

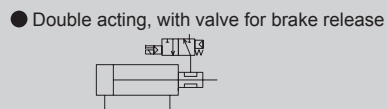
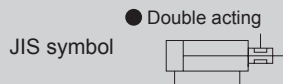
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending



Tie rod cylinder with brake Double acting single rod/double acting with valve for brake release

JSG/JSG-V Series

● Bore size: $\varnothing 40/\varnothing 50/\varnothing 63/\varnothing 80/\varnothing 100$



Specifications

Item		JSG					JSG-V					
Bore size		mm	ø40	ø50	ø63	ø80	ø100	ø40	ø50	ø63	ø80	ø100
Actuation			Double acting					Double acting/with valve				
Working fluid			Compressed air					Compressed air				
Max. working pressure		MPa	1.0 (≈150 psi, 10 bar)					0.7 (≈100 psi, 7 bar)				
Min. working pressure		MPa	0.3 (≈44 psi, 3 bar)					0.3 (≈44 psi, 3 bar)				
Proof pressure		MPa	1.6 (≈230 psi, 16 bar)					1.6 (≈230 psi, 16 bar)				
Ambient temperature		°C	-10 (14°F) to 60 (140°F) (no freezing)					-10 (14°F) to 60 (140°F) (no freezing)				
Port size	Brake section		Rc1/8		Rc1/4		Rc3/8	Rc1/8		Rc1/4		
	Cylinder		Rc1/4		Rc3/8		Rc1/2	Rc1/4		Rc3/8		Rc1/2
Stroke	With rubber cushion		^{+1.4} ₀ (to 1000), ^{+1.8} ₀ (to 1500)					^{+1.4} ₀ (to 1000), ^{+1.8} ₀ (to 1500)				
tolerance mm	With air cushion		^{+1.0} ₀ (to 360), ^{+1.4} ₀ (to 1000), ^{+1.8} ₀ (to 1500)					^{+1.0} ₀ (to 360), ^{+1.4} ₀ (to 1000), ^{+1.8} ₀ (to 1500)				
Working piston speed		mm/s	50 to 1000 (Operate within the allowable absorbed energy.)					50 to 1000 (Operate within the allowable absorbed energy.)				
Cushion			Either air cushion or rubber cushion can be selected					Either air cushion or rubber cushion can be selected				
Effective air cushion length		mm	8.6	13.4	13.4	15.4	15.4	8.6	13.4	13.4	15.4	15.4
Lubrication			Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)					Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)				
Holding force		N	980	1569	2451	3922	6178	980	1569	2451	3922	6178
Allowable	With rubber cushion		0.9	1.6	1.6	3.3	5.8	0.9	1.6	1.6	3.3	5.8
absorbed energy J	With air cushion		3.7	8.0	14.4	25.4	45.6	3.7	8.0	14.4	25.4	45.6

Electrical specification for brake valve

Item	Specifications		
Rated voltage (V)	100 AC(50/60 Hz)	200 AC(50/60 Hz)	24 DC
Starting current (A)	0.056/0.044	0.028/0.022	0.075
Holding current (A)	0.028/0.022	0.014/0.011	0.075
Power consumption (W)	1.8/1.4		1.8
Thermal class	Class B (molded coil)		

*1 : 100/200 VAC coil is available for 110/220 VAC (60 Hz).

*2 : The valve specifications are the same as those of the standard model 4KB2. For details, refer to "Pneumatic Valves (CB-023SA)".
Contact CKD when placing an order, as model numbers differ.

Stroke

Bore size (mm)	Standard stroke (mm)	Max. stroke (mm)	Available stroke (mm)	Min. stroke (mm)
$\varnothing 40$	25/50/75/100 150/200/250 300/350/400 450/500	600	800	1
$\varnothing 50$			1200	
$\varnothing 63$		700	1400	
$\varnothing 80$			1500	
$\varnothing 100$		800	1500	

*1 : The custom stroke is available in 1 mm increments.

*2 : If the maximum stroke is exceeded, product specifications may not be met, depending on operating conditions.
Contact CKD in this case.

*3 : The available strokes for models with bellows are as shown below.
 $\varnothing 40$: 500 mm
 $\varnothing 50$, $\varnothing 63$: 600 mm
 $\varnothing 80$, $\varnothing 100$: 750 mm

Min. stroke with switch

● T0/T5 type switch

Switch quantity	Different surface mounting				Same surface mounting				Center trunnion mounting				Rod side trunnion mounting Position cannot be detected at the rod side stroke end.	Head side trunnion mounting No position detection at head side stroke end.
	1	2	3	4	1	2	3	4	1	2	3	4	1	1
ø40	9	18	36	54	9	48(33)	78(64)	109(94)	81(81)	81(81)	164(142)	164(142)	38	38
ø50	9	18	36	54	9	18	36	54	112(112)	112(112)	121(121)	121(121)	51	53
ø63	10	19	38	57	10	19	38	57	85(73)	85(73)	91(91)	91(91)	41	42
ø80	10	20	39	59	10	20	39	59	96(79)	96(79)	99(99)	99(99)	41	47
ø100	10	20	40	60	10	20	40	60	101(84)	101(84)	105(105)	105(105)	47	53

*1: The values in () are of T*V (L-shaped lead wire).

*2: When the stroke is 15 mm or less, the two switches could turn ON at the same time. In this case, adjust switch mounting positions to be as far apart as possible.

● T8 type switch

Switch quantity	Different surface mounting				Same surface mounting				Center trunnion mounting				Rod side trunnion mounting Position cannot be detected at the rod side stroke end.	Head side trunnion mounting No position detection at head side stroke end.
	1	2	3	4	1	2	3	4	1	2	3	4	1	1
ø40	9	18	36	54	9	54(31)	84(62)	115(92)	87(87)	87(87)	178(148)	178(148)	41	41
ø50	9	18	36	54	9	18	36	54	116(116)	116(116)	121(121)	121(121)	54	55
ø63	10	19	38	57	10	19	38	57	89(77)	89(77)	99(99)	99(99)	44	44
ø80	10	20	39	59	10	20	39	59	100(75)	100(75)	111(111)	111(111)	43	49
ø100	10	20	40	60	10	20	40	60	105(80)	105(80)	117(117)	117(117)	49	55

*1: The values in () are of T*V (L-shaped lead wire).

*2: When the stroke is 15 mm or less, the two switches could turn ON at the same time. In this case, adjust switch mounting positions to be as far apart as possible.

● T2/T3 switch

Switch quantity	Different surface mounting				Same surface mounting				Center trunnion mounting				Rod side trunnion mounting Position cannot be detected at the rod side stroke end.	Head side trunnion mounting No position detection at head side stroke end.
	1	2	3	4	1	2	3	4	1	2	3	4	1	1
ø40	5	10	20	30	5	40(33)	70(64)	101(94)	69(60)	69(60)	152(121)	152(121)	32	32
ø50	5	10	20	30	5	10	20	30	71(62)	71(62)	71(61)	71(61)	31	32
ø63	6	11	21	32	6	11	21	32	77(68)	77(68)	77(68)	77(68)	37	38
ø80	6	11	22	33	6	11	22	33	88(79)	88(79)	88(80)	88(80)	37	43
ø100	6	11	22	33	6	11	22	33	93(84)	93(84)	93(85)	93(85)	43	49

*1: The values in () are of T*V (L-shaped lead wire).

*2: When the stroke is 15 mm or less, the two switches could turn ON at the same time. In this case, adjust switch mounting positions to be as far apart as possible.

● T1/T2Y/T3Y/T2W/T3W/T2YD switches

Switch quantity	Different surface mounting				Same surface mounting				Center trunnion mounting				Rod side trunnion mounting Position cannot be detected at the rod side stroke end.	Head side trunnion mounting No position detection at head side stroke end.
	1	2	3	4	1	2	3	4	1	2	3	4	1	1
ø40	6	11	22	33	6	62(49)	92(80)	123(110)	91(66)	91(66)	182(127)	182(127)	43	43
ø50	6	12	24	36	6	12	24	36	93(68)	93(68)	93(68)	93(68)	42	43
ø63	6	12	24	36	6	12	24	36	99(74)	99(74)	99(74)	99(74)	48	49
ø80	7	13	25	38	7	13	25	38	110(85)	110(85)	110(86)	110(86)	48	54
ø100	7	13	26	39	7	13	26	39	115(90)	115(90)	115(92)	115(92)	54	60

*1: The values in () are of T*V (L-shaped lead wire). T2YD does not have a L-shaped lead wire (V).

*2: When the stroke is 15 mm or less, the two switches could turn ON at the same time. In this case, adjust switch mounting positions to be as far apart as possible.

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

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

Switch specifications

● 1-color/2-color LED/for AC magnetic field proof

Item	Proximity 2-wire	Proximity 2-wire			Proximity 3-wire				Reed 2-wire (*4)							Proximity 2-wire
	T1H/ T1V	T2H/T2V/ T2JH/T2JV	T2YH/ T2YV	T2WH/ T2WV	T3H/ T3V	T3PH/ T3PV	T3YH/ T3YV	T3WH/ T3WV	T0H/T0V	T5H/T5V		T8H/T8V			T2YD(*4) T2YDT	
Applications	For programmable controller, relay, compact solenoid valve	Dedicated for programmable controller			For programmable controller, relay				For programmable controller, relay	For programmable controller, relay, IC circuit (no indicator lamp), serial connection		For programmable controller, relay			For programmable controller	
Output method	-				NPN output	PNP output	NPN output	NPN output	-							
Pwr. supp. V.	-				10 to 28 VDC				-							
Load voltage	85 to 265 VAC	10 to 30 VDC		24 VDC ±10%	30 VDC or less				12/24 VDC	110 VAC	5/12/24 VDC	110 VAC	12/24 VDC	110 VAC	220 VAC	24 VDC ±10%
Load current	5 to 100 mA	5 to 20 mA (*3)			100 mA or less		50 mA or less		5 to 50 mA	7 to 20 mA	≤50 mA	≤20 mA	5 to 50 mA	7 to 20 mA	7 to 10 mA	5 to 20 mA
Indicator	LED (Lit when ON)	LED (Lit when ON)	Red/green 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)	Red/green LED (Lit when ON)	LED (Lit when ON)	No indicator lamp		LED (Lit when ON)			Red/green LED (Lit when ON)	
Leakage current	≤1 mA at 100 VAC, ≤2 mA at 200 VAC	1 mA or less			10 μA or less				0 mA							1 mA or less
Weight g	1 m:33	1 m:18	1 m:33	1 m:18	1 m:18		1 m:33	1 m:18	1 m:18 3 m:49 5 m:80				1 m:33 3 m:87		1 m:61 3 m:166	
	3 m:87	3 m:49	3 m:87	3 m:49	3 m:49		3 m:87	3 m:49								
	5 m:142	5 m:80	5 m:142	5 m:80	5 m:80		5 m:142	5 m:80					5 m:142		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 fields.

