

# FCD Series

● Bore size:  $\phi 25/\phi 32/\phi 40/\phi 50/\phi 63$

Pneumatic Cylinders I  
Catalog No. CB-029SA



## Specifications

Item	FCD FCD-L					
		$\phi 25$ or equiv.	$\phi 32$ or equiv.	$\phi 40$ or equiv.	$\phi 50$ or equiv.	$\phi 63$ or equiv.
Bore size mm		$\phi 25$ or equiv.	$\phi 32$ or equiv.	$\phi 40$ or equiv.	$\phi 50$ or equiv.	$\phi 63$ or equiv.
Actuation		Double acting				
Working fluid		Compressed air				
Max. working pressure MPa		0.7				
Min. working pressure MPa		0.07				
Proof pressure MPa		1.05				
Ambient temperature °C		-10 to 60 (no freezing)				
Port size		M5		Rc1/8		Rc1/4
Stroke tolerance mm		+0.5 0 (up to 50)				
Working piston speed mm/s		50 to 500				
Cushion		No				
Lubrication		Not available				
Allowable absorbed energy J		0.015	0.02	0.026	0.04	0.05

## Rotation-stop precision/Allowable torque

Item		$\phi 25$ or equiv.	$\phi 32$ or equiv.	$\phi 40$ or equiv.	$\phi 50$ or equiv.	$\phi 63$ or equiv.
Non-rotating accuracy *2	°	$\pm 1^\circ$	$\pm 0.8^\circ$	$\pm 0.5^\circ$	$\pm 0.5^\circ$	$\pm 0.5^\circ$
Allowable torque	N·m	1	1.6	2.5	3.9	5.9

\*1: Avoid applying rotation torque with impact, or with violent changes in torque load direction.  
\*2: "Non-rotating accuracy" is the value when a torque load equivalent to 10% of "allowable torque" is applied to the end of the piston rod.

## Stroke

Model No.	Bore size (mm)	Standard Stroke (mm)	Max. Stroke (mm)	Min. Stroke (mm)
FCD	$\phi 25, \phi 32$	5/10/15/20/25	50	1
	$\phi 40, \phi 50$	30/40/50		
	$\phi 63$ or equiv.			

\*1: The custom stroke is available in 1 mm increments.  
\*2: The min. Stroke varies depending on switch mounting method. Refer to the following table.

## Min. Stroke with switch

1		2	
Rod side mount	Head side mount	Different surface mounting	Same surface mounting
10 mm		15 mm	35 mm ( $\phi 25/\phi 32/\phi 40/\phi 50$ ) 30 mm ( $\phi 63$ )

## Compatibility table by variation

Applicable bore size		Double acting/ single rod	Single acting/ push	Single acting/ pull	Double acting/ double rod
		FCD	FCS	FCH	FCD-D
ø25 to 63	P4	○	○	○	○
	P40	○	○	○	○

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

## How to order

Without switch

**FCD** - **25** - **10** - **N** **P4**  
**P40**

With switch

**FCD-L** - **25** - **10** - **SW71** - **R** - **N** **P4**  
**P40**

**A** Model No.

**B** Bore size

**C** Stroke

**D** Switch model No.

**E** Switch quantity

**F** Option

Code	Description	
<b>A Model No.</b>		
FCD	Double acting	
FCD-L	Double acting/with switch	
<b>B Bore size (mm)</b>		
25	ø25	
32	ø32	
40	ø40	
50	ø50	
63	ø63	
<b>C Stroke (mm)</b>		
<b>Bore size</b>	<b>Stroke</b>	<b>Custom Stroke</b>
ø25 to ø63	1 to 50	In 1 mm increments
<b>D Switch model No.</b>		
Refer to the compatibility table on Intro Pages 23 to 26 for switch model No.		
<b>E Switch quantity</b>		
R	1 on rod side	
H	1 on head side	
D	2	
T	3	
<b>F Option</b>		
Blank	Rod end female thread	
M	Piston rod, rod nut material (stainless steel)	
N	Rod end male thread	
R	With spigot	

## ⚠ Precautions for model No. selection

\*1: Made-to-order product. Contact CKD Sales for details.

## Related products

Speed controller									
Model No.	Appearance	Port size (Rc or R)			Compatible tube O.D.				Description page
		M5	1/8	1/4	4 (ø4)	6 (ø6)	8 (ø8)	10 (ø10)	
SC3W-M5- *-P4		●			●	●			530
SC3W-6- *-P4			●		●	●	●		
SC3W-8- *-P4				●		●	●	●	

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

**P4**  
Series

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Motor  
specification  
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