



Guided super compact cylinder double acting/single rod

# SSG Series

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



## Specifications

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 ( $\approx 150$ psi, 10 bar)										
Min. working pressure	MPa	0.15 ( $\approx 22$ psi, 1.5 bar)					0.1 ( $\approx 15$ psi, 1 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 *1		Rc1/4		Rc3/8		
Stroke tolerance	mm	Without cushion										
		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 required (use turbine oil class 1 ISO VG32 if necessary for lubrication)											
Allowable absorbed energy	J	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/	30	1
$\phi 16$	25/30		
$\phi 20$	5/10/15/20/25/	50	
$\phi 25$	30/35/40/45/50		
$\phi 32$	5/10/15/20/25/30/35/40/	100	
$\phi 40$	45/50/75/100		
$\phi 50$	10/15/20/25/		
$\phi 63$			
$\phi 80$		75/100	
$\phi 100$			

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

\*2: When using the type with a switch, refer to the table below.

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

Bore size (mm)	T0H/V / T5H/V	T2H/V / T3H/V
$\phi 12$	6	5
$\phi 16$		
$\phi 20$	5	
$\phi 25$		
$\phi 32$		
$\phi 40$		
$\phi 50$		
$\phi 63$		
$\phi 80$		
$\phi 100$		

\*1: Less than 10 mm with the 2-color LED switch is not available.

## 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 $\pm 10\%$	30 VDC or less		
Load current	5 to 20 mA	50 mA or less	5 to 20 mA		100 mA or less	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 $\mu\text{A}$ or less	1 mA or less		10 $\mu\text{A}$ or less		
Weight	g		1 m:10 3 m:29				