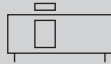


Rodless cylinder double acting

SRL3 Series

- Bore size: $\varnothing 12$, $\varnothing 16$, $\varnothing 20$, $\varnothing 25$, $\varnothing 32$, $\varnothing 40$, $\varnothing 50$, $\varnothing 63$, $\varnothing 80$, $\varnothing 100$ or equiv.

JIS symbol



Specifications

Item	SRL3											
	Bore size	mm	$\varnothing 12$	$\varnothing 16$	$\varnothing 20$	$\varnothing 25$	$\varnothing 32$	$\varnothing 40$	$\varnothing 50$	$\varnothing 63$	$\varnothing 80$	$\varnothing 100$
Actuation	Double acting											
Working fluid	Compressed air											
Max. working pressure	MPa	0.7 (≈ 100 psi, 7 bar)										
Min. working pressure	MPa	0.2 (≈ 29 psi, 2 bar)			0.1 (≈ 15 psi, 1 bar)				0.05 (≈ 7.3 psi, 0.5 bar)			
Proof pressure	MPa	1.05 (≈ 150 psi, 10.5 bar)										
Ambient temperature	$^{\circ}\text{C}$	5 (41°F) to 60 (140°F)										
Port size		M5		Rc1/8		Rc1/4		Rc3/8		Rc1/2		
Stroke tolerance	mm	$^{+2.0}_{0}$ (to 1000), $^{+2.5}_{0}$ (to 3000), $^{+3.0}_{0}$ (to 5000)										
Working piston speed	mm/s	50 to 2000 (standard piping) (*1)										
Cushion		Air cushion										
Lubrication		Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication. Once lubricated, the cylinder will need periodic lubrication.)										

*1: For common port piping, the working piston speed varies depending on the stroke. Contact CKD.

Allowable absorbed energy

Bore size (mm)	Cushioned		Without cushion	With shock absorber (initial set point)	
	Max absorbed energy (J)	Cushion stroke (mm)	Max absorbed energy (J)	Absorbed energy (J)	Effective stroke (mm)
$\varnothing 12$ or equiv.	0.03	14.5	0.003	2.4	5.5
$\varnothing 16$ or equiv.	0.22	19.2	0.007	2.4	5.5
$\varnothing 20$ or equiv.	0.59	22.2	0.010	5.7	7
$\varnothing 25$ or equiv.	1.40	20.9	0.015	10	9
$\varnothing 32$ or equiv.	2.57	23.5	0.030	18	13
$\varnothing 40$ or equiv.	4.27	23.9	0.050	50	16.5
$\varnothing 50$ or equiv.	9.13	24.9	0.072	86	21
$\varnothing 63$ or equiv.	17.4	29.6	0.138	86	21
$\varnothing 80$ or equiv.	40	45.8	0.393	143	25
$\varnothing 100$ or equiv.	67	45.8	0.622	143	25

Stroke

Bore size (mm)	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)
$\varnothing 12$ or equiv.	200/300 400/500 600/700 800/900 1000	5000	1
$\varnothing 16$ or equiv.			
$\varnothing 20$ or equiv.			
$\varnothing 25$ or equiv.			
$\varnothing 32$ or equiv.			
$\varnothing 40$ or equiv.			
$\varnothing 50$ or equiv.			
$\varnothing 63$ or equiv.			
$\varnothing 80$ or equiv.			
$\varnothing 100$ or equiv.			

* The custom stroke is available in 1 mm increments.

Number of installed M-switches and min. stroke (mm)

Switch quantity	1		2		3		4		5		6	
	M*V	M*H	M*V	M*H	M*V	M*H	M*V	M*H	M*V	M*H	M*V	M*H
Switch model No.												
Bore size (mm)												
$\varnothing 12$ or equiv.	10	10	30	45(70)	60	90(120)	90	135(170)	120	180(220)	150	225(270)
$\varnothing 16$ or equiv.	10	10	30	45(70)	60	90(120)	90	135(170)	120	180(220)	150	225(270)
$\varnothing 20$ or equiv.	10	10	30	45(70)	60	90(120)	90	135(170)	120	180(220)	150	225(270)
$\varnothing 25$ or equiv.	10	10	30	45(70)	60	90(120)	90	135(170)	120	180(220)	150	225(270)
$\varnothing 32$ or equiv.	10	10	30	45	60	90	90	135	120	180	150	225
$\varnothing 40$ or equiv.	10	10	30	45	60	90	90	135	120	180	150	225
$\varnothing 50$ or equiv.	15	15	30	45	60	90	90	135	120	180	150	225
$\varnothing 63$ or equiv.	15	15	30	45	60	90	90	135	120	180	150	225
$\varnothing 80$ or equiv.	25		50		100		150		200		250	
$\varnothing 100$ or equiv.	25		50		100		150		200		250	

Note: Values in () are the min. stroke with switch of the full stroke adjustable.

Number of installed T-switches and min. stroke (mm)

Switch quantity	1		2		3		4		5		6	
	T*V	T*H	T*V	T*H	T*V	T*H	T*V	T*H	T*V	T*H	T*V	T*H
Switch model No.												
Bore size (mm)												
$\varnothing 12$ or equiv.	5	5	45	50(70)	85	100(120)	125	150(170)	165	200(220)	205	250(270)
$\varnothing 16$ or equiv.	5	5	45	50(70)	85	100(120)	125	150(170)	165	200(220)	205	250(270)
$\varnothing 20$ or equiv.	5	5	45	50(70)	85	100(120)	125	150(170)	165	200(220)	205	250(270)
$\varnothing 25$ or equiv.	10	10	45	50(70)	85	100(120)	125	150(170)	165	200(220)	205	250(270)
$\varnothing 32$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\varnothing 40$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\varnothing 50$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\varnothing 63$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\varnothing 80$ or equiv.	15	15	45	50	85	100	125	150	165	200	205	250
$\varnothing 100$ or equiv.	15	15	45	50	85	100	125	150	165	200	205	250

Note: Values in () are the min. stroke with switch of the full stroke adjustable.

Switch specifications (M-switch)

● 1-color/2-color LED

Item	2-wire proximity		3-wire proximity		
	M2V,M2H	M2WV (2-color LED)	M3H/M3V	M3PH/M3PV (made to order)	M3WV
Applications	Dedicated for programmable controller		For programmable controller, relay, IC circuit, compact solenoid valve		
Output method	-		NPN output	PNP output	NPN output
Power supply voltage	-		4.5 to 28 VDC		10 to 28 VDC
Load voltage	10 to 30 VDC		30 VDC or less		
Load current	5 to 30 mA		100 mA or less	100 mA or less	100 mA or less
Indicator	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	1 mA or less		10 µA or less	0.05 mA or less	10 µA or less
Weight	g 1 m:22 3 m:57 5 m:93				
Item	MOV,MOH		M5V,M5H		
	2-wire reed		2-wire reed		
Applications	Programmable controller, relay		For programmable controller, relay, IC circuit (without indicator lamp), serial connection		
Power supply voltage	-		-		
Load voltage	12/24 VDC	110 VAC	5/12/24 VDC		110 VAC or less
Load current	5 to 50 mA	7 to 20 mA	50 mA or less		20 mA or less
Indicator	LED (Lit when ON)		No indicator lamp		
Leakage current	0 mA				
Weight	g 1 m:22 3 m:57 5 m:93				

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

Switch specifications (T-switch)

● 2-color LED

Item	2-wire proximity			3-wire proximity		
	T2YH/T2YV	T2WH/T2WV		T3YH/T3YV	T3WH/T3WV	
Applications	Dedicated for programmable controller			For programmable controller, relay		
Output method	-			NPN output	NPN output	
Power supply voltage	-			10 to 28 VDC		
Load voltage	10 to 30 VDC	24 VDC ±10%		30 VDC or less		
Load current	5 to 20 mA(*3)			50 mA or less		
Indicator	Red/green LED (Lit when ON)	Red/green LED (Lit when ON)		Red/green LED (Lit when ON)	Red/green LED (Lit when ON)	
Leakage current	1 mA or less			10 µA or less		
Weight	g 1 m:33 3 m:87 5 m:142 1 m:18 3 m:49 5 m:80			1 m:33 3 m:87 5 m:142 1 m:18 3 m:49 5 m:80		

● For AC magnetic field

Item	Proximity switch		
	T2YD, T2YDT (*4)		
Applications	Dedicated for programmable controller		
Indicator	Red/green LED (Lit when ON)		
Load voltage	24 VDC ±10%		
Load current	5 to 20 mA		
Internal voltage drop	6V or less		
Leakage current	1.0 mA or less		
Weight	g 1 m:61 3 m:166 5 m:272		

*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: AC magnetic field proof switch (T2YD/T2YDT) cannot be used in DC magnetic field.

Cylinder weight

Unit: kg

Bore size (mm)	Weight for 0 mm stroke			Switch weight	Mounting bracket weight		Additional weight per St = 100mm
	Basic (00)	Foot			T type	M type	
		(LB)	(LB1)				
ø12 or equiv.	0.24	0.25	0.26	Refer to the weight in the switch specifications.	0.005	0.001	0.10
ø16 or equiv.	0.32	0.33	0.35				0.13
ø20 or equiv.	0.52	0.54	0.58				0.18
ø25 or equiv.	1.0	1.1	1.1				0.28
ø32 or equiv.	1.5	1.6	1.7				0.36
ø40 or equiv.	2.4	2.5	-				0.53
ø50 or equiv.	3.5	3.6	-				0.75
ø63 or equiv.	6.1	6.4	-				1.11
ø80 or equiv.	18.4	19.0	-				2.32
ø100 or equiv.	26.2	27.2	-				3.38

SCP*3
CMK2
CMA2
SCM
SCG
SCA2
SCS2
CKV2
CAV2/
COVP/N2
SSD2
SSG
SSD
CAT
MDC2
MVC
SMG
MSD/
MSDG
FC*
STK
SRL3
SRG3
SRM3
SRT3
MRL2
MRG2
SM-25
ShkAbs
FJ
FK
Spd
Contr
Ending

SRL3 Series

How to order

No switch (built-in magnet for switch)

SRL3 - 00 - 12 B - 200

With switch (built-in magnet for switch)

SRL3 - 00 - 12 B - 200 - M0H - R - B

A Mounting
*1, *2

B Bore size

C Port thread

D Cushion

E Stroke

F Switch model No.
*4

G Switch quantity

H Option
*5, *6
*7, *8
*9

⚠ Precautions for model No. selection

*1 : Mounting bracket will be shipped assembled with the product.

*2 : For 12, 16, 20, 25 and 32 bore sizes with option code "R" or "T", the mounting will be "00" or "LB1".
(Piping with "LB" is not possible for option codes "R" and "T".)

*3 : Refer to page 1574 for the min. stroke with switch.

*4 : Switches other than (F) Switch model No. are also available. (Made to order) Refer to Ending Page 1 for details.

5 : "" of L* and N* indicates the number of sets. When more than one set are necessary, specify "L2" (for LB) or "N2" (for LB1). 2 pcs./set

*6 : For the port and cushion needle position codes, refer to dimensions on pages 1582 to 1587.

*7 : In the case of the standard with $\phi 12$ to $\phi 25$, remove the cover, attach a flat nut and install the full stroke adjusting bracket. A flat nut is attached to option "A3" to enable retrofitting the full stroke adjusting bracket without removing the cover.

*8 : In "H", the thread size for $\phi 12$ and $\phi 16$ will be "M4" and that for $\phi 20$ will be "M5".

*9 : Check the option combinations in "Option selection table" on the next page.

*10 : Copper and PTFE free as standard. (Except for type with shock absorber)

[Example of model No.]

SRL3-00-12B-200-M0H-R-B

Model: Rodless cylinder

- A** Mounting : Basic
- B** Bore size : $\phi 12$ mm
- C** Port thread : M5
- D** Cushion : Both sides cushioned
- E** Stroke : 200 mm
- F** Switch model No. : Reed M0H switch, lead wire 1 m
- G** Switch quantity : 1 on R side
- H** Option : Port position F, cushion needle position B

Code	Description
------	-------------

A Mounting	
00	Basic
LB	Axial foot
LB1	Axial foot ($\phi 12$ to $\phi 32$ only)

B Bore size (mm)	
12	$\phi 12$
16	$\phi 16$
20	$\phi 20$
25	$\phi 25$
32	$\phi 32$
40	$\phi 40$
50	$\phi 50$
63	$\phi 63$
80	$\phi 80$
100	$\phi 100$

C Port thread	
Blank	Rc thread (M5 for $\phi 12$ and $\phi 16$)
N	NPT thread ($\phi 20$ or more) (made-to-order product)
G	G thread ($\phi 20$ or more) (made-to-order product)

D Cushion	
B	Both sides cushioned
R	R side cushioned
L	L side cushioned
N	Without cushion

E Stroke (mm)		
Bore size	Stroke *3	Custom stroke
$\phi 12$ to $\phi 100$	1 to 5000	In 1 mm increments

F Switch model No.						
Axial lead wire	Radial lead wire	Contact	Voltage		Indicator	Lead wire
			AC	DC		
M0H*	M0V*	Reed	●	●	1-color LED	2-wire
M5H*	M5V*		●	●	No indicator lamp	
M2H*	M2V*		●	●	1-color LED	
-	M2WV*	Proximity	●	●	2-color LED	2-wire
M3H*	M3V*		●	●	1-color LED	3-wire
-	M3WV*		●	●	2-color LED	3-wire
M3PH*	M3PV*		●	●	1-color LED (custom)	3-wire
T2WH*	T2WV*		●	●	2-color LED	2-wire
T2YH*	T2YV*		●	●		
T3WH*	T3WV*	●	●			
T3YH*	T3YV*	●	●	2-color LED	2-wire	
T2YD*	-	●	●			
T2YDT*	-	●	●	for AC magnetic field	2-wire	

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

G Switch quantity	
R	1 on R side
L	1 on L side
D	2
T	3
4	4 (when there are more than 4 switches, indicate switch quantity.)

H Option		Bore size (ϕ)									
		12	16	20	25	32	40	50	63	80	100
A	Both-sides full stroke adjustable, shock absorber	●	●	●	●	●	●	●	●	●	●
A1	R side full stroke adjustable, shock absorber	●	●	●	●	●	●	●	●	●	●
A2	L side full stroke, adjustable, shock absorber	●	●	●	●	●	●	●	●	●	●
A3	Full stroke adjustable, adjusting bracket to be added	●	●	●	●	●	●	●	●	●	●
Y	Floating fitting	●	●	●	●	●	●	●	●	●	●
Y1	Thin floating fitting	●	●	●	●	●	●	●	●	●	●
L*	Intermediate support bracket (for 00, LB)	●	●	●	●	●	●	●	●	●	●
N*	Intermediate support bracket (for LB1)	●	●	●	●	●	●	●	●	●	●
H	Larger thread for table installation	●	●	●	●	●	●	●	●	●	●
U	Height adjustment plate	●	●	●	●	●	●	●	●	●	●
Blank	:F (Standard)	●	●	●	●	●	●	●	●	●	●
R	:R (Common port)	●	●	●	●	●	●	●	●	●	●
	:F	●	●	●	●	●	●	●	●	●	●
B	:B	●	●	●	●	●	●	●	●	●	●
	:F	●	●	●	●	●	●	●	●	●	●
T	:B	●	●	●	●	●	●	●	●	●	●
	:F	●	●	●	●	●	●	●	●	●	●
D	:D	●	●	●	●	●	●	●	●	●	●
	:F	●	●	●	●	●	●	●	●	●	●
S	:D	●	●	●	●	●	●	●	●	●	●
	:F	●	●	●	●	●	●	●	●	●	●
X	:F (Common port)	●	●	●	●	●	●	●	●	●	●
	:F	●	●	●	●	●	●	●	●	●	●

Option selection table

● : Available □ : Not available

Option	Option																	
	Code	A	A1	A2	A3	Y	Y1	L*	N*	H	U	Blank	R	B	T	D	S	X
		Both side full stroke adjustable, with shock absorber	R side full stroke adjustable, with shock absorber	L side full stroke adjustable, with shock absorber	Full stroke adjustable with adjusting bracket to be added later	Floating fitting	Thin floating fitting	Intermediate support bracket (for 00, LB)	Intermediate support bracket (for LB1)	Larger thread for table installation	Height adjustment plate	Port position F, cushion needle position F (standard)	Port position R, cushion needle position F (common port)	Port position F, cushion needle position B	Port position R, cushion needle position B (common port)	Port position D, cushion needle position F	Port position D, cushion needle position D	Port position F, cushion needle position F (common port)
A	●					●	●	●	●	●	●	●	●	●	●	●	●	●
A1		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
A2		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
A3		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Y						●	●	●	●	●	●	●	●	●	●	●	●	●
Y1							●	●	●	●	●	●	●	●	●	●	●	●
L*								●	●	●	●	●	●	●	●	●	●	●
N*									●	●	●	●	●	●	●	●	●	●
H										●	●	●	●	●	●	●	●	●
U											●	●	●	●	●	●	●	●
Blank												●	●	●	●	●	●	●
R													●	●	●	●	●	●
B														●	●	●	●	●
T															●	●	●	●
D																●	●	●
S																	●	●
X																		●

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

● Design compatible with rechargeable battery manufacturing process

SRL3 - - P4*

*1: Some combinations are not available depending on the bore size. Be sure to check the **H** Option in "How to order" on the previous page.

*2: LB1 with port position D is not possible. (ø25, ø32)

Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa							
		0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7
ø12	Push/Pull	—	—	27.7	41.5	55.3	69.1	83.0	96.8
ø16	Push/Pull	—	—	43.2	64.8	86.4	1.08x10 ²	1.30x10 ²	1.51x10 ²
ø20	Push/Pull	—	—	62.9	94.4	1.26x10 ²	1.57x10 ²	1.89x10 ²	2.20x10 ²
ø25	Push/Pull	—	54.2	1.08x10 ²	1.63x10 ²	2.17x10 ²	2.71x10 ²	3.25x10 ²	3.80x10 ²
ø32	Push/Pull	—	81.4	1.63x10 ²	2.44x10 ²	3.26x10 ²	4.07x10 ²	4.88x10 ²	5.70x10 ²
ø40	Push/Pull	—	1.27x10 ²	2.53x10 ²	3.80x10 ²	5.06x10 ²	6.33x10 ²	7.60x10 ²	8.86x10 ²
ø50	Push/Pull	—	1.99x10 ²	3.98x10 ²	5.96x10 ²	7.95x10 ²	9.94x10 ²	1.19x10 ³	1.39x10 ³
ø63	Push/Pull	1.57x10 ²	3.14x10 ²	6.27x10 ²	9.41x10 ²	1.25x10 ³	1.57x10 ³	1.88x10 ³	2.20x10 ³
ø80	Push/Pull	2.53x10 ²	5.06x10 ²	1.01x10 ³	1.52x10 ³	2.03x10 ³	2.53x10 ³	3.04x10 ³	3.54x10 ³
ø100	Push/Pull	3.96x10 ²	7.91x10 ²	1.58x10 ³	2.37x10 ³	3.16x10 ³	3.95x10 ³	4.74x10 ³	5.53x10 ³

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

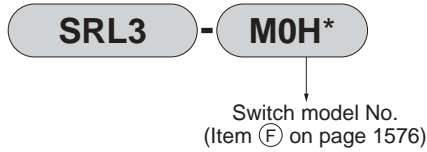
Spd Contr

Ending

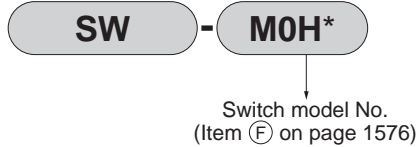
SCP*3
CMK2
CMA2
SCM
SCG
SCA2
SCS2
CKV2
CAV2/
COVPIN2
SSD2
SSG
SSD
CAT
MDC2
MVC
SMG
MSD/
MSDG
FC*
STK
SRL3
SRG3
SRM3
SRT3
MRL2
MRG2
SM-25
ShkAbs
FJ
FK
Spd
Contr
Ending

How to order switch (For configurations, refer to pages 1624 to 1626)

- Switch body + mounting bracket set (*1)



- Switch body only



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

* indicates lead wire length.

- Mounting bracket set (*2)

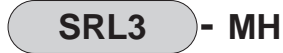
· M-switch



· T-switch



- Lead wire holder (*3)



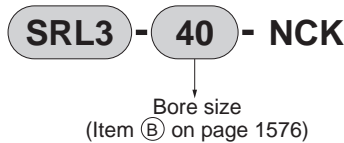
*1 : "Switch body + mounting bracket set" does not include lead wire holders.

Order lead wire holders separately if necessary.

*2 : The mounting bracket is different between the M-switch and T-switch.

*3 : The quantity of lead wire holders per set is 10.

- How to order discrete shock absorber



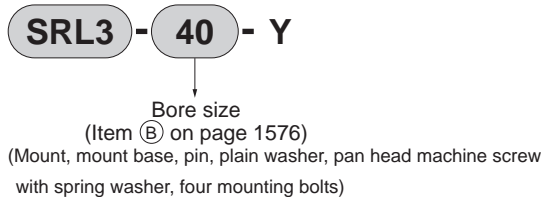
(One shock absorber, one shock absorber fixing hexagon nut)

(Note) The shock absorber fixing hexagon nut for SRL3-40 is a made-to-order product.

Applicable shock absorber model No.

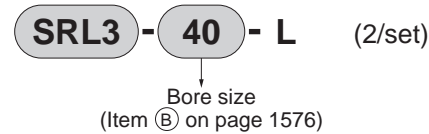
Model	Shock absorber model No.
SRL3-12	NCK-00-0.3-C
SRL3-16	NCK-00-0.3-C
SRL3-20	NCK-00-0.7-C
SRL3-25	NCK-00-1.2
SRL3-32	NCK-00-2.6
SRL3-40	NCK-00-7
SRL3-50	NCK-00-12
SRL3-63	NCK-00-12
SRL3-80	NCK-00-20
SRL3-100	NCK-00-20

- How to order floating fitting set

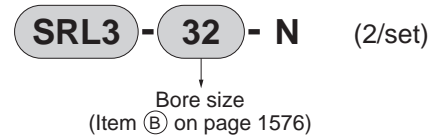


- How to order discrete intermediate support bracket

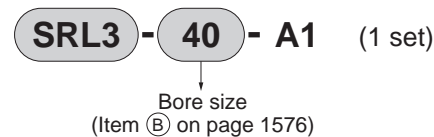
For 00/LB



For LB1

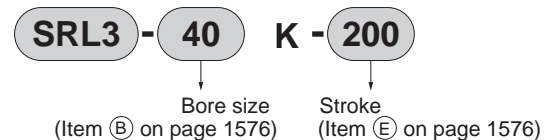


- How to order full stroke adjusting bracket kit

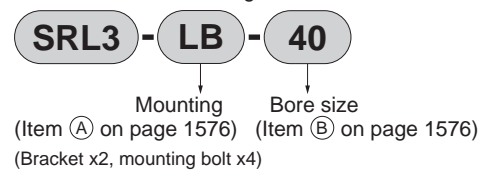


(For configurations, refer to "Full stroke adjusting bracket kit" on page 1625.)

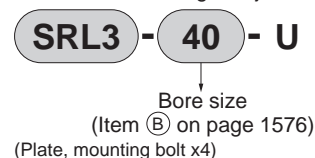
- How to order repair parts



- How to order mounting bracket

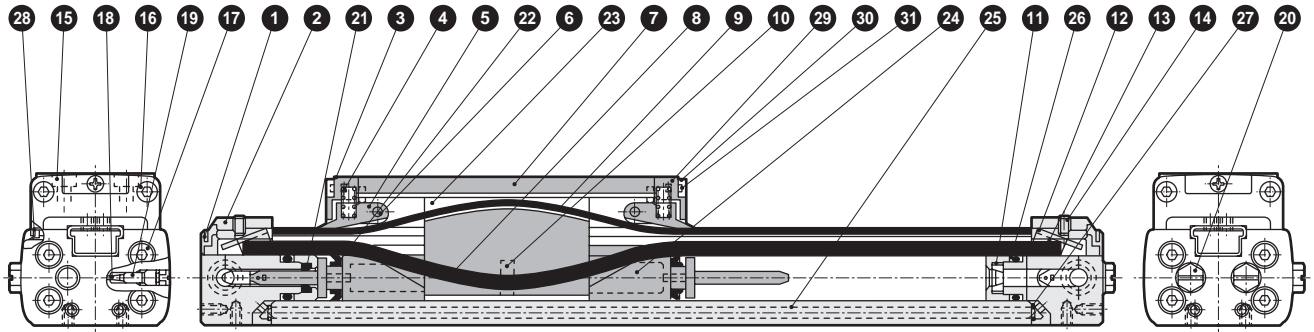


- How to order height adjustment plate set



Internal structure and parts list

● $\phi 12$ to $\phi 40$ equiv.



Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Belt cover	Polyamide		18	Needle gasket	Nitrile rubber	
2	Cover (L)	Aluminum alloy	Baking finish	19	Cushion needle	Steel	Zinc chromate
3	Table cover	Acetal resin		20	Plug ($\phi 12$, $\phi 16$)	Copper alloy	Nickeling
4	Spring	Steel	Black finish		Plug ($\phi 20$ to $\phi 40$)	Steel	Zinc chromate
5	Belt holder	Acetal resin		21	Cushion packing	Urethane rubber	
6	Parallel pin ($\phi 12$ to $\phi 20$)	Stainless steel		22	Piston packing	Nitrile rubber	
	Shaft ($\phi 25$ to $\phi 40$)	Steel	Zinc chromate	23	Yoke	Aluminum alloy	Alumite
7	Table	Aluminum alloy	Alumite	24	Piston	Acetal resin	
8	Seal belt	Urethane rubber		25	Cylinder tube	Aluminum alloy	Alumite
9	Dust-proof belt	Stainless steel + nitrile rubber		26	Cylinder gasket	Nitrile rubber	
10	Magnet			27	O-ring for common port	Nitrile rubber	
11	Cushion adaptor	Acetal resin		28	Dust wiper	Acetal resin	
12	Cover (R)	Aluminum alloy	Baking finish	29	Double-sided tape		
13	Belt spacer	Steel	Zinc chromate	30	Plate	Stainless steel ($\phi 12$ to $\phi 20$)	
14	Hexagon socket set screw	Alloy steel	Zinc chromate			Alloy steel ($\phi 25$ to $\phi 40$)	Zinc chromate
15	Hexagon socket head cap screw	Alloy steel	Zinc chromate	31	Cross-recessed tapping screw	Stainless steel	
16	Hexagon socket head cap screw	Stainless steel					
17	Hexagon socket head cap screw	Alloy steel	Zinc chromate				

Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
$\phi 12$ or equiv.	SRL3-12K-*	
$\phi 16$ or equiv.	SRL3-16K-*	
$\phi 20$ or equiv.	SRL3-20K-*	8 9 18 21
$\phi 25$ or equiv.	SRL3-25K-*	22 26 27 28
$\phi 32$ or equiv.	SRL3-32K-*	
$\phi 40$ or equiv.	SRL3-40K-*	

Note: Specify the kit No. when placing an order.
Specify the stroke for *.