Weight table

Unit: kg

Bore size (mm)	Weight for 0 mm stroke						Added weight /50 mm stroke	Switch weight	Mounting bracket weight	Accessory weight	
	Basic (00)	Foot (LB)	Flange (FA, FB)	Eye bracket (CA)	Clevis bracket (CB)	Trunnion (TA,TB,TC)				I	Y
ø40	1.75	1.89	2.16	1.94	1.94	2.09	0.17	Refer to the weight in the switch specifications.	0.024	0.09	0.14
ø50	2.91	3.07	3.54	3.32	3.32	3.40	0.23		0.022	0.20	0.33
ø63	3.94	4.28	4.96	4.49	4.51	4.82	0.25		0.022	0.20	0.33
ø80	7.81	8.24	9.38	9.08	9.09	9.30	0.40		0.026	0.52	0.96
ø100	12.08	12.94	14.40	13.80	13.83	14.65	0.51		0.024	0.48	0.92
(Example) Product weight of JSG-LB-50B-200-T0H-D-Y											
Product weight for stroke 0 mm3.07 kg											
Additional weight for stroke 200 mm0.23×200/50=0.92 kg											
Weight of 2 TOH switches0.018×2=0.036 kg											
Weight of 2 mounting brackets0.022×2=0.044 kg											
Weight of rod clevis0.33 kg											
Product weight3.07+0.92+0.036+0.044+0.33=4.4 kg											

Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa							
		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø40	Push	3.77×10 ²	5.03×10 ²	6.28×10 ²	7.54×10 ²	8.80×10 ²	1.01×10 ³	1.13×10 ³	1.26×10 ³
	Pull	3.17×10 ²	4.22×10 ²	5.28×10 ²	6.33×10 ²	7.39×10 ²	8.44×10 ²	9.50×10 ²	1.06×10 ³
ø50	Push	5.89×10 ²	7.85×10 ²	9.82×10 ²	1.18×10 ³	1.37×10 ³	1.57×10 ³	1.77×10 ³	1.96×10 ³
	Pull	4.95×10 ²	6.60×10 ²	8.25×10 ²	9.90×10 ²	1.15×10 ³	1.32×10 ³	1.48×10 ³	1.65×10 ³
ø63	Push	9.35×10 ²	1.25×10 ³	1.56×10 ³	1.87×10 ³	2.18×10 ³	2.49×10 ³	2.81×10 ³	3.12×10 ³
	Pull	8.41×10 ²	1.12×10 ³	1.40×10 ³	1.68×10 ³	1.96×10 ³	2.24×10 ³	2.52×10 ³	2.80×10 ³
ø80	Push	1.51×10 ³	2.01×10 ³	2.51×10 ³	3.02×10 ³	3.52×10 ³	4.02×10 ³	4.52×10 ³	5.03×10 ³
	Pull	1.36×10 ³	1.81×10 ³	2.27×10 ³	2.72×10 ³	3.17×10 ³	3.63×10 ³	4.08×10 ³	4.54×10 ³
ø100	Push	2.36×10 ³	3.14×10 ³	3.93×10 ³	4.71×10 ³	5.50×10 ³	6.28×10 ³	7.07×10 ³	7.85×10 ³
	Pull	2.14×10 ³	2.86×10 ³	3.57×10 ³	4.29×10 ³	5.00×10 ³	5.72×10 ³	6.43×10 ³	7.15×10 ³

How to order

Without valve

Without switch (built-in magnet for switch)

JSG - LB - 40 - B - 100 - J I

With switch (built-in magnet for switch)

JSG - LB - 40 - B - 100 - T2H - R - J I

With valve for brake release

Without switch (built-in magnet for switch)

JSG-V - LB - 40 - B - 100 - 1 - J I

With switch (built-in magnet for switch)

JSG-V - LB - 40 - B - 100 - 1 - T2H - R - J I

A Model No.

B Mounting

*1

D Port thread

E Cushion

C Bore size

F Stroke

G Solenoid valve voltage

H Switch model No.

⚠ Precautions for model No. selection

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

(Trunnion is assembled at shipment.)

*2 : The custom stroke is available in 1 mm increments.

*3 : When selecting TA or TB as mounting, the number of switches is limited to "H" (1 on head side) for TA, and "R" (1 on rod side) for TB.

*4 : "I" and "Y" cannot be selected together.

[Example of model No.]

JSG-V-LB-40B-100-1-T2H-D-JI

Model: Tie rod cylinder with brake

A Model No. : Double acting, with valve for brake release

B Mounting : Axial foot

C Bore size : ø40 mm

D Port thread : Rc thread

E Cushion : With two-sided air cushion

F Stroke : 100 mm

G Solenoid valve voltage : 100 VAC

H Switch model No. : Proximity T2H switch, lead wire 1 m

I Switch quantity : 2

J Option : With bellows

K Accessory : Rod eye (included)

I Switch quantity

*3

J Option

K Accessory

*4

Code	Description	Double acting	Double acting, brake release valve - V
B Mounting			
00	Basic	●	●
LB	Axial foot	●	●
FA	Rod side flange	●	●
FB	Head side flange	●	●
CA	Eye bracket	●	●
CB	Clevis bracket (pin and split pin attached)	●	●
TA	Rod side trunnion	●	●
TB	Head side trunnion	●	●
TC	Intermediate trunnion	●	●

C Bore size (mm)			
40	ø40	●	●
50	ø50	●	●
63	ø63	●	●
80	ø80	●	●
100	ø100	●	●

D Port thread			
Blank	Rc thread	●	●
N	NPT thread (made-to-order product)	●	●
G	G thread (made-to-order product)	●	●

E Cushion			
B	Two-sided air cushion (basic)	●	●
D	Two-sided rubber cushion	●	●

Note: The rubber cushion has a longer total length than the air cushion.

F Stroke (mm)			
Bore size	Stroke *2	Available stroke	Custom stroke
ø40	1 to 600	800	In 1 mm increments
ø50		1200	
ø63		1400	
ø80	1 to 700	1400	
ø100	1 to 800	1500	

G Solenoid valve voltage			
1	100 VAC	●	●
2	200 VAC	●	●
3	24 VDC	●	●
4	12 VDC	●	●

H Switch model No.					
Straight lead wire	L-shaped lead wire	Contact	Voltage AC DC	Indicator	Lead wire
T0H*	T0V*	Reed	● ●	1-color LED	2-wire
T5H*	T5V*		● ●	No indicator lamp	
T8H*	T8V*		● ●	1-color LED	
T1H*	T1V*		● ●	1-color LED	
T2H*	T2V*	Proximity	● ●	1-color LED	2-wire
T3H*	T3V*		● ●	1-color LED	3-wire
T3PH*	T3PV*		● ●	1-color LED	3-wire
T2WH*	T2WV*		● ●	2-color LED	2-wire
T2YH*	T2YV*		● ●		
T3WH*	T3WV*		● ●		
T3YH*	T3YV*		● ●		
T2YD*	-		● ●	2-color LED	2-wire
T2YDT*	-		● ●	AC magnetic field	
T2JH*	T2JV*		● ●	1-color LED off-delay	

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

I Switch quantity			
R	1 on rod side	●	●
H	1 on head side	●	●
D	2	●	●
T	3	●	●

J Option			
	Max. ambient temperature	Instantaneous ambient temperature	
J	Bellows 100°C	200°C	● ●
M	Piston rod material stainless steel		● ●

K Accessory			
I	Rod eye	●	●
Y	Rod clevis (pin and split pin attached)	●	●
B1	Eye bracket	●	●
B2	Clevis bracket (pin and split pin attached)	●	●
B3	Eye bracket	●	●
B4	Trunnion No. 2 bracket (2 pcs./set)	●	●

LCM
LCR
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LCW
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STM
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STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
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JSB3
LMB
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HCM
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LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
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SHC
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How to order switch

● Switch body + mounting bracket set

SCG - T0H - 40

Switch model No. (Item ㊦ on page 745)

Bore size (Item ㊿ on page 745)

● Switch body only

SW - T0H

Switch model No. (Item ㊦ on page 745)

Note: Contact CKD when using an environment-friendly T-switch.

● Switch mounting bracket set

SCG - T - 40

Mounting bracket

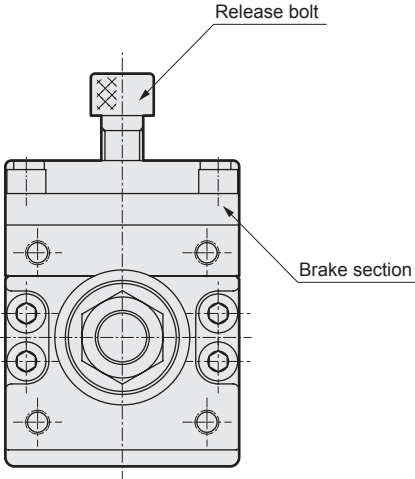
Bore size (Item ㊿ on page 745)

How to order mounting bracket

Bore size (mm)		ø40	ø50	ø63	ø80	ø100
Mounting bracket						
Foot (LB)	*1	JSG-LB-40	JSG-LB-50	JSG-LB-63	SCG-LB-80	SCG-LB-100
Flange (FA) (FB)	*2	JSG-FA-40	JSG-FA-50	JSG-FA-63	SCG-FA-80	SCG-FA-100
Eye bracket (CA)		SCG-CA-40	SCG-CA-50	SCG-CA-63	SCG-CA-80	SCG-CA-100
Clevis bracket (CB)	*3	SCG-CB-40	SCG-CB-50	SCG-CB-63	SCG-CB-80	SCG-CB-100

- *1: The foot (LB) mounting bracket is provided as 2 pcs./set.
- *2: Specify the flange (FA) with bellows as "JSG-FA-(bore size)-J".
- *3: Pin, split pin and plain washer are attached.
- *4: All mounting brackets have mounting bolts attached.

How to release the brake section manually



The brakes are released by screwing a bolt into the manual release port (female threads on top of brakes).

(The brake may go out if the bolt is screwed in too far.

Refer to the appropriate screw-in volume in the table below.)

