

Pneumatic Cylinders I
Catalog No. CB-029SA

High precision guided rodless cylinder

Double acting SRM3 Series

Double acting/position locking SRM3-Q Series

● Bore size: $\varnothing 25/\varnothing 32/\varnothing 40/\varnothing 63$ or equiv.



Specifications

Item	SRM3				SRM3-Q			
	Standard/With switch				Position locking/With switch			
Bore size mm	$\varnothing 25$ or equiv.	$\varnothing 32$ or equiv.	$\varnothing 40$ or equiv.	$\varnothing 63$ or equiv.	$\varnothing 25$ or equiv.	$\varnothing 32$ or equiv.	$\varnothing 40$ or equiv.	$\varnothing 63$ or equiv.
Actuation	Double acting				Double acting/Position locking			
Working fluid	Compressed air							
Max. working pressure MPa	0.7							
Min. working pressure MPa	0.15		0.1		0.15		0.1	
Proof pressure MPa	1.05							
Ambient temperature °C	5 to 60							
Port size	Cylinder body port	Rc1/8	Rc1/4	Rc3/8	Rc1/8	Rc1/4	Rc3/8	
	Position locking port	-			Rc1/8			
Stroke tolerance mm	+2.0 0 (up to 1000)			+2.5 0 (up to 2000)				
Working piston speed mm/s	50 to 1500 (*1, *2)							
Cushion	Air cushion							
Lubrication	Not available							
Repeatability mm	±0.03							
Position locking mechanism	-				Attached to R side of cover			
Holding force N	-				Max. thrust x 0.7			

*1: For common port piping, working piston speed varies depending on stroke length. Contact CKD.

*2: (1) When the piston moves at 500 to 1500 mm/s, reduce the speed when entering the position locking mechanism to 500 mm/s or less.

(2) To reduce the speed, add an external shock absorber or deceleration circuit.

(3) Apply grease regularly to the sliding part of the lock lever.

Allowable absorbed energy

Bore size (mm)	Cushioned		Without cushion	With shock absorber (initial set point)	
	Allowable absorbed energy (J)	Cushion stroke (mm)	Allowable absorbed energy (J)	Absorbed energy (J)	Effective Stroke (mm)
$\varnothing 25$ or equiv.	1.40	20.9	0.015	10	9
$\varnothing 32$ or equiv.	2.57	23.5	0.030	18	13
$\varnothing 40$ or equiv.	4.27	23.9	0.050	50	16.5
$\varnothing 63$ or equiv.	17.4	29.6	0.138	86	21

Stroke

Bore size(mm)	Standard Stroke (mm)	Max. Stroke (mm)	Min. Stroke (mm)
$\varnothing 25, \varnothing 32$ or equiv.	200, 300, 400, 500, 600, 700, 800, 900, 1000	1000	50
$\varnothing 40, \varnothing 63$ or equiv.	200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000	2000	80

Note: The custom Stroke is available in 1mm increments.

Compatibility table by variation

Applicable bore size		Double acting/standard		Double acting/position locking	
		P4	Q	P4	Q
ø25/32 40/63	P4	●	●	●	●
	P40	●	●	●	●

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

*1: Square nut, a standard accessory, is not included.

*2: The grease nipple is not assembled.

*3: If the switch model No. is not selected, select "CO" (for reed switch), "C1" (for proximity switch) after [Stroke].