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/
MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

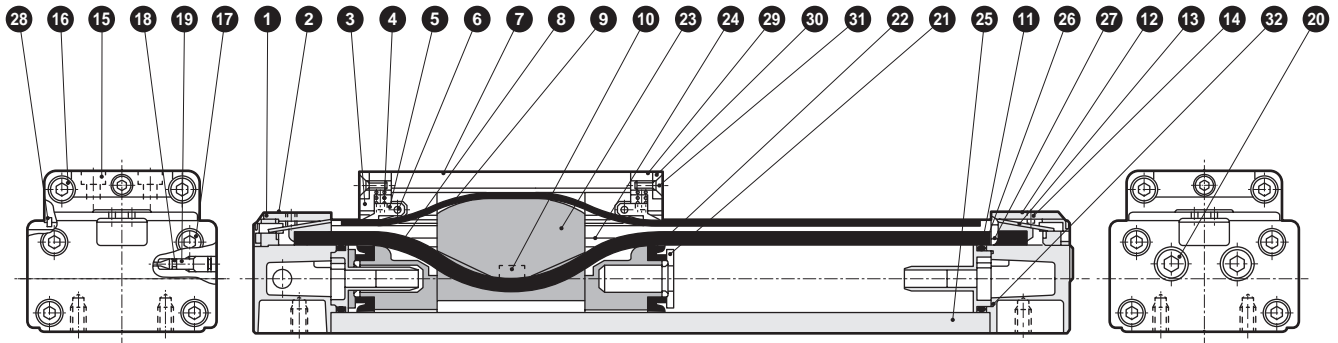
FK

Spd
Contr

Ending

Internal structure and parts list

• $\varnothing 50$ to $\varnothing 63$ or equiv.



Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Belt cover	Polyamide		17	Hexagon socket head cap screw	Alloy steel	Zinc chromate
2	Cover (L)	Aluminum alloy	Baking finish	18	Needle gasket	Nitrile rubber	
3	Table cover	Acetal resin		19	Cushion needle	Steel	Zinc chromate
4	Spring	Steel	Black finish	20	Plug	Steel	Zinc chromate
5	Belt holder	Acetal resin		21	Cushion packing	Urethane rubber	
6	Shaft	Steel	Zinc chromate	22	Piston packing	Nitrile rubber	
7	Table	Aluminum alloy	Alumite	23	Yoke	Aluminum alloy	Alumite
8	Seal belt	Urethane rubber		24	Piston	Acetal resin	
9	Dust-proof belt	Stainless steel + nitrile rubber		25	Cylinder tube	Aluminum alloy	Alumite
10	Magnet			26	Cylinder gasket	Nitrile rubber	
11	Cushion ring	Acetal resin		27	O-ring for common port	Nitrile rubber	
12	Cover (R)	Aluminum alloy	Baking finish	28	Dust wiper	Acetal resin	
13	Belt spacer	Steel	Zinc chromate	29	Double-sided tape		
14	Hexagon socket set screw	Alloy steel	Zinc chromate	30	Plate	Alloy steel	Zinc chromate
15	Hexagon socket head cap screw	Alloy steel	Zinc chromate	31	Cross-recessed tapping screw	Stainless steel	
16	Hexagon socket head cap screw	Stainless steel		32	Cushion ring gasket	Nitrile rubber	

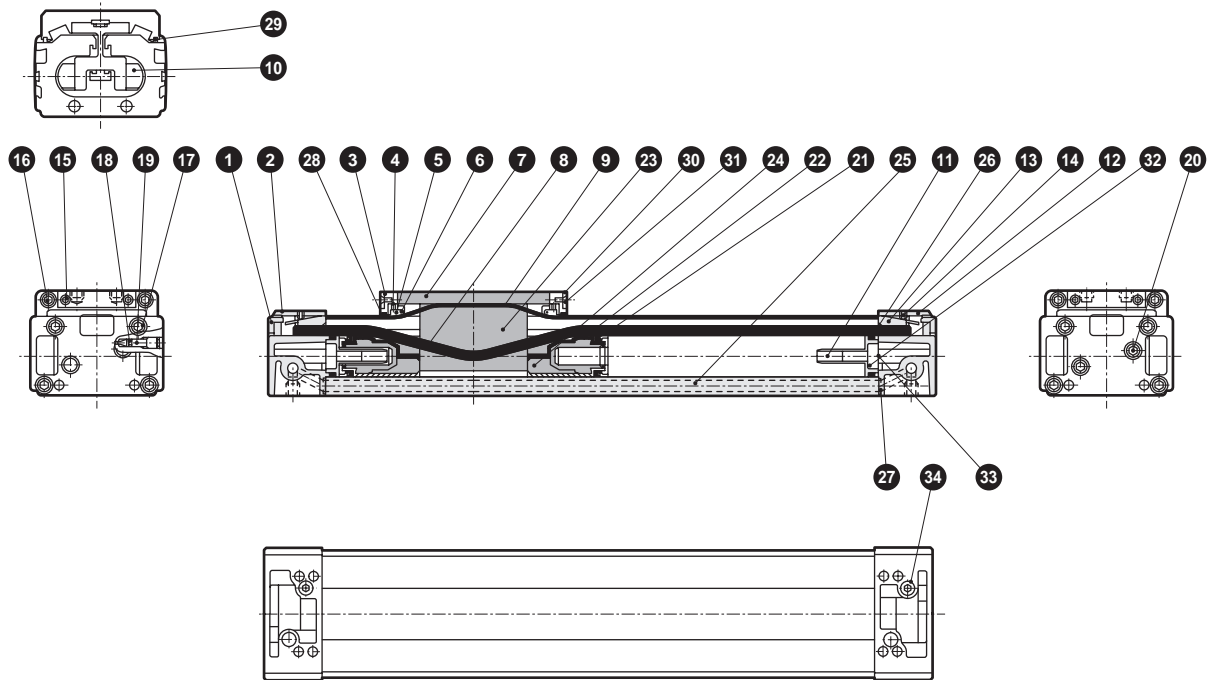
Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
$\varnothing 50$ or equiv.	SRL3-50K-*	8 9 18 21 22
$\varnothing 63$ or equiv.	SRL3-63K-*	26 27 28 32

Note: Specify the kit No. when placing an order. Specify the stroke for *.

Internal structure and parts list

● ø80 to ø100 or equiv.



Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Belt cover	Polyamide		18	Needle gasket	Nitrile rubber	
2	Cover (L)	Aluminum alloy	Baking finish	19	Cushion needle	Steel	Zinc chromate
3	Table cover	Acetal resin		20	Plug	Steel	Zinc chromate
4	Spring	Steel	Black finish	21	Cushion packing	Urethane rubber	
5	Belt holder	Acetal resin		22	Piston packing	Nitrile rubber	
6	Shaft	Steel	Zinc chromate	23	Yoke	Aluminum alloy	Alumite
7	Table	Aluminum alloy	Alumite	24	Piston	Acetal resin	
8	Seal belt	Urethane rubber		25	Cylinder tube	Aluminum alloy	Alumite
9	Dust-proof belt	Stainless steel + nitrile rubber		26	Cylinder gasket	Nitrile rubber	
10	Magnet			27	O-ring for common port	Nitrile rubber	
11	Cushion ring	Acetal resin		28	Felt (1)	Wool	
12	Cover (R)	Aluminum alloy	Baking finish	29	Felt (2)	Wool	
13	Belt spacer	Steel	Zinc chromate	30	Plate	Alloy steel	Zinc chromate
14	Hexagon socket set screw	Alloy steel	Zinc chromate	31	Cross-recessed tapping screw	Stainless steel	
15	Hexagon socket head cap screw	Alloy steel	Zinc chromate	32	Cushion ring gasket (1)	Nitrile rubber	
16	Hexagon socket head cap screw	Stainless steel		33	Cushion ring gasket (2)	Nitrile rubber	
17	Hexagon socket head cap screw	Alloy steel	Zinc chromate	34	Plug	Steel	Zinc chromate

Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø80 or equiv.	SRL3-80K-*	8 9 18 21 22 26
ø100 or equiv.	SRL3-100K-*	27 28 29 32 33

Note: Specify the kit No. when placing an order. Specify the stroke for *.

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/
MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

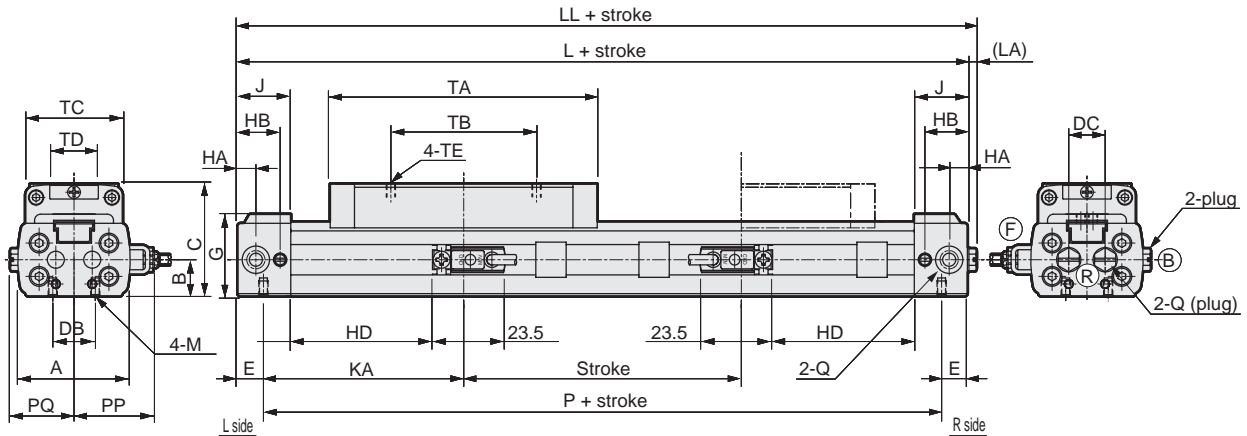
Spd
Contr

Ending

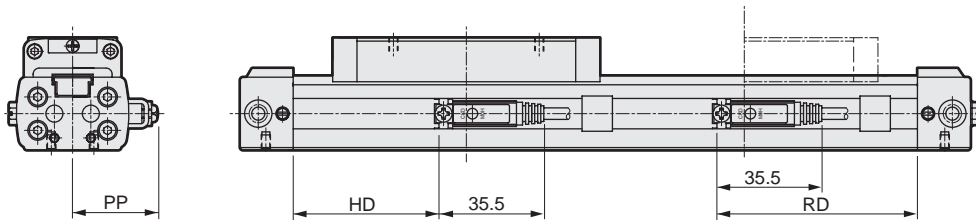
SRL3 Series

Dimensions (ø12 to ø20 equiv.)

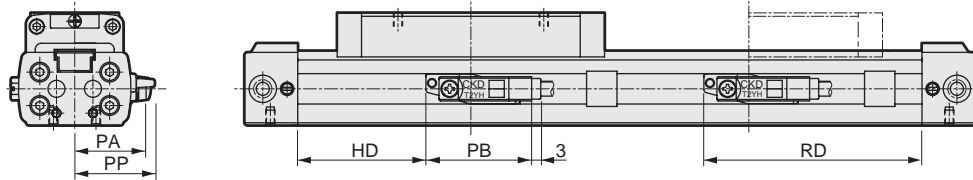
● With cylinder switch SRL3-**-***-****-M*V* (L-shaped lead wire)



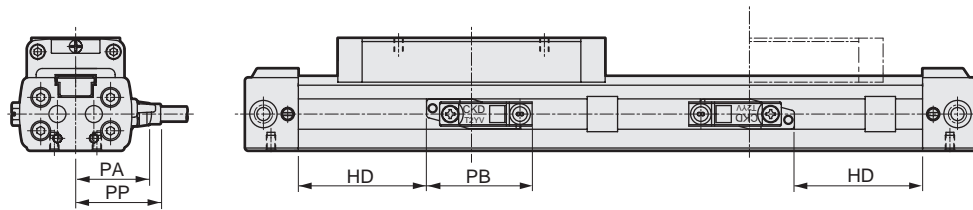
● With cylinder switch SRL3-**-***-****-M*H* (straight lead wire)



● With cylinder switch SRL3-**-***-****-T*H* (T*W, T*Y, T2YD)



● With cylinder switch SRL3-**-***-****-T*V* (T*W, T*Y)



RD: Max. sensitivity installation position HD: Max. sensitivity installation position

Code	A	B	C	DB	DC	E	G	HA	HB	J	KA	L	LL	LA	M	P	PQ	Q	TA	TB	TC	TD	TE	
SM-25																								
ShkAbs	Bore size (mm)																							
	ø12 or equiv.	33	10.5	33	10	11	8.5	24	6	14	17.5	59.5	136	139	3	M3 depth 5	119	19	M5	81	42	29	13	M3 depth 5
	ø16 or equiv.	37	12	37	14	12	8.5	27	6	14	17.5	66	149	152	3	M3 depth 5	132	21	M5	88	48	32	15	M3 depth 5
FJ	Bore size (mm)																							
	ø20 or equiv.	44	14	42	16	16	10.5	31	8.5	18.5	22	74	169	171.5	2.5	M4 depth 6.5	148	24.5	Rc1/8	100	60	38	18	M4 depth 6

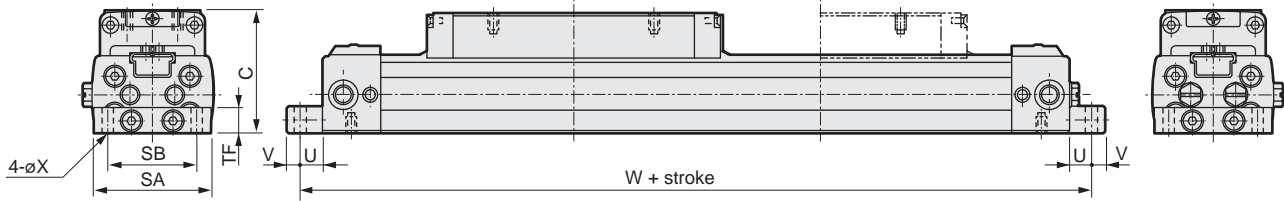
Code	With switch																	
	HD			RD			PA	PB			PP							
	M*	T*Y*	T*W	M*	T*Y*	T*W		T*Y*	T2YD	T*W*	M*V	M*H	T*YV	T*YH	T2YD	T*WV	T*WH	
Spd Contr	Bore size (mm)																	
	ø12 or equiv.	40.5	36	32	60.5	65	69	24.3	35	34	33.5	24.5	24.5	26	23	28.4	20.7	17.2
	ø16 or equiv.	47	42	38	67	72	76	26.3	35	34	33.5	26.5	26.5	28	25	30.4	22.7	19.2
Ending	Bore size (mm)																	
	ø20 or equiv.	52.5	48	44	72.5	77	81	29.3	35	34	33.5	29.5	29.5	31	28	33.4	25.7	22.2

*1: For dimensions with options and dimensions of accessories, refer to pages 1588, 1589, 1622 and 1623.

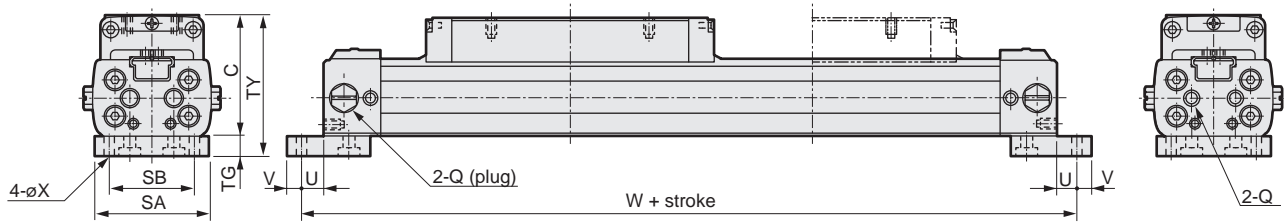
Dimensions (ø12 to ø20 equiv.)



- With foot bracket SRL3-LB-12 to 20



- With foot bracket SRL3-LB1-12 to 20



Code	With foot bracket (LB)							With foot bracket (LB1)							
	SA	SB	TF	U	V	W	X	SA	SB	TG	TY	U	V	W	X
ø12 or equiv.	32	24	8	6	4	148	3.4	32	24	6	39	6	4	148	3.4
ø16 or equiv.	35	26	8	6	4	161	3.4	35	26	6	43	6	4	161	3.4
ø20 or equiv.	43	33	10	6	6	181	4.5	43	33	8	50	6	6	181	4.5

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/
MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

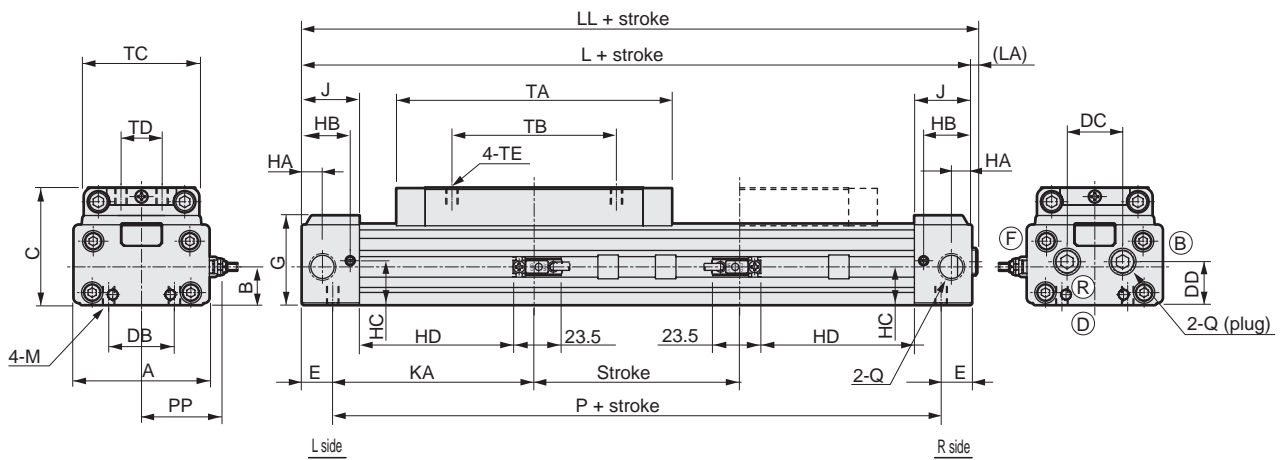
Spd
Contr

Ending

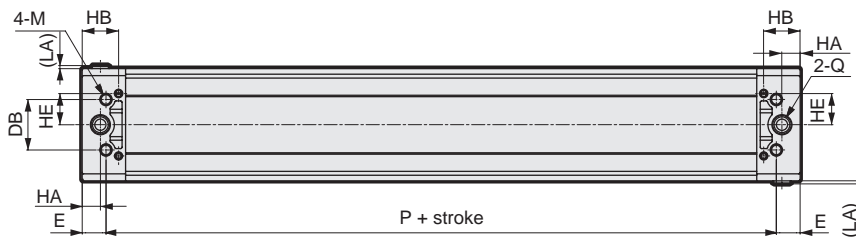
SRL3 Series

Dimensions (ø25 to ø63 equiv.)

● With cylinder switch SRL3-**-***-****-M*V* (L-shaped lead wire)



● Bottom piping (option code: D/S)



Code	A	B	C	DB	DC	DD	E	G	HA	HB	HC	HE	J	KA	L	LL	LA	M	P	Q	TA	TB	TC	TD	TE
ø25 or equiv.	53	17	53	20	26	19	14	40.5	7.5	20	18.9	-	24	81	190	192	2	M6 depth 9	162	Rc1/8	122	70	48	20	M5 depth 6
ø32 or equiv.	66	18.5	57	32	27	21	15	43.5	10	23.5	21.5	17	28	98	226	228.5	2.5	M6 depth 9	196	Rc1/4	134	80	56	20	M6 depth 7.5
ø40 or equiv.	80	22	67	36	35	28	17	51.5	13	26	27	22.3	31	105	244	246.5	2.5	M8 depth 12	210	Rc1/4	148	90	68	30	M6 depth 9
ø50 or equiv.	96	28	82	45	35	35	23	61	15	33	35.3	11	39	106	258	260.5	2.5	M8 depth 12	212	Rc3/8	152	100	80	30	M8 depth 10.5
ø63 or equiv.	118	35	95	50	39	42	19	74	15	32	43	31	39	129	296	298.5	2.5	M10 depth 15	258	Rc3/8	168	110	102	40	M8 depth 11.5

Code	With switch															
	HD			RD			PA	PB			PP					
Bore size (mm)	M*	T*Y*	T*W	M*	T*Y*	T*W		T*Y*	T2YD	T*W*	M*V	M*H	T*YV	T*YH	T2YD	T*WV
ø25 or equiv.	60	56	52	82	86	90	34.3	35	34	33.5	34.5	34.5	36	33	30.7	27.2
ø32 or equiv.	74	70	66	96	100	104	41.3	35	34	33.5	41.5	41.5	43	40	37.7	34.2
ø40 or equiv.	80	76	72	102	106	110	48.3	35	34	33.5	48.5	48.5	50	47	44.7	41.2
ø50 or equiv.	79	75	71	101	105	109	56.3	35	34	33.5	56.5	56.5	58	55	52.7	49.2
ø63 or equiv.	98	94	90	120	124	128	67.3	35	34	33.5	67.5	67.5	69	66	63.7	60.2

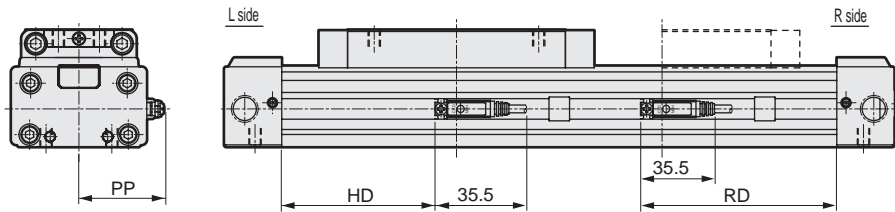
*1: For dimensions with options and dimensions of accessories, refer to pages 1588, 1589, 1622 and 1623.

*2: Option S is not available for ø25.

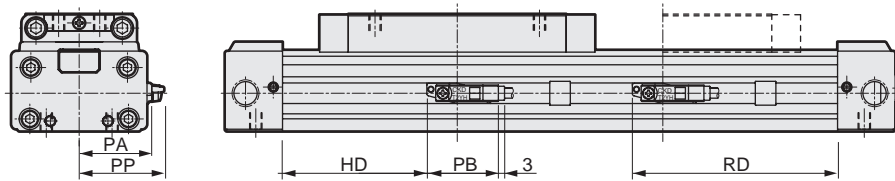
Dimensions (ø25 to ø63 equiv.)



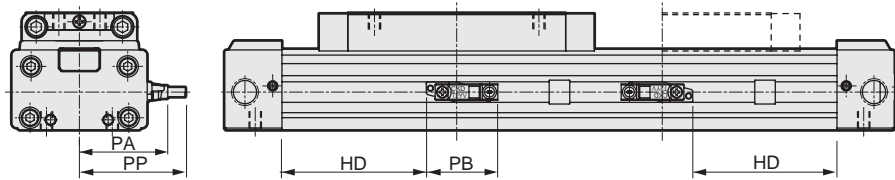
- With cylinder switch SRL3-**-**-***-M*H* (straight lead wire)



- With cylinder switch SRL3-**-**-***-T*H (T*W, T*Y, T2YD)

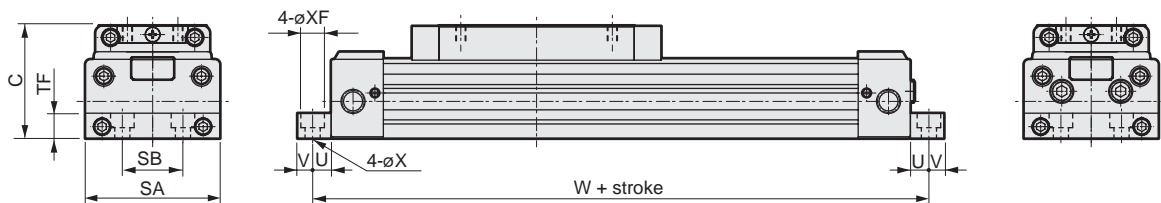


- With cylinder switch SRL3-**-**-***-T*V (T*W, T*Y)

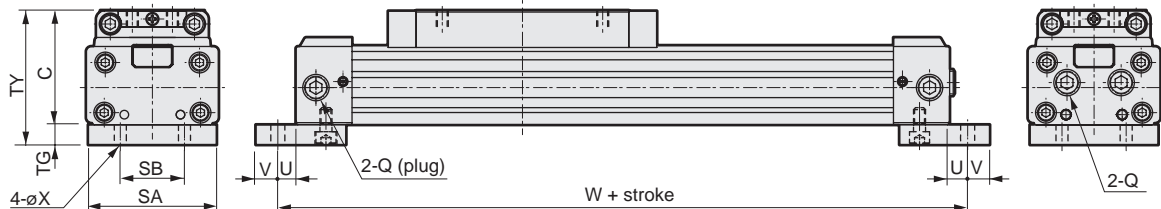


RD: Max. sensitivity installation position HD: Max. sensitivity installation position

- With foot bracket SRL3-LB-25 to 63



- With foot bracket SRL3-LB1-25, 32 (The mounting LB1 is not available for ø40 to ø63 or equiv.)

