ϕ 125	114	—	ϕ 35	74	104	184	136	21	35	184	20	29	202	184	14	20	16

* The parenthesized values of dimension A indicate the screw length.

FA

Double acting single rod **Standard** 10A-6 FA **Bore** **B** **Stroke**
Non-rotating 10A-6G FA **Bore** **B** **Stroke**

- Standard ϕ 32 to ϕ 125
- Non-rotating ϕ 40 to ϕ 100

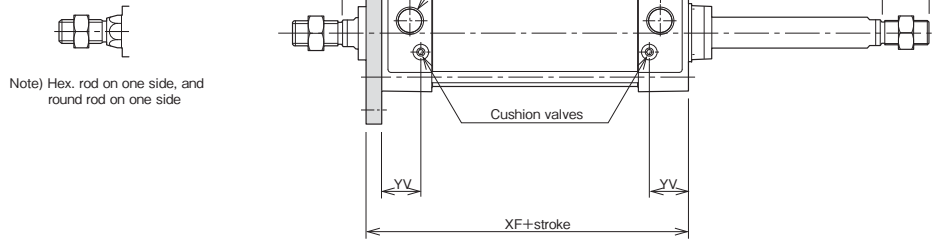


- For dimensions not shown here, refer to the SD style (basic style).
- The non-rotating cylinders have the same dimensions as the standard cylinders except dimensions of the rod end.
- For dimensional drawings of rod end attachments, refer to the accessories.
- For the mounting of sensors, see the dimensional drawings of Switch Set.
- For the mounting of valves, see the dimensional drawings of VAL Set.

Double acting double rod **Standard** 10A-6D FA **Bore** **B** **Stroke**
Non-rotating 10A-6GD FA **Bore** **B** **Stroke**

10A-6/TA6 **Bore** **B** **Stroke**

- Non-rotating (ϕ 40 to ϕ 100)



- For dimensions not shown here, refer to the double acting single rod cylinder.

Dimensional Table

Symbol Bore	A	B	B ₁	D	E	EE	EF	F	FB	H	K	KK	LL
ϕ 32	22 (19)	ϕ 24	17	10	$\square$ 44	Rc1/8	47	10	ϕ 7	31	31	M10 $\times$ 1.25	93
ϕ 40	24 (21)	ϕ 30	19	14	$\square$ 50	Rc1/4	52	10	ϕ 7	31	31	M12 $\times$ 1.25	93
ϕ 50	32 (29)	ϕ 34	22	17	$\square$ 62	Rc1/4	65	10	ϕ 9	31	31	M16 $\times$ 1.5	93
ϕ 63	32 (29)	ϕ 34	22	17	$\square$ 75	Rc3/8	76	10	ϕ 9	32	32	M16 $\times$ 1.5	96
ϕ 80	40 (37)	ϕ 39	27	21	$\square$ 94	Rc3/8	95	16	ϕ 12	36	36	M20 $\times$ 1.5	108
ϕ 100	40 (37)	ϕ 46	27	26	$\square$ 112	Rc1/2	115	16	ϕ 12	36	36	M20 $\times$ 1.5	108
ϕ 125	54 (50)	ϕ 55	36	32	$\square$ 136	Rc1/2	138	16	ϕ 14	42	36	M27 $\times$ 2	114

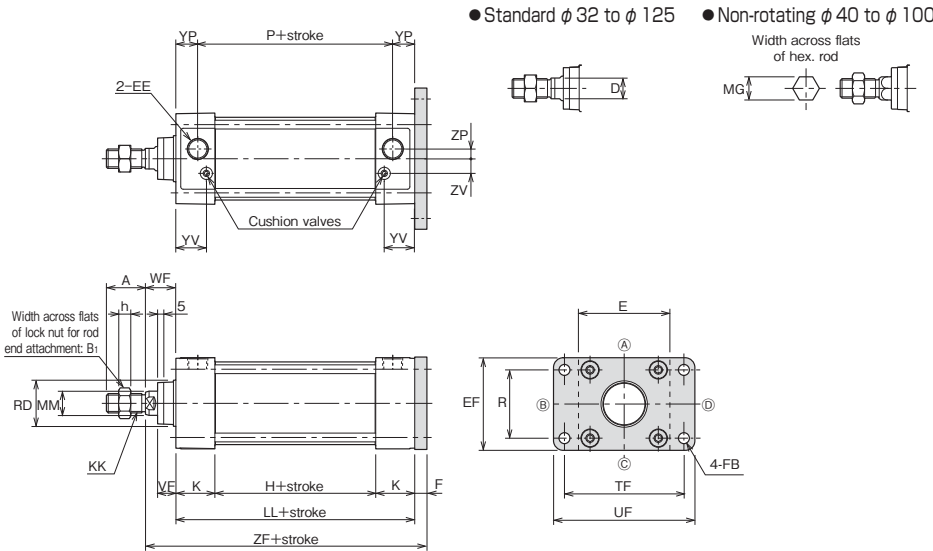
Symbol Bore	MG	MM	P	R	TF	UF	W	WF	XF	YP	YV	ZM	ZP	ZV	h
ϕ 32	—	ϕ 12	61	33	58	72	15	25	103	16	25.5	143	3	7	6
ϕ 40	14	ϕ 16	57	36	70	84	15	25	103	18	25.5	143	4	10	7
ϕ 50	19	ϕ 20	57	47	86	104	15	25	103	18	24	143	7	12	10
ϕ 63	19	ϕ 20	60	56	98	116	15	25	106	18	25	146	8	12	10
ϕ 80	23	ϕ 25	68	70	119	143	19	35	124	20	29	178	11	16	12
ϕ 100	23	ϕ 30	68	84	138	162	19	35	124	20	29	178	12	18	12
ϕ 125	—	ϕ 35	74	104	168	196	19	35	130	20	29	184	14	20	16

* The parenthesized values of dimension A indicate the screw length.

CAD/DATA
10A-6/TA6 Bore A is available. 

FB

Double acting single rod Standard 10A-6 FB Bore B Stroke
Non-rotating 10A-6G FB Bore B Stroke



- For dimensions not shown here, refer to the SD style (basic style).
- The non-rotating cylinders have the same dimensions as the standard cylinders except dimensions of the rod end.
- For dimensional drawings of rod end attachments, refer to the accessories.
- For the mounting of sensors, see the dimensional drawings of Switch Set.
- For the mounting of valves, see the dimensional drawings of VAL Set.

Dimensional Table

Symbol Bore	A	B ₁	D	E	EE	EF	F	FB	H	K	KK	LL	MG
ϕ 32	22(19)	17	10	$\square$ 44	Rc1/8	47	10	ϕ 7	31	31	M10X1.25	93	—
ϕ 40	24(21)	19	14	$\square$ 50	Rc1/4	52	10	ϕ 7	31	31	M12X1.25	93	14
ϕ 50	32(29)	22	17	$\square$ 62	Rc1/4	65	10	ϕ 9	31	31	M16X1.5	93	19
ϕ 63	32(29)	22	17	$\square$ 75	Rc3/8	76	10	ϕ 9	32	32	M16X1.5	96	19
ϕ 80	40(37)	27	21	$\square$ 94	Rc3/8	95	16	ϕ 12	36	36	M20X1.5	108	23
ϕ 100	40(37)	27	26	$\square$ 112	Rc1/2	115	16	ϕ 12	36	36	M20X1.5	108	23
ϕ 125	54(50)	36	32	$\square$ 136	Rc1/2	138	16	ϕ 14	42	36	M27X2	114	—

Symbol Bore	MM	P	R	RD	TF	UF	VF	WF	YP	YV	ZF	ZP	ZV	h
ϕ 32	ϕ 12	61	33	ϕ 26	58	72	15	25	16	25.5	128	3	7	6
ϕ 40	ϕ 16	57	36	ϕ 32	70	84	15	25	18	25.5	128	4	10	7
ϕ 50	ϕ 20	57	47	ϕ 38	86	104	15	25	18	24	128	7	12	10
ϕ 63	ϕ 20	60	56	ϕ 38	98	116	15	25	18	25	131	8	12	10
ϕ 80	ϕ 25	68	70	ϕ 44	119	143	21	35	20	29	159	11	16	12
ϕ 100	ϕ 30	68	84	ϕ 50	138	162	21	35	20	29	159	12	18	12
ϕ 125	ϕ 35	74	104	ϕ 60	168	196	21	35	20	29	165	14	20	16

* The parenthesized values of dimension A indicate the screw length.

Dimensional Table

Symbol Bore	A	B ₁	CD		D	E	EE	EW		H	K	KK	LR		MG
			CA style	CC style				CA style	CC style				CA style	CC style	
φ32	22(19)	17	φ12H9	—	10	□44	Rc1/8	16 ⁰ _{-0.070}	—	31	31	M10×1.25	R16	—	—
φ40	24(21)	19	φ14H9	φ14H9	14	□50	Rc1/4	20 ⁰ _{-0.084}	20 ⁰ _{-0.3}	31	31	M12×1.25	R17	R21	14
φ50	32(29)	22	φ14H9	φ14H9	17	□62	Rc1/4	20 ⁰ _{-0.084}	20 ⁰ _{-0.3}	31	31	M16×1.5	R17	R21	19
φ63	32(29)	22	φ14H9	φ14H9	17	□75	Rc3/8	20 ⁰ _{-0.084}	20 ⁰ _{-0.3}	32	32	M16×1.5	R17	R21	19
φ80	40(37)	27	φ20H9	φ20H9	21	□94	Rc3/8	32 ⁰ _{-0.100}	32 ⁰ _{-0.3}	36	36	M20×1.5	R25	R25	23
φ100	40(37)	27	φ20H9	φ20H9	26	□112	Rc1/2	32 ⁰ _{-0.100}	32 ⁰ _{-0.3}	36	36	M20×1.5	R26	R25	23
φ125	54(50)	36	φ20H9	—	32	□136	Rc1/2	32 ⁰ _{-0.100}	—	42	36	M27×2	R30	—	—

Symbol Bore	MM	MR		P	T		VF	WF	XC		YP	YV	ZC		ZP	ZV	h
		CA style	CC style		CA style	CC style			CA style	CC style			CA style	CC style			
φ32	φ12	R16	—	61	8	—	15	25	137	—	16	25.5	150	—	3	7	6
φ40	φ16	R17	R14	57	8	11	15	25	137	152	18	25.5	151	166	4	10	7
φ50	φ20	R17	R15	57	10	11	15	25	137	152	18	24	151	167	7	12	10
φ63	φ20	R17	R15	60	13	11	15	25	140	155	18	25	154	170	8	12	10
φ80	φ25	R24	R20	68	18	15	21	35	175	191	20	29	196	211	11	16	12
φ100	φ30	R24	R20	68	18	15	21	35	175	191	20	29	195	211	12	18	12
φ125	φ35	R25	—	74	21	—	21	35	181	—	20	29	201	—	14	20	16

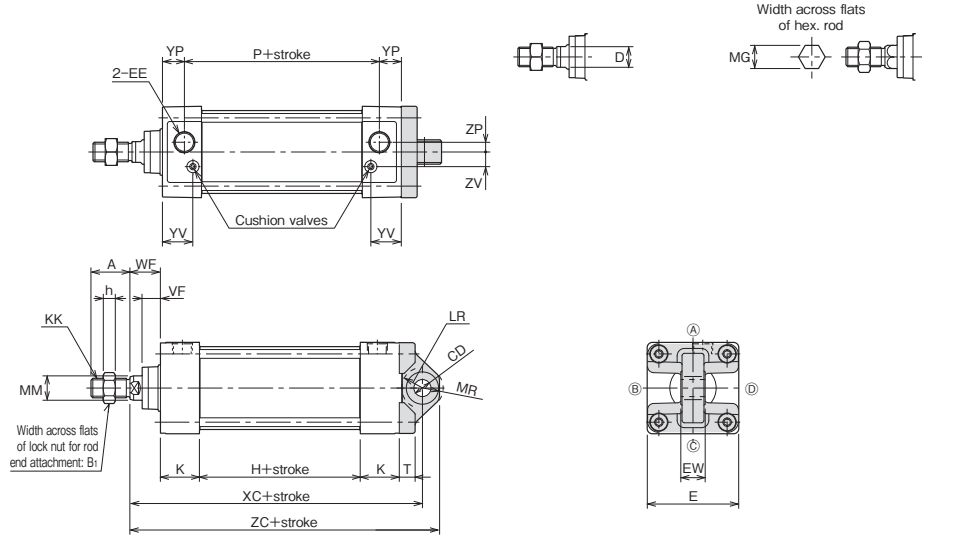
* The parenthesized values of dimension A indicate the screw length.

