



Guided super compact cylinder Double acting/ Single rod

# SSG Series

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



Pneumatic actuator  
Pneumatic cylinders  
Hand/Chuck  
Related products  
Cylinder/Switch  
Vacuum components  
Pneumatic valves  
Clean air components  
Speed controller  
Fitting  
Auxiliary valve  
Silencer  
Tube  
Gas generator  
Fluid control components  
Motor specifications

## Specifications

Item Item		SSG									
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									
Min. working pressure	MPa	0.15					0.1				
Proof pressure	MPa	1.6									
Ambient temperature	°C	-10 to 60 (no freezing)									
Port size		M5			Rc1/8 *1			Rc1/4		Rc3/8	
Stroke tolerance	mm	Without cushion +1.0 0									
	With rubber cushion										
Working piston speed	mm/s	50 to 500					50 to 300				
Cushion		With a rubber cushion or without can be selected.									
Lubrication		Not available									
Allowable absorbed energy	Without cushion	0.004	0.01	0.016	0.021	0.025	0.092	0.1	0.12	0.27	0.56
	With rubber cushion	0.03	0.05	0.10	0.16		0.44	0.75	0.78	2.51	3.92

\*1: The  $\phi 32$  bore size with a 5 mm stroke and without a switch has a port size of M5.

## Stroke

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

\*1: The custom Stroke is available in 1 mm increments. The dimensions of the total length with the custom stroke are handled the same as the next longer standard stroke.

## Related products

		Speed controller										
Model No.	Appearance	Port size (Rc or R)				Compatible tube O.D.					Page	
		M5	1/8	1/4	3/8	4 ( $\phi 4$ )	6 ( $\phi 6$ )	8 ( $\phi 8$ )	10 ( $\phi 10$ )	12 ( $\phi 12$ )		
SC3W-M5-*P4		●				●	●				530	
SC3W-6-*P4			●			●	●	●				
SC3W-8-*P4				●			●	●	●			
SC3W-10-*P4					●		●	●	●	●		

Specify the compatible tube O.D. code for \*.

## Compatibility table by variation

Applicable bore size	Double acting	
	P4	P40
ø12 to 100	P4	●
	P40	●
	P42	■

●: Applicable models ○: Semi-applicable models ▲: Contact CKD for details. ■: Not applicable

## How to order

Without switch

**SSG** - 12 D - 10 - P4 P40

With switch

**SSG-L** - 12 D - 10 - SW11 - R - P4 P40

2-color display/off-delay, with T1\* switch (ø12/ø16 only)

**SSG-L1** - 12 D - 10 - SW31 - R - P4 P40

**A** Model No.

**B** Bore size

**C** Cushion

**D** Stroke

Custom Stroke  
Available in 1 mm increments.  
(Less than 5 mm with switch is not available) Note that the dimensions of the total length with the custom Stroke are handled the same as the longer standard Stroke.

**E** Switch model No.

\*1  
\*2  
\*3  
\*4  
\*5

**F** Switch quantity

Code	Description	
<b>A Model No.</b>		
<b>SSG</b>	Double acting/ Single rod	
<b>SSG-L</b>	Double acting/ Single rod/with switch	
<b>SSG-L1</b>	ø12,ø16 2-color display, off-delay,T1* with switch	
<b>B Bore size (mm)</b>		
<b>12</b>	ø12	
<b>16</b>	ø16	
<b>20</b>	ø20	
<b>25</b>	ø25	
<b>32</b>	ø32	
<b>40</b>	ø40	
<b>50</b>	ø50	
<b>63</b>	ø63	
<b>80</b>	ø80	
<b>100</b>	ø100	
<b>C Cushion</b>		
<b>Blank</b>	Without cushion	
<b>D</b>	With two-sided rubber cushion	
<b>D Stroke (mm)</b>		
	<b>Bore size (ø)</b>	
	12 16 20 25 32 40 50 63 80 100	
<b>5</b>	5	● ● ● ● ● ● ● ● ● ●
<b>10</b>	10	● ● ● ● ● ● ● ● ● ●
<b>15</b>	15	● ● ● ● ● ● ● ● ● ●
<b>20</b>	20	● ● ● ● ● ● ● ● ● ●
<b>25</b>	25	● ● ● ● ● ● ● ● ● ●
<b>30</b>	30	● ● ● ● ● ● ● ● ● ●
<b>35</b>	35	● ● ● ● ● ● ● ● ● ●
<b>40</b>	40	● ● ● ● ● ● ● ● ● ●
<b>45</b>	45	● ● ● ● ● ● ● ● ● ●
<b>50</b>	50	● ● ● ● ● ● ● ● ● ●
<b>75</b>	75	● ● ● ● ● ● ● ● ● ●
<b>100</b>	100	● ● ● ● ● ● ● ● ● ●
<b>E Switch model No.</b>		
Refer to the compatibility table on Intro Pages 23 to 26 for switch model No.		
<b>F Switch quantity</b>		
<b>R</b>	1 on rod side	
<b>H</b>	1 on head side	
<b>D</b>	2	
<b>T</b>	3	

## ⚠ Precautions for model No. selection

- \*1: T0\* and T5\* switches cannot be mounted on the ø12, ø16 5 mm Stroke.
- \*2: T2YD\* switch cannot be installed on ø12, ø16.
- \*3: T8\* switch cannot be installed on ø12 to ø32.
- \*4: The F type switch can only be mounted on the piping port surface with a bore size of ø25.
- \*5: Switches are shipped with the product. Contact CKD if assembling before shipment is necessary.

**P4**  
Series

Pneumatic cylinders  
Hand/ Chuck  
Related products  
Cylinder Switch

Vacuum components  
Pneumatic valves

Clean air components  
controller  
Pneumatic auxiliary components  
Speed  
Fitting  
Auxiliary valve  
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Tube

Gas generator  
Fluid control components

Motor  
Motorless specifications  
Electric actuator