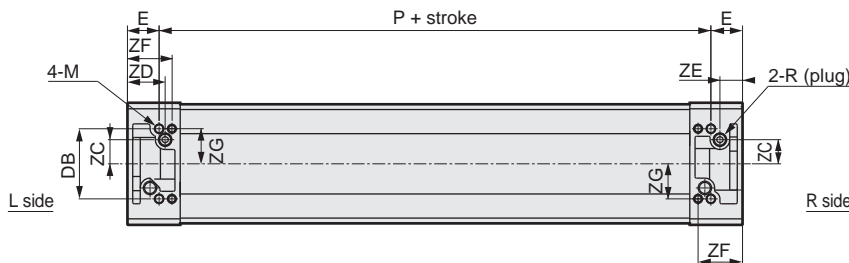
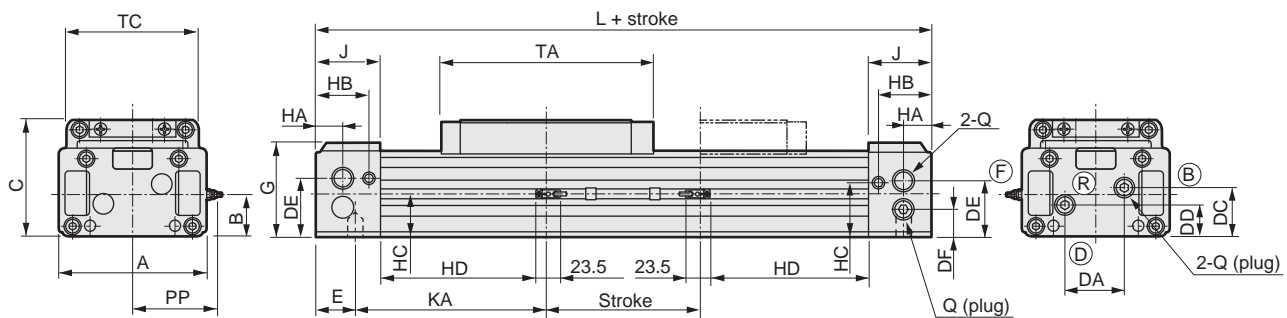
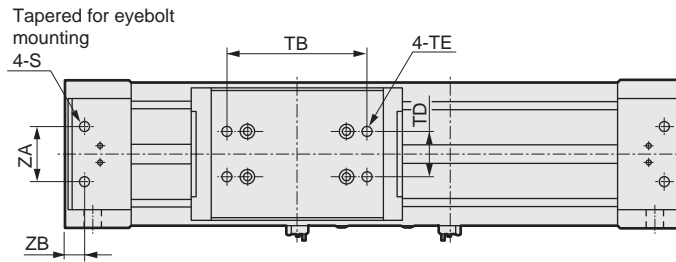


Code	With foot bracket (LB)								With foot bracket (LB1)								
	Bore size (mm)	SA	SB	TF	U	V	W	X	XF	SA	SB	TG	TY	U	V	W	X
ø25 or equiv.	52	20	12	9	11	208	7	-	-	50	20	10	63	9	11	208	7
ø32 or equiv.	64	32	12	9	11	244	7	-	-	64	32	10	67	9	11	244	7
ø40 or equiv.	80	36	15	11	9	266	9	14 spot face depth 8.6	-	-	-	-	-	-	-	-	-
ø50 or equiv.	94	45	20	11	9	280	9	14 spot face depth 8.6	-	-	-	-	-	-	-	-	-
ø63 or equiv.	116	50	25	13	12	322	11	17.5 spot face depth 10.8	-	-	-	-	-	-	-	-	-

- SCP*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/COVP/N2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/MSDG
- FC*
- STK
- SRL3**
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd Contr
- Ending

Dimensions (ø80 to ø100 equiv.)

● With cylinder switch SRL3-**-**-***-M*V* (L-shaped lead wire)



Code	A	B	C	DA	DB	DC	DD	DE	DF	E	G	HA	HB	HC	J	KA	L	M	P	Q	R	S
ø80 or equiv.	162	49	130	64	93	58	38	65	33	42	106	30	59	64.5	70	208	500	M12 depth 18	416	Rc1/2	Rc3/8	M12 depth 23
ø100 or equiv.	198	61.5	150	73	108	71.5	47.5	81.5	41.5	43	125	30	69	76.5	80	222	530	M12 depth 18	444	Rc1/2	Rc1/2	M12 depth 23

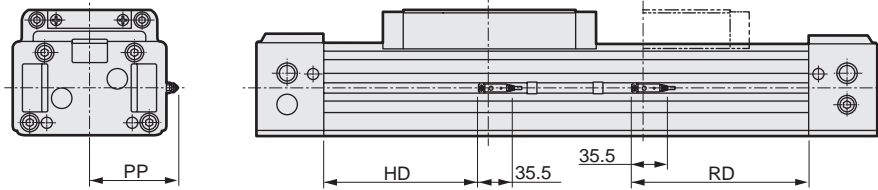
Code	TA	TB	TC	TD	TE	ZA	ZB	ZC	ZD	ZE	ZF	ZG	With foot bracket										
													SA	SB	TF	U	V	W	X				
ø80 or equiv.	228	150	146	50	M12 depth 15	60	21	32	50	30	59	46.5	162	134	25	13	12	526	14				
ø100 or equiv.	238	160	170	60	M12 depth 15	60	21	36.5	55	30	69	54	198	160	30	15	15	560	14				

*1: For dimensions with options and dimensions of accessories, refer to pages 1588, 1589, 1622 and 1623.

Dimensions (ø80 to ø100 equiv.)

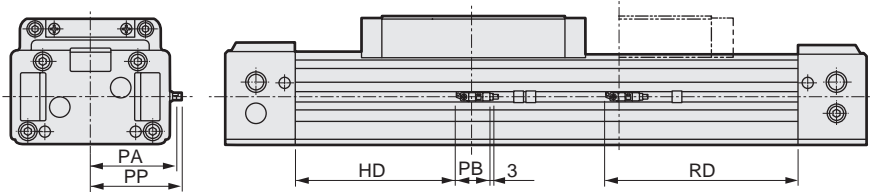


- With cylinder switch SRL3-**-**-***-M*H* (straight lead wire)

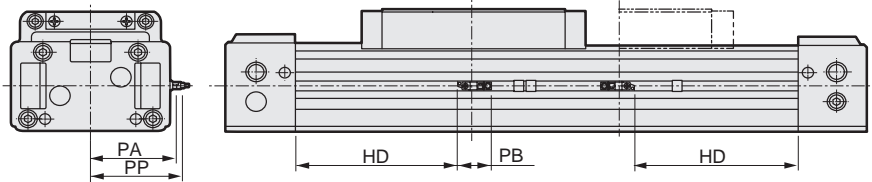


RD: Max. sensitivity mounting position
 HD: Max. sensitivity mounting position

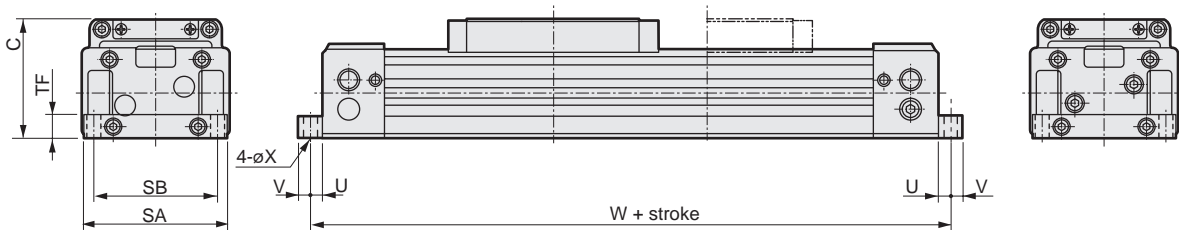
- With cylinder switch SRL3-**-**-***-T*H (T*W, T*Y, T2YD)



- With cylinder switch SRL3-**-**-***-T*V (T*W, T*Y)



- With foot bracket SRL3-LB-**-***



Code	With switch																
	HD			RD			PA	PB			PP						
	M*	T*Y*	T*W	M*	T*Y*	T*W		T*Y*	T2YD	T*W*	M*V	M*H	T*YV	T*YH	T2YD	T*WV	T*WH
ø80 or equiv.	170	165	161	190	195	199	87.3	35	34	33.5	87.5	87.5	89	86	91.4	83.7	80.2
ø100 or equiv.	175	170	166	195	200	204	105.3	35	34	33.5	105.5	105.5	107	104	109.4	101.7	98.2

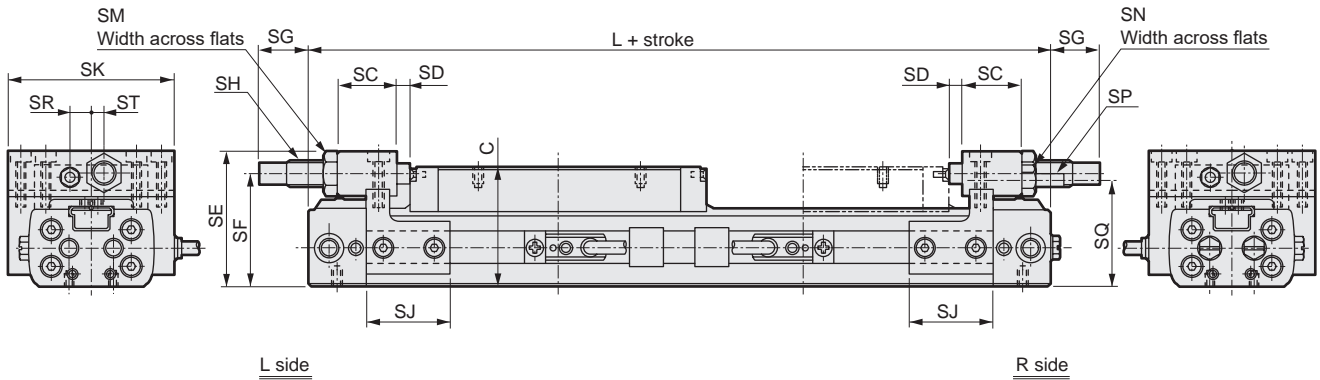
- SCP*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/COVP/N2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/MSDG
- FC*
- STK
- SRL3**
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd Contr
- Ending

SRL3 Series

SRL3 Series common dimensions

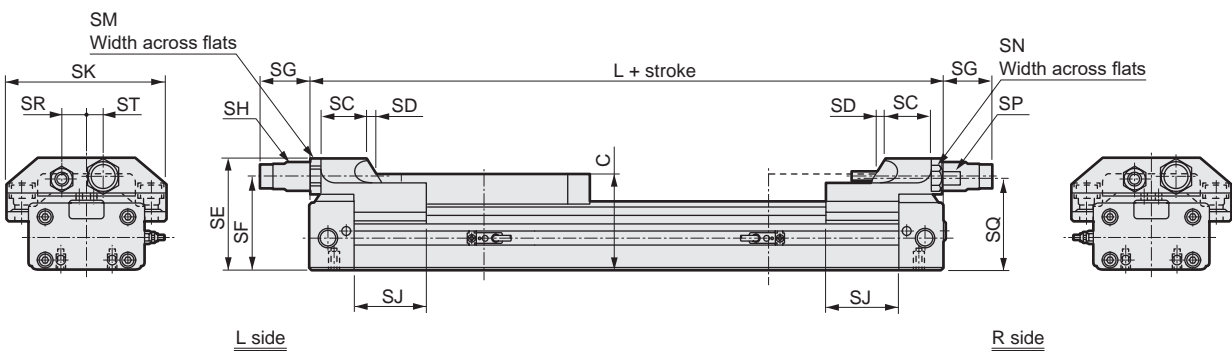
● Full stroke adjustable with shock absorber (SRL3)

· $\phi 12$ to $\phi 25$ or equiv.



Code	SC	SD	SE	SF	SG			SH		SJ	SK	SM	SN	SP	SQ	SR	ST	C	L	
					At max.	At min.	Adj. range	Thread size	Max. absorbed energy (J)											
SSD2	Bore size (mm)																			
SSG	$\phi 12$ or equiv.	19.5	2.5	40	32	17.5	7.5	10	M8x0.75	3	25	45	12	5.5	M3	30.5	6	3	33	136
SSD	$\phi 16$ or equiv.	18	4	42	35	14.5	4.5	10	M8x0.75	3	25	49	12	5.5	M3	34	6	4	37	149
CAT	$\phi 20$ or equiv.	22.5	3.5	48	40	14.5	4.5	10	M10x1.0	7	39	57	14	7	M4	38	8	5	42	169
MDC2	$\phi 25$ or equiv.	20	2.5	62.5	51.5	14.5	4.5	10	M12x1.0	12	50	77	17	10	M6	50	12	10	53	190

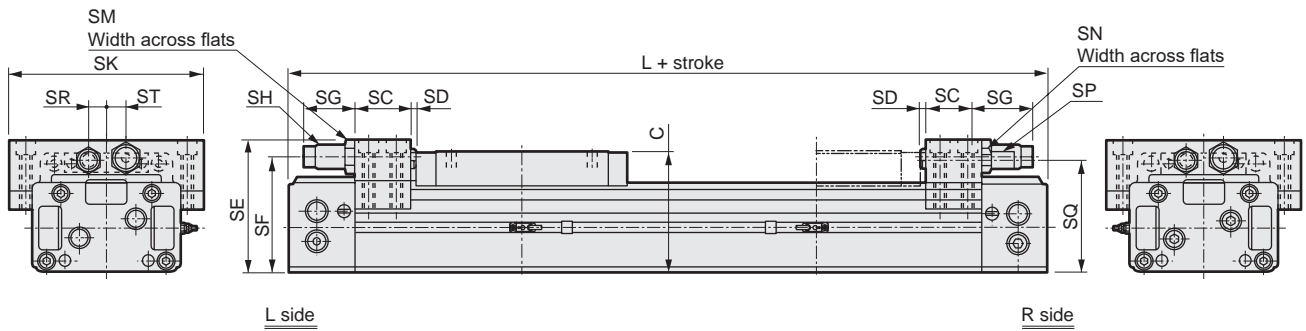
· $\phi 32$ to $\phi 63$ or equiv.



Code	SC	SD	SE	SF	SG			SH		SJ	SK	SM	SN	SP	SQ	SR	ST	C	L	
					At max.	At min.	Adj. range	Thread size	Max. absorbed energy (J)											
SM-25	$\phi 32$ or equiv.	22	7	66.5	55.5	27	17	10	M14x1.5	26	46	98	19	13	M8	53.5	14	12	57	226
ShkAbs	$\phi 40$ or equiv.	32	7	78.5	65.5	34	24	10	M20x1.5	70	51	112	24	17	M10	63.5	17	12	67	244
FJ	$\phi 50$ or equiv.	38	8	99	80	55	45	10	M25x1.5	120	53	136	32	19	M12	77.5	22	17	82	258
FK	$\phi 63$ or equiv.	38	8	112	93.5	44	34	10	M25x1.5	120	64	158	32	24	M16	89	25	20	95	296

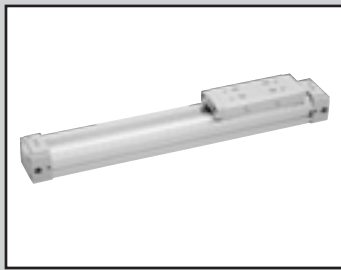
SRL3 Series common dimensions

- Full stroke adjustable with shock absorber
 - ø80, ø100 or equiv.



Code	SC	SD	SE	SF	SG			SH		SK	SM	SN	SP	SQ	SR	ST	C	L
					At max.	At min.	Adj range	Thread size	Max. absorbed energy (J)									
ø80 or equiv.	60	6	145	125.5	50	40	10	M27x1.5	200	214	32	27	M20	123	20	20	130	500
ø100 or equiv.	60	6	164	144.5	50	40	10	M27x1.5	200	250	32	27	M20	142	20	20	150	530

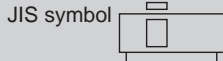
- SCP*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/COVP/N2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/MSDG
- FC*
- STK
- SRL3**
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd Contr
- Ending



Rodless cylinder resin guide

SRL3-G Series

- Bore size: $\phi 12$, $\phi 16$, $\phi 20$, $\phi 25$, $\phi 32$
 $\phi 40$, $\phi 50$, $\phi 63$, $\phi 80$, $\phi 100$



Specifications

Item	SRL3-G											
Bore size	mm	$\phi 12$	$\phi 16$	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$	$\phi 50$	$\phi 63$	$\phi 80$	$\phi 100$	
Actuation	Double acting											
Working fluid	Compressed air											
Max. working pressure	MPa	0.7 (≈ 100 psi, 7 bar)										
Min. working pressure	MPa	0.25 (≈ 36 psi, 2.5 bar)			0.15 (≈ 22 psi, 1.5 bar)			0.1 (≈ 15 psi, 1 bar)				
Proof pressure	MPa	1.05 (≈ 150 psi, 10.5 bar)										
Ambient temperature	$^{\circ}\text{C}$	5 (41 $^{\circ}\text{F}$) to 60 (140 $^{\circ}\text{F}$)										
Port size		M5		Rc1/8		Rc1/4		Rc3/8		Rc1/2		
Stroke tolerance	mm	$^{+2.0}_0$ (to 1000), $^{+2.5}_0$ (to 3000), $^{+3.0}_0$ (to 5000)										
Working piston speed	mm/s	50 to 2000 (standard piping) (*1)										
Cushion	Air cushion											
Lubrication	Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication. Once lubricated, the cylinder will need periodic lubrication.)											

*1: For common port piping, the working piston speed varies depending on the stroke. Contact CKD.

Allowable absorbed energy

Bore size (mm)	Cushioned		Without cushion	With shock absorber (initial set point)	
	Max absorbed energy (J)	Cushion stroke (mm)	Max absorbed energy (J)	Absorbed energy (J)	Effective stroke (mm)
$\phi 12$ or equiv.	0.03	14.5	0.003	2.4	5.5
$\phi 16$ or equiv.	0.22	19.2	0.007	2.4	5.5
$\phi 20$ or equiv.	0.59	22.2	0.010	5.7	7
$\phi 25$ or equiv.	1.40	20.9	0.015	10	9
$\phi 32$ or equiv.	2.57	23.5	0.030	18	13
$\phi 40$ or equiv.	4.27	23.9	0.050	50	16.5
$\phi 50$ or equiv.	9.13	24.9	0.072	86	21
$\phi 63$ or equiv.	17.4	29.6	0.138	86	21
$\phi 80$ or equiv.	40	45.8	0.393	143	25
$\phi 100$ or equiv.	67	45.8	0.622	143	25

Stroke

Bore size (mm)	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)
$\phi 12$ equiv.	200/300 400/500 600/700 800/900 1000	5000	1
$\phi 16$ equiv.			
$\phi 20$ equiv.			
$\phi 25$ equiv.			
$\phi 32$ equiv.			
$\phi 40$ equiv.			
$\phi 50$ equiv.			
$\phi 63$ equiv.			
$\phi 80$ equiv.			
$\phi 100$ equiv.			

* The custom stroke is available in 1 mm increments.

Number of installed M-switches and min. stroke (mm)

Switch quantity	1		2		3		4		5		6	
	M*V	M*H	M*V	M*H	M*V	M*H	M*V	M*H	M*V	M*H	M*V	M*H
Switch model No.												
Bore size (mm)												
$\phi 12$ or equiv.	10	10	30	45(70)	60	90(120)	90	135(170)	120	180(220)	150	225(270)
$\phi 16$ or equiv.	10	10	30	45(70)	60	90(120)	90	135(170)	120	180(220)	150	225(270)
$\phi 20$ or equiv.	10	10	30	45(70)	60	90(120)	90	135(170)	120	180(220)	150	225(270)
$\phi 25$ or equiv.	10	10	30	45(70)	60	90(120)	90	135(170)	120	180(220)	150	225(270)
$\phi 32$ or equiv.	10	10	30	45	60	90	90	135	120	180	150	225
$\phi 40$ or equiv.	10	10	30	45	60	90	90	135	120	180	150	225
$\phi 50$ or equiv.	15	15	30	45	60	90	90	135	120	180	150	225
$\phi 63$ or equiv.	15	15	30	45	60	90	90	135	120	180	150	225
$\phi 80$ or equiv.	25		50		100		150		200		250	
$\phi 100$ or equiv.	25		50		100		150		200		250	

Note: Values in () are the min. stroke with switch of the full stroke adjustable.

Number of installed T-switches and min. stroke (mm)

Switch quantity	1		2		3		4		5		6	
	T*V	T*H	T*V	T*H	T*V	T*H	T*V	T*H	T*V	T*H	T*V	T*H
Switch model No.												
Bore size (mm)												
$\phi 12$ or equiv.	5	5	45	50(70)	85	100(120)	125	150(170)	165	200(220)	205	250(270)
$\phi 16$ or equiv.	5	5	45	50(70)	85	100(120)	125	150(170)	165	200(220)	205	250(270)
$\phi 20$ or equiv.	5	5	45	50(70)	85	100(120)	125	150(170)	165	200(220)	205	250(270)
$\phi 25$ or equiv.	10	10	45	50(70)	85	100(120)	125	150(170)	165	200(220)	205	250(270)
$\phi 32$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\phi 40$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\phi 50$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\phi 63$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\phi 80$ or equiv.	15	15	45	50	85	100	125	150	165	200	205	250
$\phi 100$ or equiv.	15	15	45	50	85	100	125	150	165	200	205	250

Note: Values in () are the min. stroke with switch of the full stroke adjustable.

Switch specifications (M-switch)

● 1-color/2-color LED

Item	2-wire proximity		3-wire proximity		
	M2V,M2H	M2WV (2-color LED)	M3H/M3V	M3PH/M3PV (Made to order)	M3WV
Applications	Dedicated for programmable controller		Programmable controller, Relay, IC circuit, Road, Compact solenoid valve		
Output method	-		NPN output	PNP output	NPN output
Power supply voltage	-		4.5 to 28 VDC		10 to 28 VDC
Load voltage	10 to 30 VDC		30 VDC or less		
Load current	5 to 30mA		100 mA or less	100 mA or less	100 mA or less
Indicator	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	1 mA or less		10 μA or less	0.05 mA or less	10 μA or less
Weight	g 1 m: 22 3 m: 57 5 m: 93				
Item	2-wire reed		M5V, M5H		
	M0V, M0H		M5V, M5H		
Applications	For programmable controller, relay		For programmable controller, relay, IC circuit (without indicator lamp), serial connection		
Power supply voltage	-		-		
Load voltage	12/24 VDC	110 VAC	5/12/24 VDC		110 VAC or less
Load current	5 to 50mA	7 to 20mA	50 mA or less		20 mA or less
Indicator	LED (ON/Off)		No indicator lamp		
Leakage current	0mA				
Weight	g 1 m: 22 3 m: 57 5 m: 93				

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

Switch specifications (T Model Switch)

● 2-color LED

Item	2-wire proximity		3-wire proximity	
	T2YH/T2YV	T2WH/T2WV	T3YH/T3YV	T3WH/T3WV
Applications	Dedicated for programmable controller		For programmable controller, relay	
Output method	-		NPN output	NPN output
Power supply voltage	-		10 to 28 VDC	
Load voltage	10 to 30 VDC	24 VDC ±10%	30 VDC or less	
Load current	5 to 20 mA (*3)		50 mA or less	
Indicator	Red/green LED (Lit when ON)	Red/green LED (Lit when ON)	Red/green LED (Lit when ON)	Red/green LED (Lit when ON)
Leakage current	1 mA or less		10 μA or less	
Weight	g 1 m: 33 3 m: 87 5 m: 142		1 m: 18 3 m: 49 5 m: 80	

● For AC magnetic field

Item	2-wire proximity	
	T2YD, T2YDT	(*4)
Applications	Dedicated for programmable controller	
Indicator	Red/Green LED (Lit when ON)	
Load voltage	24 VDC ±10%	
Load current	5 to 20mA	
Internal voltage drop	6 V or less	
Leakage current	1.0 mA or less	
Weight	g 1 m: 61 3 m: 166 5 m: 272	

*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: AC magnetic field proof switch (T2YD/T2YDT) cannot be used in DC magnetic field.

Cylinder weight

Unit: kg

Bore size (mm)	Stroke for 0 mm Volume			#Switch weight	Mounting bracket weight		Additional weight per St = 100mm
	Basic (00)	Foot			T type	M type	
		(LB)	(LB1)				
ø12 or equiv.	0.24	0.25	0.26	Refer to the weight in the Use this as a reference.	0.005	0.001	0.10
ø16 or equiv.	0.32	0.33	0.35				0.13
ø20 or equiv.	0.52	0.54	0.58				0.18
ø25 or equiv.	1.0	1.1	1.1				0.28
ø32 or equiv.	1.5	1.6	1.7				0.36
ø40 or equiv.	2.4	2.5	-				0.53
ø50 or equiv.	3.5	3.6	-				0.75
ø63 or equiv.	6.1	6.4	-				1.11
ø80 or equiv.	18.8	19.4	-				2.32
ø100 or equiv.	26.6	27.6	-				3.38

SCP*3
CMK2
CMA2
SCM
SCG
SCA2
SCS2
CKV2
CAV2/COVP/N2
SSD2
SSG
SSD
CAT
MDC2
MVC
SMG
MSD/MSDG
FC*
STK
SRL3
SRG3
SRM3
SRT3
MRL2
MRG2
SM-25
ShkAbs
FJ
FK
Spd Contr
Ending

SRL3-G Series

How to order

No switch (built-in magnet for switch)

SRL3-G-00-12-B-200-B

With switch (built-in magnet for switch)

SRL3-G-00-12-B-200-M0H-R-B

A Mounting
*1, *2

B Bore size

C Port thread

D Cushion

E Stroke

F Switch model No.