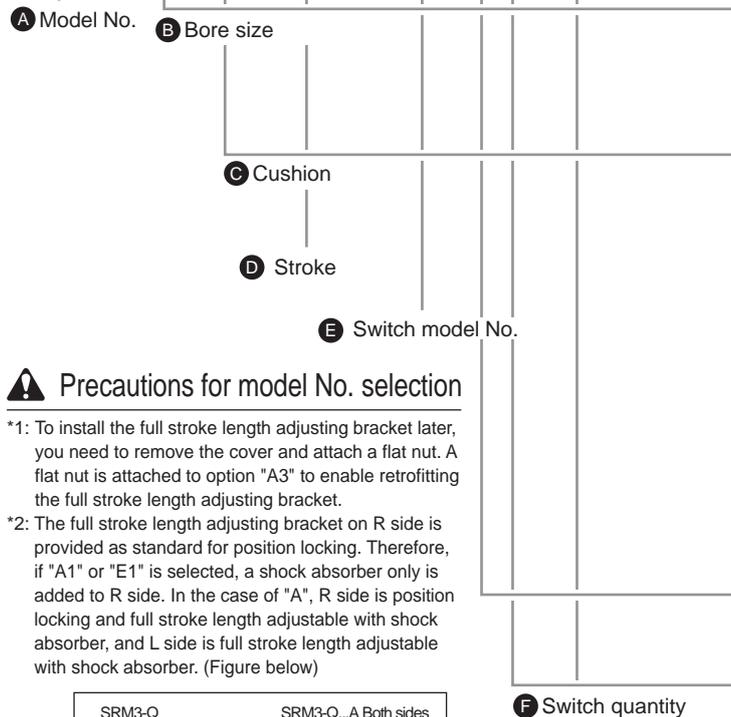
How to order

Without switch

SRM3 - 25 B - 500 - C0 - A P4 P40

With switch

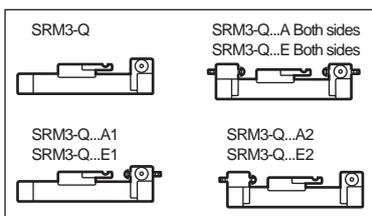
SRM3 - 25 B - 500 - SW40 - R - A P4 P40



⚠ Precautions for model No. selection

*1: To install the full stroke length adjusting bracket later, you need to remove the cover and attach a flat nut. A flat nut is attached to option "A3" to enable retrofitting the full stroke length adjusting bracket.

*2: The full stroke length adjusting bracket on R side is provided as standard for position locking. Therefore, if "A1" or "E1" is selected, a shock absorber only is added to R side. In the case of "A", R side is position locking and full stroke length adjustable with shock absorber, and L side is full stroke length adjustable with shock absorber. (Figure below)



*3: Copper and PTFE free as standard. (Except for type with shock absorber)

*4: The built-in magnet cannot be changed after shipment.

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(ø4)	6(ø6)	8(ø8)	10(ø10)	
SC3W-6-* P4		●				●	●	●		
SC3W-8-* P4			●				●	●	●	
SC3W-10-* P4					●			●	●	●

Specify the compatible tube O.D. code for *

Code	Description						
A Model No.							
SRM3	Standard						
SRM3-Q	Position locking						
B Bore size (mm)							
25	ø25						
32	ø32						
40	ø40						
63	ø63						
C Cushion							
B	Both sides cushioned						
R	R side cushioned						
L	L side cushioned						
N	Without cushion						
D Stroke (mm)							
Bore size	Stroke	Custom Stroke					
ø25	50 to 1000	In 1 mm increments					
ø32	50 to 1000						
ø40	80 to 2000						
ø63	80 to 2000						
E Switch model No.							
Refer to the compatibility table on Intro Pages 23 to 26 for switch model No.							
* Select only when the switch model No. is not selected							
C0	With integrated magnet for reed switch						
C1	With integrated magnet for proximity switch						
F Switch quantity							
R	1 on R side						
L	1 on L side						
D	2						
T	3						
4	4 (when there are more than 4 switches, indicate switch quantity.)						
G Option							
	Bore size(ø)	25	32	40	63		
A A1 A2 A3 E E1 E2 Blank R B T D S	Full Stroke adjustable	Both sides, With shock absorber	●	●	●	●	
		R side only, With shock absorber	●	●	●	●	
		L side only, With shock absorber	●	●	●	●	
		Adjusting bracket to be added later	●	●	●	●	
		Both sides, With light-load shock absorber	●	●	●	●	
		R side only, With light-load shock absorber	●	●	●	●	
		L side only, With light-load shock absorber	●	●	●	●	
		Port position	F(Standard)	●	●	●	●
			R(Common port)	●	●	●	●
			F	●	●	●	●
R(Common port)	●		●	●	●		
Cushion needle position	F	●	●	●	●		
	B	●	●	●	●		
	F	●	●	●	●		
	D	●	●	●	●		

P4 Series

Pneumatic cylinders

Hand/Chuck

Related products

Cylinder

Pneumatic actuator

Vacuum components

Pneumatic valves

Clean air components

Speed controller

Pneumatic auxiliary components

Fitting

Auxiliary valve

Stilencer

Tube

Gas generator

Fluid control components

Motor specification

Electric actuator

Motorless specifications