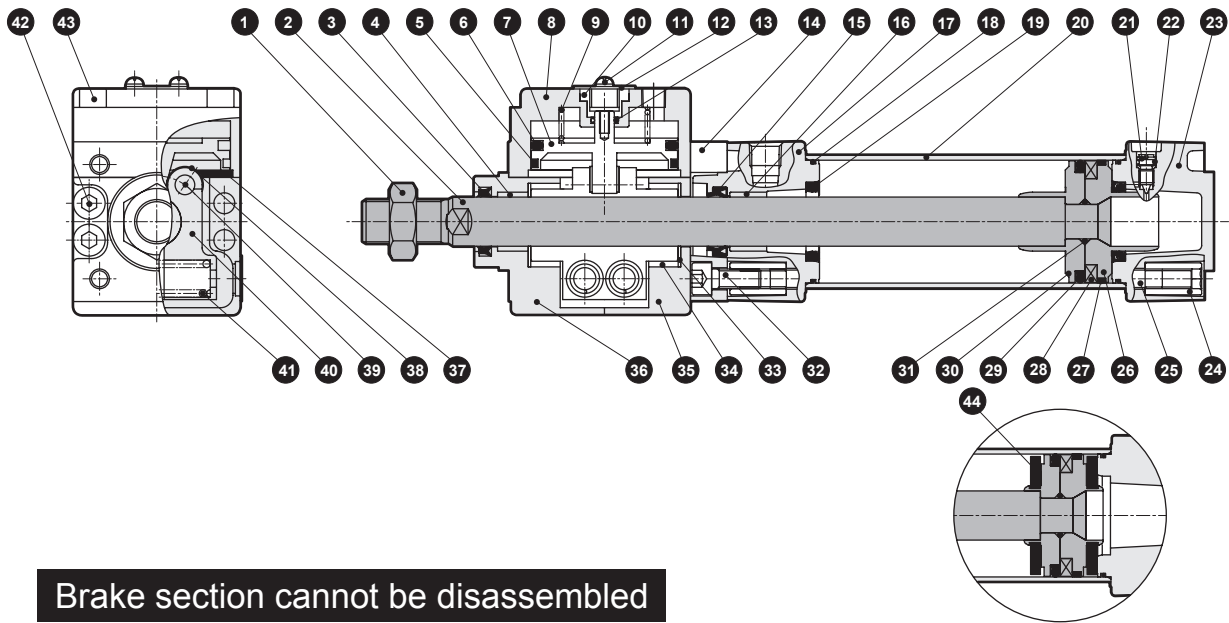
Always remove the bolt during normal use.

Release bolt size

Bore size	Bolt screw diameter	Bolt length		Appropriate screw-in volume
		JSG	JSG-V	
ø40	M12×1.75	16 or more	40 or more	3 rotations or less
ø50	M12×1.75	16 or more	40 or more	4 rotations or less
ø63	M14×2	16 or more	40 or more	4 rotations or less
ø80	M16×2	20 or more	40 or more	4.5 rotations or less
ø100	M18×2.5	20 or more	50 or more	5 rotations or less

Internal structure and parts list

● JSG



Brake section cannot be disassembled

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Rod nut	Steel	Nickel plating	24	Round nut	Steel	Zinc chromate
2	Piston rod	Steel	Industrial chrome plating	25	Tie rod	Steel	Zinc chromate
3	Dust wiper	Nitrile rubber		26	Piston H	ø40: Aluminum alloy ø50 to ø100: Aluminum alloy die-casting	
4	Bush	Oil impregnated bearing alloy		27	Wear ring	Polyacetal resin	
5	Wear ring	Acetal resin		28	Magnet	Resin	
6	Piston packing B	Nitrile rubber		29	Piston packing	Nitrile rubber	
7	Brake piston	Cast iron	Phosphate coating	30	Piston R	ø40: Aluminum alloy ø50 to ø100: Aluminum alloy die-casting	
8	Body H	Aluminum casting	Chromate	31	Piston gasket	Nitrile rubber	
9	Spring	Piano wire		32	Hexagon socket head cap screw	Alloy steel	Black finish
10	Piston guide	Cast iron	Phosphate coating	33	Thrust washer		
11	Phillips pan head machine screw/captive washer	Steel	Zinc chromate	34	Bush	Dry bearing	
12	Dust cover	Aluminum alloy	Alumite	35	Body R	Aluminum casting	Chromate
13	Gasket	Nitrile rubber		36	Body F	Aluminum casting	Chromate
14	Joint plate	Aluminum alloy	Alumite	37	Cushion rubber	Urethane rubber	
15	Rod packing	Nitrile rubber		38	Bearing		
16	Bush	Oil impregnated bearing alloy		39	Pin	Alloy steel	
17	Rod cover	Aluminum alloy die-casting	Paint	40	Brake shoe metal	Cast iron	Nickel plating
18	Cylinder gasket	Nitrile rubber		41	Spring	Piano wire	
19	Cushion packing	Nitrile rubber, steel	Zinc chromate	42	Hexagon socket head cap screw	Alloy steel	Black finish
20	Cylinder tube	Aluminum alloy	Hard alumite	43	Hexagon socket head cap screw	Alloy steel	Black finish
21	Cushion needle	Copper alloy	Nickel plating	44	Cushion rubber	Urethane rubber	
22	Needle gasket	Nitrile rubber					
23	Head cover	Aluminum alloy die-casting	Paint				

Note: Never disassemble the brake section, as the powerful spring installed can be dangerous.

Repair parts list

● With air cushion

Bore size (mm)	Kit No.	Repair parts No.
ø40	JSG-40BK	3 15 18
ø50	JSG-50BK	19 22 27
ø63	JSG-63BK	29
ø80	JSG-80BK	
ø100	JSG-100BK	

Note: Specify the kit No. when placing an order.

Material of mounting bracket

Mounting	Material	Remarks
LB	Steel	Nickel plating
FA/FB	Steel	Paint
CA/CB	Cast iron	Paint
TA/TB/TC	Cast iron	Paint

● With rubber cushion

Bore size (mm)	Kit No.	Repair parts No.
ø40	JSG-40DK	3 15 18
ø50	JSG-50DK	22 27 29
ø63	JSG-63DK	44
ø80	JSG-80DK	
ø100	JSG-100DK	

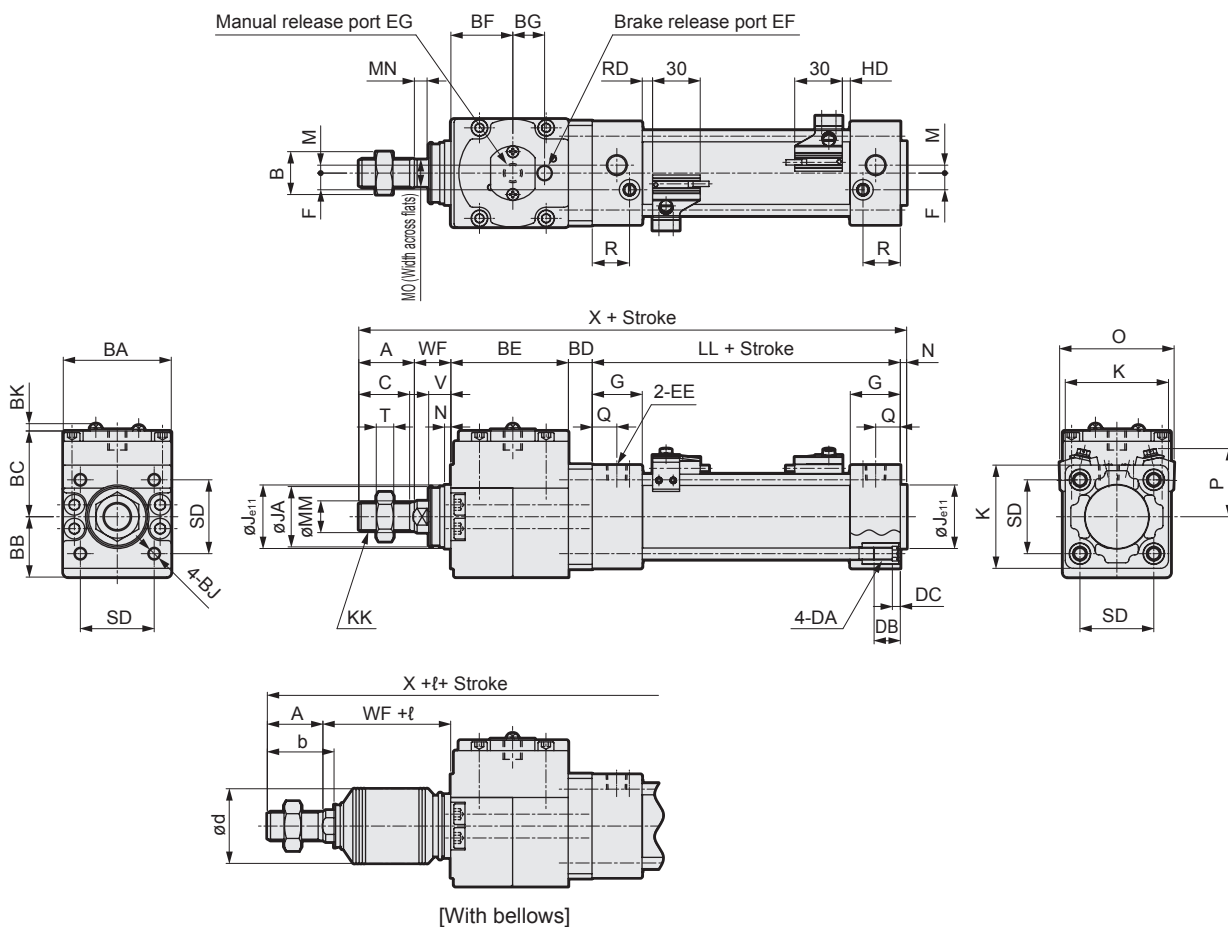
Note: Specify the kit No. when placing an order.

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

Dimensions



● Basic (00)



*1: Dimensions in () are for the rubber cushion.

*2: Refer to page 758 for RD, HD and protruding dimensions of other switches.

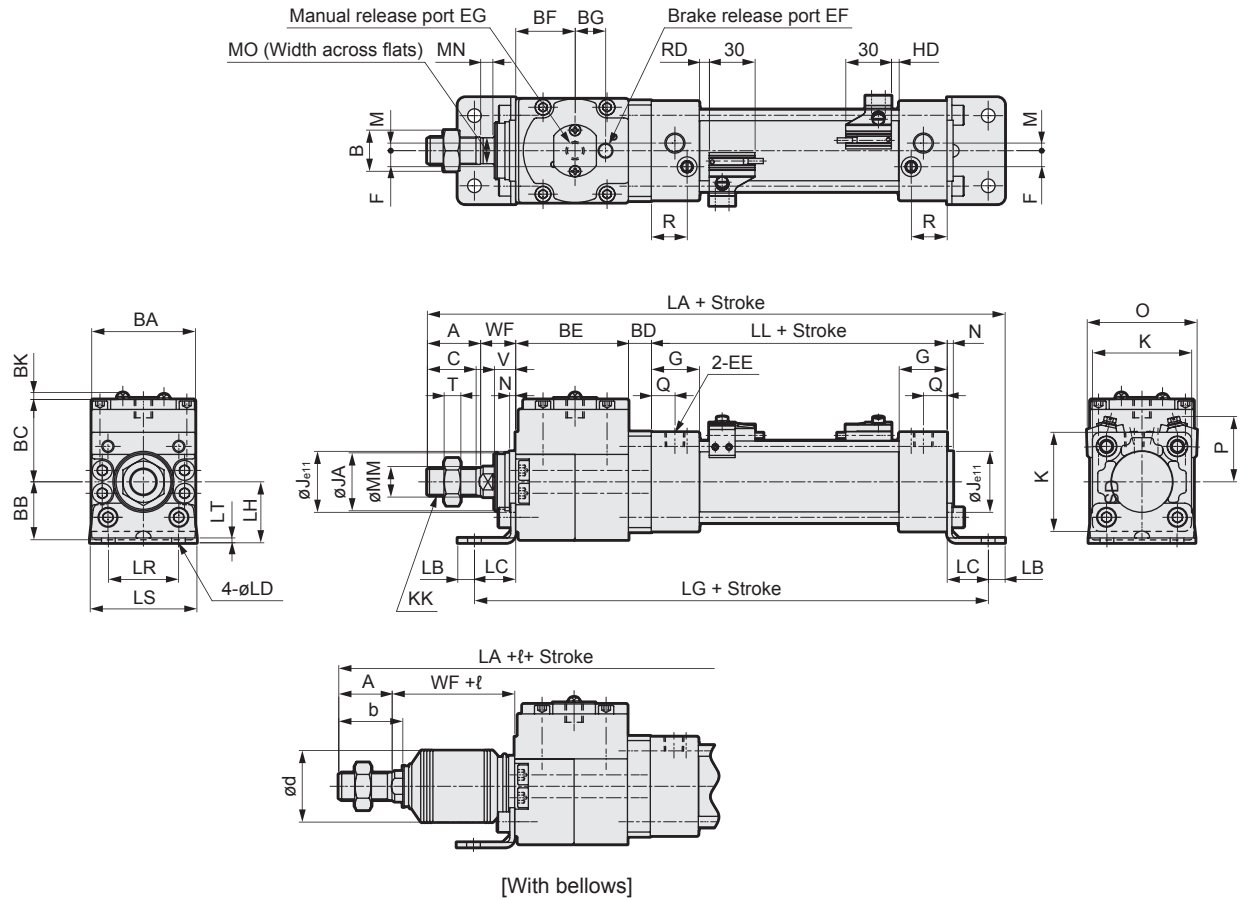
*3: Refer to page 757 for dimensions of type with valves (JSG-V).