G Switch quantity

H Option
*4, *5
*6, *7

Note on model No. selection

*1 : Mounting bracket will be shipped assembled with the product.

*2 : For 12, 16, 20, 25 and 32 bore sizes with option code "R" or "T", the mounting will be "00" or "LB1".
(Piping with mounting "LB" is not possible for option codes "R" and "T".)

*3 : Refer to page 1590 for the min. stroke with switch.

*4 : Switches other than **F** Switch model No. are also available. (Made to order) Refer to Ending Page 1 for details.

5 : "" of L* and N* indicates the number of sets. When more than one set are necessary, specify "L2" (for LB) or "N2" (for LB1).
2 pcs./set

*6 : For the port and cushion needle position codes, refer to dimensions on pages 1598 to 1603.

*7 : In the case of the standard with $\phi 12$ to $\phi 25$, remove the cover, attach a flat nut and install the full stroke adjusting bracket.

A flat nut is attached to option "A3" to enable retrofitting the full stroke adjusting bracket without removing the cover.

*8 : In "H", the thread size for $\phi 12$ and $\phi 16$ will be "M4" and that for $\phi 20$ will be "M5".

*9 : Check the option combinations in "Option selection table".

*10 : Copper and PTFE free as standard. (except for type with shock absorber)

[Example of model No.]

SRL3-G-00-12B-200-M0H-R-B

Model: Rodless cylinder resin guide type

- A** Mounting : Basic
- B** Bore size : $\phi 12$ mm
- C** Port thread : M5
- D** Cushion : Both sides cushioned
- E** Stroke : 200 mm
- F** Switch model No. : Reed M0H switch, lead wire 1 m
- G** Switch quantity : 1 on R side
- H** Option : Port position F, cushion needle position B

Code	Description										
A Mounting											
00	Basic										
LB	Axial foot										
LB1	Axial foot ($\phi 12$ to $\phi 32$ only)										
B Bore size (mm)											
12	$\phi 12$										
16	$\phi 16$										
20	$\phi 20$										
25	$\phi 25$										
32	$\phi 32$										
40	$\phi 40$										
50	$\phi 50$										
63	$\phi 63$										
80	$\phi 80$										
100	$\phi 100$										
C Port thread											
Blank	Rc thread (M5 for $\phi 12$ and $\phi 16$)										
N	NPT thread ($\phi 20$ or more) (made-to-order product)										
G	G thread ($\phi 20$ or more) (made-to-order product)										
D Cushion											
B	Both sides cushioned										
R	R side cushioned										
L	L side cushioned										
N	Without cushion										
E Stroke (mm)											
Bore size	Stroke *3	Custom stroke									
$\phi 12$ to $\phi 100$	1 to 5000	In 1 mm increments									
F Switch model No.											
Axial lead wire	Radial lead wire	Reed Contact	Voltage	Indicator	Lead wire						
M0H*	M0V*	● ●	AC DC	1-color LED	2-wire						
M5H*	M5V*		● ●	No indicator lamp							
M2H*	M2V*	● ●	● ●	1-color LED	2-wire						
-	M2WV*		● ●	2-color LED							
M3H*	M3V*	● ●	● ●	1-color LED	3-wire						
-	M3WV*		● ●	2-color LED							
M3PH*	M3PV*	● ●	● ●	1-color LED (custom)	3-wire						
T2WH*	T2WV*		● ●	2-color LED							
T2YH*	T2YV*	● ●	● ●		2-color LED	2-wire					
T3WH*	T3WV*		● ●								
T3YH*	T3YV*	● ●	● ●	2-color LED	3-wire						
T2YD*	-		● ●								
T2YDT*	-	● ●	● ●	2-color LED for AC magnetic field	2-wire						
* Lead wire length											
Blank	1 m (standard)										
3	3 m (option)										
5	5 m (option)										
G Switch quantity											
R	1 on R side										
L	1 on L side										
D	2										
T	3										
4	4 (when there are more than 4 switches, indicate switch quantity.)										
H Option											
		Bore size (ϕ)									
		12	16	20	25	32	40	50	63	80	100
A	Both-sides full stroke adjustable, shock absorber	●	●	●	●	●	●	●	●	●	●
A1	R side full stroke adjustable, shock absorber	●	●	●	●	●	●	●	●	●	●
A2	L side full stroke, adjustable, shock absorber	●	●	●	●	●	●	●	●	●	●
A3	Full stroke adjustable, adjusting bracket to be added	●	●	●	●						
L*	Intermediate support bracket (for 00, LB)	●	●	●	●	●	●	●	●	●	●
N*	Intermediate support bracket (for LB1)	●	●	●	●	●	●				
H	Larger thread for table installation	●	●	●							
U	Height adjustment plate	●	●	●	●	●	●	●	●	●	●
Blank	: F (Standard)	●	●	●	●	●	●	●	●	●	●
R	: R (Common port)	●	●	●	●	●	●	●	●	●	●
B	: F	●	●	●	●	●	●	●	●	●	●
T	: R (Common port)	●	●	●	●	●	●	●	●	●	●
D	: D				●	●	●	●	●	●	●
S	: D					●	●	●	●	●	●
X	: F (Common port)										●

Option selection table

● : Available □ : Not available

		Option															
		Both side full stroke adjustable, with shock absorber	R side full stroke adjustable, with shock absorber	L side full stroke adjustable, with shock absorber	Full stroke adjustable with adjusting bracket to be added later	Intermediate support bracket (for 00, LB)	Intermediate support bracket (for LB1)	Larger thread for table installation	Height adjustment plate	Port position F, cushion needle position F (standard)	Port position R, cushion needle position F (common port)	Port position F, cushion needle position B	Port position R, cushion needle position B (common port)	Port position D, cushion needle position F	Port position D, cushion needle position D	Port position F, cushion needle position F (common port)	
		Code	A	A1	A2	A3	L*	N*	H	U	Blank	R	B	T	D	S	X
Option	A						●	●	●	●	●	●	●	●	●	●	●
	A1						●	●	●	●	●	●	●	●	●	●	●
	A2						●	●	●	●	●	●	●	●	●	●	●
	A3						●	●	●	●	●	●	●	●	●	●	●
	L*								●	●	●	●	●	●	●	●	●
	N*								●	●	●	●	●	●	●	●	●
	H										●	●	●	●	●	●	●
	U											●	●	●	●	●	●
	Blank																
	R																
	B																
	T																
	D																
	S																
X																	

*1: Some combinations are not available depending on the bore size. Be sure to check the **H** Option in "How to order" on the previous page.

*2: LB1 with port position D is not possible. (ø25, ø32)

Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa								
		0.1	0.15	0.2	0.25	0.3	0.4	0.5	0.6	0.7
ø12	Push/Pull	—	—	—	34.6	41.5	55.3	69.1	83.0	96.8
ø16	Push/Pull	—	—	—	54.0	64.8	86.4	1.08x10 ²	1.30x10 ²	1.51x10 ²
ø20	Push/Pull	—	—	—	78.6	94.4	1.26x10 ²	1.57x10 ²	1.89x10 ²	2.20x10 ²
ø25	Push/Pull	—	81.4	1.08x10 ²	1.35x10 ²	1.63x10 ²	2.17x10 ²	2.71x10 ²	3.25x10 ²	3.80x10 ²
ø32	Push/Pull	—	1.22x10 ²	1.63x10 ²	2.04x10 ²	2.44x10 ²	3.26x10 ²	4.07x10 ²	4.88x10 ²	5.70x10 ²
ø40	Push/Pull	—	1.90x10 ²	2.53x10 ²	3.16x10 ²	3.80x10 ²	5.06x10 ²	6.33x10 ²	7.60x10 ²	8.86x10 ²
ø50	Push/Pull	—	2.98x10 ²	3.98x10 ²	4.98x10 ²	5.96x10 ²	7.95x10 ²	9.94x10 ²	1.19x10 ³	1.39x10 ³
ø63	Push/Pull	3.14x10 ²	4.70x10 ²	6.27x10 ²	7.84x10 ²	9.41x10 ²	1.25x10 ³	1.57x10 ³	1.88x10 ³	2.20x10 ³
ø80	Push/Pull	5.06x10 ²	7.60x10 ²	1.01x10 ³	1.26x10 ³	1.52x10 ³	2.03x10 ³	2.53x10 ³	3.04x10 ³	3.54x10 ³
ø100	Push/Pull	7.91x10 ²	1.19x10 ³	1.58x10 ³	1.98x10 ³	2.37x10 ³	3.16x10 ³	3.95x10 ³	4.74x10 ³	5.53x10 ³

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/
MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

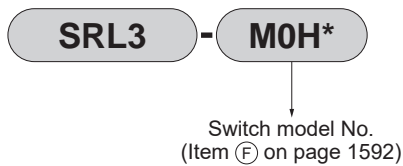
Spd
Contr

Ending

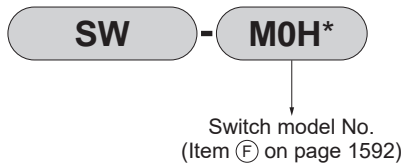
SCP*3
CMK2
CMA2
SCM
SCG
SCA2
SCS2
CKV2
CAV2/
COVPIN2
SSD2
SSG
SSD
CAT
MDC2
MVC
SMG
MSD/
MSDG
FC*
STK
SRL3
SRG3
SRM3
SRT3
MRL2
MRG2
SM-25
ShkAbs
FJ
FK
Spd
Contr
Ending

How to order switch (For configurations, refer to pages 1624 to 1626)

- Switch body + mounting bracket set (*1)



- Switch body only



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

* indicates lead wire length.

- Mounting bracket set (*2)

· M-switch



· T-switch



- Lead wire holder (*3)

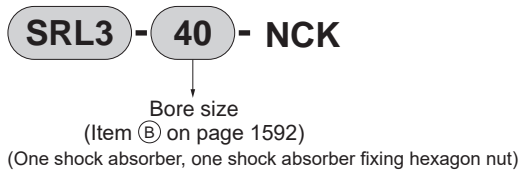


*1: "Switch body + mounting bracket set" does not include lead wire holders. Order lead wire holders separately if necessary.

*2: The mounting bracket is different between the M-switch and T-switch.

*3: The quantity of lead wire holders per set is 10.

- How to order discrete shock absorber



(Note) The shock absorber fixing hexagon nut for SRL3-40 is a made-to-order product.

Applicable shock absorber model No.

Model	Shock absorber model No.
SRL3-12	NCK-00-0.3-C
SRL3-16	NCK-00-0.3-C
SRL3-20	NCK-00-0.7-C
SRL3-25	NCK-00-1.2
SRL3-32	NCK-00-2.6
SRL3-40	NCK-00-7
SRL3-50	NCK-00-12
SRL3-63	NCK-00-12
SRL3-80	NCK-00-20
SRL3-100	NCK-00-20

- How to order discrete intermediate support bracket

For 00/LB



↓

Bore size
(Item ⑥ on page 1592)

For LB1



↓

Bore size
(Item ⑥ on page 1592)

- How to order full stroke adjusting bracket kit



↓

Bore size
(Item ⑥ on page 1592)

(For configurations, refer to "Full stroke adjusting bracket kit" on page 1625.)

- How to order repair parts



↓

Bore size (Item ⑥ on page 1592) Stroke (Item ⑤ on page 1592)

- How to order mounting bracket



↓

Mounting (Item ① on page 1592) Bore size (Item ⑥ on page 1592)
(Bracket x2, mounting bolt x4)

- How to order height adjustment plate set

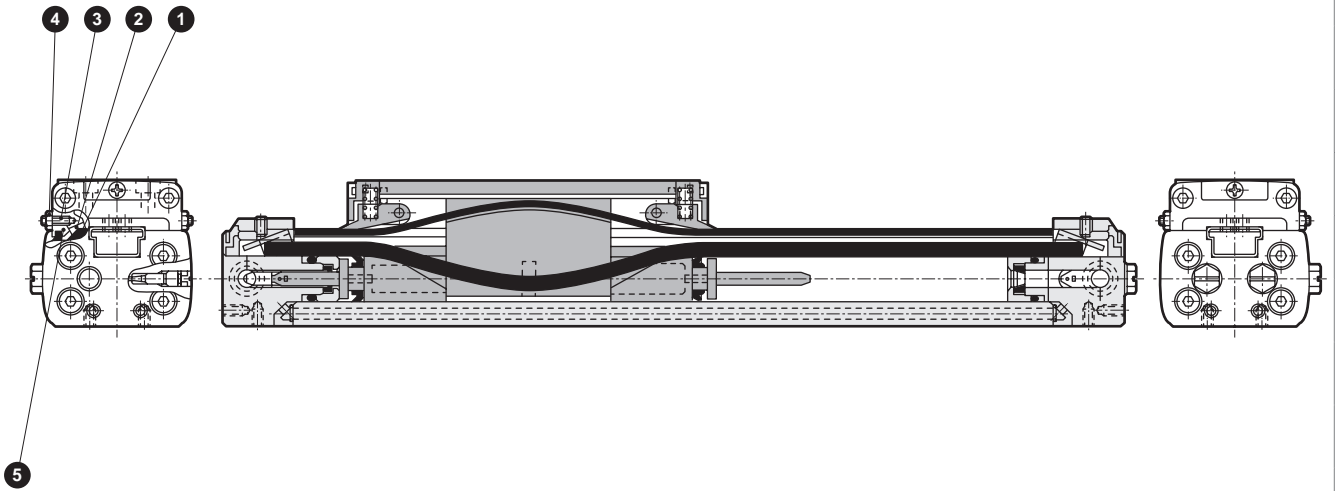


↓

Bore size (Item ⑥ on page 1592)

(Plate, mounting bolt x4)

Internal structure and parts list (ø12 to ø40 equiv.)



Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Slider	Acetal resin		4	Nut	Steel	Zinc chromate
2	Slider plate	Steel		5	Dust wiper	Acetal resin	
3	Adjusting screw	Alloy steel	Zinc chromate				

Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø12 or equiv.	SRL3-G-12K-*	
ø16 or equiv.	SRL3-G-16K-*	
ø20 or equiv.	SRL3-G-20K-*	1 5 8 9
ø25 or equiv.	SRL3-G-25K-*	18 21 22 26
ø32 or equiv.	SRL3-G-32K-*	27
ø40 or equiv.	SRL3-G-40K-*	

*1 : Specify the kit No. when placing an order. Specify the stroke for *.

*2: Part numbers 8 9 18 21 22 26 27 are the same as those on page 1579.

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/

COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/

MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

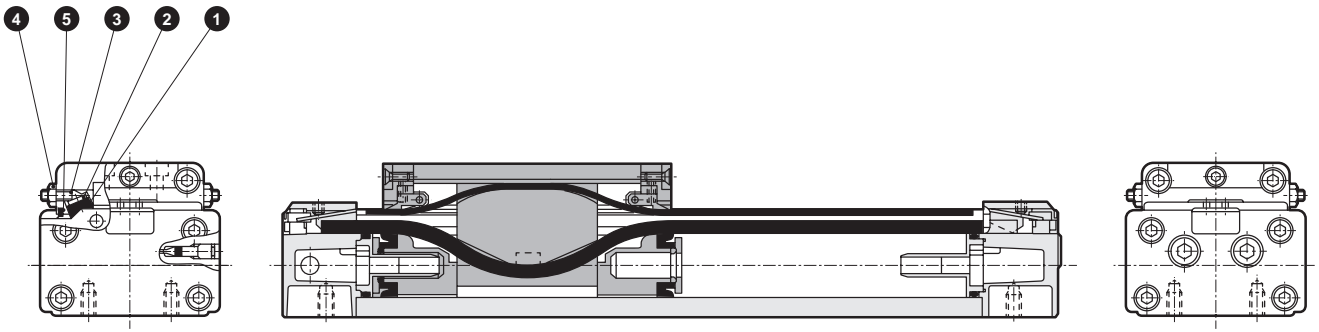
Spd

Contr

Ending

SCP*3 Internal structure and parts list (ø50, ø63 equiv.)

- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/
COVPIN2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/
MSDG
- FC*
- STK
- SRL3**
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd
Contr
- Ending



Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Slider	Acetal resin		4	Nut	Steel	Zinc chromate
2	Slider plate	Steel	Zinc chromate	5	Dust wiper	Acetal resin	
3	Adjusting screw	Alloy steel	Zinc chromate				

Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø50 or equiv.	SRL3-G-50K-*	① ⑤ ⑧ ⑨ ⑱
ø63 or equiv.	SRL3-G-63K-*	⑳ ㉑ ㉒ ㉓ ㉔

*1 : Specify the kit No. when placing an order. Specify the stroke for *.
 *2: Part numbers ⑧ ⑨ ⑱ ㉑ ㉒ ㉓ ㉔ are the same as those on page 1580.

Internal structure and parts list (ø80, ø100 equiv.)

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/
MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

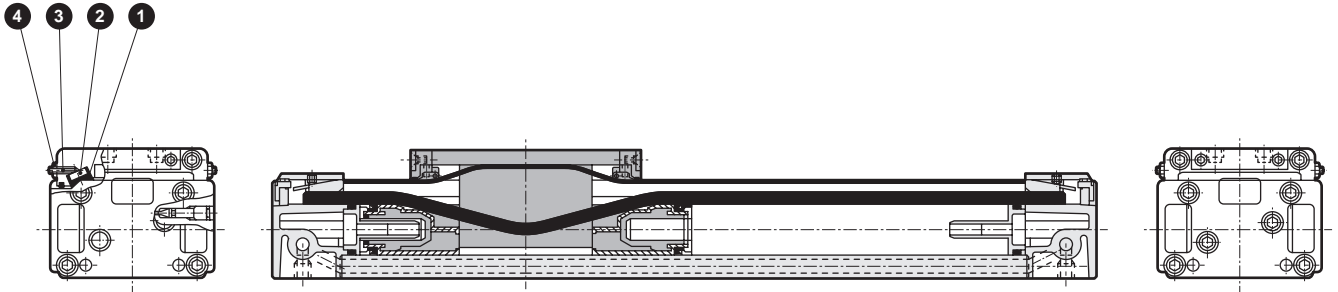
ShkAbs

FJ

FK

Spd
Contr

Ending



Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Slider	Acetal resin		3	Adjusting screw	Alloy steel	Zinc chromate
2	Slider plate	Steel	Zinc chromate	4	Nut	Steel	Zinc chromate

Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø80 or equiv.	SRL3-G-80K-*	① ⑧ ⑨ ⑱ ⑳
		㉒ ㉔ ㉕ ㉖ ㉗
ø100 or equiv.	SRL3-G-100K-*	㉘ ㉙

*1 : Specify the kit No. when placing an order. Specify the stroke for *.

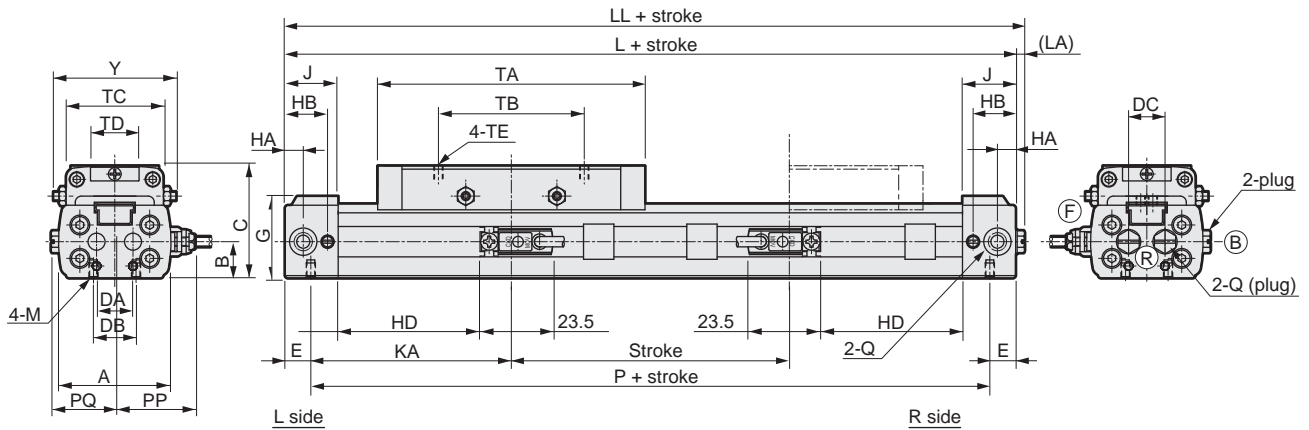
*2: Part numbers ⑧ ⑨ ⑱ ⑳ ㉒ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ are the same as those on page 1581.

SRL3-G Series

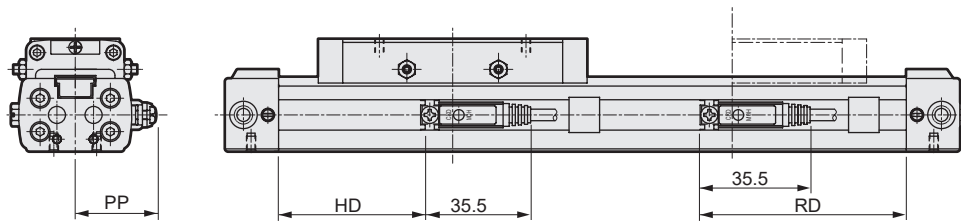


Dimensions (ø12 to ø20 equiv.)

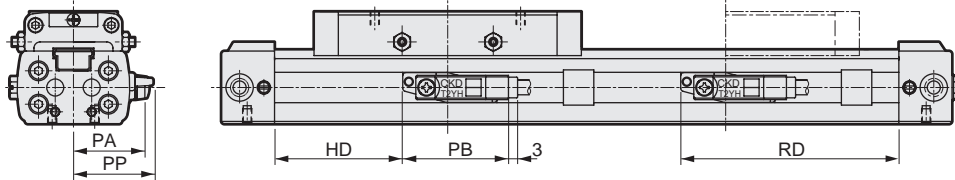
- With cylinder switch SRL3-G-**-**-**-M*V* (L-shaped lead wire)



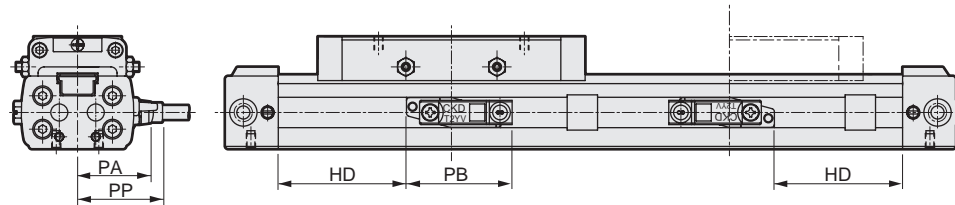
- With cylinder switch SRL3-G-**-**-**-M*H* (straight lead wire)



- With cylinder switch SRL3-G-**-**-**-T*H (T*W, T*Y, T2YD)



- With cylinder switch SRL3-G-**-**-**-T*V (T*W, T*Y)



RD: Max. sensitivity installation position HD: Max. sensitivity installation position

Code	A	B	C	DA	DB	DC	E	G	HA	HB	J	KA	L	LL	LA	M	P	PQ	Q	TA	TB	TC	TD	TE	Y	
SM-25	Bore size (mm)																									
	ø12 or equiv.	33	10.5	33	8	10	11	8.5	24	6	14	17.5	59.5	136	139	3	M3 depth 5	119	19	M5	81	42	29	13	M3 depth 5	36 to 38
	ø16 or equiv.	37	12	37	12	14	12	8.5	27	6	14	17.5	66	149	152	3	M3 depth 5	132	21	M5	88	48	32	15	M3 depth 5	39 to 41
ShkAbs	Bore size (mm)																									
	ø20 or equiv.	44	14	42	16	16	16	10.5	31	8.5	18.5	22	74	169	171.5	2.5	M4 depth 6.5	148	24.5	Rc1/8	100	60	38	18	M4 depth 6	43 to 45

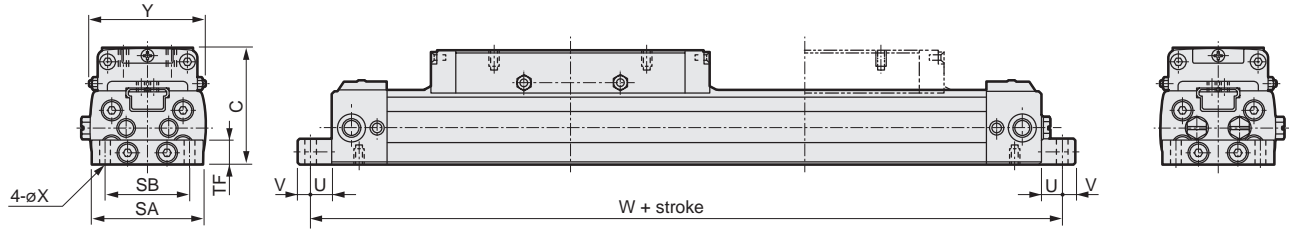
Code	With switch																	
	HD			RD			PA	PB			PP							
	M*	T*Y*	T*W	M*	T*Y*	T*W		T*Y*	T2YD	T*W*	M*V	M*H	T*YV	T*YH	T2YD	T*WV	T*WH	
Spd Contr	ø12 or equiv.	40.5	36	32	60.5	65	69	24.3	35	34	33.5	24.5	23	26	23	28.4	20.7	17.2
	ø16 or equiv.	47	42	38	67	72	76	26.3	35	34	33.5	26.5	25	28	25	30.4	22.7	19.2
Ending	ø20 or equiv.	52.5	48	44	72.5	77	81	29.3	35	34	33.5	29.5	28	31	28	33.4	25.7	22.2

*1: For dimensions with options and dimensions of accessories, refer to pages 1588, 1589, 1622 and 1623.

