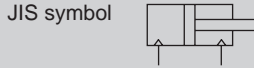


Compact cylinder, double acting/single rod/high load

# SSD2-K Series

- Bore size:  $\phi 12/\phi 16/\phi 20/\phi 25/\phi 32$   
 $\phi 40/\phi 50/\phi 63/\phi 80/\phi 100$



## Specifications

Item	SSD2-K SSD2-KL (with switch)											
	mm		$\phi 12$	$\phi 16$	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$	$\phi 50$	$\phi 63$	$\phi 80$	$\phi 100$
Bore size	mm		$\phi 12$	$\phi 16$	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$	$\phi 50$	$\phi 63$	$\phi 80$	$\phi 100$
Actuation	Double acting											
Working fluid	Compressed air											
Max. working pressure	MPa	1.0 ( $\approx 150$ psi, 10 bar)										
Min. working pressure	MPa	0.1 ( $\approx 15$ psi, 1 bar)							0.05 ( $\approx 7.3$ psi, 0.5 bar)			
Proof pressure	MPa	1.6 ( $\approx 230$ psi, 16 bar)										
Ambient temperature	$^{\circ}\text{C}$	-10 ( $14^{\circ}\text{F}$ ) to 60 ( $140^{\circ}\text{F}$ ) (no freezing)										
Port size		M5				Rc1/8		Rc1/4		Rc3/8		
Stroke tolerance	mm	+2.0 0										
Working piston speed	mm/s	50 to 500							50 to 300			
Cushion		Rubber cushion										
Lubrication		Not required (use turbine oil ISO VG32 if necessary for lubrication)										
Allowable absorbed energy	J	0.04	0.09	0.16	0.16	0.40	0.63	0.98	1.56	2.51	3.92	

## Stroke

Bore size (mm)	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)
$\phi 12$	5/10/15/20	30	1
$\phi 16$	25/30		
$\phi 20$	5/10/15/20/25	50	
$\phi 25$	30/35/40/45/50		
$\phi 32$	5/10/15/20/25/30/	100	
$\phi 40$	35/40/45/50/75/100		
$\phi 50$	10/15/20/25		
$\phi 63$	30/35/40/45/50		
$\phi 80$	75/100		
$\phi 100$			

\*1 : When using the type with switch, refer to the table of the min. stroke with switch.  
\*2: Refer to page 789 for the min. stroke with mounting bracket LB.

## Min. stroke with switch (1 or 2 switches)

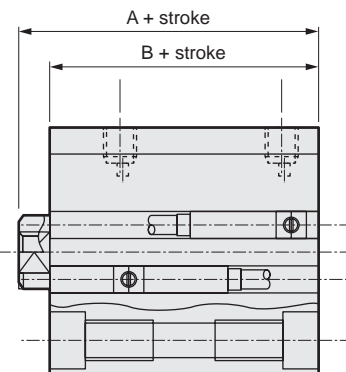
Bore size (mm)	T0H/V / T5H/V	T2H/V / T3H/V
$\phi 12$	10(5)	5
$\phi 16$		
$\phi 20$		
$\phi 25$		
$\phi 32$		
$\phi 40$		
$\phi 50$		
$\phi 63$		
$\phi 80$		
$\phi 100$		

\*1: Less than 10 mm with the 2-color LED, off-delay, AC magnetic field proof, T1\* or T8\* switch is not available.  
\*2: Values in ( ) are for the type with 1 on rod side.

## Custom stroke

### ● SSD2-K Series

Item	Standard products		Optional products	
	Standard stroke body with spacer		Dedicated unit (-S)	
Model No.	Refer to How to order.		Add "-S" option code to the model No.	
Description	A spacer is added to the standard stroke body to adjust the stroke in 1 mm increments.		Dedicated units of the required stroke are available.	
Stroke range	Bore size	Stroke range	Bore size	Stroke range
	12/16	1 to 29	12, 16	6 to 29
	20 to 25	1 to 49	20, 25	6 to 49
	32 to 100	1 to 99	32 to 100	11 to 99
Example of model No.	Model No.: SSD2-K-32-41 A +4 mm spacer is added to the SSD2-K-32-45 standard cylinder to create 41 mm stroke. B + stroke is 88 mm.		Model No.: SSD2-K-32-41-S Dedicated units for 41 mm stroke are available. B + stroke is 74mm.	



### Switch specifications (F-switch)

● 1-color/2-color LED

Item	2-wire proximity		3-wire proximity		2-wire proximity		3-wire proximity		
	F2S		F3S		F2H/F2V	F2YH/ F2YV	F3H/F3V	F3PH/F3PV (made to order)	F3YH/F3YV
Applications	Dedicated for programmable controller		For programmable controller, relay		Dedicated for programmable controller		For programmable controller, relay		
Output method	-		NPN output		-		NPN output	PNP output	NPN output
Power supply voltage	-		10 to 28 VDC		-		10 to 28 VDC	4.5 to 28 VDC	10 to 28 VDC
Load voltage	10 to 30 VDC		30 VDC or less		10 to 30 VDC	24 VDC ±10%	30 VDC or less		
Load current	5 to 20 mA		50 mA or less		5 to 20 mA		50 mA or less		
Indicator	LED (Lit when ON)				Yellow LED (Lit when ON)	Red/green LED (Lit when ON)	Yellow LED (Lit when ON)		Red/green LED (Lit when ON)
Leakage current	1 mA or less		10 µA or less		1 mA or less		10 µA or less		
Weight	g		1 m:10 3 m:29						

### Switch specifications (T-switch)

● 1-color/2-color LED/for AC magnetic field proof

Item	2-wire proximity		2-wire proximity				3-wire proximity				2-wire reed				2-wire proximity		
	T1H/T1V	T2H/T2V/ T2JH/T2JV	T2YH/ T2YV	T2WH/ T2WV	T3H/T3V	T3PH/ T3PV	T3YH/ T3YV	T3WH/ T3WV	T0H/T0V	T5H/T5V	T8H/T8V		T2YD(*4) T2YDT				
Applications	For programmable controller, relay, compact solenoid valve	Dedicated for programmable controller				For programmable controller, relay				For programmable controller, relay	For programmable controller, relay, IC circuit (no indicator lamp), serial connection		For programmable controller, relay	For programmable controller			
Output method	-		NPN output				PNP output				-						
Pwr. supp. V.	-		10 to 28 VDC				-				-						
Load voltage	85 to 265 VAC	10 to 30 VDC	24 VDC ±10%		30 VDC or less				12/24 VDC	100/110 VAC	5/12/24 VDC	100/110 VAC	12/24 VDC	110 VAC	220 VAC	24 VDC ±10%	
Load current	5 to 100 mA	5 to 20 mA (*3)				100 mA or less		50 mA or less		5 to 50 mA	7 to 20 mA	50 mA or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 mA	5 to 20 mA
Indicator	LED (Lit when ON)	LED (Lit when ON)	Red/green LED (Lit when ON)	Red/green LED (Lit when ON)	LED (Lit when ON)	Yellow LED (Lit when ON)	Red/green LED (Lit when ON)	Red/green LED (Lit when ON)	LED (Lit when ON)	No indicator lamp	LED (Lit when ON)		Red/green LED (Lit when ON)				
Leakage current	≤ 1 mA at 100 VAC, ≤ 2 mA at 200 VAC	1 mA or less				10 µA or less				0 mA				1 mA or less			
Weight g	1 m:33 3 m:87 5 m:142	1 m:18 3 m:49 5 m:80	1 m:33 3 m:87 5 m:142	1 m:18 3 m:49 5 m:80	1 m:18 3 m:49 5 m:80	1 m:33 3 m:87 5 m:142	1 m:18 3 m:49 5 m:80	1 m:18 3 m:49 5 m:80	1 m:18 3 m:49 5 m:80	1 m:33 3 m:87 5 m:142		1 m:61 3 m:166 5 m:272					

\*1: Refer to Ending Page 1 for detailed switch specifications and dimensions.

\*2: Switches other than the above models, such as switches with connectors, are also available. Refer to Ending Page 1.

\*3: The max. load current is 20 mA at 25°C. The current is lower than 20 mA if the operating ambient temperature around the switch is higher than 25°C. (5 to 10 mA at 60°C)

\*4: Switch for AC magnetic field (T2YD/T2YDT) cannot be used in DC magnetic field.

\*5: The F-switch uses a bend-resistant lead wire.

### Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa											
		0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø12	Push	-	11.3	17.0	22.6	33.9	45.2	56.5	67.9	79.2	90.5	1.02x10 <sup>2</sup>	1.13x10 <sup>2</sup>
	Pull	-	8.48	12.7	17.0	25.4	33.9	42.4	50.9	59.4	67.9	76.3	84.8
ø16	Push	-	20.1	30.2	40.2	60.3	80.4	1.01x10 <sup>2</sup>	1.21x10 <sup>2</sup>	1.41x10 <sup>2</sup>	1.61x10 <sup>2</sup>	1.81x10 <sup>2</sup>	2.01x10 <sup>2</sup>
	Pull	-	15.1	22.6	30.2	45.2	60.3	75.4	90.5	1.06x10 <sup>2</sup>	1.21x10 <sup>2</sup>	1.36x10 <sup>2</sup>	1.51x10 <sup>2</sup>
ø20	Push	-	31.4	47.1	62.8	94.2	1.26x10 <sup>2</sup>	1.57x10 <sup>2</sup>	1.88x10 <sup>2</sup>	2.20x10 <sup>2</sup>	2.51x10 <sup>2</sup>	2.83x10 <sup>2</sup>	3.14x10 <sup>2</sup>
	Pull	-	23.6	35.3	47.1	70.7	94.2	1.18x10 <sup>2</sup>	1.41x10 <sup>2</sup>	1.65x10 <sup>2</sup>	1.88x10 <sup>2</sup>	2.12x10 <sup>2</sup>	2.36x10 <sup>2</sup>
ø25	Push	-	49.1	73.6	98.2	1.47x10 <sup>2</sup>	1.96x10 <sup>2</sup>	2.45x10 <sup>2</sup>	2.95x10 <sup>2</sup>	3.44x10 <sup>2</sup>	3.93x10 <sup>2</sup>	4.42x10 <sup>2</sup>	4.91x10 <sup>2</sup>
	Pull	-	37.8	56.7	75.6	1.13x10 <sup>2</sup>	1.51x10 <sup>2</sup>	1.89x10 <sup>2</sup>	2.27x10 <sup>2</sup>	2.64x10 <sup>2</sup>	3.02x10 <sup>2</sup>	3.40x10 <sup>2</sup>	3.78x10 <sup>2</sup>
ø32	Push	-	80.4	1.21x10 <sup>2</sup>	1.61x10 <sup>2</sup>	2.41x10 <sup>2</sup>	3.22x10 <sup>2</sup>	4.02x10 <sup>2</sup>	4.83x10 <sup>2</sup>	5.63x10 <sup>2</sup>	6.43x10 <sup>2</sup>	7.24x10 <sup>2</sup>	8.04x10 <sup>2</sup>
	Pull	-	60.3	90.5	1.21x10 <sup>2</sup>	1.81x10 <sup>2</sup>	2.41x10 <sup>2</sup>	3.02x10 <sup>2</sup>	3.62x10 <sup>2</sup>	4.22x10 <sup>2</sup>	4.83x10 <sup>2</sup>	5.43x10 <sup>2</sup>	6.03x10 <sup>2</sup>
ø40	Push	-	1.26x10 <sup>2</sup>	1.88x10 <sup>2</sup>	2.51x10 <sup>2</sup>	3.77x10 <sup>2</sup>	5.03x10 <sup>2</sup>	6.28x10 <sup>2</sup>	7.54x10 <sup>2</sup>	8.80x10 <sup>2</sup>	1.01x10 <sup>3</sup>	1.13x10 <sup>3</sup>	1.26x10 <sup>3</sup>
	Pull	-	1.06x10 <sup>2</sup>	1.58x10 <sup>2</sup>	2.11x10 <sup>2</sup>	3.17x10 <sup>2</sup>	4.22x10 <sup>2</sup>	5.28x10 <sup>2</sup>	6.33x10 <sup>2</sup>	7.39x10 <sup>2</sup>	8.44x10 <sup>2</sup>	9.50x10 <sup>2</sup>	1.06x10 <sup>3</sup>
ø50	Push	-	1.96x10 <sup>2</sup>	2.95x10 <sup>2</sup>	3.93x10 <sup>2</sup>	5.89x10 <sup>2</sup>	7.85x10 <sup>2</sup>	9.82x10 <sup>2</sup>	1.18x10 <sup>3</sup>	1.37x10 <sup>3</sup>	1.57x10 <sup>3</sup>	1.77x10 <sup>3</sup>	1.96x10 <sup>3</sup>
	Pull	-	1.65x10 <sup>2</sup>	2.47x10 <sup>2</sup>	3.30x10 <sup>2</sup>	4.95x10 <sup>2</sup>	6.60x10 <sup>2</sup>	8.25x10 <sup>2</sup>	9.90x10 <sup>2</sup>	1.15x10 <sup>3</sup>	1.32x10 <sup>3</sup>	1.48x10 <sup>3</sup>	1.65x10 <sup>3</sup>
ø63	Push	1.56x10 <sup>2</sup>	3.12x10 <sup>2</sup>	4.68x10 <sup>2</sup>	6.23x10 <sup>2</sup>	9.35x10 <sup>2</sup>	1.25x10 <sup>3</sup>	1.56x10 <sup>3</sup>	1.87x10 <sup>3</sup>	2.18x10 <sup>3</sup>	2.49x10 <sup>3</sup>	2.81x10 <sup>3</sup>	3.12x10 <sup>3</sup>
	Pull	1.40x10 <sup>2</sup>	2.80x10 <sup>2</sup>	4.20x10 <sup>2</sup>	5.61x10 <sup>2</sup>	8.41x10 <sup>2</sup>	1.12x10 <sup>3</sup>	1.40x10 <sup>3</sup>	1.68x10 <sup>3</sup>	1.96x10 <sup>3</sup>	2.24x10 <sup>3</sup>	2.52x10 <sup>3</sup>	2.80x10 <sup>3</sup>
ø80	Push	2.51x10 <sup>2</sup>	5.03x10 <sup>2</sup>	7.54x10 <sup>2</sup>	1.01x10 <sup>3</sup>	1.51x10 <sup>3</sup>	2.01x10 <sup>3</sup>	2.51x10 <sup>3</sup>	3.02x10 <sup>3</sup>	3.52x10 <sup>3</sup>	4.02x10 <sup>3</sup>	4.52x10 <sup>3</sup>	5.03x10 <sup>3</sup>
	Pull	2.27x10 <sup>2</sup>	4.54x10 <sup>2</sup>	6.80x10 <sup>2</sup>	9.07x10 <sup>2</sup>	1.36x10 <sup>3</sup>	1.81x10 <sup>3</sup>	2.27x10 <sup>3</sup>	2.72x10 <sup>3</sup>	3.17x10 <sup>3</sup>	3.63x10 <sup>3</sup>	4.08x10 <sup>3</sup>	4.54x10 <sup>3</sup>
ø100	Push	3.93x10 <sup>2</sup>	7.85x10 <sup>2</sup>	1.18x10 <sup>3</sup>	1.57x10 <sup>3</sup>	2.36x10 <sup>3</sup>	3.14x10 <sup>3</sup>	3.93x10 <sup>3</sup>	4.71x10 <sup>3</sup>	5.50x10 <sup>3</sup>	6.28x10 <sup>3</sup>	7.07x10 <sup>3</sup>	7.85x10 <sup>3</sup>
	Pull	3.57x10 <sup>2</sup>	7.15x10 <sup>2</sup>	1.07x10 <sup>3</sup>	1.43x10 <sup>3</sup>	2.14x10 <sup>3</sup>	2.86x10 <sup>3</sup>	3.57x10 <sup>3</sup>	4.29x10 <sup>3</sup>	5.00x10 <sup>3</sup>	5.72x10 <sup>3</sup>	6.43x10 <sup>3</sup>	7.15x10 <sup>3</sup>

# SSD2-K Series

## How to order

No switch (without magnet for switch)



With switch (built-in magnet for switch)



**A** Bore size

**B** Port thread

**C** Stroke

**D** Switch model No.

- \*1
- \*2
- \*3
- \*8
- \*9

**E** Switch quantity

**F** Option

\*4

**G** Mounting bracket

\*5 \*6

### ⚠ Precautions for model No. selection

- \*1 : The T2YD\* switch cannot be mounted on the  $\phi 12$  and  $\phi 16$  bore sizes.
- \*2 : The T8\* switch cannot be mounted on  $\phi 12$  and  $\phi 16$ .
- \*3 : The F-switch can only be mounted on the piping port surface of bore sizes  $\phi 20$  and  $\phi 25$ .
- \*4 : Piston rod of  $\phi 12$  to  $\phi 25$  is stainless steel as standard. C-snap ring is stainless steel instead of steel. The rod end male thread nut is stainless steel.
- \*5 : The mounting bracket is included at shipment.
- \*6 : The projection dimension of piston rod WF when LB or FA is selected is different from that of the standard. Refer to the dimensions on pages 783, 785, 787, 789 and 790. The number of the specified protruding dimension will be added at the end of the model No. printed on the metal plate on the body.
- \*7 : "I" and "Y" cannot be selected together.
- \*8 : The F-switch with L type lead wire on  $\phi 20$  models cannot be selected on strokes 10 mm or under.
- \*9 : Switches are shipped with the product. Contact CKD if assembling before shipment is necessary.
- \*10 : Refer to pages 750 and 751 for combinations of variations/options.
- \*11 : F-switch cannot be selected.

### [Example of model No.]

#### SSD2-KL-12-10-T0H-R-N

Model: Compact cylinder, high load

- A** Bore size :  $\phi 12$  mm
- B** Port thread : Rc thread
- C** Stroke : 10mm
- D** Switch model No. : Reed T0H switch  
· Lead wire 1 m

- E** Switch quantity : 1 on rod side
- F** Option : Rod end male thread

**H** Accessory

\*7

Code	Description
<b>A Bore size (mm)</b>	
12	$\phi 12$
16	$\phi 16$
20	$\phi 20$
25	$\phi 25$
32	$\phi 32$
40	$\phi 40$
50	$\phi 50$
63	$\phi 63$
80	$\phi 80$
100	$\phi 100$

<b>B Port thread</b>	
Blank	Rc thread
NN	NPT thread ( $\phi 32$ and over) (made-to-order product)
GN	G thread ( $\phi 32$ and over) (made-to-order product)

<b>C Stroke (mm)</b>
Refer to the stroke table on the following page.

<b>D Switch model No.</b>		Lead wire	Voltage	Indicator	Lead wire	Bore size														
Lead wire	Lead wire					12	16	20	25	32	40	50	63	80	100					
Straight	L-shaped	Contact	AC	DC	Proximity	1-color LED	2-wire			●	●									
							3-wire			●	●									
F2H*	F2V*	Proximity	●	●	1-color LED (PNP output) (custom)	3-wire	2-wire			●	●									
							3-wire			●	●									
F3PH*	F3PV*	Proximity	●	●	2-color LED	2-wire	2-wire			●	●									
							3-wire			●	●									
F2YH*	F2YV*	Reed	●	●	1-color LED	2-wire	2-wire	●	●	●	●	●	●	●	●	●	●	●	●	●
							3-wire	●	●	●	●	●	●	●	●	●	●	●	●	●
T0H*	T0V*	Reed	●	●	No indicator lamp	2-wire	2-wire	●	●	●	●	●	●	●	●	●	●	●	●	●
							3-wire	●	●	●	●	●	●	●	●	●	●	●	●	●
T5H*	T5V*	Proximity	●	●	1-color LED	2-wire	2-wire			●	●									
							3-wire			●	●									
T8H*	T8V*	Proximity	●	●	1-color LED (PNP output)	3-wire	2-wire	●	●	●	●	●	●	●	●	●	●	●	●	●
							3-wire	●	●	●	●	●	●	●	●	●	●	●	●	●
T1H*	T1V*	Proximity	●	●	2-color LED	2-wire	2-wire			●	●									
							3-wire			●	●									
T2H*	T2V*	Proximity	●	●	2-color LED	2-wire	2-wire			●	●									
							3-wire			●	●									
T3PH*	T3PV*	Proximity	●	●	AC magnetic field	2-wire	2-wire			●	●									
							3-wire			●	●									
T2WH*	T2WV*	Proximity	●	●	1-color LED off-delay	2-wire	2-wire			●	●									
							3-wire			●	●									

<b>* Lead wire length</b>	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

<b>E Switch quantity</b>	
R	1 on rod side
H	1 on head side
D	2

<b>F Option</b>		Bore size ( $\phi$ )									
Option	Description	12	16	20	25	32	40	50	63	80	100
Blank	Rod end female thread	●	●	●	●	●	●	●	●	●	●
N	Rod end male thread	●	●	●	●	●	●	●	●	●	●
M *4	Piston rod material (stainless steel)	●	●	●	●	●	●	●	●	●	●
P6	Copper and PTFE free	Standard	●	●	●	●	●	●	●	●	●
S	Dedicated unit for custom stroke	●	●	●	●	●	●	●	●	●	●
P4	Specifications for rechargeable battery	●	●	●	●	●	●	●	●	●	●
P40		●	●	●	●	●	●	●	●	●	●

<b>G Mounting bracket</b>	
Blank	Without mounting bracket
LB	Axial foot
CB	Clevis bracket (pin and snap ring included)
FA	Rod side flange
FB	Head side flange

<b>H Accessory (available when rod end male thread "N" is selected)</b>	
I	Rod eye
Y	Rod clevis (pin and snap ring included)

### [Stroke table]

Stroke (mm)	Applicable bore size									
	12	16	20	25	32	40	50	63	80	100
5	●	●	●	●	●	●				
10	●	●	●	●	●	●	●	●	●	●
15	●	●	●	●	●	●	●	●	●	●
20	●	●	●	●	●	●	●	●	●	●
25	●	●	●	●	●	●	●	●	●	●
30	●	●	●	●	●	●	●	●	●	●
35			●	●	●	●	●	●	●	●
40			●	●	●	●	●	●	●	●
45			●	●	●	●	●	●	●	●
50			●	●	●	●	●	●	●	●
75					●	●	●	●	●	●
100					●	●	●	●	●	●

\*1: Less than 5 mm with 1-color LED switch and less than 10 mm with the 2-color LED, off-delay, AC magnetic field proof, T1\* or T8\* switch are not available.