CAD/DATA 10A-6/TA6 Bore A is available.

CA

Double acting single rod Standard 10A-6 CA Bore B Stroke Non-rotating 10A-6G CA Bore B Stroke

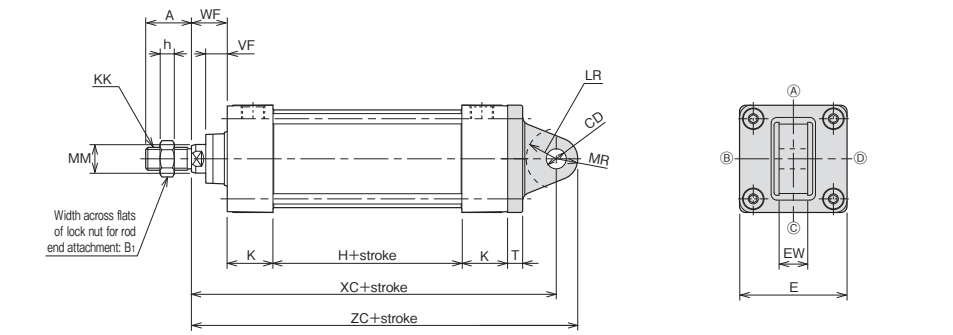
- Bore φ 32 to φ 125
- Standard φ 32 to φ 125
- Non-rotating φ 40 to φ 100



CC

Double acting single rod Standard 10A-6 CC Bore B Stroke Non-rotating 10A-6G CC Bore B Stroke

- Bore φ 40 to φ 100



- For dimensions not shown here, refer to the SD style (basic style).
- The non-rotating cylinders have the same dimensions as the standard cylinders except dimensions of the rod end.
- For dimensional drawings of rod end attachments, refer to the accessories.
- For the mounting of sensors, see the dimensional drawings of Switch Set.
- For the mounting of valves, see the dimensional drawings of VAL Set.

Dimensional Table

Symbol Bore	A	B ₁	CD	CP	D	E	EE	EW	H	K	KK	LR	MG
φ32	22 (19)	17	φ12 ^{+H₉/₈}	46	10	□44	Rc1/8	16 ^{+0.7/+0.5}	31	31	M10×1.25	R17	—
φ40	24 (21)	19	φ14 ^{+H₉/₈}	58	14	□50	Rc1/4	20 ^{+0.7/+0.5}	31	31	M12×1.25	R17	14
φ50	32 (29)	22	φ14 ^{+H₉/₈}	66	17	□62	Rc1/4	20 ^{+0.7/+0.5}	31	31	M16×1.5	R17	19
φ63	32 (29)	22	φ14 ^{+H₉/₈}	66	17	□75	Rc3/8	20 ^{+0.7/+0.5}	32	32	M16×1.5	R17	19
φ80	40 (37)	27	φ20 ^{+H₉/₈}	78	21	□94	Rc3/8	32 ^{+0.7/+0.5}	36	36	M20×1.5	R30	23
φ100	40 (37)	27	φ20 ^{+H₉/₈}	78	26	□112	Rc1/2	32 ^{+0.7/+0.5}	36	36	M20×1.5	R30	23
φ125	54 (50)	36	φ20 ^{+H₉/₈}	78	32	□136	Rc1/2	32 ^{+0.7/+0.5}	42	36	M27×2	R30	—

Symbol Bore	MM	MR	P	T	UB	VF	WF	XC	YP	YV	ZC	ZP	ZV	h
φ32	φ12	R15	61	8	33	15	25	137	16	25.5	150	3	7	6
φ40	φ16	R15	57	8	45	15	25	137	18	25.5	150	4	10	7
φ50	φ20	R17	57	8	53	15	25	137	18	24	152	7	12	10
φ63	φ20	R17	60	8	53	15	25	140	18	25	155	8	12	10
φ80	φ25	R24	68	11	67	21	35	175	20	29	196	11	16	12
φ100	φ30	R24	68	11	67	21	35	175	20	29	196	12	18	12
φ125	φ35	R22	74	14	65	21	35	181	20	29	197	14	20	16

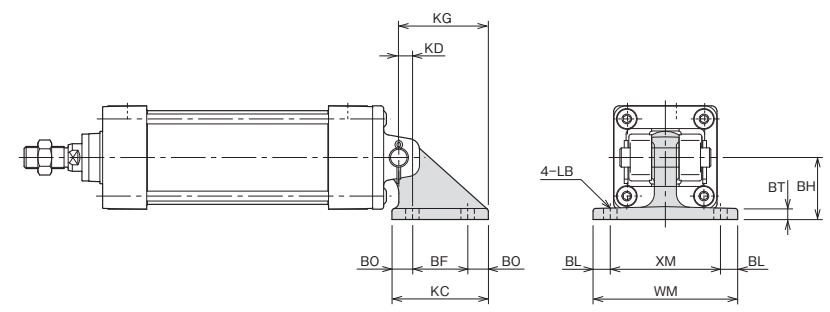
* The parenthesized values of dimension A indicate the screw length.

Bracket for CB

10A-6/TA6 Bore K

Dimensional Table

Symbol Bore	Part number	BF	BH	BL	BO	BT	KC	KD	KG	LB	WM	XM
φ32	BCA-12-A	40	35	10	11.5	8	63	5	56.5	φ9	85	65
φ40	BCA-14-A	40	45	12.5	16.5	8	73	10	66.5	φ11	105	80
φ50												
φ63												
φ80	BCA-20-A	65	60	15	16.5	12	98	5	86.5	φ14	135	105
φ100												
φ125												
φ125	BCA-20-1-A	77	75	17.5	20	15	117	17.5	114.5	φ18	145	110

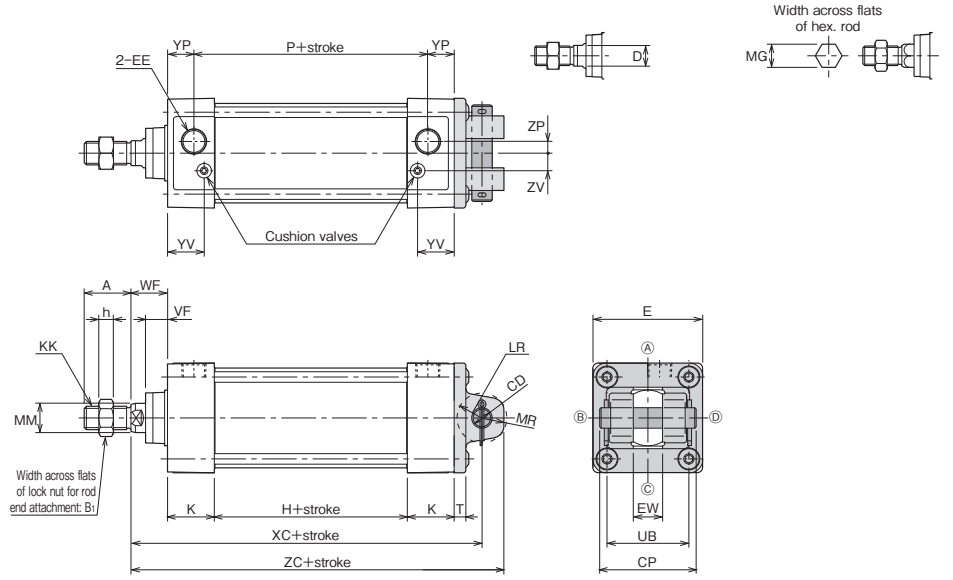


CB

Double acting single rod Standard 10A-6 CB Bore B Stroke Non-rotating 10A-6G CB Bore B Stroke

CAD/DATA 10A-6/TA6 Bore A is available.

● Standard φ 32 to φ 125 ● Non-rotating φ 40 to φ 100



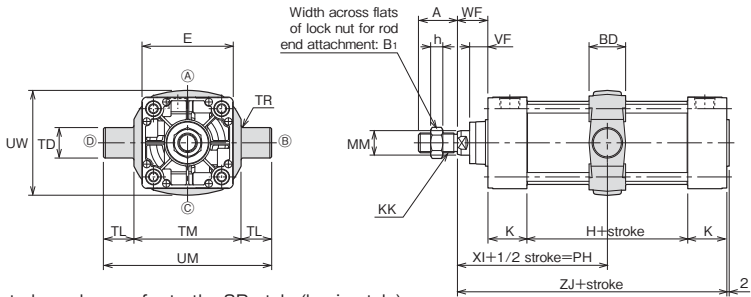
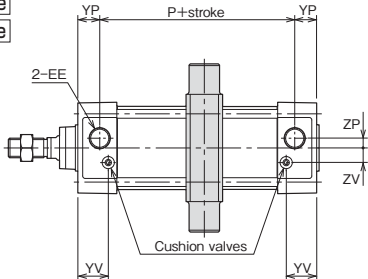
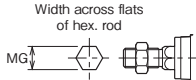
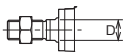
- For dimensions not shown here, refer to the SD style (basic style).
- The non-rotating cylinders have the same dimensions as the standard cylinders except dimensions of the rod end.
- For dimensional drawings of rod end attachments, refer to the accessories.
- For the mounting of sensors, see the dimensional drawings of Switch Set.
- For the mounting of valves, see the dimensional drawings of VAL Set.

CAD/DATA
10A-6/TA6 Bore A is available.

TC

Double acting single rod
Standard 10A-6 TC Bore B Stroke
Non-rotating 10A-6G TC Bore B Stroke

- Standard ϕ 32 to ϕ 125
- Non-rotating ϕ 40 to ϕ 100

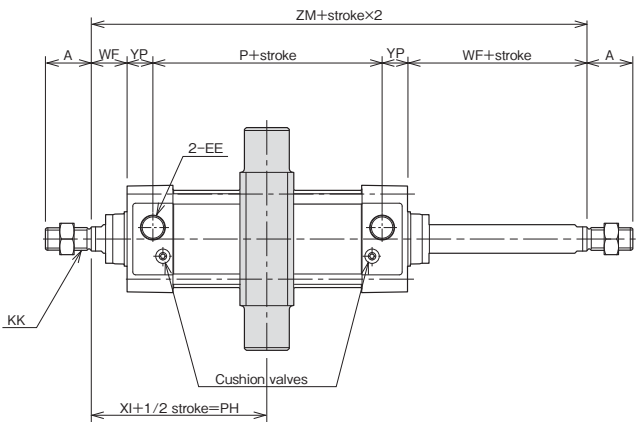


- For dimensions not shown here, refer to the SD style (basic style).
- The non-rotating cylinders have the same dimensions as the standard cylinders except dimensions of the rod end.
- For dimensional drawings of rod end attachments, refer to the accessories.
- For the mounting of sensors, see the dimensional drawings of Switch Set.
- For the mounting of valves, see the dimensional drawings of VAL Set.

Double acting double rod
Standard 10A-6D TC Bore B Stroke
Non-rotating 10A-6GD TC Bore B Stroke

- Non-rotating (ϕ 40 to ϕ 100)

Note) Hex. rod on one side, and round rod on one side



- For dimensions not shown here, refer to the double acting single rod cylinder.

