

Compact design pneumatic cylinder with Non-rotating rod

- The use of a magnetic proximity sensor embedded in the cylinder body reduces the cylinder body, the dead space.
- Separable type convenient for maintenance
- Two types of rod end, female thread and male thread, are available.
- A variety of accessories including mounting accessories and rod end attachments makes the cylinder applicable to a wide range of purposes.
- Custom made cylinders of single acting type and dual stroke type with adjustable stroke can be supplied.



Cylinder Specifications: Non-rotating type

Series variations	Double acting single rod		Double acting double rod	
	Standard type	Switch Set	Standard type	Switch Set
Series	10S-6G	10S-6RG	10S-6GD	10S-6RGD
Cylinder bore (mm)	φ 20 · φ 25 · φ 32 · φ 40 · φ 50 · φ 63 · φ 80 · φ 100			
Working fluid	Air			
Lubrication	Unnecessary			
Working pressure range	φ 20 to φ 32: 0.1 to 1 MPa φ 40 to φ 100: 0.05 to 1 MPa			
Working speed range	φ 20 to φ 40: 50 to 500 mm/s φ 50 to φ 100: 50 to 300 mm/s			
Proof test pressure	1.5 MPa			
Working temperature range	Standard type: -10 to +70°C (No freezing) Switch Set: 0 to +60°C (No freezing)			
Structure of cushioning	With cushion pads on both ends			
Allowable rotating angle	φ 20 · φ 25: ±1.5°, φ 32 · φ 40: ±1° φ 50 · φ 63: ±0.8°, φ 80 · φ 100: ±0.5°			
Allowable torque	φ 20 · φ 25: 0.5N · m φ 32 · φ 40: 1.0N · m φ 50 · φ 63: 3.4N · m φ 80 · φ 100: 10N · m			
Tolerance for thread	JIS 6H/6g			
Tolerance of stroke	$\begin{smallmatrix} +1.0 \\ 0 \end{smallmatrix}$ mm			
Note 1) Mounting style	SD(basic style) · ST(tapped on both sides) · LA · LB · FA · FB · CA · CB			
Rod end threads	Female thread, male thread			
Accessory	Bracket for CB (φ 32 to φ 100)		—	

- Note 1)
- SD style (basic style) cylinders are not tapped, so mounting accessories cannot be mounted to them. When requiring only the cylinder body with mounting accessories, place an order for ST style (tapped on both sides).
 - Cylinders with mounting accessories have bores of 32 to 100.
 - Double rod cylinders of mounting styles CA, CB and FB are not available.

Standard Stroke Range: Non-rotating type

Series variations	Type	Bore	Cylinder stroke (mm)																Male thread type
			5	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100	
Double acting single rod	Standard type 10S-6G Switch Set 10S-6RG	φ 20 · φ 25	○	○	○	○	○	○	○	○	○	○	○	○	—	—	—	—	○
		φ 32 · φ 40	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
		φ 50 to φ 100	—	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Double acting double rod	Standard type 10S-6GD Switch Set 10S-6RGD	φ 20 · φ 25	○	○	○	○	○	○	—	—	—	—	—	—	—	—	—	—	○
		φ 32 · φ 40	○	○	○	○	○	○	○	○	○	○	—	—	—	—	—	—	○
		φ 50 to φ 100	—	○	○	○	○	○	○	○	○	○	—	—	—	—	—	—	○

- Notes) 1. For fractional strokes in the standard stroke range of any double acting cylinder, consult us.
* For the leadtime, consult us.
2. For strokes more than the standard, consult us.
3. Do not use the cylinder in an unevenly loaded state. Particularly, when rotating mounting accessories are used, be sure to consult us.

Product Lineup

Unit: mm

Series Variations		Type	φ20	φ25	φ32	φ40	φ50	φ63	φ80	φ100
Non-rotating	Double acting single rod	Standard type 10S-6G	●	●	●	●	●	●	●	●
		Switch Set 10S-6RG	●	●	●	●	●	●	●	●
	Double acting double rod	Standard type 10S-6GD	●	●	●	●	●	●	●	●
		Switch Set 10S-6RGD	●	●	●	●	●	●	●	●

Weight Table

Double acting single rod/double rod/standard type and Switch Set

Unit: g

Bore (mm)	Basic weight (SD · ST)				Additional weight		
	Standard type		Switch Set		Additional weight per mm of stroke		Male threaded rod end
	Double acting single rod	Double acting double rod	Double acting single rod	Double acting double rod	Double acting single rod	Double acting double rod	
φ 20	81	101	109	129	2.3	2.9	8
φ 25	107	132	145	170	2.8	3.7	8
φ 32	176	239	226	289	3.8	5.4	16.5
φ 40	198	245	273	320	4.6	6.1	16.5
φ 50	340	415	460	535	7.2	9.7	60
φ 63	511	613	673	775	8.5	11.0	60
φ 80	1122	1385	1351	1614	13.4	17.2	125
φ 100	1804	2193	2095	2484	16.8	22.4	125

- For the double rod type, double the weight of the relevant male threaded rod end.

Additional Weight Table

Unit: g

Bore (mm)	Mounting accessory additional weight					Rod end attachment additional weight				Sensor additional weight	
	LA	LB	FA FB	CA	CB	Rod eye (T-end)	Rod eye with spherical bearing (S-end)	Rod clevis (Y-end) with pin	Floating joint (F-end)	PD/PF type	ZD136C-T
φ 20	—	—	—	—	—	—	50	55	60	1: 15 3: 35	— 254
φ 25	—	—	—	—	—	—	50	55	60		
φ 32	96	84	210	145	165	160	110	270	110		
φ 40	110	100	275	205	220	160	110	270	110		
φ 50	160	150	415	275	380	210	200	340	380		
φ 63	260	240	560	375	505	210	200	340	380		
φ 80	520	500	1515	890	1100	620	360	870	750		
φ 100	590	580	1950	1090	1360	620	360	870	1330		

- "1" and "3" shown in the sensor additional weight column are cord lengths. (1: 1m 3: 3m)
For additional weights other than the basic weights, see the above table.
- Calculation formula** Cylinder weight (g)=basic weight +(cylinder stroke (mm)×additional weight per mm of stroke)+ mounting accessory weight+male threaded rod end+(sensor additional weight×sensor quantity)
- Calculation example** Double acting type/single rod, cylinder bore 40 mm, stroke 50 mm, LB, male thread type, 2 pcs of PD12L1
273+ (4.6×50) +100+16.5+ (15×2) =649.5(g)

How to order

- Standard type 10S-6G
- Switch Set 10S-6RG

Standard type
10S-6G Double acting single rod, non-rotating
10S-6GD Double acting double rod, non-rotating
Switch Set
10S-6RG Double acting single rod, non-rotating
10S-6RGD Double acting double rod, non-rotating

- Without mounting accessory SD (Basic style)
- For mounting accessory mounting
- ST (Basic style/tapped on both sides)
 - LA (Side lugs)
 - LB (End angle)
 - FA (Rod flange)
 - FB (Cap flange)
 - CA (Cap eye)
 - CB (Cap clevis) with pin

Notes) For the mounting styles ST, LA, LB, FA, FB, CA and CB, the bore is 32 to 100 mm.

- SD style (basic style) cylinders are not tapped, so mounting accessories cannot be mounted to them. When requiring only the cylinder body with mounting accessories, place an order for ST style (tapped on both sides).
- When purchasing ST style cylinder body (tapped on both sides) of mounting style FA, change dimension WF to the following value.

Female thread	φ32 to φ63	13,5
	φ80 · φ100	21,5
Male thread	φ32 to φ63	15
	φ80 · φ100	21,5

- Notes) ●No sensor can be mounted to the standard type.
- If mounting bolts are necessary, place an order for the bolts specified in the mounting bolt list.

1 2 3 4 5 6 7 8 9

Mounting style 2 Cylinder bore 3 Cushioning 4 Stroke 5 Male thread type 6 Sensor symbol 7 Sensor quantity 8 Rod end attachment 9

Standard type 10S-6G

Switch Set 10S-6RG

Without mounting accessory SD (Basic style)

For mounting accessory mounting

Notes) For the mounting styles ST, LA, LB, FA, FB, CA and CB, the bore is 32 to 100 mm.

●SD style (basic style) cylinders are not tapped, so mounting accessories cannot be mounted to them. When requiring only the cylinder body with mounting accessories, place an order for ST style (tapped on both sides).

When purchasing ST style cylinder body (tapped on both sides) of mounting style FA, change dimension WF to the following value.

Female thread φ32 to φ63 13,5
φ80 · φ100 21,5

Male thread φ32 to φ63 15
φ80 · φ100 21,5

Notes) ●No sensor can be mounted to the standard type.

- If mounting bolts are necessary, place an order for the bolts specified in the mounting bolt list.

Notes) ●The rod end attachments are designed for male thread types. Do not use the floating joint (F-end) together with CA or CB.

Notes on ordering sensors

When no sensor is required, specify 000 for the sensor symbol 7 and the sensor quantity 8 when placing an order.

In the case of Switch Set, sensors are not mounted on cylinders at delivery.

