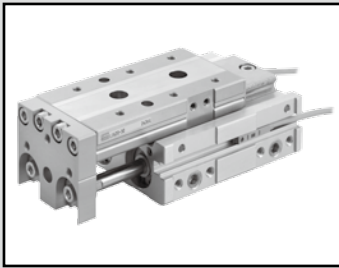


LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

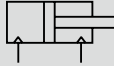


Linear slide cylinder Double acting/single rod

LCG Series

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

JIS symbol



Specifications

Item		LCG					
Bore size	mm	$\varnothing 6$	$\varnothing 8$	$\varnothing 12$	$\varnothing 16$	$\varnothing 20$	$\varnothing 25$
Actuation		Double acting					
Working fluid		Compressed air					
Max. working pressure	MPa	0.7 (≈ 100 psi, 7 bar)					
Min. working pressure	MPa	0.15 (≈ 22 psi, 1.5 bar) (*1)					
Proof pressure	MPa	1.05 (≈ 150 psi, 10.5 bar)					
Ambient temperature	$^{\circ}\text{C}$	-10 (14 $^{\circ}\text{F}$) to 60 (140 $^{\circ}\text{F}$) (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 speed	mm/s	50 to 500 (*3)					
Cushion		With rubber cushion					
Lubrication		Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)					
Allowable absorbed energy	J	Refer to Table 3 on page 188.					

*1: 0.2 MPa when using $\varnothing 6$ 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: Keep within 50 to 200 mm/s when using a stroke adjusting stopper.

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

Stroke length

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

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

With buffer specifications Specifications other than the below are same as the above common specifications.

Item		Description					
Bore size	mm	$\varnothing 6$	$\varnothing 8$	$\varnothing 12$	$\varnothing 16$	$\varnothing 20$	$\varnothing 25$
Buffer stroke length	mm	4		9		10	
Buffer part	When set N	3	5	10	13	17	21
spring load	When operated N	7	8	14	20	25	29

*1: In the type with buffer, adjusting the rod side stroke length will shorten the buffer stroke length and increase the spring load when set.

*2: Keep the buffer stroke length less than the stroke length above. Otherwise, malfunctions or damage may result.

Theoretical thrust table

Refer to page 189.

Switch specifications

- 1-color/2-color display

Item	Reed 2-wire				Proximity 2-wire		Proximity 3-wire		
	T0H/T0V		T5H/T5V		T2H/T2V	T2WH/ T2WV	T3H/ T3V	T3PH/ T3PV	T3WH/ T3WV
Applications	For programmable controller, relay		For programmable controller, relay, IC circuit (without indicator lamp), serial connection		Dedicated for programmable controller		For programmable controller, relay		
Output method	-		-		-		NPN output	PNP output	NPN output
Power supply voltage	-		-		-		10 to 28 VDC		
Load voltage	12/24 VDC	110 VAC	5/12/24 VDC	110 VAC	10 to 30 VDC	24 VDC ±10%	30 VDC or less		
Load current	5 to 50 mA	7 to 20 mA	50 mA or less	20 mA or less	5 to 20 mA		100 mA or less	50 mA or less	
Indicator lamp	LED (Lit when ON)		Without indicator lamp		LED (Lit when ON)	Red/green LED (Lit when ON)	LED (Lit when ON)	Yellow LED (Lit when ON)	Red/green LED (Lit when ON)
Leakage current	0 mA				1 mA or less		10 µA or less		
Weight	g 1 m:18 3 m:49 5 m:80								

Item	Proximity 2-wire		Proximity 3-wire		Proximity 2-wire		Proximity 3-wire		
	F2S		F3S		F2H/F2V	F2YH/ F2YV	F3H/F3V	F3PH/F3PV (Made to order)	F3YH/ F3YV
Applications	Dedicated for programmable controller		For programmable controller, relay		Dedicated for programmable controller		For programmable controller, relay		
Output method	-		NPN output		-		NPN output	PNP output	NPN output
Power supply voltage	-		10 to 28 VDC		-		10 to 28 VDC	4.5 to 28 VDC	10 to 28 VDC
Load voltage	10 to 30 VDC		30 VDC or less		10 to 30 VDC	24 VDC ±10%	30 VDC or less		
Load current	5 to 20 mA		50 mA or less		5 to 20 mA		50 mA or less		
Indicator lamp	LED (Lit when ON)		LED (Lit when ON)		Yellow LED (Lit when ON)	Red/green LED (Lit when ON)	Yellow LED (Lit when ON)	Yellow LED (Lit when ON)	Red/green LED (Lit when ON)
Leakage current	1 mA or less		10 µA or less		1 mA or less		10 µA or less		
Weight	g 1 m:10 3 m:29								

*1 : Refer to Ending Page 1 for detailed switch specifications and dimensions.

*2 : Switches other than the above models, such as switches with connectors, are also available. Refer to Ending Page 1.

*3 : The max. load current is 20 mA at 25°C. The current is lower than 20 mA if the operating ambient temperature around the switch is higher than 25°C. (5 to 10 mA at 60°C)

*4 : The F type switch uses a bend-resistant lead wire.

Cylinder weight

- Basic

(Unit: g)

Bore size (mm)	Basic Stroke length (mm)								
	10	20	30	40	50	75	100	125	150
ø6	150	150	170	230	250	-	-	-	-
ø8	220	220	250	330	360	450	-	-	-
ø12	480	480	480	530	580	770	910	-	-
ø16	750	740	730	810	890	1,240	1,430	1,630	-
ø20	1,270	1,260	1,250	1,370	1,490	1,930	2,220	2,510	2,800
ø25	2,120	2,100	2,080	2,260	2,440	3,240	3,660	4,080	4,500

- Additional weight of options

(Unit: g)

Bore size (mm)	Option/stopper code				With buffer
	S1 to S4	S5/S6	A1 to A4	A5/A6	B/BL
ø6	30	40	40	50	40
ø8	40	60	50	70	40
ø12	70	100	80	110	70
ø16	110	150	120	160	80
ø20	170	250	180	270	150
ø25	290	380	300	400	320

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

How to order (ø6 to ø16)

Without switch (built-in magnet for switch)



With switch (built-in magnet for switch)



Model No.

A Bore size

B Stroke length

D Switch quantity
C Switch model No.
*12

⚠ Precautions for model No. selection

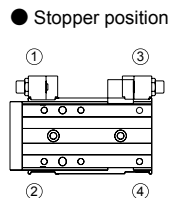
- *1 : To change the adjustable stroke length, use the discrete stroke adjusting stopper on page 145.
- *2 : For the adjustable stroke range with a shock absorber stopper, refer to the stopper dimensions table on page 162.
- *3 : For the port position, refer to the stopper dimensions on page 162.
- *4 : The port positions of the standard without stopper are ① and ③ in the figure below.
- *5 : Combination of the stroke adjusting stopper and shock absorber stopper is made to order.
- *6 : Can be selected for the type with stopper only.
- *7 : A switch for buffer should be purchased separately. Refer to how to order a switch on page 144.
- *8 : Refer to the selection table below for combinations of options.
- *9 : A1**, A2**, A5** and A6** of ø6 to ø8 with 10 mm stroke length or less and ø12/ø16 with 20 mm stroke length or less are made to order since adjustment is not possible with the standard stopper.
- *10 : When two switches are necessary for the type with S*** or A*** of ø6 to ø8 with 30 mm stroke length or less, select the F □ H type switch.
- *11 : The anti-rust is made to order.
- *12 : The stroke adjusting stopper for 0.3 MPa and over working pressure is the metal sealing.
- *13 : When changing the stopper position from the head side to the rod side, the stopper must be purchased separately according to the stroke length and adjustable stroke length. Refer to "Precautions when purchasing discrete stopper" on page 145. A1, A2 and adjustable stroke length of 15 mm and 25 mm may not be available depending on the stroke length.

[Example of model No.]

LCG-12-40-F2H-R-A1DT

Model: Linear slide cylinder Double acting/single rod LCG

- A Bore size : ø12
- B Stroke length : 40 mm
- C Switch model No. : Proximity/2-wire Axial lead wire
- D Switch quantity : 1 on rod side
- E Other options : Shock absorber
Stopper position ①
With side and bottom ports
Material, steel (nitriding)



LCG Double acting/single rod selection table

(Combination with stroke adjusting stopper, shock absorber stopper)

○: Available — : Not available

Model No. code	Option code		Stroke adjusting stopper						Shock absorber stopper					
	Bore size	Stroke length	S1	S2	S3	S4	S5	S6	A1	A2	A3	A4	A5	A6
LCG	ø6, ø8	10	○	○	○	○	○	○	—	—	○	○	—	—
		20 or more	○	○	○	○	○	○	○	○	○	○	○	○
LCG -B, BL	ø12 to ø25	10 to 20	○	○	○	○	○	○	—	—	○	○	—	—
		30 or more	○	○	○	○	○	○	○	○	○	○	○	○

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

Code	Description
A Bore size	
6	ø6
8	ø8
12	ø12
16	ø16

B Stroke length (mm)		Bore size (ø)			
		6	8	12	16
10	10	●	●	●	●
20	20	●	●	●	●
30	30	●	●	●	●
40	40	●	●	●	●
50	50	●	●	●	●
75	75		●	●	●
100	100			●	●
125	125				●

C Switch model No.							Bore size			
Axial lead wire	Radial lead wire	Contact	Voltage AC	DC	Indicator lamp	Lead Line	ø6	ø8	ø12	ø16
-	F2S*	Proximity	●	●	1-color display	2-wire				
-	F3S*		●	●		3-wire				
F2H*	F2V*		●	●	1-color display (PNP output) (made to order)	2-wire				
F3H*	F3V*		●	●		3-wire	●	●	●	
F3PH*	F3PV*	Reed	●	●	2-color display	3-wire				
F2YH*	F2YV*		●	●		2-wire				
F3YH*	F3YV*		●	●		3-wire				
T0H*	T0V*	Proximity	●	●	1-color display no indicator lamp	2-wire				
T5H*	T5V*		●	●		3-wire				
T2H*	T2V*		●	●		2-wire				
T3H*	T3V*	Proximity	●	●	1-color display (PNP output)	3-wire				●
T3PH*	T3PV*		●	●		2-wire				
T2WH*	T2WV*		●	●		3-wire				
T3WH*	T3WV*	●	●	2-color display	2-wire					

* Lead wire length		Bore size			
Stroke length	Lead wire length	ø6	ø8	ø12	ø16
Blank	1 m (standard)				●
3	3 m (option)				●
5	5 m (option)				●

D Switch quantity	
R	1 on rod side
H	1 on head side
D	2

E Option	
Blank	No option

S Stroke adjusting stopper		Stopper installation position
Stroke length	Stopper position	
5 mm stroke adjustment on one side *1, *5, *8		
S1**	Stopper position ① (can be changed to ④)	Stopper installation position
S2**	Stopper position ② (can be changed to ③)	
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		Stopper installation position
Stroke length	Stopper position	
*2, *5, *8		
A1**	Stopper position ① (can be changed to ④)	Stopper installation position
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	

** part	
Blank	Port on the stopper: without port
D	Port on stopper: side and bottom ports *3, *6
Blank	Stopper block material: steel
T	Stopper block material: steel (nitriding) *6

B With buffer		*7, *8
B	Without switch groove	
BL	With switch groove	

Plug attached	
Blank	None
N	With side piping port plug (not available for ø6)

How to order (ø20, ø25)

Without switch (built-in magnet for switch)



With switch (built-in magnet for switch)



Model No.

A Tube
Bore size

B Stroke length

D Switch quantity

C Switch model No.
*12

F Anti-rust
treatment

⚠ Precautions for model No. selection

- *1 : To change the adjustable stroke length, use the discrete stroke adjusting stopper on page 145.
- *2 : For the adjustable stroke range with a shock absorber stopper, refer to the stopper dimensions table on page 162.
- *3 : For the port position, refer to the stopper dimensions on page 162.
- *4 : The port positions of the standard without stopper are ① and ③ in the figure below.
- *5 : Combination of the stroke adjusting stopper and shock absorber stopper is made to order.
- *6 : Can be selected for the type with stopper only.
- *7 : A switch for buffer should be purchased separately. Refer to how to order a switch on page 144.
- *8 : Refer to the selection table on page 142 for combinations of options.
- *9 : A1**, A2**, A5** and A6** with 20 mm stroke length or less are made to order since adjustment is not possible with the standard stopper.
- *10: The table is alloy steel.
To prevent rust, select "U" for an environment where the temperature and humidity is high or condensation may occur on the product surface.
- *11: The stroke adjusting stopper for 0.3 MPa and over working pressure is the metal sealing.
- *12: When changing the stopper position from the head side to the rod side, the stopper must be purchased separately according to the stroke length and adjustable stroke length. Refer to "Precautions when purchasing discrete stopper" on page 145.
A1, A2 and adjustable stroke length of 15 mm and 25 mm may not be available depending on the stroke length.

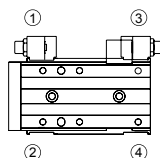
[Example of model No.]

LCG-20-40-T2H-R-A1DT

Model: Linear slide cylinder Double acting/single rod LCG

- A** Bore size : ø20
- B** Stroke length : 40 mm
- C** Switch model No. : Proximity/2-wire
Axial lead wire
- D** Switch quantity : 1 on rod side
- E** Other options : Shock absorber
Stopper position ①
With side and bottom ports
Material, steel (nitriding)

● Stopper position



Specifications for rechargeable battery (Catalog No. CC-1226A)

- Design compatible with rechargeable battery manufacturing process.

LCG - ... - P4*

Code	Description
A Bore size	
20	ø20
25	ø25
B Stroke length (mm)	
10	10
20	20
30	30
40	40
50	50
75	75
100	100
125	125
150	150

C Switch model No.						
Axial lead wire	Radial lead wire	Contact	Voltage		Indicator lamp	Lead wire
			AC	DC		
T0H*	T0V*	Reed	●	●	1-color display	2-wire
T5H*	T5V*		●	●	Without indicator lamp	
T2H*	T2V*	Proximity	●	●	1-color display	2-wire
T3H*	T3V*		●	●	1-color display (PNP output)	3-wire
T3PH*	T3PV*		●	●	1-color display (PNP output)	3-wire
T2WH*	T2WV*		●	●	2-color display	2-wire
T3WH*	T3WV*		●	●	2-color display	3-wire

* Lead wire length	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

D Switch quantity	
R	1 on rod side
H	1 on head side
D	2

E Option	
Blank	No option

S Stroke adjusting stopper		
5 mm stroke adjustment on one side *1, *5, *8		
S1**	Stopper position ① (can be changed to ④)	Stopper installation position
S2**	Stopper position ② (can be changed to ③)	
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 *2, *5, *8		
A1**	Stopper position ① (can be changed to ④)	Stopper installation position
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	

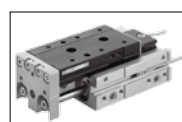
** part	
Blank	Port on the stopper: without port
D	Port on stopper: side and bottom ports *3, *6
Blank	Stopper block material: steel
T	Stopper block material: steel (nitriding) *6

B With buffer *7, *8	
B	Without switch groove
BL	With switch groove

Plug attached	
Blank	None
N	With side piping port plug (not available for ø25)

F Anti-rust treatment	
Blank	None
U	Anti-rust treated product (table/guide) *10

U: Anti-rust treated product (ø20, ø25)



The table and rail surface rustproofing reduces rust in high-humidity environments and near ionizers.

The table and rail are black.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

- LCM
- LCR
- LCG**
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

How to order switch

For $\phi 6$ to $\phi 12$

SW - F2H

Switch model No.
(Item © on page 142)

For $\phi 16$ to $\phi 25$

SW - T2H3

Switch model No.
(Item © on pages 142, 143)

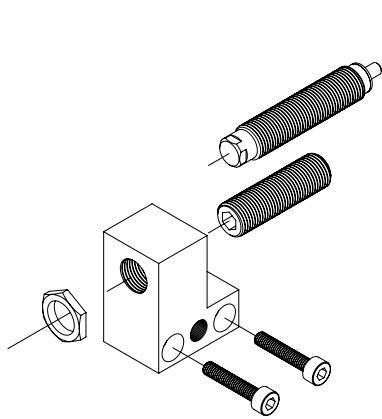
● For buffer

SW - F 2 V 3

Output	
2	DC 2-wire proximity
3	DC 3-wire proximity
Radial lead wire	
Lead wire length	
Blank	1 m (standard)
3	3 m (option)

How to order a stopper set

- Set of a stopper and stroke adjusting stopper or shock absorber stopper
- Use it when changing from the standard to the stroke adjusting stopper or shock absorber stopper.



LCG - 12 - S 2 D - S02

Bore size
(Item A on pages 142, 143)

A Stopper	
S	Stroke adjusting stopper
A	Shock absorber stopper
B Stopper installation position *1	
1	Stopper position ① or ④
2	Stopper position ② or ③
C Port on the stopper	
Blank	Without port
D	With side and bottom ports
D Adjustable stroke length *2/*3	
Blank	Adjustable stroke range 5 mm
S02	Adjustable stroke range 15 mm
S03	Adjustable stroke range 25 mm

*1: When installing in the ① or ② stopper mounting position, the stroke causes changes in the adjustable stroke length; see the table below.

*2: $\phi 6$ and $\phi 8$ are not available for S03.

*3: Cannot be selected for the shock absorber stopper "A".

Precautions when purchasing the stopper set

When the stopper set is installed in the ① or ② position (refer to pages 142 and 143), add the part shown on the right according to the stroke length and adjustable stroke length.

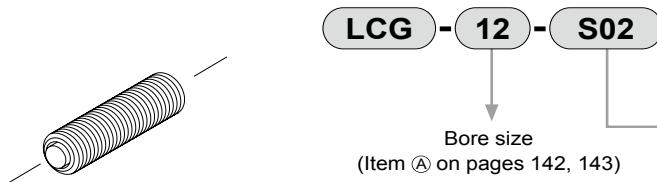
Model No. code	Option code		Discrete stroke adjusting stopper		
	Bore size	Stroke length	Adjustable stroke length (mm)		
LCG Series	$\phi 6, \phi 8$	10	S02	—	—
		20 or more	N/A	S02	—
	$\phi 12$ to $\phi 25$	10	S03	—	—
		20	S02	S03	—
		30 or more	N/A	S02	S03

● Stopper set weight (Unit: g)

Stopper port	S1, S2			A1, A2
Port on stopper	Blank, D			
Adjustable stroke length	Blank	S02	S03	Blank
$\phi 6$	15	18	—	18
$\phi 8$	21	25	—	27
$\phi 12$	28	31	34	33
$\phi 16$	42	47	52	49
$\phi 20$	77	85	92	86
$\phi 25$	87	94	101	95

How to order discrete stroke adjusting stopper

- Hexagon socket set screw with urethane
- Use when changing the adjustable stroke range or when using a custom stroke length.



A Adjustable stroke range	
S01	Single side 5 mm (standard)
S02	Single side 15 mm
S03	Single side 25 mm

Specify S01, S02 or S03 in (A).
 Note: S03 is not available for $\phi 6$ and $\phi 8$.
 Some models may not be available and adjustable stroke range may differ from the above depending on the model No.

Precautions when purchasing discrete stopper

When a discrete stroke adjusting stopper or a discrete shock absorber stopper is installed in the ① or ② position (refer to pages 142 and 143), the combination will be as shown on the right according to the stroke length and adjustable stroke length.

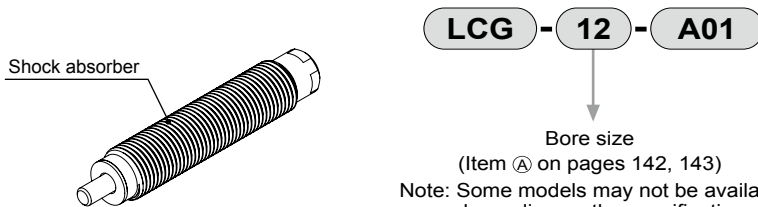
Model No. code	Option code		Discrete stroke adjusting stopper			Discrete shock absorber stopper
	Bore size	Stroke length	Adjustable stroke length (mm)			
LCG Series -S1, S2, S5, S6 -A1, A2, A5, A6	$\phi 6, \phi 8$	10	S02	—	—	—
		20 or more	S01	S02	—	A01
	$\phi 12$ to $\phi 25$	10	S03	—	—	—
		20	S02	S03	—	—
		30 or more	S01	S02	S03	A01

- Discrete stroke adjusting stopper weight (Unit: g)

Adjustable stroke range	S01	S02	S03
$\phi 6$	6	9	—
$\phi 8$	7	10	—
$\phi 12$	7	11	14
$\phi 16$	11	16	22
$\phi 20$	22	30	37
$\phi 25$	23	30	37

How to order discrete shock absorber stopper

- Shock absorber set
- Use when changing from the stroke adjusting stopper or shock absorber stopper.



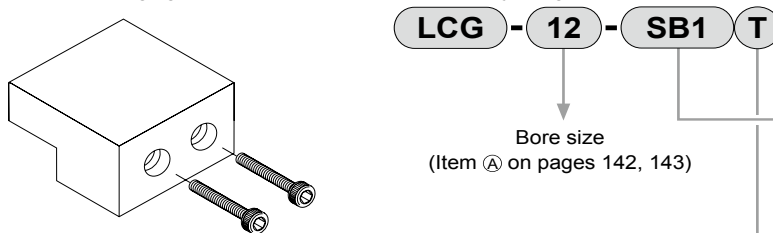
Note: Some models may not be available depending on the specifications. Refer to pages 142 and 143.
 For the adjustable stroke range with a shock absorber stopper, refer to page 162.