Refer to page 776 for the min. stroke with switch.

\*2: The total length is the same as that of the next longer standard stroke.

\*3: Refer to page 789 for the min. stroke with mounting bracket LB.

### How to order switch

SW - T0H

Switch model No.  
(Item ① on page 778)

### Cylinder weight table (the weight of the switches is when there are 2 cylinder switches.)

(Unit: g)

Stroke (mm)	5		10		15		20		25		30		35		40		45		50		75		100	
	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch
ø12	44	86	53	95	61	103	70	112	78	121	87	129	-	-	-	-	-	-	-	-	-	-	-	-
ø16	59	104	69	114	80	125	91	136	102	147	113	158	-	-	-	-	-	-	-	-	-	-	-	-
ø20	75	150	88	163	101	176	113	188	126	201	138	213	151	226	163	238	176	251	188	263	-	-	-	-
ø25	102	193	118	209	134	225	150	241	165	256	182	273	198	289	214	305	230	321	246	337	-	-	-	-
ø32	167	281	188	302	209	323	231	345	253	367	275	389	297	411	318	432	340	454	361	475	534	583	642	690
ø40	236	379	263	406	290	433	316	459	342	485	369	512	396	539	422	565	449	592	475	618	702	751	834	883
ø50	-	-	425	619	467	661	510	704	553	747	594	788	636	830	678	872	720	914	762	956	1109	1166	1319	1376
ø63	-	-	617	896	672	951	727	1006	782	1061	838	1117	893	1172	948	1227	1003	1282	1058	1337	1548	1612	1823	1887
ø80	-	-	1101	1514	1188	1601	1274	1687	1361	1774	1448	1861	1535	1948	1621	2034	1708	2121	1794	2207	2574	2640	3006	3072
ø100	-	-	1660	2227	1774	2341	1888	2455	2002	2569	2115	2682	2229	2796	2343	2910	2457	3024	2571	3138	3636	3708	4206	4278

### How to order mounting bracket

Bore size (mm)	ø12	ø16	ø20	ø25	ø32	ø40	ø50	ø63	ø80	ø100
Foot (LB)	SSD2-LB-12	SSD2-LB-16	SSD2-LB-20	SSD2-LB-25	SSD2-LB-32	SSD2-LB-40	SSD2-LB-50	SSD2-LB-63	SSD2-LB-80	SSD2-LB-100
Flange (FA/FB)	SSD2-FA-12	SSD2-FA-16	SSD2-FA-20	SSD2-FA-25	SSD2-FA-32	SSD2-FA-40	SSD2-FA-50	SSD2-FA-63	SSD2-FA-80	SSD2-FA-100
Clevis bracket (CB)	SSD2-CB-12	SSD2-CB-16	SSD2-CB-20	SSD2-CB-25	SSD2-CB-32	SSD2-CB-40	SSD2-CB-50	SSD2-CB-63	SSD2-CB-80	SSD2-CB-100

\*1: The foot mounting bracket is provided as 2 pcs./set.

### Specifications for rechargeable battery (catalog No. CC-1226A)

- Design compatible with rechargeable battery manufacturing process

SSD2-K----- P4\*

SCP\*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/  
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/  
MSDG

FC\*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

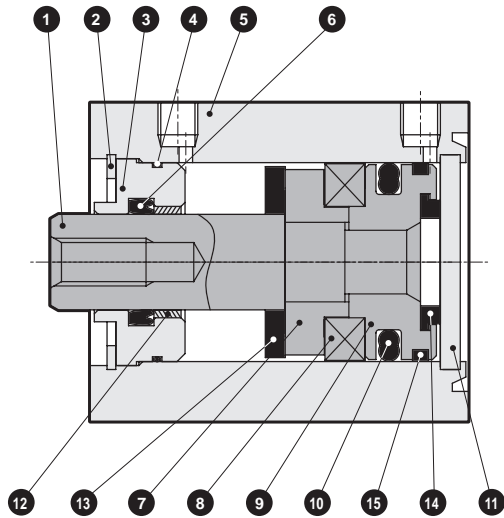
Spd  
Contr

Ending

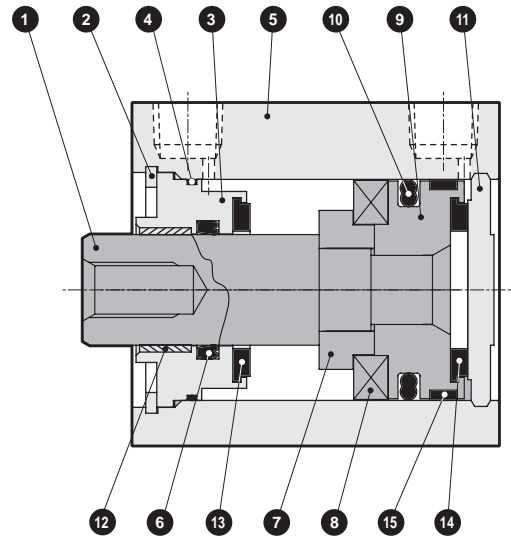
# SSD2-K Series

## Internal structure and parts list

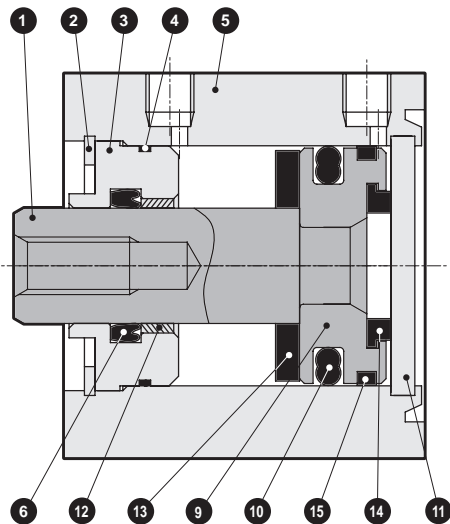
● SSD2-KL-12 to 25 (double acting/single rod/with switch)



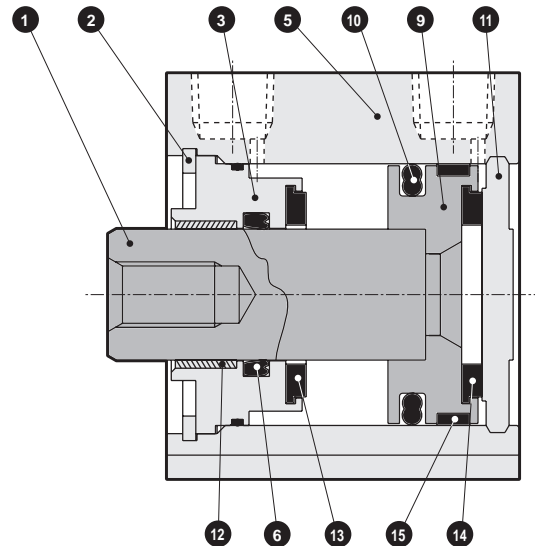
● SSD2-KL-32 (double acting/single rod high load/with switch)



● SSD2-K-12 to 25 (double acting/single rod high load)



● SSD2-K-32 (double acting/single rod high load)



No.	Part name	Material	Remarks
1	Piston rod	ø12 to ø25: Stainless steel ø32: Steel	ø16 to ø32 Industrial chrome plating
2	C-snap ring	Steel	Zinc phosphate
3	Rod metal	Special aluminum	Alumite (*2)
4	Rod metal gasket	Nitrile rubber	
5	Body	Aluminum alloy	Hard alumite
6	Rod packing	Nitrile rubber	
7	Spacer	Aluminum alloy	Chromate
8	Magnet	Plastic	

No.	Part name	Material	Remarks
9	Piston	Aluminum alloy	Chromate
10	Piston packing	Nitrile rubber	
11	Cover	ø12 to ø25: Stainless steel ø32: Aluminum alloy	ø32: Alumite
12	Bush	Oiles drymet	ø20 to ø32 (*1)
13	Cushion rubber (R)	Urethane rubber	
14	Cushion rubber (H)	Urethane rubber	
15	Wear ring	Polyacetal resin	

\*1: Material is steel for copper and PTFE free specifications.

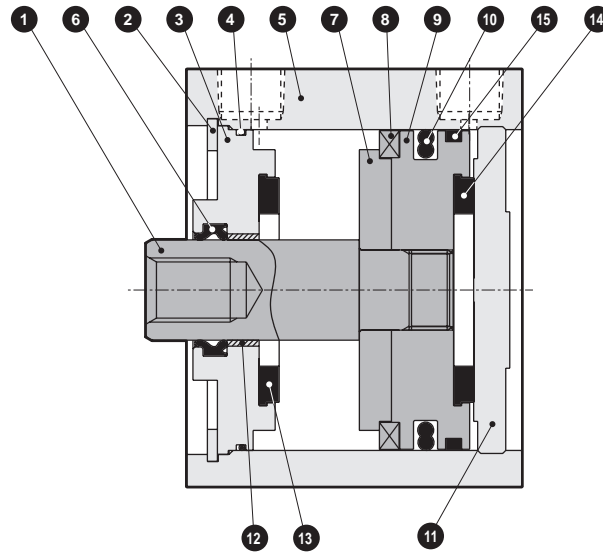
\*2: Chromate-coated for ø32.

## Repair parts list

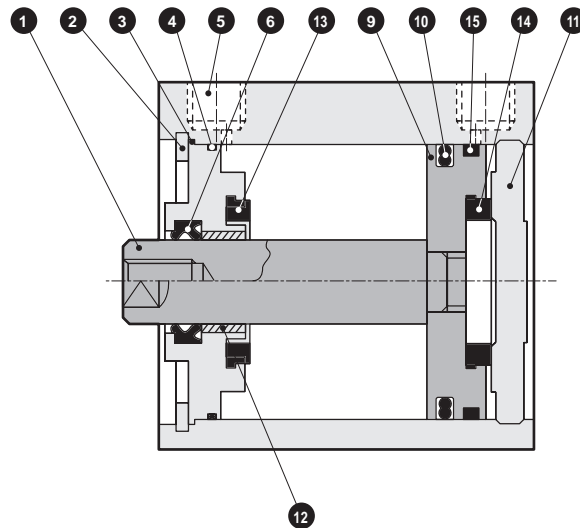
Bore size (mm)	Kit No.	Repair parts No.
ø12	SSD2-K-12K	
ø16	SSD2-K-16K	
ø20	SSD2-K-20K	
ø25	SSD2-K-25K	
ø32	SSD2-K-32K	

### Internal structure and parts list

● SSD2-KL-40 to 100 (double acting/single rod/with switch)



● SSD2-K-40 to 100 (double acting/single rod high load)



No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Piston rod	Steel	Industrial chrome plating	9	Piston	Aluminum alloy	Chromate
2	C-snap ring	Steel	Zinc phosphate	10	Piston packing	Nitrile rubber	
3	Rod metal	Aluminum alloy	Alumite (*2)	11	Cover	Aluminum alloy	Alumite
4	Rod metal gasket	Nitrile rubber		12	Bush	Oiles drymet	*1
5	Body	Aluminum alloy	Hard alumite	13	Cushion rubber (R)	Urethane rubber	
6	Rod packing	Nitrile rubber		14	Cushion rubber (H)	Urethane rubber	
7	Spacer	Aluminum alloy		15	Wear ring	Polyacetal resin	
8	Magnet	Plastic					

\*1: Material is steel for copper and PTFE free specifications.