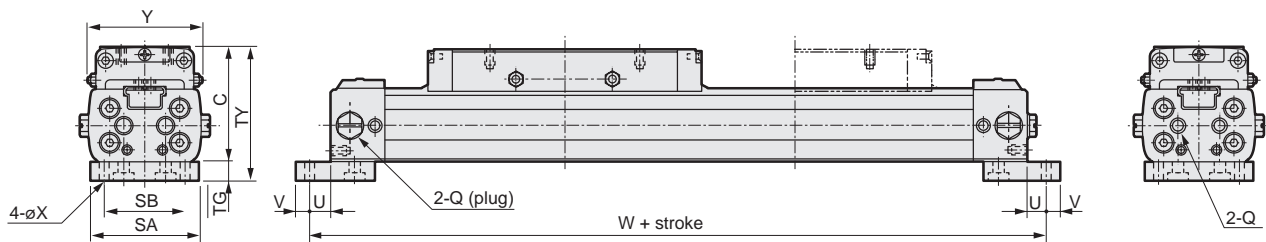
Dimensions (ø12 to ø20 equiv.)



- With foot bracket SRL3-G-LB-12 to 20



- With foot bracket SRL3-G-LB1-12 to 20



Code	With foot bracket (LB)							With foot bracket (LB1)							
	SA	SB	TF	U	V	W	X	SA	SB	TG	TY	U	V	W	X
ø12 or equiv.	32	24	8	6	4	148	3.4	32	24	6	39	6	4	148	3.4
ø16 or equiv.	35	26	8	6	4	161	3.4	35	26	6	43	6	4	161	3.4
ø20 or equiv.	43	33	10	6	6	181	4.5	43	33	8	50	6	6	181	4.5

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/
MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

Spd
Contr

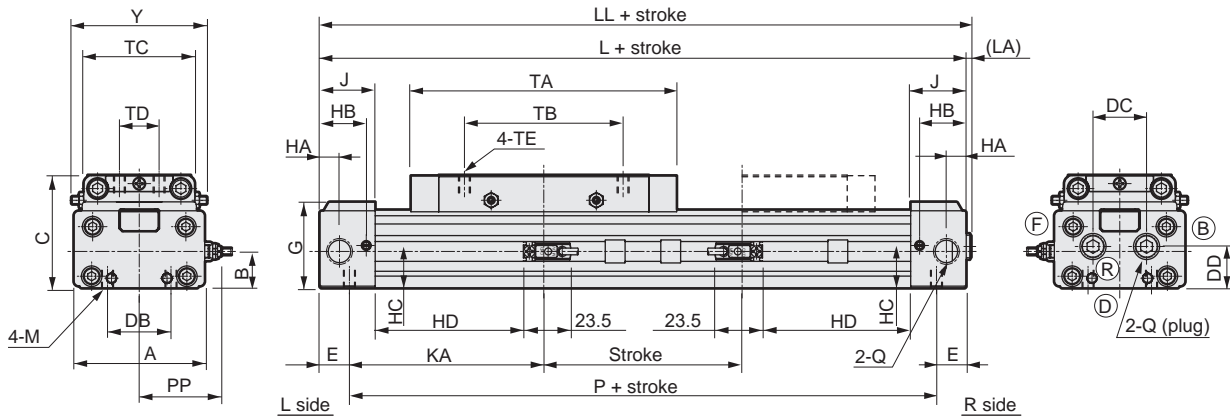
Ending

SRL3-G Series

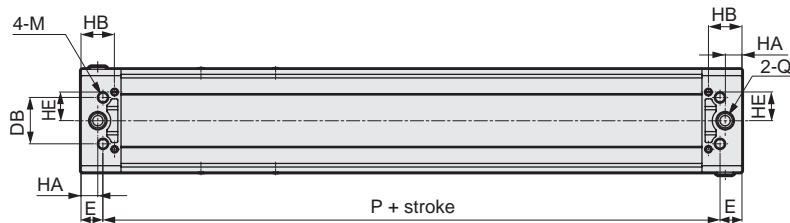


Dimensions (ø25 to ø63 equiv.)

- With cylinder switch SRL3-G-**-**_***-M*V* (L-shaped lead wire)



- Bottom piping (option code: D/S)



Code	A	B	C	DB	DC	DD	E	G	HA	HB	HC	HE	J	KA	L	LL	LA	M	P	Q	TA	TB	TC	TD	TE	Y
ø25 or equiv.	53	17	53	20	26	19	14	40.5	7.5	20	18.9	-	24	81	190	192	2	M6 depth 9	162	Rc1/8	122	70	48	20	M5 depth 6	58 to 61
ø32 or equiv.	66	18.5	57	32	27	21	15	43.5	10	23.5	21.5	17	28	98	226	228.5	2.5	M6 depth 9	196	Rc1/4	134	80	56	20	M6 depth 7.5	65 to 69
ø40 or equiv.	80	22	67	36	35	28	17	51.5	13	26	27	22.3	31	105	244	246.5	2.5	M8 depth 12	210	Rc1/4	148	90	68	30	M6 depth 9	77 to 81
ø50 or equiv.	96	28	82	45	35	35	23	61	15	33	35.3	11	39	106	258	260.5	2.5	M8 depth 12	212	Rc3/8	152	100	80	30	M8 depth 10.5	92 to 96
ø63 or equiv.	118	35	95	50	39	42	19	74	15	32	43	31	39	129	296	298.5	2.5	M10 depth 15	258	Rc3/8	168	110	102	40	M8 depth 11.5	114 to 118

Code	With switch															
	HD			RD			PA	PB			PP					
Bore size (mm)	M*	T*Y*	T*W	M*	T*Y*	T*W		T*Y*	T2YD	T*W*	M*V	M*H	T*YV	T*YH	T2YD	T*WV
ø25 or equiv.	60	56	52	82	86	90	35	34	33.5	34.5	33	36	33	38.4	30.7	27.2
ø32 or equiv.	74	70	66	96	100	104	35	34	33.5	41.5	40	43	40	45.4	37.7	34.2
ø40 or equiv.	80	76	72	102	106	110	35	34	33.5	48.5	47	50	47	52.4	44.7	41.2
ø50 or equiv.	79	75	71	101	105	109	35	34	33.5	56.5	55	58	55	60.4	52.7	49.2
ø63 or equiv.	98	94	90	120	124	128	35	34	33.5	67.5	66	69	66	71.4	63.7	60.2

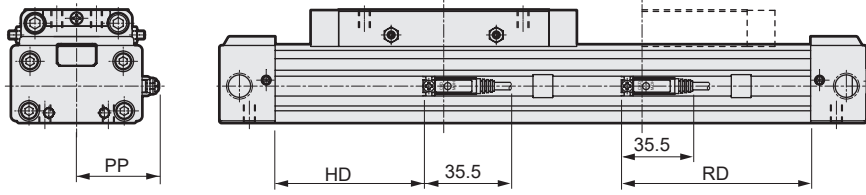
*1: For dimensions with options and dimensions of accessories, refer to pages 1588, 1589, 1622 and 1623.

*2: Bottom piping is not available for ø25.

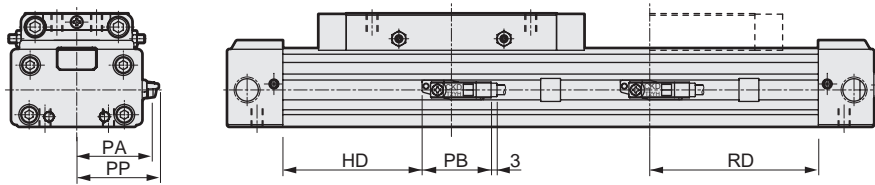
Dimensions (ø25 to ø63 equiv.)



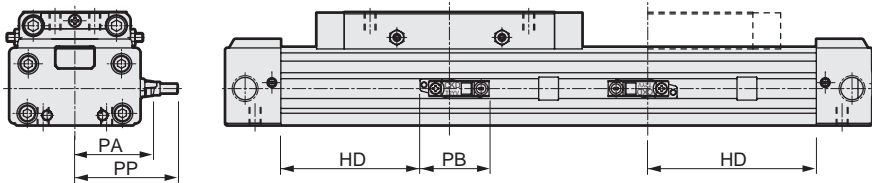
- With cylinder switch SRL3-G-**-**-***-M*H* (straight lead wire)



- With cylinder switch SRL3-G-**-**-***-T*H (T*W, T*Y, T2YD)

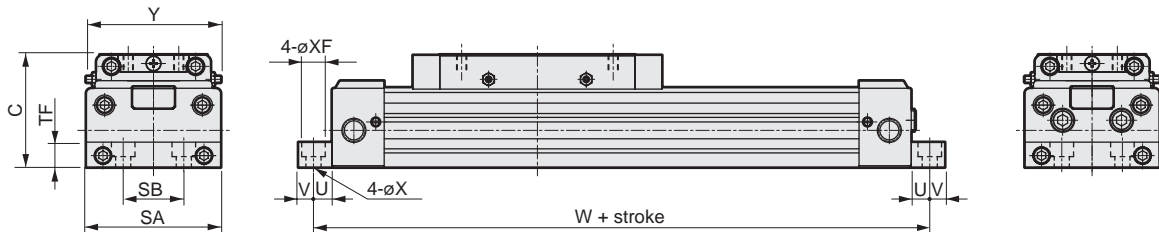


- With cylinder switch SRL3-G-**-**-***-T*V (T*W, T*Y)

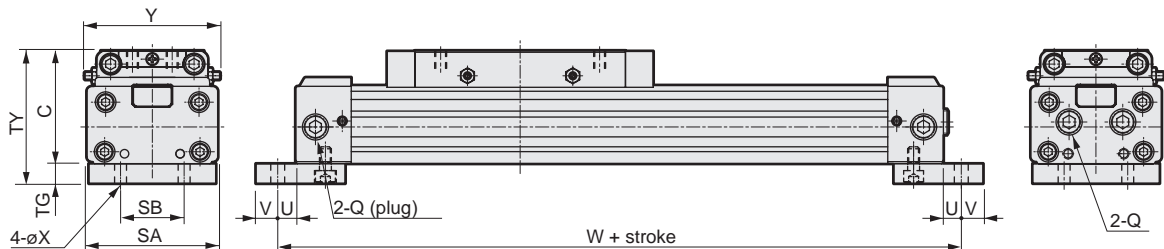


RD: Max. sensitivity installation position HD: Max. sensitivity installation position

- With foot bracket SRL3-G-LB-25 to 63



- With foot bracket SRL3-G-LB1-25, 32 (The mounting LB1 is not available for ø40 to ø63 or equiv.)



Code	With foot bracket (LB)								With foot bracket (LB1)							
	SA	SB	TF	U	V	W	X	XF	SA	SB	TG	TY	U	V	W	X
ø25 or equiv.	52	20	12	9	11	208	7	-	50	20	10	63	9	11	208	7
ø32 or equiv.	64	32	12	9	11	244	7	-	64	32	10	67	9	11	244	7
ø40 or equiv.	80	36	15	11	9	266	9	14 spot face depth 8.6	-	-	-	-	-	-	-	-
ø50 or equiv.	94	45	20	11	9	280	9	14 spot face depth 8.6	-	-	-	-	-	-	-	-
ø63 or equiv.	116	50	25	13	12	322	11	17.5 spot face depth 10.8	-	-	-	-	-	-	-	-

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

Spd Contr

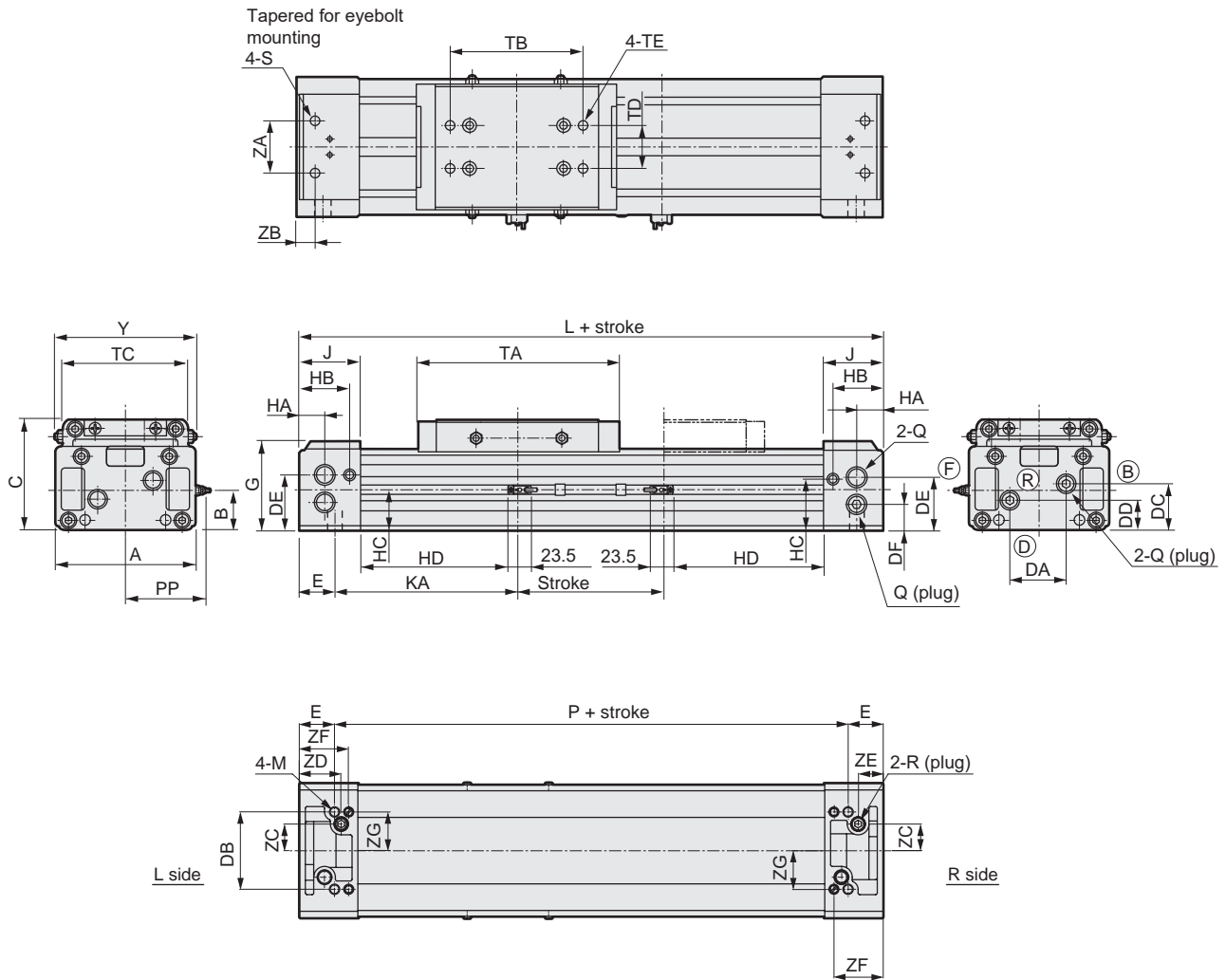
Ending

SRL3-G Series

Dimensions (ø80 to ø100 equiv.)



- With cylinder switch SRL3-G-**-**-**-M*V*
(L-shaped lead wire)



Code	A	B	C	DA	DB	DC	DD	DE	DF	E	G	HA	HB	HC	J	KA	L	M	P	Q	R	S	
ShkAbs																							
ø80 or equiv.	162	49	130	64	93	58	38	65	33	42	106	30	59	64.5	70	208	500	M12 depth 18	416	Rc1/2	Rc3/8	M12 depth 23	
FJ																							
ø100 or equiv.	198	61.5	150	73	108	71.5	47.5	81.5	41.5	43	125	30	69	76.5	80	222	530	M12 depth 18	444	Rc1/2	Rc1/2	M12 depth 23	

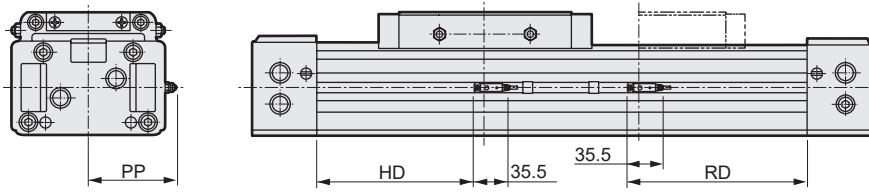
Code	TA	TB	TC	TD	TE	Y	ZA	ZB	ZC	ZD	ZE	ZF	ZG	With foot bracket							
ShkAbs														SA	SB	TF	U	V	W	X	
ø80 or equiv.	228	150	146	50	M12 depth 15	157 to 164	60	21	64	50	30	59	46.5	162	134	25	13	12	526	14	
FJ																					
ø100 or equiv.	238	160	170	60	M12 depth 15	183 to 190	60	21	73	55	30	69	54	198	160	30	15	15	560	14	

*1: For dimensions with options and dimensions of accessories, refer to pages 1588, 1589, 1622 and 1623.

Dimensions (ø80 to ø100 equiv.)

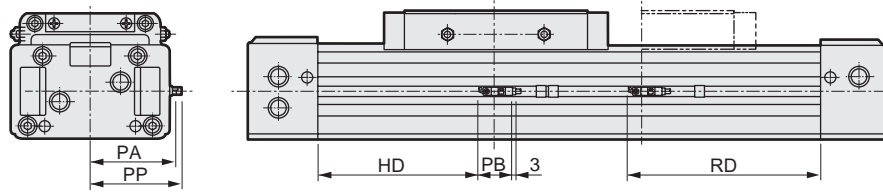


- With cylinder switch SRL3-G-**-***-M*H* (Axial lead wire)

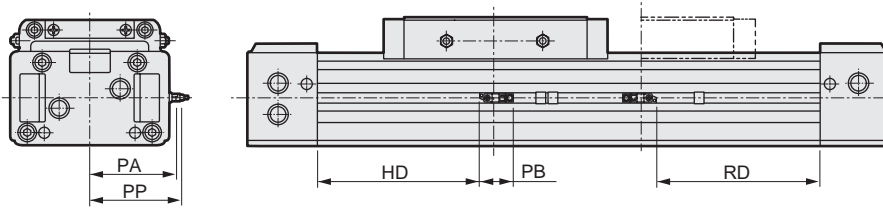


RD: Max. sensitivity mounting position
HD: Max. sensitivity mounting position

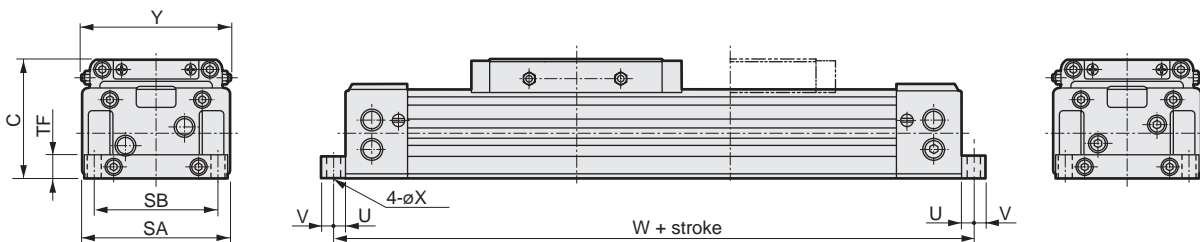
- With cylinder switch SRL3-G-**-***-T*H (T*W, T*Y, T2YD)



- With cylinder switch SRL3-G-**-***-T*V (T*T*W, T*Y)



- With foot bracket SRL3-G-LB-**-***



Code	With switch																
	HD			RD			PA	PB			PP						
	M*	T*Y*	T*W	M*	T*Y*	T*W		T*Y*	T2YD	T*W*	M*V	M*H	T*YV	T*YH	T2YD	T*WV	T*WH
ø80 or equiv.	170	165	161	190	195	199	87.3	35	34	33.5	87.5	86	89	86	91.4	83.7	80.2
ø100 or equiv.	175	170	166	195	200	204	105.3	35	34	33.5	105.5	104	107	104	109.4	101.7	98.2

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

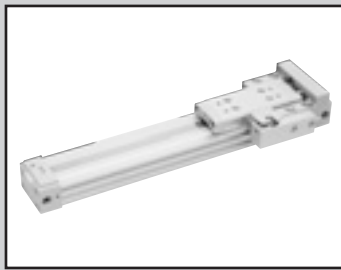
ShkAbs

FJ

FK

Spd Contr

Ending



Rodless cylinder double acting/position locking

SRL3-Q Series

- Bore size: $\varnothing 12$, $\varnothing 16$, $\varnothing 20$, $\varnothing 25$, $\varnothing 32$
 $\varnothing 40$, $\varnothing 50$, $\varnothing 63$, $\varnothing 80$, $\varnothing 100$



Specifications

Item	SRL3-Q											
	Bore size	mm	$\varnothing 12$	$\varnothing 16$	$\varnothing 20$	$\varnothing 25$	$\varnothing 32$	$\varnothing 40$	$\varnothing 50$	$\varnothing 63$	$\varnothing 80$	$\varnothing 100$
Actuation	Double acting											
Working fluid	Compressed air											
Max. working pressure	MPa	0.7 (≈ 100 psi, 7 bar)										
Min. working pressure	MPa	0.2 (≈ 29 psi, 2 bar)			0.15 (≈ 22 psi, 1.5 bar)				0.1 (≈ 15 psi, 1 bar)			
Proof pressure	MPa	1.05 (≈ 150 psi, 10.5 bar)										
Ambient temperature	$^{\circ}\text{C}$	5 (41 $^{\circ}\text{F}$) to 60 (140 $^{\circ}\text{F}$)										
Port size	Cylinder	M5		Rc1/8		Rc1/4		Rc3/8		Rc1/2		
	Position locking part	M5 Rc1/8										
Stroke tolerance	mm	$^{+2.0}_0$ (to 1000)			$^{+2.5}_0$ (to 3000)			$^{+3.0}_0$ (to 5000)				
Working piston speed	mm/s	50 to 2000 (standard piping) (*1)										
Cushion	Air cushion											
Lubrication	Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication. Once lubricated, the cylinder will need periodic lubrication.)											
Position locking mechanism	Attached to R side of cover											
Holding force	N	Max. thrust x 0.7										

- *1: (1) When the piston moves at 500 to 2000 mm/s, reduce the speed when entering the position locking mechanism to 500 mm/s or less. For common port piping, the working piston speed varies depending on the stroke. Contact CKD.
- (2) To reduce the speed, add an external shock absorber or deceleration circuit.
- (3) Apply grease regularly to the sliding part of the lock lever.

Allowable absorbed energy

Bore size (mm)	Cushioned		Without cushion	With shock absorber (initial set point)	
	Max absorbed energy (J)	Cushion stroke (mm)	Max absorbed energy (J)	Absorbed energy (J)	Effective stroke (mm)
$\varnothing 12$ or equiv.	0.03	14.5	0.003	2.4	5.5
$\varnothing 16$ or equiv.	0.22	19.2	0.007	2.4	5.5
$\varnothing 20$ or equiv.	0.59	22.2	0.010	5.7	7
$\varnothing 25$ or equiv.	1.40	20.9	0.015	10	9
$\varnothing 32$ or equiv.	2.57	23.5	0.030	18	13
$\varnothing 40$ or equiv.	4.27	23.9	0.050	50	16.5
$\varnothing 50$ or equiv.	9.13	24.9	0.072	86	21
$\varnothing 63$ or equiv.	17.4	29.6	0.138	86	21
$\varnothing 80$ or equiv.	40	45.8	0.393	143	25
$\varnothing 100$ or equiv.	67	45.8	0.622	143	25

Stroke

Bore size (mm)	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)
$\varnothing 12$ equiv.	200/300 400/500 600/700 800/900 1000	5000	5
$\varnothing 16$ equiv.			
$\varnothing 20$ equiv.			
$\varnothing 25$ equiv.			
$\varnothing 32$ equiv.			
$\varnothing 40$ equiv.			
$\varnothing 50$ equiv.			
$\varnothing 63$ equiv.			
$\varnothing 80$ equiv.			
$\varnothing 100$ equiv.			

* The custom stroke is available in 1 mm increments.

Number of installed M-switches and min. stroke (mm)

Switch quantity	1		2		3		4		5		6	
	M*V	M*H	M*V	M*H	M*V	M*H	M*V	M*H	M*V	M*H	M*V	M*H
Switch model No.	Bore size (mm)											
$\varnothing 12$ or equiv.	10	10	30	70	60	120	90	170	120	220	150	270
$\varnothing 16$ or equiv.	10	10	30	70	60	120	90	170	120	220	150	270
$\varnothing 20$ or equiv.	10	10	30	70	60	120	90	170	120	220	150	270
$\varnothing 25$ or equiv.	10	10	30	70	60	120	90	170	120	220	150	270
$\varnothing 32$ or equiv.	10	10	30	45	60	90	90	135	120	180	150	225
$\varnothing 40$ or equiv.	10	10	30	45	60	90	90	135	120	180	150	225
$\varnothing 50$ or equiv.	15	15	30	45	60	90	90	135	120	180	150	225
$\varnothing 63$ or equiv.	15	15	30	45	60	90	90	135	120	180	150	225
$\varnothing 80$ or equiv.	25		50		100		150		200		250	
$\varnothing 100$ or equiv.	25		50		100		150		200		250	

Number of installed T-switches and min. stroke (mm)

Switch quantity	1		2		3		4		5		6	
	T*V	T*H	T*V	T*H	T*V	T*H	T*V	T*H	T*V	T*H	T*V	T*H
Switch model No.	Bore size (mm)											
$\varnothing 12$ or equiv.	5	5	45	70	85	120	125	170	165	220	205	270
$\varnothing 16$ or equiv.	5	5	45	70	85	120	125	170	165	220	205	270
$\varnothing 20$ or equiv.	5	5	45	70	85	120	125	170	165	220	205	270
$\varnothing 25$ or equiv.	10	10	45	70	85	120	125	170	165	220	205	270
$\varnothing 32$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\varnothing 40$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\varnothing 50$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\varnothing 63$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\varnothing 80$ or equiv.	15	15	45	50	85	100	125	150	165	200	205	250
$\varnothing 100$ or equiv.	15	15	45	50	85	100	125	150	165	200	205	250



Be sure to read the Safety Precautions for **Position locking** on pages 1639 and 1642 to 1644 before use.

