

SCP03
CMK2
SCM
SSD2
MDC2
MSD
MSDG-L
SMG
LCR
LCG
STM
STG
STR2
SCP03
CMK2
SCM
SCG
SSD2
SMG
LCR
STG
STS
STL
LSH
LSHL
LSHM
LST
LSTM
HMC
CKW
ABP2
SCP03
CMK2
SCM
SSD2
MSD
MSDG-L
SMG
STG
STM
LCR
LCG
STR2
LSH
LSHL
SCP03
CMK2
SCM
SCG
SSD2
STG

Long service life cylinder

Environment-resistant cylinder

Linear Slide Hand

Low-profile long stroke hand

Wide-Parallel Hand

Chuck

Air Booster

Compatible with rechargeable batteries

Supports food mfg. processes



Linear slide cylinder Double acting/Single rod

Long service life cylinder

LCR-P4/P40-HP1 Series

● Bore size: $\phi 6/\phi 8/\phi 12/\phi 16/\phi 20/\phi 25$

JIS symbol



Specifications

Item		LCR-P4/P40-HP1					
Bore size mm		ø6	ø8	ø12	ø16	ø20	ø25
Actuation		Double acting					
Working fluid		Compressed air					
Max. working pressure MPa		0.7					
Min. working pressure MPa		0.15 (*1)					
Proof pressure MPa		1.05					
Ambient temperature °C		-10 to 60 (no freezing)					
Port size	Main body side	M3	M5			Rc1/8	
	Main body back	-	M3			M5	Rc1/8
Stroke tolerance mm		+2.0 0 (*2)					
Working piston speedmm/s		50 to 500 (*3)					
Cushion		With rubber cushion					
Lubrication		Not available					
Allowable absorbed energy J		Refer to the following table.					

*1: 0.2MPa when using the $\phi 6$ shock absorber stopper.

*2: Note that there will be a slight gap between the end plate and floating bush if no stopper is attached.

*3: Use the stroke adjusting stopper at 50 to 200mm/s.

*4: The stroke adjusting stopper for 0.3 MPa and over working pressure is the metal sealing type.

Stroke

Bore size (mm)	Standard stroke (mm)
$\phi 6$	10, 20, 30, 40, 50
$\phi 8$	10, 20, 30, 40, 50, 75
$\phi 12$	10, 20, 30, 40, 50, 75, 100
$\phi 16$	10, 20, 30, 40, 50, 75, 100, 125
$\phi 20$	10, 20, 30, 40, 50, 75, 100, 125, 150
$\phi 25$	10, 20, 30, 40, 50, 75, 100, 125, 150

Note: Products with strokes other than the above are not available.

LCR allowable absorbed energy (Eo)

Bore size	Standard (J)	With stroke adjusting stopper (J)	With shock absorber stopper (J)
$\phi 6$	0.025	0.0032	0.14
$\phi 8$	0.058	0.0032	0.25
$\phi 12$	0.112	0.014	0.25
$\phi 16$	0.176	0.043	0.65
$\phi 20$	0.314	0.055	1.3
$\phi 25$	0.314	0.14	1.3

Related products

Speed controller											
Model No.	Appearance	Port size (Rc or R)					Applicable tube bore				
		M3	M5	1/8	1/4	3/8	4($\phi 4$)	6($\phi 6$)	8($\phi 8$)	10($\phi 10$)	12($\phi 12$)
SC3W-M3- *P4		●	●				●				
SC3W-M5- *P4			●				●	●			
SC3W-6- *P4				●			●	●	●		

Specify the compatible tube O.D. code for *. Refer to "rechargeable battery compatible Component P4" Series" (No.CC-1226A) for details.

Refer to the LCR Series in "Pneumatic Cylinders II (No. CB-030SA)" for dimentions.

How to order

Without switch (built-in magnet for switch)

LCR - 8 - 40 - S506 DTN P4 P40 - HP1

With switch (built-in magnet for switch)

LCR - 12 - 40 - SW81 - R - S506 DTN P4 P40 - HP1

Model No.

A Tube
Bore size

B Stroke

C Switch model No.