\*2: Chromate-coated for ø40 and ø50.

### Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø40	SSD2-K-40K	
ø50	SSD2-K-50K	
ø63	SSD2-K-63K	
ø80	SSD2-K-80K	
ø100	SSD2-K-100K	

SCP\*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/  
COVP/N2

**SSD2**

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/  
MSDG

FC\*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

Spd  
Contr

Ending

# SSD2-K Series

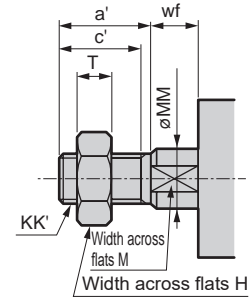
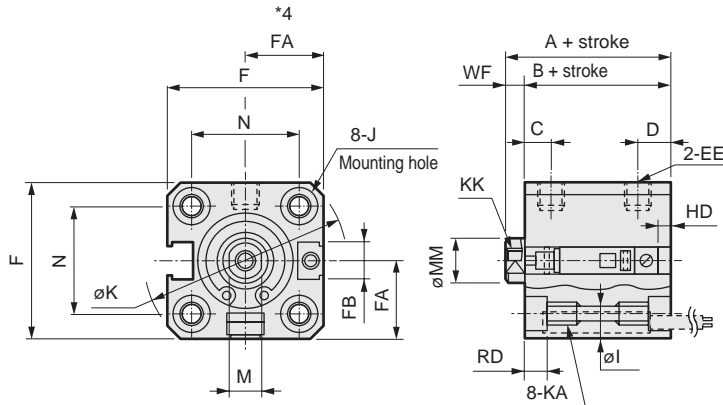
## Dimensions



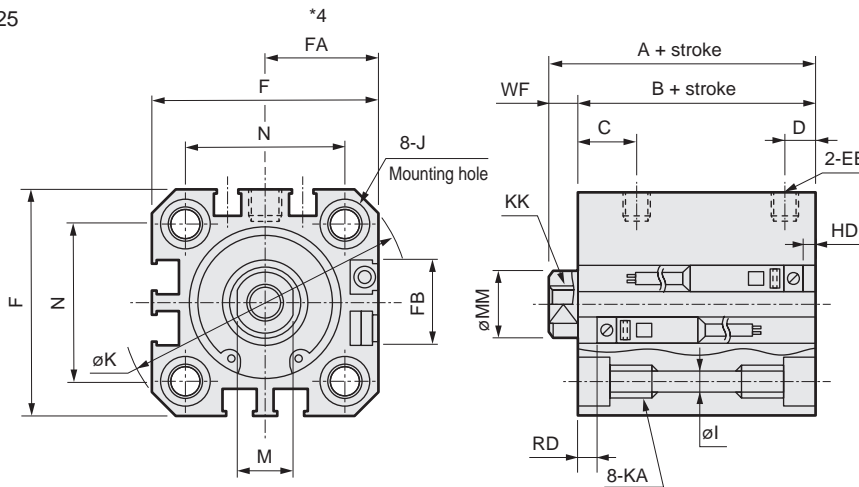
● SSD2-KL-12 to 25 (with switch)

● Rod end male thread

ø12/ø16



ø20/ø25



· Precautions regarding the switch mounting groove

\*1: Only F-switch is available for the ø20 or ø25 piping port surface.

Code	Common dimensions with switch																	
	A <sup>*1</sup>	B <sup>*1</sup>	C	D	EE	F	FA <sup>*3</sup>	FB	I	J	K	KA	KK	M	MM	N	WF	
STK	ø12	30.5	27	5.5	5.5	M5	25	13(16.5)	4.5	3.5	6.5 spot face depth 3.5	32	M4 depth 7	M3 depth 6	5	6	15.5	3.5
	ø16	30.5	27	5.5	5.5	M5	29	15(18.5)	4.5	3.5	6.5 spot face depth 3.5	38	M4 depth 7	M4 depth 8	6	8	20	3.5
SRL3	ø20	39	34.5	8	5.5	M5	36	18.5(22)	12.5	5.5	9 spot face depth 5.5	47	M6 depth 11	M5 depth 7	8	10	25.5	4.5
	ø25	42.5	37.5	11	6	M5	40	20.5(24)	13.5	5.5	9 spot face depth 5.5	51	M6 depth 11	M6 depth 12	10	12	28	5
Switch dimensions	Reed T0H/T0V, T5H/T5V		Proximity T2H/T2V, T3H/T3V		Proximity T2WH/T2WV, T3WH T3WV		Proximity F2H/F2V, F3H/F3V, F2YH/F2YV, F3YH/F3YV		Proximity F2S/F3S									
	Bore size (mm)	HD	RD	HD	RD	HD	RD	HD	RD	HD	RD							
SRG3	ø12	4.5	3.5	4.5	3.5	6.5	5.5											
	ø16	3	5	3	5	5	7											
SRM3	ø20	6.5	9	6.5	9	8.5	11	11	13.5	10	12.5							
	ø25	6	12.5	6	12.5	8	14.5	10.5	17	9.5	16							

\*1 : To calculate A + stroke or B + stroke when using custom stroke, apply the next longer standard stroke (instead of the custom stroke) to the stroke value.

(Example) If the custom stroke is 7 mm, apply the standard stroke of 10 mm.

· For ø16: A + stroke = 40.5 B + stroke = 37

When you have selected "S" (dedicated unit for custom stroke), apply the custom stroke of 7 mm.

· For ø16: A + stroke = 37.5 B + stroke = 34

\*2: Refer to page 1045 for HD and RD dimensions of the 2-color LED, off-delay, AC magnetic field tolerant, T1\* and T8\* switches.

\*3: Refer to page 1045 for protruding dimensions of the 2-color LED, off-delay, AC magnetic field tolerant, T1\* and T8\* switches.

\*4 : Dimensions in ( ) of FA are for the L-shaped lead wire.

\*5: For dimensions of individual accessories, refer to pages 1046 to 1049.

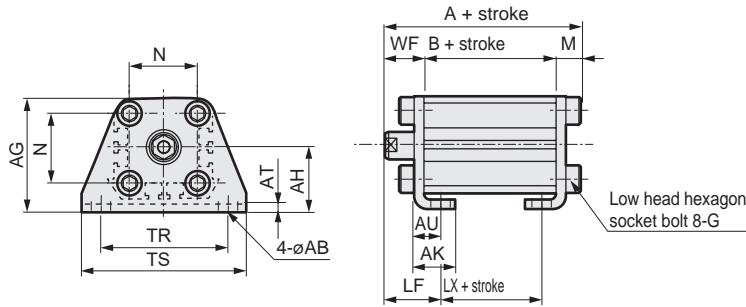
● Dimensions of rod end male thread part

Code	a'	c'	H	kk'	M	MM	T	wf
FK	Bore size (mm)							
	ø12	10.5	9	8	M5	5	6	3.2
Spd Contr	ø16	12	10	10	M6	6	8	3.6
	ø20	14	12	13	M8	8	10	5
Ending	ø25	17.5	15	17	M10x1.25	10	12	6

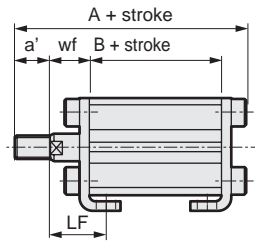
### Dimensions with mounting bracket



- Axial foot (LB) with switch  
SSD2-KL-12 to 25 -LB



Rod end male thread

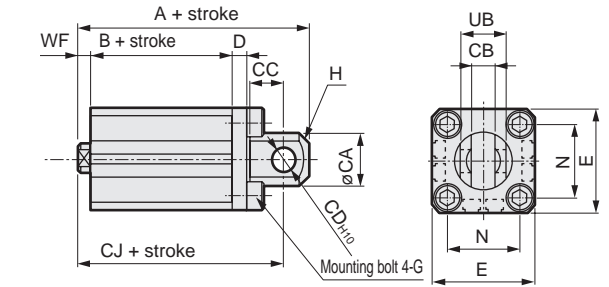


Code	Common dimensions						Female thread				
Bore size (mm)	AB	AG	AH	AK	AT	AU	G	N	TR	TS	M
ø12	5	29.5	17	12.5	2	8	M4x10	15.5	34	44	4.8
ø16	5	33.5	19	13	2	8	M4x10	20	38	48	4.8
ø20	7	42	24	15	3.2	9.2	M6x16	25.5	48	62	7.2
ø25	7	46	26	16.5	3.2	10.7	M6x16	28	52	66	7.2

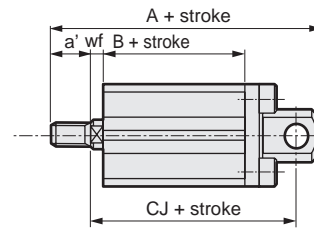
  

Code	Male thread										
Bore size (mm)	WF	LF	A	B	LX	a'	wf	LF	A	B	LX
ø12	13.5	19.5	45.3	27	15	10.5	13.5	19.5	55.8	27	15
ø16	13.5	19.5	45.3	27	15	12	13.5	19.5	57.3	27	15
ø20	14.5	20.5	56.2	34.5	22.5	14	14.5	20.5	70.2	34.5	22.5
ø25	15	22.5	59.7	37.5	22.5	17.5	15	22.5	77.2	37.5	22.5

- Clevis bracket (CB) with switch  
SSD2-KL-12 to 25 -CB



Rod end male thread

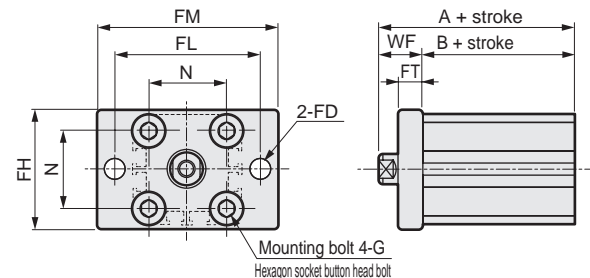


Code	Common dimensions									
Bore size (mm)	CA	CB	CC	CD	D	E	G	H	N	UB
ø12	12	5.2 <sup>+0.2</sup> <sub>0</sub>	7	5	4	25	M4x12	C1.5	15.5	10 <sup>3.1</sup> <sub>3.4</sub>
ø16	15	6.6 <sup>+0.3</sup> <sub>0</sub>	8	5	5	29	M4x12	C2	20	12 <sup>3.1</sup> <sub>3.4</sub>
ø20	20	8.2 <sup>+0.2</sup> <sub>0</sub>	12	8	5	36	M6x16	C4	25.5	16 <sup>3.1</sup> <sub>3.3</sub>
ø25	24	10.2 <sup>+0.2</sup> <sub>0</sub>	14	10	5	40	M6x16	C5	28	20 <sup>3.1</sup> <sub>3.3</sub>