Switch specifications (M-switch)

● 1-color/2-color LED

Item	2-wire proximity		3-wire proximity		
	M2V,M2H	M2WV (2-color LED)	M3H/M3V	M3PH/M3PV (made to order)	M3WV
Applications	Dedicated for programmable controller		For programmable controller, relay, IC circuit, compact solenoid valve		
Output method	-		NPN output	PNP output	NPN output
Power supply voltage	-		4.5 to 28 VDC		10 to 28 VDC
Load voltage	10 to 30 VDC		30 VDC or less		
Load current	5 to 30 mA		100 mA or less	100 mA or less	100 mA or less
Indicator	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	1 mA or less		10 μA or less	0.05 mA or less	10 μA or less
Weight	g 1 m:22 3 m:57 5 m:93				
Item	MOV,M0H		M5V,M5H		
	M0V,M0H		M5V,M5H		
Applications	For programmable controller, relay		For programmable controller, relay, IC circuit (without indicator lamp), serial connection		
Power supply voltage	-		-		
Load voltage	12/24 VDC	110 VAC	5/12/24 VDC		110 VAC or less
Load current	5 to 50 mA	7 to 20 mA	50 mA or less		20 mA or less
Indicator	LED (Lit when ON)		No indicator lamp		
Leakage current	0 mA				
Weight	g 1 m:22 3 m:57 5 m:93				

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

Switch specifications (T-switch)

● 2-color LED

Item	2-wire proximity			3-wire proximity		
	T2YH/T2YV	T2WH/T2WV		T3YH/T3YV	T3WH/T3WV	
Applications	Dedicated for programmable controller			For programmable controller, relay		
Output method	-			NPN output	NPN output	
Power supply voltage	-			10 to 28 VDC		
Load voltage	10 to 30 VDC	24 VDC ±10%		30 VDC or less		
Load current	5 to 20 mA			50 mA or less		
Indicator	Red/green LED (Lit when ON)	Red/green LED (Lit when ON)		Red/green LED (Lit when ON)	Red/green LED (Lit when ON)	
Leakage current	1 mA or less			10 μA or less		
Weight	g 1 m:33 3 m:87 5 m:142 1 m:18 3 m:49 5 m:80			1 m:33 3 m:87 5 m:142 1 m:18 3 m:49 5 m:80		

● For AC magnetic field

Item	2-wire proximity		
	T2YD,T2YDT (*4)		
Applications	Dedicated for programmable controller		
Indicator	Red/green LED (Lit when ON)		
Load voltage	24 VDC ±10%		
Load current	5 to 20 mA		
Internal voltage drop	6V or less		
Leakage current	1.0 mA or less		
Weight	g 1 m:61 3 m:166 5 m:272		

*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: AC magnetic field proof switch (T2YD/T2YDT) cannot be used in DC magnetic field.

Cylinder weight

Unit: kg

Bore size (mm)	Weight for 0 mm stroke			Switch weight	Mounting bracket weight		Additional weight per St = 100mm
	Basic (00)	Foot			T type	M type	
		(LB)	(LB1)				
ø12 or equiv.	0.38	0.39	0.40	Refer to the weight in the switch specifications.	0.005	0.001	0.10
ø16 or equiv.	0.47	0.48	0.50				0.13
ø20 or equiv.	0.74	0.76	0.80				0.18
ø25 or equiv.	1.5	1.6	1.6				0.28
ø32 or equiv.	2.4	2.5	2.6				0.36
ø40 or equiv.	3.6	3.7	-				0.53
ø50 or equiv.	6.0	6.1	-				0.75
ø63 or equiv.	8.8	9.1	-				1.11
ø80 or equiv.	22.4	23.0	-				2.32
ø100 or equiv.	30.5	31.5	-				3.38

SCP*3
CMK2
CMA2
SCM
SCG
SCA2
SCS2
CKV2
CAV2/
COVP/N2
SSD2
SSG
SSD
CAT
MDC2
MVC
SMG
MSD/
MSDG
FC*
STK
SRL3
SRG3
SRM3
SRT3
MRL2
MRG2
SM-25
ShkAbs
FJ
FK
Spd
Contr
Ending

SRL3-Q Series

How to order

No switch (built-in magnet for switch)

SRL3-Q-00-12-B-200-B

With switch (built-in magnet for switch)

SRL3-Q-00-12-B-200-M0H-R-B

A Mounting
*1, *2

B Bore size

C Port thread

D Cushion

E Stroke

F Switch model No.

*4

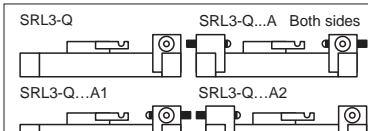
G Switch quantity

H Option

*5, *6
*7, *8
*9, *10

⚠ Precautions for model No. selection

- *1 : Mounting bracket will be shipped assembled with the product.
- *2 : For 12, 16, 20, 25 and 32 bore sizes with option code "R" or "T", the mounting will be "00" or "LB1". (Piping with "LB" is not possible for option codes "R" and "T".)
- *3 : Refer to page 1604 for the min. stroke with switch.
- *4 : Switches other than (F) Switch model No. are also available. (Made to order) Refer to Ending Page 1 for details.
- *5 : The full stroke adjusting bracket on R side is provided as standard for the position locking. Therefore, if "A1" is selected, a shock absorber only is added to R side. In the case of "A", R side is position locking and full stroke adjustable with shock absorber, and L side is full stroke adjustable with shock absorber. (Figure below)



6 : "" of L* and R* indicates the number of sets. When more than one set are necessary, specify "L2" (for LB) or "N2" (for LB1).
2 pcs./set

- *7 : For the port and cushion needle position codes, refer to dimensions on pages 1582 to 1587.
- *8 : In the case of the standard with ø12 to ø25, remove the cover, attach a flat nut and install the full stroke adjusting bracket. A flat nut is attached to option "A3" to enable retrofitting the full stroke adjusting bracket without removing the cover.
- *9 : In "H", the thread size for ø12 and ø16 will be "M4" and that for ø20 will be "M5".
- *10 : Check the option combinations in "Option selection table" on the next page.
- *11 : Copper and PTFE free as standard. (except for type with shock absorber)

[Example of model No.]

SRL3-Q-00-12B-200-M0H-R-B

Model: Rodless cylinder position locking

- A** Mounting : Basic
- B** Bore size : ø12 mm
- C** Port thread : M5
- D** Cushion : Both sides cushioned
- E** Stroke : 200 mm
- F** Switch model No. : Reed M0H switch, lead wire 1 m
- G** Switch quantity : 1 on R side
- H** Option : Port position F, cushion needle position B

Code	Description												
A Mounting													
00	Basic												
LB	Axial foot												
LB1	Axial foot (ø12 to ø32 only)												
B Bore size (mm)													
12	ø12												
16	ø16												
20	ø20												
25	ø25												
32	ø32												
40	ø40												
50	ø50												
63	ø63												
80	ø80												
100	ø100												
C Port thread													
Blank	Rc thread (M5 for ø12 and ø16)												
N	NPT thread (ø20 or more) (made-to-order product)												
G	G thread (ø20 or more) (made-to-order product)												
D Cushion													
B	Both sides cushioned												
R	R side cushioned												
L	L side cushioned												
N	Without cushion												
E Stroke (mm)													
Bore size	Stroke *3	Custom stroke											
ø12 to ø100	5 to 5000	In 1 mm increments											
F Switch model No.													
Axial lead wire	Radial lead wire	Contact	Voltage	Indicator	Lead wire								
M0H*	M0V*	Reed	AC	DC	1-color LED								
M5H*	M5V*		●	●		No indicator lamp							
M2H*	M2V*		●	●	1-color LED	2-wire							
-	M2WV*		●	●	2-color LED								
M3H*	M3V*	Proximity	●	●	1-color LED	3-wire							
-	M3WV*		●	●	2-color LED								
M3PH*	M3PV*		●	●	1-color LED (custom)	3-wire							
T2WH*	T2WV*		●	●	2-color LED								
T2YH*	T2YV*		●	●		2-color LED	2-wire						
T3WH*	T3WV*		●	●	2-color LED								
T3YH*	T3YV*	●	●	2-color LED		3-wire							
T2YD*	-	●	●		2-color LED		2-wire						
T2YDT*	-	●	●	for AC magnetic field									
* Lead wire length													
Blank	1 m (standard)												
3	3 m (option)												
5	5 m (option)												
G Switch quantity													
R	1 on R side												
L	1 on L side												
D	2												
T	3												
4	4 (when there are more than 4 switches, indicate switch quantity.)												
H Option													
		Bore size (ø)		12	16	20	25	32	40	50	63	80	100
A	Both-sides full stroke adjustable, shock absorber		●	●	●	●	●	●	●	●	●	●	●
A1	R side full stroke adjustable, shock absorber		●	●	●	●	●	●	●	●	●	●	●
A2	L side full stroke, adjustable, shock absorber		●	●	●	●	●	●	●	●	●	●	●
A3	Full stroke adjustable, adjusting bracket to be added		●	●	●	●	●	●	●	●	●	●	●
Y	Floating fitting		●	●	●	●	●	●	●	●	●	●	●
Y1	Thin floating fitting		●	●	●	●	●	●	●	●	●	●	●
L*	Intermediate support bracket (for 00, LB)		●	●	●	●	●	●	●	●	●	●	●
N*	Intermediate support bracket (for LB1)		●	●	●	●	●	●	●	●	●	●	●
H	Larger thread for table installation		●	●	●	●	●	●	●	●	●	●	●
U	Height adjustment plate		●	●	●	●	●	●	●	●	●	●	●
Blank	:F (Standard)		●	●	●	●	●	●	●	●	●	●	●
R	:R (Common port)		●	●	●	●	●	●	●	●	●	●	●
B	:F		●	●	●	●	●	●	●	●	●	●	●
T	:R (Common port)		●	●	●	●	●	●	●	●	●	●	●
D	:D		●	●	●	●	●	●	●	●	●	●	●
S	:D		●	●	●	●	●	●	●	●	●	●	●
X	:F (Common port)		●	●	●	●	●	●	●	●	●	●	●

Option selection table

● : Available ■ : Not available

		Option																
		Both side full stroke adjustable, with shock absorber	R side full stroke adjustable, with shock absorber	L side full stroke adjustable, with shock absorber	Full stroke adjustable with adjusting bracket to be added later	Floating fitting	Thin floating fitting	Intermediate support bracket (for 00, LB)	Intermediate support bracket (for LB1)	Larger thread for table installation	Height adjustment plate	Port position F, cushion needle position F (standard)	Port position R, cushion needle position F (common port)	Port position F, cushion needle position B	Port position R, cushion needle position B (common port)	Port position D, cushion needle position F	Port position D, cushion needle position D	Port position F, cushion needle position F (common port)
Code		A	A1	A2	A3	Y	Y1	L*	N*	H	U	Blank	R	B	T	D	S	X
Option	A	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	A1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	A2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	A3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Y	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Y1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	L*	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	N*	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	U	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Blank	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	R	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	T	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	D	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	S	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
X	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

Specifications for rechargeable battery

(Catalog No. CC-1226A)

● Design compatible with rechargeable battery manufacturing process

SRL3 - Q - - P4*

*1: Some combinations are not available depending on the bore size. Be sure to check the **H** Option in "How to order" on the previous page.

*2: LB1 with port position D is not possible. (ø25, ø32)

Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa							
		0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7
ø12	Push/Pull	-	-	27.7	41.5	55.3	69.1	83.0	96.8
ø16	Push/Pull	-	-	43.2	64.8	86.4	1.08x10 ²	1.30x10 ²	1.51x10 ²
ø20	Push/Pull	-	-	62.9	94.4	1.26x10 ²	1.57x10 ²	1.89x10 ²	2.20x10 ²
ø25	Push/Pull	-	81.4	1.08x10 ²	1.63x10 ²	2.17x10 ²	2.71x10 ²	3.25x10 ²	3.80x10 ²
ø32	Push/Pull	-	1.22x10 ²	1.63x10 ²	2.44x10 ²	3.26x10 ²	4.07x10 ²	4.88x10 ²	5.70x10 ²
ø40	Push/Pull	-	1.90x10 ²	2.53x10 ²	3.80x10 ²	5.06x10 ²	6.33x10 ²	7.60x10 ²	8.86x10 ²
ø50	Push/Pull	-	2.98x10 ²	3.98x10 ²	5.96x10 ²	7.95x10 ²	9.94x10 ²	1.19x10 ³	1.39x10 ³
ø63	Push/Pull	3.14x10 ²	4.70x10 ²	6.27x10 ²	9.41x10 ²	1.25x10 ³	1.57x10 ³	1.88x10 ³	2.20x10 ³
ø80	Push/Pull	5.06x10 ²	7.60x10 ²	1.01x10 ³	1.52x10 ³	2.03x10 ³	2.53x10 ³	3.04x10 ³	3.54x10 ³
ø100	Push/Pull	7.91x10 ²	1.19x10 ³	1.58x10 ³	2.37x10 ³	3.16x10 ³	3.95x10 ³	4.74x10 ³	5.53x10 ³

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

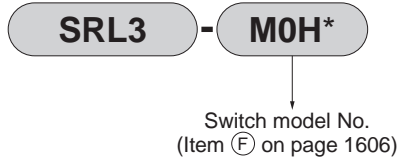
FK

Spd Contr

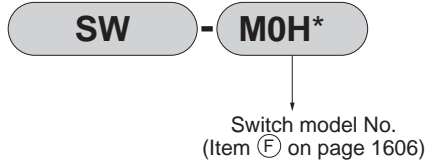
Ending

How to order switch (For configurations, refer to pages 1624 to 1626)

- Switch body + mounting bracket set (*1)



- Switch body only



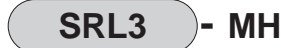
* Lead wire length	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

* indicates lead wire length.

- Mounting bracket set (*2)



- Lead wire holder (*3)

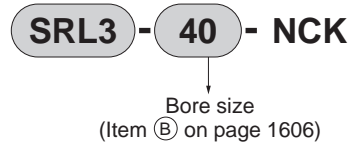


*1: "Switch body + mounting bracket set" does not include lead wire holders. Order lead wire holders separately if necessary.

*2: The mounting bracket is different between the M-switch and T-switch.

*3: The quantity of lead wire holders per set is 10.

- How to order discrete shock absorber



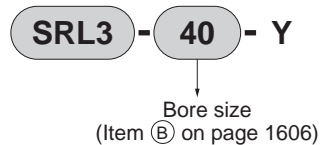
(One shock absorber, one shock absorber fixing hexagon nut)

(Note) The shock absorber fixing hexagon nut for SRL3-40 is a made-to-order product.

Applicable shock absorber model No.

Model	Shock absorber model No.
SRL3-12	NCK-00-0.3-C
SRL3-16	NCK-00-0.3-C
SRL3-20	NCK-00-0.7-C
SRL3-25	NCK-00-1.2
SRL3-32	NCK-00-2.6
SRL3-40	NCK-00-7
SRL3-50	NCK-00-12
SRL3-63	NCK-00-12
SRL3-80	NCK-00-20
SRL3-100	NCK-00-20

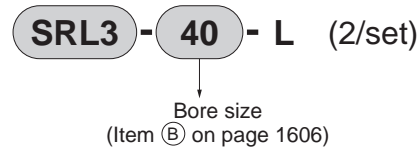
- How to order floating fitting set



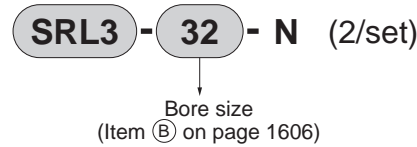
(Mount, mount base, pin, plain washer, pan head machine screw with spring washer)

- How to order discrete intermediate support bracket

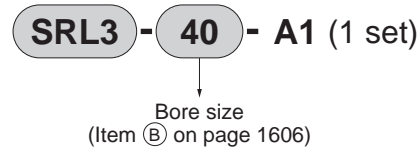
For 00/LB



For LB1

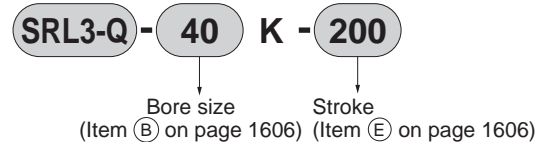


- How to order full stroke adjusting bracket kit

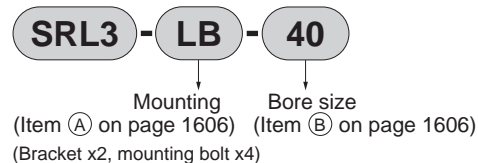


(For configurations, refer to "Full stroke adjusting bracket kit" on page 1625.)

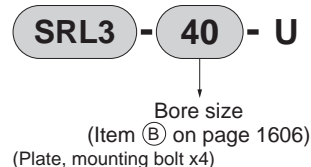
- How to order repair parts



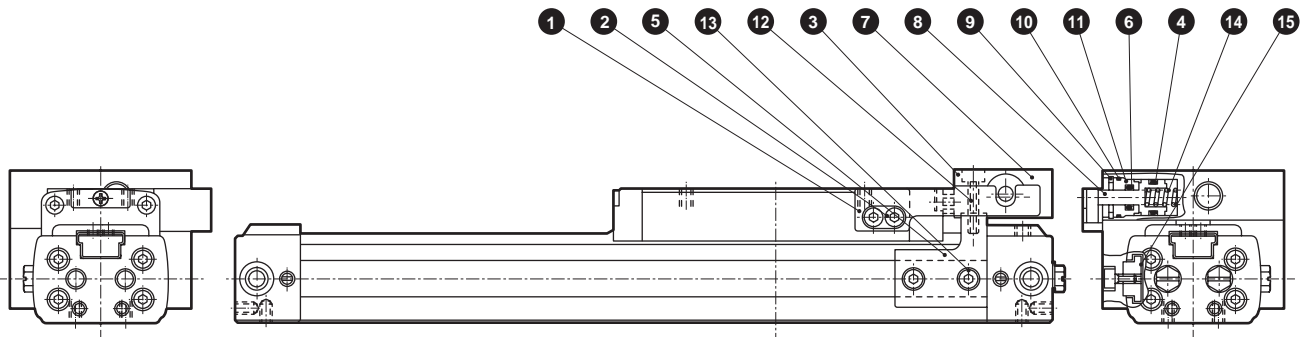
- How to order mounting bracket



- How to order height adjustment plate set



Internal structure and parts list (ø12 to ø25 equiv.)



Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Lock lever	Alloy steel	Chrome plating	9	C-snap ring for hole	Steel	
2	Hexagon socket head cap screw	Alloy steel	Zinc chromate	10	Gasket	Nitrile rubber	
3	Stopper	Steel	Black finish	11	Rod cover	Aluminum alloy	Alumite
4	Piston packing	Nitrile rubber		12	Hexagon socket head cap screw	Alloy steel	Zinc chromate
5	Adaptor	Steel	Zinc chromate	13	Hexagon socket head cap screw	Alloy steel	Zinc chromate
6	Rod packing	Nitrile rubber		14	Spring	Steel	Electrodeposition
7	Position locking mechanism	Aluminum alloy	Alumite	15	Flat nut	Alloy steel	Black finish
8	Lock pin (stopper piston)	Alloy steel	Chrome plating				

Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø12 or equiv.	SRL3-Q-12K-*	
ø16 or equiv.	SRL3-Q-16K-*	④ ⑥ ⑩ ⑧ ⑨ ⑱
ø20 or equiv.	SRL3-Q-20K-*	⑳ ㉑ ㉒ ㉓ ㉔
ø25 or equiv.	SRL3-Q-25K-*	

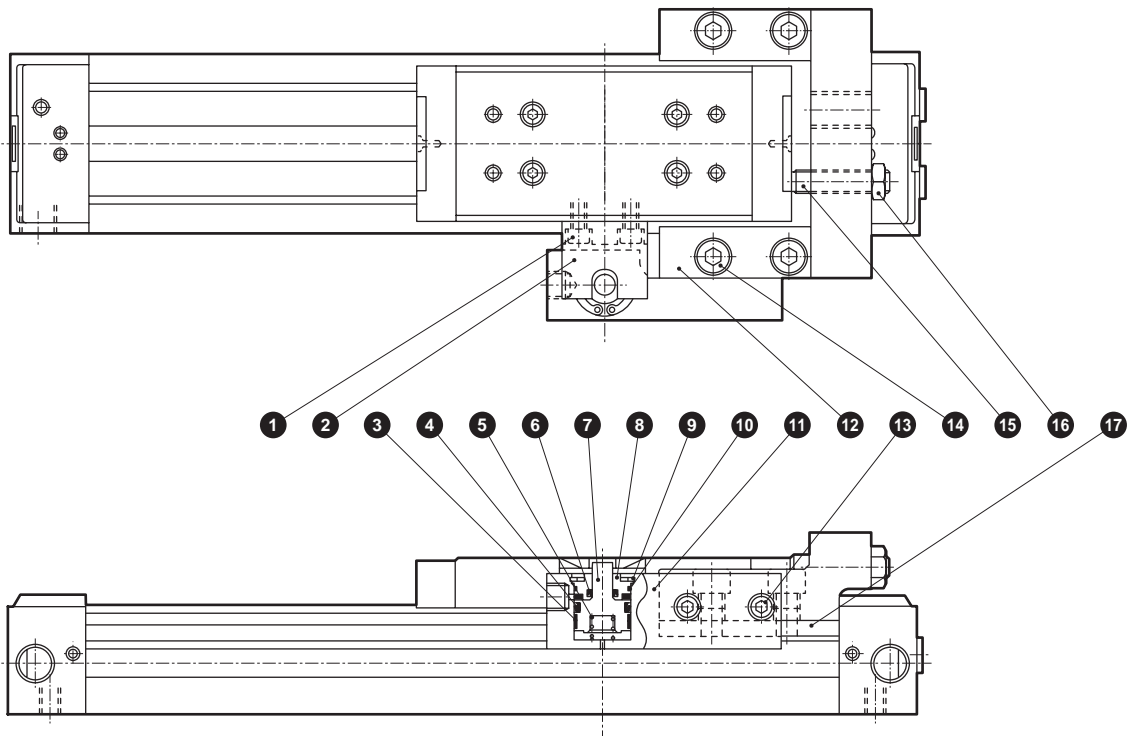
*1 : Specify the kit No. when placing an order. Specify the stroke for *.

*2: Part numbers ⑧⑨⑱⑳㉑㉒㉓㉔ are the same as those on page 1579.

- SCP*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/COVP/N2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/MSDG
- FC*
- STK
- SRL3**
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd Contr
- Ending

SRL3-Q Series

SCP*3 Internal structure and parts list (ø32 to ø63 equiv.)



Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Hexagon socket head cap screw	Alloy steel	Zinc chromate	10	Gasket	Nitrile rubber	
2	Lock lever	Alloy steel	Zinc chromate	11	Position locking mechanism	Aluminum alloy	Alumite
3	Wear ring	Acetal resin		12	Adaptor	Steel	Zinc chromate
4	Piston packing	Nitrile rubber		13	Hexagon socket head cap screw	Alloy steel	Zinc chromate
5	Spring	Steel	Electrodeposition	14	Hexagon socket head cap screw	Alloy steel	Zinc chromate
6	Rod packing	Nitrile rubber		15	Hexagon socket set screw	Alloy steel	Zinc chromate
7	Lock pin	Alloy steel	Chrome plating	16	Hexagon nut	Steel	Zinc chromate
8	Rod cover	Aluminum alloy	Alumite	17	Adaptor nut	Alloy steel	Zinc chromate
9	C-snap ring for hole	Steel					

Repair parts list

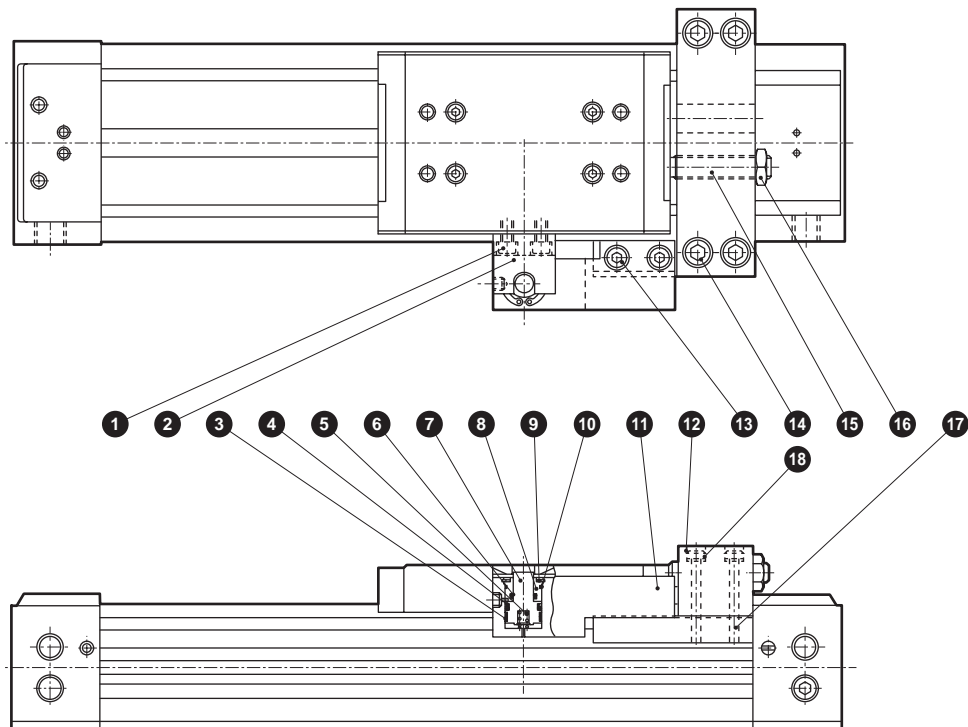
Bore size (mm)	Kit No.	Repair parts No.
ø32 or equiv.	SRL3-Q-32K-*	③ ④ ⑥
ø40 or equiv.	SRL3-Q-40K-*	⑩ ⑧ ⑨ ⑱ ⑲ ⑳
ø50 or equiv.	SRL3-Q-50K-*	⑳ ㉓ ㉔ ㉕ *3
ø63 or equiv.	SRL3-Q-63K-*	

*1 : Specify the kit No. when placing an order. Specify the stroke for *.

