

Linear slide cylinder Double acting side installation type

# LCM-A Series



● Bore size:  $\phi$  4.5,  $\phi$  6,  $\phi$  8

JIS symbol



## Specifications

Descriptions	LCM-A			
Bore size	mm	$\phi$ 4.5	$\phi$ 6	$\phi$ 8
Actuation		Double acting		
Working fluid		Compressed air		
Max. working pressure	MPa	0.7		
Min. working pressure	MPa	0.2		0.15
Withstanding pressure	MPa	1.05		
Ambient temperature	$^{\circ}$ C	0 to 60		
Port size		M3		
Stroke tolerance	mm	+1.0 0		
Working piston speed	mm/s	30 to 500		
Cushion		None	Rubber cushioned	
Lubrication		Not required (when lubricating, use turbine oil Class 1 ISOVG 32)		
Allowable energy absorption	J	Refer to the table on Page 1766.		

## Specifications with buffer

Descriptions	LCM-*-*-B		
Buffer stroke	mm	4 (Max.)	
Buffer section spring load	Setting	N	0.3
	Operation	N	0.7

## Stroke length

Bore size (mm)	Standard stroke length (mm)	Min. stroke length with switch (mm)
$\phi$ 4.5	5, 10	5
$\phi$ 6	5, 10, 15	
$\phi$ 8	5, 10, 15, 20	

Note 1: Other than standard stroke length is not available.

SCP\*2  
CMK2  
CMA2  
SCM  
SCG  
SCA2  
SCS  
CKV2  
CA/OV2  
SSD  
CAT  
MDC2  
MVC  
SMD2  
MSD\*  
FC\*  
STK  
ULK\*  
JSK/M2  
JSG  
JSC3  
USSD  
USC  
JSB3  
LMB  
STG  
STS/L  
LCS  
LCG  
LCM  
LCT  
LCY  
STR2  
UCA2  
HCM  
HCA  
SRL2  
SRG  
SRM  
SRT  
MRL2  
MRG2  
SM-25  
CAC3  
UCAC  
RCC2  
MFC  
SHC  
GLC  
Ending

### Switch specifications

Descriptions	Proximity 2 wire		Proximity 3 wire	
	F2H/F2V	F2YH/F2YV	F3H/F3V	F3YH/F3YV
Applications	Programmable controller		Programmable controller, relay	
Output method	-		NPN output	
Power voltage	-		10 to 28 VDC	
Load voltage	10 to 30 VDC	24 VDC ±10%	30 VDC or less	
Load current	5 to 20 mA		100 mA or less	50 mA or less
Light	LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Red/green LED (ON lighting)
Leakage current	1 mA or less		10 µA or less	

Note 1: The maximum load current 20mA is applied at 25°C. The current will be lower than 20mA if ambient temperature around switch is higher than 25°C. (5 to 10mA at 60°C)

### Cylinder weight

Unit: g

Stroke length (mm)	5		10		15		20		Additional weight	
	Magnet + Without switch rail	Magnet + With switch rail	Magnet + Without switch rail	Magnet + With switch rail	Magnet + Without switch rail	Magnet + With switch rail	Magnet + Without switch rail	Magnet + With switch rail	With buffer	Weight per switch
φ 4.5	59	63	59	63	-	-	-	-	3	10
φ 6	78	83	78	83	88	94	-	-	4	10
φ 8	106	111	106	111	132	138	132	138	5	10

### Theoretical thrust table

Unit: N

Bore size (mm)	Operating direction	Working pressure MPa					
		0.2	0.3	0.4	0.5	0.6	0.7
φ 4.5	Push	3.2	4.8	6.4	8.0	9.5	11.1
	Pull	2.6	3.8	5.1	6.4	7.7	9.0
φ 6	Push	5.6	8.5	11.3	14.1	16.9	19.7
	Pull	4.2	6.4	8.5	10.6	12.7	14.8
φ 8	Push	10.1	15.1	20.1	25.2	30.2	35.2
	Pull	8.6	13.0	17.3	21.6	25.9	30.2

- SCP\*2
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS
- CKV2
- CA/OV2
- SSD
- CAT
- MDC2
- MVC
- SMD2
- MSD\*
- FC\*
- STK
- ULK\*
- JSK/M2
- JSG
- JSC3
- USSD
- USC
- JSB3
- LMB
- STG
- STS/L
- LCS
- LCG
- LCM**
- LCT
- LCY
- STR2
- UCA2
- HCM
- HCA
- SRL2
- SRG
- SRM
- SRT
- MRL2
- MRG2
- SM-25
- CAC3
- UCAC
- RCC2
- MFC
- SHC
- GLC
- Ending