Dimensional Table

Symbol	A	B ₁	BD	D	E	EE	H	K	KK	MG	MM	P	Min. PH	TD
Bore														
ϕ 32	22 (19)	17	30	10	$\square$ 44	Rc1/8	31	31	M10 $\times$ 1.25	—	ϕ 12	61	71	ϕ 16e9
ϕ 40	24 (21)	19	30	14	$\square$ 50	Rc1/4	31	31	M12 $\times$ 1.25	14	ϕ 16	57	71	ϕ 25e9
ϕ 50	32 (29)	22	30	17	$\square$ 62	Rc1/4	31	31	M16 $\times$ 1.5	19	ϕ 20	57	71	ϕ 25e9
ϕ 63	32 (29)	22	30	17	$\square$ 75	Rc3/8	32	32	M16 $\times$ 1.5	19	ϕ 20	60	72	ϕ 25e9
ϕ 80	40 (37)	27	35	21	$\square$ 94	Rc3/8	36	36	M20 $\times$ 1.5	23	ϕ 25	68	88.5	ϕ 25e9
ϕ 100	40 (37)	27	40	26	$\square$ 112	Rc1/2	36	36	M20 $\times$ 1.5	23	ϕ 30	68	91	ϕ 25e9
ϕ 125	54 (50)	36	43	32	$\square$ 136	Rc1/2	42	36	M27 $\times$ 2	—	ϕ 35	74	92.5	ϕ 25e9

Symbol	TL	TM	TR	UM	UW	VF	WF	XI	YP	YV	ZJ	ZM	ZP	ZV	h
Bore															
ϕ 32	16	55	R1	87	53	15	25	71.5	16	25.5	118	143	3	7	6
ϕ 40	25	63	R1.6	113	60	15	25	71.5	18	25.5	118	143	4	10	7
ϕ 50	25	76	R1.6	126	72	15	25	71.5	18	24	118	143	7	12	10
ϕ 63	25	88	R1.6	138	87	15	25	73	18	25	121	146	8	12	10
ϕ 80	25	114	R1.6	164	105	21	35	89	20	29	143	178	11	16	12
ϕ 100	25	132	R2	182	129	21	35	89	20	29	143	178	12	18	12
ϕ 125	25	158	R2	208	159	21	35	92	20	29	149	184	14	20	16

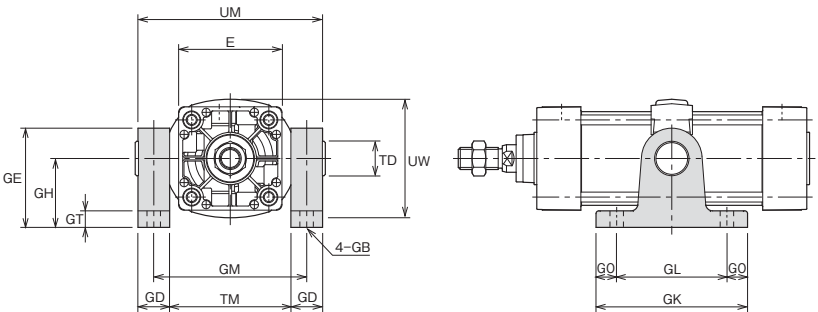
* The parenthesized values of dimension A indicate the screw length.

Bracket for TC

10A-6/TA6 Bore K

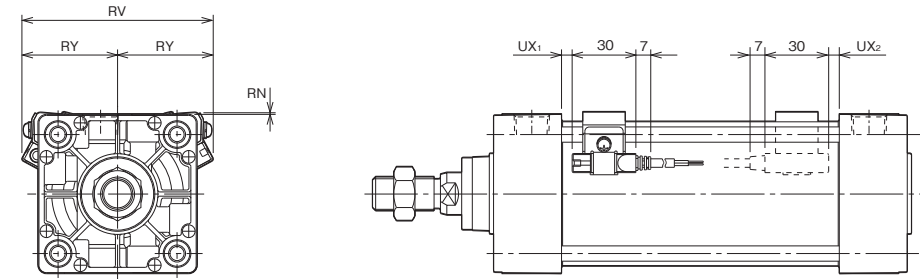
Dimensional Table

Symbol	Part number	E	GB	GD	GE	GH	GK	GL	GM	GO	GT	TD	TM	UM	UW
Bore															
ϕ 32	BTA-16-A	$\square$ 44	ϕ 9	15	56	40	81	60	70	10.5	12	ϕ 16	55	87	53
ϕ 40		$\square$ 50	ϕ 12	23	74	50	111	80	86	15.5	14	ϕ 25	63	113	60
ϕ 50	BTA-25-A	$\square$ 62	ϕ 12	23	74	50	111	80	99	15.5	14	ϕ 25	76	126	72
ϕ 63		$\square$ 75	ϕ 12	23	74	50	111	80	111	15.5	14	ϕ 25	88	138	87
ϕ 80	BTA-25-1-A	$\square$ 94	ϕ 14	23	92	70	121	85	137	18	14	ϕ 25	114	164	105
ϕ 100		$\square$ 112	ϕ 14	23	92	70	121	85	155	18	14	ϕ 25	132	182	129
ϕ 125	BTA-25-2-A	$\square$ 136	ϕ 18	25	116	85	145	105	183	20	27	ϕ 25	158	208	159

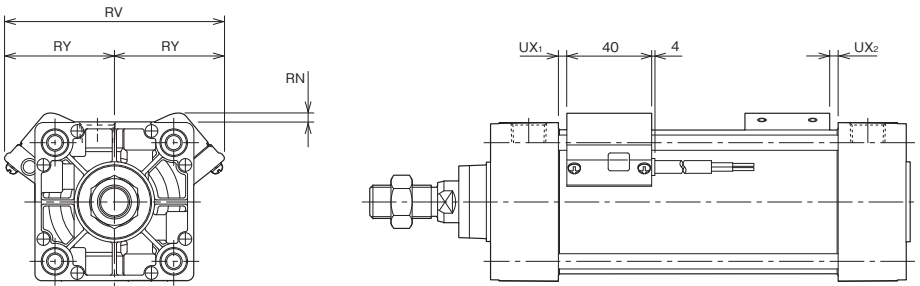


Switch Set

- AX type sensor



- SR type sensor



Dimensional Table

Symbol Bore	RY		RV		RN		UX ₁		UX ₂	
	AX type	SR type	AX type	SR type	AX type	SR type	AX type	SR type	AX type	SR type
φ32	32	38	64	76	4	5	8	2	4	0
φ40	36	40	72	80	3	4	8	2	4	0
φ50	40	45	80	90	2	3	9	2	5	0
φ63	47	52	94	104	2	5	9	2	5	0
φ80	52	60	104	120	0	2	11	4	6	0
φ100	60	67	120	134	0	0	11	4	6	0
φ125	72	76	144	152	0	0	13	4	9	3

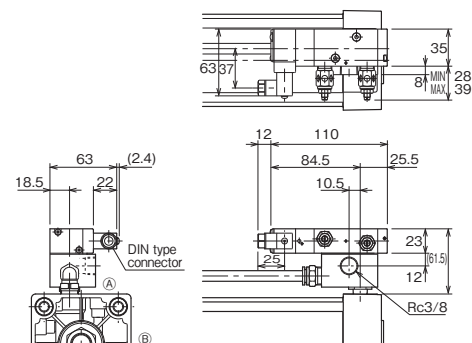
Note) Dimension UX indicates the optimum sensor mounting position for detection of stroke end.

Operating Range and Hysteresis

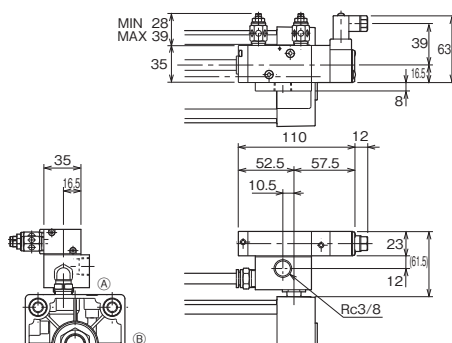
Bore	Reed sensor				Solid state sensor								
	AX1** type		SR type		AX2** type								
	Operating range	Hysteresis	Operating range	Hysteresis	Operating range	Hysteresis							
φ32	5 to 10	1 or less	8 to 12	2 or less	3 to 6	1 or less							
φ40			9 to 13		4 to 8								
φ50	6 to 12												
φ63													
φ80													
φ100	8 to 14												
φ125													

VAL Set

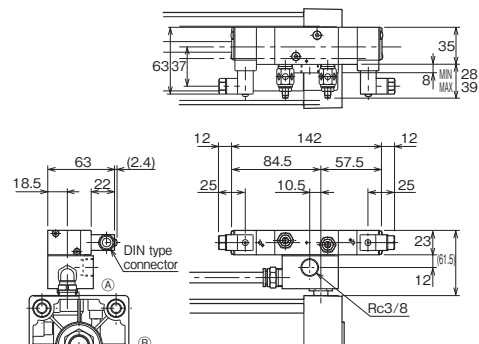
Energized advancing type



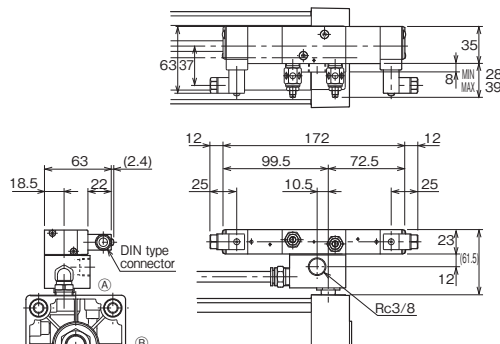
Energized retracting type



Detent type



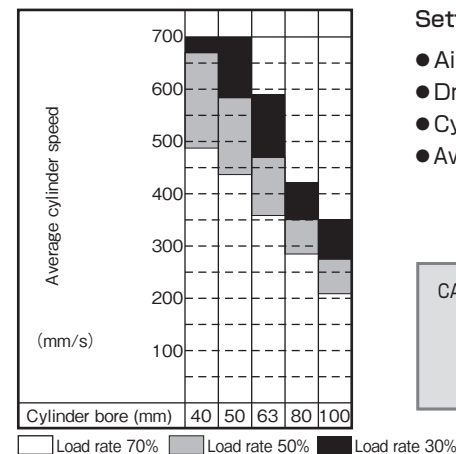
3-position closed center type



- The cushion valve position is Ⓐ on the rod side and Ⓑ on the cap side.
- For dimensions of the cylinder body, see the dimensional drawings of each mounting style.

Information

Average Speed of VAL Set Cylinders



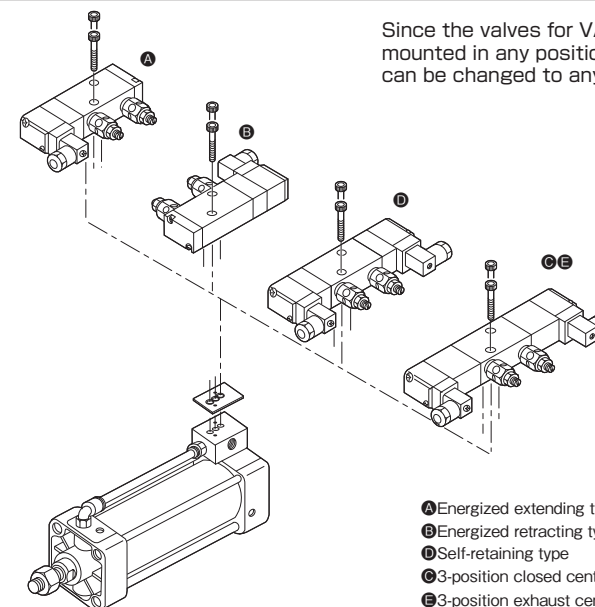
Setting conditions

- Air pressure: 0.5 MPa
- Driving direction: Vertically upward
- Cylinder stroke: 250 mm
- Average speed: Average speed after the cylinder starts moving until it reaches the stroke end

CAUTION Use the table shown left to find an approximate cylinder speed.
The actual speed varies depending on the working conditions.
Use the cylinder within the working speed range.

Handling procedures

Valve repositioning procedures

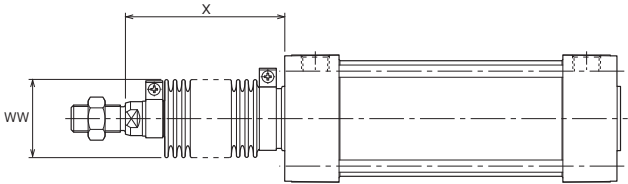


Since the valves for VAL Set Cylinders can be mounted in any position, the operating method can be changed to any type.

- Ⓐ Energized extending type
 - Ⓑ Energized retracting type (Valves Ⓐ and Ⓑ are the same.)
 - Ⓒ Self-retaining type
 - Ⓓ 3-position closed center type
 - Ⓔ 3-position exhaust center type
- Note) Lead wire type valves have different symbols.

With Boots

CAD/DATA
10A-6/TA6 Bore K is available. 