Female thread type (No entry for standard type)

Male thread type

Cylinder stroke (mm)

With cushion pads

Cylinder bore (mm)

10S-6G, 10S-6RG φ20, φ25, φ32, φ40,
10S-6GD, 10S-6RGD φ50, φ63, φ80, φ100

●For the mounting accessories, see 10S-6 Series.

Sensor List

Type	Sensor symbol	Load voltage range	Load current range	Protective circuit	Indicating lamp	Wiring method	Cord length	Classification	
Reed sensor	 PD12L1	24 V DC 110 V AC	DC: 2.5 to 40mA AC: 2.5 to 20mA	None	None	0.2 mm ² , 2-core, outer dia. φ 2.6 mm, rear wiring	1 m	General purpose	
	 PD12L3						3 m		
	 PD11L1		DC: 5 to 40mA AC: 5 to 20mA		LED (Lights when sensing)	0.2 mm ² , 2-core, outer dia. φ 2.6 mm, rear wiring	1 m		
	 PD11L3						3 m		
	 PD32L1		DC: 2.5 to 40mA AC: 2.5 to 20mA		None	0.2 mm ² , 2-core, outer dia. φ 2.6 mm, upper wiring	1 m		
	 PD32L3						3 m		
	 PD31L1		DC: 5 to 40mA AC: 5 to 20mA		LED (Lights when sensing)	0.2 mm ² , 2-core, outer dia. φ 2.6 mm, upper wiring	1 m		
	 PD31L3						3 m		
Solid state sensor	 PD14L1	DC10 to 28V	5 to 20mA	Provided	LED (Lights when sensing)	0.2 mm ² , 2-core, outer dia. φ 2.6 mm, rear wiring	1 m	General purpose	
	 PD14L3						3 m		
	 PD13L1	28 V DC or less	0.1 to 40mA	Provided	LED (Lights when sensing)	0.15 mm ² , 3-core, outer dia. φ 2.6 mm, rear wiring	1 m		
	 PD13L3						3 m		
	 PE34L1	DC10 to 28V	5 to 20mA	Provided	LED (Lights when sensing)	0.2 mm ² , 2-core, outer dia. φ 2.6 mm, upper wiring	1 m		
	 PE34L3						3 m		
	 PE33L1	28 V DC or less	0.1 to 40mA	Provided	LED (Lights when sensing)	0.15 mm ² , 3-core, outer dia. φ 2.6 mm, upper wiring	1 m		
	 PE33L3						3 m		
	 ZD136C-T	DC: 10 to 28V	5 to 50mA	Provided	2-LED (2-LED type in red/green)	0.5 mm ² , 2-core, outer dia. φ 6 mm, rear wiring	5 m		Strong magnetic field resistance

- 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.).
- For handling of sensors, be sure to 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.
 - ZD136C-T can be mounted to cylinders with bores of 32, 40, 50, 63, 80 and 100 mm. It cannot be mounted to cylinders with bores of 20 and 25 mm.
 - For ZE type sensors, see the sensor specifications at the end of this catalog.

●General purpose type PD/PE type sensor

●For strong magnetic field resistance ZD type sensor

Mounting Style

SD (Basic style)

LA (Side lugs)φ32 to φ100

FB (Cap flange)φ32 to φ100

ST (Basic style/tapped on both sides)φ32 to φ100

LB (End angle)φ32 to φ100

CA (Cap eye)φ32 to φ100

FA (Rod flange)φ32 to φ100

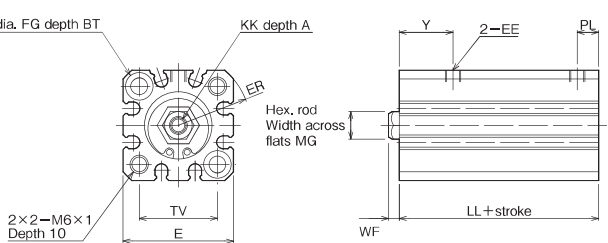
CB (Cap clevis)φ32 to φ100

SD

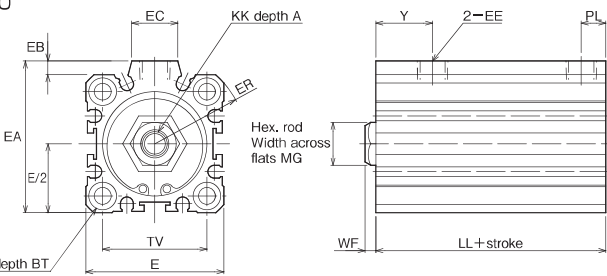
Double acting non-rotating single rod/standard type and Switch Set/basic style

10S-6G SD Bore N Standard stroke
10S-6RG SD Bore N Standard stroke - Sensor symbol Sensor quantity

- Bore $\phi 20 \cdot \phi 25$



- Bore $\phi 32$ to $\phi 100$



Dimensional Table

Symbol	A	BT	E	EA	EB	EC	EE	ER	FB	FG	KK
Bore											
$\phi 20$	7	5.4	□36	—	—	—	M5×0.8	R23.5	$\phi 5.5$	$\phi 9$	M5×0.8
$\phi 25$	7	5.4	□40	—	—	—	M5×0.8	R26	$\phi 5.5$	$\phi 9$	M5×0.8
$\phi 32$	12	5.4	□45	49.5	4.5	15	Rc1/8	R30	$\phi 5.5$	$\phi 9$	M8×1.25
$\phi 40$	12	5.4	□52	57	5	17.5	Rc1/8	R34.5	$\phi 5.5$	$\phi 9$	M8×1.25
$\phi 50$	15	8	□64	71	7	19	Rc1/4	R42.5	$\phi 6.6$	$\phi 11$	M10×1.5
$\phi 63$	15	10.5	□77	84	7	19	Rc1/4	R51	$\phi 9$	$\phi 14$	M10×1.5
$\phi 80$	20	13.5	□98	104	6	25	Rc3/8	R65	$\phi 11$	$\phi 17.5$	M16×2
$\phi 100$	20	13.5	□177	123.5	6.5	25	Rc3/8	R78	$\phi 11$	$\phi 17.5$	M16×2

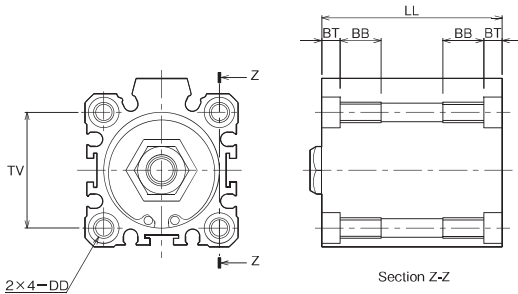
Symbol Stroke	LL		MG	PL			TV	WF	Y
				10S-6G		10S-6RG			
	10S-6G	10S-6RG		5	10 or more				
Bore									
ϕ 20	30	40	9	6	7	7	$\square$ 25.5	3.5	17.5
ϕ 25	31	41	9	6	7	7	$\square$ 28	3.5	18.5
ϕ 32	35	45	14	8		8	$\square$ 34	3.5	18.5
ϕ 40	35	45	14	11.5		11.5	$\square$ 40	3.5	15.5
ϕ 50	37	47	19	12		12	$\square$ 50	3.5	19
ϕ 63	41	51	19	14.5		14.5	$\square$ 60	3.5	19.5
ϕ 80	51.5	61.5	23	16.5		16.5	$\square$ 77	6.5	23
ϕ 100	58	68	23	21		21	$\square$ 94	6.5	25

● For the dimensions of the mounting accessories, see 10S-6 Series.

ST

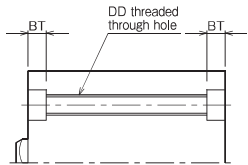
ST type (basic style/tapped on both sides)

10S-6G ST Bore N Standard stroke
10S-6RG ST Bore N Standard stroke - Sensor symbol Sensor quantity
10S-6GD ST Bore N Standard stroke
10S-6RGD ST Bore N Standard stroke - Sensor symbol Sensor quantity



Note) When dimension LL is less than the value shown in the following table, tapped through holes are made.

Symbol	LL
Bore	
$\phi 32$	—
$\phi 40$	—
$\phi 50$	—
$\phi 63$	57
$\phi 80$	71
$\phi 100$	71



Dimensional Table

Symbol	BB Note)	BT	DD	TV
Bore				
$\phi 32$	12	5.4	M6×1	□34
$\phi 40$	12	5.4	M6×1	□40
$\phi 50$	14	8	M8×1.25	□50
$\phi 63$	18	10.5	M10×1.5	□60
$\phi 80$	22	13.5	M12×1.75	□77
$\phi 100$	22	13.5	M12×1.75	□94

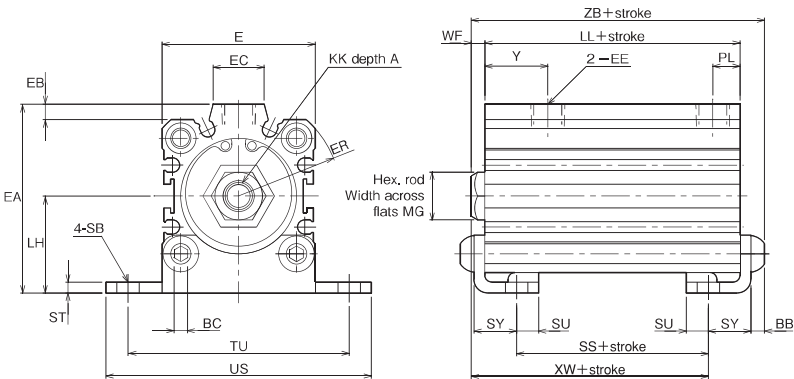
● For dimensions not shown in this figure, refer to SD (basic style).