Applicable shock absorber model No.

Model	Shock absorber model No.	Weight (g)
LCG-6	SKL-0804	9
LCG-8	SKL-0805	12
LCG-12	SKL-0805	12
LCG-16	SKL-1006	19
LCG-20	SKL-1208	31
LCG-25	SKL-1208	31

How to order discrete stopper block

- Use it when changing from the standard to the stroke adjusting stopper or shock absorber stopper.



A Stopper block	
SB1	$\phi 6/\phi 8$: For 30 mm stroke length or less $\phi 12$ to $\phi 25$: For 50 mm stroke length or less
SB2	$\phi 6/\phi 8$: For 40 mm stroke length or more $\phi 12$ to $\phi 25$: For 75 mm stroke length or more

B Material	
Blank	Stopper block material: steel
T	Stopper block material: steel (nitriding)

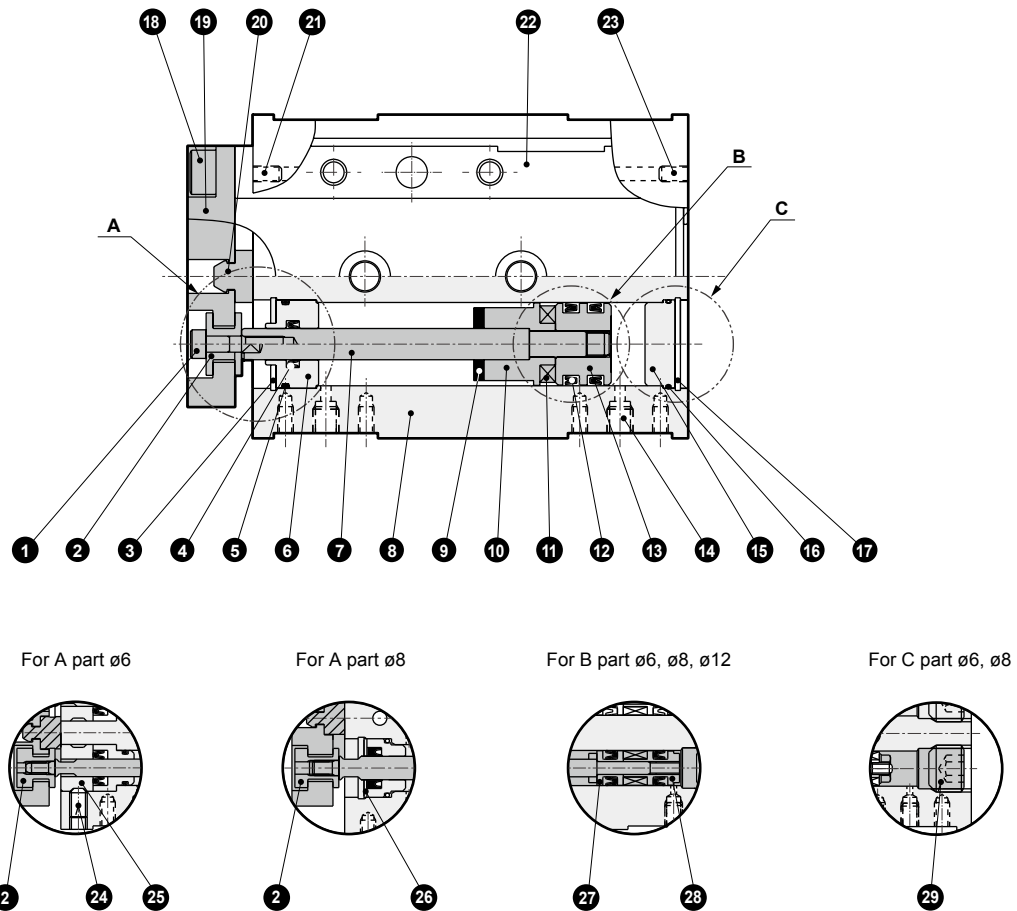
- Discrete stroke adjusting stopper weight (Unit: g)

Adjustable stroke range	SB1(T)	SB2(T)
$\phi 6$	11	21
$\phi 8$	14	24
$\phi 12$	23	37
$\phi 16$	38	72
$\phi 20$	60	99
$\phi 25$	112	206

- LCM
- LCR
- LCG**
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

Internal structure and parts list

- LCM
- LCR
- LCG**
- LCW
- LX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending



Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Hexagon socket head cap screw	Alloy steel	Zinc chromate	15	Cover	Aluminum alloy	Chromate
2	Floating bush	Stainless steel		16	Cover gasket	Nitrile rubber	
3	C type snap ring	ø8: Steel ø12 to 25: Stainless steel	ø8 to 25 only	17	C type snap ring	ø8: Steel ø12 to 25: Stainless steel	ø8 to 25 only
4	Rod packing	Nitrile rubber		18	Hexagon socket head cap screw	Alloy steel	Zinc chromate
5	Metal gasket	Nitrile rubber		19	End plate	Aluminum alloy	Alumite
6	Rod metal	Aluminum alloy	Alumite	20	Cushion rubber (H)	Urethane rubber	
7	Piston rod	Stainless steel		21	Plug	Stainless steel	
8	Cylinder body	Aluminum alloy	Hard alumite	22	Table	ø6 to 16: Stainless steel ø20, 25: Steel	
9	Cushion rubber (R)	Urethane rubber		23	Hexagon socket set screw	Stainless steel	
10	Magnet spacer	Aluminum alloy	Chromate	24	Hexagon socket set screw	Stainless steel	ø6 only
11	Magnet	Plastic		25	Rod metal A	Aluminum alloy	
12	Piston packing	Nitrile rubber		26	Cap	Aluminum alloy	Chromate
13	Piston	Aluminum alloy	Chromate	27	Piston A	Aluminum alloy	Chromate
14	Plug	Stainless steel	ø6 to 16	28	Piston B	Aluminum alloy	Chromate
		Steel	ø20, 25	29	Hexagon socket set screw	Alloy steel	Zinc chromate

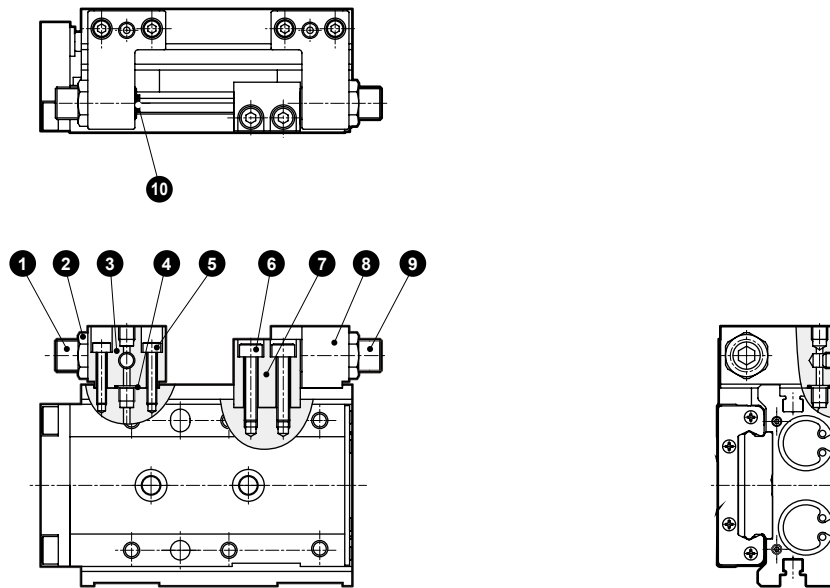
Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø6	LCG-6K	
ø8	LCG-8K	
ø12	LCG-12K	4 5 9
ø16	LCG-16K	12 16 20
ø20	LCG-20K	
ø25	LCG-25K	

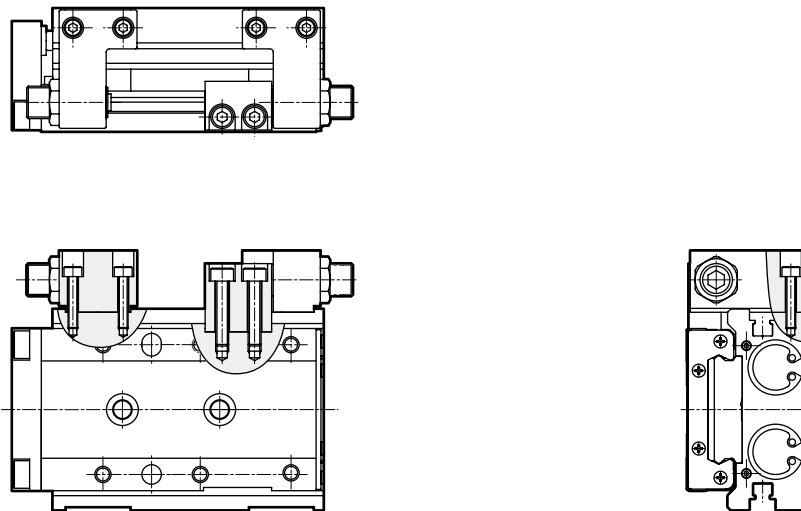
Internal structure and parts list

Structure with stopper

● Type with port on stopper side and bottom (code D)



● Without port on the stopper



LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

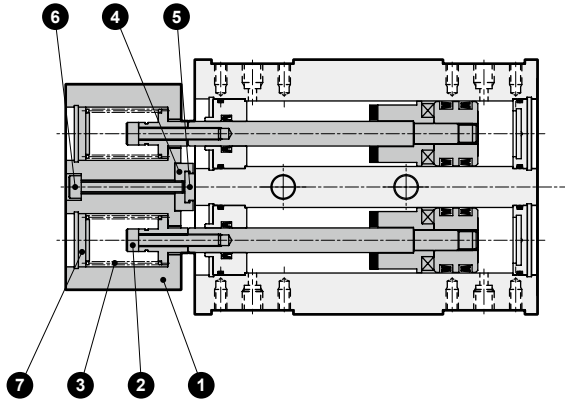
Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Stopper bolt	Alloy steel	Nickeling	7	Stopper block (Stopper block code: Blank)	Steel	Nickeling
2	Hexagon nut	Alloy steel	Nickeling		Stopper block (Stopper block code: T)	Steel	Nitriding
3	Stopper A	Aluminum alloy	Alumite	8	Stopper B	Aluminum alloy	Alumite
4	Gasket	Urethane rubber		9	Stopper bolt	Alloy steel	Nickeling
5	Hexagon socket head cap screw	Alloy steel	Zinc chromate	10	Cushion rubber	Urethane rubber	
6	Hexagon socket head cap screw	Alloy steel	Zinc chromate				

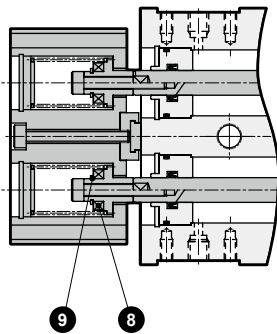
Internal structure and parts list

LCG-*-*-B*

● With buffer, without switch groove



● With buffer, with switch groove



Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	End plate	Aluminum alloy	Alumite	6	C type snap ring	ø6, 8: Steel ø12 to 25: Stainless steel	
2	Hexagon socket head cap screw	Alloy steel	Zinc chromate				
3	Coil spring	Steel		7	Cover	Aluminum alloy	Chromate
4	Stopper	ø6: Stainless steel ø8 to 25: Aluminum alloy		8	Magnet	Plastic	
5	Cushion rubber	Urethane rubber		9	E-ring	ø6 to 12: Stainless steel ø16 to 25: Steel	

MEMO

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

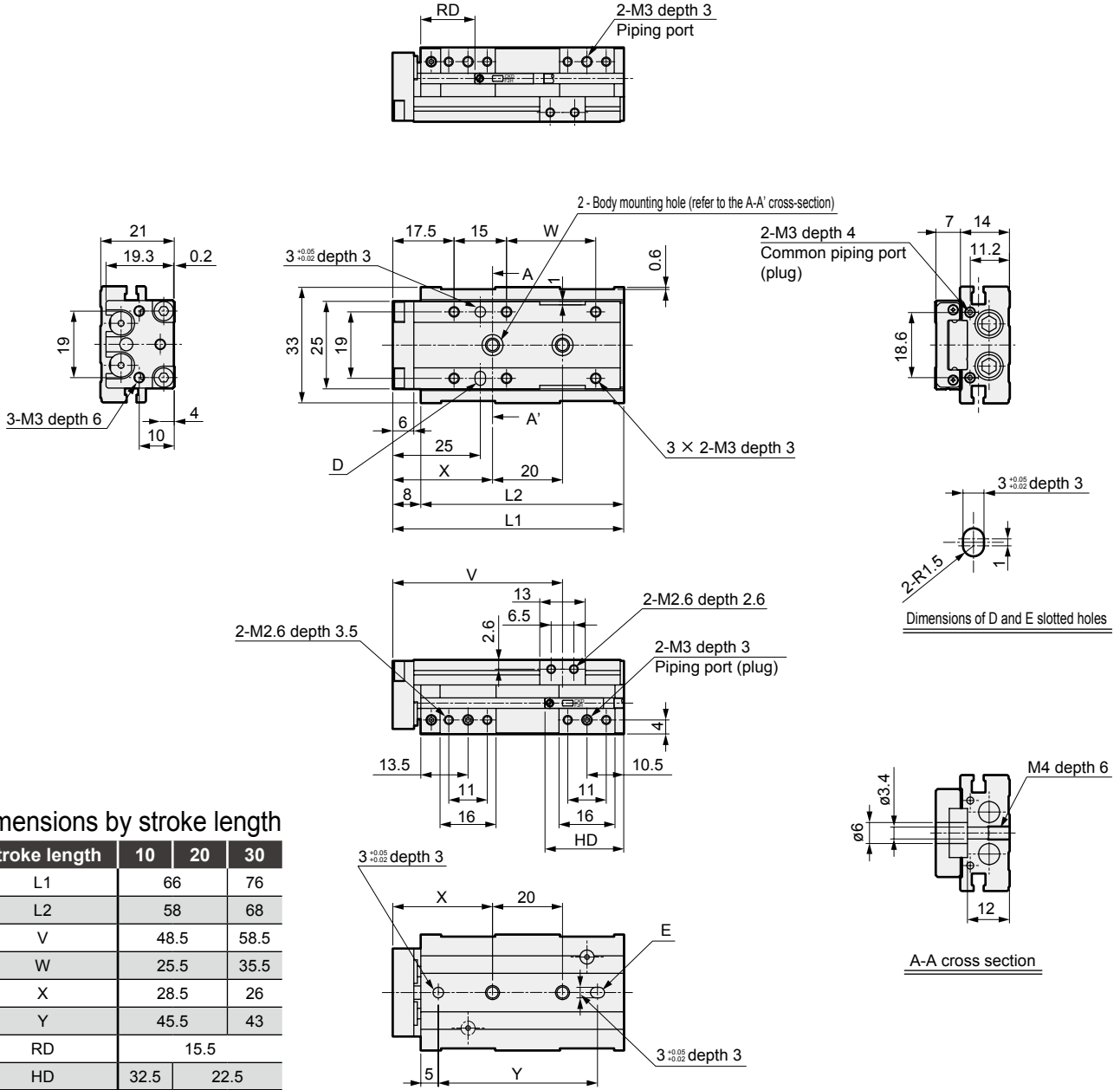


Dimensions (bore size: $\phi 6$)

● LCG-6

Stroke length: 10, 20, 30

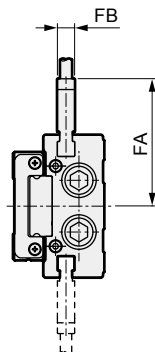
(Body mounting hole in the figure shows 20 mm stroke length)



Dimensions by stroke length

Stroke length	10	20	30
L1	66	76	
L2	58	68	
V	48.5	58.5	
W	25.5	35.5	
X	28.5	26	
Y	45.5	43	
RD	15.5		
HD	32.5	22.5	

● Dimensions of protruding section when the F2S or F3S cylinder switch is mounted



Stroke length	10	20	30
FA	29.6		
FB	4		
RD	14.5		
HD	33.5	23.5	

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of

1. Common; when piping on page 196.

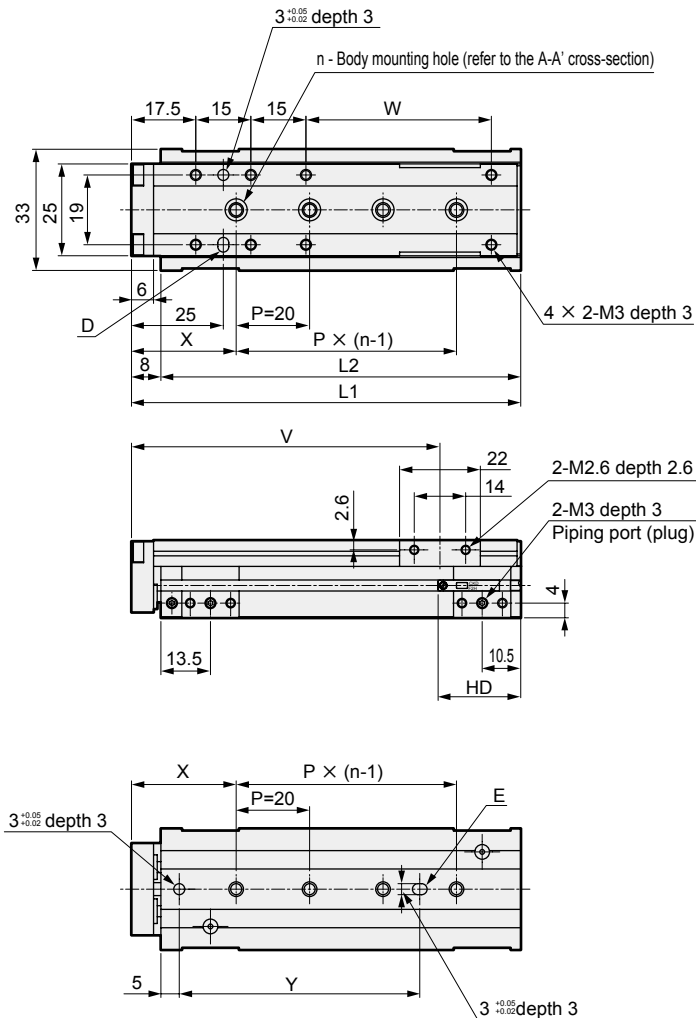
Dimensions (bore size: $\phi 6$)



● LCG-6

Stroke length: 40, 50

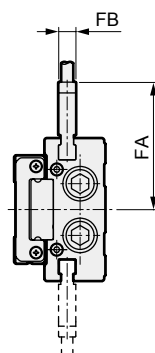
(Body mounting hole in the figure shows 50 mm stroke length)



Dimensions by stroke length

Stroke length	40	50
L1	96	106
L2	88	98
n	3	4
V	74	84
W	40.5	50.5
X	27	28.5
Y	44	65.5
RD	25.5	
HD	22.5	

● Dimensions of protruding section when the F2S or F3S cylinder switch is mounted



Stroke length	40	50
FA	29.6	
FB	4	
RD	24.5	
HD	23.5	

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of 1. Common; when piping on page 196.

