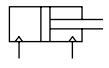
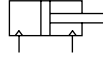
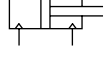
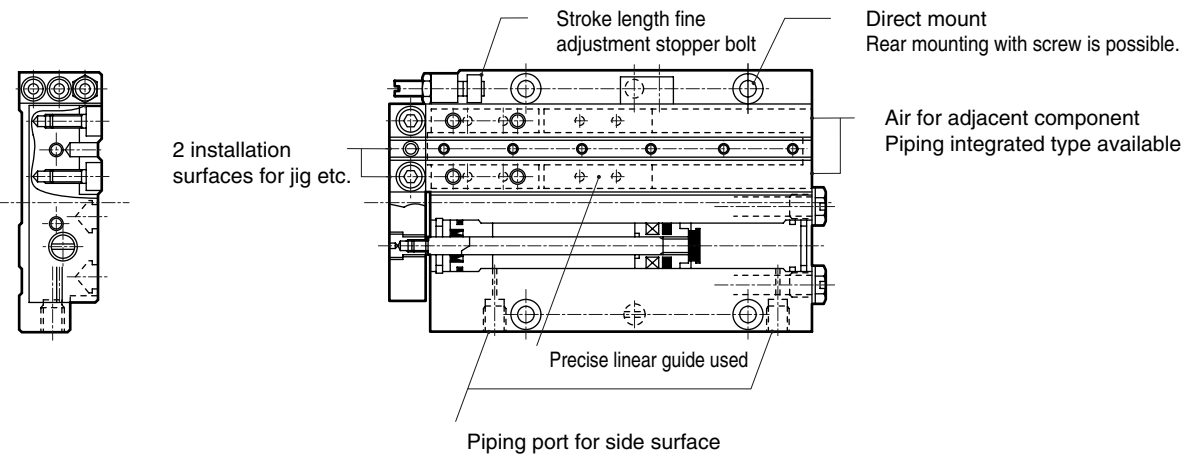


● : Standard, ◎ : Option, ■ : Not available

Variation	Model no. JIS symbol	Bore size (mm)	Standard stroke length (mm)						Max. stroke length (mm)	Option		Switch	Page
			15	30	50	75	100	With dowel hole E		Additional table tap N			
Basic type	LCY 	φ 10	●	●	●	■	■	50	◎	◎	◎	1850	
		φ 16, φ 20, φ 25	●	●	●	●	●	100	◎	◎			
Reduced piping type	LCY-A 	φ 10	●	●	●	■	■	50	◎	◎	◎	1850	
		φ 16, φ 20, φ 25	●	●	●	●	●	100	◎	◎			
Stroke adjustable type (retracted)	LCY-R 	φ 10	●	●	●	■	■	50	◎	◎	◎	1850	
		φ 16, φ 20, φ 25	●	●	●	●	●	100	◎	◎			

Product introduction



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

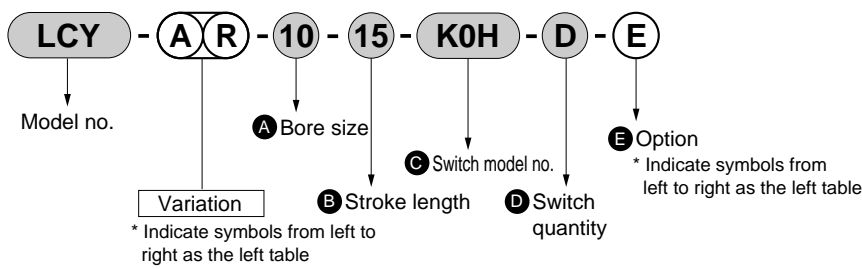
Linear slide cylinder
Combined functions

Variation and option selection table

- : Standard
- ◎ : Option
- : Available (custom order)
- △ : Available depending on conditions (consult with CKD.)
- X : Not available

Code	Code	Code	Variation			Port thread		Option	
			Double acting basic type	Reduced piping type	Adjustable stroke (retracted)	NPT	G	Additional table tap	With dowel hole
		Symbol	No	A	R	N	G	N	E
USC	Double acting basic type	Blank	Blank	Blank	Blank	X	X	◎	◎
JSB3	Reduced piping type	A	Blank	○	Blank	X	X	◎	◎
LMB	Adjustable stroke (retracted)	R	Blank	Blank	○	X	X	◎	◎
STG									
STS/L									
LCS	NPT	N					X	X	X
LCG	G	G						X	X
LCM									
LCT									
LCY	Additional table tap	N							◎
STR2	With dowel hole	E							
UCA2									
HCM									
HCA	Cylinder switch	Listed on Ending	◎	◎	◎			◎	◎
SRL2									
SRG									
SRM									
SRT									
MRL2									
MRG2									
SM-25									
CAC3									
UCAC									
RCC2									
MFC									
SHC									
GLC									
Ending									

<Example of model number>



Model no.: Linear slide cylinder

- Variation: Reduced piping type, stroke adjustable type
- A** Bore size : $\phi 10\text{mm}$
- B** Stroke length : 15mm
- C** Switch model no. : Reed, K0H switch, lead wire 1m
- D** Switch quantity : 2
- E** Option : With dowel hole

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

Linear slide cylinder
Combined functions



Pneumatic components

Safety precautions

Always read this section before starting use.

Refer to Intro 71 for general precautions of the cylinder, and to Intro 78 for general precautions of the cylinder switch.

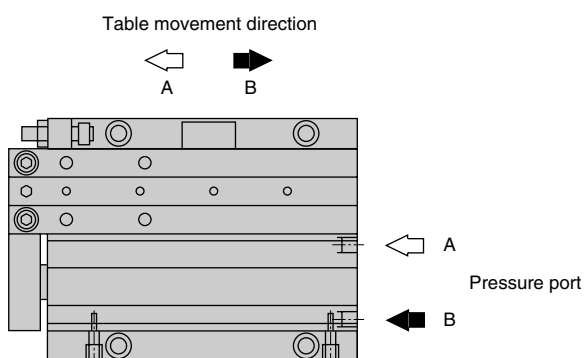
Linear slide cylinder LCY Series

Installation & Adjustment

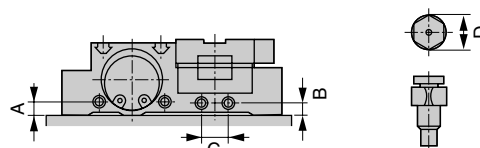
1. Common; piping

CAUTION

- Check the piping port and table movement direction before using the rear piping port.



- Piping joints are limited when using the rear piping port or when using the reduced piping port. Refer to the following table when selecting joints.



Rear piping port

Descriptions Bore size (mm)	Port size	Port dimension			Joint O.D.	Applicable joints
		A	B	C	ϕD	
$\phi 10$	M5	5.5			$\phi 11$ or less	SC3W-M5-4, SC3W-M5-6, GWJS4-M5, GWJS4-M5-S, GWJL4-M5, GWJL4-M5-S, GWS4-M5, GWL4-M5, GWL6-M5, FTS4-M5, FTL4-M5, FTS6-M5, FTL6-M5
$\phi 16$						
$\phi 20$						
$\phi 25$						

Reduced piping port

Descriptions Bore size (mm)	Port size	Port dimension			Joint O.D.	Applicable joints
		A	B	C	ϕD	
$\phi 10$	M5	5.5			$\phi 11$ or less	GWJS4-M5, GWJS4-M5-S, GWJL4-M5, GWJL6-M5-S, GWS4-M5, GWL4-M5, GWL6-M5, FTS4-M5, FTL4-M5, FTS6-M5, FTL6-M5
$\phi 16$						
$\phi 20$		5		9	$\phi 9$ or less	GWJS4-M5-S, FTS4-M5, FTL4-M5, FTS6-M5, FTL6-M5
$\phi 25$				10	$\phi 10$ or less	GWJL4-M5, GWJL4-M5-S, GWL4-M5, GWL6-M5, FTS4-M5, FTL4-M5, FTS6-M5, FTL6-M5

2. Common; installation

⚠ CAUTION

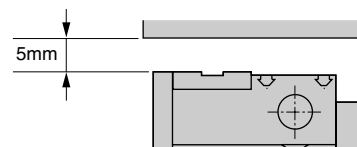
- Check that no dents or scratches occur on main tubing installation or slide table that may adversely affect flatness.
- The linear slide cylinder has a 0 to -5 mm stroke adjustment bolt on the piston rod's protruding side. Loosen the hexagon nut and adjust to the required stroke. Then, tighten the hexagon nut to prevent loosening.
- Avoid using with the stopper bolt removed.
- Use the cylinder within the allowable energy absorption range below.
If kinetic energy exceeds these values, consider using another shock absorber.