D Switch quantity

E Stopper

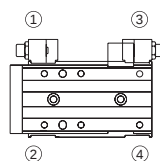
F Option

Code	Description						
A Bore size							
6	ø6						
8	ø8						
12	ø12						
16	ø16						
20	ø20						
25	ø25						
B Stroke (mm)							
		Bore size (ø)					
		6	8	12	16	20	25
10	10	●	●	●	●	●	●
20	20	●	●	●	●	●	●
30	30	●	●	●	●	●	●
40	40	●	●	●	●	●	●
50	50	●	●	●	●	●	●
75	75		●	●	●	●	●
100	100			●	●	●	●
125	125				●	●	●
150	150					●	●
C Switch model No.							
Refer to the compatibility table on pages 210 to 213 for switch model No.							
D Switch quantity							
R	1 on rod side						
H	1 on head side						
D	2						
E Stopper							
Refer to “Stopper” on page 190.							
F Option							
Blank	Port on stopper: without port						
D	Port on stopper: side and bottom ports						
Blank	Stopper block material: Steel						
T	Stopper block material: steel (nitriding)						
Plug included							
Blank	No						
N	With side piping port plug (not available for ø6, ø25)						

⚠ Precautions for model No. selection

- *1: The port positions of the standard without stopper are ① and ③ in the figure below.
- *2: Can be selected for the type with stopper only.
- *3: A1**, A2**, A5** and A6** of ø6 to ø8-10st, ø12 to ø25-20st or less cannot be adjusted with the standard stopper, so they are made to order.
- *4: Select the F/H type switch when using the two switches for the S*** or A*** type with ø6 to ø8-30st or less.
- *5: Select when using rear piping.
- *6: Can be selected only when using stroke adjusting stopper (S) and one side mixed type (C).
- *7: When using the W3 to 6 (two-sided combined stopper) with ø6 (all st), ø8-20st, 30st, ø12-30st to 50st and ø16-30st to 50st, use the axial lead wire when using the cylinder with two switches or the head side.
- *8: Cannot be selected when choosing two-sided combined type (W).
- *9: The adjustable stroke range when choosing two-sided combined type (W) is ø6:9 mm, ø8:13.5 mm, ø12:14.5 mm, ø16:15 mm, ø20:13 mm, ø25:10 mm.
- *10: The stroke adjusting stopper for 0.3 MPa and over working pressure is the metal sealing type.

● Stopper position



SCPD3	Long service life cylinder
CMK2	
SCM	
SSD2	
MDC2	
MSD	
MSDG-L	
SMG	
LCR	
LCG	
STM	
STG	
STR2	
SCPD3	Environment-resistant cylinder
CMK2	
SCM	
SCG	
SSD2	
SMG	
LCR	
STG	
STS	
STL	
LSH	Linear Slide Hand
LSHL	
LSHM	
LST	Low-profile long stroke hand
LSTM	
HMC	Wide Parallel Hand
CKW	Chuck
ABP2	Air Booster
SCPD3	Compatible with rechargeable batteries
CMK2	
SCM	
SSD2	
MSD	
MSDG-L	
SMG	
STG	
STM	
LCR	
LCG	
STR2	
LSH	
LSHL	
SCPD3	Supports food mfg. processes
CMK2	
SCM	
SCG	
SSD2	
STG	

LCR-P4/P40-HP1 Series

[E] Stopper

Code	Description	Code	Description
E Stopper		C One side hybrid stopper mix (shock absorber stopper, stroke adjusting stopper)	
Blank	No option	C1**	A1+S3
S Stroke adjusting stopper		C2**	A2+S4
S1**	Stopper position ① (Can be changed to ④)	C3**	A3+S1
S2**	Stopper position ② (Can be changed to ③)	C4**	A4+S2
S3**	Stopper position ③ (Can be changed to ②)		
S4**	Stopper position ④ (Can be changed to ①)		
S5**	Stopper position ①, ③		
S6**	Stopper position ②, ④		
A Shock absorber stopper			
A1**	Stopper position ① (Can be changed to ④)		
A2**	Stopper position ② (Can be changed to ③)		
A3**	Stopper position ③ (Can be changed to ②)		
A4**	Stopper position ④ (Can be changed to ①)		
A5**	Stopper position ①, ③		
A6**	Stopper position ②, ④		
W Two-sided combined double stopper (Shock absorber stopper, metal stopper)	*7, *9		
W1**	A1 + metal stopper		
W2**	A2 + metal stopper		
W3**	A3 + metal stopper		
W4**	A4 + metal stopper		
W5**	A5 + metal stopper		
W6**	A6 + metal stopper		

Note: When changing the stopper position from the head side to the rod side, the stopper must be purchased separately according to the stroke and adjustable stroke. Refer to "HP Series General Catalog" (Catalog No. CC-1421A). A1, A2 and adjustable stroke of 15 mm and 25 mm may not be available depending on the stroke.