*2 : Part numbers (⑧ ⑨ ⑱ ⑲ ㉔ ㉕ ㉓ ㉔ ㉕) are the same as those on pages 1579 and 1580.

*3 : ㉕ is only applicable to ø50 equiv./ø63 equiv.

Internal structure and parts list (ø80, ø100 equiv.)



Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Hexagon socket head cap screw	Alloy steel	Zinc chromate	10	Gasket	Nitrile rubber	
2	Lock lever	Alloy steel	Zinc chromate	11	Position locking mechanism	Aluminum alloy	Alumite
3	Wear ring	Acetal resin		12	Adaptor	Steel	Zinc chromate
4	Piston packing	Nitrile rubber		13	Hexagon socket head cap screw	Alloy steel	Zinc chromate
5	Spring	Steel	Electrodeposition	14	Hexagon socket head cap screw	Alloy steel	Zinc chromate
6	Rod packing	Nitrile rubber		15	Hexagon socket set screw	Alloy steel	Zinc chromate
7	Lock pin	Alloy steel	Chrome plating	16	Hexagon nut	Steel	Zinc chromate
8	Rod cover	Aluminum alloy	Alumite	17	Adaptor nut	Alloy steel	Zinc chromate
9	C-snap ring for hole	Steel		18	Conical spring washer	Steel	

Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø80 or equiv.	SRL3-Q-80K-*	3 4 6 10 (8) (9) (18) (21)
ø100 or equiv.	SRL3-Q-100K-*	(22) (26) (27) (28) (29) (32) (33)

*1 : Specify the kit No. when placing an order. Specify the stroke for *.

*2: Part numbers (8)(9)(18)(21)(22)(26)(27)(28)(29)(32)(33) are the same as those on page 1581.

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/

COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/

MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK


Spd

Contr

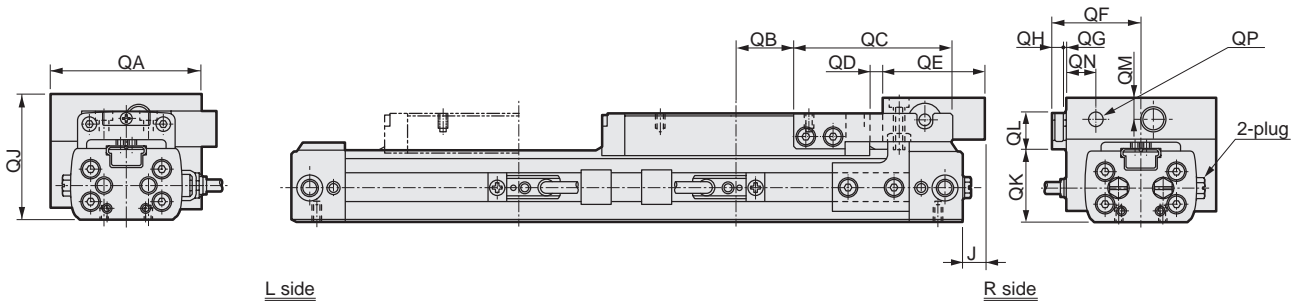
Ending

SRL3-Q Series

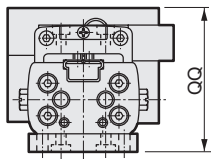
SCP*3
CMK2
CMA2
SCM
SCG
SCA2
SCS2
CKV2
CAV2/
COVPIN2
SSD2
SSG
SSD
CAT
MDC2
MVC
SMG
MSD/
MSDG
FC*
STK
SRL3
SRG3
SRM3
SRT3
MRL2
MRG2
SM-25
ShkAbs
FJ
FK
Spd
Contr
Ending

Dimensions (ø12 to ø25 equiv.)  *1: For dimensions other than those below, refer to pages 1582 to 1585.
*2: For dimensions with options and dimensions of accessories, refer to pages 1588, 1589, 1622 and 1623.


● SRL3-Q



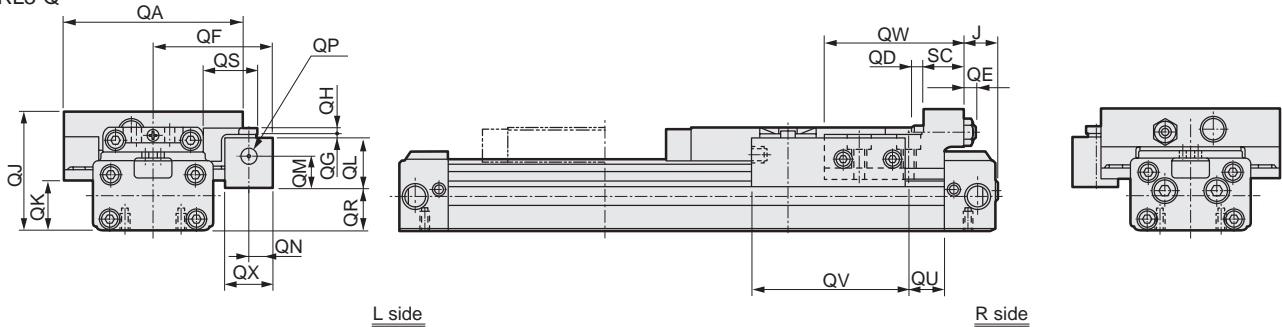
● With foot bracket SRL3-Q-LB1-**-***



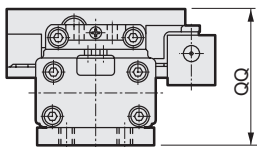
Code	J	QA	QB	QC	QD	QE	QF	QG	QH	QJ	QK	QL	QM	QN	QP	QQ
ø12 or equiv.	0	45	19	46	2.5	25	27.5	1	4	40	21.5	12.5	7	9.5	M5	46
ø16 or equiv.	0	49	19	52	2.5	28	29.5	1	4	42	25	12	7	9.5	M5	48
ø20 or equiv.	-1	57	24	53	2.5	31	33.5	1	4	48	29	13	8	10.5	Rc1/8	56
ø25 or equiv.	5.5	77	26	67.5	2.5	37	43.5	1	4	62.5	36	17	8	10.5	Rc1/8	72.5

Dimensions (ø32 to ø63 equiv.)  *1: For dimensions other than those below, refer to pages 1584 and 1585.
*2: For dimensions with options and dimensions of accessories, refer to pages 1588, 1589, 1622 and 1623.

● SRL3-Q



● With foot bracket SRL3-Q-LB1-32-***



Code	J	QA	QD	QE	QF	QG	QH	QJ	QK	QL	QM	QN	QP	QQ	QR	QS	QU	QV	QW	QX	SC
ø32 or equiv.	19.5	98	7	6	65	2	4	66.5	28	27.5	18	13	Rc1/8	88.5	23.5	29	21	84	76	26	22
ø40 or equiv.	11.5	112	7	11	72	2	4	78.5	34	27.5	18	13	Rc1/8	-	31.5	29	27	84	87	26	32
ø50 or equiv.	9.5	136	8	9	84	2	5	99	40	33	21.5	15	Rc1/8	-	42	36	12.5	100	102	30	38
ø63 or equiv.	20.5	158	8	14	95	2	5	112	50	33	21.5	15	Rc1/8	-	55	36	31.5	100	91	30	38

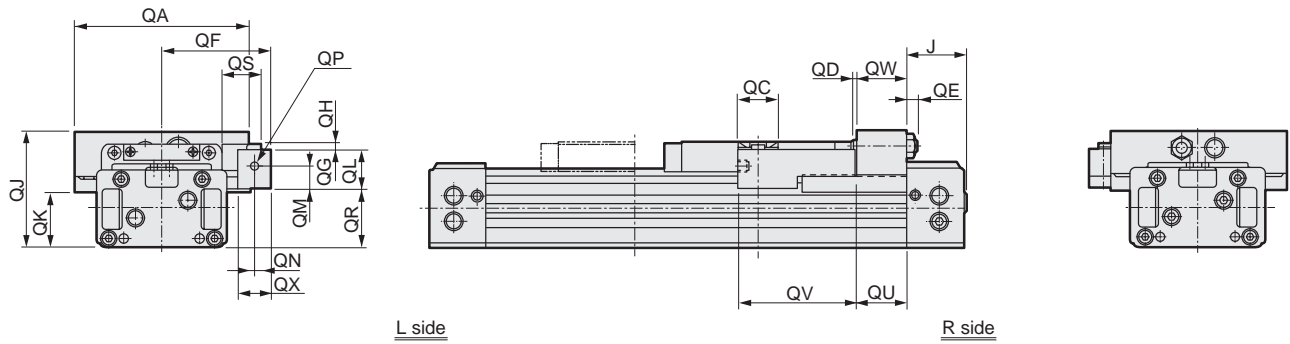
Dimensions (ø80, ø100 equiv.)



*1: For dimensions other than those below, refer to pages 1586 and 1587.

*2: For dimensions with options and dimensions of accessories, refer to pages 1588, 1589, 1622 and 1623.

● SRL3-Q



Code	J	QA	QC	QD	QE	QF	QG	QH	QJ	QK	QL	QM	QN	QP	QR	QS	QU	QV	QW	QX
ø80 or equiv.	70	214	50	6	14	133	2	7	145	69	47.5	29	20	Rc1/8	73.5	48	62	143	60	40
ø100 or equiv.	80	250	50	6	14	145	2	7	164	88	47.5	29	20	Rc1/8	92.5	48	62	148	60	40

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/
MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

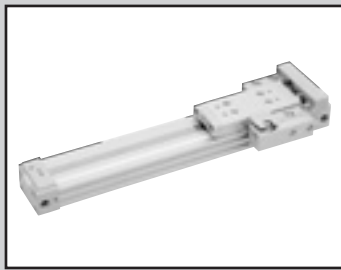
ShkAbs

FJ

FK

Spd
Contr

Ending



Rodless cylinder double acting/resin guide/position locking

SRL3-GQ Series

- Bore size: $\phi 12$, $\phi 16$, $\phi 20$, $\phi 25$, $\phi 32$, $\phi 40$, $\phi 50$, $\phi 63$, $\phi 80$, $\phi 100$



Specifications

Item	SRL3-GQ										
Bore size mm	$\phi 12$	$\phi 16$	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$	$\phi 50$	$\phi 63$	$\phi 80$	$\phi 100$	
Actuation	Double acting										
Working fluid	Compressed air										
Max. working pressure MPa	0.7 (≈ 100 psi, 7 bar)										
Min. working pressure MPa	0.25 (≈ 36 psi, 2.5 bar)			0.15 (≈ 22 psi, 1.5 bar)				0.1 (≈ 15 psi, 1 bar)			
Proof pressure MPa	1.05 (≈ 150 psi, 10.5 bar)										
Ambient temperature $^{\circ}\text{C}$	5 (41 $^{\circ}\text{F}$) to 60 (140 $^{\circ}\text{F}$)										
Port size	Cylinder	M5	Rc1/8		Rc1/4		Rc3/8		Rc1/2		
	Position locking part	M5	Rc1/8								
Stroke tolerance mm	$^{+2.0}_0$ (to 1000), $^{+2.5}_0$ (to 3000), $^{+3.0}_0$ (to 5000)										
Working piston speed mm/s	50 to 2000 (standard piping) (*1)										
Cushion	Air cushion										
Lubrication	Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication. Once lubricated, the cylinder will need periodic lubrication.)										
Position locking mechanism	Attached to R side of cover										
Holding force N	Max. thrust x 0.7										

- *1: (1) When the piston moves at 500 to 2000 mm/s, reduce the speed when entering the position locking mechanism to 500 mm/s or less. For common port piping, the working piston speed varies depending on the stroke. Contact CKD.
 (2) To reduce the speed, add an external shock absorber or deceleration circuit.
 (3) Apply grease regularly to the sliding part of the lock lever.

Allowable absorbed energy

Bore size (mm)	Cushioned		Without cushion	With shock absorber (initial set point)	
	Max absorbed energy (J)	Cushion stroke (mm)	Max absorbed energy (J)	Absorbed energy (J)	Effective stroke (mm)
$\phi 12$ or equiv.	0.03	14.5	0.003	2.4	5.5
$\phi 16$ or equiv.	0.22	19.2	0.007	2.4	5.5
$\phi 20$ or equiv.	0.59	22.2	0.010	5.7	7
$\phi 25$ or equiv.	1.40	20.9	0.015	10	9
$\phi 32$ or equiv.	2.57	23.5	0.030	18	13
$\phi 40$ or equiv.	4.27	23.9	0.050	50	16.5
$\phi 50$ or equiv.	9.13	24.9	0.072	86	21
$\phi 63$ or equiv.	17.4	29.6	0.138	86	21
$\phi 80$ or equiv.	40	45.8	0.393	143	25
$\phi 100$ or equiv.	67	45.8	0.622	143	25

Stroke

Bore size (mm)	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)
$\phi 12$ equiv.	200/300 400/500 600/700 800/900 1000	5000	5
$\phi 16$ equiv.			
$\phi 20$ equiv.			
$\phi 25$ equiv.			
$\phi 32$ equiv.			
$\phi 40$ equiv.			
$\phi 50$ equiv.			
$\phi 63$ equiv.			
$\phi 80$ equiv.			
$\phi 100$ equiv.			

* The custom stroke is available in 1 mm increments.

Number of installed M-switches and min. stroke (mm)

Switch quantity	1		2		3		4		5		6	
	M*V	M*H	M*V	M*H	M*V	M*H	M*V	M*H	M*V	M*H	M*V	M*H
Switch model No.	Bore size (mm)											
$\phi 12$ or equiv.	10	10	30	70	60	120	90	170	120	220	150	270
$\phi 16$ or equiv.	10	10	30	70	60	120	90	170	120	220	150	270
$\phi 20$ or equiv.	10	10	30	70	60	120	90	170	120	220	150	270
$\phi 25$ or equiv.	10	10	30	70	60	120	90	170	120	220	150	270
$\phi 32$ or equiv.	10	10	30	45	60	90	90	135	120	180	150	225
$\phi 40$ or equiv.	10	10	30	45	60	90	90	135	120	180	150	225
$\phi 50$ or equiv.	15	15	30	45	60	90	90	135	120	180	150	225
$\phi 63$ or equiv.	15	15	30	45	60	90	90	135	120	180	150	225
$\phi 80$ or equiv.	25		50		100		150		200		250	
$\phi 100$ or equiv.	25		50		100		150		200		250	

Number of installed T-switches and min. stroke (mm)

Switch quantity	1		2		3		4		5		6	
	T*V	T*H	T*V	T*H	T*V	T*H	T*V	T*H	T*V	T*H	T*V	T*H
Switch model No.	Bore size (mm)											
$\phi 12$ or equiv.	5	5	45	70	85	120	125	170	165	220	205	270
$\phi 16$ or equiv.	5	5	45	70	85	120	125	170	165	220	205	270
$\phi 20$ or equiv.	5	5	45	70	85	120	125	170	165	220	205	270
$\phi 25$ or equiv.	10	10	45	70	85	120	125	170	165	220	205	270
$\phi 32$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\phi 40$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\phi 50$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\phi 63$ or equiv.	10	10	45	50	85	100	125	150	165	200	205	250
$\phi 80$ or equiv.	15	15	45	50	85	100	125	150	165	200	205	250
$\phi 100$ or equiv.	15	15	45	50	85	100	125	150	165	200	205	250

Be sure to read the Safety Precautions for **Position locking** on pages 1639 and 1642 to 1644 before use.

Switch specifications (M-switch)

● 1-color/2-color LED

Item	2-wire proximity		3-wire proximity		
	M2V,M2H	M2WV (2-color LED)	M3H/M3V	M3PH/M3PV (made to order)	M3WV
Applications	Dedicated for programmable controller		For programmable controller, relay, IC circuit, compact solenoid valve		
Output method	-		NPN output	PNP output	NPN output
Power supply voltage	-		4.5 to 28 VDC		10 to 28 VDC
Load voltage	10 to 30 VDC		30 VDC or less		
Load current	5 to 30 mA		100 mA or less	100 mA or less	100 mA or less
Indicator	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	1 mA or less		10 μA or less	0.05mA or less	10 μA or less
Weight	g		1 m:22 3 m:57 5 m:93		
Item	2-wire reed				
	M0V, M0H		M5V, M5H		
Applications	Programmable controller, relay		For programmable controller, relay, IC circuit (without indicator lamp), serial connection		
Power supply voltage	-		-		
Load voltage	12/24 VDC	110 VAC	5/12/24 VDC		110 VAC or less
Load current	5 to 50 mA	7 to 20 mA	50 mA or less		20 mA or less
Indicator	LED (Lit when ON)		No indicator lamp		
Leakage current			0 mA		
Weight	g		1 m:22 3 m:57 5 m:93		

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

Switch specifications (T-switch)

● 2-color LED

Item	2-wire proximity			3-wire proximity		
	T2YH/T2YV	T2WH/T2WV		T3YH/T3YV	T3WH/T3WV	
Applications	Dedicated for programmable controller			For programmable controller, relay		
Output method	-			NPN output	NPN output	
Power supply voltage	-			10 to 28 VDC		
Load voltage	10 to 30 VDC	24 VDC ±10%		30 VDC or less		
Load current	5 to 20 mA (*1)			50 mA or less		
Indicator	Red/green LED (Lit when ON)	Red/green LED (Lit when ON)		Red/green LED (Lit when ON)	Red/green LED (Lit when ON)	
Leakage current	1 mA or less			10 μA or less		
Weight	g		1 m:33 3 m:87 5 m:142		1 m:18 3 m:49 5 m:80	

● For AC magnetic field

Item	2-wire proximity		
	T2YD,T2YDT (*4)		
Applications	Dedicated for programmable controller		
Indicator	Red/green LED (Lit when ON)		
Load voltage	24 VDC ±10%		
Load current	5 to 20 mA		
Internal voltage drop	6V or less		
Leakage current	1.0 mA or less		
Weight	g		1 m:61 3 m:166 5 m:272

*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: AC magnetic field proof switch (T2YD/T2YDT) cannot be used in DC magnetic field.

Cylinder weight

Unit: kg

Bore size (mm)	Weight for 0 mm stroke			Switch weight	Mounting bracket weight		Additional weight per St = 100 mm
	Basic (00)	Foot			T type	M type	
		(LB)	(LB1)				
ø12 or equiv.	0.38	0.39	0.40	Refer to the weight in the switch specifications.	0.005	0.001	0.10
ø16 or equiv.	0.47	0.48	0.50				0.13
ø20 or equiv.	0.74	0.76	0.80				0.18
ø25 or equiv.	1.5	1.6	1.6				0.28
ø32 or equiv.	2.4	2.5	2.6				0.36
ø40 or equiv.	3.6	3.7	-				0.53
ø50 or equiv.	6.0	6.1	-				0.75
ø63 or equiv.	8.8	9.1	-				1.11
ø80 or equiv.	22.4	23.0	-				2.32
ø100 or equiv.	30.5	31.5	-				3.38

SCP*3
CMK2
CMA2
SCM
SCG
SCA2
SCS2
CKV2
CAV2/
COVP/N2
SSD2
SSG
SSD
CAT
MDC2
MVC
SMG
MSD/
MSDG
FC*
STK
SRL3
SRG3
SRM3
SRT3
MRL2
MRG2
SM-25
ShkAbs
FJ
FK
Spd
Contr
Ending

SRL3-GQ Series

How to order

No switch (built-in magnet for switch)

SRL3-GQ-00-12-B-200-B

With switch (built-in magnet for switch)

SRL3-GQ-00-12-B-200-M0H-R-B

A Mounting
*1, *2

B Bore size

C Port thread

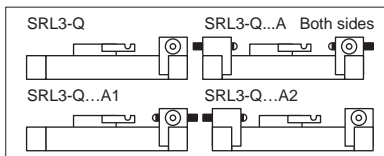
D Cushion

E Stroke

F Switch model No.

⚠ Precautions for model No. selection

- *1 : Mounting bracket will be shipped assembled with the product.
- *2 : For 12, 16, 20, 25 and 32 bore sizes with option code "R" or "T", the mounting will be "00" or "LB1".
(Piping with "LB" is not possible for option codes "R" and "T".)
- *3 : Refer to page 1614 for the min. stroke with switch.
- *4 : Switches other than **F** Switch model No. are also available. (Made to order) Refer to Ending Page 1 for details.
- *5 : The full stroke adjusting bracket on R side is provided as standard for the position locking. Therefore, if "A1" is selected, a shock absorber only is added to R side. In the case of "A", R side is position locking and full stroke adjustable with shock absorber, and L side is full stroke adjustable with shock absorber. (Figure below)



- *6 : "*" of L* and N* indicates the number of sets. When more than one set are necessary, specify "L2" (for LB) or "N2" (for LB1). 2 pcs./set
- *7 : For the port and cushion needle position codes, refer to dimensions on pages 1598 to 1603.
- *8 : In the case of the standard with ø12 to ø25, remove the cover, attach a flat nut and install the full stroke adjusting bracket. A flat nut is attached to option "A3" to enable retrofitting the full stroke adjusting bracket without removing the cover.
- *9 : In "H", the thread size for ø12 and ø16 will be "M4" and that for ø20 will be "M5".
- *10 : Check the option combinations in "Option selection table" on the next page.
- *11 : Copper and PTFE free as standard. (except for type with shock absorber)

[Example of model No.]

SRL3-GQ-00-12B-200-M0H-R-B

Model: Rodless cylinder Resin guide/position locking

- A** Mounting : Basic
- B** Bore size : ø12 mm
- C** Port thread : M5
- D** Cushion : Both sides cushioned
- E** Stroke : 200 mm
- F** Switch model No. : Reed M0H switch, lead wire 1 m
- G** Switch quantity : 1 on R side
- H** Option : Port position F, cushion needle position B

Code	Description												
A Mounting													
00	Basic												
LB	Axial foot												
LB1	Axial foot (ø12 to ø32 only)												
B Bore size (mm)													
12	ø12												
16	ø16												
20	ø20												
25	ø25												
32	ø32												
40	ø40												
50	ø50												
63	ø63												
80	ø80												
100	ø100												
C Port thread													
Blank	Rc thread (M5 for ø12 and ø16)												
N	NPT thread (ø20 or more) (made-to-order product)												
G	G thread (ø20 or more) (made-to-order product)												
D Cushion													
B	Both sides cushioned												
R	R side cushioned												
L	L side cushioned												
N	Without cushion												
E Stroke (mm)													
Bore size	Stroke *3	Custom stroke											
ø12 to ø100	5 to 5000	In 1 mm increments											
F Switch model No.													
Axial lead wire	Radial lead wire	Reed Contact	Voltage	Indicator	Lead wire								
M0H*	M0V*	● ●	AC DC	1-color LED	2-wire								
M5H*	M5V*		● ●			No indicator lamp							
M2H*	M2V*	● ●	● ●	1-color LED	2-wire								
-	M2WV*		● ●	2-color LED									
M3H*	M3V*	● ●	● ●	1-color LED	3-wire								
-	M3WV*		● ●	2-color LED									
M3PH*	M3PV*	● ●	● ●	1-color LED (custom)	3-wire								
T2WH*	T2WV*		● ●	2-color LED									
T2YH*	T2YV*	● ●	● ●		2-color LED	2-wire							
T3WH*	T3WV*		● ●										
T3YH*	T3YV*	● ●	● ●	2-color LED	3-wire								
T2YD*	-		● ●			2-color LED							
T2YDT*	-	● ●	● ●	AC magnetic field	2-wire								
* Lead wire length													
Blank	1 m (standard)												
3	3 m (option)												
5	5 m (option)												
G Switch quantity													
R	1 on R side												
L	1 on L side												
D	2												
T	3												
4	4 (when there are more than 4 switches, indicate switch quantity.)												
H Option													
		Bore size (ø)		12	16	20	25	32	40	50	63	80	100
A	Both-sides full stroke adjustable, shock absorber		●	●	●	●	●	●	●	●	●	●	●
A1	R side full stroke adjustable, shock absorber		●	●	●	●	●	●	●	●	●	●	●
A2	L side full stroke, adjustable, shock absorber		●	●	●	●	●	●	●	●	●	●	●
A3	Full stroke adjustable, adjusting bracket to be added		●	●	●	●	●	●	●	●	●	●	●
L*	Intermediate support bracket (for 00, LB)		●	●	●	●	●	●	●	●	●	●	●
N*	Intermediate support bracket (for LB1)		●	●	●	●	●	●	●	●	●	●	●
H	Larger thread for table installation		●	●	●	●	●	●	●	●	●	●	●
U	Height adjustment plate		●	●	●	●	●	●	●	●	●	●	●
Blank	:F (Standard)		●	●	●	●	●	●	●	●	●	●	●
R	:R (Common port)		●	●	●	●	●	●	●	●	●	●	●
B	:F		●	●	●	●	●	●	●	●	●	●	●
T	:R (Common port)		●	●	●	●	●	●	●	●	●	●	●
D	:D		●	●	●	●	●	●	●	●	●	●	●
S	:D		●	●	●	●	●	●	●	●	●	●	●
X	:F (Common port)		●	●	●	●	●	●	●	●	●	●	●

Option selection table

● Available ■ Not available

Option	Option															
	Code	A	A1	A2	A3	L*	N*	H	U	Blank	R	B	T	D	S	X
		Both side full stroke adjustable, with shock absorber														
		R side full stroke adjustable, with shock absorber														
		L side full stroke adjustable, with shock absorber														
		Full stroke adjustable with adjusting bracket to be added later														
		Intermediate support bracket (for 00, LB)														
		Intermediate support bracket (for LB1)														
		Larger thread for table installation														
		Height adjustment plate														
		Port position F, cushion needle position F (standard)														
		Port position R, cushion needle position F (common port)														
		Port position F, cushion needle position B														
		Port position R, cushion needle position B (common port)														
		Port position D, cushion needle position F														
		Port position D, cushion needle position D														
		Port position F, cushion needle position F (common port)														

*1: Some combinations are not available depending on the bore size. Be sure to check the **H** Option in "How to order" on the previous page.