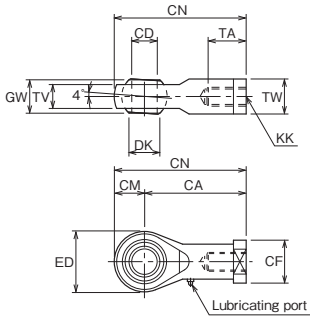


	Standard	Semi-standard	
Material	Nylon tarpaulin	Chloroprene	Conex
Heat proof	80℃	100℃	200℃

Notes) ● Conex is the registered trademark of Teijin Limited.
● Remember that the heat proof field in the table above shows the allowable temperatures for the boots, not for the cylinder.
● The boots have been mounted at our factory prior to delivery.

Rod End Attachment

- Rod eye with spherical bearing (S-end)



Dimensional Table/With boots (nylon tarpaulin/chloroprene)

Symbol Bore	WW	X (standard strokes)												X (other than standard strokes)
		50	75	100	125	150	200	250	300	350	400	450	500	Nylon tarpaulin/chloroprene
φ32	φ36	62	70	79	87	95	112	129	145	162	179	195	212	$\frac{1}{3}$ stroke+45
φ40	φ41	62	70	79	87	95	112	129	145	162	179	195	212	
φ50	φ47	67	75	84	92	100	117	134	150	167	184	200	217	$\frac{1}{3}$ stroke+50
φ63	φ47	67	75	84	92	100	117	134	150	167	184	200	217	
φ80	φ56	68	74	80	87	93	105	118	130	143	155	168	180	$\frac{1}{4}$ stroke+55
φ100	φ61	68	74	80	87	93	105	118	130	143	155	168	180	
φ125	φ71	68	74	80	87	93	105	118	130	143	155	168	180	

Note) If the calculated value has a fractional part, round it up.

Dimensional Table/With boots (Conex)

Symbol Bore	WW	X (standard strokes)												X (other than standard strokes)
		50	75	100	125	150	200	250	300	350	400	450	500	Conex
φ32	φ61	70	83	95	108	120	145	170	195	220	245	270	295	$\frac{1}{2}$ stroke+45
φ40	φ61	70	83	95	108	120	145	170	195	220	245	270	295	
φ50	φ61	75	88	100	113	125	150	175	200	225	250	275	300	$\frac{1}{2}$ stroke+50
φ63	φ61	75	88	100	113	125	150	175	200	225	250	275	300	
φ80	φ61	75	85	95	105	115	135	155	175	195	215	235	255	$\frac{2}{5}$ stroke+55
φ100	φ61	75	85	95	105	115	135	155	175	195	215	235	255	
φ125	φ71	75	85	95	105	115	135	155	175	195	215	235	255	

Note) If the calculated value has a fractional part, round it up.

Dimensional Table/Rod eye with spherical bearing (S-end)

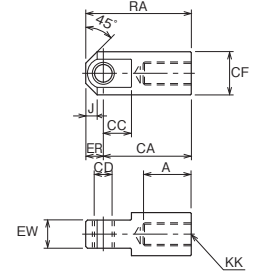
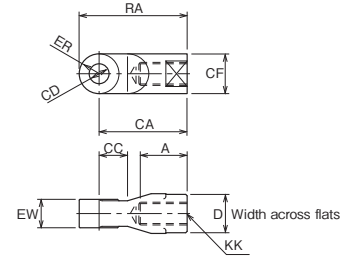
Symbol Bore	Part number	CA	CD	CF	CM	CN	DK	ED	GW	KK	TA	TV	TW
φ32	RSA-10-A	43	φ10H9	φ19	13	56	φ12.9	26	14 ⁰ _{-0.1}	M10×1.25	21	10.5	17
φ40	RSA-12-A	50	φ12H9	φ22	15	65	φ15.4	30	16 ⁰ _{-0.1}	M12×1.25	24	12	19
φ50	RSA-16-A	64	φ16H9	φ27	19	83	φ19.4	38	21 ⁰ _{-0.1}	M16×1.5	33	15	22
φ63													
φ80	RSA-20-A	77	φ20H9	φ34	23	100	φ24.4	46	25 ⁰ _{-0.1}	M20×1.5	40	18	30
φ100													

Rod End Attachment

●Rod eye(T-end)

φ32 to φ100

φ 125



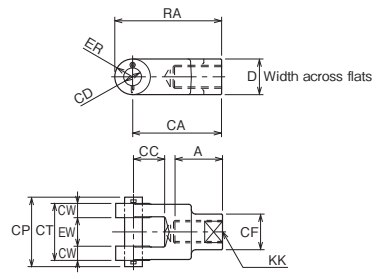
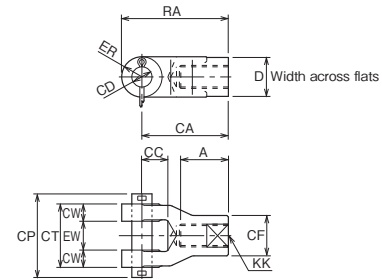
CAD/DATA
10A-6/TA6 Bore K is available.



●Rod clevis(Y-end)with pin

φ32 to φ100

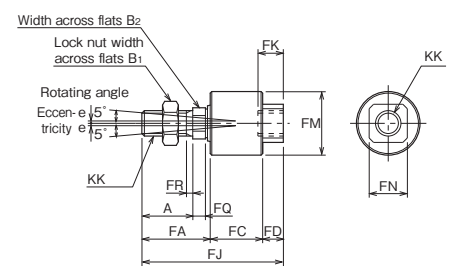
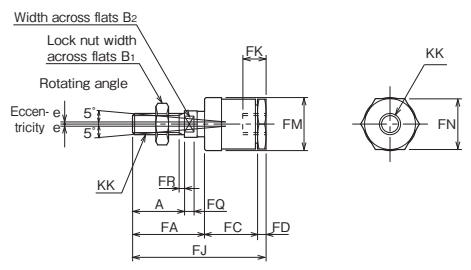
φ 125



●Floating joint(F-end)

φ 32

φ40 to φ125



Note) The insertion of the floating joint into the socket shall not equal or exceed the dimension of screw diameter.
(Return the joint one or two turns after it gets into contact with the socket bottom, and fix it with a lock nut.)
Excessive insertion can cause operation failure.
●DO NOT use together with CA, CB, CC, and TC accessories.

Dimensional Table/Rod eye (T-end)

Symbol	Part number	A	CA	CC	CD	CF	D	ER	EW	J	KK	RA
Bore												
φ32	RTA-10-A	23	55	20	φ12H9	φ24	24	R12	16 ⁰ _{-0.1}	—	M10×1.25	67
φ40	RTA-12-A	25	60	20	φ14H9	φ24	24	R12	20 ⁰ _{-0.1}	—	M12×1.25	72
φ50	RTA-16-A	33	60	20	φ14H9	φ28	27	R14	20 ⁰ _{-0.1}	—	M16×1.5	74
φ63												
φ80	RTA-20-A	41	85	30	φ20H9	φ36	36	R19	32 ⁰ _{-0.1}	—	M20×1.5	104
φ100												
φ125	RTA-27-A	56	100	32	φ20H9	φ49	—	20	32 ⁰ _{-0.1}	13	M27×2	120

Dimensional Table/Rod clevis (Y-end) with pin

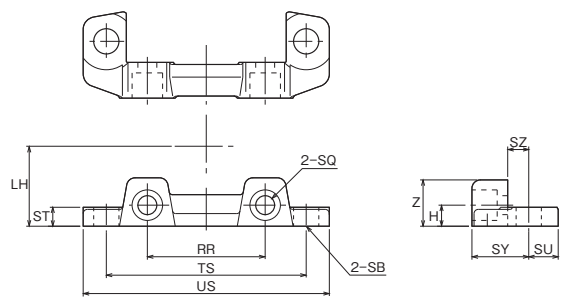
Symbol	Part number	A	CA	CC	CD	CF	CP	CT	CW	D	ER	EW	KK	RA
Bore														
φ32	RYA-10-1-A	23	55	20	φ12 ^{H9} ₁₈	φ24	46	32	8	24	R12	16 ^{+1.5} _{+0.5}	M10×1.25	67
φ40	RYA-12-1-A	25	60	20	φ14 ^{H9} ₁₈	φ24	58	44	12	24	R12	20 ^{+1.5} _{+0.5}	M12×1.25	71
φ50	RYA-16-A	33	60	18	φ14 ^{H9} ₁₈	φ28	58	44	12	27	R14	20 ^{+1.5} _{+0.5}	M16×1.5	74
φ63														
φ80	RYA-20-A	41	85	28	φ20 ^{H9} ₁₈	φ36	78	64	16	36	R19	32 ^{+1.5} _{+0.5}	M20×1.5	104
φ100														
φ125	RYA-27-A	56	100	35	φ20 ^{H9} ₁₈	φ40	78	64	16	40	R20	32 ^{+1.5} _{+0.5}	M27×2	120

Dimensional Table/Floating joint (F-end)

Symbol	Part number	A	B ₁	B ₂	e	FA	FC	FD	FJ	FK	FM	FN	FQ	FR	KK
Bore															
φ32	RFS-10T	24.5	17	10	1	31	28	4	63	11	φ25	24	4.5	2.5	M10×1.25
φ40	RFS-12T	24	19	13	1	33	25.5	11	69.5	13.5	φ32	□19	7	3.5	M12×1.25
φ50·φ63	RFS-16T	32	22	17	1.5	43	33	13	89	16	φ40	□24	8	4	M16×1.5
φ80	RFS-20T080	40	27	22	2	53	42	15	110	22	φ50	□30	9	5	M20×1.5
φ100	RFS-20T100	40	27	24	2.5	56	49	18	123	24	φ64	□36	12	6	M20×1.5
φ125	RFS-27T	54	36	32	2.5	74	62	21	157	30	φ76	□46	14	7	M27×2

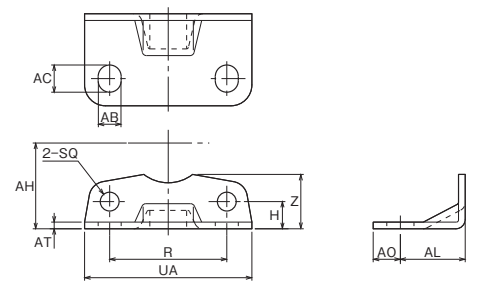
Mounting Accessory

●LA(side lugs)



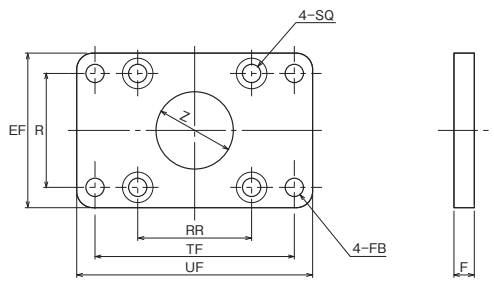
● With mounting bolts for cylinder body
(A set includes 2 accessories.)

●LB(end angles)



● With mounting bolts for cylinder body
(A set includes 2 accessories.)