Stopper model No. selection method

1 Stopper combination table

Model No. - [① Stopper type] [② Stopper position] [③] Example) LCR-8-40-[S] [5] 06

		Adjustable stroke (one side)	Shock absorber (One side)	Two-sided combined double stopper	One side hybrid stopper mix
		Stopper model No. [①]			
		[S]	[A]	[W]	[C]
Stopper position model No. [②]	[1]	[S1]	[A1]	[W1]	[C1]
	[2]	[S2]	[A2]	[W2]	[C2]
	[3]	[S3]	[A3]	[W3]	[C3]
	[4]	[S4]	[A4]	[W4]	[C4]
	[5]	[S5]	[A5]	[W5]	/
	[6]	[S6]	[A6]	[W6]	

▲ shows the piping direction. When choosing two-sided combined type (W), the stopper bracket comes with piping on both sides. ▲ The stopper bracket on the reverse side of (piping direction) is provided with a plug.

: Shock absorber stopper
 : Stroke adjusting stopper (adjusting range 5 mm)
 : Metal adjusting stopper (adjusting range 15 mm)

LCR-P4/P40-HP1 Series

Stopper model No. selection method

LCR Double acting/Single rod selection table

(Combination with stroke adjusting stopper, shock absorber stopper)

●: Available - : Not available

Model Model No.	Stopper type		Adjustable stroke																											
	Stopper code		S1			S2			S3			S4			S5							S6								
			Adjustment length code																											
	Bore size	Stroke	Blank	02	03	Blank	02	03	Blank	02	03	Blank	02	03	Blank	02	03	04	05	06	07	Blank	02	03	04	05	06	07		
LCR	ø6,ø8	10	●	-	-	●	-	-	●	●	-	●	●	-	●	-	-	-	-	●	-	●	-	-	-	-	●	-		
		20 or more	●	●	-	●	●	-	●	●	-	●	●	-	●	●	-	●	-	●	-	●	●	-	●	-	●	-		
	ø12 to ø25	10	●	-	-	●	-	-	●	●	-	●	●	-	●	-	-	-	-	●	-	●	-	-	-	-	●	-		
		20	●	●	-	●	●	-	●	●	●	●	●	●	●	●	●	-	●	-	●	●	●	●	-	●	-	●	●	
		30 or more	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

Model Model No.	Stopper type		Shock absorber						Two-sided combined double stopper						One side hybrid stopper mix											
	Stopper code		A1	A2	A3	A4	A5	A6	W1	W2	W3	W4	W5	W6	C1			C2			C3			C4		
	Bore size	Stroke													Adjustment length code											
LCR	ø6,ø8	10	-	-	●	●	-	-	-	-	●	●	-	-	-	-	-	-	●	-	-	●	-	-		
		20 or more	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	●	●	-		
	ø12 to ø25	10	-	-	●	●	-	-	-	-	●	●	-	-	-	-	-	-	●	-	-	●	-	-		
		20	-	-	●	●	-	-	-	-	●	●	-	-	-	-	-	-	●	●	-	●	●	-		
		30 or more	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		

The table above also applies to a combination with option code D (with port on the stopper) or T (steel stopper block (nitriding)).

SCP3	Long service life cylinder	CMK2	Environment-resistant cylinder	SCM	Linear Slide Hand	SSD2	Low-profile long stroke hand	MDC2	Wide Parallel Hand	MSD	Chuck	MSDG-L	Air Booster	SMG	Compatible with rechargeable batteries	LCR	Supports food mfg. processes	STM		STG	
SCP3		CMK2		SCM		SSD2		MDC2		MSD		MSDG-L		SMG		LCR		STM		STG	
SCP3		CMK2		SCM		SSD2		MDC2		MSD		MSDG-L		SMG		LCR		STM		STG	
SCP3		CMK2		SCM		SSD2		MDC2		MSD		MSDG-L		SMG		LCR		STM		STG	
SCP3		CMK2		SCM		SSD2		MDC2		MSD		MSDG-L		SMG		LCR		STM		STG	
SCP3		CMK2		SCM		SSD2		MDC2		MSD		MSDG-L		SMG		LCR		STM		STG	
SCP3		CMK2		SCM		SSD2		MDC2		MSD		MSDG-L		SMG		LCR		STM		STG	
SCP3		CMK2		SCM		SSD2		MDC2		MSD		MSDG-L		SMG		LCR		STM		STG	
SCP3		CMK2		SCM		SSD2		MDC2		MSD		MSDG-L		SMG		LCR		STM		STG	
SCP3		CMK2		SCM		SSD2		MDC2		MSD		MSDG-L		SMG		LCR		STM		STG	