Bore size (mm)	Rubber cushion	
	Allowable energy absorption J	
	PUSH	PULL
φ 10	0.023	0.035
φ 16	0.023	0.098
φ 20	0.030	0.098
φ 25	0.030	0.186

Note: If the stopper bolt is loosened and the cylinder is stopped with the rod bushing in the PUSH state, almost no energy is absorbed because there is no rubber cushion. Check that it stops with the stopper bolt.

- Apply lithium-based grease or oil to rail grooves if guide section movement is poor or 100 km travel is used as a guide.
- Do not apply load exceeding the tolerable range to the piston rod. Take special care when using a lateral rod.
- The cylinder switch may malfunction if cylinders are installed adjacently. Separate cylinders by the following distances.

- The cylinder may malfunction if a magnetic substance, such as steel plate, is nearby. Move the magnetic substance to at least 5 mm from the cylinder.



- When using installation screw holes on the table, check that bolts do not protrude from the bottom of the table. Check length when selecting bolts. Malfunctions may occur if bolts contact the linear guide section.

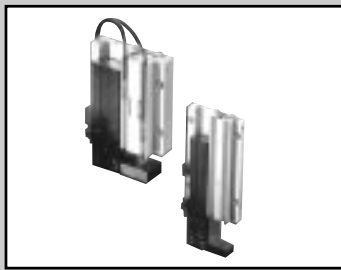
- SCP*2
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS
- CKV2
- CA/OV2
- SSD
- CAT
- MDC2
- MVC
- SMD2
- MSD*
- FC*
- STK
- ULK*
- JSK/M2
- JSG
- JSC3
- USSD
- USC
- JSB3
- LMB
- STG
- STS/L
- LCS
- LCG
- LCM
- LCT
- LCY**
- STR2
- UCA2
- HCM
- HCA
- SRL2
- SRG
- SRM
- SRT
- MRL2
- MRG2
- SM-25
- CAC3
- UCAC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

Unit: mm

Adjacent conditions	Symbol	Switch model no.	φ 10	φ 16	φ 20	φ 25	Remarks
2 cylinders/parallel -Vertical placement Install switch at side of adjacent cylinder 	A	K0,K5	32	30	40	51	When cylinders are installed, the switch position cannot be adjusted if the screw driver length is longer than B dimension.
		K2,K3	30	34	42	52	
	B	K0,K5	15	8	12	17	
		K2,K3	13	12	14	18	
3 and more cylinders/parallel -Vertical placement 	A	K0,K5	35	31	40	54	When cylinders are installed, the switch position cannot be adjusted if the screw driver length is longer than B dimension.
		K2,K3	32	33	42	53	
	B	K0,K5	17	10	13	21	
		K2,K3	14	12	15	20	

Ending

Linear slide cylinder
Combined functions



Linear slide cylinder

Double acting

Double acting reduced piping type

Stroke adjustable type

LCY Series
LCY-A Series
LCY-R Series

● Bore size: $\phi 10$, $\phi 16$, $\phi 20$, $\phi 25$

JIS symbol



Specifications

Descriptions	LCY	LCY-A	LCY-R
Bore size mm	$\phi 10$	$\phi 16$	$\phi 25$
Actuation	Double acting		
Working fluid	Compressed air		
Max. working pressure MPa	0.7		
Min. working pressure MPa	0.15	0.2	0.15
Withstanding pressure MPa	1.0		
Ambient temperature °C	-10 to 60 (no freezing)		
Port size	M5		
Stroke tolerance mm	+1.0 0		
Adjustable stroke range mm	0 to -5 (extend type)		0 to -5 (both sides)
Working piston speed mm/s	50 to 300		
Cushion	Rubber cushion		
Lubrication	Not required (when lubricating, use turbine oil Class 1 ISO VG32.)		
Allowable energy absorption J	0.023	0.023	0.030

Note) Maximum clearance between end plate and piston rod is 0.15 mm.

Stroke length

Bore size (mm)	Standard stroke length (mm)	Max. stroke length (mm)	Min. stroke length (mm)	Min. stroke length with switch (mm)
$\phi 10$	15, 30, 50	50	15	15
$\phi 16$	15, 30, 50, 75, 100	100		
$\phi 20$				
$\phi 25$				

Note: Stroke length other than above is not available.

Switch specifications

● 1 color/2 color indicator

Descriptions	Proximity 2 wire		Proximity 3 wire			Reed 2 wire	
	K2H/K2V	K2YH/K2YV	K3H/K3V	K3PH/K3PV (Custom order)	K3YH/K3YV	K0H/K0V	K5H/K5V
Applications	Programmable controller		Programmable controller, relay			Programmable controller, relay	
Output method	-		NPN output	PNP output	NPN output	-	
Power voltage	-		10 to 28 VDC			-	
Load voltage	10 to 30 VDC		30 VDC or less			12 VDC/24 VDC	110 VAC
Load current	5 to 20mA (Note 1)		50mA or less			5 to 50mA	7 to 20mA
Light	LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Yellow LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	
Leakage current	1mA or less		10 μ A or less			0mA	

Note 1: The maximum load current: above 20mA applies at 25°C When ambient temperature around a switch is higher than 25°C, the value is lower than 20mA. (5 to 10mA when 60°C)

● With preventive maintenance output

Descriptions	Proximity 3 wire		Proximity 4 wire	
	K2YFH/V	K3YFH/V	K2YMH/V	K3YMH/V
Applications	Programmable controller		Programmable controller, relay	
Output method	NPN output			
Light	Red/green LED (ON lighting)			
	-		Yellow LED (ON lighting)	
Regular output	Power voltage	-	10 to 28 VDC	-
	Load voltage	10 to 30 VDC	30 VDC or less	10 to 30 VDC
	Load current	5 to 20mA	50mA or less	5 to 20mA
	Leakage current	1mA or less	10 μ A or less	1.2mA or less
Preventive maintenance output	Load voltage	30 VDC or less		
	Load current	20mA or less	50mA or less	5 to 20mA or less
	Leakage current	10 μ A or less		

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

Linear slide cylinder
Combined functions

Cylinder weight

Unit: g

Stroke length		15	30	50	75	100
Model						
φ 10	Basic type	167	197	237		
	Reduced piping type	167	198	238		
	Stroke adjustable type	175	205	245		
φ 16	Basic type	322	363	417	486	554
	Reduced piping type	322	363	418	487	556
	Stroke adjustable type	334	375	429	498	566
φ 20	Basic type	564	627	712	818	923
	Reduced piping type	565	628	714	820	926
	Stroke adjustable type	590	653	738	844	949
φ 25	Basic type	849	934	1048	1190	1333
	Reduced piping type	850	935	1050	1193	1336
	Stroke adjustable type	879	964	1078	1220	1363