●FA(rod flange) and FB(cap flange)



● With mounting bolts for cylinder body

Dimensional Table/LA (side lugs)

Symbol Bore	Part number	H	LH	RR	SB	SQ	ST	SU	SY	SZ	TS	US	Z
φ32	MAA6-LA032	5.5	22	□33	φ9	φ7	8	14	23	10	63	81	14
φ40	MAA6-LA040	6.5	25	□37	φ12	φ7	8	14	23	10	70	92	16
φ50	MAA6-LA050	7.5	31	□47	φ12	φ7	9	14	25	10	83	105	17
φ63	MAA6-LA063	10	38	□56	φ12	φ9	9	14	27	10	95	117	22
φ80	MAA6-LA080	12	47	□70	φ14	φ11	13	18	34	13	121	147	28
φ100	MAA6-LA100	15	57	□84	φ14	φ11	14	18	38	13	140	168	30
φ125	MAA6-LA125	17	69	□104	φ18	φ13	18	21	46	17	175	213	35

Dimensional Table/LB (end angles)

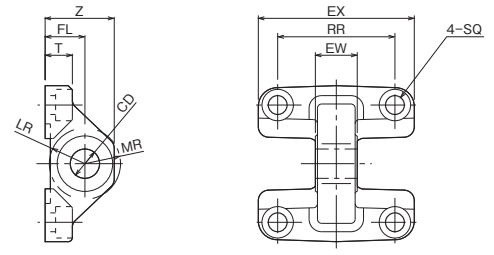
Symbol Bore	Part number	AB	AC	AH	AL	AO	AT	H	R	UA	SQ	Z
φ32	MAA6-LB032	9	11	28	20.5	9.5	3.2	11.5	33	50	φ7	20
φ40	MAA6-LB040	11	13	30	23.5	12.5	3.2	11.5	36	57	φ7	21
φ50	MAA6-LB050	11	13	36.5	28	12	3.2	13	47	68	φ7	23
φ63	MAA6-LB063	11	13	41	31	13	3.2	13	56	80	φ9	26
φ80	MAA6-LB080	14	16	49	30	16	4	14	70	97	φ11	30
φ100	MAA6-LB100	14	16	57	30	16	4	15	84	112	φ11	35
φ125	MAA6-LB125	18	20	70	35	18	6	18	104	136	φ13	45

Dimensional Table/FA (rod flange) and FB (cap flange)

Symbol Bore	Part number	EF	F	FB	R	RR	SQ	TF	UF	Z
φ32	MAA6-FA032	47	10	φ7	33	□33	φ6.6	58	72	φ26
φ40	MAA6-FA040	52	10	φ7	36	□37	φ6.6	70	84	φ32
φ50	MAA6-FA050	65	10	φ9	47	□47	φ6.6	86	104	φ38
φ63	MAA6-FA063	76	10	φ9	56	□56	φ9	98	116	φ38
φ80	MAA6-FA080	95	16	φ12	70	□70	φ11	119	143	φ44
φ100	MAA6-FA100	115	16	φ12	84	□84	φ11	138	162	φ50
φ125	MAA6-FA125	138	16	φ14	104	□104	φ13	168	196	φ60

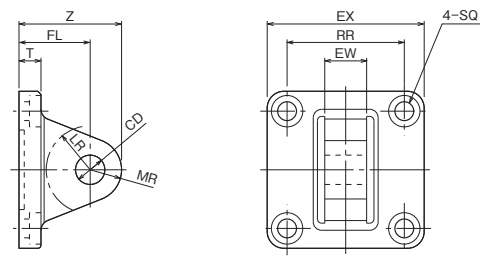
Mounting Accessory

- CA(cap eye)



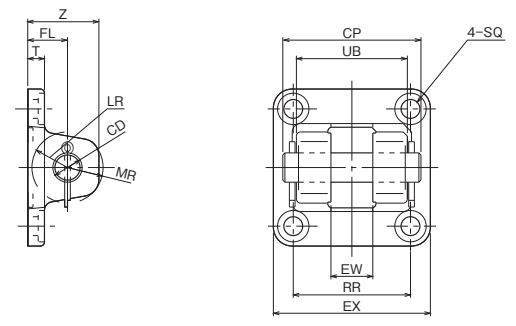
● With mounting bolts for cylinder body

- CC(cap eye)



● With mounting bolts for cylinder body

- CB(cap clevis)



● With mounting bolts for cylinder body

Dimensional Table/CA (cap eye)

Symbol Bore	Part number	CD	EW	EX	FL	LR	MR	RR	SQ	T	Z
φ32	MAA6-CA032	φ12H9	16 ⁰ _{-0.070}	□44	19	R16	R16	□33	φ6.6	8	32
φ40	MAA6-CA040	φ14H9	20 ⁰ _{-0.084}	□50	19	R17	R17	□37	φ6.6	8	33
φ50	MAA6-CA050	φ14H9	20 ⁰ _{-0.084}	□60	19	R17	R17	□47	φ6.6	10	33
φ63	MAA6-CA063	φ14H9	20 ⁰ _{-0.084}	□75	19	R17	R17	□56	φ9	13	33
φ80	MAA6-CA080	φ20H9	32 ⁰ _{-0.100}	□94	32	R25	R24	□70	φ11	18	53
φ100	MAA6-CA100	φ20H9	32 ⁰ _{-0.100}	□111	32	R26	R24	□84	φ11	18	52
φ125	MAA6-CA125	φ20H9	32 ⁰ _{-0.100}	□135	32	R30	R25	□104	φ13	21	52

Dimensional Table/CC (cap eye)

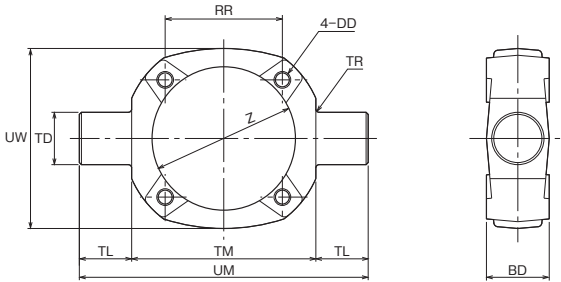
Symbol Bore	Part number	CD	EW	EX	FL	LR	MR	RR	SQ	T	Z
φ40	MAA6-CC040	φ14H9	20 ⁰ _{-0.3}	□50	34	R21	R14	□37	φ6.6	11	48
φ50	MAA6-CC050	φ14H9	20 ⁰ _{-0.3}	□62	34	R21	R15	□47	φ6.6	11	49
φ63	MAA6-CC063	φ14H9	20 ⁰ _{-0.3}	□75	34	R21	R15	□56	φ9	11	49
φ80	MAA6-CC080	φ20H9	32 ⁰ _{-0.3}	□94	48	R25	R20	□70	φ11	15	68
φ100	MAA6-CC100	φ20H9	32 ⁰ _{-0.3}	□112	48	R25	R20	□84	φ11	15	68

Dimensional Table/CB (cap clevis)

Symbol Bore	Part number	CD	CP	EW	EX	FL	LR	MR	T	SQ	RR	UB	Z
φ32	MAA6-CB032	φ12 ^{H9} _{T8}	46	16 ^{+0.7} _{+0.5}	□44	19	R17	R15	8	φ6.6	□33	33	32
φ40	MAA6-CB040	φ14 ^{H9} _{T8}	58	20 ^{+0.7} _{+0.5}	□50	19	R17	R15	8	φ6.6	□37	45	32
φ50	MAA6-CB050	φ14 ^{H9} _{T8}	66	20 ^{+0.7} _{+0.5}	□60	19	R17	R17	8	φ6.6	□47	53	34
φ63	MAA6-CB063	φ14 ^{H9} _{T8}	66	20 ^{+0.7} _{+0.5}	□75	19	R17	R17	8	φ9	□56	53	34
φ80	MAA6-CB080	φ20 ^{H9} _{T8}	78	32 ^{+0.7} _{+0.5}	□94	32	R30	R24	11	φ11	□70	67	53
φ100	MAA6-CB100	φ20 ^{H9} _{T8}	78	32 ^{+0.7} _{+0.5}	□111	32	R30	R24	11	φ11	□84	67	53
φ125	MAA6-CB125	φ20 ^{H9} _{T8}	78	32 ^{+0.7} _{+0.5}	□136	32	R30	R22	14	φ13	□104	65	48

Mounting Accessory

- TC(intermediate trunnion)



Dimensional Table/TC (intermediate trunnion)

Symbol Bore	Part number	BD	DD	RR	TD	TL	TM	TR	UM	UW	Z
φ32	MAA6-TC032	30	M6×1	□33	φ16e9	16	55	R1	87	53	φ36.5
φ40	MAA6-TC040	30	M6×1	□37	φ25e9	25	63	R1.6	113	60	φ44.5
φ50	MAA6-TC050	30	M6×1	□47	φ25e9	25	76	R1.6	126	72	φ55.5
φ63	MAA6-TC063	30	M8×1.25	□56	φ25e9	25	88	R1.6	138	87	φ68.5
φ80	MAA6-TC080	35	M10×1.5	□70	φ25e9	25	114	R1.6	164	105	φ87.5
φ100	MAA6-TC100	40	M10×1.5	□84	φ25e9	25	132	R2	182	129	φ107.5
φ125	MAA6-TC125	43	M12×1.75	□104	φ25e9	25	158	R2	208	159	φ133.5

Specifications for Adjustable Stroke Cylinders

Series variations	With adjustable extended stroke		With adjustable retracted stroke	
	Standard type	VAL Set	Standard type	VAL Set
Series	10A-6A1	10A-6VA1	10A-6A2	10A-6VA2
Cylinder bore (mm)	φ32·φ40·φ50·φ63 φ80·φ100·φ125	φ40·φ50·φ63 φ80·φ100	φ32·φ40·φ50·φ63 φ80·φ100·φ125	φ40·φ50·φ63 φ80·φ100
Working fluid	Air			
Lubrication	Unnecessary			
Working pressure range	0.1 to 1 MPa	0.17 to 0.7 MPa	0.05 to 1 MPa	0.17 to 0.7 MPa
Working speed range	50 to 700mm/s		30 to 700mm/s	
Proof test pressure	1.5 MPa	1.05 MPa	1.5 MPa	1.05 MPa
Working temperature range	−10 to +70°C (No freezing)	+5 to +50°C	−10 to +70°C (No freezing)	+5 to +50°C
Structure of cushioning	With cushions on both ends (cushion pad at rod extending end for adjustment)		With cushions on both ends (none at rod retracting end for adjustment)	
Cushion stroke (cushion ring parallel part length)	φ32·φ40: 16mm φ50·φ63: 20mm φ80·φ100·φ125: 25mm			
Stroke adjusting method	Stopper adjustment		Adjuster screw adjustment	
Stroke adjusting range	0 to 50mm		φ32·φ40: 0 to 57mm φ50·φ63·φ80·φ100·φ125: 0 to 60mm	
Tolerance for thread	JIS 6H/6g			
Mounting style	SD · LA · LB · FA · TC · TC/B		SD · LA · LB · FA · TC · TC/B	

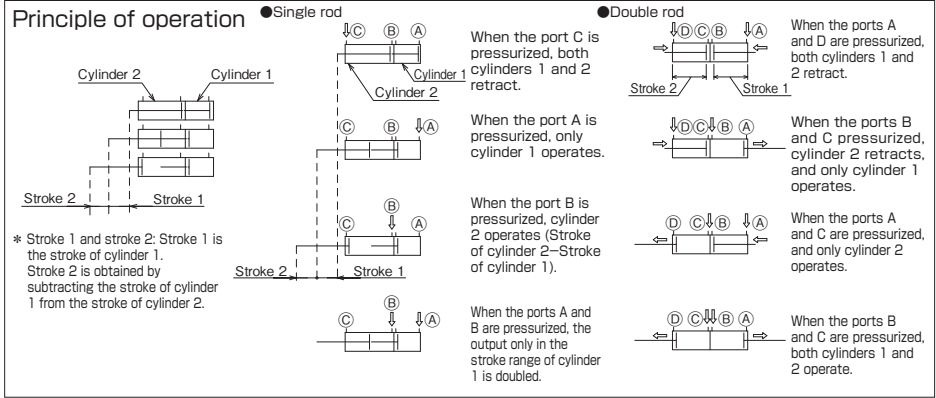
(Note) For the working speed range, see the selection materials to check the relationship between the speed and the cushion mechanism.