Code	Basic (00) basic dimensions																						
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BF	BG	BJ	BK	C	DA	DB	DC	EE	EF	EG	F	G	J	JA	K
ø40	30	22	57	31.5	46.5	14	63	32.5	20	M6 Depth 12	4.6	27	M6	16	5	Rc1/4	Rc1/8	M12	9	27	35	31	52
ø50	35	27	68	38	54	15	74	39	20	M8 Depth 12	4.6	32	M8	16	5	Rc1/4	Rc1/8	M12	10.5	31.5	40	38	65
ø63	35	27	78	43	59	15	88	44.5	27	M8 Depth 14	4.6	32	M8	16	5	Rc3/8	Rc1/4	M14	12	31.5	45	38	75
ø80	40	32	98	53	72.5	23	108	54.5	27	M10 Depth 16	4.6	37	M10	16	5	Rc3/8	Rc1/4	M16	14	38	45	43	95
ø100	40	41	118	63	80.5	22.5	128.5	65.5	35	M10 Depth 18	4.6	37	M10	16	5	Rc1/2	Rc3/8	M18	15	38	55	51	114
Code																With switch							
Bore size (mm)	KK	*1 LL	M	MM	MN	MO	N	Q	R	SD	T	V	WF	*1 X	O	P	T0, T5, T2, T3, T3P		T2W, T3W				
																	RD	HD	RD	HD			
ø40	M14×1.5	84(90)	4	16	6	14	4	14	19	38	8	13	21	216(222)	66	41	5(8)	5(8)	7.5(10.5)	7.5(10.5)			
ø50	M18×1.5	94(102)	5	20	8	17	4	15.5	23.5	46.5	11	14	23	245(253)	72	43	6.5(10.5)	5(9)	9(13)	7(11)			
ø63	M18×1.5	94(102)	9	20	8	17	4	16.5	21.5	56.5	11	14	23	259(267)	83	48	6.5(10.5)	5(9)	9(13)	7(11)			
ø80	M22×1.5	114(124)	11.5	25	11	22	4	19	28	72	13	20	32	321(331)	104	57	12.5(17.5)	6(11)	15(20)	8(13)			
ø100	M26×1.5	114(124)	17	30	13	27	4	19	28	89	16	20	32	341(351)	121	63	12(17)	6.5(11.5)	14.5(19.5)	8.5(13.5)			
Code	With bellows																						
Bore size (mm)	A	b	d	WF	ℓ																		
					50 or less	Over 50 to 100	Over 100 to 150	Over 150 to 200	Over 200 to 300	Over 300 to 400	Over 400 to 500	Over 500 to 600	Over 600 to 700	Over 700 to 750	Over 750 to 800	Over 800							
ø40	30	35	40	21	30	43	55	68	93	118	143	0.35 x stroke-32											
ø50	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41										
ø63	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41										
ø80	40	50	53	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63							
ø100	40	52.5	61	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63							

Dimensions



● Axial foot (LB)



*1: Dimensions in () are for the rubber cushion.

*2: Refer to page 758 for RD, HD and protruding dimensions of other switches.

*3: Refer to page 757 for dimensions of type with valves (JSG-V).

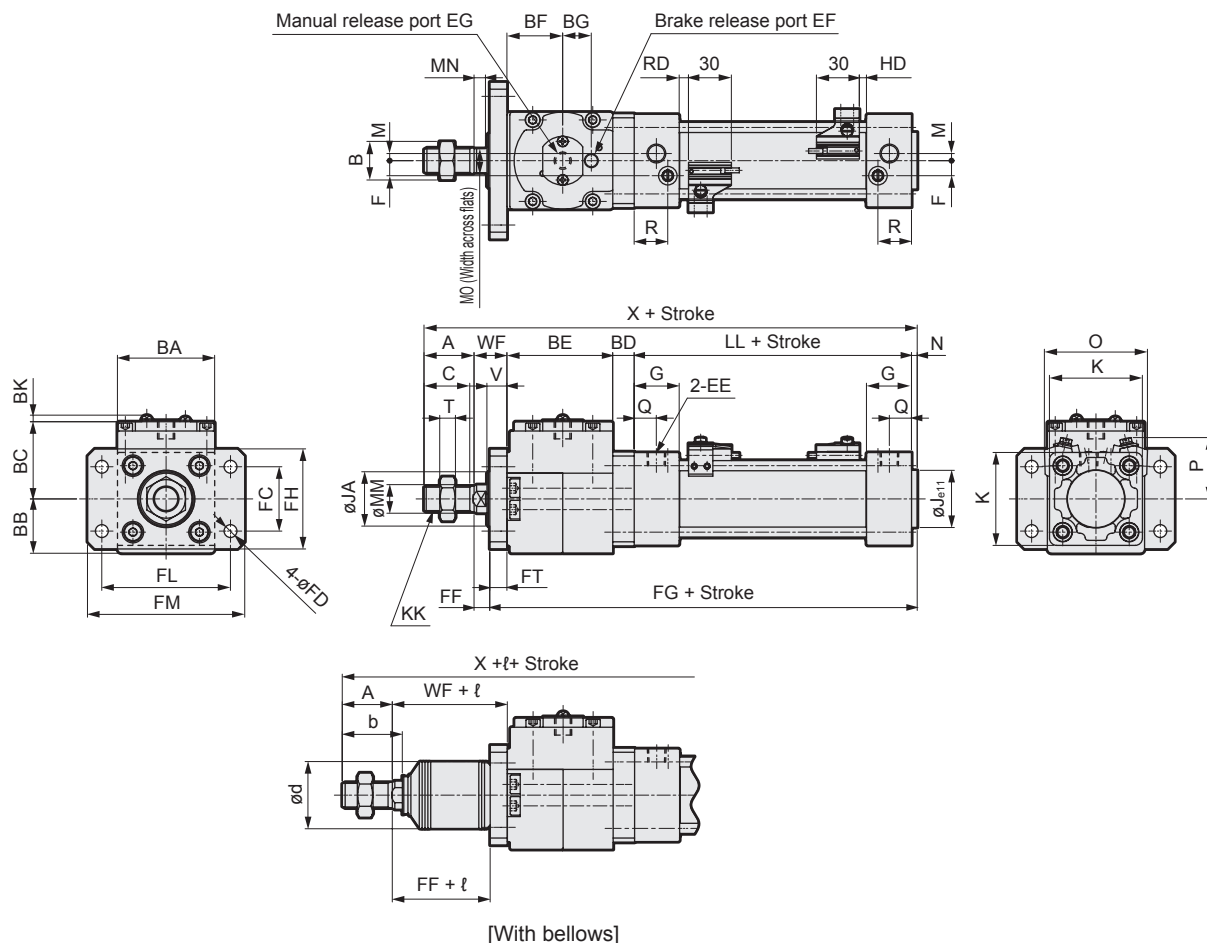
Code	Axial foot (LB) basic dimensions																								
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BF	BG	BK	C	EE	EF	EG	F	G	J	JA	K	KK	*1 LL	M	MM	MN	MO
ø40	30	22	57	31.5	46.5	14	63	32.5	20	4.6	27	Rc1/4	Rc1/8	M12	9	27	35	31	52	M14×1.5	84(90)	4	16	6	14
ø50	35	27	68	38	54	15	74	39	20	4.6	32	Rc1/4	Rc1/8	M12	10.5	31.5	40	38	65	M18×1.5	94(102)	5	20	8	17
ø63	35	27	78	43	59	15	88	44.5	27	4.6	32	Rc3/8	Rc1/4	M14	12	31.5	45	38	75	M18×1.5	94(102)	9	20	8	17
ø80	40	32	98	53	72.5	23	108	54.5	27	4.6	37	Rc3/8	Rc1/4	M16	14	38	45	43	95	M22×1.5	114(124)	11.5	25	11	22
ø100	40	41	118	63	80.5	22.5	128.5	65.5	35	4.6	37	Rc1/2	Rc3/8	M18	15	38	55	51	114	M26×1.5	114(124)	17	30	13	27
Code												Mounting dimensions								With switch					
Bore size (mm)	N	Q	R	T	V	WF	*1 LA	LB	LC	LD	*1 LG	LH	LR	LS	LT	O	P	T0, T5, T2, T3, T3P		T2W, T3W					
																		RD	HD	RD	HD				
ø40	4	14	19	8	13	21	247(253)	11	24	9	209(215)	33	38	55	3.2	66	41	5(8)	5(8)	7.5(10.5)	7.5(10.5)				
ø50	4	15.5	23.5	11	14	23	279(287)	11	27	9	237(245)	40	46	70	3.2	72	43	6.5(10.5)	5(9)	9(13)	7(11)				
ø63	4	16.5	21.5	11	14	23	296(304)	14	27	12	251(259)	48	56	80	4.5	83	48	6.5(10.5)	5(9)	9(13)	7(11)				
ø80	4	19	28	13	20	32	361(371)	14	30	12	305(315)	55	72	95	4.5	104	57	12.5(17.5)	6(11)	15(20)	8(13)				
ø100	4	19	28	16	20	32	385(395)	16	32	14	329(339)	65	89	114	6	121	63	12(17)	6.5(11.5)	14.5(19.5)	8.5(13.5)				
Code	With bellows																								
Bore size (mm)	A	b	d	WF	ℓ														Over 800						
					50 or less	Over 50 to 100	Over 100 to 150	Over 150 to 200	Over 200 to 300	Over 300 to 400	Over 400 to 500	Over 500 to 600	Over 600 to 700	Over 700 to 750	Over 750 to 800										
ø40	30	35	40	21	30	43	55	68	93	118	143	0.35 x stroke-32													
ø50	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø63	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø80	40	50	53	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									
ø100	40	52.5	61	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									

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

Dimensions



● Rod side flange (FA)



*1: Dimensions in () are for the rubber cushion.