Discrete cylinder switch weight

Unit: g

Name	Model no.	Lead wire length		
		1m	3m	5m
Cylinder switch	K0 \downarrow	18	52	86
	K2 \downarrow	18	52	86
	K3 \downarrow	18	52	86
	K5 \downarrow	18	52	86

(Example) Product weight

LCY-16-50-K2H-D

- Cylinder product weight: $417\text{g} \times 1 = 417\text{g}$
- Weight of cylinder switch (2 pcs.): $18 \times 2 = 36\text{g}$
- Product weight: $417\text{g} + 36\text{g} = 453\text{g}$

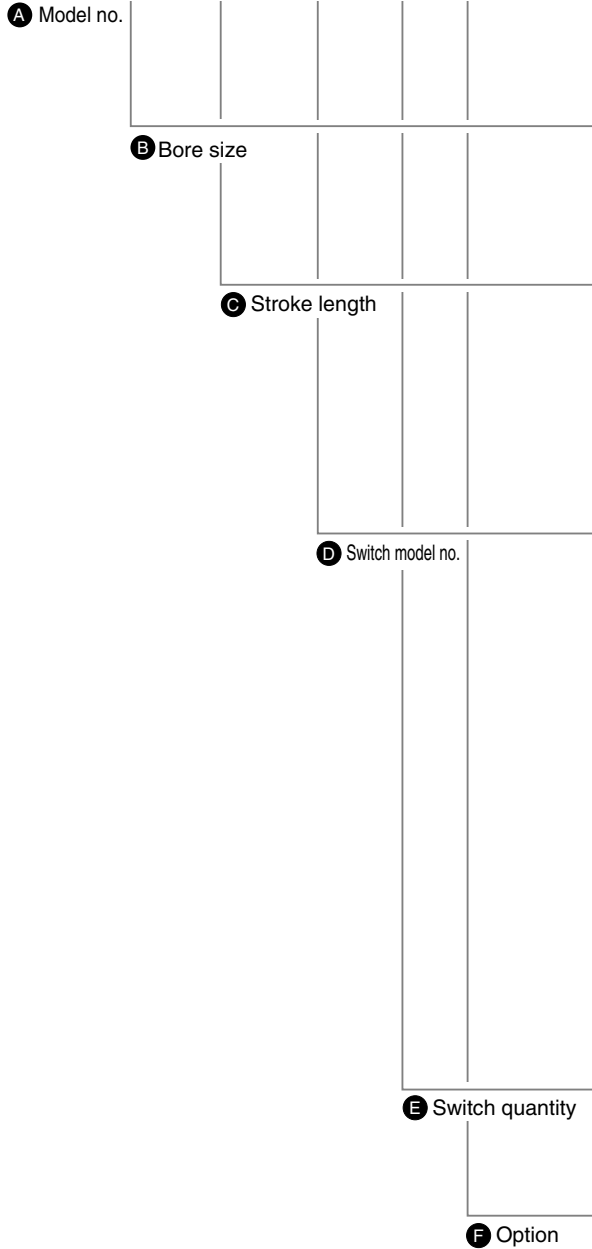
How to order

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

Without switch



With switch



Symbol	Descriptions				
A Model no.					
LCY	Basic type				
LCY-A	Reduced piping type				
LCY-R	Stroke adjustable type				
B Bore size (mm)					
10	φ 10				
16	φ 16				
20	φ 20				
25	φ 25				
C Standard stroke length					
Symbol	Stroke length (mm)	Applicable bore size			
		φ 10	φ 16	φ 20	φ 25
15	15	●	●	●	●
30	30	●	●	●	●
50	50	●	●	●	●
75	75		●	●	●
100	100		●	●	●
D Switch model no.					
Axial lead wire	Radial lead wire	Contact	Indicator		Lead wire
K0H*	K0V*	Reed	1 color indicator type		2-wire
K5H*	K5V*		Without indicator light		
K2H*	K2V*	Proximity	1 color indicator type		2-wire
K3H*	K3V*		1 color indicator type (custom order)		3-wire
K3PH*	K3PV*		1 color indicator type (custom order)		3-wire
K2YH*	K2YV*	Proximity	2 color indicator type		2-wire
K3YH*	K3YV*		2 color indicator type		3-wire
K2YFH*	K2YFV*		2 color indicator type (custom order) (w/o indicator light for preventive maintenance output)		3-wire
K3YFH*	K3YFV*		2 color indicator type (custom order) (w/ indicator light for preventive maintenance output)		4-wire
K2YMH*	K2YMV*		2 color indicator type (custom order) (w/ indicator light for preventive maintenance output (1 color))		3-wire
K3YMH*	K3YMV*	2 color indicator type (custom order) (w/ indicator light for preventive maintenance output (1 color))		4-wire	
*Lead wire length					
Blank	1m (standard)				
3	3m (option)				
5	5m (option)				
E Switch quantity					
R	One on rod end				
H	One on head end				
D	Two				
F Option					
E	With dowel hole				
N	Additional table tap				

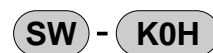
<Example of model number>

LCY-A-10-15-K0H-R-E

Model: Linear slide cylinder

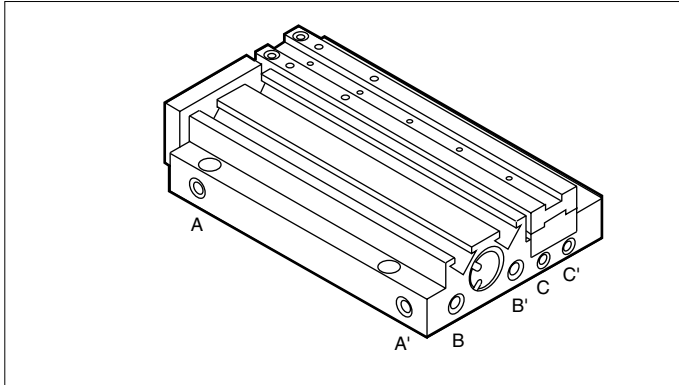
- A** Model no. : Reduced piping type
- B** Bore size : φ10mm
- C** Stroke length : 15mm
- D** Switch model no. : Reed switch K0H
- E** Switch quantity : One on rod end
- F** Option : With dowel hole

How to order switch discrete



Switch model no.
(Item **D** above)

Piping



Model description	Applicable bore size	Port position		
		A, A'	B, B'	C, C'
LCY	$\phi 10$ to $\phi 25$	○	○	-
LCY-A	$\phi 10, \phi 16$	○	△	-
	$\phi 20, \phi 25$	○	○	△
LCY-R	$\phi 10$ to $\phi 25$	○	○	-

- : Piping port for cylinder drive
- △ : Piping port for an actuator mounted on the rod end such as grippers
- : No port setting