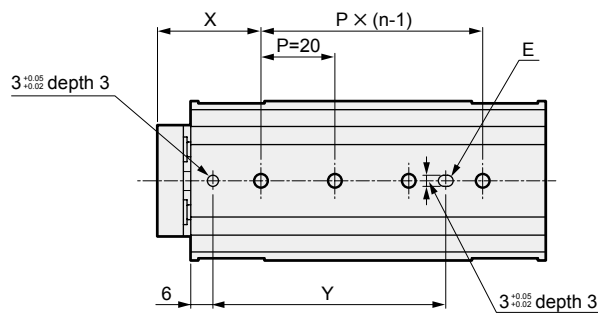
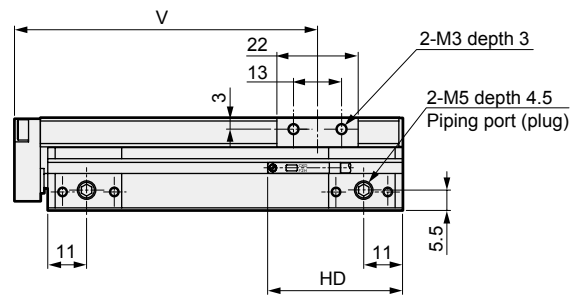
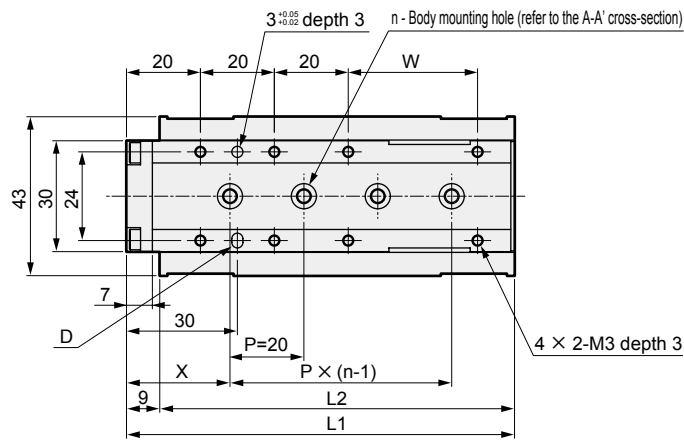
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

Dimensions (bore size: $\varnothing 8$)



● LCG-8

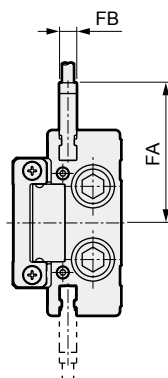
Stroke length: 40, 50, 75
(Body mounting hole in the figure shows 50 mm stroke length)



Dimensions by stroke length

Stroke length	40	50	75
L1	95	105	130
L2	86	96	121
n	3	4	5
V	72	82	107
W	25	35	60
X	26.5	28	25
Y	41.5	63	80
RD	13		
HD	33		

● Dimensions of protruding section when the F2S or F3S cylinder switch is mounted



Stroke length	40	50	75
FA	32.6		
FB	4		
RD	12		
HD	34		

- *1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.
- *2 : When using rear piping, refer to the cautions of 1. Common; when piping on page 196.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

Dimensions (bore size: $\varnothing 12$)

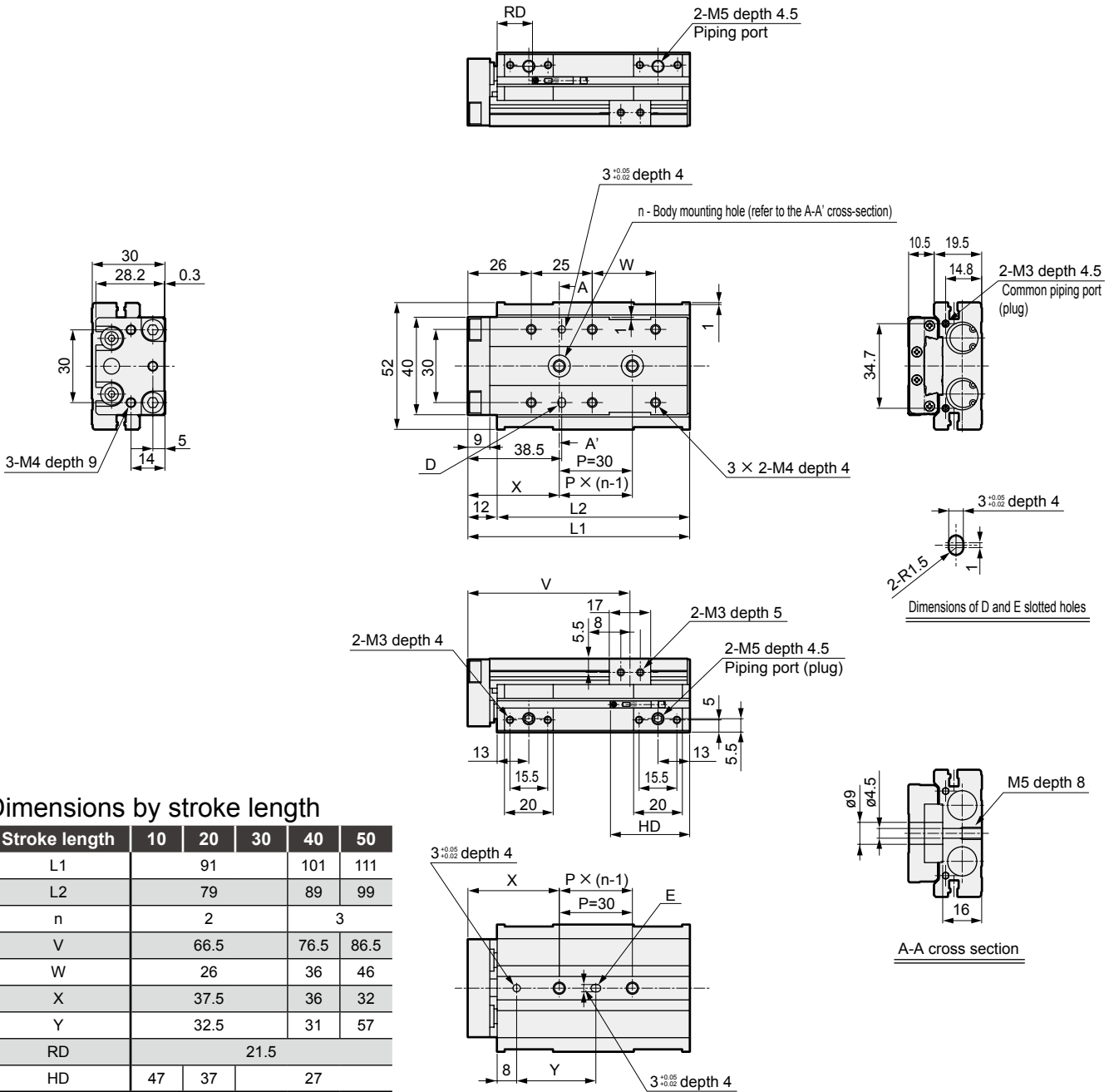


● LCG-12

Stroke: 10, 20, 30, 40, 50

(Body mounting hole in the figure shows 30 mm stroke length)

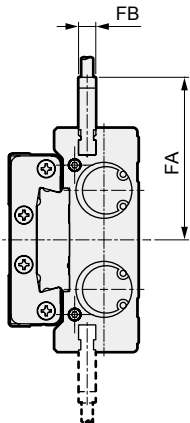
- LCM
- LCR
- LCG**
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MecHnd/Chuk
- ShkAbs
- FJ
- SpdContr
- Ending



Dimensions by stroke length

Stroke length	10	20	30	40	50
L1		91		101	111
L2		79		89	99
n		2		3	
V		66.5		76.5	86.5
W		26		36	46
X		37.5		36	32
Y		32.5		31	57
RD	21.5				
HD	47	37		27	

● Dimensions of protruding section when the F2S or F3S cylinder switch is mounted



Stroke length	10	20	30	40	50
FA			37.8		
FB			4		
RD			20.5		
HD	48	38		28	

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of

1. Common; when piping on page 196.

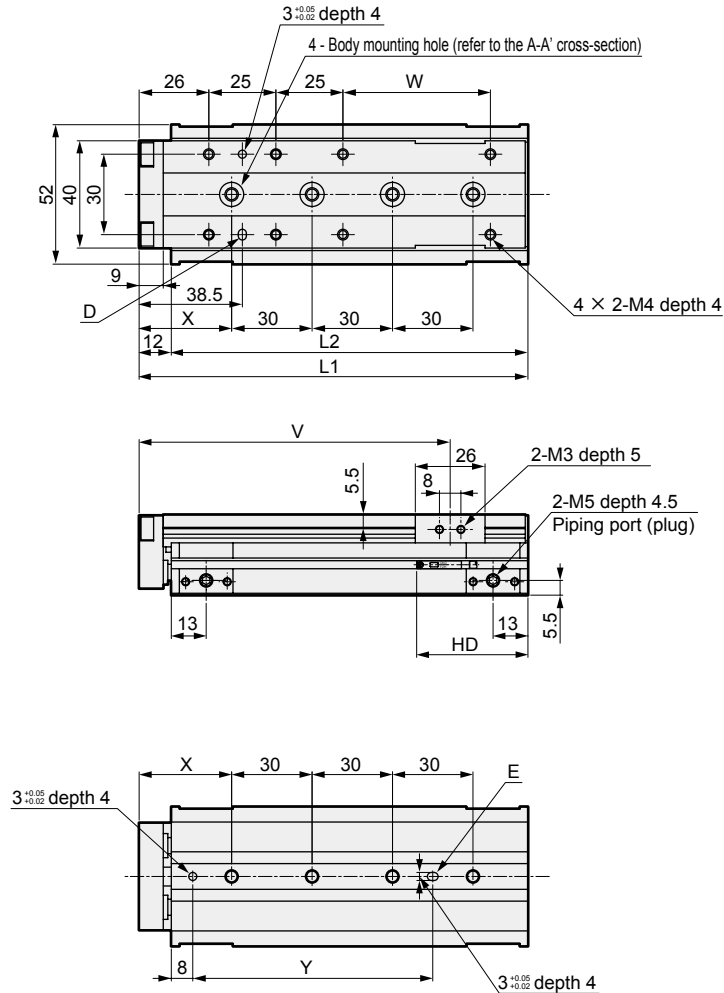
Dimensions (bore size: $\phi 12$)



● LCG-12

Stroke length: 75, 100

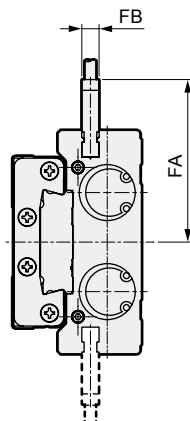
(Body mounting hole in the figure shows 100 mm stroke length)



Dimensions by stroke length

Stroke length	75	100
L1	145	170
L2	133	158
V	116	141
W	55	80
X	34.5	47
Y	89.5	102
RD	21.5	
HD	36	

● Dimensions of protruding section when the F2S or F3S cylinder switch is mounted



Stroke length	75	100
FA	37.8	
FB	4	
RD	20.5	
HD	37	

*1: When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.
 *2: When using rear piping, refer to the cautions of 1. Common; when piping on page 196.

- LCM
- LCR
- LCG**
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

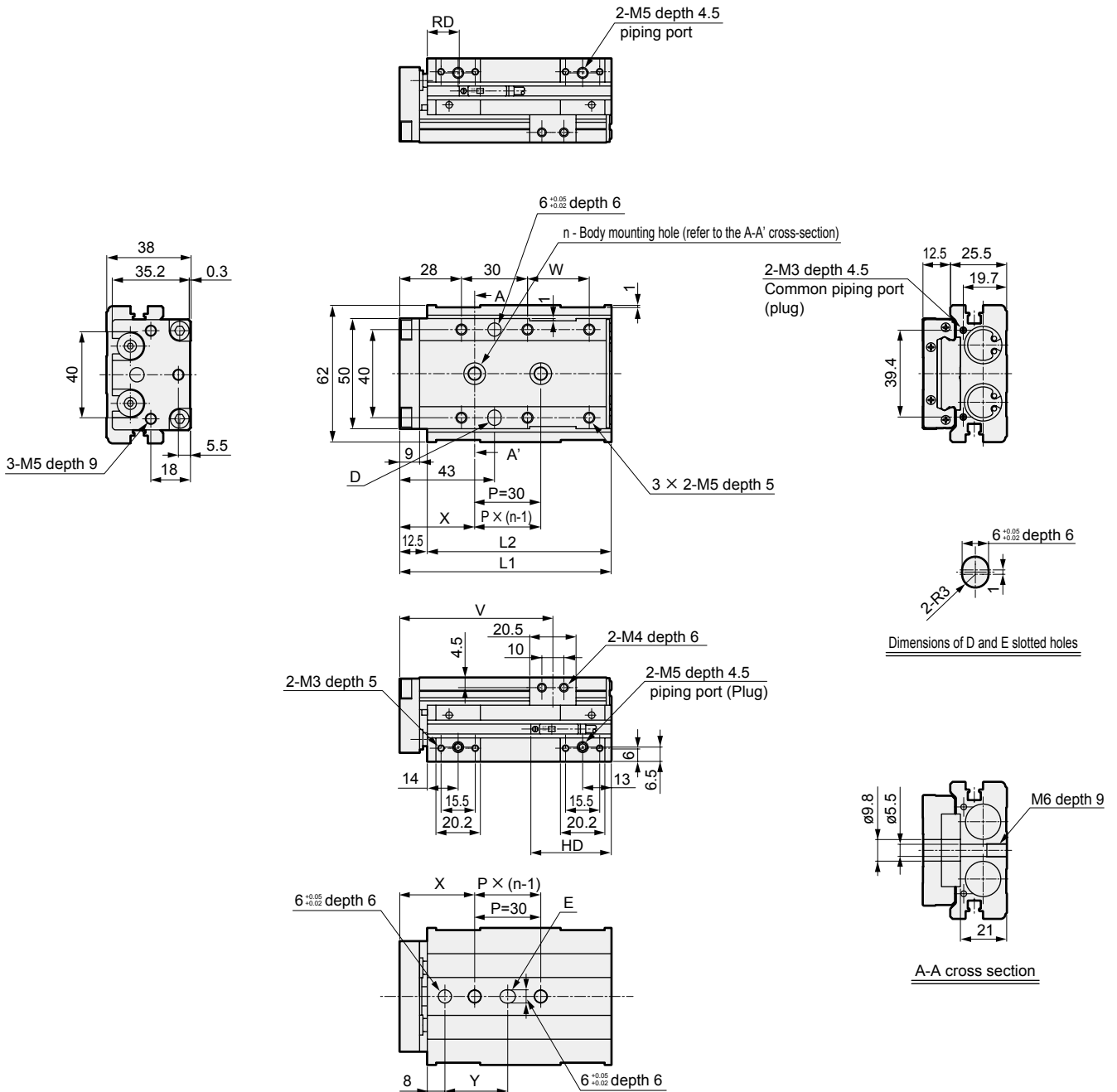
Dimensions (bore size: $\varnothing 16$)



● LCG-16

Stroke: 10, 20, 30, 40, 50

(Body mounting hole in the figure shows 30 mm stroke length)



Dimensions of D and E slotted holes

A-A cross section

Dimensions by stroke length

Stroke length	10	20	30	40	50
L1	96		106	116	
L2	83.5		93.5	103.5	
n	2		3		
V	69.8		79.8	89.8	
W	28		38	48	
X	34		45.5	35.5	
Y	28.5		40	60	
T0/5*	RD	17			
T2/3*	HD	56.5	46.5	36.5	
T2/3W*	RD	19.5			
	HD	54	44	34	

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of

1. Common; when piping on page 196.

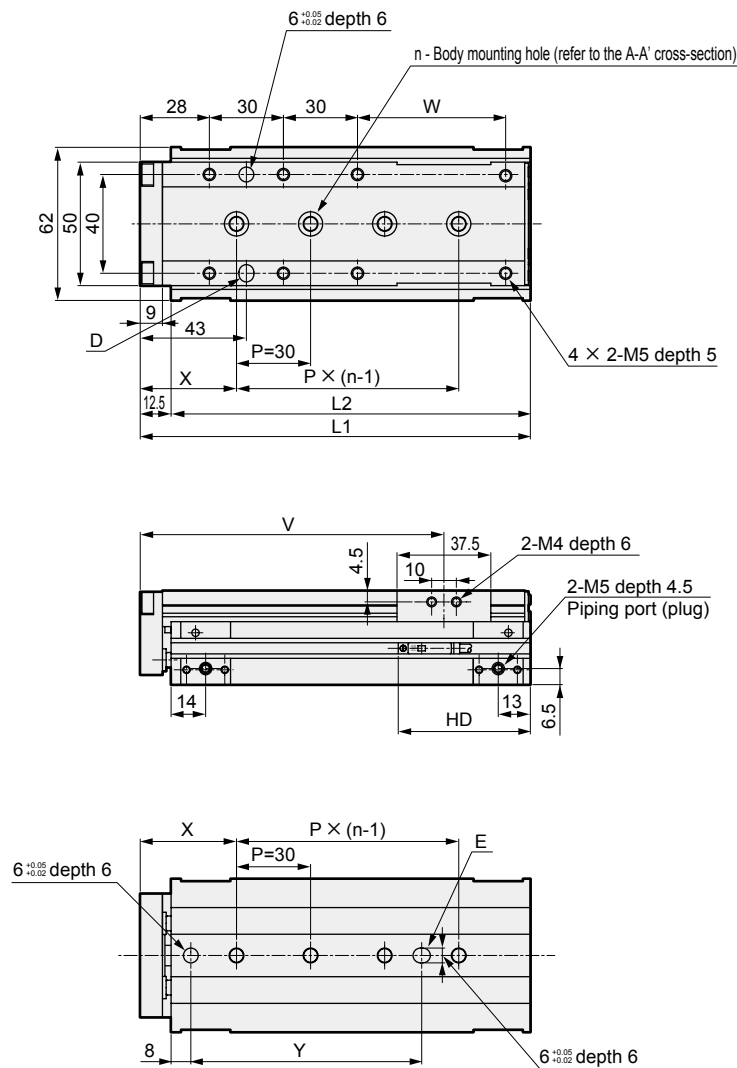
Dimensions (bore size: $\phi 16$)



● LCG-16

Stroke length: 75, 100, 125

(Body mounting hole in the figure shows 75 mm stroke length)



Dimensions by stroke length

Stroke length	75	100	125
L1	158	183	208
L2	145.5	170.5	195.5
n	4	5	
V	123.3	148.3	173.3
W	60	85	110
X	39	37	49
Y	93.5	121.5	133.5
T0/5*	RD	17	
T2/3*	HD	53.5	
T2/3W*	RD	19.5	
	HD	51	

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of

1. Common; when piping on page 196.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

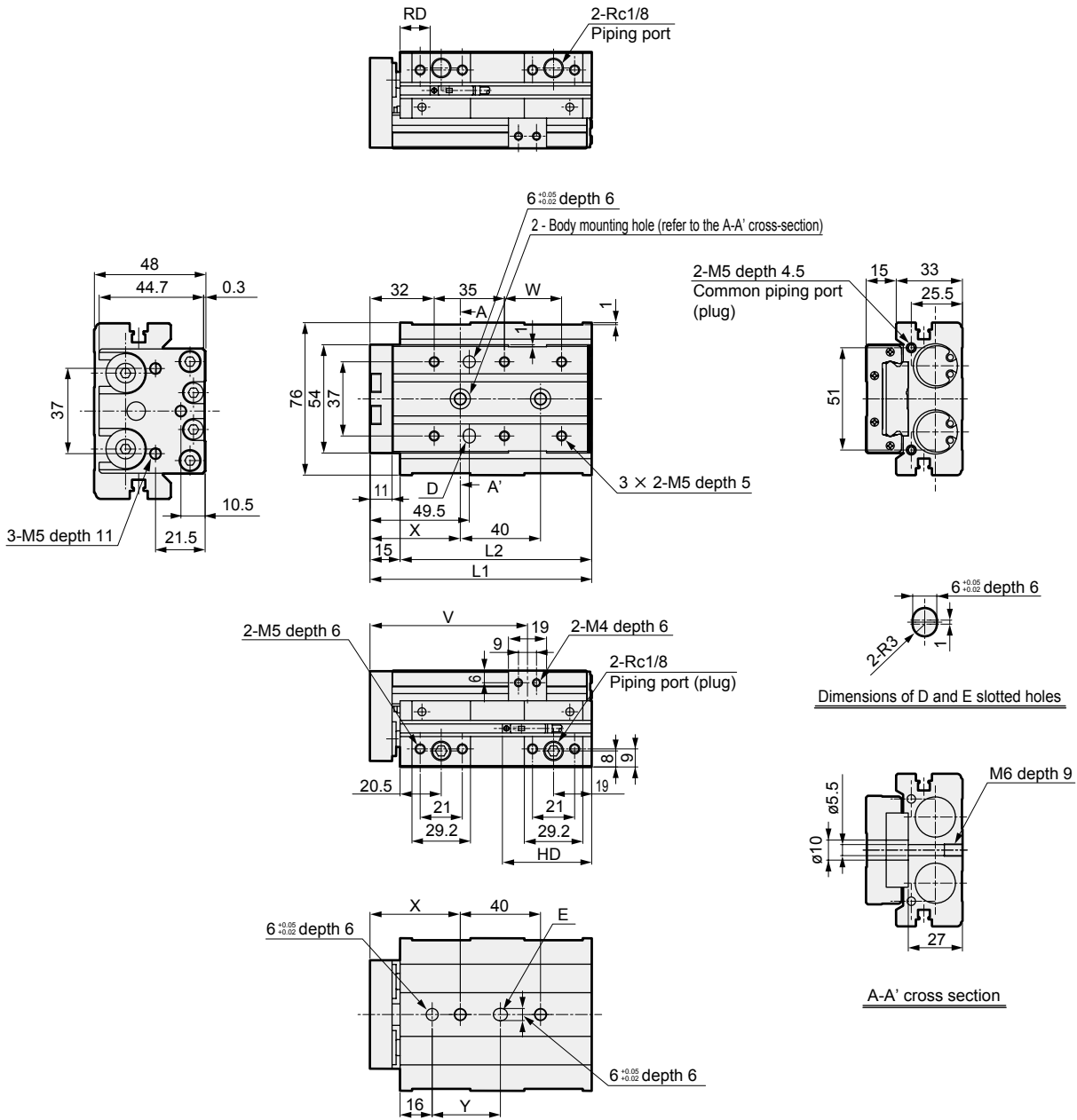


Dimensions (bore size: $\varnothing 20$)

● LCG-20

Stroke: 10, 20, 30, 40, 50

(Body mounting hole in the figure shows 30 mm stroke length)



Dimensions by stroke length

Stroke length	10	20	30	40	50
L1		110.5		120.5	130.5
L2		95.5		105.5	115.5
V		78.5		88.5	98.5
W		28.5		38.5	48.5
X		45		51	49
Y		34		40	38
T0/5*	RD	16			
T2/3*	HD	69.5	59.5	49.5	
T2/3W*	RD	18.5			
	HD	67	57	47	

* The same dimensions apply to the anti-rust (U).