LA

Double acting non-rotating single rod/standard type and Switch Set/side lugs

10S-6G LA Bore N Standard stroke
10S-6RG LA Bore N Standard stroke – Sensor symbol Sensor quantity

- Bore ϕ 32 to ϕ 100



Dimensional Table

Symbol Bore	A	BB	BC	E	EA	EB	EC	EE	ER	KK	LH	LL		MG
												10S-6G	10S-6RG	
ϕ 32	12	4	4	45	55.5	4.5	15	Rc1/8	R30	M8×1.25	28.5	35	45	14
ϕ 40	12	4	4	52	63.5	5	17.5	Rc1/8	R34.5	M8×1.25	32.5	35	45	14
ϕ 50	15	5	5	64	77	7	19	Rc1/4	R42.5	M10×1.5	38	37	47	19
ϕ 63	15	6	6	77	90	7	19	Rc1/4	R51	M10×1.5	44.5	41	51	19
ϕ 80	20	7	8	98	113.5	6	25	Rc3/8	R65	M16×2	58.5	51.5	61.5	23
ϕ 100	20	7	8	117	132	6.5	25	Rc3/8	R78	M16×2	67	58	68	23

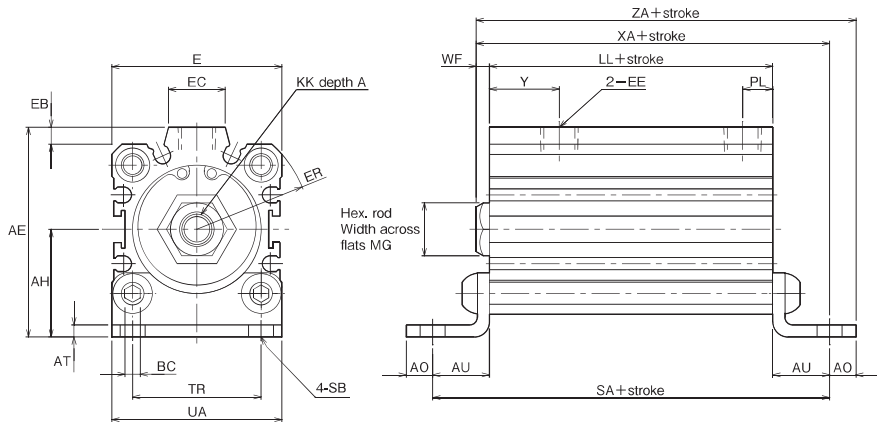
Symbol Bore	PL	SB	SS		ST	SU	SY	TU	US	WF	XW		Y	ZB	
			10S-6G	10S-6RG							10S-6G	10S-6RG		10S-6G	10S-6RG
ϕ 32	8	ϕ 6.6	16.4	26.4	3.2	6.5	12.5	65	78	3.5	29.2	39.2	18.5	45.7	55.7
ϕ 40	11.5	ϕ 6.6	16.4	26.4	3.2	6.5	12.5	73	87	3.5	29.2	39.2	15.5	45.7	55.7
ϕ 50	12	ϕ 9	15.4	25.4	3.2	8	14	87	103	3.5	29.7	39.7	19	48.7	58.7
ϕ 63	14.5	ϕ 11	16.4	26.4	3.2	9.5	15.5	109	127	3.5	32.2	42.2	19.5	53.7	63.7
ϕ 80	16.5	ϕ 14	18.5	28.5	4.5	11	21	123	145	6.5	41.5	51.5	23	69.5	79.5
ϕ 100	21	ϕ 14	25	35	4.5	11	21	137	159	6.5	48	58	25	76	86

LB

Double acting non-rotating single rod/standard type and Switch Set/end angle

10S-6G LB Bore N Standard stroke
10S-6RG LB Bore N Standard stroke – Sensor symbol Sensor quantity

- Bore ϕ 32 to ϕ 100



Dimensional Table

Symbol Bore	A	AE	AH	AO	AT	AU	BC	E	EB	EC	EE	ER	KK	LL	
														10S-6G	10S-6RG
ϕ 32	12	55.5	28.5	7	3.2	15	4	45	4.5	15	Rc1/8	R30	M8×1.25	35	45
ϕ 40	12	63.5	32.5	7	3.2	15	4	52	5	17.5	Rc1/8	R34.5	M8×1.25	35	45
ϕ 50	15	77	38	9	3.2	18	5	64	7	19	Rc1/4	R42.5	M10×1.5	37	47
ϕ 63	15	90	44.5	11	3.2	20	6	77	7	19	Rc1/4	R51	M10×1.5	41	51
ϕ 80	20	113.5	58.5	14	4.5	25	8	98	6	25	Rc3/8	R65	M16×2	51.5	61.5
ϕ 100	20	132	67	14	4.5	25	8	117	6.5	25	Rc3/8	R78	M16×2	58	68

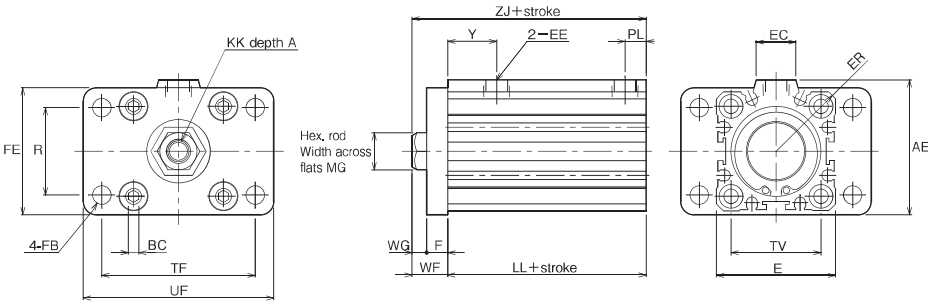
Symbol Bore	MG	PL	SA		SB	TR	UA	WF	XA		Y	ZA	
			10S-6G	10S-6RG					10S-6G	10S-6RG		10S-6G	10S-6RG
ϕ 32	14	8	65	75	ϕ 6.6	34	45	3.5	53.5	63.5	18.5	60.5	70.5
ϕ 40	14	11.5	65	75	ϕ 6.6	40	53	3.5	53.5	63.5	15.5	60.5	70.5
ϕ 50	19	12	73	83	ϕ 9	50	64	3.5	58.5	68.5	19	67.5	77.5
ϕ 63	19	14.5	81	91	ϕ 11	60	77	3.5	64.5	74.5	19.5	75.5	85.5
ϕ 80	23	16.5	101.5	111.5	ϕ 14	77	100	6.5	83	93	23	97	107
ϕ 100	23	21	108	118	ϕ 14	94	117	6.5	89.5	99.5	25	103.5	113.5

FA

Double acting non-rotating single rod/standard type and Switch Set/rod flange

10S-6G FA Bore N Standard stroke
10S-6RG FA Bore N Standard stroke – Sensor symbol Sensor quantity

- Bore ϕ 32 to ϕ 100



Note) A flange cannot be fitted on the cap side because a tapped hole is not made on the side.

Dimensional Table

Symbol	A	AE	BC	E	EC	EE	ER	F	FB	FE	KK
Bore											
ϕ 32	12	51	4	□45	15	Rc1/8	R30	8	ϕ 7	48	M8×1.25
ϕ 40	12	59	4	□52	17.5	Rc1/8	R34.5	10	ϕ 7	56	M8×1.25
ϕ 50	15	74	5	□64	19	Rc1/4	R42.5	10	ϕ 9	70	M10×1.5
ϕ 63	15	87.5	6	□77	19	Rc1/4	R51	10	ϕ 9	84	M10×1.5
ϕ 80	20	107.5	8	□98	25	Rc3/8	R65	16	ϕ 12	105	M16×2
ϕ 100	20	125.5	8	□117	25	Rc3/8	R78	16	ϕ 12	121	M16×2

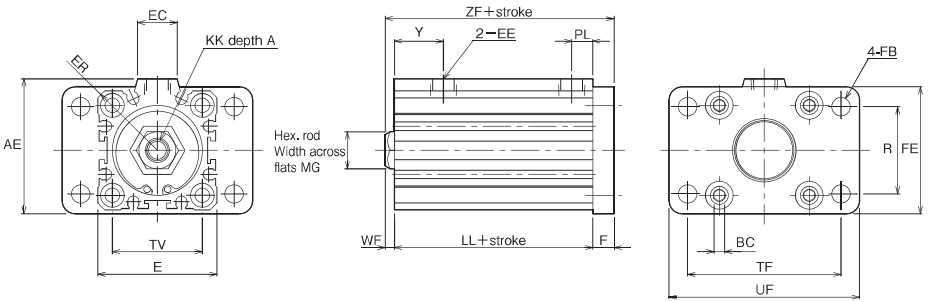
Symbol	LL		MG	PL	R	TV	TF	UF	WF	WG	Y	ZJ	
Bore	10S-6G	10S-6RG										10S-6G	10S-6RG
ϕ 32	35	45	14	8	33	□34	58	72	13.5	5.5	18.5	48.5	58.5
ϕ 40	35	45	14	11.5	36	□40	70	84	13.5	3.5	15.5	48.5	58.5
ϕ 50	37	47	19	12	47	□50	86	104	13.5	3.5	19	50.5	60.5
ϕ 63	41	51	19	14.5	56	□60	98	116	13.5	3.5	19.5	54.5	64.5
ϕ 80	51.5	61.5	23	16.5	70	□77	126	150	21.5	5.5	23	73	83
ϕ 100	58	68	23	21	84	□94	143	165	21.5	5.5	25	79.5	89.5

FB

Double acting non-rotating single rod/standard type and Switch Set/cap flange

10S-6G FB Bore N Standard stroke
10S-6RG FB Bore N Standard stroke – Sensor symbol Sensor quantity

- Bore ϕ 32 to ϕ 100



Note) A flange cannot be fitted on the rod side because a tapped hole is not made on the side.