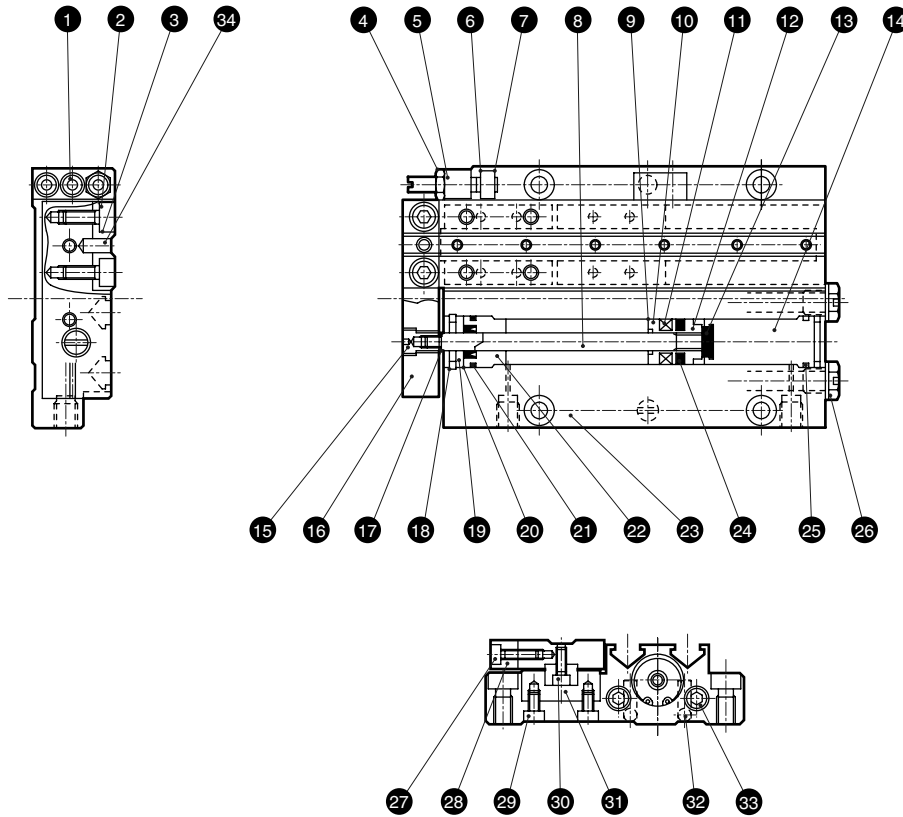
- SCP*2
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS
- CKV2
- CA/OV2
- SSD
- CAT
- MDC2
- MVC
- SMD2
- MSD*
- FC*
- STK
- ULK*
- JSK/M2
- JSG
- JSC3
- USSD
- USC
- JSB3
- LMB
- STG
- STS/L
- LCS
- LCG
- LCM
- LCT
- LCY**
- STR2
- UCA2
- HCM
- HCA
- SRL2
- SRG
- SRM
- SRT
- MRL2
- MRG2
- SM-25
- CAC3
- UCAC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

Ending

Linear slide cylinder
Combined functions

Internal structure and parts list

● Basic type LCY-10 to 25



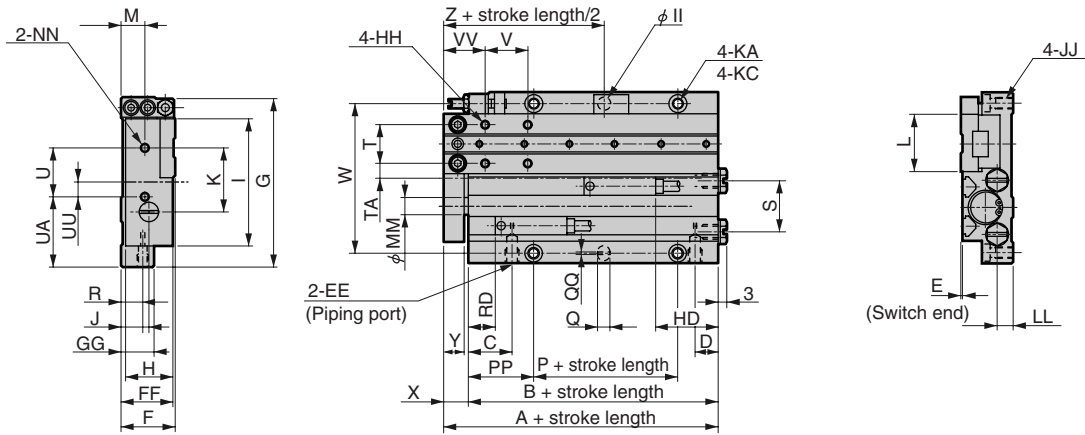
No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Hexagon socket head cap bolt	Steel	Galvanizing	18	C type snap ring for hole	Steel	Phosphoric acid salt membrane
2	Hexagon socket head cap bolt	Steel	Galvanizing	19	Cap	Aluminum alloy	Only $\phi 10$
3	Table	Aluminum alloy	Black alumite	20	Rod packing seal	Nitrile rubber	
4	Hexagon nut	Steel	Blackening	21	Cylinder gasket	Nitrile rubber	
5	Stopper block	Steel	Galvanizing	22	Rod bushing	Special aluminum alloy	Alumite
6	Stopper bolt	Steel	Blackening	23	Cylinder body	Aluminum alloy	Hard alumite
7	Cushion rubber	Urethane rubber		24	Piston packing seal	Nitrile rubber	
8	Piston rod	Stainless steel	$\phi 20, \phi 25$: industrial chrome plating	25	Gasket	Nitrile rubber	
9	Snap ring	Stainless steel	Only $\phi 10$	26	Plug	Brass	Nickeling
10	Spacer	Special aluminum alloy		27	Hexagon socket head cap bolt	Steel	Galvanizing
11	Magnet	Plastic		28	Stopper	Steel	Galvanizing
12	Piston	Special aluminum alloy		29	Hexagon socket head cap bolt	Steel	Galvanizing
13	Cushion rubber (H)	Urethane rubber		30	Hexagon socket head cap bolt	Steel	Galvanizing
14	Base plate	Aluminum alloy		31	Linear guide		
15	Floating bush	Steel	Galvanizing	32	Steel ball	Stainless steel	
16	End plate	Aluminum alloy	Black alumite	33	Hexagon socket head set screw	Steel	Galvanizing
17	Plain washer	Steel	Only blackening $\phi 10$	34	Spring pin	Stainless steel	Blackening

Repair parts list

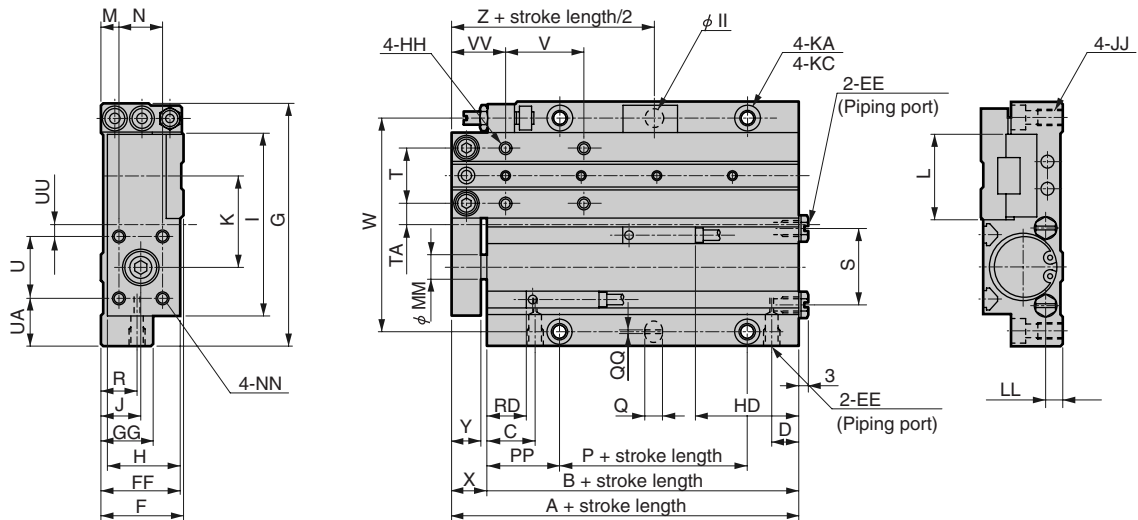
Bore size (mm)	Kit No.	Repair parts number
$\phi 10$	LCY-10K	
$\phi 16$	LCY-16K	
$\phi 20$	LCY-20K	● 4 ● 6 ● 7 ● 13 ● 20 ● 21 ● 24 ● 25
$\phi 25$	LCY-25K	