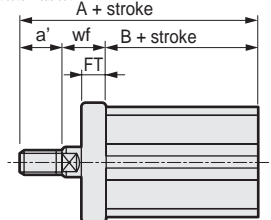
  

Code	Female thread				Male thread				
Bore size (mm)	WF	A	B	CJ	a'	wf	A	B	CJ
ø12	3.5	50.5	27	44.5	10.5	3.5	61	27	44.5
ø16	3.5	51.5	27	45.5	12	3.5	63.5	27	45.5
ø20	4.5	66	34.5	57	14	4.5	80	34.5	57
ø25	5	72.5	37.5	62.5	17.5	5	90	37.5	62.5

- Rod side flange (FA) with switch  
SSD2-KL-12 to 25 -FA



Rod end male thread

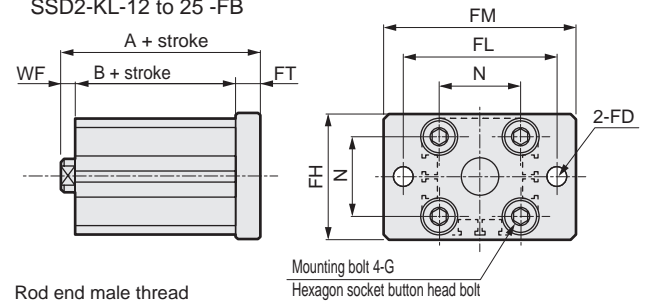


Code	Common dimensions						
Bore size (mm)	FD	FH	FL	FM	FT	N	G
ø12	4.5	25	45	55	5.5	15.5	M4x12
ø16	4.5	30	45	55	5.5	20	M4x12
ø20	6.6	39	48	60	8	25.5	M6x16
ø25	6.6	42	52	64	8	28	M6x16

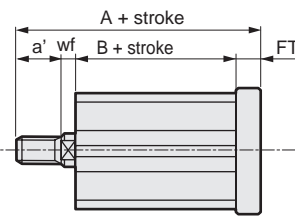
  

Code	Female thread				Male thread		
Bore size (mm)	WF	A	B	a'	wf	A	B
ø12	13.5	40.5	27	10.5	13.5	51	27
ø16	13.5	40.5	27	12	13.5	52.5	27
ø20	14.5	49	34.5	14	14.5	63	34.5
ø25	15	52.5	37.5	17.5	15	70	37.5

- Head side flange (FB) with switch  
SSD2-KL-12 to 25 -FB



Rod end male thread



Code	Common dimensions						
Bore size (mm)	FD	FH	FL	FM	FT	N	G
ø12	4.5	25	45	55	5.5	15.5	M4x12
ø16	4.5	30	45	55	5.5	20	M4x12
ø20	6.6	39	48	60	8	25.5	M6x16
ø25	6.6	42	52	64	8	28	M6x16

Code	Female thread				Male thread		
Bore size (mm)	WF	A	B	a'	wf	A	B
ø12	3.5	36	27	10.5	3.5	46.5	27
ø16	3.5	36	27	12	3.5	48	27
ø20	4.5	47	34.5	14	4.5	61	34.5
ø25	5	50.5	37.5	17.5	5	68	37.5



# SSD2-K Series

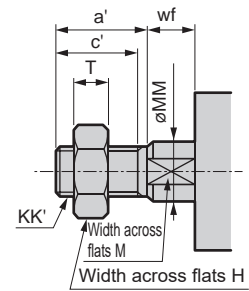
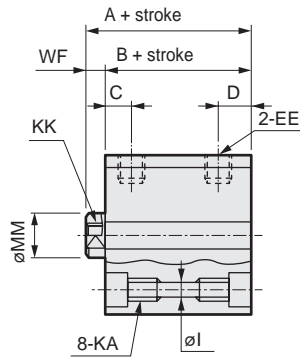
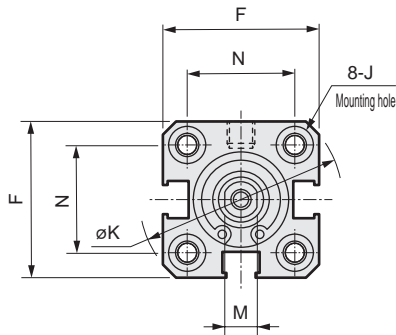
## Dimensions



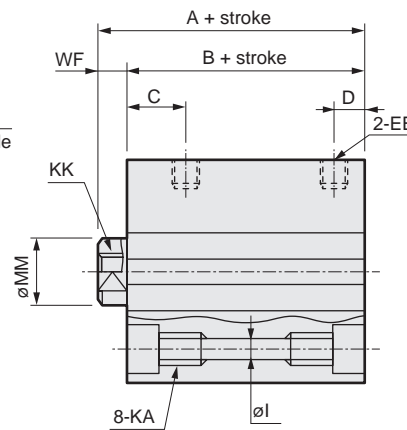
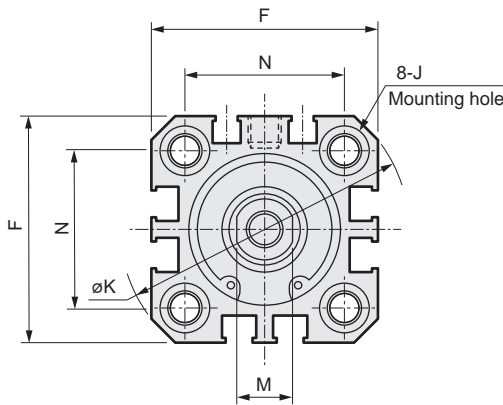
● SSD2-K-12 to 25 (without switch)

● Rod end male thread

ø12/ø16



ø20/ø25



Code	Dimensions without switch and common dimensions															
	Bore size (mm)	A <sup>*1</sup>	B <sup>*1</sup>	C	D	EE	F	I	J	K	KA	KK	M	MM	N	WF
SRG3	ø12	25.5	22	5.5	5.5	M5	25	3.5	6.5 spot face depth 3.5	32	M4 depth 7	M3 depth 6	5	6	15.5	3.5
SRM3	ø16	25.5	22	5.5	5.5	M5	29	3.5	6.5 spot face depth 3.5	38	M4 depth 7	M4 depth 8	6	8	20	3.5
SRT3	ø20	29	24.5	8	5.5	M5	36	5.5	9 spot face depth 5.5	47	M6 depth 11	M5 depth 7	8	10	25.5	4.5
SRL3	ø25	32.5	27.5	11	6	M5	40	5.5	9 spot face depth 5.5	51	M6 depth 11	M6 depth 12	10	12	28	5

\*1 : To calculate A+ stroke or B+ stroke when using custom stroke, apply the next longer standard stroke (instead of the custom stroke) to the stroke value.

(Example) If the custom stroke is 7 mm, apply the standard stroke of 10 mm.

• For ø16: A + stroke = 35.5 B + stroke = 32

When you have selected "S" (dedicated unit for custom stroke), apply the custom stroke of 7 mm.

• For ø16: A + stroke = 32.5 B + stroke = 29

\*2: For dimensions with accessories and of individual accessories, refer to pages 1046 to 1049.

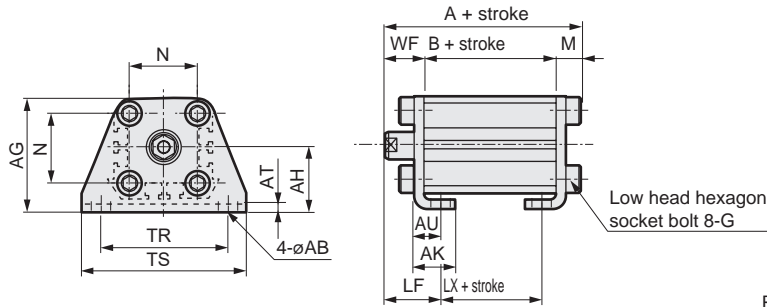
● Dimensions of rod end male thread part

Code	a'	c'	H	kk'	M	MM	T	wf	
FJ	ø12	10.5	9	8	M5	5	6	3.2	3.5
FK	ø16	12	10	10	M6	6	8	3.6	3.5
Spd Contr	ø20	14	12	13	M8	8	10	5	4.5
Ending	ø25	17.5	15	17	M10x1.25	10	12	6	5

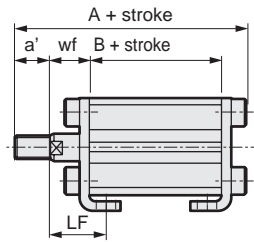
### Dimensions with mounting bracket



- Axial foot (LB) without switch  
SSD2-K-12 to 25 -LB



Rod end male thread

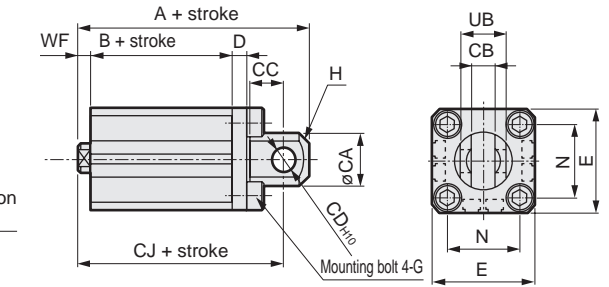


Code	Common dimensions										Female thread		
	Bore size (mm)	AB	AG	AH	AK	AT	AU	G	N	TR	TS	M	
ø12	5	29.5	17	12.5	2	8	M4x10	15.5	34	44	4.8		
ø16	5	33.5	19	13	2	8	M4x10	20	38	48	4.8		
ø20	7	42	24	15	3.2	9.2	M6x16	25.5	48	62	7.2		
ø25	7	46	26	16.5	3.2	10.7	M6x16	28	52	66	7.2		

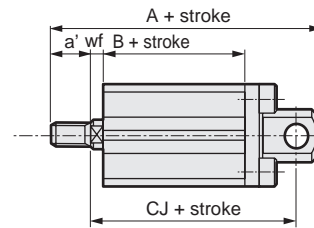
  

Code	Male thread										
	Bore size (mm)	WF	LF	A	B	LX	a'	wf	LF	A	B
ø12	13.5	19.5	40.3	22	10	10.5	13.5	19.5	50.8	22	10
ø16	13.5	19.5	40.3	22	10	12	13.5	19.5	52.3	22	10
ø20	14.5	20.5	46.2	24.5	12.5	14	14.5	20.5	60.2	24.5	12.5
ø25	15	22.5	49.7	27.5	12.5	17.5	15	22.5	67.2	27.5	12.5

- Clevis bracket (CB) without switch  
SSD2-K-12 to 25 -CB



Rod end male thread

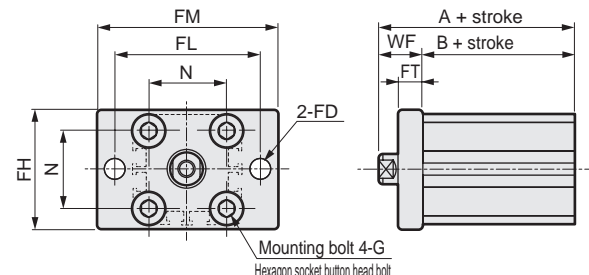


Code	Common dimensions										
	Bore size (mm)	CA	CB	CC	CD	D	E	G	H	N	UB
ø12	12	5.2 <sup>+0.2</sup>	7	5	4	25	M4x12	C1.5	15.5	10 <sup>-0.1</sup>	10 <sup>-0.3</sup>
ø16	15	6.6 <sup>+0.3</sup>	8	5	5	29	M4x12	C2	20	12 <sup>-0.1</sup>	12 <sup>-0.4</sup>
ø20	20	8.2 <sup>+0.2</sup>	12	8	5	36	M6x16	C4	25.5	16 <sup>-0.1</sup>	16 <sup>-0.3</sup>
ø25	24	10.2 <sup>+0.2</sup>	14	10	5	40	M6x16	C5	28	20 <sup>-0.1</sup>	20 <sup>-0.3</sup>

