

Linear slide cylinder Double acting stroke adjustable type (extended/retracted)

LCM-R Series

● Bore size: ϕ 4.5, ϕ 6, ϕ 8



Specifications

Descriptions		LCM-R		
Bore size	mm	ϕ 4.5	ϕ 6	ϕ 8
Actuation		Double acting		
Working fluid		Compressed air		
Max. working pressure	MPa	0.7		
Min. working pressure	MPa	0.25	0.2	0.15
Withstanding pressure	MPa	1.05		
Ambient temperature	°C	0 to 60		
Port size		M3		
Stroke tolerance	mm	+1.0 0		
Working piston speed	mm/s	30 to 500		
Cushion	Extended	None		
	Retracted	None		
Lubrication		Not required (when lubricating, use turbine oil Class 1 ISOVG 32)		
Adjustable stroke range	Extended	mm	-5 to 0	
	Retracted	mm	-7 to 0	
Repeatability	mm	±0.02		
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)
ϕ 4.5	5, 10	5
ϕ 6	5, 10, 15	
ϕ 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	52	56	52	56	-	-	-	-	3	10
φ 6	71	76	71	76	80	86	-	-	4	10
φ 8	100	105	100	105	123	129	123	129	5	10

Theoretical thrust table

Unit: N

Bore size (mm)	Working pressure MPa					
	0.2	0.3	0.4	0.5	0.6	0.7
φ 4.5	2.6	3.8	5.1	6.4	7.7	9.0
φ 6	4.2	6.4	8.5	10.6	12.7	14.8
φ 8	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-R - 6 - 10 - R ————— **J2**

● With switch

LCM-R - 6 - 10 - R - F2H - R - J2

A Bore size

B Stroke length

C Piping direction

D Switch model no.

E Switch quantity

F Option

Symbol	Descriptions
A Bore size (mm)	
4.5	φ 4.5
6	φ 6
8	φ 8

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

C Piping direction	
R	Right viewed from rod end
L	Left viewed from rod end

D Switch model no.				
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

*Lead wire length	
Blank	1 m (standard)
3	3 m (option)

E Switch quantity	
R	One on rod end
H	One on head end
D	Two

F Option	
B	With buffer
M Note 1	With magnet
F1 Note 1, 2	Magnet + switch rail (switch groove 1 pc.)
F2 Note 1	Magnet + switch rail (switch groove 2 pcs.)
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>

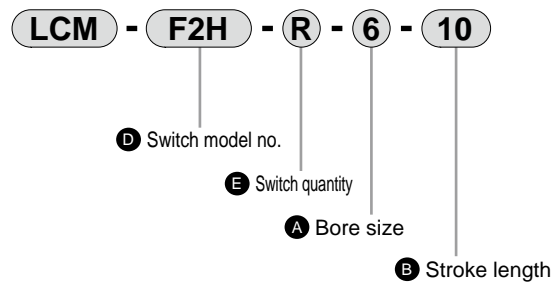
LCM-R-6-10-R-F2H-R-J2

Model: Linear slide cylinder,
double acting stroke adjustable type (extended/retracted)

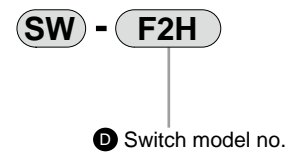
- A** Bore size: φ 6 mm
- B** Stroke length: 10 mm
- C** Piping direction: Right viewed from rod end
- D** Switch model no.: Proximity switch F2H, lead wire 1m
- E** Switch quantity: One on rod end
- F** Option: Dowel pin attached (2 pcs.)

How to order switch

- Switch body + switch rail + magnet

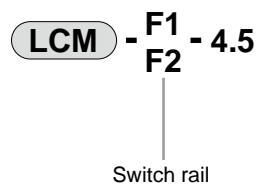


- Only switch body

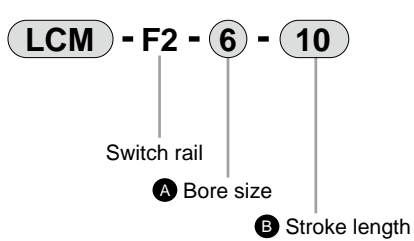


- Only switch rail

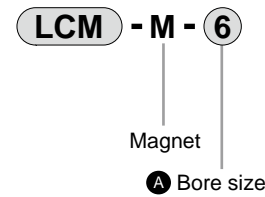
- ϕ 4.5



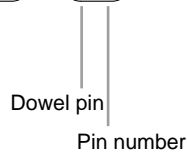
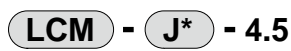
- ϕ 6, ϕ 8



- 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
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