Dimensions

● Basic type LCY-10/16



● Basic type LCY-20/25



Symbol	A	B	C	D	E	EE	F	FF	G	GG	H	HH
Bore size (mm)												
φ 10	62	53	14	7.5	1	M5	18	17	56	11	15	M3 depth 6
φ 16	75	66	11.5	7.5	0.5	M5	21	20	68	13	18.8	M4 depth 7
φ 20	85	73	16	9	0.5	M5	27	26	80	17	23.8	M4 depth 8
φ 25	102	88	17	11	0.5	M5	33	32	88	20	29.5	M5 depth 10

Symbol	I	II	J	JJ	K	KA	KC	L	LL	M	MM	N
Bore size (mm)												
φ 10	42.5	4 ^{+0.07} / _{-0.02} depth 4	9.5	M4 depth 6	21	3.4 penetrating	6.5 spot face depth 3.3	19	5.5	8	4	-
φ 16	51	6 ^{+0.07} / _{-0.02} depth 6	10	M5 depth 7.5	25.5	4.3 penetrating	8 spot face depth 4.4	21	5.5	8	6	-
φ 20	60	6 ^{+0.07} / _{-0.02} depth 6	13	M5 depth 8	30	4.3 penetrating	8 spot face depth 4.4	28	5.5	6	8	14
φ 25	67	6 ^{+0.07} / _{-0.02} depth 6	16	M6 depth 10	33.5	5.2 penetrating	9.5 spot face depth 5.4	34	5.5	8	10	16

Symbol	NN	P	PP	Q	QQ	R	S
Bore size (mm)							
φ 10	M3 depth 8	18	21	4 ^{+0.07} / _{-0.02} depth 4	1	7.2	17
φ 16	M4 depth 8	30	20	6 ^{+0.07} / _{-0.02} depth 6	1	9	24
φ 20	M4 depth 10	32	24	6 ^{+0.07} / _{-0.02} depth 6	1	12	25
φ 25	M5 depth 12	38	25	6 ^{+0.07} / _{-0.02} depth 6	1	14	28

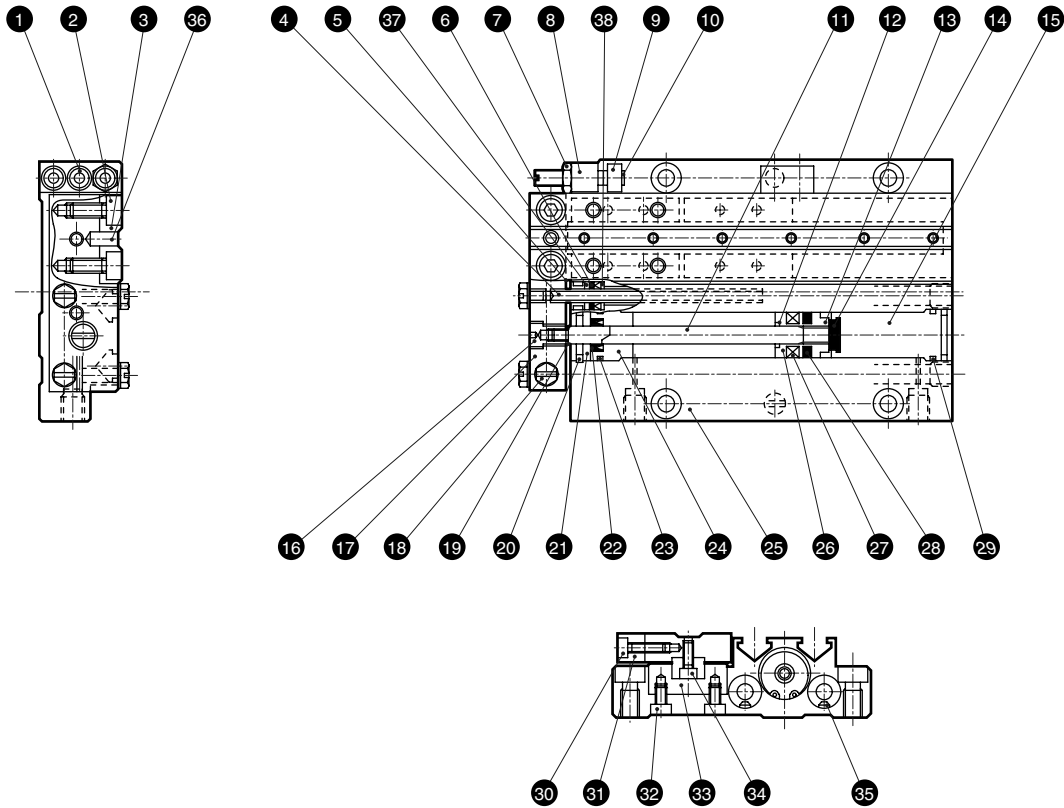
Symbol	T	TA	U	UA	UU	V	VV	W	X	Y	Z	K0H/K5H		K2H/K3H		K0V/K5V		K2V/K3V	
Bore size (mm)												RD	HD	RD	HD	RD	HD	RD	HD
φ 10	12	5.5	16	23.5	4.5	14	14	48.5	9 ^{+0.5} / _{-1.0}	8	39	8	21	9	20	8	18	9	17
φ 16	14	8	18	31	3	19	15	59	9 ^{+0.5} / _{-1.0}	8	44	10.5	31.5	11.5	30.5	10.5	28.5	11.5	27.5
φ 20	18	7	20	16	4	26	16	70	12 ^{+0.5} / _{-1.5}	10	52	13.5	35.5	14.5	34.5	13.5	32.5	14.5	31.5
φ 25	22	5.5	22	16	6	26	16	77	14 ^{+0.5} / _{-1.5}	12	58	14	50	15	49	14	47	15	46

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

Ending
Linear slide cylinder
Combined functions

Internal structure and parts list

● Reduced piping type LCY-A-10/16



No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Hexagon socket head cap bolt	Steel	Galvanizing	20	C type snap ring for hole	Steel	Phosphoric acid salt membrane
2	Hexagon socket head cap bolt	Steel	Galvanizing	21	Cap	Aluminum alloy	Only ϕ 10
3	Table	Aluminum alloy	Black alumite	22	Rod packing seal	Nitrile rubber	
4	Pipe	Stainless steel		23	Cylinder gasket	Nitrile rubber	
5	Piping cap	Aluminum alloy		24	Rod bushing	Special aluminum alloy	Alumite
6	Piping packing seal	Nitrile rubber		25	Cylinder body	Aluminum alloy	Hard alumite
7	Hexagon nut	Steel	Blackening	26	Spacer	Special aluminum alloy	
8	Stopper block	Steel	Galvanizing	27	Magnet	Plastic	
9	Stopper bolt	Steel	Blackening	28	Piston packing seal	Nitrile rubber	
10	Cushion rubber	Urethane rubber		29	Gasket	Nitrile rubber	
11	Piston rod	Stainless steel	ϕ 20, ϕ 25: industrial chrome plating	30	Hexagon socket head cap bolt	Steel	Galvanizing
12	Snap ring	Stainless steel	Only ϕ 10	31	Stopper	Steel	Galvanizing
13	Piston	Special aluminum alloy		32	Hexagon socket head cap bolt	Steel	Galvanizing
14	Cushion rubber (H)	Urethane rubber		33	Linear guide		
15	Base plate	Aluminum alloy		34	Hexagon socket head cap bolt	Steel	Galvanizing
16	Floating bush	Steel	Galvanizing	35	Hexagon socket head set screw	Steel	Galvanizing
17	End plate	Aluminum alloy	Black alumite	36	Spring pin	Stainless steel	Blackening
18	Plug	Copper or copper alloy	Nickeling	37	Piping spacer	Aluminum alloy	
19	Plain washer	Steel	Blackening	38	Plain washer	Stainless steel	