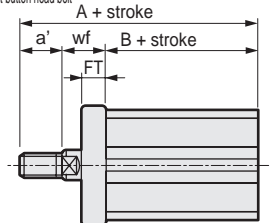
  

Code	Female thread					Male thread				
	Bore size (mm)	WF	A	B	CJ	a'	wf	A	B	CJ
ø12	3.5	45.5	22	39.5	10.5	3.5	56	22	39.5	
ø16	3.5	46.5	22	40.5	12	3.5	58.5	22	40.5	
ø20	4.5	56	24.5	47	14	4.5	70	24.5	47	
ø25	5	62.5	27.5	52.5	17.5	5	80	27.5	52.5	

- Rod side flange (FA) without switch  
SSD2-K-12 to 25 -FA



Rod end male thread

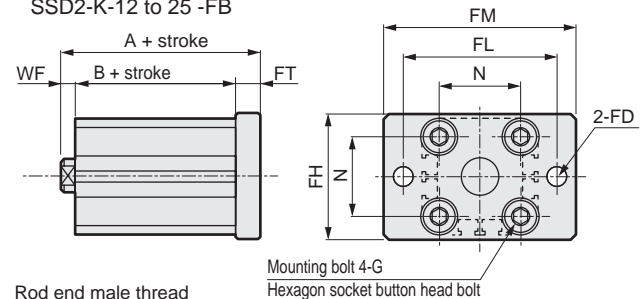


Code	Common dimensions						
	Bore size (mm)	FD	FH	FL	FM	FT	N
ø12	4.5	25	45	55	5.5	15.5	M4x12
ø16	4.5	30	45	55	5.5	20	M4x12
ø20	6.6	39	48	60	8	25.5	M6x16
ø25	6.6	42	52	64	8	28	M6x16

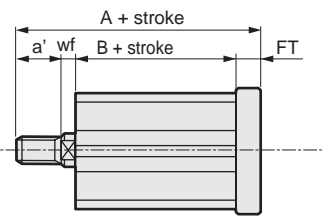
  

Code	Female thread				Male thread		
	Bore size (mm)	WF	A	B	a'	wf	A
ø12	13.5	35.5	22	10.5	13.5	46	22
ø16	13.5	35.5	22	12	13.5	47.5	22
ø20	14.5	39	24.5	14	14.5	53	24.5
ø25	15	42.5	27.5	17.5	15	60	27.5

- Head side flange (FB) without switch  
SSD2-K-12 to 25 -FB



Rod end male thread



Code	Common dimensions						
	Bore size (mm)	FD	FH	FL	FM	FT	N
ø12	4.5	25	45	55	5.5	15.5	M4x12
ø16	4.5	30	45	55	5.5	20	M4x12
ø20	6.6	39	48	60	8	25.5	M6x16
ø25	6.6	42	52	64	8	28	M6x16

Code	Female thread				Male thread		
	Bore size (mm)	WF	A	B	a'	wf	A
ø12	3.5	31	22	10.5	3.5	41.5	22
ø16	3.5	31	22	12	3.5	43	22
ø20	4.5	37	24.5	14	4.5	51	24.5
ø25	5	40.5	27.5	17.5	5	58	27.5

- SCP\*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/COVP/N2
- SSD2**
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/MSDG
- FC\*
- STK
- SRL3
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd Contr
- Ending

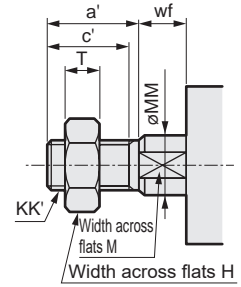
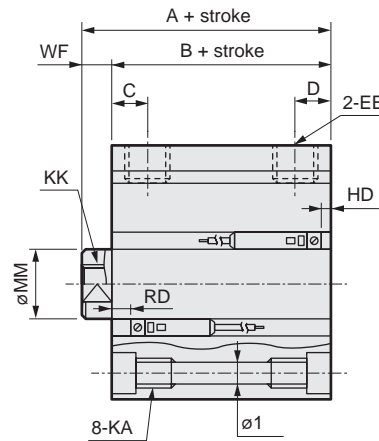
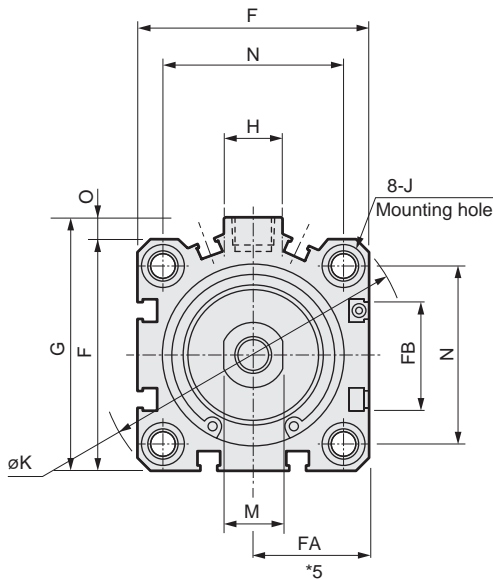
# SSD2-K Series

## Dimensions



● SSD2-KL-32 to 100 (with switch)

● Rod end male thread



Code	Common dimensions with switch																			
Bore size (mm)	A <sup>*1</sup>	B <sup>*1</sup>	C	D	EE	F	FA <sup>*5</sup>	FB	G	H	I	J	K	KA	KK	M	MM	N	O	WF
ø32	50	43	8	8	Rc1/8	45	23(26.5)	20.5	49.5	12.5	5.5	9 spot face depth 5.5	60	M6 depth 11	M8 depth 13	14	16	34	4.5	7
ø40	56.5	49.5	12	8.5	Rc1/8	52	26.5(30)	27.5	57	15	5.5	9 spot face depth 5.5	69	M6 depth 11	M8 depth 13	14	16	40	5	7
ø50	58.5	50.5	10.5	10.5	Rc1/4	64	32.5(36)	28.5	71	18	6.9	11 spot face depth 6.5	86	M8 depth 13	M10 depth 15	17	20	50	7	8
ø63	64	56	13	11	Rc1/4	77	39(42.5)	28.5	84	23	8.7	14 spot face depth 9	103	M10 depth 25	M10 depth 15	17	20	60	7	8
ø80	73.5	63.5	16	13	Rc3/8	98	49.5(53)	28.5	104	31	10.5	17.5 spot face depth 11	132	M12 depth 28	M16 depth 21	22	25	77	6	10
ø100	85	73	23	15	Rc3/8	117	59(62.5)	28.5	123.5	38	10.5	17.5 spot face depth 11	156	M12 depth 28	M20 depth 27	27	30	94	6.5	12
Switch dimensions	Reed T0H/T0V, T5H/T5V				Proximity T2H/T2V, T3H/T3V			Proximity T2WH/T2WV, T3WH/T3WV												
Bore size (mm)	HD		RD		HD		RD		HD		RD									
ø32	9		15		9		15		11		17									
ø40	9.5		19.5		9.5		19.5		11		21									
ø50	10		20		10		20		11.5		21.5									
ø63	17.5		18		17.5		18		19		19.5									
ø80	22		20.5		22.5		20.5		24		22									
ø100	28		24.5		28		24.5		29.5		26									

\*1 : To calculate A + stroke or B + stroke when using custom stroke, apply the next longer standard stroke (instead of the custom stroke) to the stroke value.  
(Example) If the custom stroke is 7 mm, apply the standard stroke of 10 mm.

· For ø40: A + stroke = 60 B + stroke = 53

When you have selected "S" (dedicated unit for custom stroke), apply the custom stroke of 7 mm.

· For ø40: A + stroke = 57 B + stroke = 50

\*2 : HD and RD dimensions for 5 mm stroke differ from these dimensions according to the setting.

\*3: Refer to page 1045 for HD and RD dimensions of the 2-color LED, off-delay, AC magnetic field tolerant, T1\* and T8\* switches.

\*4: Refer to page 1045 for protruding dimensions of the 2-color LED, off-delay, AC magnetic field tolerant, T1\* and T8\* switches.

\*5 : Dimensions in ( ) of FA are for the L-shaped lead wire.

\*6: For dimensions with accessories and of individual accessories, refer to pages 1046 to 1049.

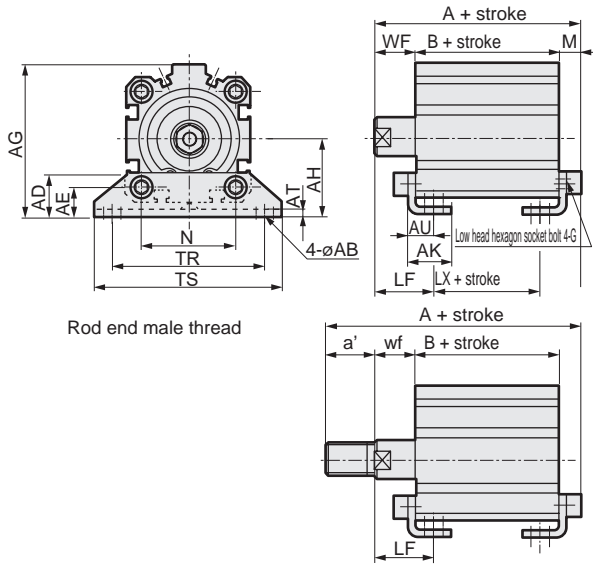
● Dimensions of rod end male thread part

Code	a'	c'	H	kk'	M	MM	T	wf
ø32	23.5	20.5	22	M14x1.5	14	16	8	5
ø40	23.5	20.5	22	M14x1.5	14	16	8	5
ø50	28.5	26	27	M18x1.5	17	20	11	5
ø63	28.5	26	27	M18x1.5	17	20	11	5
ø80	35.5	32.5	32	M22x1.5	22	25	13	8
ø100	35.5	32.5	41	M26x1.5	27	30	16	8