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of

1. Common; when piping on page 196.

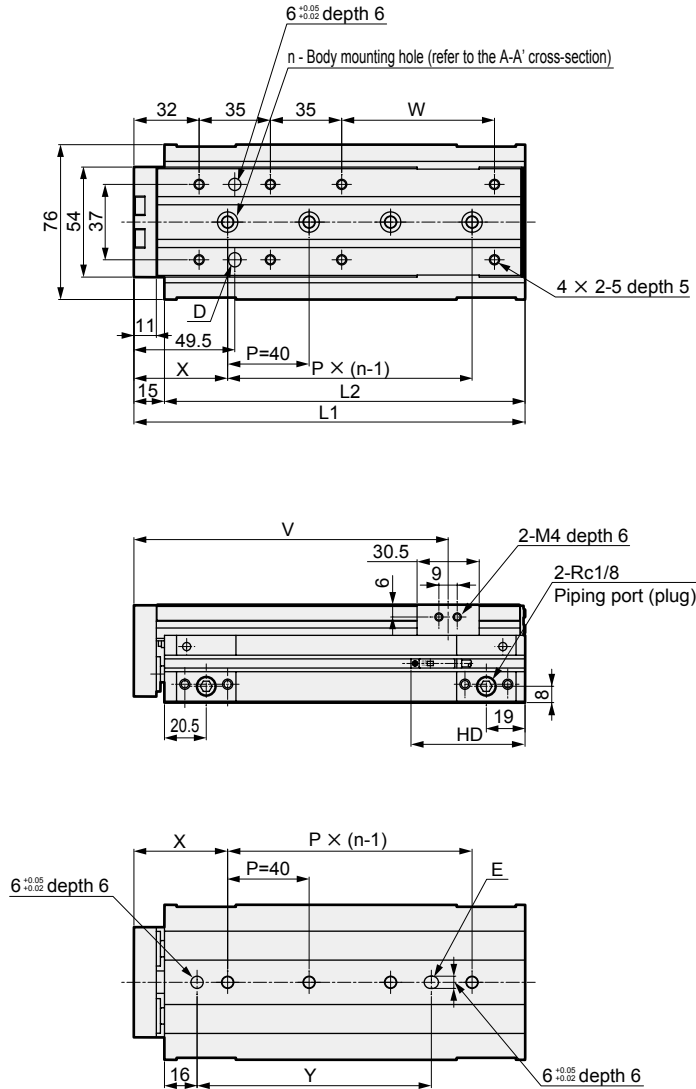
Dimensions (bore size: $\varnothing 20$)



● LCG-20

Stroke length: 75, 100, 125, 150

(Body mounting hole in the figure shows 100 mm stroke length)



Dimensions by stroke length

Stroke length	75	100	125	150
L1	167	192	217	242
L2	152	177	202	227
n	3	4	5	
V	129.3	154.3	179.3	204.3
W	50	75	100	125
X	46	53	51	
Y	75	115	122	160
T0/5*	RD	16		
T2/3*	HD	61		
T2/3W*	RD	18.5		
	HD	58.5		

* The same dimensions apply to the anti-rust (U).

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting.

The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of

1. Common; when piping on page 196.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

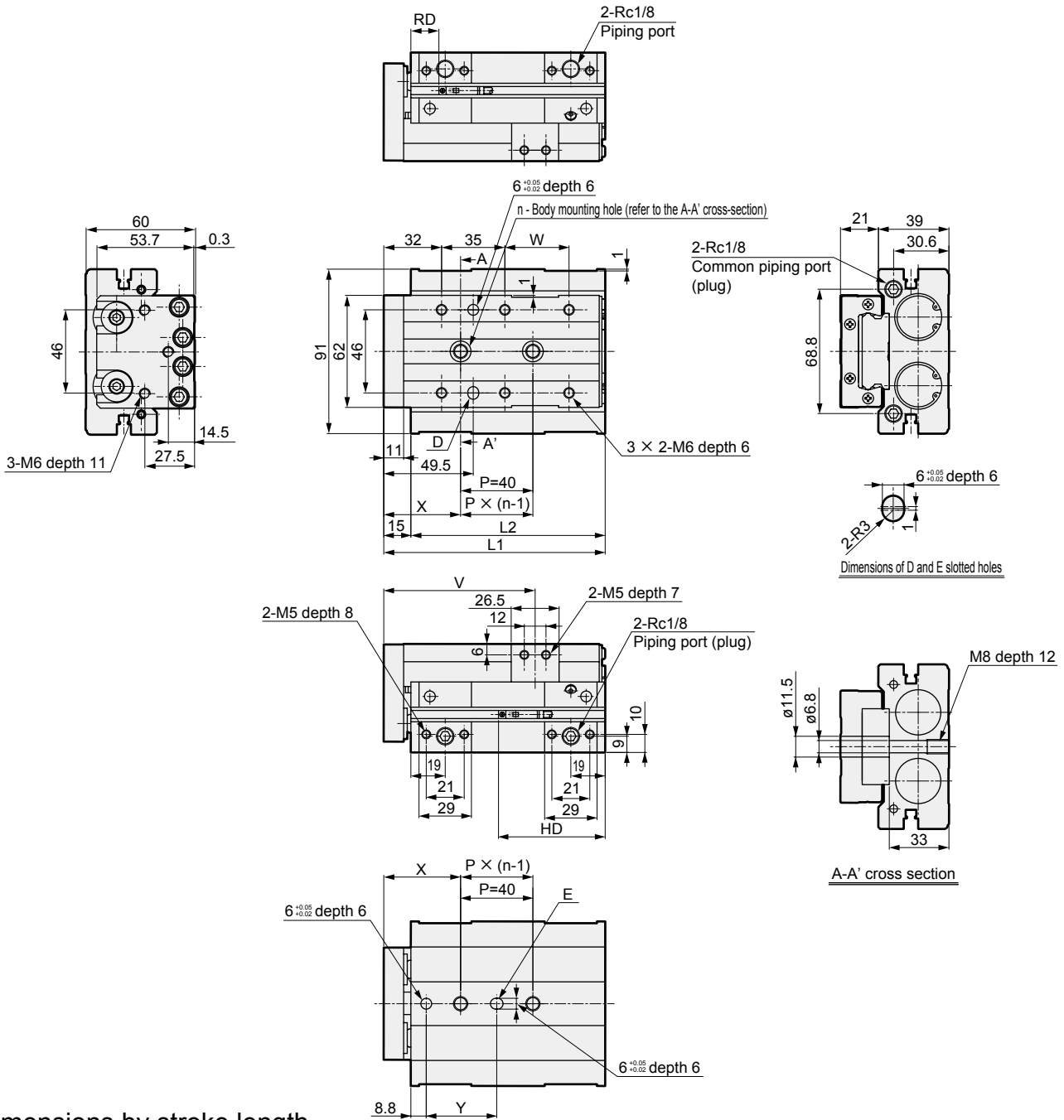
Dimensions (bore size: $\varnothing 25$)



● LCG-25

Stroke: 10, 20, 30, 40, 50

(Body mounting hole in the figure shows 30 mm stroke length)



Dimensions by stroke length

Stroke length	10	20	30	40	50
L1		122.5	132.5	142.5	
L2		107.5	117.5	127.5	
n		2	3	2	
V		83.8	93.8	103.8	
W		35.5	45.5	55.5	
X		42.5	45.5	60.5	
Y		39	42	57	
T0/5*	RD	18.5			
T2/3*	HD	79	69	59	
T2/3W*	RD	21			
	HD	76.5	66.5	56.5	

* The same dimensions apply to the anti-rust (U).

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of

1. Common; when piping on page 196.

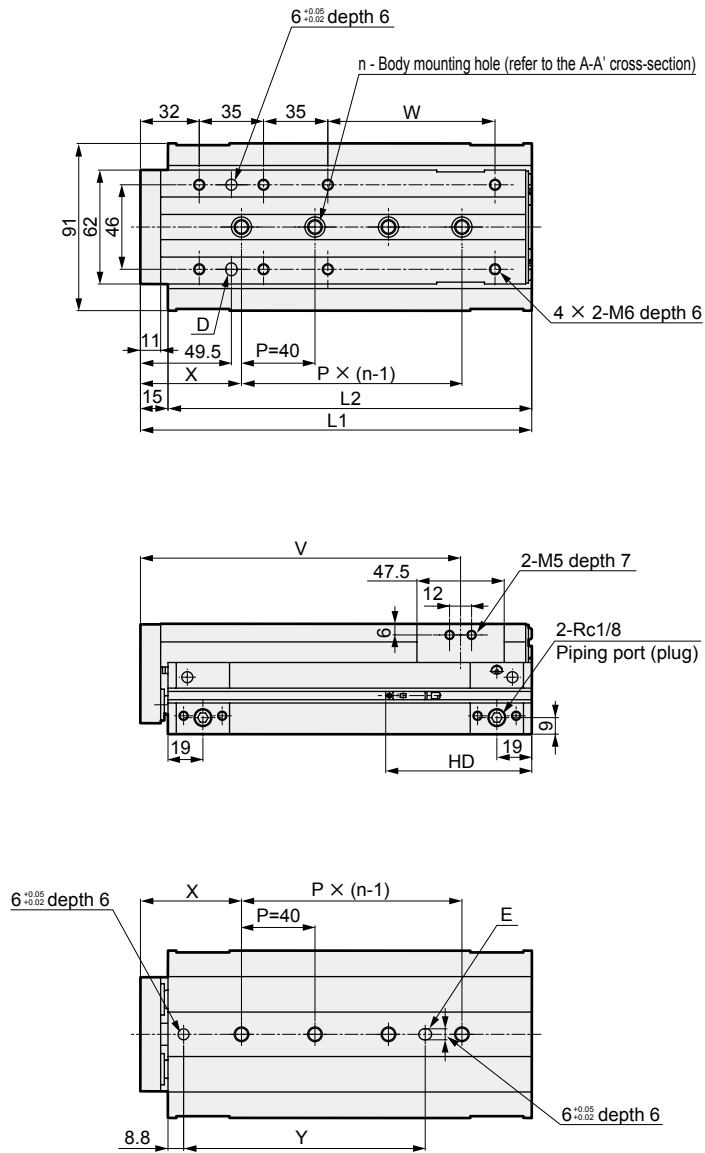
Dimensions (bore size: $\varnothing 25$)



● LCG-25

Stroke length: 75, 100, 125, 150

(Body mounting hole in the figure shows 100 mm stroke length)



Dimensions by stroke length

Stroke length	75	100	125	150
L1	188	213	238	263
L2	173	198	223	248
n	3	4	5	
V	138.8	163.8	188.8	213.8
W	66	91	116	141
X	60	55	45	60
Y	96.5	131.5	161.5	176.5
T0/5*	RD	18.5		
	HD	79.5		
T2/3*	RD	21		
	HD	77		

* The same dimensions apply to the anti-rust (U).

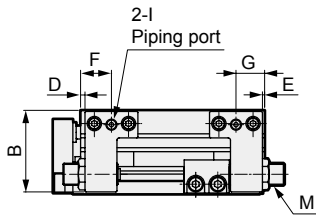
- *1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.
- *2 : When using rear piping, refer to the cautions of 1. Common; when piping on page 196.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

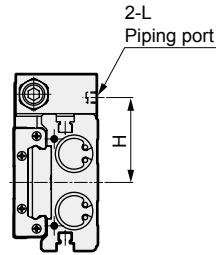
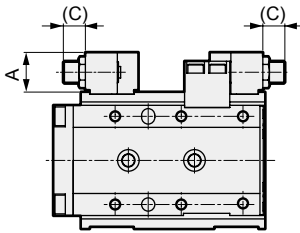
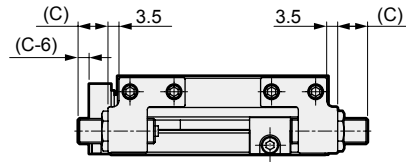
Dimensions: Option



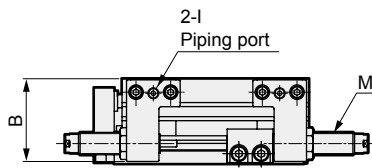
● Stroke adjusting stopper (S1 to S6)



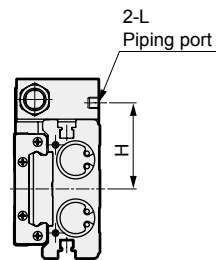
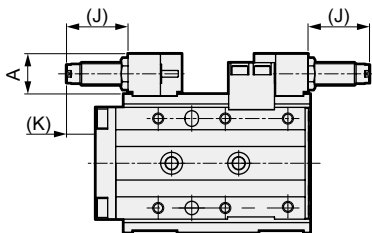
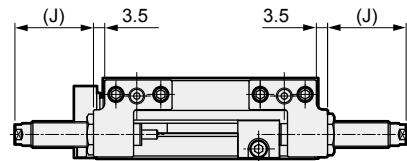
· For ø8



● Shock absorber stopper (A1 to A6)



· For ø8



*1: F, H and L dimensions are only for the types with port on the stopper (S*D* and A*D*).

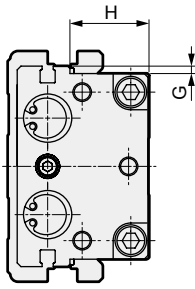
*2: The figure of the stroke adjusting stopper (S1 to S6) is for 5 mm adjustable stroke range. If the adjustable stroke range is increased, the C dimension increases accordingly.

*3: S3** to S6** and A3** to A6** are not available for the position locking.

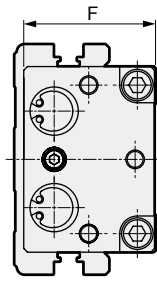
Code	Bore size (mm)	A	B	C			D	E	F	G	H	I	J	K	L	M	Shock absorber stopper adjustable stroke range (one side)
				Adjustable stroke range													
				5 mm	15 mm	25 mm											
ø6	14	19.9	11	21	-	4	1	13.5	10.5	24	M3 depth 3	21	9	M3 depth 3	M8×0.75	9	
ø8	15.6	24.5	9.5	19.5	-	0.5	0.5	11	11	27.3	M5 depth 4	25	15.5	M5 depth 4	M8×0.75	13.5	
ø12	15.5	29	12	22	32	1	1	13	13	31	M5 depth 4	25	12	M5 depth 4	M8×0.75	14.5	
ø16	18	37	10	20	30	2	1	14	13	39	M5 depth 4	28.5	14	M5 depth 4	M10×1	15	
ø20	20.5	45.5	14.5	24.5	34.5	4	2.5	20.5	19	47	Rc1/8	28.5	9.5	M5 depth 4	M12×1	13	
ø25	20.5	57	11.5	21.5	31.5	2.5	2.5	19	19	54.5	Rc1/8	25.5	8	M5 depth 4	M12×1	10	

Dimensions: Option

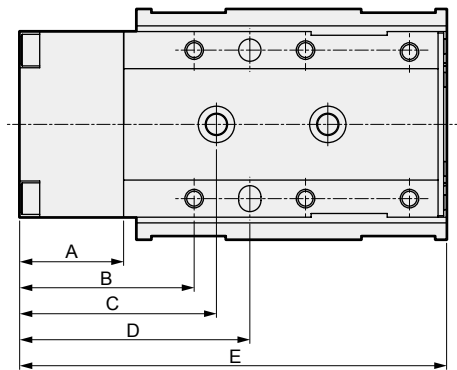
● With buffer (B, BL)



Option code: BL



Option code: B



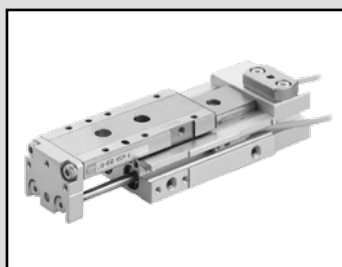
Code	A	B	C									D
			Stroke length (mm)									
			10	20	30	40	50	75	100	125	150	
ø6	22.5	34	45	45	42.5	43.5	45	-	-	-	-	41.5
ø8	21.5	34.5	42.5	42.5	42.5	41	42.5	39.5	-	-	-	44.5
ø12	27	44	55.5	55.5	55.5	54	50	52.5	65	-	-	56.5
ø16	28	47	53	53	53	64.5	54.5	58	56	68	-	62
ø20	31	52	65	65	65	71	69	66	66	73	71	69.5
ø25	34	55	65.5	65.5	65.5	68.5	83.5	83	78	68	83	72.5

Code	E									F	G	H
	Stroke length (mm)											
	10	20	30	40	50	75	100	125	150			
ø6	82.5	82.5	92.5	112.5	122.5	-	-	-	-	20	3.5	11.2
ø8	80.5	80.5	90.5	109.5	119.5	144.5	-	-	-	23.5	3.2	13.5
ø12	109	109	109	119	129	163	188	-	-	29	3.2	16
ø16	115	115	115	125	135	177	202	227	-	35.5	1	21.3
ø20	130.5	130.5	130.5	140.5	150.5	187	212	237	262	45.5	4	24.5
ø25	145.5	145.5	145.5	155.5	165.5	211	236	261	286	56	4.5	31

Note: The dimensions not listed are the same as those of the standard.

- LCM
- LCR
- LCG**
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

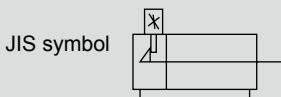
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending



Linear slide cylinder Double acting/position locking

LCG-Q Series

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



Specifications

Item		LCG-Q				
Bore size	mm	$\varnothing 8$	$\varnothing 12$	$\varnothing 16$	$\varnothing 20$	$\varnothing 25$
Actuation		Double acting				
Working fluid		Compressed air				
Max. working pressure	MPa	0.7 (≈ 100 psi, 7 bar)				
Min. working pressure	MPa	0.15 (≈ 22 psi, 1.5 bar)				
Proof pressure	MPa	1.05 (≈ 150 psi, 10.5 bar)				
Ambient temperature	$^{\circ}\text{C}$	-10 (14 $^{\circ}\text{F}$) to 60 (140 $^{\circ}\text{F}$) (no freezing)				
Port size	Main body side	M5			Rc1/8	
	Main body back	None				
Stroke tolerance	mm	+2.0 (*1) 0				
Working piston speed	mm/s	50 to 500				
Cushion		With rubber cushion				
Position locking mechanism		Head side				
Holding force	N	At PULL, theoretical thrust x 0.7 (at 0.7 MPa (≈ 100 psi, 7 bar))				
Lubrication		Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)				
Allowable absorbed energy	J	Refer to Table 3 on page 188.				

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

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

Stroke length

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

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

With buffer specifications Specifications other than the below are same as the above common specifications.

Item		Description				
Bore size	mm	$\varnothing 8$	$\varnothing 12$	$\varnothing 16$	$\varnothing 20$	$\varnothing 25$
Buffer stroke length	mm	4	9		10	
Buffer part	Set	N	5	10	13	17
	Operating	N	8	14	20	25
spring load	N					21
						29

*1: In the type with buffer, adjusting the rod side stroke length will shorten the buffer stroke length and increase the spring load when set.

*2: Keep the buffer stroke length less than the stroke length above. Otherwise, malfunctions or damage may result.

Theoretical thrust table

Refer to page 189.

Switch specifications

- 1-color/2-color display

Item	Reed 2-wire				Proximity 2-wire		Proximity 3-wire		
	T0H/T0V		T5H/T5V		T2H/T2V	T2WH/ T2WV	T3H/ T3V	T3PH/ T3PV	T3WH/ T3WV
Applications	For programmable controller, relay		For programmable controller, relay, IC circuit (without indicator lamp), serial connection		Dedicated for programmable controller		For programmable controller, relay		
Output method	-		-		-		NPN output	PNP output	NPN output
Power supply voltage	-		-		-		10 to 28 VDC		
Load voltage	12/24 VDC	110 VAC	5/12/24 VDC	110 VAC	10 to 30 VDC	24 VDC ±10%	30 VDC or less		
Load current	5 to 50 mA	7 to 20 mA	50 mA or less	20 mA or less	5 to 20 mA		100 mA or less		50 mA or less
Indicator lamp	LED (Lit when ON)		Without indicator lamp		LED (Lit when ON)	Red/green LED (Lit when ON)	LED (Lit when ON)	Yellow LED (Lit when ON)	Red/green LED (Lit when ON)
Leakage current	0 mA				1 mA or less		10 µA or less		
Weight	g 1 m:18 3 m:49 5 m:80								

Item	Proximity 2-wire		Proximity 3-wire		Proximity 2-wire		Proximity 3-wire		
	F2S		F3S		F2H/F2V	F2YH/ F2YV	F3H/F3V	F3PH/F3PV (Made to order)	F3YH/ F3YV
Applications	Dedicated for programmable controller		For programmable controller, relay		Dedicated for programmable controller		For programmable controller, relay		
Output method	-		NPN output		-		NPN output	PNP output	NPN output
Power supply voltage	-		10 to 28 VDC		-		10 to 28 VDC	4.5 to 28 VDC	10 to 28 VDC
Load voltage	10 to 30 VDC		30 VDC or less		10 to 30 VDC	24 VDC ±10%	30 VDC or less		
Load current	5 to 20 mA		50 mA or less		5 to 20 mA		50 mA or less		
Indicator lamp	LED (Lit when ON)				Yellow LED (Lit when ON)	Red/green LED (Lit when ON)	Yellow LED (Lit when ON)	Yellow LED (Lit when ON)	Red/green LED (Lit when ON)
Leakage current	1 mA or less		10 µA or less		1 mA or less		10 µA or less		
Weight	g 1 m:10 3 m:29								

*1 : Refer to Ending Page 1 for detailed switch specifications and dimensions.