*2: Refer to page 758 for RD, HD and protruding dimensions of other switches.

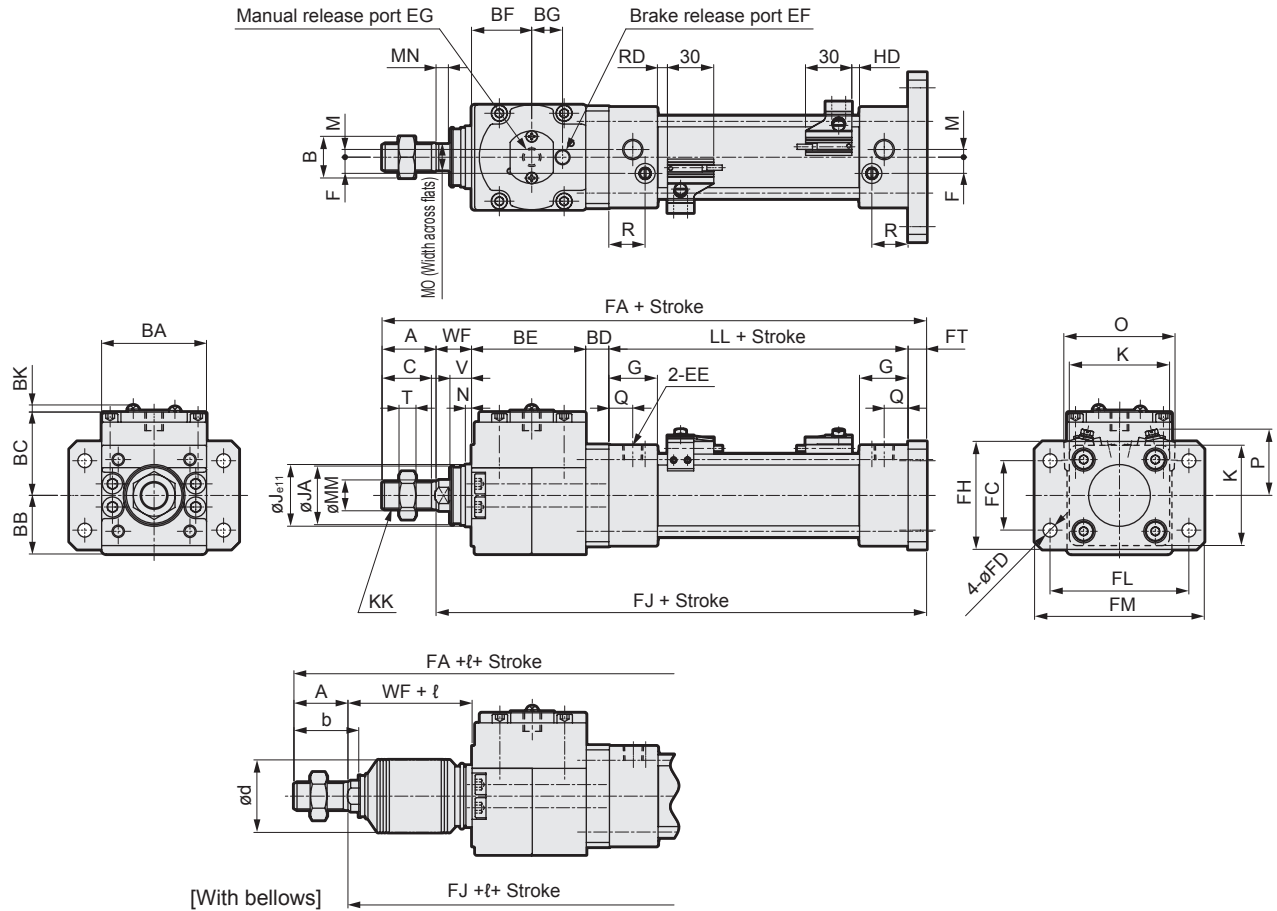
*3: Refer to page 757 for dimensions of type with valves (JSG-V).

Code	Rod side flange (FA) basic dimensions																								
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BF	BG	BK	C	EE	EF	EG	F	G	J	JA	K	KK	*1 LL	M	MM	MN	MO
ø40	30	22	57	31.5	46.5	14	63	32.5	20	4.6	27	Rc1/4	Rc1/8	M12	9	27	35	31	52	M14×1.5	84(90)	4	16	6	14
ø50	35	27	68	38	54	15	74	39	20	4.6	32	Rc1/4	Rc1/8	M12	10.5	31.5	40	38	65	M18×1.5	94(102)	5	20	8	17
ø63	35	27	78	43	59	15	88	44.5	27	4.6	32	Rc3/8	Rc1/4	M14	12	31.5	45	38	75	M18×1.5	94(102)	9	20	8	17
ø80	40	32	98	53	72.5	23	108	54.5	27	4.6	37	Rc3/8	Rc1/4	M16	14	38	45	43	95	M22×1.5	114(124)	11.5	25	11	22
ø100	40	41	118	63	80.5	22.5	128.5	65.5	35	4.6	37	Rc1/2	Rc3/8	M18	15	38	55	51	114	M26×1.5	114(124)	17	30	13	27
Code											Mounting dimensions								With switch						
Bore size (mm)	N	Q	R	T	V	WF	*1 X	FC	FD	FF	*1 FG	FH	FL	FM	FT	O	P	T0, T5, T2, T3, T3P		T2W, T3W					
																		RD	HD	RD	HD				
ø40	4	14	19	8	13	21	216(222)	46	9	11	175(181)	65	83	101	10	66	41	5(8)	5(8)	7.5(10.5)	7.5(10.5)				
ø50	4	15.5	23.5	11	14	23	245(253)	52	9	11	199(207)	77	100	120	12	72	43	6.5(10.5)	5(9)	9(13)	7(11)				
ø63	4	16.5	21.5	11	14	23	259(267)	62	9	11	213(221)	92	115	135	12	83	48	6.5(10.5)	5(9)	9(13)	7(11)				
ø80	4	19	28	13	20	32	321(331)	63	12	16	265(275)	100	126	153	16	104	57	12.5(17.5)	6(11)	15(20)	8(13)				
ø100	4	19	28	16	20	32	341(351)	75	14	16	285(295)	120	150	178	16	121	63	12(17)	6.5(11.5)	14.5(19.5)	8.5(13.5)				
Code	With bellows																								
Bore size (mm)	A	b	d	WF	ℓ																				
					50 or less	Over 50 to 100	Over 100 to 150	Over 150 to 200	Over 200 to 300	Over 300 to 400	Over 400 to 500	Over 500 to 600	Over 600 to 700	Over 700 to 750	Over 750 to 800	Over 800									
ø40	30	35	40	21	30	43	55	68	93	118	143	0.35 x stroke-32													
ø50	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø63	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø80	40	50	53	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									
ø100	40	52.5	61	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									

Dimensions



● Head side flange (FB)



*1: Dimensions in () are for the rubber cushion.

*2: Refer to page 758 for RD, HD and protruding dimensions of other switches.

*3: Refer to page 757 for dimensions of type with valves (JSG-V).

Code	Head side flange (FB) basic dimensions																								
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BF	BG	BK	C	EE	EF	EG	F	G	J	JA	K	KK	*1 LL	M	MM	MN	MO
ø40	30	22	57	31.5	46.5	14	63	32.5	20	4.6	27	Rc1/4	Rc1/8	M12	9	27	35	31	52	M14×1.5	84(90)	4	16	6	14
ø50	35	27	68	38	54	15	74	39	20	4.6	32	Rc1/4	Rc1/8	M12	10.5	31.5	40	38	65	M18×1.5	94(102)	5	20	8	17
ø63	35	27	78	43	59	15	88	44.5	27	4.6	32	Rc3/8	Rc1/4	M14	12	31.5	45	38	75	M18×1.5	94(102)	9	20	8	17
ø80	40	32	98	53	72.5	23	108	54.5	27	4.6	37	Rc3/8	Rc1/4	M16	14	38	45	43	95	M22×1.5	114(124)	11.5	25	11	22
ø100	40	41	118	63	80.5	22.5	128.5	65.5	35	4.6	37	Rc1/2	Rc3/8	M18	15	38	55	51	114	M26×1.5	114(124)	17	30	13	27
Code							Mounting dimensions										With switch								
Bore size (mm)	N	Q	R	T	V	WF	*1 FA	FC	FD	FH	*1 FJ	FL	FM	FT	O	P	T0,T5,T2,T3,T3P		T2W,T3W						
																			RD	HD	RD	HD			
ø40	4	14	19	8	13	21	222(228)	46	9	65	192(198)	83	101	10	66	41	5(8)	5(8)	7.5(10.5)	7.5(10.5)					
ø50	4	15.5	23.5	11	14	23	253(261)	52	9	77	218(226)	100	120	12	72	43	6.5(10.5)	5(9)	9(13)	7(11)					
ø63	4	16.5	21.5	11	14	23	267(275)	62	9	92	232(240)	115	135	12	83	48	6.5(10.5)	5(9)	9(13)	7(11)					
ø80	4	19	28	13	20	32	333(343)	63	12	100	293(303)	126	153	16	104	57	12.5(17.5)	6(11)	15(20)	8(13)					
ø100	4	19	28	16	20	32	353(363)	75	14	120	313(323)	150	178	16	121	63	12(17)	6.5(11.5)	14.5(19.5)	8.5(13.5)					
Code	With bellows																								
Bore size (mm)	A	b	d	WF	ℓ																				
					50 or less	Over 50 to 100	Over 100 to 150	Over 150 to 200	Over 200 to 300	Over 300 to 400	Over 400 to 500	Over 500 to 600	Over 600 to 700	Over 700 to 750	Over 750 to 800	Over 800									
ø40	30	35	40	21	30	43	55	68	93	118	143	0.35 x stroke-32													
ø50	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø63	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø80	40	50	53	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									
ø100	40	52.5	61	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									