Order Made Specifications
Specifications for Dual Stroke Cylinders

Series variations	Single rod		Double rod	
	Standard type		Standard type	
Series	10A-6Q1		10A-6Q2	
Cylinder bore (mm)	φ 40 · φ 50 · φ 63 · φ 80 · φ 100		φ 32 · φ 40 · φ 50 · φ 63 · φ 80 · φ 100 · φ 125	
Working fluid	Air			
Lubrication	Unnecessary			
Working pressure range	0.1 to 0.7 MPa		0.05 to 0.7 MPa	
Working speed range	50 to 700mm/s			
Proof test pressure	1.05 MPa			
Working temperature range	−10 to +70°C (No freezing)			
Structure of cushioning	With cushions on both ends			
Cushion stroke (cushion ring parallel part length)	φ 32 · φ 40: 16mm φ 50 · φ 63: 20mm φ 80 · φ 100 · φ 125: 25mm			
Tolerance for thread	JIS 6H/6g			
Mounting style	SD · LA · LB · FA · FB CA · CC · CB · CB w/ bracket · TC · TC w/ bracket		SD · LA · LB · FA · TC · TC w/ bracket	

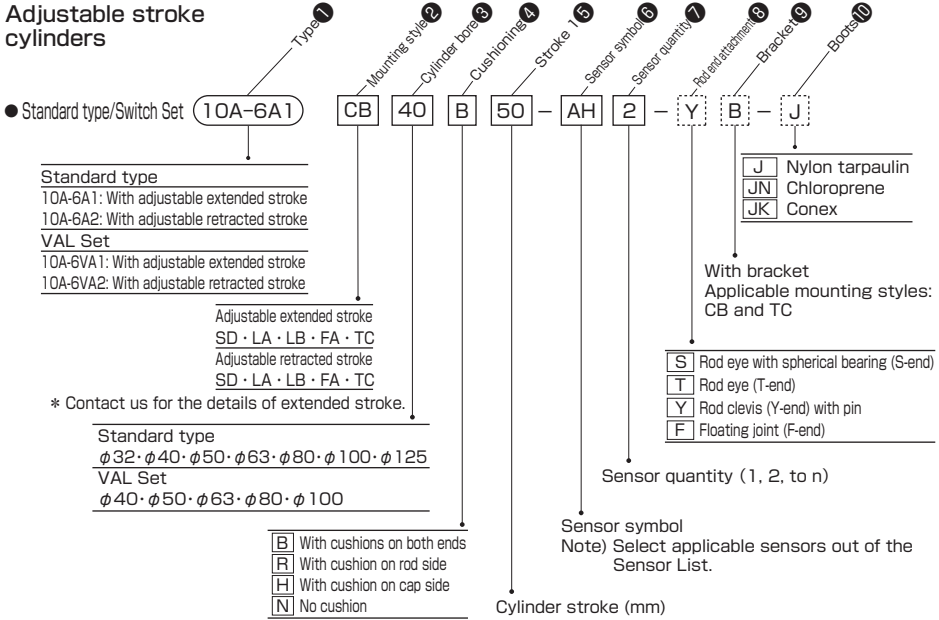
(Note) For the working speed range, see the selection materials to check the relationship between the speed and the cushion mechanism.

Principle of operation



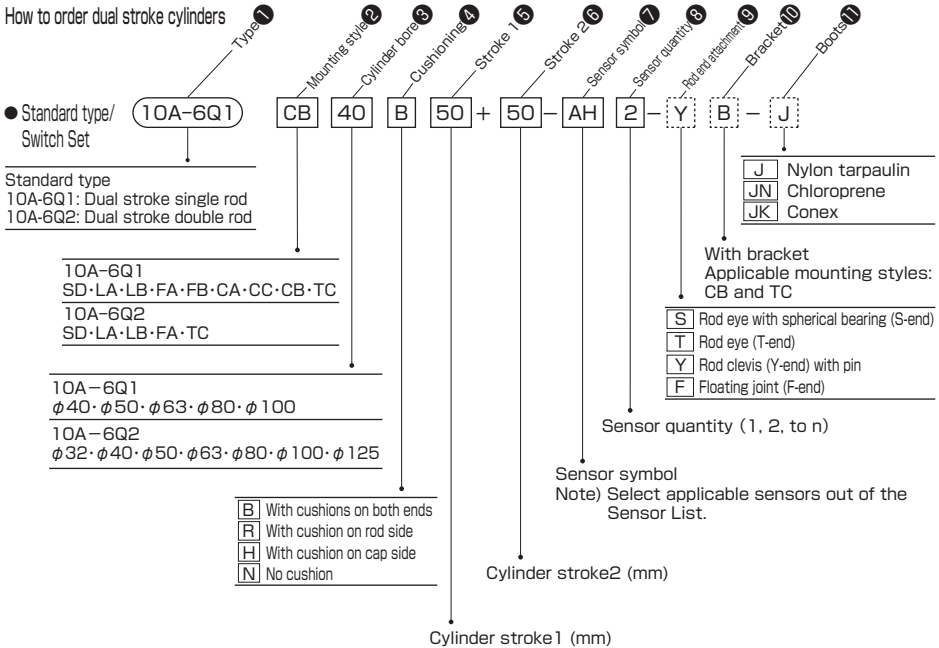
How to order

Adjustable stroke cylinders



* For details, please contact us.

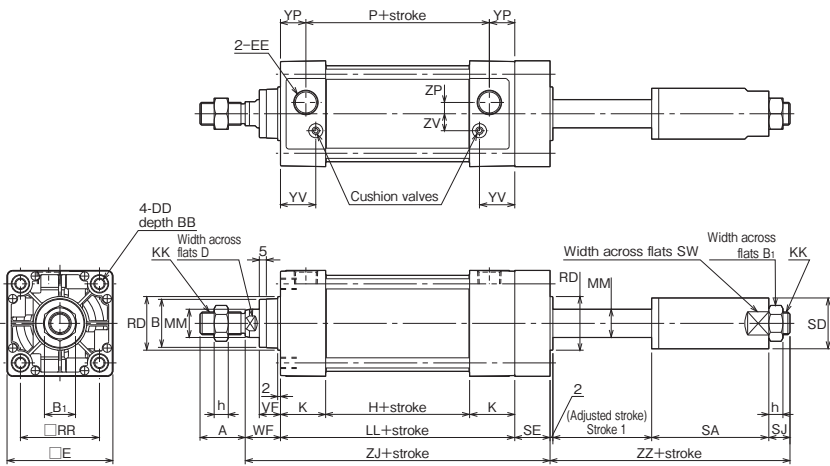
How to order dual stroke cylinders



* For details, please contact us.

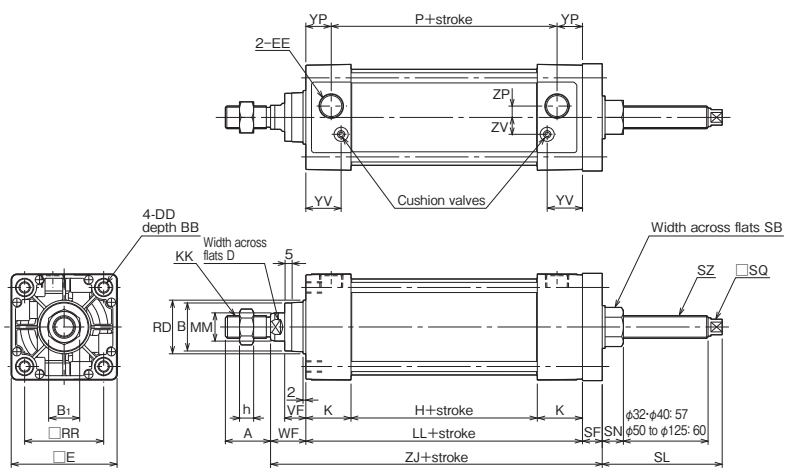
Stroke Adjustment

Adjustable extended stroke 10A-6A1 SD Bore B Stroke



- Stroke adjusting range: 0 to 50 mm
- Mounting style: SD, LA, LB, FA, TC
- For details, please contact us.

Adjustable retracted stroke 10A-6A2 SD Bore B Stroke



- Stroke adjusting range φ32·φ40: 0 to 57mm
φ50 to φ125: 0 to 60mm
- Mounting style: SD, LA, LB, FA, TC
- For details, please contact us.

Dimensional Table/Adjustable extended stroke

Symbol	A	B	B ₁	BB	D	DD	E	EE	H	K	KK	LL	MM	P
Bore														
φ32	22(19)	φ24	17	14	10	M6×1	44	Rc1/8	31	31	M10×1.25	93	φ12	61
φ40	24(21)	φ30	19	14	14	M6×1	50	Rc1/4	31	31	M12×1.25	93	φ16	57
φ50	32(29)	φ34	22	14	17	M6×1	62	Rc1/4	31	31	M16×1.5	93	φ20	57
φ63	32(29)	φ34	22	14	17	M8×1.25	75	Rc3/8	32	32	M16×1.5	96	φ20	60
φ80	40(37)	φ39	27	15	21	M10×1.5	94	Rc3/8	36	36	M20×1.5	108	φ25	68
φ100	40(37)	φ46	27	15	26	M10×1.5	112	Rc1/2	36	36	M20×1.5	108	φ30	68
φ125	54(50)	φ55	36	15	32	M12×1.75	136	Rc1/2	42	36	M27×2	114	φ35	74

Symbol	RD	RR	SA	SD	SE	SJ	SW	VF	WF	YP	YV	ZJ	ZP	ZV	ZZ	h
Bore																
φ32	φ26	33	69	φ25	25	10	22	15	25	16	25.5	143	3	7	81	6
φ40	φ32	37	74	φ30	25	11	27	15	25	18	25.5	143	4	10	87	7
φ50	φ38	47	83	φ36	25	14	32	15	25	18	24	143	7	12	99	10
φ63	φ38	56	83	φ36	25	14	32	15	25	18	25	146	8	12	99	10
φ80	φ44	70	84	φ45	35	17	41	21	35	20	29	178	11	16	103	12
φ100	φ50	84	84	φ50	35	17	46	21	35	20	29	178	12	18	103	12
φ125	φ60	104	89	φ55	40	21	50	21	35	20	29	189	14	20	112	16

* The parenthesized values of dimension A indicate the screw length.

Dimensional Table/Adjustable retracted stroke

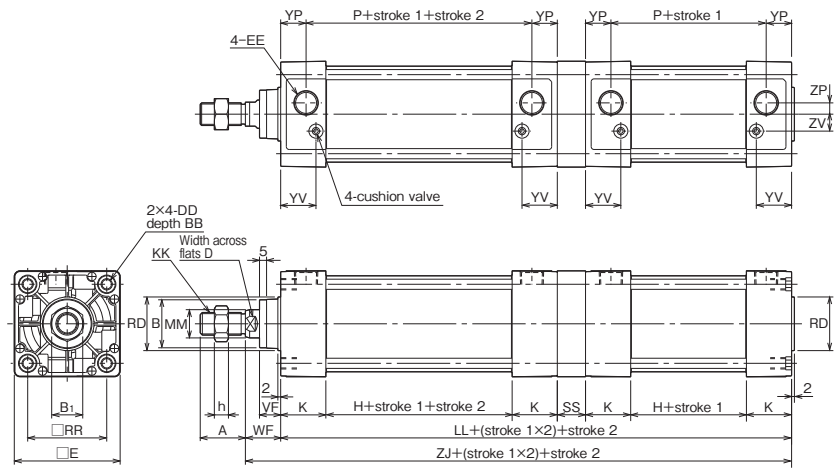
Symbol	A	B	B ₁	BB	D	DD	E	EE	H	K	KK	LL	MM	P
Bore														
φ32	22(19)	φ24	17	14	10	M6×1	44	Rc1/8	31	31	M10×1.25	93	φ12	61
φ40	24(21)	φ30	19	14	14	M6×1	50	Rc1/4	31	31	M12×1.25	93	φ16	57
φ50	32(29)	φ34	22	14	17	M6×1	62	Rc1/4	31	31	M16×1.5	93	φ20	57
φ63	32(29)	φ34	22	14	17	M8×1.25	75	Rc3/8	32	32	M16×1.5	96	φ20	60
φ80	40(37)	φ39	27	15	21	M10×1.5	94	Rc3/8	36	36	M20×1.5	108	φ25	68
φ100	40(37)	φ46	27	15	26	M10×1.5	112	Rc1/2	36	36	M20×1.5	108	φ30	68
φ125	54(50)	φ55	36	15	32	M12×1.75	136	Rc1/2	42	36	M27×2	114	φ35	74

Symbol	RD	RR	SB	SF	SL	SN	SQ	SZ	VF	WF	YP	YV	ZJ	ZP	ZV	h
Bore																
φ32	φ26	33	19	14	79	12	8	M12×1.25	15	25	16	25.5	132	3	7	6
φ40	φ32	37	19	14	79	12	8	M12×1.25	15	25	18	25.5	132	4	10	7
φ50	φ38	47	24	14	85	15	11	M16×1.5	15	25	18	24	132	7	12	10
φ63	φ38	56	24	14	85	15	11	M16×1.5	15	25	18	25	135	8	12	10
φ80	φ44	70	30	22	91	19	14	M20×1.5	21	35	20	29	165	11	16	12
φ100	φ50	84	30	22	91	19	14	M20×1.5	21	35	20	29	165	12	18	12
φ125	φ60	104	36	23	96	22	17	M24×1.5	21	35	20	29	172	14	20	16

* The parenthesized values of dimension A indicate the screw length.