Dimensional Table

Symbol	A	AE	BC	E	EC	EE	ER	F	FB	FE	KK
Bore											
ϕ 32	12	51	4	□45	15	Rc1/8	R30	8	ϕ 7	48	M8×1.25
ϕ 40	12	59	4	□52	17.5	Rc1/8	R34.5	10	ϕ 7	56	M8×1.25
ϕ 50	15	74	5	□64	19	Rc1/4	R42.5	10	ϕ 9	70	M10×1.5
ϕ 63	15	87.5	6	□77	19	Rc1/4	R51	10	ϕ 9	84	M10×1.5
ϕ 80	20	107.5	8	□98	25	Rc3/8	R65	16	ϕ 12	105	M16×2
ϕ 100	20	125.5	8	□117	25	Rc3/8	R78	16	ϕ 12	121	M16×2

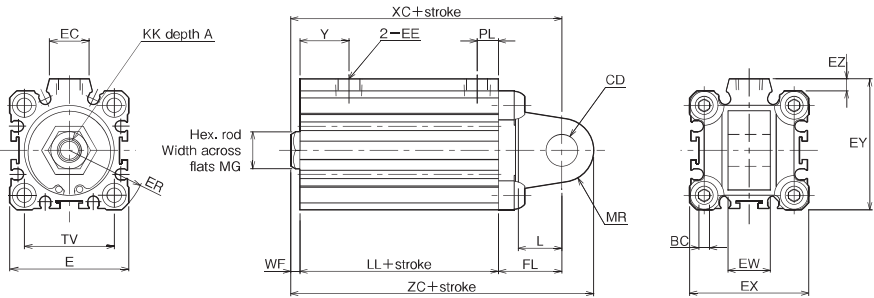
Symbol	LL		MG	PL	R	TV	TF	UF	WF	Y	ZF	
Bore	10S-6G	10S-6RG									10S-6G	10S-6RG
ϕ 32	35	45	14	8	33	□34	58	72	3.5	18.5	46.5	56.5
ϕ 40	35	45	14	11.5	36	□40	70	84	3.5	15.5	48.5	58.5
ϕ 50	37	47	19	12	47	□50	86	104	3.5	19	50.5	60.5
ϕ 63	41	51	19	14.5	56	□60	98	116	3.5	19.5	54.5	64.5
ϕ 80	51.5	61.5	23	16.5	70	□77	126	150	6.5	23	74	84
ϕ 100	58	68	23	21	84	□94	143	165	6.5	25	80.5	90.5

CA

Double acting non-rotating single rod/standard type and Switch Set/cap eye

10S-6G CA Bore N Standard stroke
10S-6RG CA Bore N Standard stroke – Sensor symbol Sensor quantity

● Bore ϕ 32 to ϕ 100



Dimensional Table

Symbol	A	BC	CD	E	EC	EE	ER	EX	EY	EZ	EW	FL	KK
Bore													
φ 32	12	4	φ 12H9	□45	15	Rc1/8	R30	□45	49.5	4.5	16 ⁰ _{-0.070}	24	M8×1.25
φ 40	12	4	φ 14H9	□52	17.5	Rc1/8	R34.5	□53	57.5	4.5	20 ⁰ _{-0.084}	24	M8×1.25
φ 50	15	5	φ 14H9	□64	19	Rc1/4	R42.5	□64	71	7	20 ⁰ _{-0.084}	24	M10×1.5
φ 63	15	6	φ 14H9	□77	19	Rc1/4	R51	□77	84	7	20 ⁰ _{-0.084}	24	M10×1.5
φ 80	20	8	φ 20H9	□98	25	Rc3/8	R65	□100	105	5	32 ⁰ _{-0.100}	32	M16×2
φ 100	20	8	φ 20H9	□117	25	Rc3/8	R78	□117	123.5	6.5	32 ⁰ _{-0.100}	32	M16×2

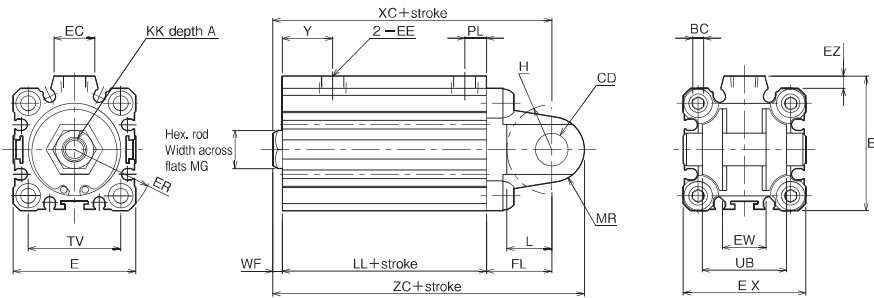
Symbol	L	LL		MG	MR	PL	TV	WF	XC		Y	ZC	
Bore		10S-6G	10S-6RG						10S-6G	10S-6RG		10S-6G	10S-6RG
φ 32	16.5	35	45	14	R12	8	□34	3.5	62.5	72.5	18.5	74.5	84.5
φ 40	16	35	45	14	R14	11.5	□40	3.5	62.5	72.5	15.5	76.5	86.5
φ 50	16	37	47	19	R14	12	□50	3.5	64.5	74.5	19	78.5	88.5
φ 63	16	41	51	19	R14	14.5	□60	3.5	68.5	78.5	19.5	82.5	92.5
φ 80	21	51.5	61.5	23	R19	16.5	□77	6.5	90	100	23	109	119
φ 100	21	58	68	23	R19	21	□94	6.5	96.5	106.5	25	115.5	125.5

CB

Double acting non-rotating single rod/standard type and Switch Set/cap clevis

10S-6G CB Bore N Standard stroke
10S-6RG CB Bore N Standard stroke – Sensor symbol Sensor quantity

● Bore ϕ 32 to ϕ 100



Dimensional Table

Symbol	A	BC	CD	E	EC	EE	ER	EX	EY	EZ	EW	FL	H
Bore													
φ 32	12	4	φ 12H9/f8	□45	15	Rc1/8	R30	□45	49.5	4.5	16 ^{+0.7 +0.5}	24	R16.5
φ 40	12	4	φ 14H9/f8	□52	17.5	Rc1/8	R34.5	□53	57.5	4.5	20 ^{+0.7 +0.5}	24	R18
φ 50	15	5	φ 14H9/f8	□64	19	Rc1/4	R42.5	□64	71	7	20 ^{+0.7 +0.5}	24	R21
φ 63	15	6	φ 14H9/f8	□77	19	Rc1/4	R51	□77	84	7	20 ^{+0.7 +0.5}	24	R22
φ 80	20	8	φ 20H9/f8	□98	25	Rc3/8	R65	□100	105	5	32 ^{+0.7 +0.5}	32	R30
φ 100	20	8	φ 20H9/f8	□117	25	Rc3/8	R78	□117	123.5	6.5	32 ^{+0.7 +0.5}	32	R30

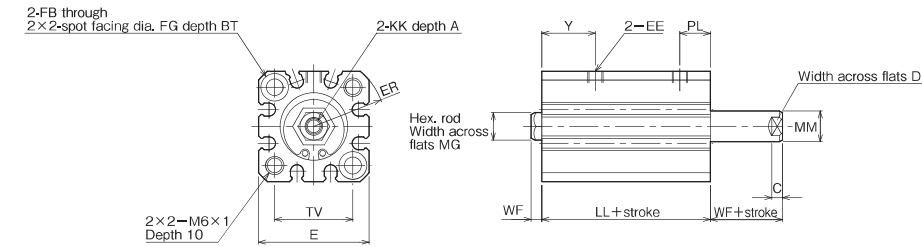
Symbol	KK	L	LL		MG	MR	PL	TV	UB	WF	XC		Y	ZC	
Bore			10S-6G	10S-6RG							10S-6G	10S-6RG		10S-6G	10S-6RG
φ 32	M8×1.25	16.5	35	45	14	R12	8	□34	31	3.5	62.5	72.5	18.5	74.5	84.5
φ 40	M8×1.25	16	35	45	14	R14	11.5	□40	38	3.5	62.5	72.5	15.5	76.5	86.5
φ 50	M10×1.5	16	37	47	19	R14	12	□50	49	3.5	64.5	74.5	19	78.5	88.5
φ 63	M10×1.5	16	41	51	19	R14	14.5	□60	52	3.5	68.5	78.5	19.5	82.5	92.5
φ 80	M16×2	21	51.5	61.5	23	R19	16.5	□77	64	6.5	90	100	23	109	119
φ 100	M16×2	21	58	68	23	R19	21	□94	64	6.5	96.5	106.5	25	115.5	125.5