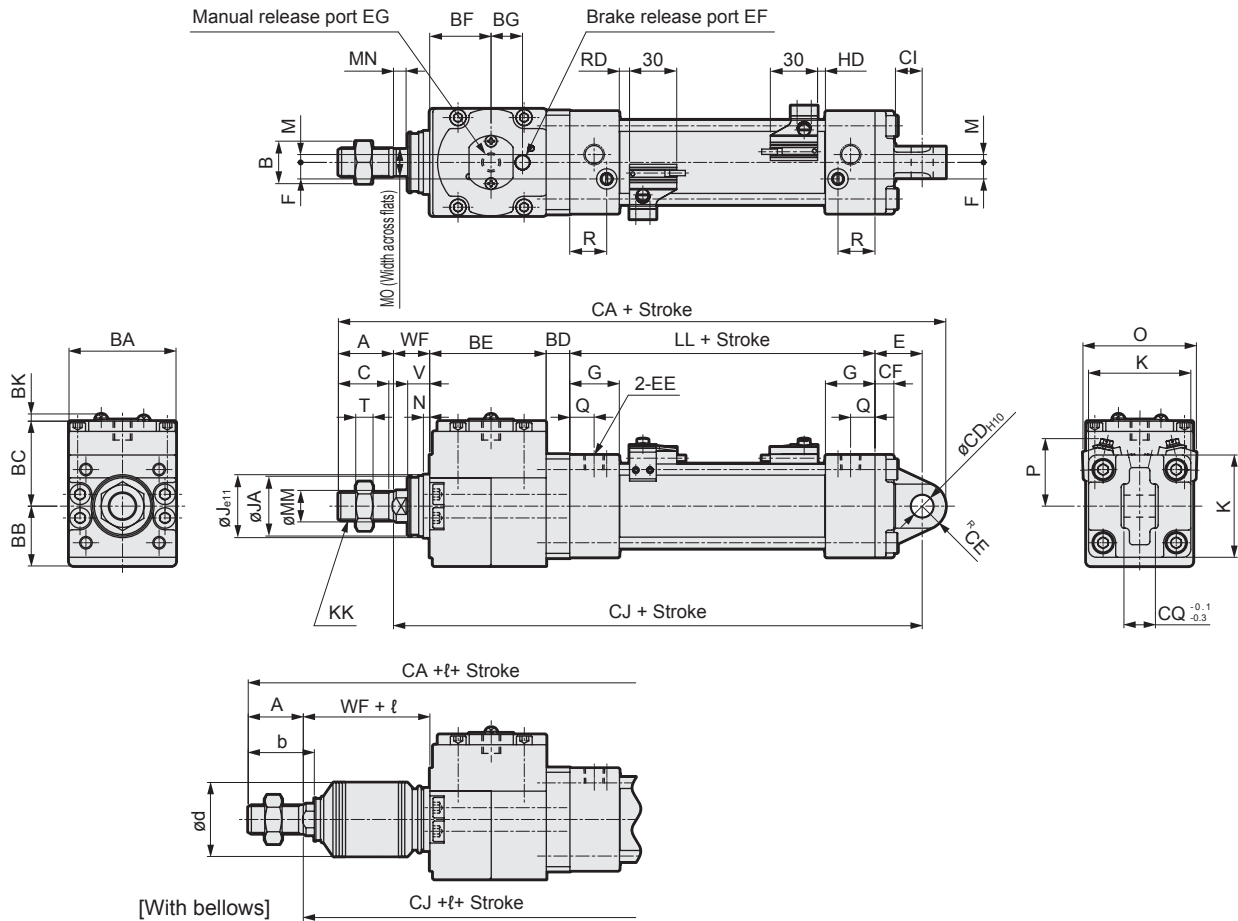
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

JSG/JSG-V Series

Dimensions



● Eye bracket (CA)



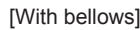
*1: Dimensions in () are for the rubber cushion.

*2: Refer to page 758 for RD, HD and protruding dimensions of other switches.

*3: Refer to page 757 for dimensions of type with valves (JSG-V).

Code	Eye bracket (CA) basic dimensions																								
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BF	BG	BK	C	EE	EF	EG	F	G	J	JA	K	KK	*1 LL	M	MM	MN	MO
ø40	30	22	57	31.5	46.5	14	63	32.5	20	4.6	27	Rc1/4	Rc1/8	M12	9	27	35	31	52	M14×1.5	84(90)	4	16	6	14
ø50	35	27	68	38	54	15	74	39	20	4.6	32	Rc1/4	Rc1/8	M12	10.5	31.5	40	38	65	M18×1.5	94(102)	5	20	8	17
ø63	35	27	78	43	59	15	88	44.5	27	4.6	32	Rc3/8	Rc1/4	M14	12	31.5	45	38	75	M18×1.5	94(102)	9	20	8	17
ø80	40	32	98	53	72.5	23	108	54.5	27	4.6	37	Rc3/8	Rc1/4	M16	14	38	45	43	95	M22×1.5	114(124)	11.5	25	11	22
ø100	40	41	118	63	80.5	22.5	128.5	65.5	35	4.6	37	Rc1/2	Rc3/8	M18	15	38	55	51	114	M26×1.5	114(124)	17	30	13	27
Code							Mounting dimensions										With switch								
Bore size (mm)	N	Q	R	T	V	WF	*1 FA	CD	CE	CF	CI	*1 CJ	CQ	E	O	P	T0, T5, T2, T3, T3P		T2W, T3W						
																	RD	HD	RD	HD					
ø40	4	14	19	8	13	21	246(252)	10	11	9	13	205(211)	14	23	66	41	5(8)	5(8)	7.5(10.5)	7.5(10.5)					
ø50	4	15.5	23.5	11	14	23	286(294)	14	15	12	17	236(244)	20	30	72	43	6.5(10.5)	5(9)	9(13)	7(11)					
ø63	4	16.5	21.5	11	14	23	300(308)	14	15	12	17	250(258)	20	30	83	48	6.5(10.5)	5(9)	9(13)	7(11)					
ø80	4	19	28	13	20	32	382(392)	22	23	15	26	319(329)	30	42	104	57	12.5(17.5)	6(11)	15(20)	8(13)					
ø100	4	19	28	16	20	32	402(412)	22	23	15	26	339(349)	30	42	121	63	12(17)	6.5(11.5)	14.5(19.5)	8.5(13.5)					
Code	With bellows																								
Bore size (mm)	A	b	d	WF	ℓ																				
					50 or less	Over 50 to 100	Over 100 to 150	Over 150 to 200	Over 200 to 300	Over 300 to 400	Over 400 to 500	Over 500 to 600	Over 600 to 700	Over 700 to 750	Over 750 to 800	Over 800									
ø40	30	35	40	21	30	43	55	68	93	118	143	0.35 x stroke-32													
ø50	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø63	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø80	40	50	53	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									
ø100	40	52.5	61	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									

- Clevis bracket (CB)



*2: Refer to page 758 for RD, HD and protruding dimensions of other switches.

*3: Refer to page 757 for dimensions of type with valves (JSG-V).

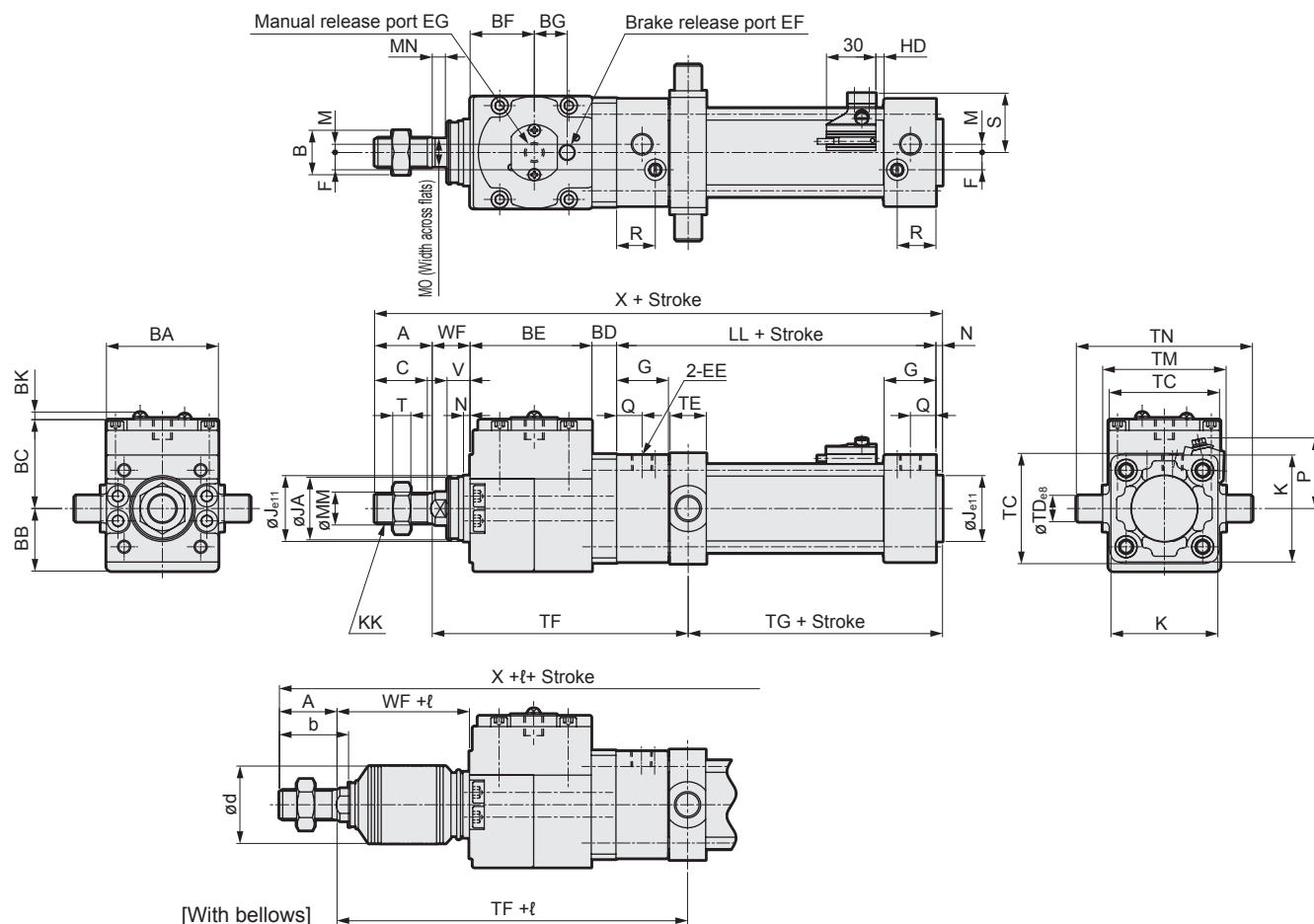
Code	Clevvis bracket (CB) basic dimensions																									
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BF	BG	BK	C	EE	EF	EG	F	G	J	JA	K	KK	*1 LL	M	MM	MN	MO	
	ø40	30	22	57	31.5	46.5	14	63	32.5	20	4.6	27	Rc1/4	Rc1/8	M12	9	27	35	31	52	M14×1.5	84(90)	4	16	6	14
ø50	35	27	68	38	54	15	74	39	20	4.6	32	Rc1/4	Rc1/8	M12	10.5	31.5	40	38	65	M18×1.5	94(102)	5	20	8	17	
ø63	35	27	78	43	59	15	88	44.5	27	4.6	32	Rc3/8	Rc1/4	M14	12	31.5	45	38	75	M18×1.5	94(102)	9	20	8	17	
ø80	40	32	98	53	72.5	23	108	54.5	27	4.6	37	Rc3/8	Rc1/4	M16	14	38	45	43	95	M22×1.5	114(124)	11.5	25	11	22	
ø100	40	41	118	63	80.5	22.5	128.5	65.5	35	4.6	37	Rc1/2	Rc3/8	M18	15	38	55	51	114	M26×1.5	114(124)	17	30	13	27	
Code							Mounting dimensions												With switch							
Bore size (mm)	N	Q	R	T	V	WF	*1 CA	CD	CE	CF	CI	*1 CJ	CV	CW	E	PA	O	P	T0, T5, T2, T3, T3P		T2W, T3W					
	RD		HD		RD		HD																			
ø40	4	14	19	8	13	21	246(252)	10	11	9	13	205(211)	28	14	23	44	66	41	5(8)		5(8)		7.5(10.5)		7.5(10.5)	
ø50	4	15.5	23.5	11	14	23	286(294)	14	15	12	17	236(244)	40	20	30	60	72	43	6.5(10.5)		5(9)		9(13)		7(11)	
ø63	4	16.5	21.5	11	14	23	300(308)	14	15	12	17	250(258)	40	20	30	60	83	48	6.5(10.5)		5(9)		9(13)		7(11)	
ø80	4	19	28	13	20	32	382(392)	22	23	15	26	319(329)	60	30	42	82	104	57	12.5(17.5)		6(11)		15(20)		8(13)	
ø100	4	19	28	16	20	32	402(412)	22	23	15	26	339(349)	60	30	42	82	121	63	12(17)		6.5(11.5)		14.5(19.5)		8.5(13.5)	
Code	With bellows																									
Bore size (mm)	A	b	d	WF	ℓ																					
	50 or less	Over 50 to 100	Over 100 to 150	Over 150 to 200	Over 200 to 300	Over 300 to 400	Over 400 to 500	Over 500 to 600	Over 600 to 700	Over 700 to 750	Over 750 to 800	Over 800														
ø40	30	35	40	21	30	43	55	68	93	118	143	0.35 x stroke-32														
ø50	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41													
ø63	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41													
ø80	40	50	53	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63										
ø100	40	52.5	61	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63										