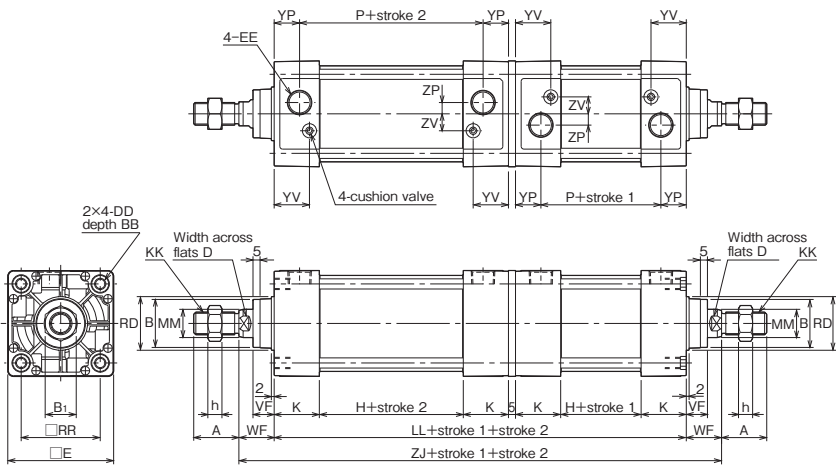
Dual stroke **Order made**

Dual stroke single rod 10A-6Q1 **SD** **Bore** **B** **Stroke1** + **Stroke2**



- Mounting style: SD, LA, LB, FA, FB, CA, CC, CB, TC
- For details, please contact us.

Dual stroke double rod 10A-6Q2 **SD** **Bore** **B** **Stroke1** + **Stroke2**



- Mounting style: SD, LA, LB, FA, TC
- For details, please contact us.

Dimensional Table/Dual stroke single rod

Symbol	A	B	B ₁	BB	D	DD	E	EE	H	K	KK	LL
Bore												
φ40	24(21)	φ30	19	14	14	M6×1	50	Rc1/4	31	31	M12×1.25	206
φ50	32(29)	φ34	22	14	17	M6×1	62	Rc1/4	31	31	M16×1.5	206
φ63	32(29)	φ34	22	14	17	M8×1.25	75	Rc3/8	32	32	M16×1.5	212
φ80	40(37)	φ39	27	15	21	M10×1.5	94	Rc3/8	36	36	M20×1.5	241
φ100	40(37)	φ46	27	15	26	M10×1.5	112	Rc1/2	36	36	M20×1.5	241

Symbol	MM	P	RD	RR	SS	VF	WF	YP	YV	ZJ	ZP	ZV	h
Bore													
φ40	φ16	57	φ32	37	20	15	25	18	25.5	231	4	10	7
φ50	φ20	57	φ38	47	20	15	25	18	24	231	7	12	10
φ63	φ20	60	φ38	56	20	15	25	18	25	237	8	12	10
φ80	φ25	68	φ44	70	25	21	35	20	29	276	11	16	12
φ100	φ30	68	φ50	84	25	21	35	20	29	276	12	18	12

Note) Dual stroke single rod cylinders with bores of 32 and 125 mm are not available.
* The parenthesized values of dimension A indicate the screw length.

Dimensional Table/Dual stroke double rod

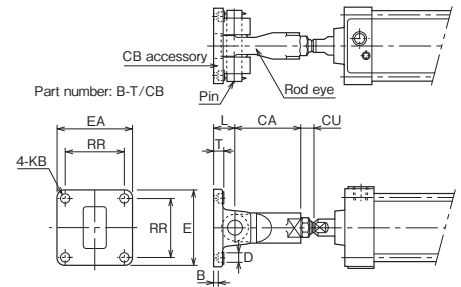
Symbol	A	B	B ₁	BB	D	DD	E	EE	H	K	KK
Bore											
φ32	22(19)	φ24	17	14	10	M6×1	44	Rc1/8	31	31	M10×1.25
φ40	24(21)	φ30	19	14	14	M6×1	50	Rc1/4	31	31	M12×1.25
φ50	32(29)	φ34	22	14	17	M6×1	62	Rc1/4	31	31	M16×1.5
φ63	32(29)	φ34	22	14	17	M8×1.25	75	Rc3/8	32	32	M16×1.5
φ80	40(37)	φ39	27	15	21	M10×1.5	94	Rc3/8	36	36	M20×1.5
φ100	40(37)	φ46	27	15	26	M10×1.5	112	Rc1/2	36	36	M20×1.5
φ125	54(50)	φ55	36	15	32	M12×1.75	136	Rc1/2	42	36	M27×2

Symbol	LL	MM	P	RD	RR	VF	WF	YP	YV	ZJ	ZP	ZV	h
Bore													
φ32	191	φ12	61	φ26	33	15	25	16	25.5	241	3	7	6
φ40	191	φ16	57	φ32	37	15	25	18	25.5	241	4	10	7
φ50	191	φ20	57	φ38	47	15	25	18	24	241	7	12	10
φ63	197	φ20	60	φ38	56	15	25	18	25	247	8	12	10
φ80	221	φ25	68	φ44	70	21	35	20	29	291	11	16	12
φ100	221	φ30	68	φ50	84	21	35	20	29	291	12	18	12
φ125	233	φ35	74	φ60	104	21	35	20	29	303	14	20	16

* The parenthesized values of dimension A indicate the screw length.

Combination of rod end attachments

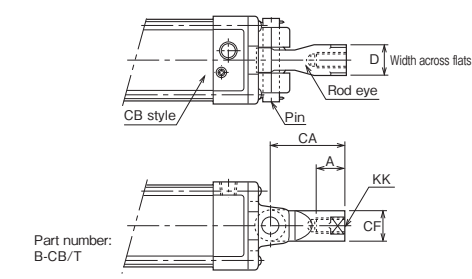
Rod eye—CB accessory



Dimensional Table

Symbol	Bore	B	CA	CU		D	E	EA	KB	L	RR	T
				Min.	Max.							
φ32	6	55	6	12	φ11	43	43	φ6.6	19	33	8	
φ40	6	60	7	13	φ11	49	49	φ6.6	19	37	8	
φ50	6	60	10	17	φ11	60	60	φ6.6	19	47	8	
φ63	6	60	10	17	φ15	74	74	φ9	19	56	8	
φ80	9	85	12	21	φ20	93	93	φ11	32	70	11	
φ100	9	85	12	21	φ20	110	110	φ11	32	84	11	
φ125	10	100	16	30	φ22	134	134	φ13	32	104	14	

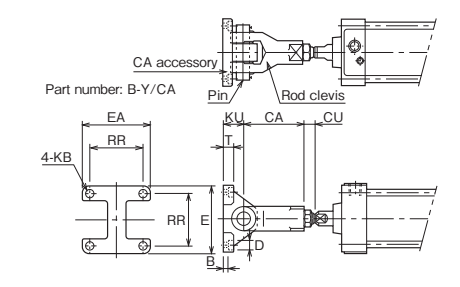
CB style—rod eye



Dimensional Table

Symbol	Bore	A	CA	CF	D	KK
φ32	23	55	φ24	24	M10×1.25	
φ40	25	60	φ24	24	M12×1.25	
φ50	33	60	φ28	27	M16×1.5	
φ63	33	60	φ28	27	M16×1.5	
φ80	41	85	φ36	36	M20×1.5	
φ100	41	85	φ36	36	M20×1.5	
φ125	56	100	φ49	—	M27×2	

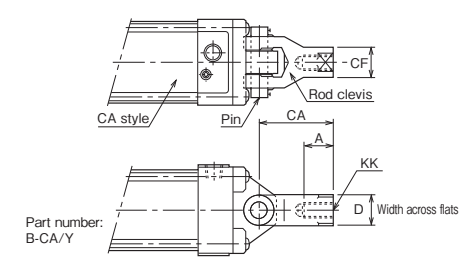
Rod clevis—CA accessory



Dimensional Table

Symbol	Bore	B	CA	CU		D	E	EA	KB	KU	RR	T
				Min.	Max.							
φ32	6	55	6	12	φ14	43	43	φ6.6	19	33	8	
φ40	6	60	7	13	φ14	49	49	φ6.6	19	37	8	
φ50	7	60	10	17	φ14	60	60	φ6.6	19	47	10	
φ63	10	60	10	17	φ15	74	74	φ9	19	56	13	
φ80	14	85	12	21	φ20	93	93	φ11	32	70	18	
φ100	14	85	12	21	φ20	110	110	φ11	32	84	18	
φ125	14	100	16	30	φ22	134	134	φ13	32	104	18	

CA style—rod clevis

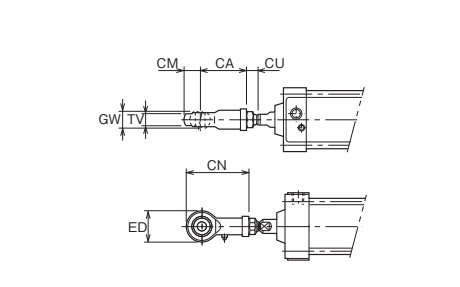


Dimensional Table

Symbol	Bore	A	CA	CF	D	KK
φ32	23	55	φ24	24	M10×1.25	
φ40	25	60	φ24	24	M12×1.25	
φ50	33	60	φ28	27	M16×1.5	
φ63	33	60	φ28	27	M16×1.5	
φ80	41	85	φ36	36	M20×1.5	
φ100	41	85	φ36	36	M20×1.5	
φ125	56	100	φ40	40	M27×2	

Combination of rod end attachments

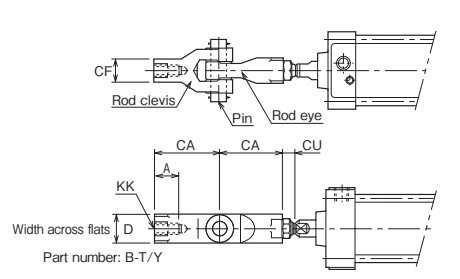
Rod eye with spherical bearing (S-end)



Dimensional Table

Symbol	Bore	CA	CM	CN	CU		ED	GW	TV
					Min.	Max.			
φ32	43	13	56	6	12	26	14 _{-0.1} ⁰	10.5±0.1	
φ40	50	15	65	7	13	30	16 _{-0.1} ⁰	12±0.1	
φ50	64	19	83	10	17	38	21 _{-0.1} ⁰	15±0.1	
φ63	64	19	83	10	17	38	21 _{-0.1} ⁰	15±0.1	
φ80	77	23	100	12	21	46	25 _{-0.1} ⁰	18±0.1	
φ100	77	23	100	12	21	46	25 _{-0.1} ⁰	18±0.1	

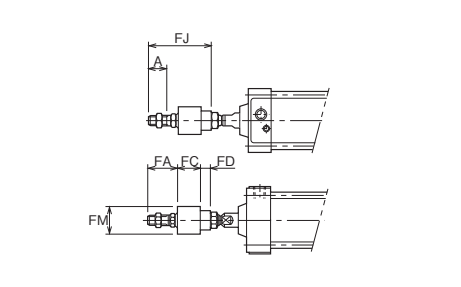
Rod eye—rod clevis



Dimensional Table

Symbol	Bore	A	CA	CF	CU		D	KK
					Min.	Max.		
φ32	23	55	φ24	6	12	24	M10×1.25	
φ40	25	60	φ24	7	13	24	M12×1.25	
φ50	33	60	φ28	10	17	27	M16×1.5	
φ63	33	60	φ28	10	17	27	M16×1.5	
φ80	41	85	φ36	12	21	36	M20×1.5	
φ100	41	85	φ36	12	21	36	M20×1.5	
φ125	56	100	φ40	16	30	40	M27×2	

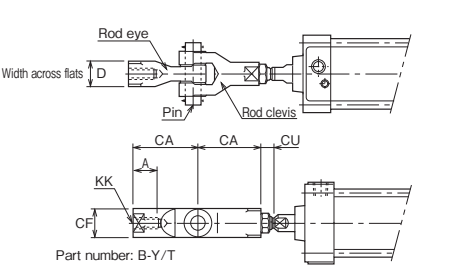
With floating joint



Dimensional Table

Symbol	Bore	A	FA	FC	FD	FJ	FM
φ32	24.5	31	28	4	63	φ25	
φ40	24	33	25.5	11	69.5	φ32	
φ50	32	43	33	13	89	φ40	
φ63	32	43	33	13	89	φ40	
φ80	40	53	42	15	110	φ50	
φ100	40	56	49	18	123	φ64	
φ125	54	74	62	21	157	φ76	