SD

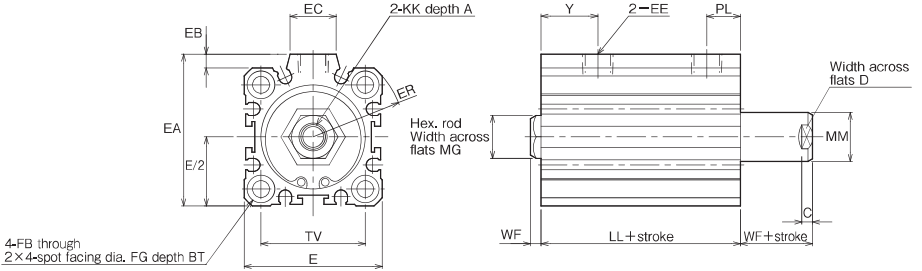
Double acting non-rotating double rod/standard type and Switch Set/basic style

10S-6GD SD Bore N Standard stroke
10S-6RGD SD Bore N Standard stroke – Sensor symbol Sensor quantity

● Bore $\phi 20 \cdot \phi 25$



● Bore $\phi 32$ to $\phi 100$



Dimensional Table

Symbol	A	BT	C	D	E	EA	EB	EC	EE	ER	FB	FG	KK
Bore													
$\phi 20$	7	5.4	3.5	8	36	—	—	—	M5×0.8	R23.5	$\phi 5.5$	$\phi 9$	M5×0.8
$\phi 25$	7	5.4	3.5	10	40	—	—	—	M5×0.8	R26	$\phi 5.5$	$\phi 9$	M5×0.8
$\phi 32$	12	5.4	3.5	14	45	49.5	4.5	15	Rc1/8	R30	$\phi 5.5$	$\phi 9$	M8×1.25
$\phi 40$	12	5.4	3.5	14	52	57	5	17.5	Rc1/8	R34.5	$\phi 5.5$	$\phi 9$	M8×1.25
$\phi 50$	15	8	3.5	18	64	71	7	19	Rc1/4	R42.5	$\phi 6.6$	$\phi 11$	M10×1.5
$\phi 63$	15	10.5	3.5	18	77	84	7	19	Rc1/4	R51	$\phi 9$	$\phi 14$	M10×1.5
$\phi 80$	20	13.5	5	22	98	104	6	25	Rc3/8	R65	$\phi 11$	$\phi 17.5$	M16×2
$\phi 100$	20	13.5	5	27	117	123.5	6.5	25	Rc3/8	R78	$\phi 11$	$\phi 17.5$	M16×2

Symbol	LL		MG	MM	PL	TV	WF	Y
Series	10S-6G	10S-6RG						
Bore								
$\phi 20$	35	45	9	$\phi 10$	10	25.5	3.5	17.5
$\phi 25$	36	46	9	$\phi 12$	10	28	3.5	18.5
$\phi 32$	45	55	14	$\phi 16$	11	34	3.5	18.5
$\phi 40$	40	50	14	$\phi 16$	11.5	40	3.5	15.5
$\phi 50$	42	52	19	$\phi 20$	12	50	3.5	19
$\phi 63$	46	56	19	$\phi 20$	14.5	60	3.5	19.5
$\phi 80$	61.5	71.5	23	$\phi 25$	16.5	77	6.5	23
$\phi 100$	68	78	23	$\phi 30$	21	94	6.5	25

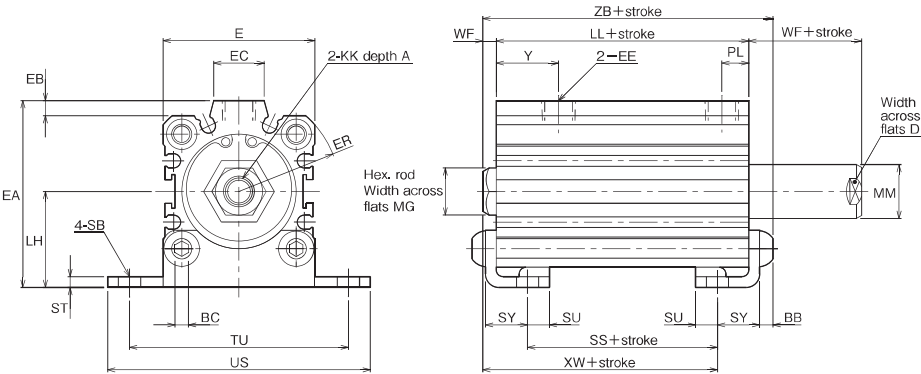
● For the dimensions of the mounting accessories, see 10S-6 Series.

LA

Double acting non-rotating double rod/standard type and Switch Set/side lugs

10S-6GD LA Bore N Standard stroke
10S-6RGD LA Bore N Standard stroke – Sensor symbol Sensor quantity

● Bore $\phi 32$ to $\phi 100$



Dimensional Table

Symbol	A	BB	BC	D	E	EA	EB	EC	EE	ER	KK	LH	LL		MG
Bore													10S-6GD	10S-6RGD	
$\phi 32$	12	4	4	14	45	55.5	4.5	15	Rc1/8	R30	M8×1.25	28.5	45	55	14
$\phi 40$	12	4	4	14	52	63.5	5	17.5	Rc1/8	R34.5	M8×1.25	32.5	40	50	14
$\phi 50$	15	5	5	18	64	77	7	19	Rc1/4	R42.5	M10×1.5	38	42	52	19
$\phi 63$	15	6	6	18	77	90	7	19	Rc1/4	R51	M10×1.5	44.5	46	56	19
$\phi 80$	20	7	8	22	98	113.5	6	25	Rc3/8	R65	M16×2	58.5	61.5	71.5	23
$\phi 100$	20	7	8	27	117	132	6.5	25	Rc3/8	R78	M16×2	67	68	78	23

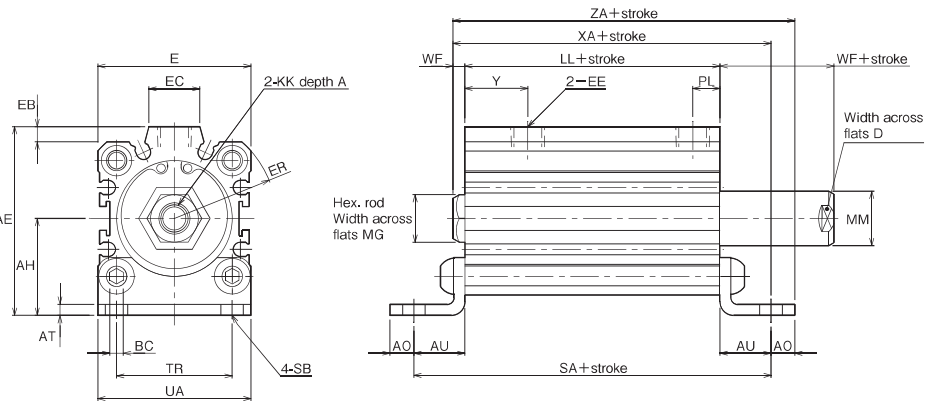
Symbol	MM	PL	SB	SS		ST	SU	SY	TU	US	WF	XW		Y	ZB	
Bore				10S-6GD	10S-6RGD							10S-6GD	10S-6RGD		10S-6GD	10S-6RGD
$\phi 32$	$\phi 16$	11	$\phi 6.6$	26.4	36.4	3.2	6.5	12.5	65	78	3.5	39.2	49.2	18.5	55.7	65.7
$\phi 40$	$\phi 16$	11.5	$\phi 6.6$	21.4	31.4	3.2	6.5	12.5	73	87	3.5	34.2	44.2	15.5	50.7	60.7
$\phi 50$	$\phi 20$	12	$\phi 9$	20.4	30.4	3.2	8	14	87	103	3.5	34.7	44.7	19	53.7	63.7
$\phi 63$	$\phi 20$	14.5	$\phi 11$	21.4	31.4	3.2	9.5	15.5	109	127	3.5	37.2	47.2	19.5	58.7	68.7
$\phi 80$	$\phi 25$	16.5	$\phi 14$	28.5	38.5	4.5	11	21	123	145	6.5	51.5	61.5	23	89.5	99.5
$\phi 100$	$\phi 30$	21	$\phi 14$	35	45	4.5	11	21	137	159	6.5	58	63	25	91	101

LB

Double acting non-rotating double rod/standard type and Switch Set/end angle

10S-6GD LB Bore N Standard stroke
10S-6RGD LB Bore N Standard stroke – Sensor symbol Sensor quantity