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

Dimensions



● Rod side trunnion (TA)



*1: Dimensions in () are for the rubber cushion.

*2: Refer to page 758 for RD, HD and protruding dimensions of other switches.

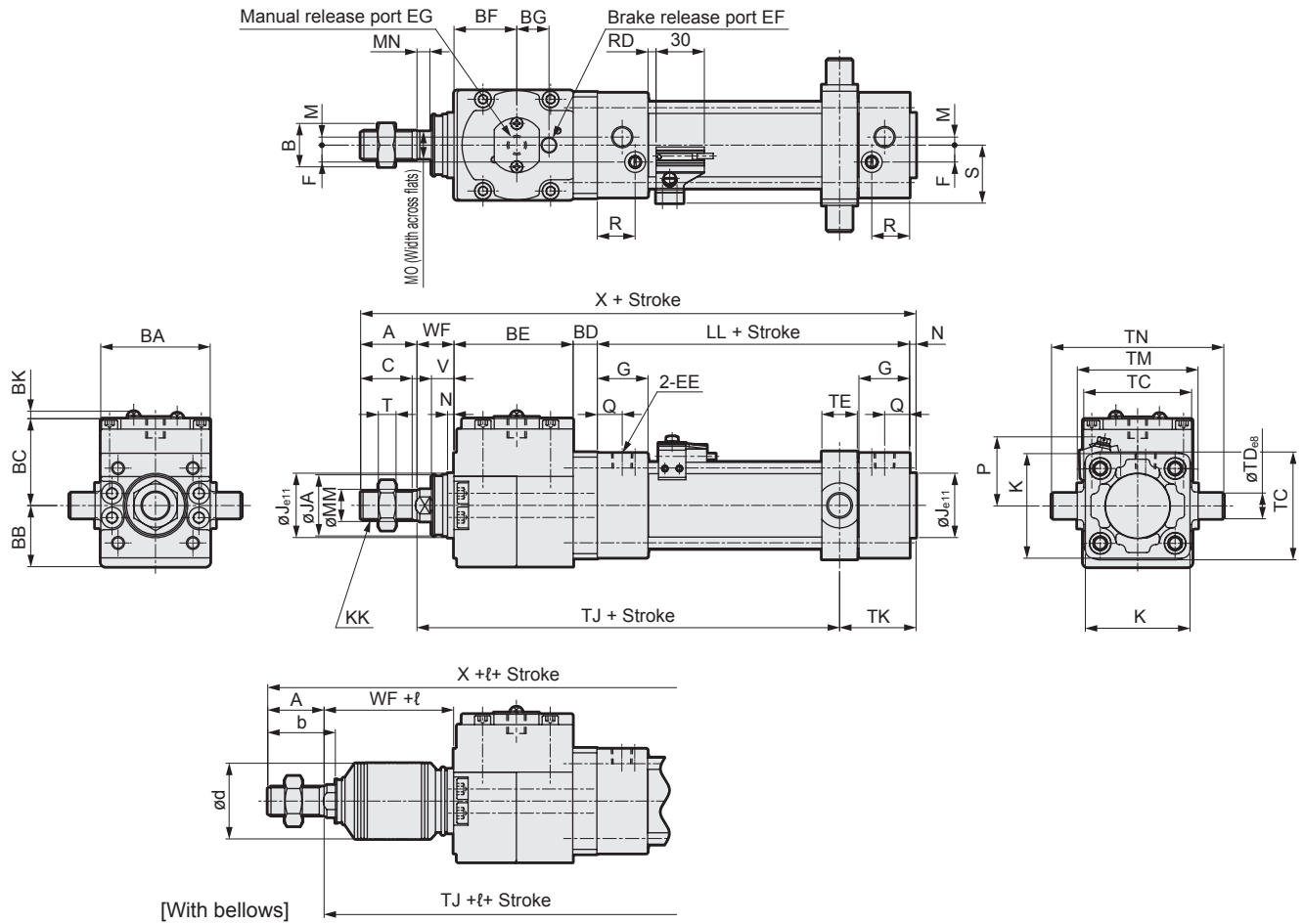
*3: Refer to page 757 for dimensions of type with valves (JSG-V).

Code	Rod side trunnion (TA) basic dimensions																								
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BF	BG	BK	C	EE	EF	EG	F	G	J	JA	K	KK	*1 LL	M	MM	MN	MO
ø40	30	22	57	31.5	46.5	14	63	32.5	20	4.6	27	Rc1/4	Rc1/8	M12	9	27	35	31	52	M14×1.5	84(90)	4	16	6	14
ø50	35	27	68	38	54	15	74	39	20	4.6	32	Rc1/4	Rc1/8	M12	10.5	31.5	40	38	65	M18×1.5	94(102)	5	20	8	17
ø63	35	27	78	43	59	15	88	44.5	27	4.6	32	Rc3/8	Rc1/4	M14	12	31.5	45	38	75	M18×1.5	94(102)	9	20	8	17
ø80	40	32	98	53	72.5	23	108	54.5	27	4.6	37	Rc3/8	Rc1/4	M16	14	38	45	43	95	M22×1.5	114(124)	11.5	25	11	22
ø100	40	41	118	63	80.5	22.5	128.5	65.5	35	4.6	37	Rc1/2	Rc3/8	M18	15	38	55	51	114	M26×1.5	114(124)	17	30	13	27
Code	Mounting dimensions											With switch													
Bore size (mm)	N	Q	R	T	V	WF	*1 X	TC	TD	TE	TF	*1 TG	TM	TN	S	P	T0, T5, T2, T3, T3P			T2W, T3W					
ø40	4	14	19	8	13	21	216(222)	57	16	22	137	49(55)	63	95	33	41	5(8)			7.5(10.5)					
ø50	4	15.5	23.5	11	14	23	245(253)	67	16	22	155.5	54.5(62.5)	75	107	36	43	5(9)			7(11)					
ø63	4	16.5	21.5	11	14	23	259(267)	82	20	28	172.5	51.5(59.5)	90	130	41.5	48	5(9)			7(11)					
ø80	4	19	28	13	20	32	321(331)	100	20	34	219	62(72)	110	150	52	57	6(11)			8(13)					
ø100	4	19	28	16	20	32	341(351)	121	25	40	242	59(69)	132	182	60.5	63	6.5(11.5)			8.5(13.5)					
Code	With bellows																								
Bore size (mm)	A	b	d	WF	ℓ																				
ø40	30	35	40	21	30	43	55	68	93	118	143	0.35 x stroke-32													
ø50	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø63	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø80	40	50	53	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									
ø100	40	52.5	61	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									

Dimensions



● Head side trunnion (TB)



*1: Dimensions in () are for the rubber cushion.

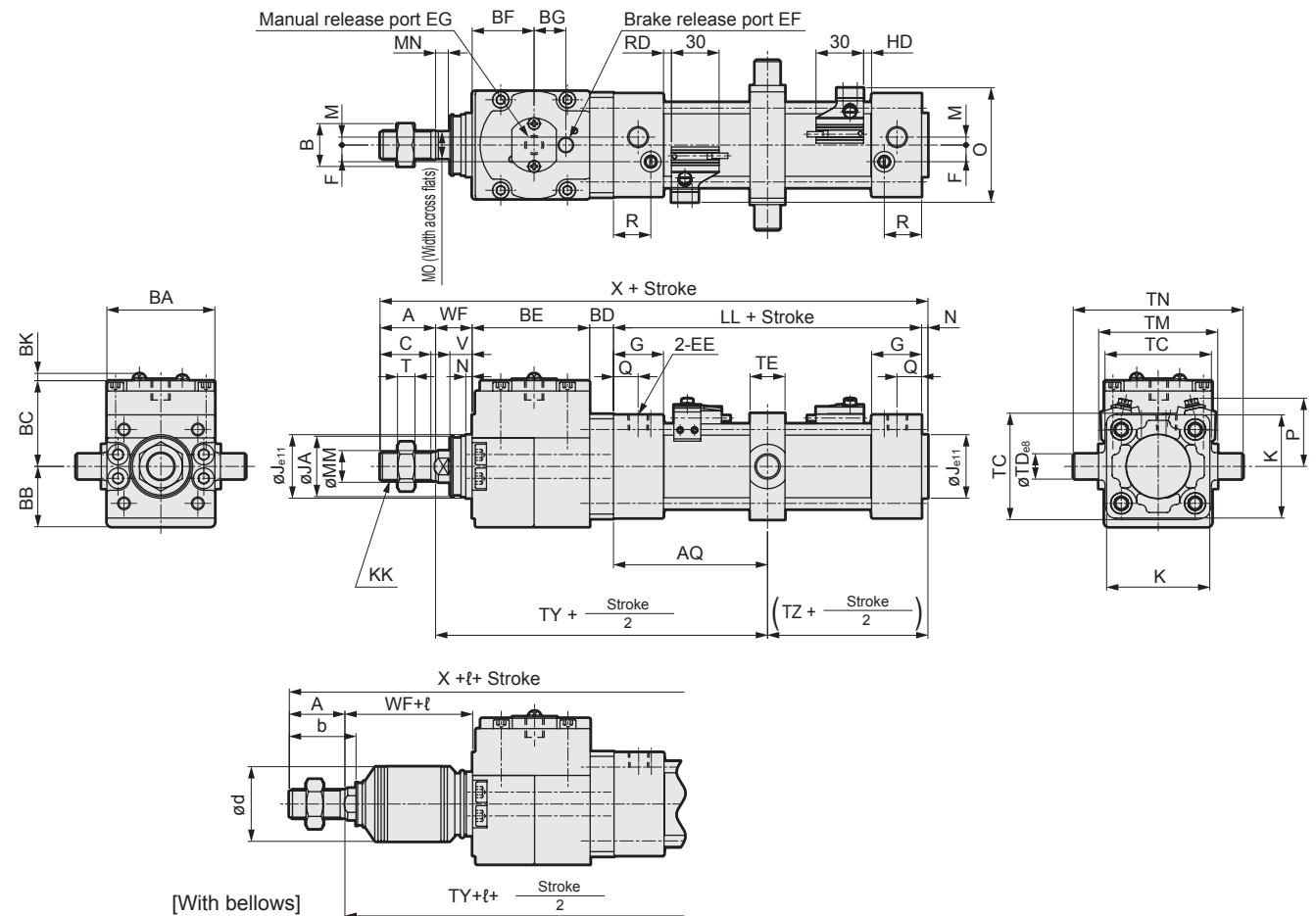
*2: Refer to page 758 for RD, HD and protruding dimensions of other switches.