Rod clevis—rod eye

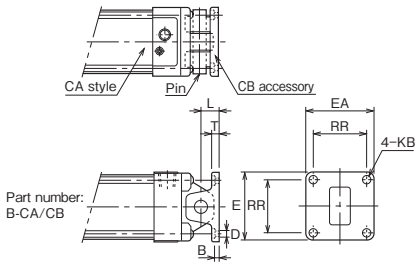


Dimensional Table

Symbol	Bore	A	CA	CF	CU		D	KK
					Min.	Max.		
φ32	23	55	φ24	6	12	24	M10×1.25	
φ40	25	60	φ24	7	13	24	M12×1.25	
φ50	33	60	φ28	10	17	27	M16×1.5	
φ63	33	60	φ28	10	17	27	M16×1.5	
φ80	41	85	φ36	12	21	36	M20×1.5	
φ100	41	85	φ36	12	21	36	M20×1.5	
φ125	56	100	φ49	16	30	—	M27×2	

Combination of rod end attachments

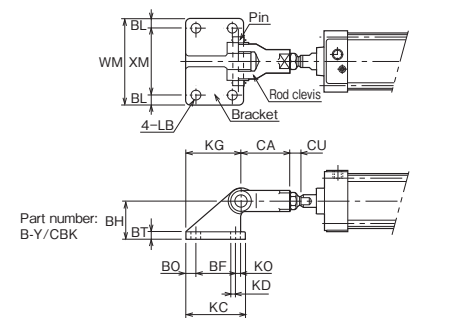
CA style—CB accessory



Dimensional Table

Symbol	B	D	E	EA	KB	L	RR	T
Bore								
φ32	6	φ11	43	43	φ6.6	19	33	8
φ40	6	φ11	49	49	φ6.6	19	37	8
φ50	6	φ11	60	60	φ6.6	19	47	8
φ63	6	φ15	74	74	φ9	19	56	8
φ80	9	φ20	93	93	φ11	32	70	11
φ100	9	φ20	110	110	φ11	32	84	11
φ125	10	φ22	134	134	φ13	32	104	14

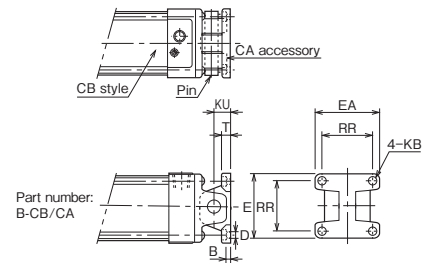
Rod clevis—CB bracket



Dimensional Table

Symbol	BF	BH	BL	BO	BT	CU	KC	KD	KG	KO	LB	WM	XM
Bore						Min. Max.							
φ32	40	35	10	8	55	6 12	60	5	55	5	φ9	85	65
φ40						7 13							
φ50	40	45	12.5	15	8	60 10 13	70	10	65	5	φ11	105	80
φ63						10 17							
φ80						12 21							
φ100	65	60	15	15	12	85 12 21	95	5	85	10	φ14	135	105
φ125	77	75	17.5	17.5	14	100 16 30	112	17.5	—	—	φ18	145	110

CB style—CA accessory



Dimensional Table

Symbol	B	D	E	EA	KB	KU	RR	T
Bore								
φ32	6	φ14	43	43	φ6.6	19	33	8
φ40	6	φ14	49	49	φ6.6	19	37	8
φ50	7	φ14	60	60	φ6.6	19	47	10
φ63	10	φ15	74	74	φ9	19	56	13
φ80	14	φ20	93	93	φ11	32	70	18
φ100	14	φ20	110	110	φ11	32	84	18
φ125	14	φ22	134	134	φ13	32	104	18

Special rod end shape type(standard/round rod)

A10

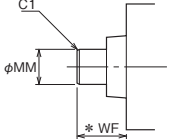


Table of Basic Dimensions

Bore	φ32	φ40	φ50	φ63	φ80	φ100	φ125
Symbol							
MM	φ12	φ16	φ20	φ25	φ30	φ35	
WF		25			35		

A12

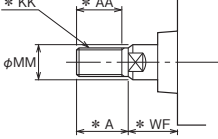


Table of Basic Dimensions

Bore	φ32	φ40	φ50	φ63	φ80	φ100	φ125
Symbol							
A	22	24	32		40	54	
AA	19.5	21.5	29		37	50	
KK	M10×1.25	M12×1.25	M16×1.5		M20×1.5	M27×2	
MM	φ12	φ16	φ20	φ25	φ30	φ35	
WF		25			35		

A14

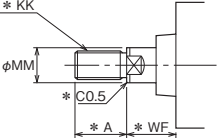


Table of Basic Dimensions

Bore	φ32	φ40	φ50	φ63	φ80	φ100	φ125
Symbol							
A	22	24	32		40	54	
KK	M10×1.25	M12×1.25	M16×1.5		M20×1.5	M27×2	
MM	φ12	φ16	φ20	φ25	φ30	φ35	
WF		25			35		

A16

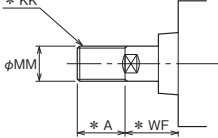


Table of Basic Dimensions

Bore	φ32	φ40	φ50	φ63	φ80	φ100	φ125
Symbol							
A	22	24	32		40	54	
KK	M12×1.25	M16×1.5	M20×1.5		M25×1.5	M30×2	M35×1.5
MM	φ12	φ16	φ20	φ25	φ30	φ35	
WF		25			35		

A20

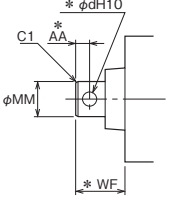


Table of Basic Dimensions

Bore	φ32	φ40	φ50	φ63	φ80	φ100	φ125
Symbol							
AA	7	8	12		14	18	
d	φ6	φ8	φ10		φ12	φ14	
MM	φ12	φ16	φ20	φ25	φ30	φ35	
WF	33	39	45		57	66	

A27

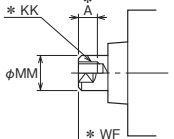


Table of Basic Dimensions

Bore	φ32	φ40	φ50	φ63	φ80	φ100	φ125
Symbol							
A	9	12	18		20	25	
KK	M6×1	M8×1.25	M10×1.5		M16×2	M20×2.5	
MM	φ12	φ16	φ20	φ25	φ30	φ35	
WF	33	35			45		

Special rod end shape type(standard/round rod)

A29

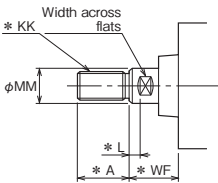


Table of Basic Dimensions

Bore Symbol	φ32	φ40	φ50	φ63	φ80	φ100	φ125
A	22(19)	24(21)	32(29)		40(37)	54(50)	
KK	M10×1.25	M12×1.25	M16×1.5		M20×1.5	M27×2	
L	8			10			
MM	φ12	φ16	φ20	φ25	φ30	φ35	
WF	33		35		45		

* The parenthesized values of dimension A indicate the screw length.

A30

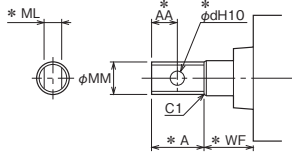


Table of Basic Dimensions

Bore Symbol	φ32	φ40	φ50	φ63	φ80	φ100	φ125
A	18	24	30		36	45	
AA	7	8	12		14	18	
d	φ6	φ8	φ10		φ12	φ14	
ML	7 ⁰ _{-0.1}	10 ⁰ _{-0.1}	12 ⁰ _{-0.1}		14 ⁰ _{-0.1}	20 ⁰ _{-0.1}	
MM	φ12	φ16	φ20	φ25	φ30	φ35	
WF		20			26		

A37

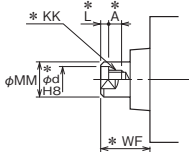


Table of Basic Dimensions

Bore Symbol	φ32	φ40	φ50	φ63	φ80	φ100	φ125
A	9	12	18		20	25	
KK	M6×1	M8×1.25	M10×1.5		M16×2	M20×2.5	
d	φ8	φ10	φ12		φ18	φ22	
L	5	7		10			
MM	φ12	φ16	φ20	φ25	φ30	φ35	
WF	33		35		45		

Special rod end shape type (non-rotating/hex. rod)

G12

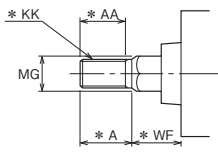


Table of Basic Dimensions

Bore Symbol	φ40	φ50	φ63	φ80	φ100
A	24	32		40	
AA	21.5	29		37	
KK	M12×1.25	M16×1.5		M20×1.5	
MG	14	19		23	
WF		25		35	

G14

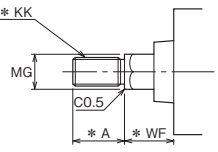


Table of Basic Dimensions

Bore Symbol	φ40	φ50	φ63	φ80	φ100
A	24(21)	32(29)		40(37)	
KK	M12×1.25	M16×1.5		M20×1.5	
MG	14	19		23	
WF		25		35	

* The parenthesized values of dimension A indicate the screw length.

G27

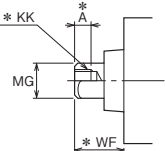


Table of Basic Dimensions

Bore Symbol	φ40	φ50	φ63	φ80	φ100
A	12	18		20	
KK	M8×1.25	M10×1.5		M16×2	
MG	14	19		23	
WF	33	35		45	

G37

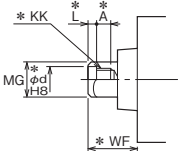


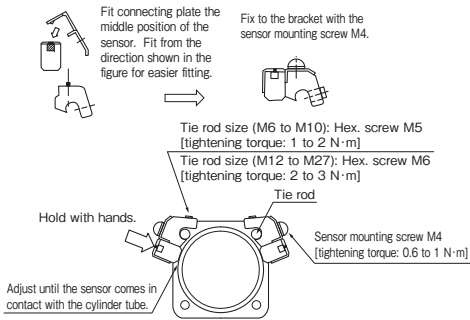
Table of Basic Dimensions

Bore Symbol	φ40	φ50	φ63	φ80	φ100
A	12	18		20	
KK	M8×1.25	M10×1.5		M16×2	
d	φ10	φ12		φ18	
L	7		10		
MG	14	19		23	
WF	33	35		45	

- For the detailed specifications, dimensions and leadtime of cylinders with special rod ends, contact us.
- If any of the *-marked dimensions must be changed to a non-standard value, consult us.

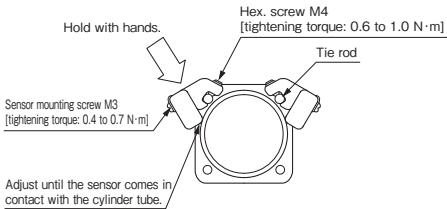
Setting method of sensor detecting position

AX type



1. Loosen the two hex. screws with a hex. wrench, and move them along the tie rod.
2. Adjust the detecting position (for the 2-LED type, the position where the green lamp lights up) 2 to 5 mm (about half of the operating range is appropriate) before the required position where the sensor indicator lamp starts to light up (ON). Then, gently hold the top of the sensor so that the cylinder tube contacts the detecting face of the sensor, and clamp the hex. screw to an appropriate tightening torque.
Note) Inappropriate tightening torque may cause the off-center of the sensor position.
3. The indicating lamp lights up when the sensor is set to the ON position.
4. Sensors can be mounted to any of four tie rods and on the most suitable position depending on the mounting space of the cylinder and wiring method.
5. Mount a sensor to the most suitable position to detect the stroke end with the "sensor mounting dimension" (dimension UX).

SR type



1. Loosen the two hex. screws with a hex. wrench, and move them along the tie rod.
2. Adjust the detecting position 2 to 5 mm (about half of the operating range is appropriate) before the required position where the sensor indicator lamp starts to light up (ON). Then, gently hold the top of the sensor so that the cylinder tube contacts the detecting face of the sensor, and clamp the hex. screw to an appropriate tightening torque.
Note) Inappropriate tightening torque may cause the off-center of the sensor position.
3. The indicating lamp goes out when the sensor is set to the ON position.
4. Sensors can be mounted to any of four tie rods and on the most suitable position depending on the mounting space of the cylinder and wiring method.
5. Mount a sensor to the most suitable position to detect the stroke end with the "sensor mounting dimension" (dimension UX).