*2 : Switches other than the above models, such as switches with connectors, are also available. Refer to Ending Page 1.

*3 : The max. load current is 20 mA at 25°C. The current is lower than 20 mA if the operating ambient temperature around the switch is higher than 25°C. (5 to 10 mA at 60°C)

*4 : The F type switch uses a bend-resistant lead wire.

Cylinder weight

- Position locking

(Unit: g)

Bore size (mm)	Basic Stroke length (mm)								
	10	20	30	40	50	75	100	125	150
ø8	280	280	310	390	420	510	-	-	-
ø12	570	570	570	620	670	860	1,000	-	-
ø16	880	870	860	940	1,020	1,370	1,560	1,760	-
ø20	1,450	1,440	1,430	1,550	1,670	2,110	2,400	2,690	2,980
ø25	2,360	2,340	2,320	2,500	2,680	3,480	3,900	4,320	4,740

- Additional weight of options

(Unit: g)

Bore size (mm)	Option/stopper code		With buffer
	S1/S2	A1/A2	B/BL
ø8	40	50	40
ø12	70	80	70
ø16	110	120	80
ø20	170	180	150
ø25	290	300	320

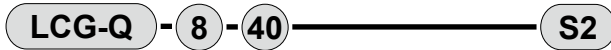
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

LCG-Q Series

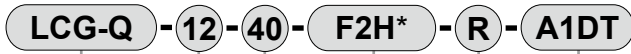
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

How to order (ø8 to ø16)

Without switch (built-in magnet for switch)



With switch (built-in magnet for switch)



Model No.

A Bore size

B Stroke length

D Switch quantity

C Switch model No.
*11

⚠ Precautions for model No. selection

- *1 : To change the adjustable stroke length, use the discrete stroke adjusting stopper on page 169.
- *2 : For the adjustable stroke range with a shock absorber stopper, refer to the stopper dimensions table on page 162.
- *3 : For the port position, refer to the stopper dimensions on page 162.
- *4 : The port positions of the standard without stopper are ① and ③ in the figure below.
- *5 : Combination of the stroke adjusting stopper and shock absorber stopper is made to order.
- *6 : Can be selected for the type with stopper only.
- *7 : A switch for buffer should be purchased separately. Refer to how to order a switch on page 168.
- *8 : Refer to the selection table below for combinations of options.
- *9 : A1** and A2** of ø8 with 10 mm stroke length or less and ø12/ø16 with 20 mm stroke length or less are made to order since adjustment is not possible with the standard stopper.
- *10 : The rust proof is made to order.
- *11 : The stroke adjusting stopper for 0.3 MPa and over working pressure is the metal sealing.

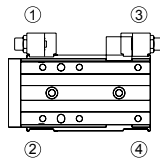
[Example of model No.]

LCG-Q-12-40-F2H-R-A1DT

Model: Linear slide cylinder Double acting/position locking LCG-Q

- A** Bore size : ø12
- B** Stroke length : 40 mm
- C** Switch model No. : Proximity/2-wire Axial lead wire
- D** Switch quantity : 1 on rod side
- E** Other options : Shock absorber Stopper position ① With side and bottom ports Material, steel (nitriding)

● Stopper position



E Option

Code	Description
A Bore size	
8	ø8
12	ø12
16	ø16

B Stroke length (mm)		Bore size (ø)		
		8	12	16
10	10	●	●	●
20	20	●	●	●
30	30	●	●	●
40	40	●	●	●
50	50	●	●	●
75	75	●	●	●
100	100		●	●
125	125			●
150	150			

C Switch model No.									
Axial lead wire	Radial lead wire	Contact	Voltage		Indicator lamp	Lead wire	Bore size		
			AC	DC			ø8	ø12	ø16
-	F2S*	Proximity		●	1-color display	2-wire			
-	F3S*			●		3-wire			
F2H*	F2V*			●		2-wire			
F3H*	F3V*			●	3-wire	●	●		
F3PH*	F3PV*			●	1 color display (PNP output) (made to order)	3-wire			
F2YH*	F2YV*			●	2-color display	2-wire			
F3YH*	F3YV*		●	3-wire	3-wire				
T0H*	T0V*	Reed	●	●	1-color display	2-wire			
T5H*	T5V*		●	●	no indicator lamp				
T2H*	T2V*	Proximity		●	1-color display	2-wire			
T3H*	T3V*			●	3-wire	3-wire			
T3PH*	T3PV*			●	1-color display (PNP output)	3-wire			●
T2WH*	T2WV*			●	2-wire	2-wire			
T3WH*	T3WV*		●	3-wire	3-wire				

* Lead wire length				
Blank	1 m (standard)			●
3	3 m (option)			●
5	5 m (option)			●

D Switch quantity	
R	1 on rod side
H	1 on head side
D	2

E Option	
Blank	No option

S Stroke adjusting stopper			
5 mm stroke adjustment on one side *1, *5, *8			
S1**	Stopper position ①		Stopper mount position
S2**	Stopper position ②		Stopper mount position
A Shock absorber stopper		*2, *5, *8	
A1**	Stopper position ①		Stopper mount position
A2**	Stopper position ②		Stopper mount position
** part			
Blank	Port on the stopper: without port		
D	Port on the stopper: Side and bottom ports *3, *6		
Blank	Stopper block material: steel		
T	Stopper block material: steel (nitriding) *6		
B With buffer		*7, *8	
B	Without switch groove		
BL	With switch groove		

LCG-Q position locking selection table

(Combination with stroke adjusting stopper, shock absorber stopper)

○: Available — : Not available

Model No. code	Option code		Stroke adjusting stopper						Shock absorber stopper					
	Bore size	Stroke length	S1	S2	S3	S4	S5	S6	A1	A2	A3	A4	A5	A6
LCG-Q	ø8	10	○	○	—	—	—	—	—	—	—	—	—	—
		20 or more	○	○	—	—	—	—	—	○	○	—	—	—
LCG-Q -B, BL	ø12 to ø25	10 to 20	○	○	—	—	—	—	—	—	—	—	—	—
		30 or more	○	○	—	—	—	—	—	○	○	—	—	—

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

How to order (ø20, ø25)

Without switch (built-in magnet for switch)



With switch (built-in magnet for switch)



Model No.

A Bore size

B Stroke length

D Switch quantity

C Switch model No.
*11

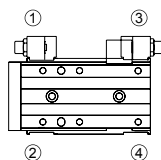
E Option

F Anti-rust treatment

⚠ Precautions for model No. selection

- *1 : To change the adjustable stroke length, use the discrete stroke adjusting stopper on page 169.
- *2 : For the adjustable stroke range with a shock absorber stopper, refer to the stopper dimensions table on page 162.
- *3 : For the port position, refer to the stopper dimensions on page 162.
- *4 : The port positions of the standard without stopper are ① and ③ in the figure below.
- *5 : Combination of the stroke adjusting stopper and shock absorber stopper is made to order.
- *6 : Can be selected for the type with stopper only.
- *7 : A switch for buffer should be purchased separately. Refer to how to order a switch on page 168.
- *8 : Refer to the selection table below for combinations of options.
- *9 : A1** and A2** with 20 mm stroke length or less are made to order since adjustment is not possible with the standard stopper.
- *10: The table is steel.
To prevent rust, select "U" for an environment where the temperature and humidity is high or condensation may occur on the product surface.
- *11: The stroke adjusting stopper for 0.3 MPa and over working pressure is the metal sealing.

● Stopper position



[Example of model No.]

LCG-Q-20-40-F2H-R-A1DT

Model: Linear slide cylinder Double acting/position locking LCG-Q

- A Bore size : ø20
- B Stroke length : 40 mm
- C Switch model No. : Proximity/2-wire Axial lead wire
- D Switch quantity : 1 on rod side
- E Other options : Shock absorber
Stopper position ①
With side and bottom ports
Material, steel (nitriding)

Specifications for rechargeable battery (Catalog No. CC-1226A)

- Design compatible with rechargeable battery manufacturing process.

LCG-Q - ... - P4*

Code	Description
A Bore size	
20	ø20
25	ø25

B Stroke length (mm)	
10	10
20	20
30	30
40	40
50	50
75	75
100	100
125	125
150	150

C Switch model No.						
Axial lead wire	Radial lead wire	Contact	Voltage		Indicator lamp	Lead wire
			AC	DC		
T0H*	T0V*	Reed	●	●	1-color display	2-wire
T5H*	T5V*		●	●	Without indicator lamp	
T2H*	T2V*	Proximity		●	1-color display	2-wire
T3H*	T3V*			●	display	3-wire
T3PH*	T3PV*			●	1-color display (PNP output)	3-wire
T2WH*	T2WV*			●	2-color display	2-wire
T3WH*	T3WV*			●	display	3-wire

* Lead wire length	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

D Switch quantity	
R	1 on rod side
H	1 on head side
D	2

E Option	
Blank	No option

S Stroke adjusting stopper		
5 mm stroke adjustment on one side *1, *5, *8		
S1**	Stopper position ①	Stopper mount position
S2**	Stopper position ②	Stopper mount position

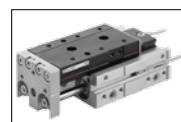
A Shock absorber stopper *2, *5, *8		
A1**	Stopper position ①	Stopper mount position
A2**	Stopper position ②	Stopper mount position

** part		
Blank	Port on the stopper: without port	
D	Port on the stopper: side and bottom ports *3, *6	
Blank	Stopper block material: steel	
T	Stopper block material: steel (nitriding) *6	

B With buffer *7, *8		
B	Without switch groove	
BL	With switch groove	

F Anti-rust treatment		
Blank	None	
U	Anti-rust treated product (table/guide) *10	

U: Anti-rust treated product (ø20, ø25)



The table and rail surface rustproofing reduces rust in high-humidity environments and near ionizers.

The table and rail are black.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

- LCM
- LCR
- LCG**
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MecHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

How to order switch

For $\varnothing 8$ to $\varnothing 12$

SW - F2H

Switch model No.
(Item © on page 166)

For $\varnothing 16$ to $\varnothing 25$

SW - T2H3

Switch model No.
(Item © on pages 166, 167)

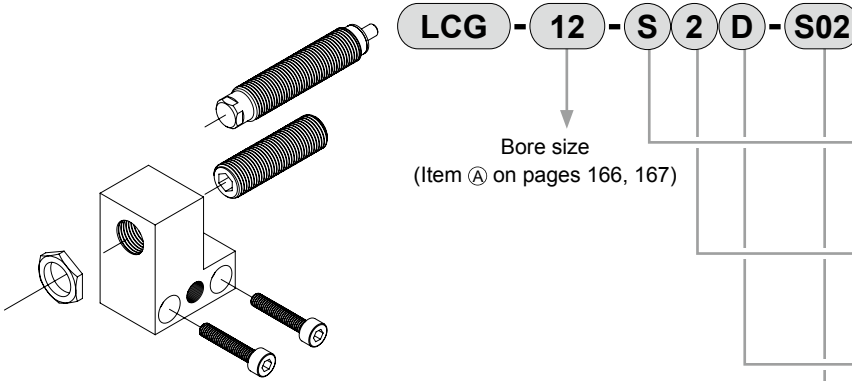
● Buffer part

SW - F 2 V 3

Output	
2	DC 2-wire proximity
3	DC 3-wire proximity
Radial lead wire	
Lead wire length	
Blank	1 m (standard)
3	3 m (option)

How to order a stopper set

- Set of a stopper and stroke adjusting stopper or shock absorber stopper
- Use it when changing from the standard to the stroke adjusting stopper or shock absorber stopper.



Bore size
(Item A on pages 166, 167)

A Stopper	
S	Stroke adjusting stopper
A	Shock absorber stopper
B Stopper installation position *1	
1	Stopper position ①
2	Stopper position ②
C Port on the stopper	
Blank	Without port
D	With side and bottom ports
D Adjustable stroke length *2/*3	
Blank	Adjustable stroke range 5 mm
S02	Adjustable stroke range 15 mm
S03	Adjustable stroke range 25 mm

- *1: The adjustable stroke length changes depending on the stroke; see the table below.
- *2: $\varnothing 8$ is not available for S03.
- *3: Cannot be selected for the shock absorber stopper "A".

Precautions when purchasing the stopper set

Discrete stroke adjusting stopper S01 is built into the stroke adjusting stopper set. Add the part shown on the right according to the stroke length and adjustable stroke length.

Model No. code	Option code		Discrete stroke adjusting stopper		
			Adjustable stroke length (mm)		
	Bore size	Stroke length	-5	-15	-25
LCG-Q Series	$\varnothing 8$	10	S02	—	—
		20 or more	N/A	S02	—
	$\varnothing 12$ to $\varnothing 25$	10	S03	—	—
		20	S02	S03	—
	30 or more	N/A	S02	S03	

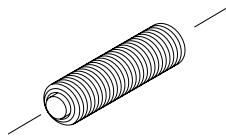
—: Not applicable

● Stopper set weight (Unit: g)

Stopper	S1,S2			A1,A2
Port on the stopper	Blank, D			
Adjustable stroke length	Blank	S02	S03	Blank
$\varnothing 8$	21	25	—	27
$\varnothing 12$	28	31	34	33
$\varnothing 16$	42	47	52	49
$\varnothing 20$	77	85	92	86
$\varnothing 25$	87	94	101	95

How to order discrete stroke adjusting stopper

- Hexagon socket set screw with urethane
- Use when changing the adjustable stroke range or when using a custom stroke length.



LCG - 12 - S02

Bore size
(Item A on pages 166, 167)

A Adjustable stroke range	
S01	Single side 5 mm (standard)
S02	Single side 15 mm
S03	Single side 25 mm

Specify S01, S02 or S03 in (A).
Note: S03 is not available for ø8.
Some models may not be available and adjustable stroke range may differ from the above depending on the Model No.

Precautions when purchasing discrete stopper

Note that the combination will be as shown on the right according to the stroke length and adjustable stroke length.

Model No. code	Option code		Discrete stroke adjusting stopper			Discrete shock absorber stopper
	Bore size	Stroke length	Adjustable stroke length (mm)			
LCG Series -S1, S2 -A1, A2	ø8	10	S02	—	—	—
		20 or more	S01	S02	—	A01
	ø12 to ø25	10	S03	—	—	—
		20	S02	S03	—	—
	30 or more	S01	S02	S03	A01	

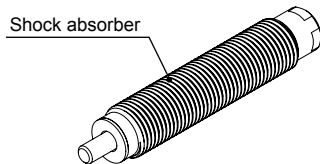
- Discrete stroke adjusting stopper weight

(Unit: g)

Adjustable stroke range	S01	S02	S03
ø8	7	10	—
ø12	7	11	14
ø16	11	16	22
ø20	22	30	37
ø25	23	30	37

How to order discrete shock absorber stopper

- Shock absorber set
- Use when changing from the stroke adjusting stopper or shock absorber stopper.



LCG - 12 - A01

Bore size
(Item A on pages 166, 167)

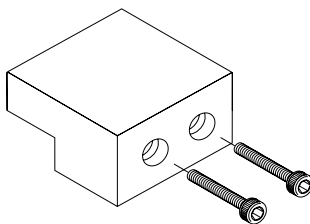
Note: Some models may not be available depending on the specifications. Refer to pages 166 and 167.
Note: For the adjustable stroke range with a shock absorber stopper, refer to page 162.

Applicable shock absorber model No.

Model	Shock absorber model No.	Weight (g)
LCG-8	SKL-0805	12
LCG-12	SKL-0805	12
LCG-16	SKL-1006	19
LCG-20	SKL-1208	31
LCG-25	SKL-1208	31

How to order discrete stopper block

- Use it when changing from the standard to the stroke adjusting stopper or shock absorber stopper.



LCG - 12 - SB1 T

Bore size
(Item A on pages 166, 167)

A Stopper block	
SB1	ø8: For 30 mm stroke length or less
	ø12 to ø25: For 50 mm stroke length or less
SB2	ø8: For 40 mm stroke length or more
	ø12 to ø25: For 75 mm stroke length or more

B Material	
Blank	Stopper block material: steel
T	Stopper block material: steel (nitriding)

- Discrete stopper block weight

(Unit: g)

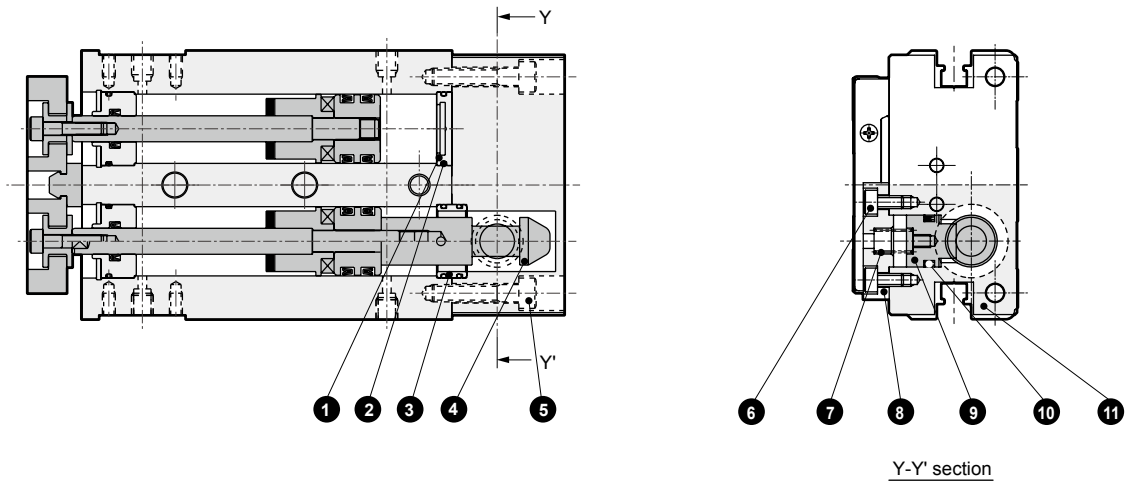
Block	SB1(T)	SB2(T)
ø8	14	24
ø12	23	37
ø16	38	72
ø20	60	99
ø25	112	206

- LCM
- LCR
- LCG
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

Internal structure and parts list

● LCG-Q



Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Cover	Aluminum alloy		6	Hexagon socket head cap screw	Alloy steel	Zinc chromate
2	Gasket	Nitrile rubber		7	Coil spring	Steel	
3	Joint ring	ø8: Stainless steel	ø12 to ø25: Chromate	8	Stopper cover	Aluminum alloy	Alumite
		ø12 to 25: Aluminum alloy		9	Stopper piston	Carbon steel	Nitriding
4	Sleeve	Carbon steel	Nitriding	10	Stopper packing	Nitrile rubber	
5	Hexagon socket head cap screw	Alloy steel	Zinc chromate	11	Head cover	Aluminum alloy	Alumite

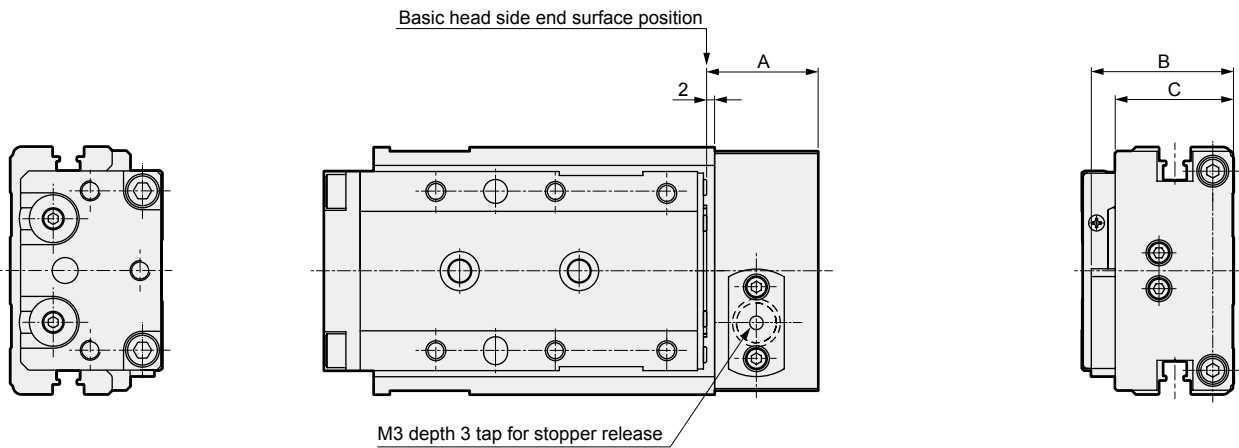
Repair parts list

Bore size (mm)	Kit No.	Repair parts No.	
		Repair parts for position locking	Basic parts are repair parts
ø8	LCG-Q-8K		
ø12	LCG-Q-12K		4 5 9
ø16	LCG-Q-16K	10	12 16 20
ø20	LCG-Q-20K		
ø25	LCG-Q-25K		

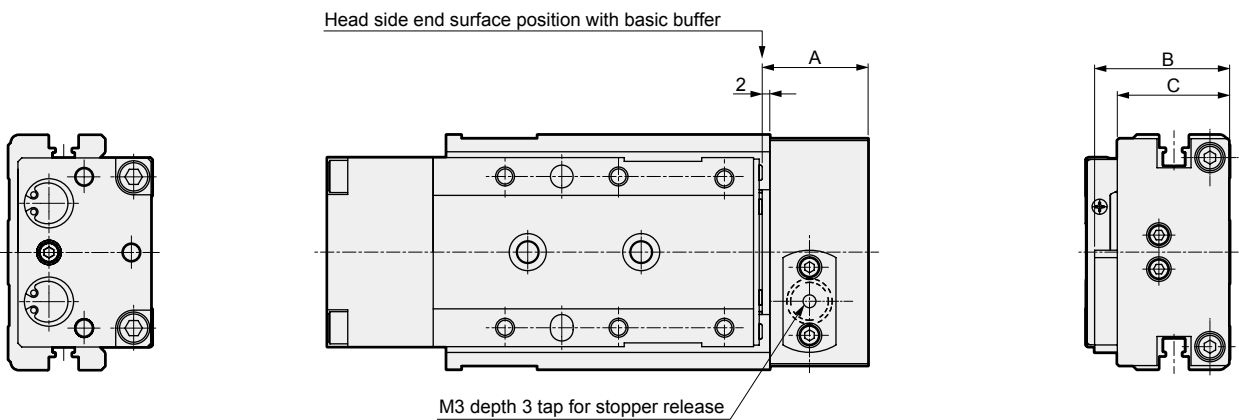
Note: The repair part numbers for the base section correspond to those in the double acting/single rod parts list on page 146.