*2: LB1 with port position D is not possible. (ø25, ø32)

Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa								
		0.1	0.15	0.2	0.25	0.3	0.4	0.5	0.6	0.7
ø12	Push/Pull	—	—	—	34.6	41.5	55.3	69.1	83.0	96.8
ø16	Push/Pull	—	—	—	54.0	64.8	86.4	1.08x10 ²	1.30x10 ²	1.51x10 ²
ø20	Push/Pull	—	—	—	78.6	94.4	1.26x10 ²	1.57x10 ²	1.89x10 ²	2.20x10 ²
ø25	Push/Pull	—	81.4	1.08x10 ²	1.35x10 ²	1.63x10 ²	2.17x10 ²	2.71x10 ²	3.25x10 ²	3.80x10 ²
ø32	Push/Pull	—	1.22x10 ²	1.63x10 ²	2.04x10 ²	2.44x10 ²	3.26x10 ²	4.07x10 ²	4.88x10 ²	5.70x10 ²
ø40	Push/Pull	—	1.90x10 ²	2.53x10 ²	3.16x10 ²	3.80x10 ²	5.06x10 ²	6.33x10 ²	7.60x10 ²	8.86x10 ²
ø50	Push/Pull	—	2.98x10 ²	3.98x10 ²	4.94x10 ²	5.96x10 ²	7.95x10 ²	9.94x10 ²	1.19x10 ³	1.39x10 ³
ø63	Push/Pull	3.14x10 ²	4.70x10 ²	6.27x10 ²	7.84x10 ²	9.41x10 ²	1.25x10 ³	1.57x10 ³	1.88x10 ³	2.20x10 ³
ø80	Push/Pull	5.06x10 ²	7.60x10 ²	1.01x10 ³	1.26x10 ³	1.52x10 ³	2.03x10 ³	2.53x10 ³	3.04x10 ³	3.54x10 ³
ø100	Push/Pull	7.91x10 ²	1.19x10 ³	1.58x10 ³	1.98x10 ³	2.37x10 ³	3.16x10 ³	3.95x10 ³	4.74x10 ³	5.53x10 ³

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/
MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

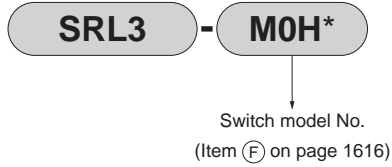
Spd
Contr

Ending

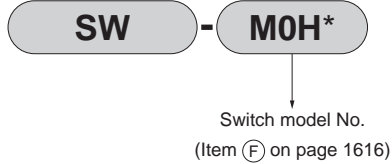
SCP*3
CMK2
CMA2
SCM
SCG
SCA2
SCS2
CKV2
CAV2/
COVPIN2
SSD2
SSG
SSD
CAT
MDC2
MVC
SMG
MSD/
MSDG
FC*
STK
SRL3
SRG3
SRM3
SRT3
MRL2
MRG2
SM-25
ShkAbs
FJ
FK
Spd
Contr
Ending

How to order switch (For configurations, refer to pages 1624 to 1626)

- Switch body + mounting bracket set (*1)



- Switch body only



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

* indicates lead wire length.

- Mounting bracket set (*2)

· M-switch



· T-switch



Note: The mounting bracket is different between the M-switch and T-switch.

- Lead wire holder (*3)

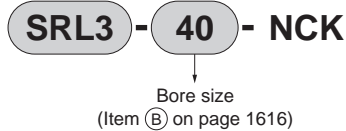


*1: "Switch body + mounting bracket set" does not include lead wire holders. Order lead wire holders separately if necessary.

*2: The mounting bracket is different between the M-switch and T-switch.

*3: The quantity of lead wire holders per set is 10.

- How to order discrete shock absorber



(One shock absorber, one shock absorber fixing hexagon nut)

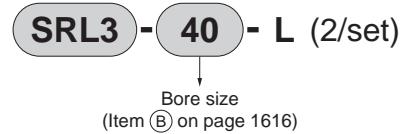
(Note) The shock absorber fixing hexagon nut for SRL3-40 is a made-to-order product.

Applicable shock absorber model No.

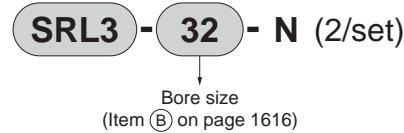
Model	Shock absorber model No.
SRL3-12	NCK-00-0.3-C
SRL3-16	NCK-00-0.3-C
SRL3-20	NCK-00-0.7-C
SRL3-25	NCK-00-1.2
SRL3-32	NCK-00-2.6
SRL3-40	NCK-00-7
SRL3-50	NCK-00-12
SRL3-63	NCK-00-12
SRL3-80	NCK-00-20
SRL3-100	NCK-00-20

- How to order discrete intermediate support bracket

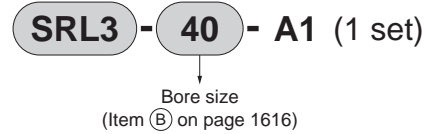
For 00/LB



For LB1

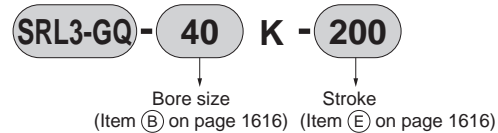


- How to order full stroke adjusting bracket kit

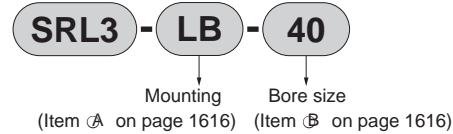


(For configurations, refer to "Full stroke adjusting bracket kit" on page 1625.)

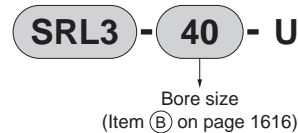
- How to order repair parts



- How to order mounting bracket



- How to order height adjustment plate set



(Plate, mounting bolt x4)

Internal structure and parts list

For the internal structure and parts list, refer to:
 SRL3 Series Pages 1579 to 1581
 SRL3-G Series Pages 1595 to 1597
 SRL3-Q Series Pages 1609 to 1611.

Repair parts list

Bore size (mm)	Kit No.	Repair parts No.		
ø12 or equiv.	SRL3-GQ-12K-*	8 9 18 21 22 26	4 6 10	1 5
ø16 or equiv.	SRL3-GQ-16K-*	27 (The same as part numbers on page 1579.)	(The same as part numbers on page 1609.)	(The same as part numbers on page 1595.)
ø20 or equiv.	SRL3-GQ-20K-*			
ø25 or equiv.	SRL3-GQ-25K-*			
ø32 or equiv.	SRL3-GQ-32K-*	8 9 18 21 22 26	3 4 6 10	1 5
ø40 or equiv.	SRL3-GQ-40K-*	27 (The same as part numbers on page 1579.)	(The same as part numbers on page 1610.)	(The same as part numbers on page 1595.)
ø50 or equiv.	SRL3-GQ-50K-*	8 9 18 21 22 26	3 4 6 10	1 5
ø63 or equiv.	SRL3-GQ-63K-*	27 32 (The same as part numbers on page 1580.)	(The same as part numbers on page 1610)	(The same as part numbers on page 1596.)
ø80 or equiv.	SRL3-GQ-80K-*	8 9 18 21 22 26	3 4 6 10	1
ø100 or equiv.	SRL3-GQ-100K-*	27 28 29 32 33 (The same as part numbers on page 1581.)	(The same as part numbers on page 1611.)	(The same as part numbers on page 1597.)

Dimensions

SRL3 Series Pages 1582 to 1587
 SRL3-G Series Pages 1598 to 1603
 SRL3-Q Series Pages 1612 and 1613.

SCP*3
CMK2
CMA2
SCM
SCG
SCA2
SCS2
CKV2
CAV2/ COVP/N2
SSD2
SSG
SSD
CAT
MDC2
MVC
SMG
MSD/ MSDG
FC*
STK
SRL3
SRG3
SRM3
SRT3
MRL2
MRG2
SM-25
ShkAbs
FJ
FK
Spd Contr
Ending

SRL3-Q Series

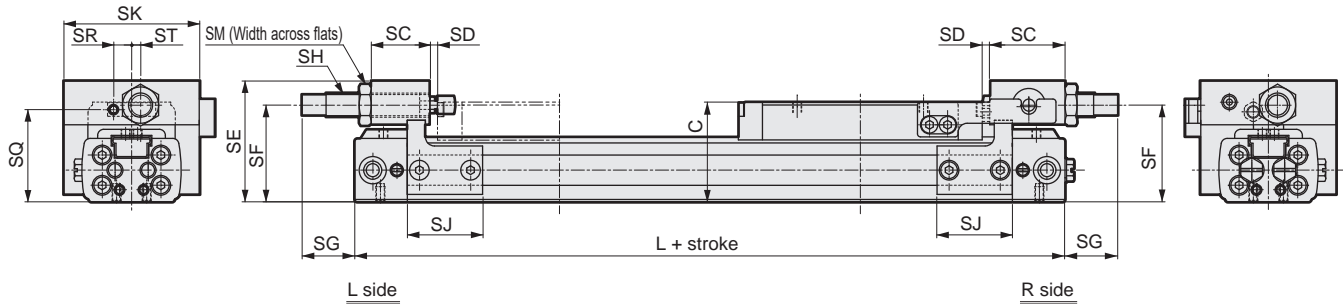
SRL3-Q Series common dimensions

● Full stroke adjustable with shock absorber

Note: In the case of option A or A1, adjust the stroke on the position locking side by adjusting the stroke of the entire unit. Do not perform fine adjustment using the shock absorber and hexagon socket set screw.

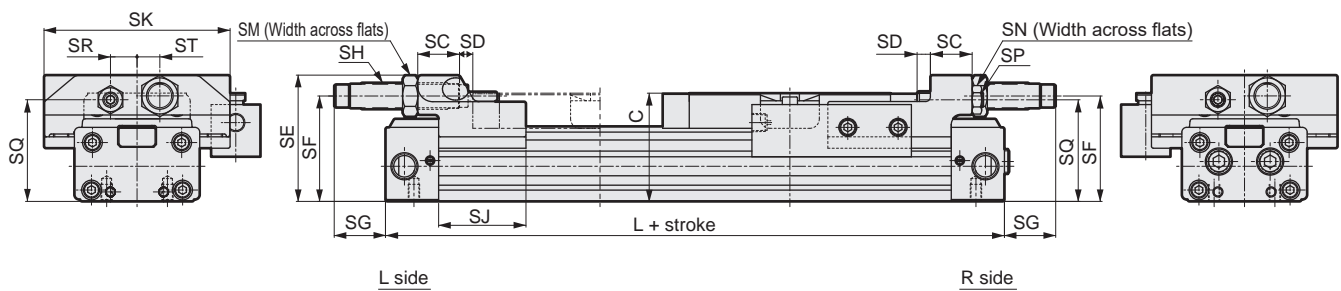
Fine adjustment with the shock absorber and hexagon socket set screw will cause the lock lever and the position locking mechanism to be misaligned, which prevents secure locking.

·ø12 to ø25 or equiv.



Code	SC	SD	SE	SF	SG			SH		SJ	SK	SM	SN	SP	SQ	SR	ST	C	L
					At max.	At min.	Adj range	Thread size	Max. absorbed energy (J)										
ø12 or equiv.	19.5	2.5	40	32	17.5	7.5	10	M8x0.75	3	25	45	12	5.5	M3	30.5	6	3	33	136
ø16 or equiv.	18	4	42	35	14.5	4.5	10	M8x0.75	3	25	49	12	5.5	M3	34	6	4	37	149
ø20 or equiv.	22.5	3.5	48	40	14.5	4.5	10	M10x1.0	7	39	57	14	7	M4	38	8	5	42	169
ø25 or equiv.	20	2.5	62.5	51.5	14.5	4.5	10	M12x1.0	12	50	77	17	10	M6	50	12	10	53	190

·ø32 to ø63 or equiv.



Code	SC	SD	SE	SF	SG			SH		SJ	SK	SM	SN	SP	SQ	SR	ST	C	L
					At max.	At min.	Adj range	Thread size	Max. absorbed energy (J)										
ø32 or equiv.	22	7	66.5	55.5	27	17	10	M14x1.5	26	46	98	19	13	M8	53.5	14	12	57	226
ø40 or equiv.	32	7	78.5	65.5	34	24	10	M20x1.5	70	51	112	24	17	M10	63.5	17	12	67	244
ø50 or equiv.	38	8	99	80	55	45	10	M25x1.5	120	53	136	32	19	M12	77.5	22	17	82	258
ø63 or equiv.	38	8	112	93.5	44	34	10	M25x1.5	120	64	158	32	24	M16	89	25	20	95	296

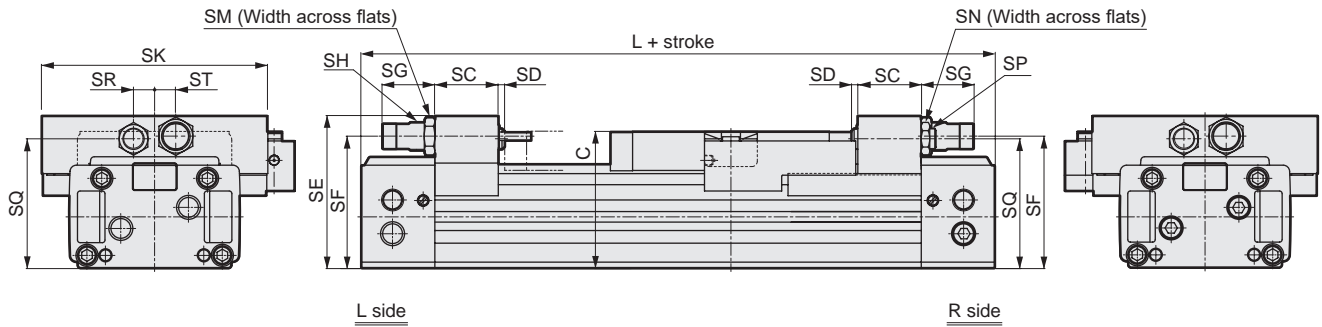
SRL3-Q Series common dimensions

● Full stroke adjustable with shock absorber

Note: In the case of option A or A1, adjust the stroke on the position locking side by adjusting the stroke of the entire unit. Do not perform fine adjustment using the shock absorber and hexagon socket set screw.

Fine adjustment with the shock absorber and hexagon socket set screw will cause the lock lever and the position locking mechanism to be misaligned, which prevents secure locking.

-ø80 to ø100 or equiv.



Code	SC	SD	SE	SF	SG			SH		SK	SM	SN	SP	SQ	SR	ST	C	L
					At max.	At min.	Adj.range	Thread size	Max. absorbed energy (J)									
ø80 or equiv.	60	6	145	125.5	50	40	10	M27x1.5	200	214	32	27	M20	123	20	20	130	500
ø100 or equiv.	60	6	164	144.5	50	40	10	M27x1.5	200	250	32	27	M20	142	20	20	150	530

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/
MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

Spd
Contr

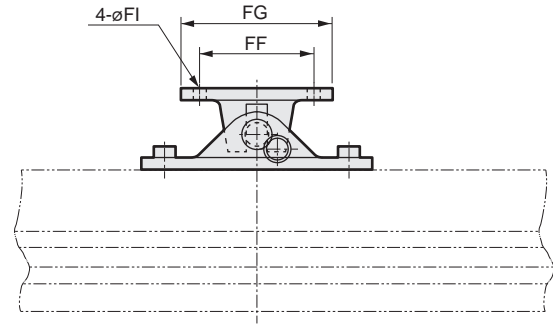
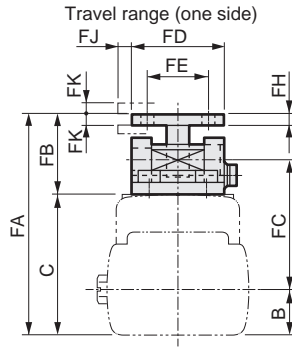
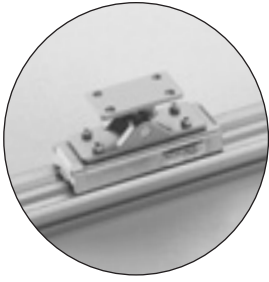
Ending

SRL3 Series

SRL3 Series common option dimensions

● Floating fitting (Y)

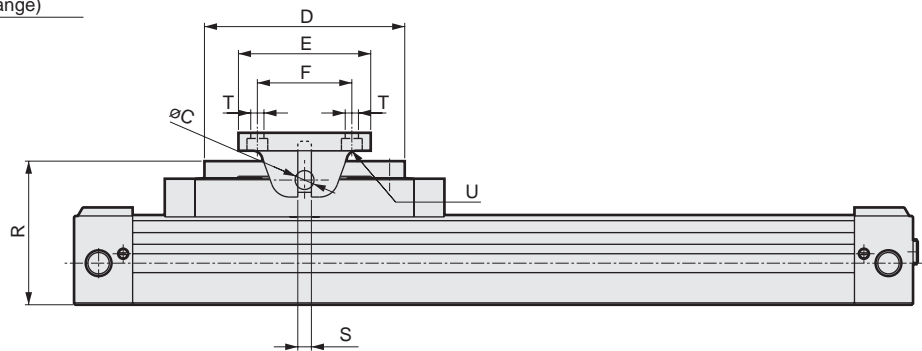
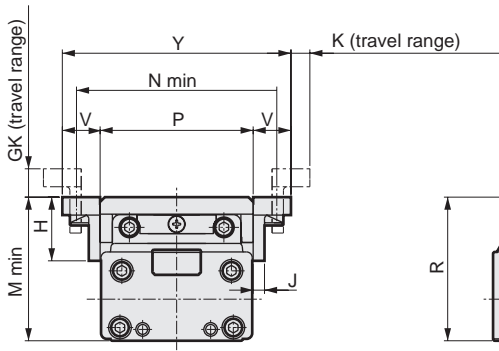
Material: Steel
Zinc chromate treatment



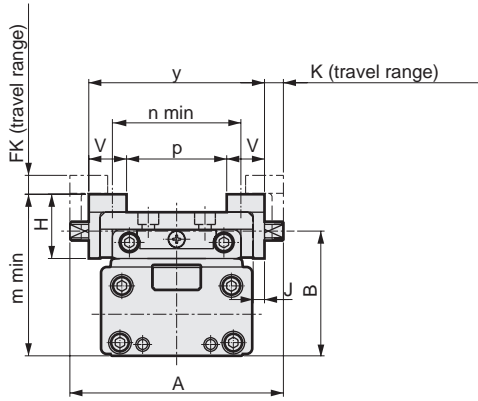
Code	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	B	C
Code													
Bore size (mm)													
ø12 or equiv.	54	21	31.5	24	16	30	40	3	3.4	3	3	10.5	33
ø16 or equiv.	58	21	34	24	16	30	40	3	3.4	3	3	12	37
ø20 or equiv.	67	25	39	30	20	40	56	4	4.5	3	3	14	42
ø25 or equiv.	78	25	47	30	20	40	56	4	6	3	3	17	53
ø32 or equiv.	95	38	55.5	45	30	50	70	6	7	5	5	18.5	57

Code	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	B	C
Code													
Bore size (mm)													
ø40 or equiv.	105	38	62	45	30	50	70	6	7	5	5	22	67
ø50 or equiv.	126	44	73	60	40	70	90	8	9	5	5	28	82
ø63 or equiv.	139	44	79	60	40	70	90	8	9	5	5	35	95
ø80 or equiv.	188	58	107	80	50	90	120	11	14	10	5	49	130
ø100 or equiv.	220	70	120.5	90	60	110	140	13	14	10	5	61.5	150

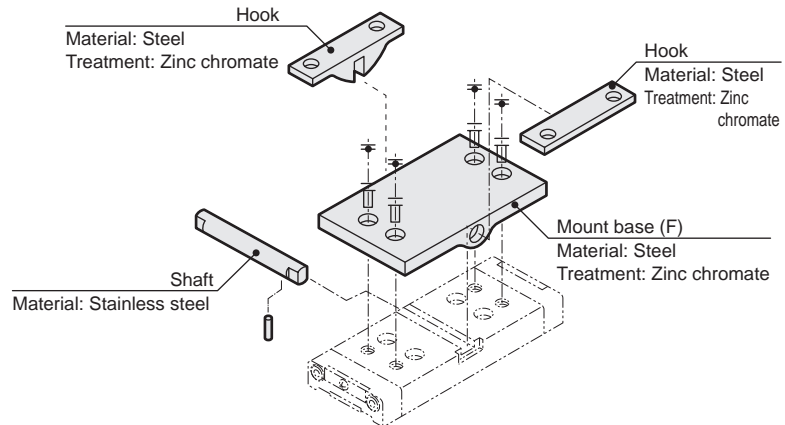
● Thin floating fitting (Y1) ø12 to ø63



[Hooks facing outside]



[Hooks facing inside]



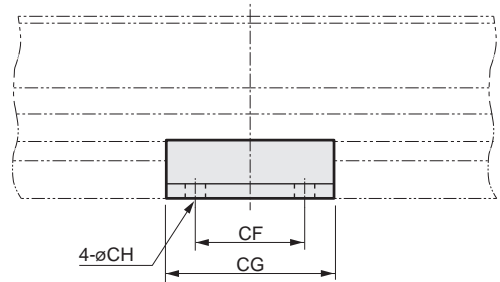
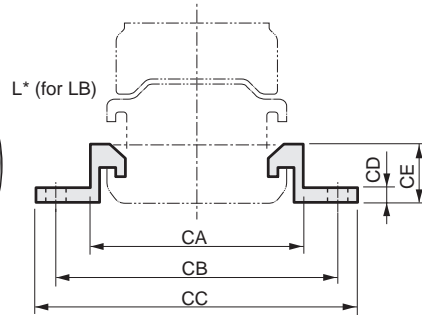
Code	A	B	C	D	E	F	H	J	K	FK	GK	M min	m min	N min	n min	P	p	R	S	V	Y	y	T	U
Code																								
Bore size																								
ø12	52	32	5	60	40	30	20	3	6	6	9	38	43	47.5	26.5	34	16	38	3.5	12	58	40	ø3.4	ø6.5 spot face depth 3.3
ø16	56	36.5	5	60	40	30	20	3	6	6	9	42	47	51.5	30.5	38	20	42	3.5	12	62	44	ø3.4	ø6.5 spot face depth 3.3
ø20	64	41	6	84	56	40	24.5	4	6	6	9	48.5	56.5	62	34	44	22	48.5	4	15	74	52	ø4.5	ø8 spot face depth 4.4
ø25	74	53	6	84	56	40	24.5	4	6	6	9	60.5	68.5	72	44	54	32	60.5	4	15	84	62	ø5.5	ø9.5 spot face depth 5.4
ø32	99	56.5	8	106	70	50	34	6	10	10	15	66	75.5	92	54	67	39	66	5.5	20	107	79	ø6.6	ø11 spot face depth 6.5
ø40	113	66	10	116	70	50	34	6	10	10	15	76	85.5	106	68	81	53	76	7	20	121	93	ø6.6	ø11 spot face depth 6.5
ø50	133	81	12	120	90	70	43	8	10	10	15	93	106	129	81	97	63	93	8.5	25	147	113	ø9	ø14 spot face depth 8.6
ø63	155	94	14	136	90	70	43	8	10	10	15	108	120	151	103	119	85	107	10	25	169	135	ø9	ø14 spot face depth 8.6

SRL3 Series common option dimensions



- Intermediate support bracket (L*N*)
(auxiliary bracket for preventing sag)

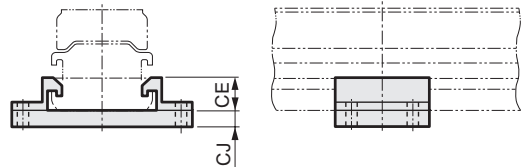
Material: Aluminum alloy
Alumite treatment



Code	CA	CB	CC	CD	CE	CF	CG	CH	CJ
ø12 or equiv.	38	52	60	3	11	16	30	4	6
ø16 or equiv.	42	56	64	3	12	20	35	4	6
ø20 or equiv.	49	64	75	4	14	20	38	5	8
ø25 or equiv.	60	76	88	6	19.5	20	40	7	10
ø32 or equiv.	74	88	100	6	21.5	20	40	7	10
ø40 or equiv.	90	108	124	6	24.5	30	60	9	-
ø50 or equiv.	106	124	140	8	30.5	30	60	9	-
ø63 or equiv.	130	152	172	10	38.5	50	90	11	-
ø80 or equiv.	172	210	236	12	32	60	110	14	-
ø100 or equiv.	208	246	272	12	32	60	110	14	-

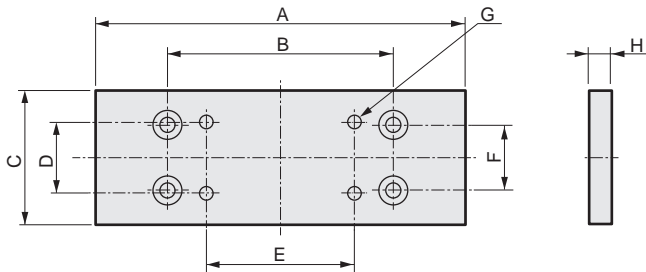
L* (for 00/LB)N* (for LB1)

N* (for LB1)



- Height adjustment plate (U)

Material: Aluminum alloy
Alumite treatment



Code	A	B	C	D	E	F	G	H
ø 12	80	42	29	16	30	13	4-M3 through	8
ø 16	87	48	32	16	30	15	4-M3 through	6
ø 20	99	60	38	20	40	18	4-M4 through	7
ø 25	121	70	48	20	40	20	4-M5 through	10.5
ø 32	134	80	56	30	50	20	4-M6 through	10.5
ø 40	147	90	68	30	50	30	4-M6 through	12.5
ø 50	151	100	80	40	70	30	4-M8 through	18
ø 63	167	110	102	40	70	40	4-M8 through	18
ø 80	227	150	146	50	90	50	4-M12 through	18
ø 100	237	160	170	60	110	60	4-M12 through	18

SCP*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/
MSDG

FC*

STK

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

Spd
Contr

Ending