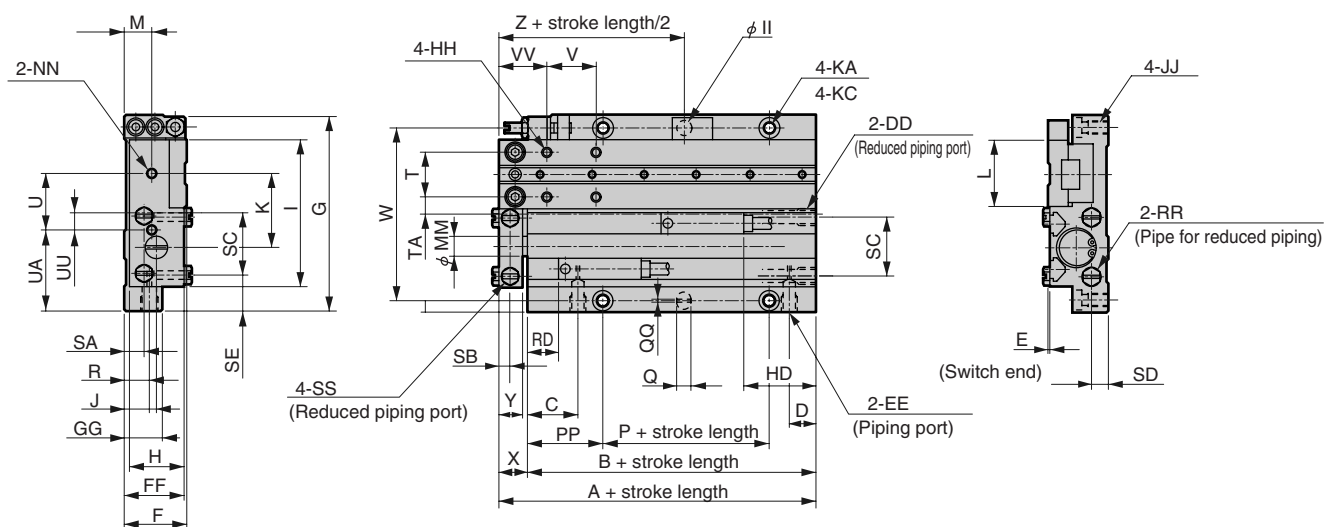
Repair parts list

Bore size (mm)	Kit No.	Repair parts number
ϕ 10	LCY-A-10K	6 7 9 10 14 22 23 28 29
ϕ 16	LCY-A-16K	

Dimensions (φ 10, φ 16)



- Reduced piping type LCY-A-10/16



Symbol	A	B	C	D	DD	E	EE	F	FF	G	GG	H	HH							
Bore size (mm)																				
φ 10	62	53	14	7.5	M5	1	M5	18	17	56	11	15	M3 depth 6							
φ 16	75	66	11.5	7.5	M5	0.5	M5	21	20	68	13	18.8	M4 depth 7							
Symbol	I	II	J	JJ	K	KA	KC	L	M	MM										
Bore size (mm)																				
φ 10	42.5	4 ^{+0.07} / _{+0.02} depth 4	9.5	M4 depth 6	21	3.4 penetrating	6.5 spot face depth 3.3	19	8	4										
φ 16	51	6 ^{+0.07} / _{+0.02} depth 6	10	M5 depth 7.5	25.5	4.3 penetrating	8 spot face depth 4.4	21	8	6										
Symbol	NN	P	PP	Q	QQ	R	RR	SA	SB	SC	SD	SE	SS							
Bore size (mm)																				
φ 10	M3 depth 8	18	21	4 ^{+0.07} / _{+0.02} depth 4	1	7.2	3	5.5	3.5	17	5.5	10	M3 depth 3							
φ 16	M4 depth 8	30	20	6 ^{+0.07} / _{+0.02} depth 6	1	9	3	5.5	3.5	24	5.5	11.5	M3 depth 3							
Symbol	T	TA	U	UA	UU	V	VV	W	X	Y	Z	K0H/K5H		K2H/K3H		K0V/K5V		K2V/K3V		
Bore size (mm)													RD	HD	RD	HD	RD	HD	RD	HD
φ 10	12	5.5	16	23.5	4.5	14	14	48.5	9 ^{+0.5} / _{-1.0}	8	39	8	21	9	20	8	18	9	17	
φ 16	14	8	18	31	3	19	15	59	9 ^{+0.5} / _{-1.0}	8	44	10.5	31.5	11.5	30.5	10.5	28.5	11.5	27.5	

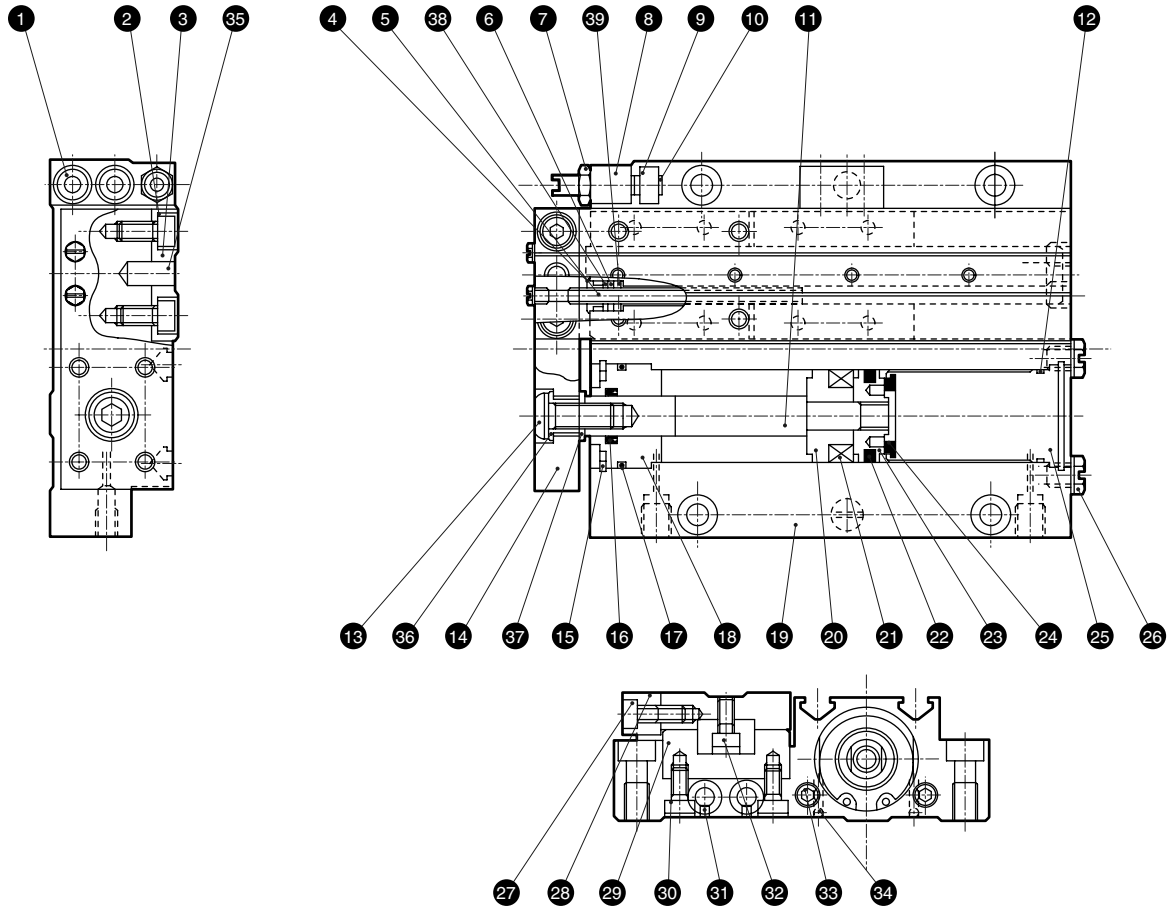
- SCP*2
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS
- CKV2
- CA/OV2
- SSD
- CAT
- MDC2
- MVC
- SMD2
- MSD*
- FC*
- STK
- ULK*
- JSK/M2
- JSG
- JSC3
- USSD
- USC
- JSB3
- LMB
- STG
- STS/L
- LCS
- LCG
- LCM
- LCT
- LCY**
- STR2
- UCA2
- HCM
- HCA
- SRL2
- SRG
- SRM
- SRT
- MRL2
- MRG2
- SM-25
- CAC3
- UCAC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