● Bore ϕ 32 to ϕ 100



Dimensional Table

Symbol	A	AE	AH	AO	AT	AU	BC	D	E	EB	EC	EE	ER	KK
Bore														
ϕ 32	12	55.5	28.5	7	3.2	15	4	14	45	4.5	15	Rc1/8	R30	M8×1.25
ϕ 40	12	63.5	32.5	7	3.2	15	4	14	52	5	17.5	Rc1/8	R34.5	M8×1.25
ϕ 50	15	77	38	9	3.2	18	5	18	64	7	19	Rc1/4	R42.5	M10×1.5
ϕ 63	15	90	44.5	11	3.2	20	6	18	77	7	19	Rc1/4	R51	M10×1.5
ϕ 80	20	113.5	58.5	14	4.5	25	8	22	98	6	25	Rc3/8	R65	M16×2
ϕ 100	20	132	67	14	4.5	25	8	27	117	6.5	25	Rc3/8	R78	M16×2

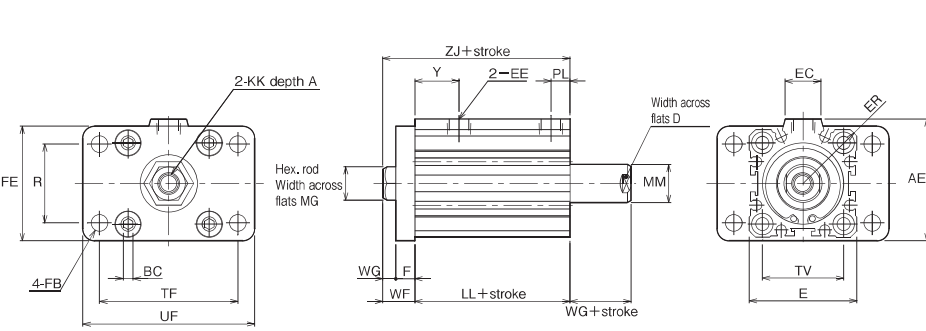
Symbol	LL		MG	MM	PL	SA		SB	TR	UA	WF	XA		Y	ZA	
Bore	10S-6GD	10S-6RGD				10S-6GD	10S-6RGD					10S-6GD	10S-6RGD		10S-6GD	10S-6RGD
ϕ 32	45	55	14	ϕ 16	8	75	85	ϕ 6.6	34	45	3.5	63.5	73.5	18.5	70.5	80.5
ϕ 40	40	50	14	ϕ 16	11.5	70	80	ϕ 6.6	40	53	3.5	58.5	68.5	15.5	65.5	75.5
ϕ 50	42	52	19	ϕ 20	12	78	88	ϕ 9	50	64	3.5	63.5	73.5	19	72.5	82.5
ϕ 63	46	56	19	ϕ 20	14.5	86	96	ϕ 11	60	77	3.5	69.5	79.5	19.5	80.5	90.5
ϕ 80	61.5	71.5	23	ϕ 25	16.5	111.5	121.5	ϕ 14	77	100	6.5	93	103	23	107	117
ϕ 100	68	78	23	ϕ 30	21	118	123	ϕ 14	94	117	6.5	99.5	109.5	25	113.5	123.5

FA

Double acting non-rotating double rod/standard type and Switch Set/rod flange

10S-6GD FA Bore N Standard stroke
10S-6RGD FA Bore N Standard stroke – Sensor symbol Sensor quantity

● Bore ϕ 32 to ϕ 100



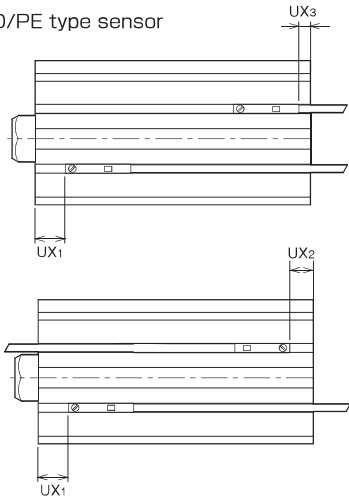
Dimensional Table

Symbol	A	AE	BC	D	E	EC	EE	ER	F	FB	FE	KK
Bore												
ϕ 32	12	51	4	14	$\square$ 45	15	Rc1/8	R30	8	ϕ 7	48	M8×1.25
ϕ 40	12	59	4	14	$\square$ 52	17.5	Rc1/8	R34.5	10	ϕ 7	56	M8×1.25
ϕ 50	15	74	5	18	$\square$ 64	19	Rc1/4	R42.5	10	ϕ 9	70	M10×1.5
ϕ 63	15	87.5	6	18	$\square$ 77	19	Rc1/4	R51	10	ϕ 9	84	M10×1.5
ϕ 80	20	107.5	8	22	$\square$ 98	25	Rc3/8	R65	16	ϕ 12	105	M16×2
ϕ 100	20	125.5	8	27	$\square$ 117	25	Rc3/8	R78	16	ϕ 12	121	M16×2

Symbol	LL		MG	MM	PL	R	TV	TF	UF	WF	WG	Y	ZJ	
Bore	10S-6GD	10S-6RGD											10S-6GD	10S-6RGD
ϕ 32	45	55	14	ϕ 16	8	33	$\square$ 34	58	72	13.5	5.5	18.5	58.5	68.5
ϕ 40	40	50	14	ϕ 16	11.5	36	$\square$ 40	70	84	13.5	3.5	15.5	53.5	63.5
ϕ 50	42	52	19	ϕ 20	12	47	$\square$ 50	86	104	13.5	3.5	19	55.5	65.5
ϕ 63	46	56	19	ϕ 20	14.5	56	$\square$ 60	98	116	13.5	3.5	19.5	59.5	69.5
ϕ 80	61.5	71.5	23	ϕ 25	16.5	70	$\square$ 77	126	150	21.5	5.5	23	83	93
ϕ 100	68	78	23	ϕ 30	21	84	$\square$ 94	143	165	21.5	5.5	25	89.5	99.5

Switch Set

● PD/PE type sensor



Dimensional Table (PD type/reed sensor)
Double acting single rod

Bore	φ20	φ25	φ32	φ40	φ50	φ63	φ80	φ100
Symbol								
UX1	12.2	11.8	20.5	16.2	17.7	18.7	27.5	28
UX2	1.8	3.2	0	2.8	3.3	6.3	8	14
UX3	3.8	5.2	0.5	4.8	5.3	8.3	10	16

Double acting double rod

Bore	φ20	φ25	φ32	φ40	φ50	φ63	φ80	φ100
Symbol								
UX1	12.2	11.8	20.5	16.2	17.7	18.7	27.5	28
UX2	6.8	8.2	8.5	7.8	8.3	11.3	18	24
UX3	8.8	10.2	10.5	9.8	10.3	13.3	20	26

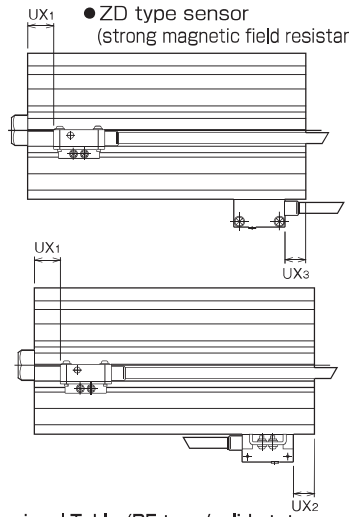
Dimensional Table (PD type/solid state sensor)
Double acting single rod

Bore	φ20	φ25	φ32	φ40	φ50	φ63	φ80	φ100
Symbol								
UX1	18.2	17.8	26.5	22.2	23.7	24.7	33.5	34
UX2	7.8	9.2	4.5	8.8	9.3	12.3	14	20
UX3	-2.2	-0.8	-5.5	-1.2	-0.7	2.3	4	10

Double acting double rod

Bore	φ20	φ25	φ32	φ40	φ50	φ63	φ80	φ100
Symbol								
UX1	18.2	17.8	26.5	22.2	23.7	24.7	33.5	34
UX2	12.8	14.2	14.5	13.8	14.3	17.3	24	30
UX3	2.8	4.2	4.5	3.8	4.3	7.3	14	20

● ZD type sensor
(strong magnetic field resistance)



Dimensional Table (PE type/solid state sensor)
Double acting single rod

Bore	φ20	φ25	φ32	φ40	φ50	φ63	φ80	φ100
Symbol								
UX1	17.2	16.8	25.5	21.2	22.7	23.7	32.5	33
UX2	6.8	8.2	3.5	7.8	8.3	11.3	13	19
UX3	7.8	9.2	4.5	8.8	9.3	12.3	14	20

Double acting double rod

Bore	φ20	φ25	φ32	φ40	φ50	φ63	φ80	φ100
Symbol								
UX1	17.2	16.8	25.5	21.2	22.7	23.7	32.5	33
UX2	11.8	13.2	13.5	12.8	13.3	16.3	23	29
UX3	12.8	14.2	14.5	13.8	14.3	17.3	24	30

Dimensional Table
(ZD type/solid state sensor/strong magnetic field resistant)
Double acting single rod

Bore	φ32	φ40	φ50	φ63	φ80	φ100
Symbol						
UX1	26.5	22.2	23.7	24.7	33.5	34
UX2	4.5	8.8	9.3	12.3	14	20
UX3	-	-	-	-3.7	-2	4