Dimensions

● LCG-Q



● LCG-Q-**-B (with buffer)



Code	A	B	C
ø8	23	28	22
ø12	24.5	30.5	24.5
ø16	28	35.7	29.7
ø20	30	39	33
ø25	30	48	42

Note: Dimensions other than those listed above are the same as those of double acting/single rod.

- LCM
- LCR
- LCG**
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending



Linear slide cylinder Double acting/single rod clean-room specifications

LCG-P7* Series

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

JIS symbol



Specifications

Item		LCG-P7*					
Bore size	mm	$\phi 6$	$\phi 8$	$\phi 12$	$\phi 16$	$\phi 20$	$\phi 25$
Actuation		Double acting					
Working fluid		Compressed air					
Max. working pressure	MPa	0.7 (≈ 100 psi, 7 bar)					
Min. working pressure	MPa	0.15 (≈ 22 psi, 1.5 bar)					
Proof pressure	MPa	1.05 (≈ 150 psi, 10.5 bar)					
Ambient temperature	$^{\circ}\text{C}$	-10 (14°F) to 60 (140°F) (no freezing)					
Port size	Main body side	M3	M5			Rc1/8	
	Main body back	M3			M5	Rc1/8	
Pressure relief port size		M3	M5			Rc1/8	
Stroke tolerance	mm	+2.0 0 (*1)					
Working piston speed	mm/s	50 to 500					
Cushion		With rubber cushion					
Lubrication		Not available					
Allowable absorbed energy	J	Refer to Table 3 on page 188.					

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

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

Stroke length

Bore size (mm)	Standard stroke length (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 stroke lengths other than the above are not available.

Theoretical thrust table

Refer to page 189.

Switch specifications

- 1-color/2-color display

Item	Reed 2-wire				Proximity 2-wire		Proximity 3-wire		
	T0H/T0V		T5H/T5V		T2H/T2V	T2WH/T2WV	T3H/T3V	T3PH/T3PV	T3WH/T3WV
Applications	For programmable controller, relay		For programmable controller, relay, IC circuit (without indicator lamp), serial connection		Dedicated for programmable controller		For programmable controller, relay		
Output method	-		-		-		NPN output	PNP output	NPN output
Power supply voltage	-		-		-		10 to 28 VDC		
Load voltage	12/24 VDC	110 VAC	5/12/24 VDC	110 VAC	10 to 30 VDC	24 VDC ±10%	30 VDC or less		
Load current	5 to 50 mA	7 to 20 mA	50 mA or less	20 mA or less	5 to 20 mA		100 mA or less		50 mA or less
Indicator lamp	LED (Lit when ON)		Without indicator lamp		LED (Lit when ON)	Red/green LED (Lit when ON)	LED (Lit when ON)	Yellow LED (Lit when ON)	Red/green LED (Lit when ON)
Leakage current	0 mA				1 mA or less		10 µA or less		
Weight	g		1 m:18 3 m:49 5 m:80						

Item	Proximity 2-wire		Proximity 3-wire		Proximity 2-wire		Proximity 3-wire		
	F2S		F3S		F2H/F2V	F2YH/F2YV	F3H/F3V	F3PH/F3PV (Made to order)	F3YH/F3YV
Applications	Dedicated for programmable controller		For programmable controller, relay		Dedicated for programmable controller		For programmable controller, relay		
Output method	-		NPN output		-		NPN output	PNP output	NPN output
Power supply voltage	-		10 to 28 VDC		-		10 to 28 VDC	4.5 to 28 VDC	10 to 28 VDC
Load voltage	10 to 30 VDC		30 VDC or less		10 to 30 VDC	24 VDC ±10%	30 VDC or less		
Load current	5 to 20 mA		50 mA or less		5 to 20 mA		50 mA or less		
Indicator lamp	LED (Lit when ON)				Yellow LED (Lit when ON)	Red/green LED (Lit when ON)	Yellow LED (Lit when ON)	Yellow LED (Lit when ON)	Red/green LED (Lit when ON)
Leakage current	1 mA or less		10 µA or less		1 mA or less		10 µA or less		
Weight	g		1 m:10 3 m:29						

*1 : Refer to Ending Page 1 for detailed switch specifications and dimensions.

*2 : Switches other than the above models, such as switches with connectors, are also available. Refer to Ending Page 1.

*3 : The max. load current is 20 mA at 25°C. The current is lower than 20 mA if the operating ambient temperature around the switch is higher than 25°C. (5 to 10 mA at 60°C)

*4 : The F type switch uses a bend-resistant lead wire.

Cylinder weight

- Clean-room specifications

(Unit: g)

Bore size (mm)	Basic Stroke length (mm)								
	10	20	30	40	50	75	100	125	150
ø6	170	170	190	250	270	-	-	-	-
ø8	270	270	300	380	410	500	-	-	-
ø12	550	550	550	600	650	840	980	-	-
ø16	890	880	870	950	1,030	1,380	1,570	1,770	-
ø20	1,470	1,460	1,450	1,570	1,690	2,130	2,420	2,710	3,000
ø25	2,410	2,390	2,370	2,550	2,730	3,530	3,950	4,370	4,790

- Weight of variation/option (stopper)

(Unit: g)

Bore size (mm)	Option/stopper code	
	S1 to S4	S5/S6
ø6	30	40
ø8	40	60
ø12	70	100
ø16	110	150
ø20	170	250
ø25	290	380

- LCM
- LCR
- LCG
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

LCG-P7* Series

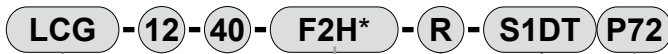
- LCM
- LCR
- LCG**
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MecHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

How to order (ø6 to ø16)

Without switch (built-in magnet for switch)



With switch (built-in magnet for switch)



Model No.

A Bore size

B Stroke length

C Switch model No.
*6

D Switch quantity

F Clean-room specifications

E Option

⚠ Precautions for model No. selection

- *1 : For the port position, refer to the stopper dimensions on page 162.
- *2 : The port positions of the standard without stopper are ① and ③ in the figure below.
- *3 : Can be selected for the type with stopper only.
- *4 : When two switches are necessary for the type with S*** of ø6 to ø8 with 30 mm stroke length or less, select the F□H type switch.
- *5 : The anti-rust is made to order.
- *6 : The stroke adjusting stopper for 0.3 MPa and over working pressure is the metal sealing.
- *7 : When changing the stopper position from the head side to the rod side, the stopper must be purchased separately according to the stroke length and adjustable stroke length. Refer to "Precautions when purchasing discrete stopper" on page 145. Adjustable stroke lengths of 15 mm and 25 mm may not be possible depending on the stroke length.

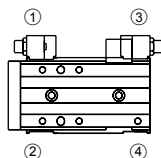
[Example of model No.]

LCG-12-40-F2H*-R-S1DT-P72

Model: Linear slide cylinder Double acting/single rod (clean-room specifications) LCG-P7*

- A** Bore size : ø12
- B** Stroke length : 40 mm
- C** Switch model No. : Proximity/2-wire
Axial lead wire
- D** Switch quantity : 1 on rod side
- E** Other options : Stroke adjusting stopper
Stopper position ①
With side and bottom ports
Material, steel (nitriding)
- F** Clean-room specifications : Exhaust port

● Stopper position



Code	Description
A Bore size	
6	ø6
8	ø8
12	ø12
16	ø16

B Stroke length (mm)		Bore size (ø)			
		6	8	12	16
10	10	●	●	●	●
20	20	●	●	●	●
30	30	●	●	●	●
40	40	●	●	●	●
50	50	●	●	●	●
75	75		●	●	●
100	100			●	●
125	125				●
150	150				

C Switch model No.										
Axial lead wire	Radial lead wire	Contact	Voltage		Indicator lamp	Lead wire	Bore size			
			AC	DC			ø6	ø8	ø12	ø16
-	F2S*	Proximity		●	1-color display	2-wire				
-	F3S*			●		3-wire				
F2H*	F2V*			●	3-wire	●	●	●		
F3H*	F3V*			●		1-color display (PNP output) (made to order)				
F3PH*	F3PV*	Reed		●	2-color display	2-wire				
F2YH*	F2YV*			●		3-wire				
F3YH*	F3YV*			●	2-wire					
T0H*	T0V*			●		1-color display no indicator lamp				
T5H*	T5V*	Proximity		●	1-color display	2-wire				
T2H*	T2V*			●		3-wire				
T3H*	T3V*			●	1-color display (PNP output)				●	
T3PH*	T3PV*			●		2-color display				
T2WH*	T2WV*		●	2-wire						
T3WH*	T3WV*		●		3-wire					

Lead wire length					
Blank	1 m (standard)				●
3	3 m (option)				●
5	5 m (option)				●

D Switch quantity					
R	1 on rod side				●
H	1 on head side				●
D	2				●

E Option					
Blank	No option				●

S Stroke adjusting stopper					
5 mm stroke adjustment on one side		*4			
S1**	Stopper position ① (can be changed to ④)	Stopper installation position			●
S2**	Stopper position ② (can be changed to ③)				●
S3**	Stopper position ③ (can be changed to ②) *7				●
S4**	Stopper position ④ (can be changed to ①) *7				●
S5**	Stopper position ①, ③				●
S6**	Stopper position ②, ④				●

** part					
Blank	Port on the stopper: without port				●
D	Port on the stopper: side and bottom ports				● *1, *3
Blank	Stopper block material: steel				●
T	Stopper block material: steel (nitriding)				● *3

Plug attached					
Blank	None				
N	With side piping port plug (not available for ø6)				

F Clean-room specifications		Structure			
P72	Exhaust port				
P73	Vacuum treatment				

How to order (ø20, ø25)

Without switch (built-in magnet for switch)

LCG - **20** - **40** - **S5** **U** **P72**

With switch (built-in magnet for switch)

LCG - **20** - **40** - **T2H*** - **R** - **S1DT** **U** **P72**

Model No.

A Bore size

B Stroke length

C Switch model No.

*4

E Clean-room specifications

D Switch quantity

E Option

F Anti-rust treatment

⚠ Precautions for model No. selection

- *1 : For the port position, refer to the stopper dimensions on page 162.
- *2 : The port positions of the standard without stopper are ① and ③ in the figure below.
- *3 : Can be selected for the type with stopper only.
- *4 : The table is steel.
To prevent rust, select "U" for an environment where the temperature and humidity is high or condensation may occur on the product surface.
- *5 : The stroke adjusting stopper for 0.3 MPa and over working pressure is the metal sealing.
- *6 : When changing the stopper position from the head side to the rod side, the stopper must be purchased separately according to the stroke length and adjustable stroke length. Refer to "Precautions when purchasing discrete stopper" on page 145. Adjustable stroke lengths of 15 mm and 25 mm may not be possible depending on the stroke length.

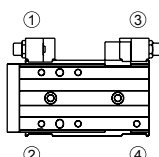
[Example of model No.]

LCG-12-40-F2H*-R-S1DT-P72

Model: Linear slide cylinder Double acting/single rod (clean-room specifications) LCG-P7*

- A** Bore size : ø12
- B** Stroke length : 40 mm
- C** Switch model No. : Proximity/2-wire
Axial lead wire
- D** Switch quantity : 1 on rod side
- E** Other options : Stroke adjusting stopper
Stopper position ①
With side and bottom ports
Material, steel (nitriding)
- F** Clean-room specifications : Exhaust port

● Stopper position



Code	Description
A Bore size	
20	ø20
25	ø25

B Stroke length (mm)	
10	10
20	20
30	30
40	40
50	50
75	75
100	100
125	125
150	150

C Switch model No.						
Axial lead wire	Radial lead wire	Contact	Voltage		Indicator lamp	Lead wire
			AC	DC		
T0H*	T0V*	Reed	●	●	1-color display	2-wire
T5H*	T5V*		●	●	Without indicator lamp	
T2H*	T2V*	Proximity		●	1-color display	2-wire
T3H*	T3V*			●	display	3-wire
T3PH*	T3PV*			●	1-color display (PNP output)	3-wire
T2WH*	T2WV*			●	2-color display	2-wire
T3WH*	T3WV*		●	display	3-wire	

Lead wire length	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

D Switch quantity	
R	1 on rod side
H	1 on head side
D	2

E Option	
Blank	No option

S Stroke adjusting stopper		*4
5 mm stroke adjustment on one side		
S1**	Stopper position ① (can be changed to ④)	Stopper installation position
S2**	Stopper position ② (can be changed to ③)	
S3**	Stopper position ③ (can be changed to ②) *6	
S4**	Stopper position ④ (can be changed to ①) *6	
S5**	Stopper position ①,③	
S6**	Stopper position ②,④	

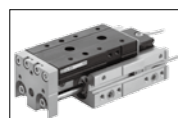
** part	
Blank	Port on the stopper: without port
D	Port on the stopper: side and bottom ports
Blank	Stopper block material: steel
T	Stopper block material: steel (nitriding)

F Anti-rust treatment	
Blank	None
U	Anti-rust treated product (table/guide) *4

Plug attached	
Blank	None
N	With side piping port plug (ø25 cannot be selected.)

G Clean-room specifications	
Structure	
P72	Exhaust port
P73	Vacuum treatment

U: Anti-rust treated product (ø20, ø25)



The table and rail surface rustproofing reduces rust in high-humidity environments and near ionizers.

The table and rail are black.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

LCG-P7* Series

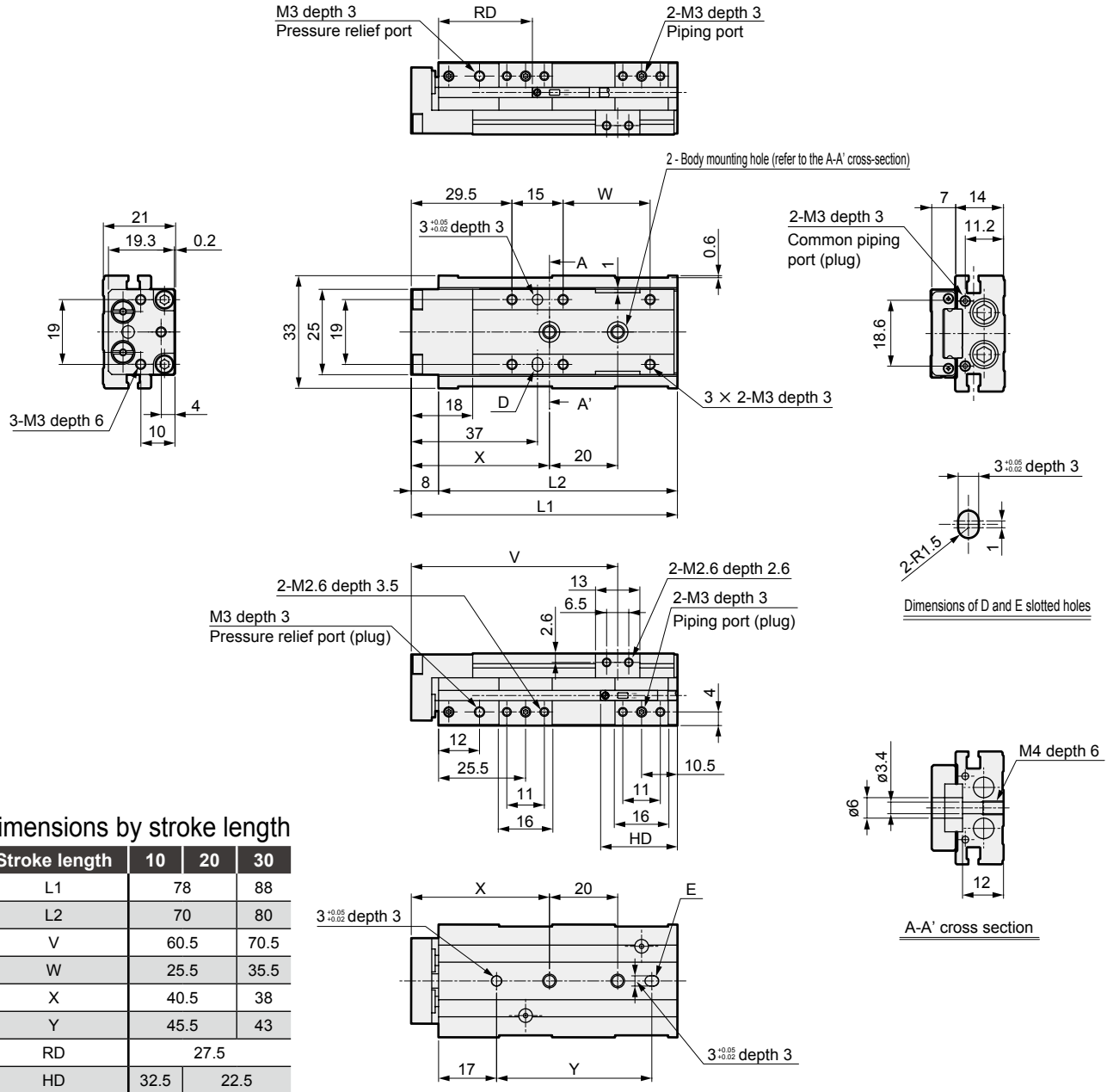


Dimensions (bore size: $\phi 6$)

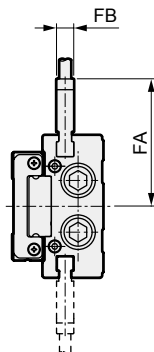
● LCG-6-P7*

Stroke length: 10, 20, 30

(Body mounting hole in the figure shows 20 mm stroke length)



● Dimensions of protruding section when the F2S or F3S cylinder switch is mounted



Stroke length	10	20	30
FA	29.6		
FB	4		
RD	26.5		
HD	33.5	23.5	

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of

1. Common; when piping on page 196.

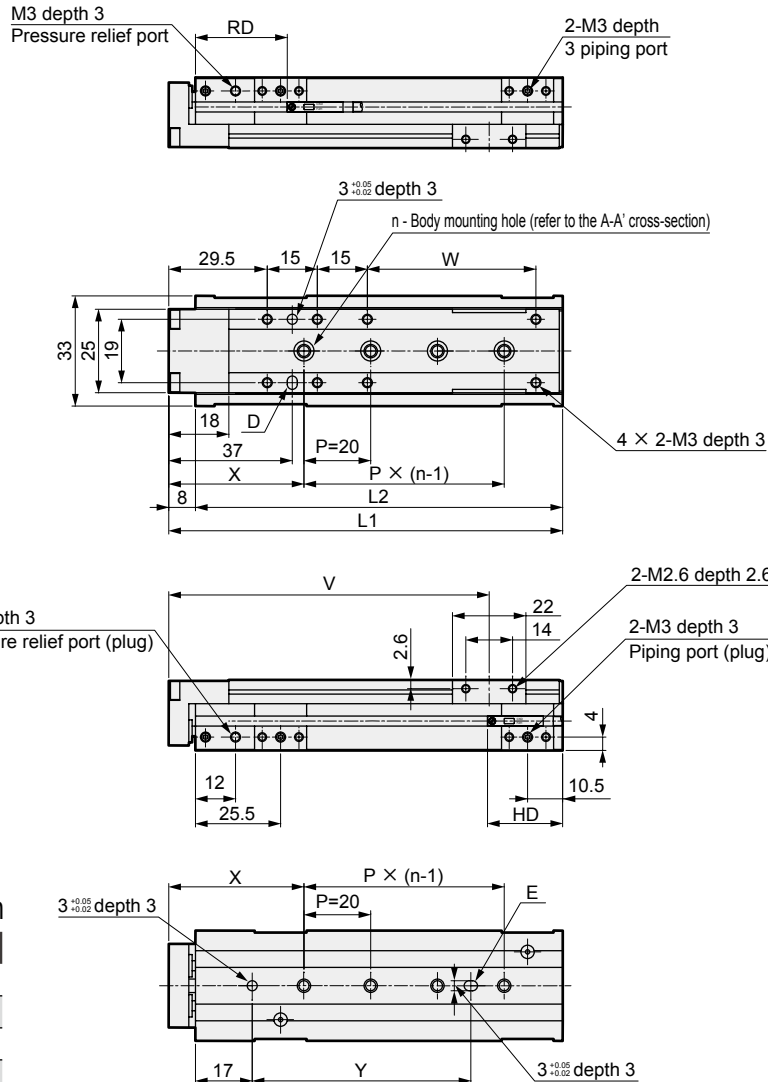
Dimensions (bore size: $\phi 6$)



● LCG-6-P7*

Stroke length: 40, 50

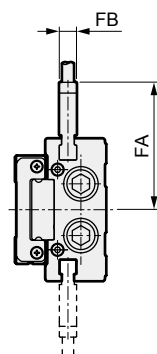
(Body mounting hole in the figure shows 50 mm stroke length)



Dimensions by stroke length

Stroke length	40	50
L1	108	118
L2	100	110
n	3	4
V	86	96
W	40.5	50.5
X	39	40.5
Y	44	65.5
RD	37.5	
HD	22.5	

● Dimensions of protruding section when the F2S or F3S cylinder switch is mounted



Stroke length	40	50
FA	29.6	
FB	4	
RD	36.5	
HD	23.5	

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting.