Ending

Linear slide cylinder
Combined functions

Internal structure and parts list

● Reduced piping type LCY-A-20/25



No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Hexagon socket head cap bolt	Steel	Galvanizing	21	Magnet	Plastic	
2	Hexagon socket head cap bolt	Steel	Galvanizing	22	Piston packing seal	Nitrile rubber	
3	Table	Aluminum alloy	Black alumite	23	Piston	Special aluminum alloy	
4	Piping cap	Aluminum alloy		24	Cushion rubber (H)	Urethane rubber	
5	Pipe	Stainless steel		25	Base plate	Aluminum alloy	
6	Piping packing seal	Nitrile rubber		26	Plug	Brass	Nickeling
7	Hexagon nut	Steel	Blackening	27	Hexagon socket head cap bolt	Steel	Galvanizing
8	Stopper block	Steel	Galvanizing	28	Stopper	Steel	Galvanizing
9	Stopper bolt	Steel	Blackening	29	Linear guide		
10	Cushion rubber	Urethane rubber		30	Hexagon socket head cap bolt	Steel	Galvanizing
11	Piston rod	Stainless steel	φ 20, φ 25: industrial chrome plating	31	Hexagon socket head set screw	Steel	Galvanizing
12	Gasket	Nitrile rubber		32	Hexagon socket head cap bolt	Steel	Galvanizing
13	Hexagon socket head button bolt	Steel	Galvanizing	33	Hexagon socket head set screw	Steel	Galvanizing
14	End plate	Aluminum alloy	Black alumite	34	Stainless steel sphere	Stainless steel	
15	C type snap ring for hole	Steel	Phosphate coating	35	Spring pin	Stainless steel	Blackening
16	Rod packing seal	Nitrile rubber		36	Floating bush	Steel	Galvanizing
17	Cylinder gasket	Nitrile rubber		37	Plain washer	Steel	Blackening
18	Rod bushing	Special aluminum alloy	Alumite	38	Piping spacer	Aluminum alloy	
19	Cylinder body	Aluminum alloy	Hard alumite	39	Plain washer	Stainless steel	
20	Spacer	Special aluminum alloy					

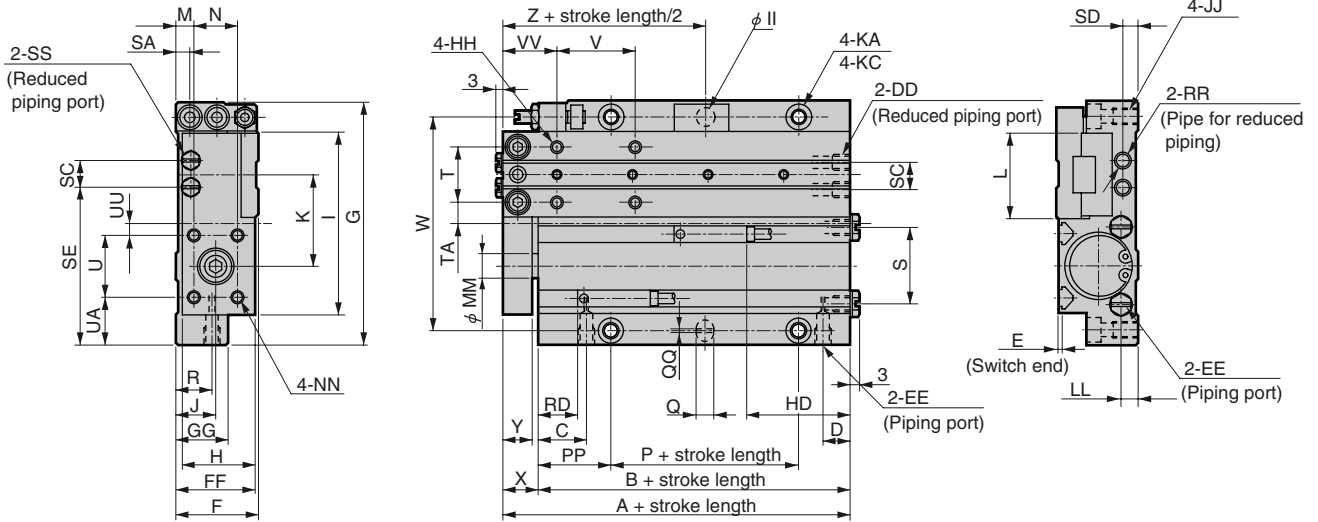
Repair parts list

Bore size (mm)	Kit No.	Repair parts number
φ 20	LCY-A-20K	6 7 9 10 12 16 17 22 24
φ 25	LCY-A-25K	

Dimensions (φ20, φ25)



- Reduced piping type LCY-A-20/25



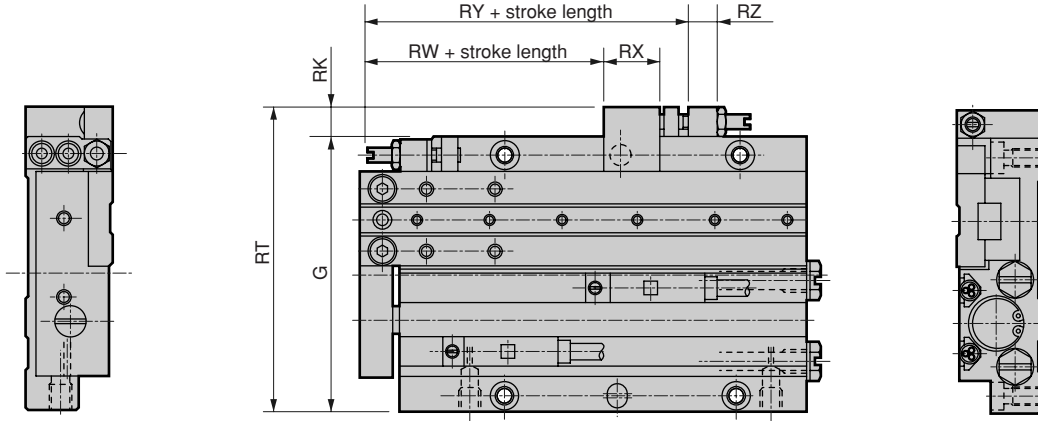
Symbol	A	B	C	D	DD	E	EE	F	FF	G	GG	H	HH						
Bore size (mm)																			
φ 20	85	73	16	9	M5	0.5	M5	27	26	80	17	23.8	M4 depth 8						
φ 25	102	88	17	11	M5	0.5	M5	33	32	88	20	29.5	M5 depth 10						
Symbol	I	II	J	JJ	K	KA	KC	L	LL	M	MM	N							
Bore size (mm)																			
φ 20	60	6 ^{+0.07} / _{+0.02} depth 6	13	M5 depth 8	30	4.3 penetrating	8 spot face depth 4.4	28	5.5	6	8	14							
φ 25	67	6 ^{+0.07} / _{+0.02} depth 6	16	M6 depth 10	33.5	5.2 penetrating	9.5 spot face depth 5.4	34	5.5	8	10	16							
Symbol	NN	P	PP	Q	QQ	R	RR	S	SA	SB	SC	SD	SE	SS					
Bore size (mm)																			
φ 20	M4 depth 10	32	24	6 ^{+0.07} / _{+0.02} depth 6	1	12	3	25	5	-	9	5	51.5	M3 depth 3					
φ 25	M5 depth 12	38	25	6 ^{+0.07} / _{+0.02} depth 6	1	14	3	28	5	-	10	5	55.5	M3 depth 3					
Symbol	T	TA	U	UA	UU	V	VV	W	X	Y	Z	K0H/K5H		K2H/K3H		K0V/K5V		K2V/K3V	
Bore size (mm)												RD	HD	RD	HD	RD	HD	RD	HD
φ 20	18	7	20	16	4	26	16	70	12 ^{+0.5} / _{-1.5}	10	52	13.5	35.5	14.5	34.5	13.5	32.5	14.5	31.5
φ 25	22	5.5	22	16	6	26	16	77	14 ^{+0.5} / _{-1.5}	12	58	14	50	15	49	14	47	15	46