Double acting double rod

Bore	φ32	φ40	φ50	φ63	φ80	φ100
Symbol						
UX1	26.5	22.2	23.7	24.7	33.5	34
UX2	14.5	13.8	14.3	17.3	24	30
UX3	-1.5	-2.2	-1.7	1.3	8	14

Operating Range and Hysteresis

Bore	PD type (reed sensor)		PD/PE type (solid state sensor)	
	Operating range	Hysteresis	Operating range	Hysteresis
φ20	10 to 13	2 or less	3.5 to 7	1 or less
φ25	10.5 to 14.5		3.5 to 7	
φ32	8.5 to 10.5		3.5 to 7	
φ40	9.5 to 12.5	1 or less	3.5 to 7.5	0.5 or less
φ50	12 to 15		4.5 to 7.5	
φ63	12 to 16		5 to 7.5	
φ80	13 to 16		5.5 to 8.5	
φ100	13 to 16		5.5 to 8.5	

Sensor Mountable Minimum Stroke (PD/PE type)

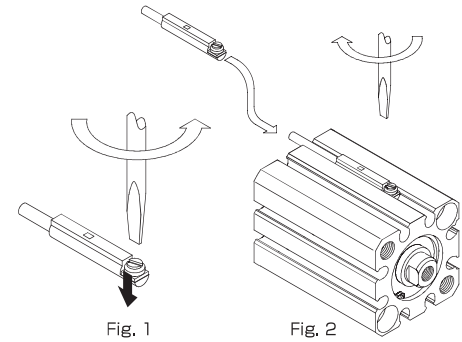
Bore	Mounting of 2 sensors	Mounting of 1 sensor
	Mounting in 2 grooves	
φ 20 to φ 100	10 Note)	10

Note) It is possible to mount 2 sensors at a stroke of 5 mm. However, note that an overlap may occur.

Setting method of sensor detecting position

● PD/PE type sensor

1. Turn the sensor fixing screw to bring it into contact with the nut.
(The sensor fixing screw has left-hand threads. Turn it counterclockwise as shown in Fig. 1.)
2. Insert the sensor in the sensor mounting groove in the cylinder body from the cap or rod side, and slide it.
3. Secure the sensor at the optimum setting position.
(Turn the sensor fixing screw clockwise as shown in Fig. 2, and the sensor fixing screw will be in contact with the sensor mounting groove in the cylinder body to secure the sensor.)
The tightening torque must be 0.1 to 0.2 N·m.
4. If the sensor has an indicating lamp, the lamp will light up when the sensor is turned on.



Operating Range and Hysteresis (strong magnetic field resistant sensor)

Bore	ZD type (solid state sensor)	
	Operating range	Hysteresis
φ32	3.5 to 5.5 (1.5 to 2.5)	0.5 or less
φ40	3.5 to 6 (1.5 to 3.5)	
φ50	3.5 to 6 (2 to 4)	
φ63	3.5 to 6.5 (2.5 to 4.5)	
φ80	4.5 to 6.5 (2.5 to 4.5)	
φ100	4.5 to 6.5 (2.5 to 4.5)	

Note) Parenthesized are the optimum adjustment ranges (the green lamp is on).

Sensor Mountable Minimum Stroke (ZD type)

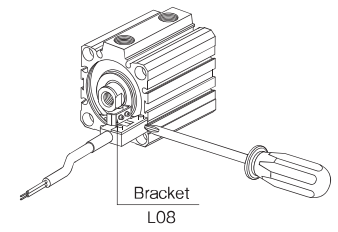
Bore	Mounting of 2 sensors	Mounting of 1 sensor
	Mounting in 2 grooves	
ϕ 32 to ϕ 100	10 Note)	5

Note) The value shown in the above table applies in the case where part of the cord that cannot be folded is out of the cylinder body for reasons of the cord bending radius. For the minimum stroke in such a state that the cord is not out of the cylinder body, see the following table.

Bore	Cord protruding direction	
	Cap cover side	Rod cover side
φ32	55	50
φ40	55	45
φ50	55	45
φ63	50	45
φ80	45	40
φ100	40	35

● ZD type sensor (strong magnetic field resistance)

1. Loosen the sensor fixing screw.
2. Insert the sensor in the sensor mounting groove in the cylinder body from the cap or rod side, and slide it.
3. Secure the sensor at the optimum setting position, and tighten the sensor fixing screw. The tightening torque must be 0.1 to 0.2 N·m.
4. If the sensor has an indicating lamp, the lamp will light up when the sensor is turned on.



Custom Made Specifications

Specifications for Single Acting Type Cylinders

Series variations	Single acting type (spring return)		Single acting type (spring-extended)
Type	Standard type	Switch Set	Standard type
Series	10S-6GSR	10S-6RGSR	10S-6GSH
Cylinder bore (mm)	φ 20 ・ φ 25 ・ φ 32 ・ φ 40 ・ φ 50		
Working fluid	Air		
Lubrication	Unnecessary (To lubricate, use additive-free turbine oil Class 1 equivalent to ISO VG32.)		
Working pressure range	φ20, φ25: 0.18 to 1.0 MPa φ32 to φ50: 0.12 to 1.0 MPa		
Working speed range	φ20 to φ40: 100 to 500 mm/s φ50: 100 to 300 mm/s		
Proof test pressure	1.5 MPa		
Working temperature range	Standard type: —10 to +70°C(No freezing) Switch Set: 0 to +60°C(No freezing)		
Structure of cushioning ^{Note 1)}	With cushion pads		
Allowable rotating angle	φ 20 ・ φ 25: ±1.5° φ 32 ・ φ 40: ±1° φ 50: ±0.8°		
Allowable torque ^{Note 2)}	φ 20 ・ φ 25: 0.5N ・ m φ 32 ・ φ 40: 1.0N ・ m φ 50: 3.4N ・ m		
Tolerance for thread	JIS 6H/6g		
Tolerance of stroke	$\begin{smallmatrix} +1.0 \\ 0 \end{smallmatrix}$ mm		
Mounting style ^{Note 3)}	SD, ST, LA, LB, FA, FB, CA, CB		
Rod end threads	Female thread, male thread		
Accessory	Bracket for CB(φ32 to φ50)		
Rod end attachments	Rod eye (T-end), rod eye with spherical bearing (S-end), rod clevis (Y-end), floating joint (F-end)		

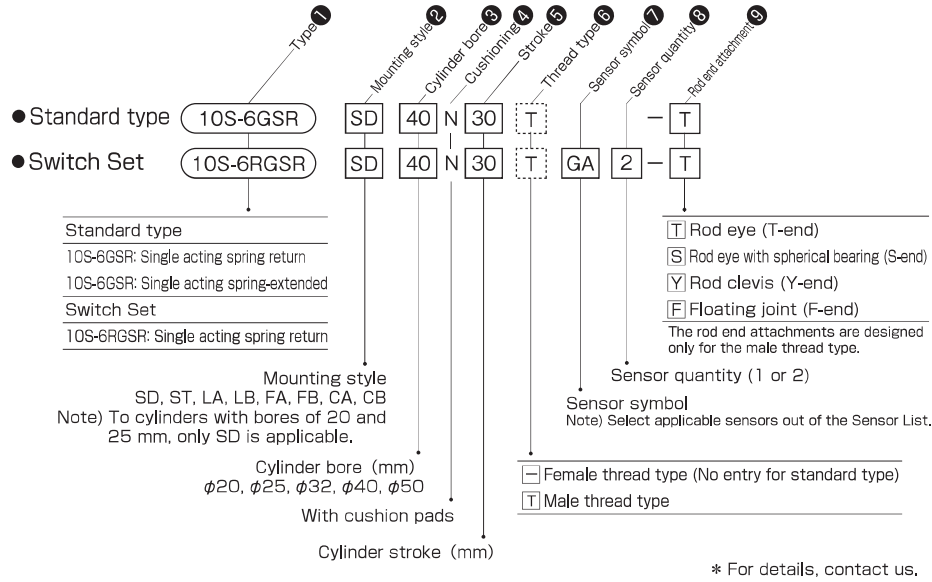
Note 1) The rod side of the spring return type and the cap side of the spring-extended type are not provided with cushion pads.
Note 2) The allowable torque is applicable only when the cylinder is installed. When using the cylinder, do not apply a rotating torque to the piston rod.
Note 3) To cylinders with bores of 20 and 25 mm, only SD style is applicable.