The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of

1. Common; when piping on page 196.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

LCG-P7* Series

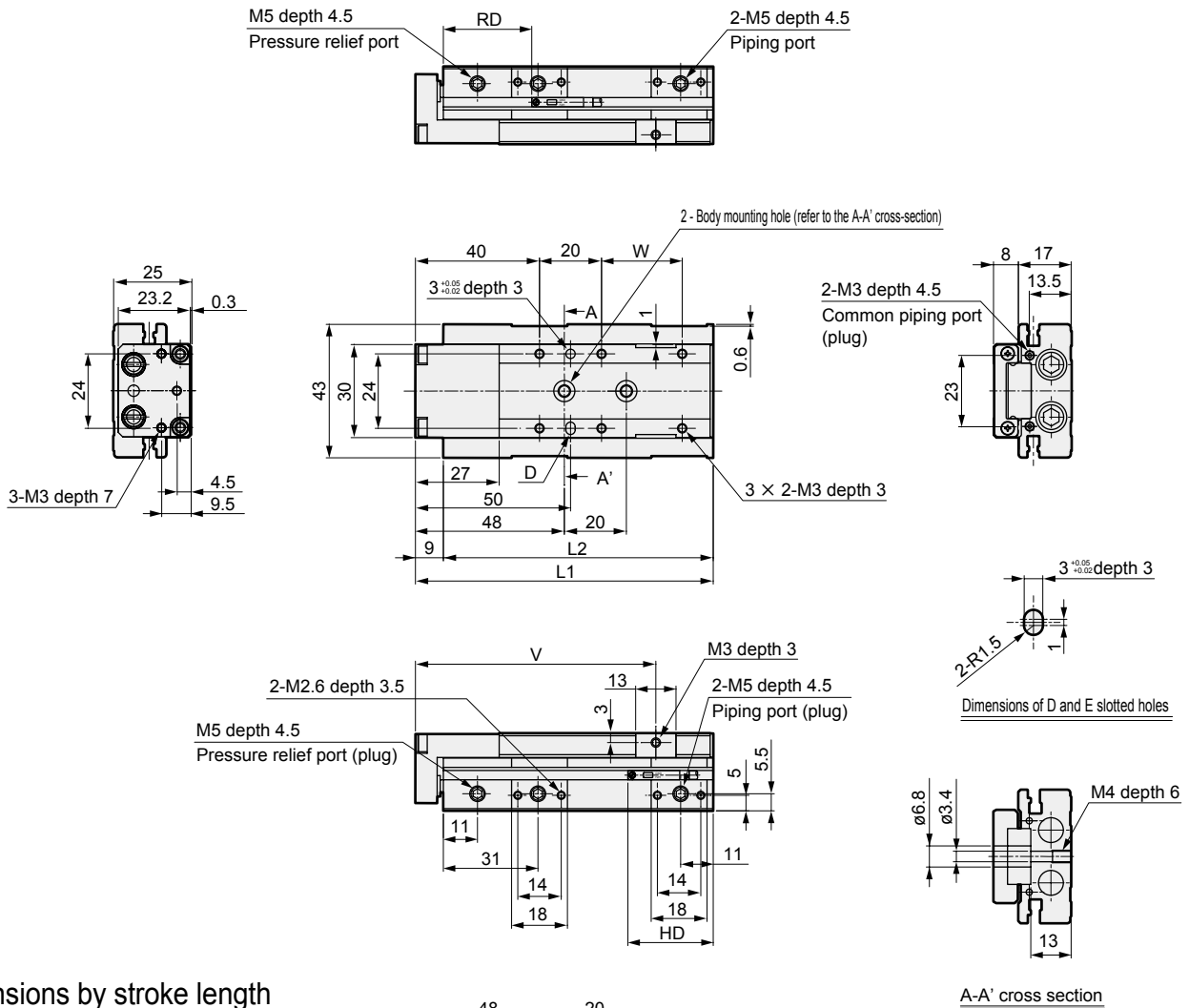
Dimensions (bore size: $\varnothing 8$)



● LCG-8-P7*

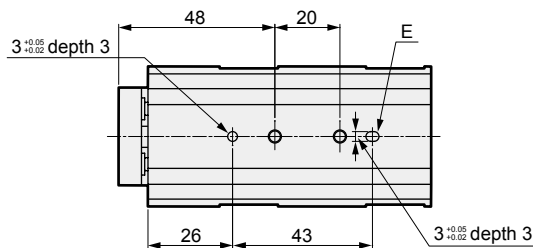
Stroke length: 10, 20, 30

(Body mounting hole in the figure shows 30 mm stroke length)

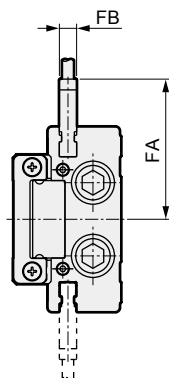


Dimensions by stroke length

Stroke length	10	20	30
L1	86	96	
L2	77	87	
V	67.5	77.5	
W	16	26	
RD	33		
HD	34	24	



● Dimensions of protruding section when the F2S or F3S cylinder switch is mounted



Stroke length	10	20	30
FA	32.6		
FB	4		
RD	32		
HD	35	25	

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of

1. Common; when piping on page 196.

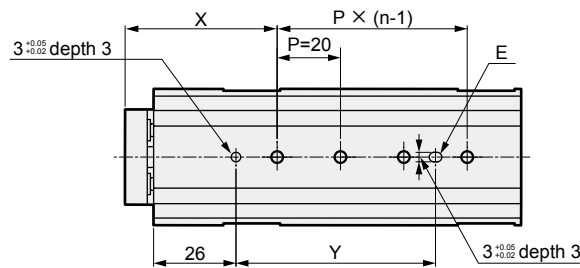
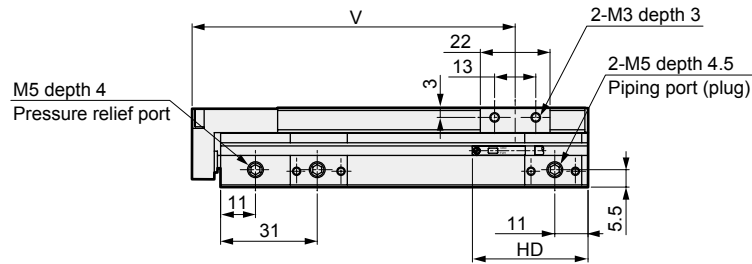
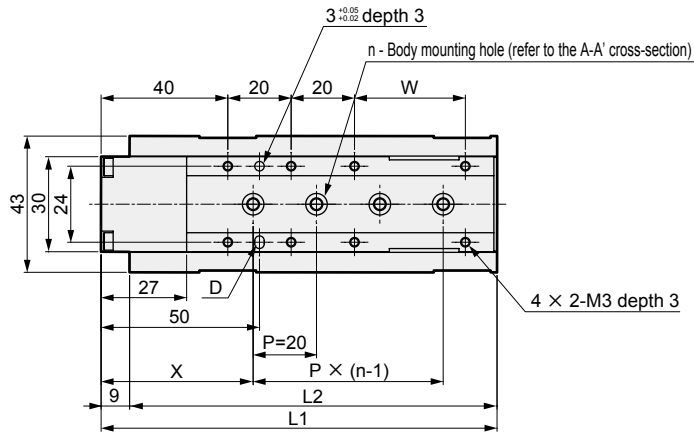
Dimensions (bore size: $\varnothing 8$)



● LCG-8-P7*

Stroke length: 40, 50, 75

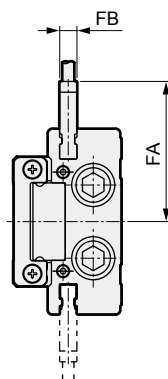
(Body mounting hole in the figure shows 50 mm stroke length)



Dimensions by stroke length

Stroke length	40	50	75
L1	115	125	150
L2	106	116	141
n	3	4	5
V	92	102	127
W	25	35	60
X	46.5	48	45
Y	41.5	63	80
RD		34	
HD		32	

● Dimensions of protruding section when the F2S or F3S cylinder switch is mounted



Stroke length	40	50	75
FA		32.6	
FB		4	
RD		33	
HD		33	

- *1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.
- *2 : When using rear piping, refer to the cautions of 1. Common; when piping on page 196.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

LCG-P7* Series

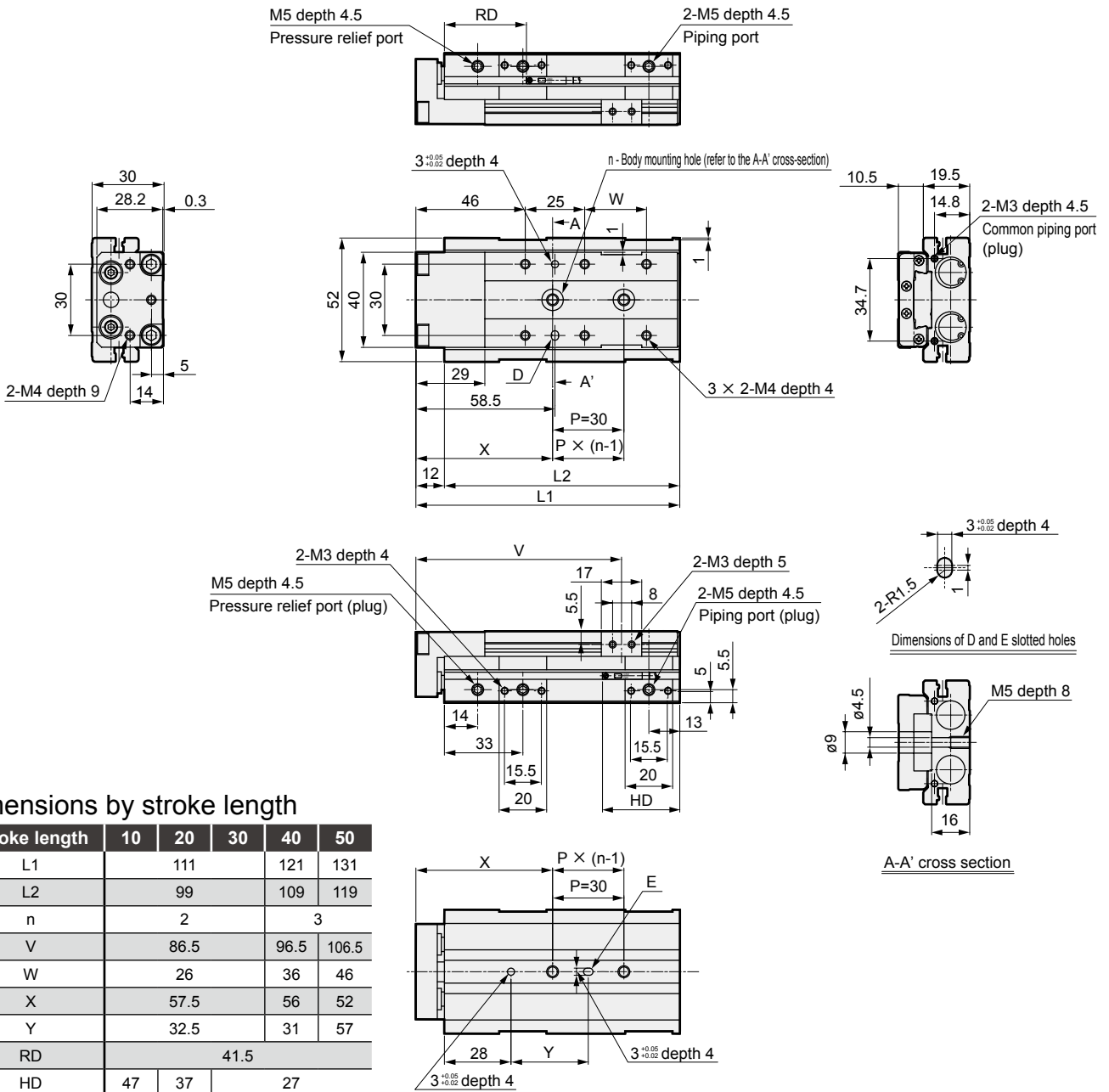
Dimensions (bore size: $\phi 12$)



● LCG-12-P7*

Stroke: 10, 20, 30, 40, 50

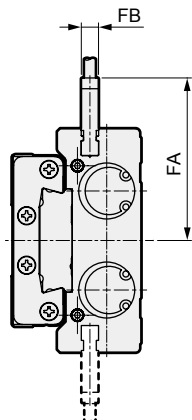
(Body mounting hole in the figure shows 30 mm stroke length)



Dimensions by stroke length

Stroke length	10	20	30	40	50
L1		111	121	131	
L2		99	109	119	
n		2		3	
V		86.5	96.5	106.5	
W		26	36	46	
X		57.5	56	52	
Y		32.5	31	57	
RD		41.5			
HD	47	37		27	

● Dimensions of protruding section when the F2S or F3S cylinder switch is mounted



Stroke length	10	20	30	40	50
FA			37.8		
FB			4		
RD			40.5		
HD	48	38		28	

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of 1. Common; when piping on page 196.

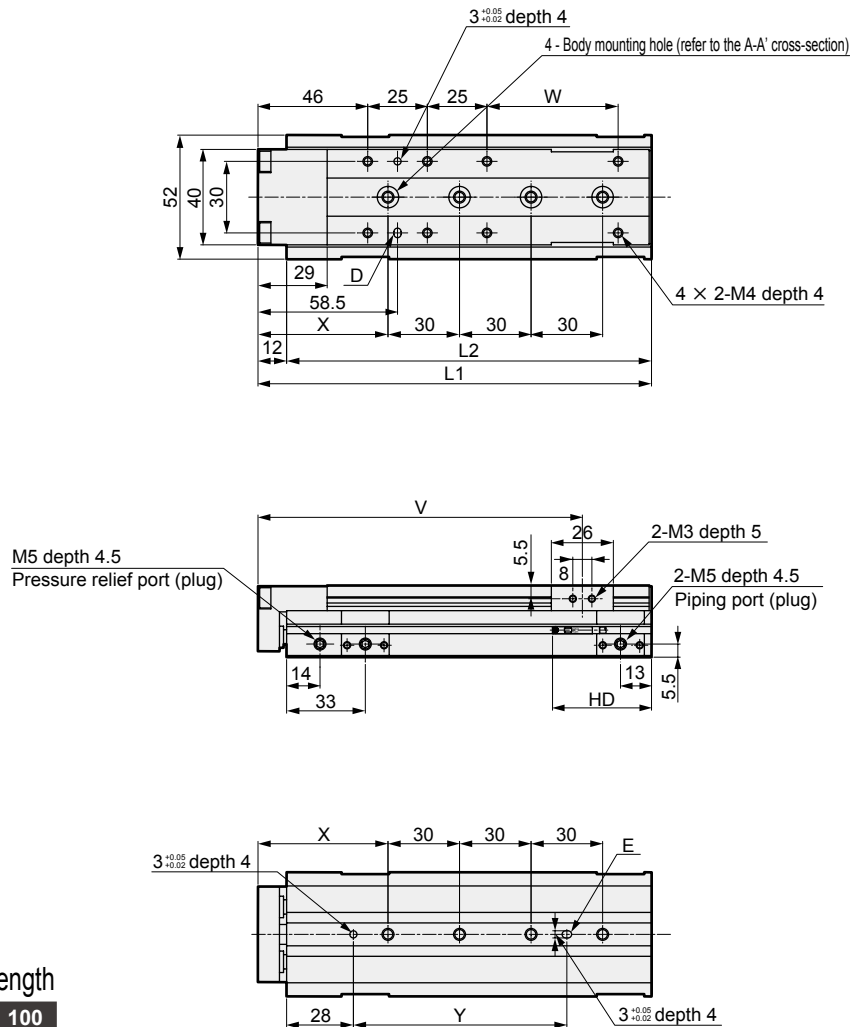
Dimensions (bore size: $\phi 12$)



● LCG-12-P7*

Stroke length: 75, 100

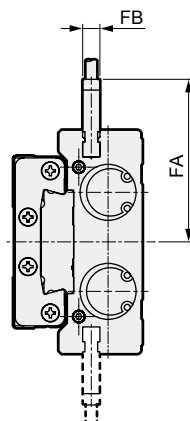
(Body mounting hole in the figure shows 100 mm stroke length)



Dimensions by stroke length

Stroke length	75	100
L1	165	190
L2	153	178
V	136	161
W	55	80
X	54.5	67
Y	89.5	102
RD	41.5	
HD	36	

● Dimensions of protruding section when the F2S or F3S cylinder switch is mounted



Stroke length	75	100
FA	37.8	
FB	4	
RD	40.5	
HD	37	

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of

1. Common; when piping on page 196.

- LCM
- LCR
- LCG**
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

LCG-P7* Series

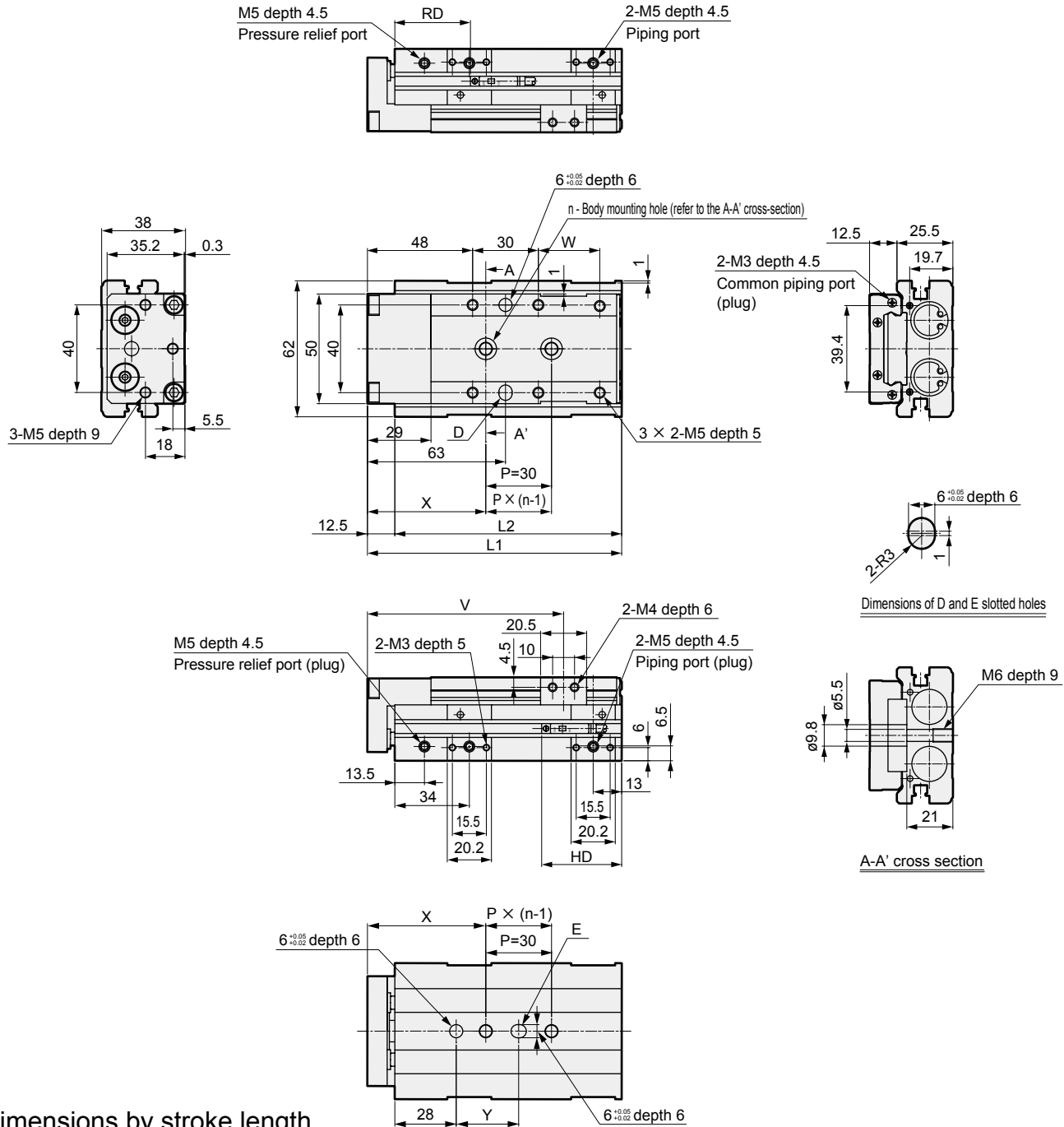


Dimensions (bore size: $\phi 16$)

● LCG-16-P7*

Stroke: 10, 20, 30, 40, 50

(Body mounting hole in the figure shows 30 mm stroke length)



Dimensions by stroke length

Stroke length	10	20	30	40	50
L1		116	126	136	
L2		103.5	113.5	123.5	
n		2		3	
V		89.8	99.8	109.8	
W		28	38	48	
X		54	65.5	55.5	
Y		28.5	40	60	
T0*/T5*	RD	37			
T2*/T3*	HD	56.5	46.5	36.5	
T2W*/T3W*	RD	39.5			
	HD	54	44	34	

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.