Linear slide cylinder  
Combined functions

## How to order

● Without switch

**LCM-A - 6 - 10 - R** ————— **J2**

● With switch

**LCM-A - 6 - 10 - R - F2H - R - J2**

**A** Bore size

**B** Stroke length

**C** Table direction

**D** Switch model no.

**E** Switch quantity

**F** Option

Symbol	Descriptions
<b>A Bore size (mm)</b>	
4.5	φ 4.5
6	φ 6
8	φ 8

<b>B Stroke length (mm)</b>		Bore size		
		φ 4.5	φ 6	φ 8
5	5	●	●	●
10	10	●	●	●
15	15	-	●	●
20	20	-	-	●

<b>C Table direction</b>	
R	Right viewed from rod end
L	Left viewed from rod end

<b>D Switch model no.</b>				
Axial lead wire	Radial lead wire	Contact	Indicator	Lead wire
F2H*	F2V*	Proximity	1 color indicator type	2-wire
F3H*	F3V*			3-wire
F2YH*	F2YV*		2 color indicator type	2-wire
F3YH*	F3YV*			3-wire

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

<b>E Switch quantity</b>	
R	One on rod end
H	One on head end
D	Two

<b>F Option</b>	
B	With buffer
M Note 1	With magnet
F1 Note 1, 2	With magnet + switch rail (switch groove 1 pcs.)
F2 Note 1	With magnet + switch rail (switch groove 2 pc.)
J*	Dowel pin attached (* ... pin number)

### ⚠ Caution for model no. selection

Note 1: Selection not required when designating the switch type.

Note 2: Available only for φ 4.5.

<Example of model number>

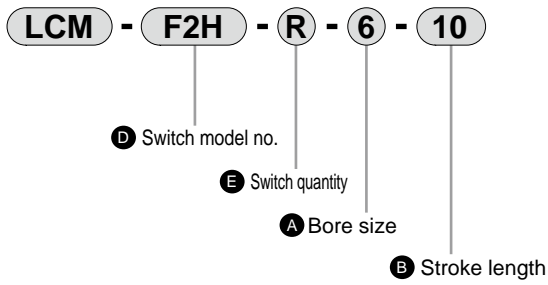
**LCM-A-6-10-R-F2H-R-J2**

Model: Linear slide cylinder double acting side installation type

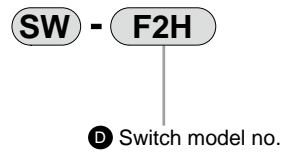
- A** Bore size: φ 6 mm
- B** Stroke length: 10 mm
- C** Piping direction: Right viewed from rod end
- D** Switch model no.: Proximity switch F2H, lead wire 1m
- E** Switch quantity: One on rod end
- F** Option: Dowel pin attached (2 pc.)

### How to order switch

- Switch body + switch rail + magnet

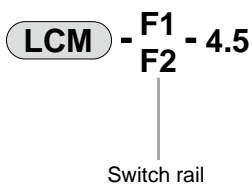


- Only switch body

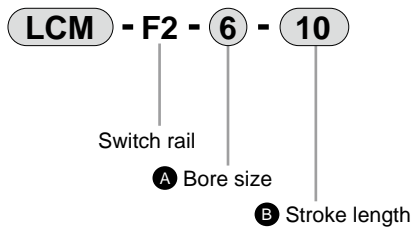


- Only switch rail

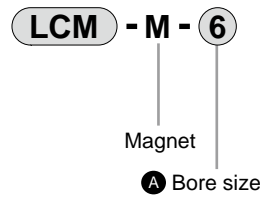
- $\phi$  4.5



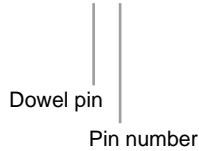
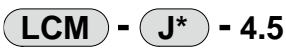
- $\phi$  6,  $\phi$  8



- Only magnet



### How to order dowel pin



SCP*2
CMK2
CMA2
SCM
SCG
SCA2
SCS
CKV2
CA/OV2
SSD
CAT
MDC2
MVC
SMD2
MSD*
FC*
STK
ULK*
JSK/M2
JSG
JSC3
USSD
USC
JSB3
LMB
STG
STS/L
LCS
LCG
<b>LCM</b>
LCT
LCY
STR2
UCA2
HCM
HCA
SRL2
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