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

Linear slide cylinder
Combined functions

Dimensions

- Stroke adjustable type (retracted) LCY-R

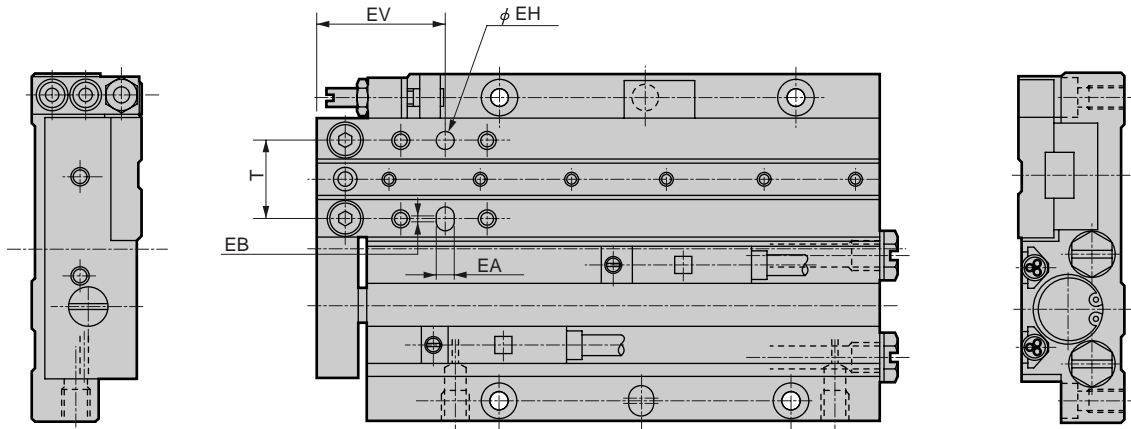


Symbol	G	RK	RT	RW	RX	RY	RZ
Bore size (mm)							
φ 10	56	6	62	20.2	11.5	37.2	6
φ 16	68	7	75	21.2	14	40.7	7
φ 20	80	9	89	26.7	18	50.7	9
φ 25	88	9	97	28.7	19.5	54.2	9

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

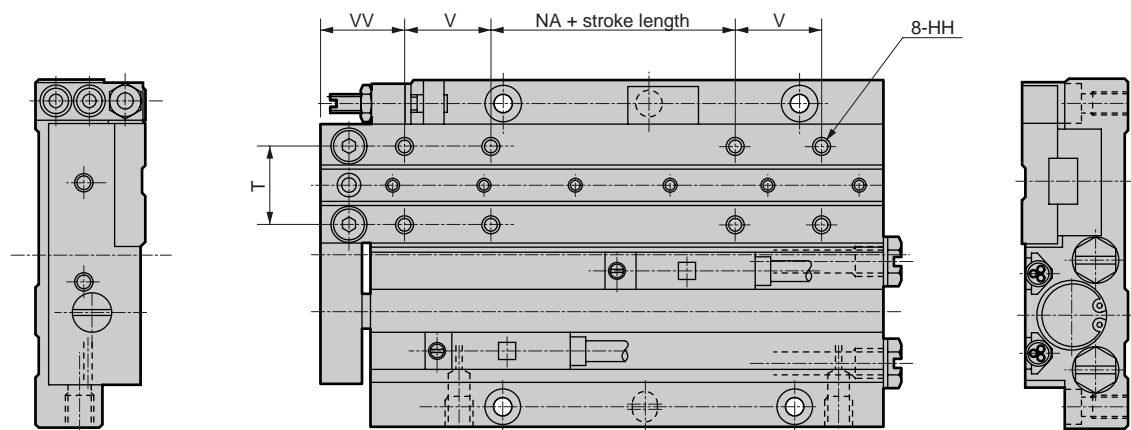
Dimensions; with optional equipment

- With dowel hole LCY-E



Symbol	EV	EH	EA	EB	T
Bore size (mm)					
φ 10	21	3H8 depth 4	3H8 depth 4	1	12
φ 16	24.5	3H8 depth 4	3H8 depth 4	1	14
φ 20	29	4H8 depth 4	4H8 depth 4	1	18
φ 25	29	4H8 depth 4	4H8 depth 4	1	22

- Additional table tap type LCY-N



Symbol	V	VV	NA	HH	T
Bore size (mm)					
φ 10	14	14	8	M3 depth 6	12
φ 16	19	15	10	M4 depth 7	14
φ 20	26	16	5	M4 depth 8	18
φ 25	26	16	22	M5 depth 10	22

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

Linear slide cylinder
Combined functions

Allowable load

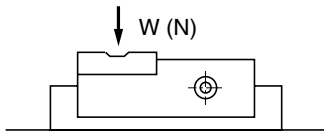
1. Load (W) moment (M1, M2, M3) should be calculated for each load.
2. Divide each load by the maximum value on the following table to find load and moment ration. The total should not be greater than 1.0.

$$\frac{W}{W_{\max}} + \frac{M1}{M1_{\max}} + \frac{M2}{M2_{\max}} + \frac{M3}{M3_{\max}} \leq 1.0$$

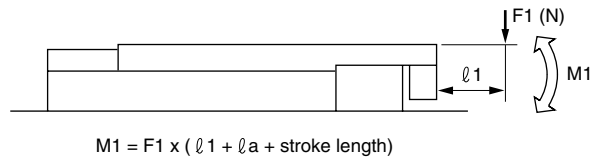
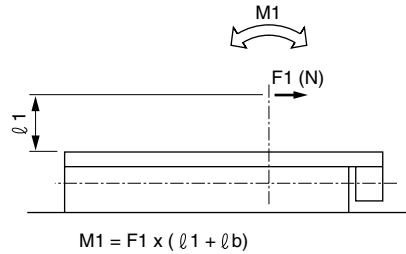
Max. allowable load

Descriptions	Vertical load W (N)	Bending moment M1 (N·m)	Radial moment M2 (N·m)	Twist moment M3 (N·m)	ℓa (m)	ℓb (m)
Bore size (mm)						
φ 10	3.92	0.58	0.58	0.29	0.034	0.009
φ 16	9.80	1.17	1.17	0.58	0.041	0.0115
φ 20	17.65	1.76	1.76	0.88	0.047	0.012
φ 25	26.47	3.52	3.52	1.76	0.057	0.015

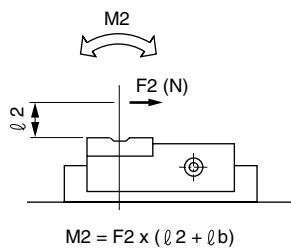
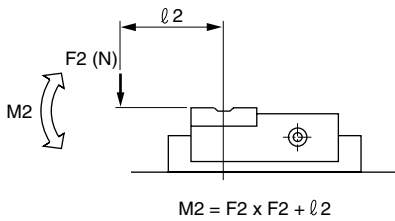
● Vertical load: W



● Bending moment: M1



● Radial moment: M2



● Twist moment: M3