Table of Strokes of Custom Made Cylinders

		Stroke(mm)									
Series	Bore	5	10	15	20	25	30	35	40	45	50
		●	●	●	●	●	●	—	—	—	—
10S-6GSR 10S-6RGSR	φ20	●	●	●	●	●	●	—	—	—	—
	φ25	●	●	●	●	●	●	—	—	—	—
	φ32	●	●	●	●	●	●	—	—	—	—
	φ40	●	●	●	●	●	●	●	●	●	●
10S-6GSH	φ50	—	●	●	●	●	●	●	●	●	●
	φ20	●	●	—	—	—	—	—	—	—	—
	φ25	●	●	—	—	—	—	—	—	—	—
	φ32	●	●	—	—	—	—	—	—	—	—
	φ40	●	●	—	—	—	—	—	—	—	—
	φ50	—	●	—	●	—	—	—	—	—	—

How to order

Single acting type cylinders



Sensor List

Type	Sensor symbol	Load voltage range	Load current range	Protective circuit	Indicating lamp	Wiring method	Cord length	Classification
Reed sensor	GA PD12L1	24 V DC 110 V AC	DC: 2.5 to 40mA AC: 2.5 to 20mA	None	None	0.2 mm ² , 2-core, outer dia. φ2.6 mm, rear wiring	1 m	General purpose
	GB PD12L3						3 m	
	GC PD11L1		DC: 5 to 40mA AC: 5 to 20mA		LED (Lights when sensing)	0.2 mm ² , 2-core, outer dia. φ2.6 mm, rear wiring	1 m	
	GD PD11L3						3 m	
	GE PD32L1		DC: 2.5 to 40mA AC: 2.5 to 20mA		None	0.2 mm ² , 2-core, outer dia. φ2.6 mm, upper wiring	1 m	
	GF PD32L3						3 m	
	GG PD31L1		DC: 5 to 40mA AC: 5 to 20mA		LED (Lights when sensing)	0.2 mm ² , 2-core, outer dia. φ2.6 mm, upper wiring	1 m	
Solid state sensor	GJ PD14L1	DC10 to 28V	5 to 20mA	Provided	LED (Lights when sensing)	0.2 mm ² , 2-core, outer dia. φ2.6 mm, rear wiring	1 m	General purpose
	GK PD14L3						3 m	
	GL PD13L1	28 V DC or less	0.1 to 40mA	Provided	LED (Lights when sensing)	0.15 mm ² , 3-core, outer dia. φ2.6 mm, rear wiring	1 m	
	GM PD13L3						3 m	
	GN PE34L1	DC10 to 28V	5 to 20mA	Provided	LED (Lights when sensing)	0.2 mm ² , 2-core, outer dia. φ2.6 mm, upper wiring	1 m	
	GP PE34L3						3 m	
	GR PE33L1	28 V DC or less	0.1 to 40mA	Provided	LED (Lights when sensing)	0.15 mm ² , 3-core, outer dia. φ2.6 mm, upper wiring	1 m	
	GS PE33L3						3 m	
	NK ZD136C-T	DC: 10 to 28V	5 to 50mA	Provided	LED (2-LED type in red/green)	0.5 mm ² , 2-core, outer dia. φ6 mm, rear wiring	5 m	
								Strong magnetic field resistance

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.).
●For handling of sensors, be sure to 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.
●ZD136C-T can be mounted to cylinders with bores of 32, 40 and 50 mm. It cannot be mounted to cylinders with bores of 20 and 25 mm.
●For ZE type sensors, see the sensor specifications at the end of this catalog.

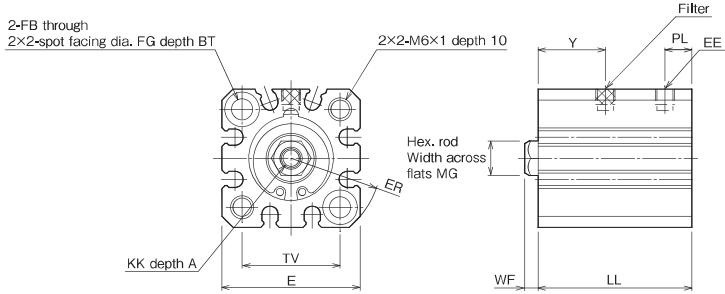
Custom Made Specifications

Single acting/spring return

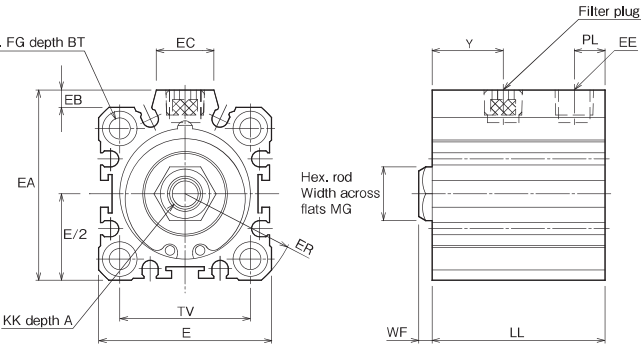
Standard type10S-6GSR SD BoreN Standard stroke

Switch Set10S-6RGSR SD BoreN Standard stroke – Sensor symbol Sensor quantity

●φ20, φ25



●φ32 to φ50



Dimensional Table

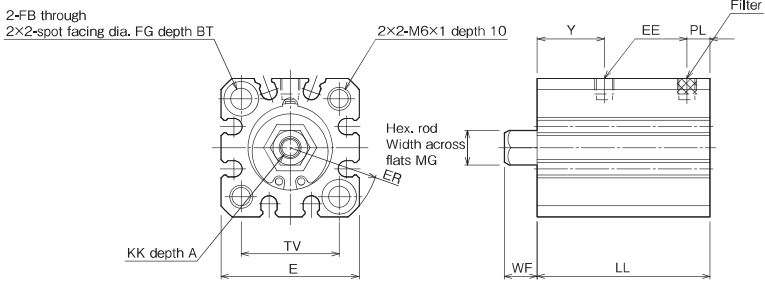
Symbol Stroke Bore	A	BT	E	EA	EB	EC	EE	ER	FB	FG	KK	LL									
												10S-6GSR									
												5	10	15	20	25	30	35	40	45	50
φ20	7	5.4	□36	—	—	—	M5×0.8	R23.5	φ5.5	φ9	M5×0.8	35	40	50	55	60	65	—	—	—	—
φ25	7	5.4	□40	—	—	—	M5×0.8	R26	φ5.5	φ9	M5×0.8	36	41	51	56	61	66	—	—	—	—
φ32	12	5.4	□45	49.5	4.5	15	Rc1/8	R30	φ5.5	φ9	M8×1.25	40	45	60	65	70	75	—	—	—	—
φ40	12	5.4	□52	57	5	17.5	Rc1/8	R34.5	φ5.5	φ9	M8×1.25	40	45	60	65	70	75	80	85	90	95
φ50	15	8	□64	71	7	19	Rc1/4	R42.5	φ6.6	φ11	M10×1.5	—	47	52	57	72	77	82	87	92	97

Symbol Stroke Bore	LL										MG	TV	WF	Y	PL		
	10S-6RGSR														10S-6GSR		
	5	10	15	20	25	30	35	40	45	50					5	10	RGSR
φ 20	45	50	60	65	70	75	—	—	—	—	9	□25.5	3.5	17.5	6	7	7
φ 25	46	51	61	66	71	76	—	—	—	—	9	□28	3.5	18.5	6	7	7
φ 32	50	55	70	75	80	85	—	—	—	—	14	□34	3.5	18.5	8	7	8
φ 40	50	55	70	75	80	85	90	95	100	105	14	□40	3.5	15.5	11.5		11.5
φ 50	—	57	62	67	82	87	92	97	102	107	19	□50	3.5	19	12		12

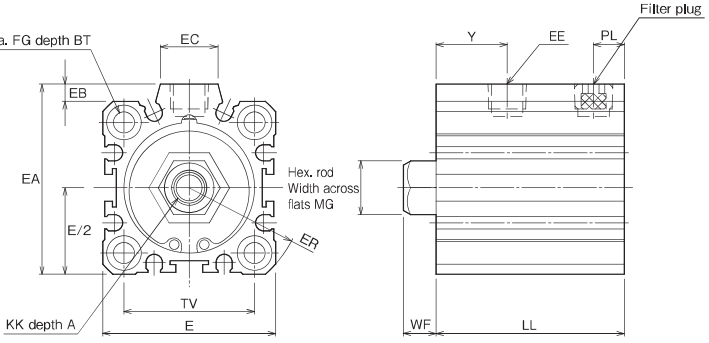
Single acting/spring-extended

Standard type10S-6GSH SD BoreN Standard stroke

●φ20, φ25



●φ32 to φ50



Dimensional Table

Symbol Bore	A	BT	E	EA	EB	EC	EE	ER	FB	FG	KK	LL			MG	TV	WF		
												5	10	20			5	10	20
φ 20	7	5.4	□36	—	—	—	M5×0.8	R23.5	φ 5.5	φ 9	M5×0.8	45	50	—	9	□25.5	8.5	13.5	—
φ 25	7	5.4	□40	—	—	—	M5×0.8	R26	φ 5.5	φ 9	M5×0.8	46	51	—	9	□28	8.5	13.5	—
φ 32	12	5.4	□45	49.5	4.5	15	Rc1/8	R30	φ 5.5	φ 9	M8×1.25	55	60	—	14	□34	8.5	13.5	—
φ 40	12	5.4	□52	57	5	17.5	Rc1/8	R34.5	φ 5.5	φ 9	M8×1.25	50	55	—	14	□40	8.5	13.5	—
φ 50	15	8	□64	71	7	19	Rc1/4	R42.5	φ 6.6	φ 11	M10×1.5	—	57	67	19	□50	—	13.5	23.5

Symbol Bore	Y	PL		
		5	10	20
φ 20	17.5	6	7	—
φ 25	18.5	6	7	—
φ 32	18.5	8		—
φ 40	15.5	11.5		—
φ 50	19	—	12	