### Dimensions with mounting bracket



- Axial foot (LB) with switch  
SSD2-KL-32 to 100 -LB

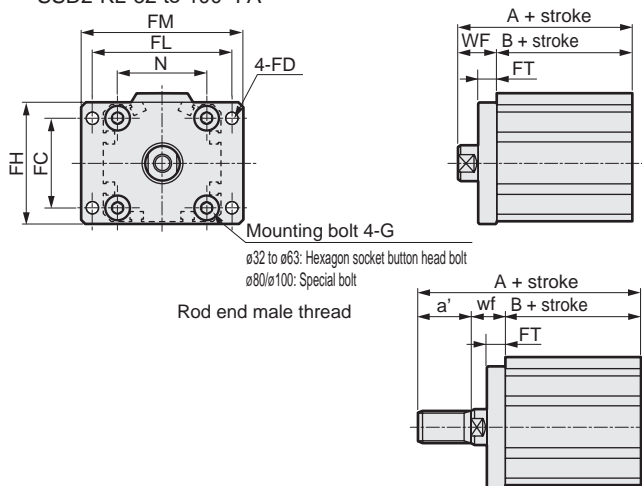


Code	Common dimensions											Female thread			
	Bore size (mm)	AB	AD	AE	AG	AH	AK	AT	AU	G	N	TR	TS		
ø32	7	18.5	13	57	30	17	3.2	11.2	M6x16	34	57	71			
ø40	7	18	13	64	33	18.2	3.2	11.2	M6x16	40	64	78			
ø50	9	22	14	78	39	22.7	3.2	14.7	M8x20	50	79	95			
ø63	11	26	16	91.5	46	25.2	3.2	16.2	M10x25	60	95	113			
ø80	13	31.5	20.5	114	59	30.5	4.5	19.5	M12x40	77	118	140			
ø100	13	35	24	136	71	35.5	6	23	M12x40	94	137	162			

Code	Male thread											
	Bore size (mm)	M	WF	LF	A	B	LX	a'	wf	LF	A	B
ø32	7.2	17	25	67.2	43	27	23.5	15	23	88.7	43	27
ø40	7.2	17	25	73.7	49.5	33.5	23.5	15	23	95.2	49.5	33.5
ø50	8.2	18	29.5	76.7	50.5	27.5	28.5	15	26.5	102.2	50.5	27.5
ø63	9.2	18	31	83.2	56	30	28.5	15	28	108.7	56	30
ø80	11.5	20	35	95	63.5	33.5	35.5	18	33	128.5	63.5	33.5
ø100	13	22	39	108	73	39	35.5	18	35	139.5	73	39

- Rod side flange (FA)  
SSD2-KL-32 to 100 -FA

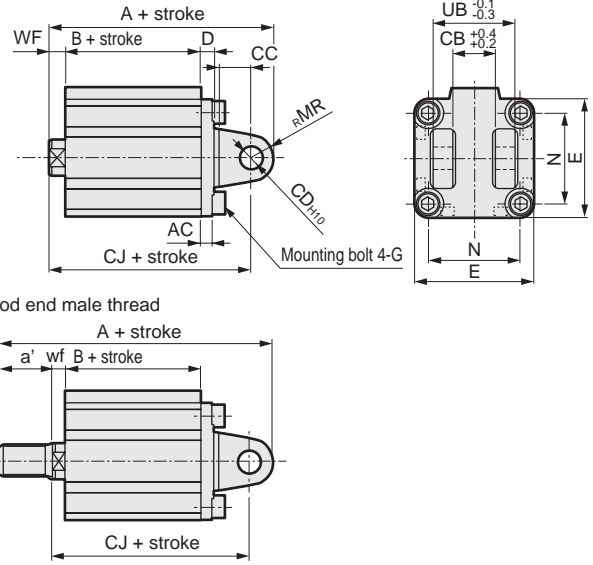


Code	Common dimensions								G
	Bore size (mm)	FC	FD	FH	FL	FM	FT	N	
ø32	34	5.5	48	56	65	8	34	M6x16	
ø40	40	5.5	54	62	72	8	40	M6x16	
ø50	50	6.6	67	76	89	9	50	M8x20	
ø63	60	9	80	92	108	9	60	M10x25	
ø80	77	11	99	116	134	11	77	M12x40	
ø100	94	11	117	136	154	11	94	M12x40	

Code	Female thread				Male thread			
	Bore size (mm)	WF	A	B	a'	wf	A	B
ø32	17	60	43	23.5	15	81.5	43	
ø40	17	66.5	49.5	23.5	15	88	49.5	
ø50	18	68.5	50.5	28.5	15	94	50.5	
ø63	18	74	56	28.5	15	99.5	56	
ø80	20	83.5	63.5	35.5	18	117	63.5	
ø100	22	95	73	35.5	18	126.5	73	

- Clevis bracket (CB) with switch  
SSD2-KL-32 to 100 -CB



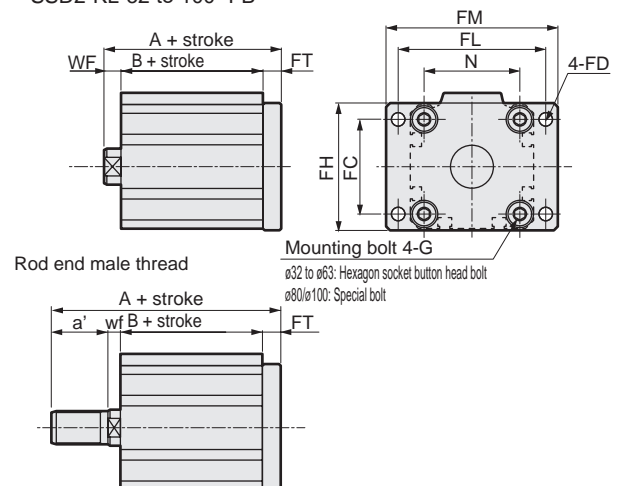
Code	Common dimensions									
	Bore size (mm)	AC	CB	CC	CD	D	E	G	MR	N
ø32	4.5	18.2	14	10	5	45	M6x16	10	34	36
ø40	5	18.2	14	10	6	52	M6x16	10	40	36
ø50	6	22.2	20	14	7	64	M8x20	14	50	44
ø63	7	22.2	20	14	8	77	M10x25	14	60	44
ø80	9	28.2	27	18	10	98	M12x40	18	77	56
ø100	12	32.2	31	22	13	117	M12x40	22	94	64

Code	Female thread					Male thread				
	Bore size (mm)	WF	A	B	CJ	a'	wf	A	B	CJ
ø32	7	80	43	70	23.5	5	101.5	43	68	
ø40	7	88.5	49.5	78.5	23.5	5	110	49.5	76.5	
ø50	8	100.5	50.5	86.5	28.5	5	126	50.5	83.5	
ø63	8	108	56	94	28.5	5	133.5	56	91	
ø80	10	129.5	63.5	111.5	35.5	8	163	63.5	109.5	
ø100	12	152	73	130	35.5	8	183.5	73	126	

\* A pin and a snap ring are included.

- Head side flange (FB)  
SSD2-KL-32 to 100 -FB



Code	Common dimensions								G
	Bore size (mm)	FC	FD	FH	FL	FM	FT	N	
ø32	34	5.5	48	56	65	8	34	M6x16	
ø40	40	5.5	54	62	72	8	40	M6x16	
ø50	50	6.6	67	76	89	9	50	M8x20	
ø63	60	9	80	92	108	9	60	M10x25	
ø80	77	11	99	116	134	11	77	M12x40	
ø100	94	11	117	136	154	11	94	M12x40	

Code	Female thread				Male thread			
	Bore size (mm)	WF	A	B	a'	wf	A	B
ø32	7	58	43	23.5	5	79.5	43	
ø40	7	64.5	49.5	23.5	5	86	49.5	
ø50	8	67.5	50.5	28.5	5	93	50.5	
ø63	8	73	56	28.5	5	98.5	56	
ø80	10	84.5	63.5	35.5	8	118	63.5	
ø100	12	96	73	35.5	8	127.5	73	

SCP*3
CMK2
CMA2
SCM
SCG
SCA2
SCS2
CKV2
CAV2/COVP/N2
<b>SSD2</b>
SSG
SSD
CAT
MDC2
MVC
SMG
MSD/MSDG
FC*
STK
SRL3
SRG3
SRM3
SRT3
MRL2
MRG2
SM-25
ShkAbs
FJ
FK
Spd Contr
Ending

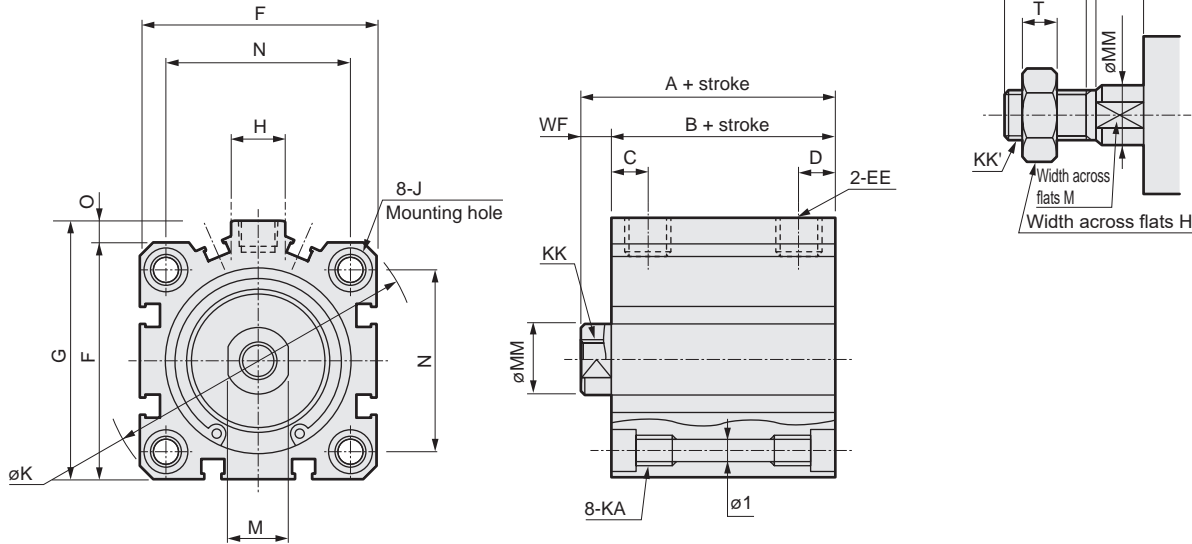
# SSD2-K Series

## Dimensions



● SSD2-K-32 to 100 (without switch)

● Rod end male thread



Code	Dimensions without switch and common dimensions												
Bore size (mm)	A <sup>*1, *3</sup>	B <sup>*1, *3</sup>	C	D	EE	F	G	H	I	J	K	KA	KK
ø32	40(50)	33(43)	8	8	Rc1/8	45	49.5	12.5	5.5	9 spot face depth 5.5	60	M6 depth 11	M8 depth 13
ø40	46.5(56.5)	39.5(49.5)	12	8.5	Rc1/8	52	57	15	5.5	9 spot face depth 5.5	69	M6 depth 11	M8 depth 13
ø50	48.5(58.5)	40.5(50.5)	10.5	10.5	Rc1/4	64	71	18	6.9	11 spot face depth 6.5	86	M8 depth 13	M10 depth 15
ø63	54(64)	46(56)	13	11	Rc1/4	77	84	23	8.7	14 spot face depth 9	103	M10 depth 25	M10 depth 15
ø80	63.5(73.5)	53.5(63.5)	16	13	Rc3/8	98	104	31	10.5	17.5 spot face depth 11	132	M12 depth 28	M16 depth 21
ø100	75(85)	63(73)	23	15	Rc3/8	117	123.5	38	10.5	17.5 spot face depth 11	156	M12 depth 28	M20 depth 27

Code	Dimensions without switch and common dimensions				
Bore size (mm)	M	MM	N	O	WF
ø32	14	16	34	4.5	7
ø40	14	16	40	5	7
ø50	17	20	50	7	8
ø63	17	20	60	7	8
ø80	22	25	77	6	10
ø100	27	30	94	6.5	12

\*1 : To calculate A + stroke or B + stroke when using custom stroke, apply the next longer standard stroke (instead of the custom stroke) to the stroke value.