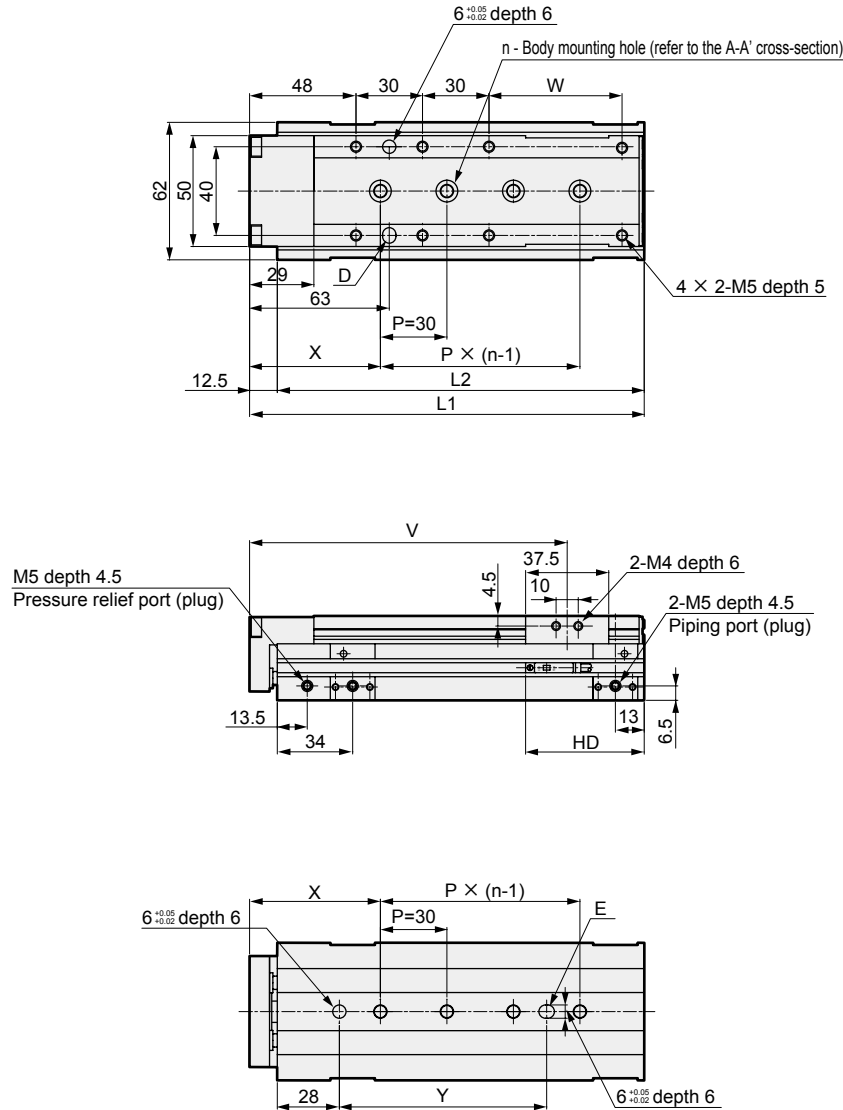
*2 : When using rear piping, refer to the cautions of 1. Common; when piping on page 196.

Dimensions (bore size: $\varnothing 16$)



● LCG-16-P7*

Stroke length: 75, 100, 125,
(Body mounting hole in the figure shows 75 mm stroke length)



Dimensions by stroke length

Stroke length	75	100	125
L1	178	203	228
L2	165.5	190.5	215.5
n	4	5	
V	143.3	168.3	193.3
W	60	85	110
X	59	57	69
Y	93.5	121.5	133.5
T0*/T5*	RD	37	
T2*/T3*	HD	53.5	
T2W*/T3W*	RD	39.5	
	HD	51	

- *1 : When using a positioning hole, use a pin of dimensions that do not require press fitting.
The recommended tolerance of a pin is JIS tolerance m6 or less.
- *2 : When using rear piping, refer to the cautions of 1. Common; when piping on page 196.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

LCG-P7* Series

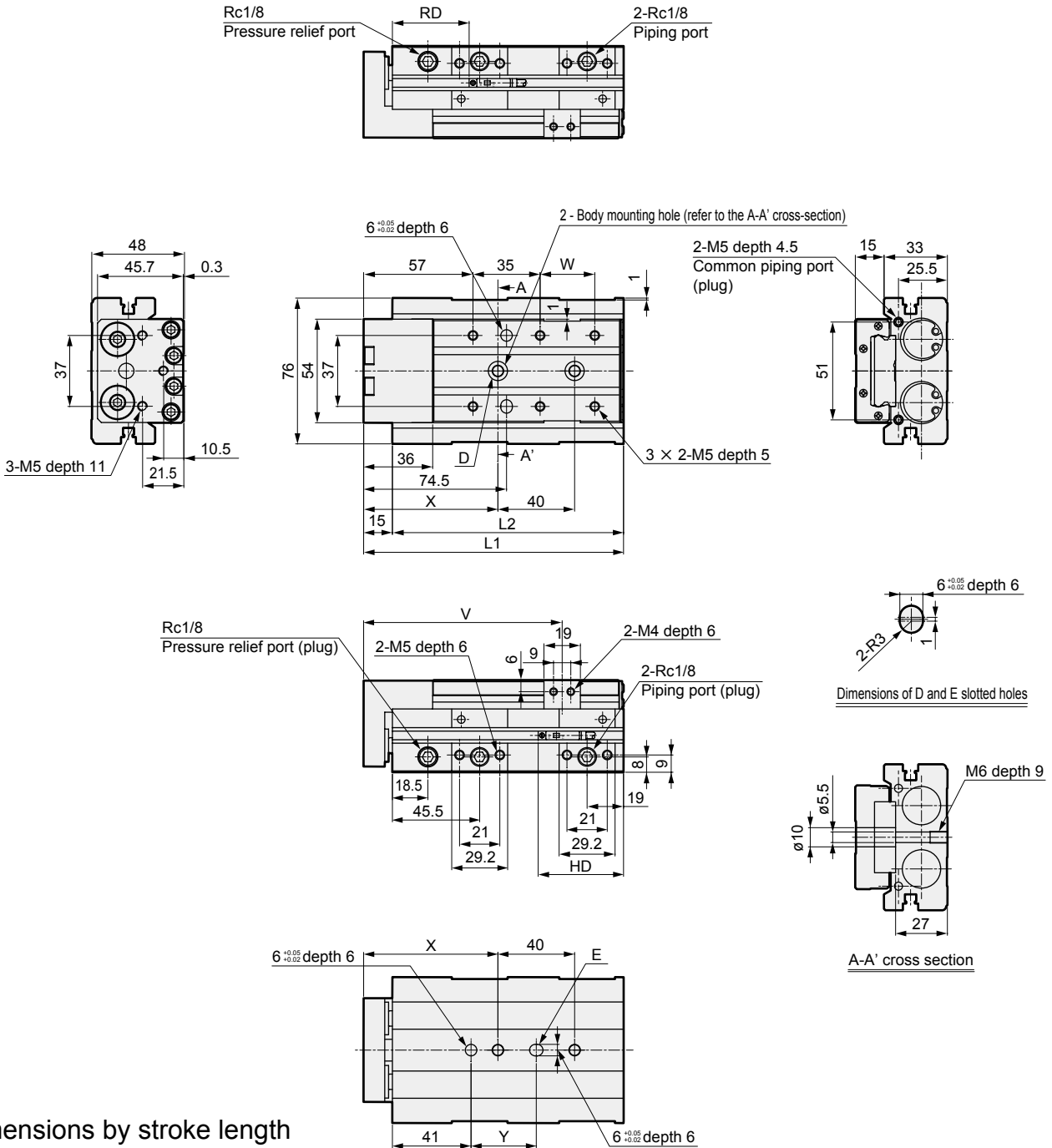


Dimensions (bore size: $\phi 20$)

● LCG-20-P7*

Stroke: 10, 20, 30, 40, 50

(Body mounting hole in the figure shows 30 mm stroke length)



Dimensions by stroke length

Stroke length	10	20	30	40	50
L1		135.5	145.5	155.5	
L2		120.5	130.5	140.5	
V		103.5	113.5	123.5	
W		28.5	38.5	48.5	
X		70	76	74	
Y		34	40	38	
T0*/T5*	RD	41			
T2*/T3*	HD	69.5	59.5	49.5	
T2W*/T3W*	RD	43.5			
	HD	67	57	47	

* The same dimensions apply to the anti-rust (U).

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of

1. Common; when piping on page 196.

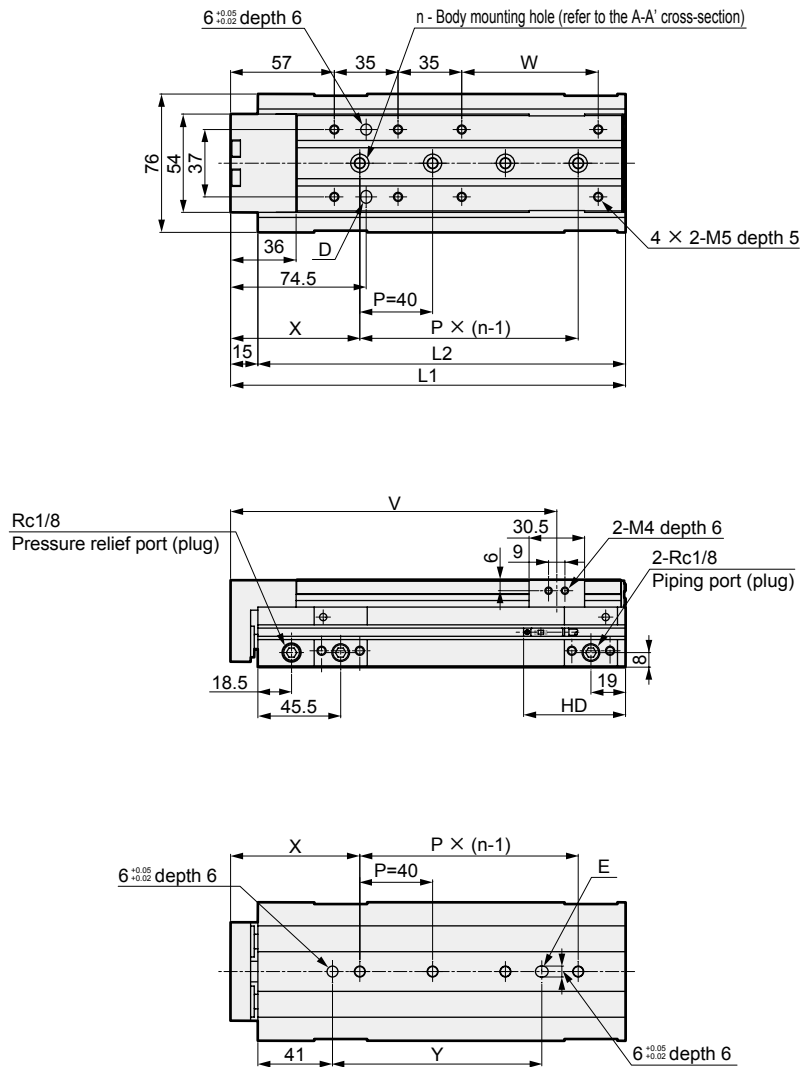
Dimensions (bore size: $\varnothing 20$)



● LCG-20-P7*

Stroke length: 75, 100, 125, 150

(Body mounting hole in the figure shows 100 mm stroke length)



Dimensions by stroke length

Stroke length	75	100	125	150
L1	192	217	242	267
L2	177	202	227	252
n	3	4	5	
V	154.3	179.3	204.3	229.3
W	50	75	100	125
X	71	78	76	
Y	75	115	122	160
T0*/T5*	RD	41		
T2*/T3*	HD	61		
T2W*/T3W*	RD	43.5		
	HD	58.5		

* The same dimensions apply to the anti-rust (U).

*1 : When using a positioning hole, use a pin of dimensions that do not require press fitting.

The recommended tolerance of a pin is JIS tolerance m6 or less.

*2 : When using rear piping, refer to the cautions of

1. Common; when piping on page 196.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

LCG-P7* Series

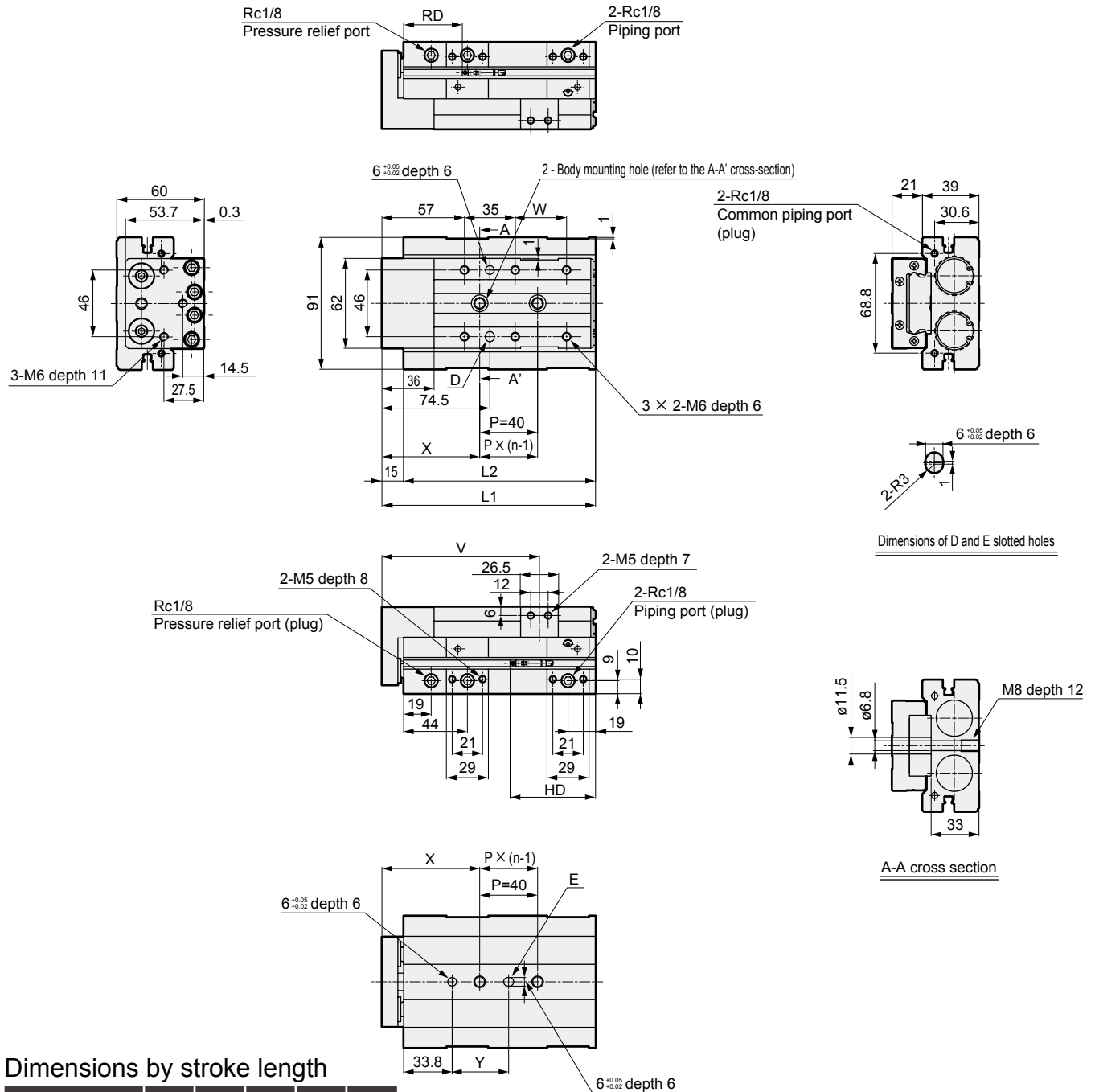


Dimensions (bore size: $\varnothing 25$)

● LCG-25-P7*

Stroke: 10, 20, 30, 40, 50

(Body mounting hole in the figure shows 30 mm stroke length)



Dimensions by stroke length

Stroke length	10	20	30	40	50
L1	147.5	157.5	167.5		
L2	132.5	142.5	152.5		
n	2	3	2		
V	108.8	118.8	128.8		
W	35.5	45.5	55.5		
X	67.5	70.5	85.5		
Y	39	42	57		
T0*/T5*	RD	43.5			
T2*/T3*	HD	79	69	59	
T2W*/T3W*	RD	46			
	HD	76.5	66.5	56.5	

* The same dimensions apply to the anti-rust (U).

- *1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.
- *2 : When using rear piping, refer to the cautions of **1. Common; when piping** on page 196.

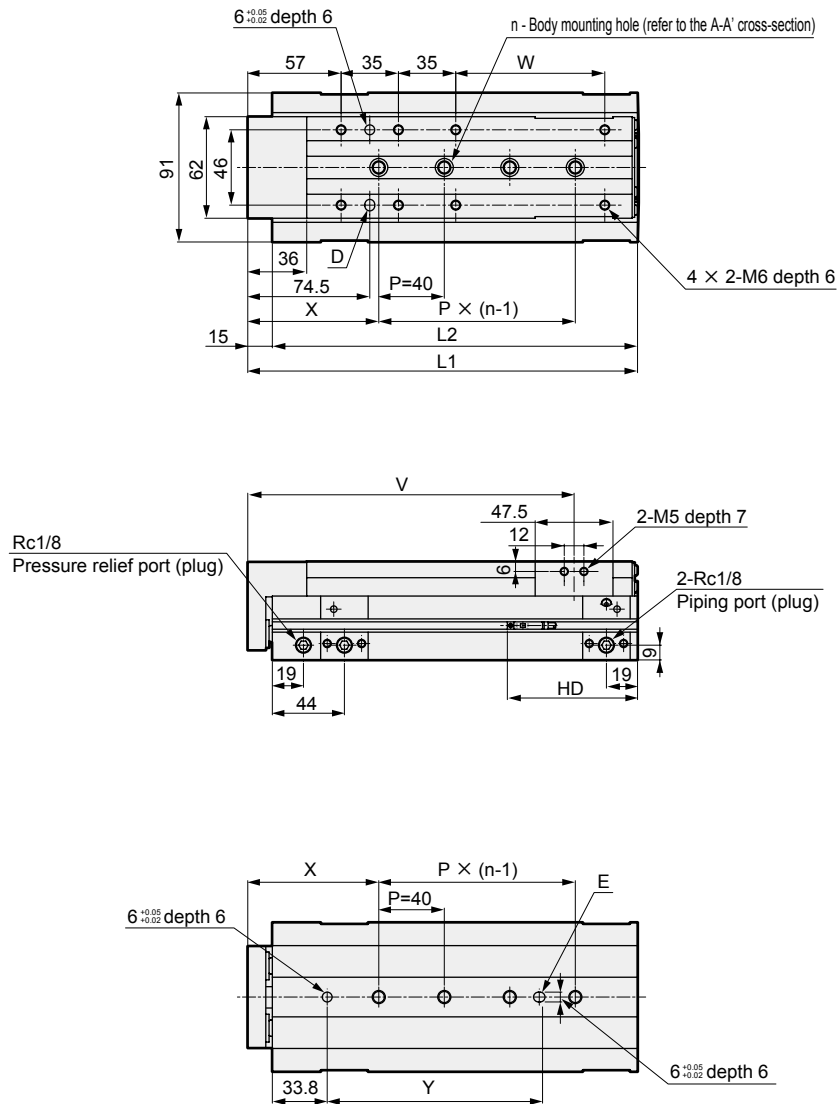
Dimensions (bore size: $\varnothing 25$)



● LCG-25-P7*

Stroke length: 75, 100, 125, 150

(Body mounting hole in the figure shows 100 mm stroke length)



Dimensions by stroke length

Stroke length	75	100	125	150
L1	213	238	263	288
L2	198	223	248	273
n	3	4	5	
V	163.8	188.8	213.8	238.8
W	66	91	116	141
X	85	80	70	85
Y	96.5	131.5	161.5	176.5
T0*/T5*	RD	43.5		
T2*/T3*	HD	79.5		
T2W*/T3W*	RD	46		
	HD	77		

* The same dimensions apply to the anti-rust (U).

- *1 : When using a positioning hole, use a pin of dimensions that do not require press fitting. The recommended tolerance of a pin is JIS tolerance m6 or less.
- *2 : When using rear piping, refer to the cautions of 1. Common; when piping on page 196.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
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Hand
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