(Example) If the custom stroke is 7 mm, apply the standard stroke of 10 mm.

· For ø40: A + stroke = 50 B + stroke = 43

When you have selected "S" (dedicated unit for custom stroke), apply the custom stroke of 7 mm.

· For ø40: A + stroke = 47 B + stroke = 40

\*2: For dimensions of individual accessories, refer to pages 1046 to 1049.

\*3 : Dimensions in ( ) of codes A and B are for strokes of more than 50 mm.

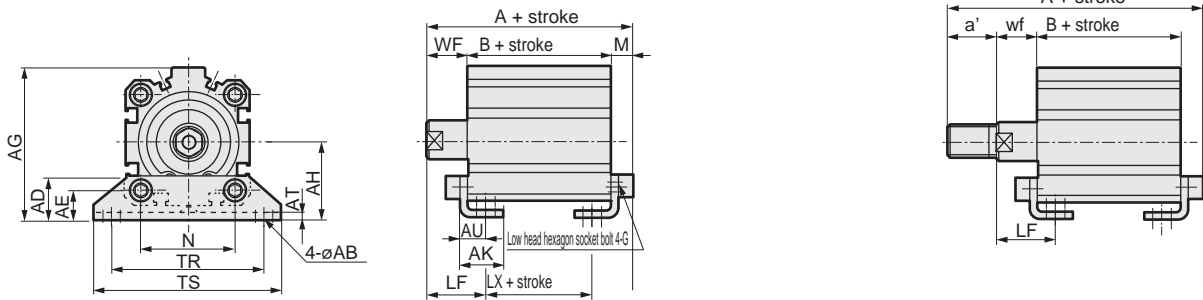
● Dimensions of rod end male thread part

Code	a'	c'	H	kk'	M	MM	T	wf
Bore size (mm)								
ø32	23.5	20.5	22	M14x1.5	14	16	8	5
ø40	23.5	20.5	22	M14x1.5	14	16	8	5
ø50	28.5	26	27	M18x1.5	17	20	11	5
ø63	28.5	26	27	M18x1.5	17	20	11	5
ø80	35.5	32.5	32	M22x1.5	22	25	13	8
ø100	35.5	32.5	41	M26x1.5	27	30	16	8

### Dimensions with mounting bracket



- Axial foot (LB) without switch  
SSD2-K-32 to 100 -LB



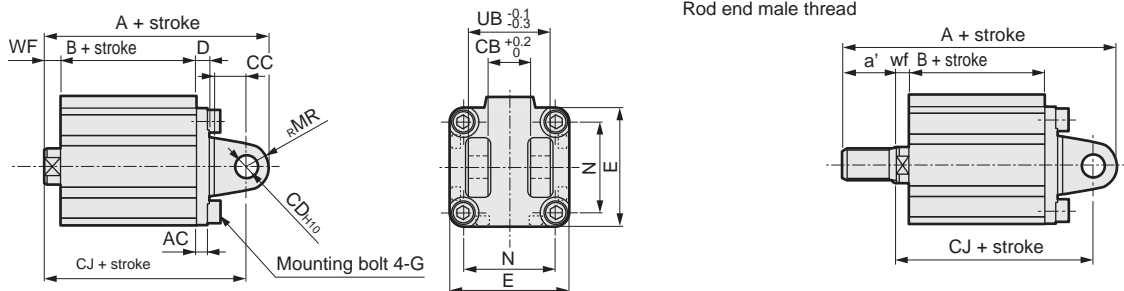
Code	Common dimensions													Female thread			
	AB	AD	AE	AG	AH	AK	AT	AU	G	N	TR	TS	M	WF	LF	A	B
ø32	7	18.5	13	57	30	17	3.2	11.2	M6x16	34	57	71	7.2	17	25	57.2(67.2)	33(43)
ø40	7	18	13	64	33	18.2	3.2	11.2	M6x16	40	64	78	7.2	17	25	63.7(73.7)	39.5(49.5)
ø50	9	22	14	78	39	22.7	3.2	14.7	M8x20	50	79	95	8.2	18	29.5	66.7(76.7)	40.5(50.5)
ø63	11	26	16	91.5	46	25.2	3.2	16.2	M10x25	60	95	113	9.2	18	31	73.2(83.2)	46(56)
ø80	13	31.5	20.5	114	59	30.5	4.5	19.5	M12x40	77	118	140	11.5	20	35	85(95)	53.5(63.5)
ø100	13	35	24	136	71	35.5	6	23	M12x40	94	137	162	13	22	39	98(108)	63(73)

Code	Male thread						
	LX	a'	wf	LF	A	B	LX
ø32	17(27)	23.5	15	23	78.7(88.7)	33(43)	17(27)
ø40	23.5(33.5)	23.5	15	23	85.2(95.2)	39.5(49.5)	23.5(33.5)
ø50	17.5(27.5)	28.5	15	26.5	92.2(102.2)	40.5(50.5)	17.5(27.5)
ø63	20(30)	28.5	15	28	98.7(108.7)	46(56)	20(30)
ø80	23.5(33.5)	35.5	18	33	118.5(128.5)	53.5(63.5)	23.5(33.5)
ø100	29(39)	35.5	18	35	129.5(139.5)	63(73)	29(39)

Note: ø80: LB cannot be selected for 15 mm stroke or less.

\* Dimensions in ( ) are for strokes of more than 50 mm.

- Clevis bracket (CB) without switch  
SSD2-K-32 to 100 -CB



Code	Common dimensions										Female thread				Male thread				
	AC	CB	CC	CD	D	E	G	MR	N	UB	WF	A	B	CJ	a'	wf	A	B	CJ
ø32	4.5	18.2	14	10	5	45	M6x16	10	34	36	7	70(80)	33(43)	60	23.5	5	91.5(101.5)	33(43)	58
ø40	5	18.2	14	10	6	52	M6x16	10	40	36	7	78.5(88.5)	39.5(49.5)	68.5	23.5	5	100(110)	39.5(49.5)	66.5
ø50	6	22.2	20	14	7	64	M8x20	14	50	44	8	90.5(100.5)	40.5(50.5)	76.5	28.5	5	116(126)	40.5(50.5)	73.5
ø63	7	22.2	20	14	8	77	M10x25	14	60	44	8	98(108)	46(56)	84	28.5	5	123.5(133.5)	46(56)	81
ø80	9	28.2	27	18	10	98	M12x40	18	77	56	10	119.5(129.5)	53.5(63.5)	101.5	35.5	8	153(163)	53.5(63.5)	99.5
ø100	12	32.2	31	22	13	117	M12x40	22	94	64	12	142(152)	63(73)	120	35.5	8	173.5(183.5)	63(73)	116

\*1 Dimensions in ( ) are for strokes of more than 50 mm.  
\*2 A pin and a snap ring are included.

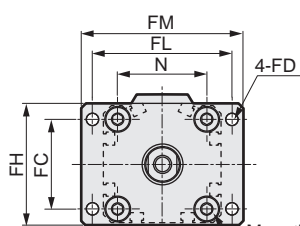
- SCP\*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/COVP/N2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/MSDG
- FC\*
- STK
- SRL3
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd Contr
- Ending

# SSD2-K Series

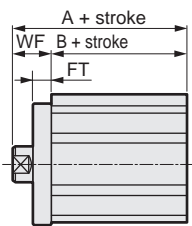


## Dimensions with mounting bracket

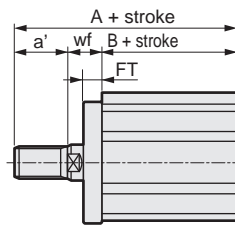
- Rod side flange (FA) without switch  
SSD2-K-32 to 100 -FA



Mounting bolt 4-G  
 ø32 to ø63: Hexagon socket button head bolt  
 ø80/ø100: Special bolt



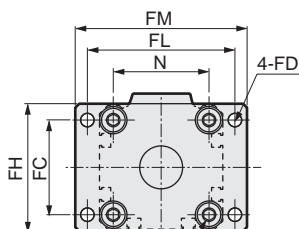
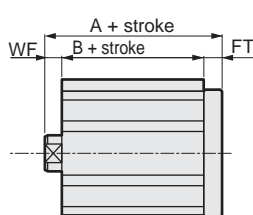
Rod end male thread



Code	Common dimensions								Female thread			Male thread				
	Bore size (mm)	FC	FD	FH	FL	FM	FT	N	G	WF	A	B	a'	wf	A	B
SSD	ø32	34	5.5	48	56	65	8	34	M6x16	17	50(60)	33(43)	23.5	15	71.5(81.59)	33(43)
SSG	ø40	40	5.5	54	62	72	8	40	M6x16	17	56.5(66.5)	39.5(49.5)	23.5	15	78(88)	39.5(49.5)
SSD	ø50	50	6.6	67	76	89	9	50	M8x20	18	58.5(68.5)	40.5(50.5)	28.5	15	84(94)	40.5(50.5)
SSD	ø63	60	9	80	92	108	9	60	M10x25	18	64(74)	46(56)	28.5	15	89.5(99.5)	46(56)
CAT	ø80	77	11	99	116	134	11	77	M12x40	20	73.5(83.5)	53.5(63.5)	35.5	18	107(117)	53.5(63.5)
CAT	ø100	94	11	117	136	154	11	94	M12x40	22	85(95)	63(73)	35.5	18	116.5(126.5)	63(73)

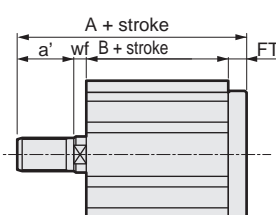
\* Dimensions in ( ) are for strokes of more than 50 mm.

- Head side flange (FB) without switch  
SSD2-K-32 to 100 -FB



Mounting bolt 4-G  
 ø32 to ø63: Hexagon socket button head bolt  
 ø80/ø100: Special bolt

Rod end male thread



Code	Common dimensions								Female thread			Male thread				
	Bore size (mm)	FC	FD	FH	FL	FM	FT	N	G	WF	A	B	a'	wf	A	B
SM-25	ø32	34	5.5	48	56	65	8	34	M6x16	7	48(58)	33(43)	23.5	5	69.5(79.5)	33(43)
SM-25	ø40	40	5.5	54	62	72	8	40	M6x16	7	54.5(64.5)	39.5(49.5)	23.5	5	76(86)	39.5(49.5)
ShkAbs	ø50	50	6.6	67	76	89	9	50	M8x20	8	57.5(67.5)	40.5(50.5)	28.5	5	83(93)	40.5(50.5)
ShkAbs	ø63	60	9	80	92	108	9	60	M10x25	8	63(73)	46(56)	28.5	5	88.5(98.5)	46(56)
FJ	ø80	77	11	99	116	134	11	77	M12x40	10	74.5(84.5)	53.5(63.5)	35.5	8	108(118)	53.5(63.5)
FJ	ø100	94	11	117	136	154	11	94	M12x40	12	86(96)	63(73)	35.5	8	117.5(127.5)	63(73)

\* Dimensions in ( ) are for strokes of more than 50 mm.