*3: Refer to page 757 for dimensions of type with valves (JSG-V).

Code	Head side trunnion (TB) basic dimensions																								
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BF	BG	BK	C	EE	EF	EG	F	G	J	JA	K	KK	*1 LL	M	MM	MN	MO
ø40	30	22	57	31.5	46.5	14	63	32.5	20	4.6	27	Rc1/4	Rc1/8	M12	9	27	35	31	52	M14×1.5	84(90)	4	16	6	14
ø50	35	27	68	38	54	15	74	39	20	4.6	32	Rc1/4	Rc1/8	M12	10.5	31.5	40	38	65	M18×1.5	94(102)	5	20	8	17
ø63	35	27	78	43	59	15	88	44.5	27	4.6	32	Rc3/8	Rc1/4	M14	12	31.5	45	38	75	M18×1.5	94(102)	9	20	8	17
ø80	40	32	98	53	72.5	23	108	54.5	27	4.6	37	Rc3/8	Rc1/4	M16	14	38	45	43	95	M22×1.5	114(124)	11.5	25	11	22
ø100	40	41	118	63	80.5	22.5	128.5	65.5	35	4.6	37	Rc1/2	Rc3/8	M18	15	38	55	51	114	M26×1.5	114(124)	17	30	13	27
Code												Mounting dimensions						With switch							
Bore size (mm)	N	Q	R	T	V	WF	*1 X	TC	TD	TE	*1 TJ	TK	TM	TN	S	P	T0, T5, T2, T3, T3P		T2W, T3W						
																	RD		RD						
ø40	4	14	19	8	13	21	216(222)	57	16	22	143(149)	43	63	95	33	41	5(8)		7.5(10.5)						
ø50	4	15.5	23.5	11	14	23	245(253)	67	16	22	162.5(170.5)	47.5	75	107	36	43	6.5(10.5)		9(13)						
ø63	4	16.5	21.5	11	14	23	259(267)	82	20	28	173.5(181.5)	50.5	90	130	41.5	48	6.5(10.5)		9(13)						
ø80	4	19	28	13	20	32	321(331)	100	20	34	221(231)	60	110	150	52	57	12.5(17.5)		15(20)						
ø100	4	19	28	16	20	32	341(351)	121	25	40	238(248)	63	132	182	60.5	63	12(17)		14.5(19.5)						
Code	With bellows																								
Bore size (mm)	A	b	d	WF	ℓ																				
					50 or less	Over 50 to 100	Over 100 to 150	Over 150 to 200	Over 200 to 300	Over 300 to 400	Over 400 to 500	Over 500 to 600	Over 600 to 700	Over 700 to 750	Over 750 to 800	Over 800									
ø40	30	35	40	21	30	43	55	68	93	118	143	0.35 x stroke-32													
ø50	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø63	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø80	40	50	53	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									
ø100	40	52.5	61	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									

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

- Intermediate trunnion (TC)



*1: Dimensions in () are for the rubber cushion.

*2: Refer to page 758 for RD, HD and protruding dimensions of other switches.

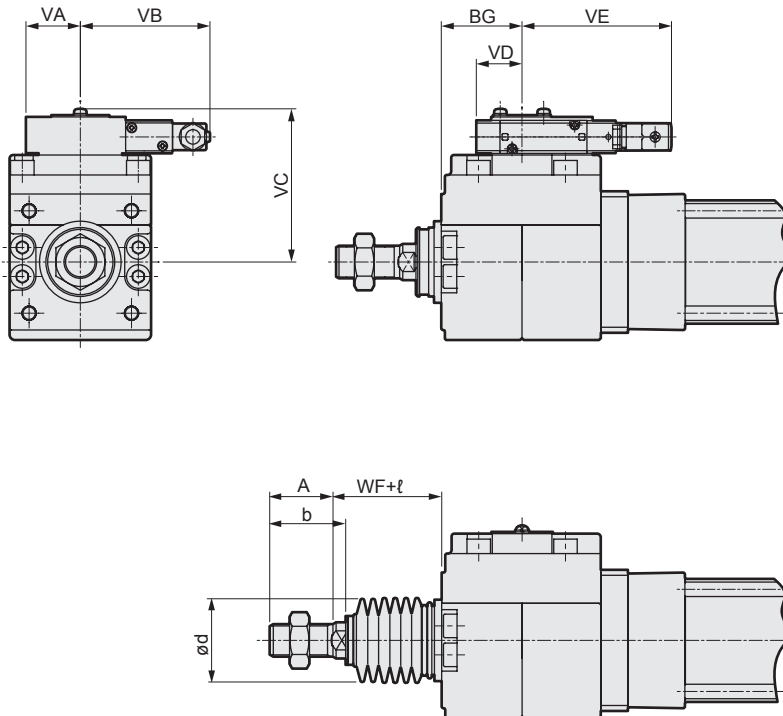
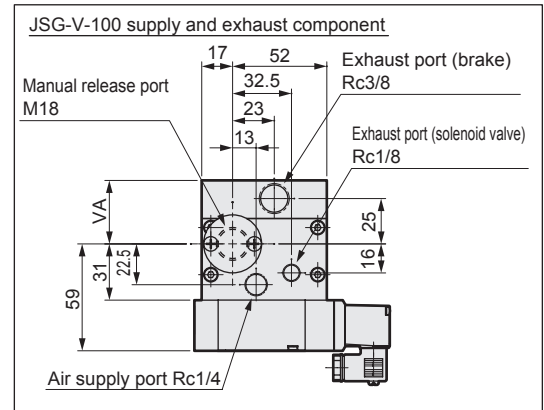
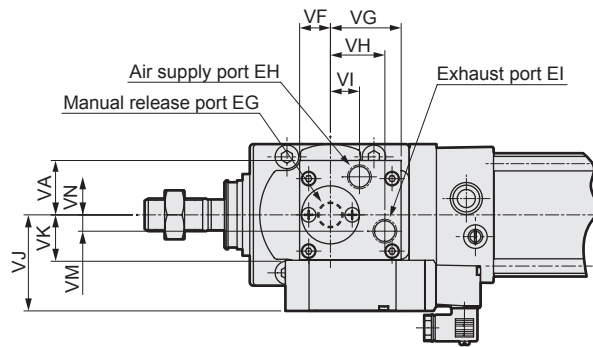
*3: Refer to page 757 for dimensions of type with valves (JSG-V).

Code		Intermediate trunnion (TC) basic dimensions																							
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BF	BG	BK	C	EE	EF	EG	F	G	J	JA	K	KK	*1 LL	M	MM	MN	MO
	ø40	30	22	57	31.5	46.5	14	63	32.5	20	4.6	27	Rc1/4	Rc1/8	M12	9	27	35	31	52	M14×1.5	84(90)	4	16	6
ø50	35	27	68	38	54	15	74	39	20	4.6	32	Rc1/4	Rc1/8	M12	10.5	31.5	40	38	65	M18×1.5	94(102)	5	20	8	17
ø63	35	27	78	43	59	15	88	44.5	27	4.6	32	Rc3/8	Rc1/4	M14	12	31.5	45	38	75	M18×1.5	94(102)	9	20	8	17
ø80	40	32	98	53	72.5	23	108	54.5	27	4.6	37	Rc3/8	Rc1/4	M16	14	38	45	43	95	M22×1.5	114(124)	11.5	25	11	22
ø100	40	41	118	63	80.5	22.5	128.5	65.5	35	4.6	37	Rc1/2	Rc3/8	M18	15	38	55	51	114	M26×1.5	114(124)	17	30	13	27
Code												Mounting dimensions							With switch						
Bore size (mm)	N	Q	R	T	V	WF	*1 X	TC	TD	TE	TM	TN	*1 TY	*1 TZ	*1 AQ	O	P	T0,T5,T2,T3,T3P		T2W,T3W					
																		RD	HD	RD	HD				
ø40	4	14	19	8	13	21	216(222)	57	16	22	63	95	140(143)	46(49)	42(45)+ Stroke 2	66	41	5(8)	5(8)	7.5(10.5)	7.5(10.5)				
ø50	4	15.5	23.5	11	14	23	245(253)	67	16	22	75	107	159(163)	51(55)	47(51)+ Stroke 2	72	43	6.5(10.5)	5(9)	9(13)	7(11)				
ø63	4	16.5	21.5	11	14	23	259(267)	82	20	28	90	130	173(177)	51(55)	47(51)+ Stroke 2	83	48	6.5(10.5)	5(9)	9(13)	7(11)				
ø80	4	19	28	13	20	32	321(331)	100	20	34	110	150	220(225)	61(66)	51(62)+ Stroke 2	104	57	12.5(17.5)	6(11)	15(20)	8(13)				
ø100	4	19	28	16	20	32	341(351)	121	25	40	132	182	240(245)	61(66)	51(62)+ Stroke 2	121	63	12(17)	6.5(11.5)	14.5(19.5)	8.5(13.5)				
Code		With bellows																							
Bore size (mm)	A	b	d	WF	ℓ																				
					50 or less	Over 50 to 100	Over 100 to 150	Over 150 to 200	Over 200 to 300	Over 300 to 400	Over 400 to 500	Over 500 to 600	Over 600 to 700	Over 700 to 750	Over 750 to 800	Over 800									
ø40	30	35	40	21	30	43	55	68	93	118	143	0.35 x stroke-32													
ø50	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø63	35	42	47	23	31	44	56	69	94	119	144	169	0.35 x stroke-41												
ø80	40	50	53	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									
ø100	40	52.5	61	32	29	42	54	67	92	117	142	167	192	204	217	0.35 x stroke-63									

Dimensions



- JSG-V (with valve for brake release)



*1: The shape of the JSG-V-100 supply and exhaust port differs from that of other sizes. Refer to the dimensions of JSG-V-100 supply and exhaust components in the upper right figure.

Code	With valve for brake release (JSG-V) basic dimensions																
Bore size (mm)	BG	EG	EH	EI	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VM	VN
ø40	32.5	M12	Rc1/8	Rc1/8	26	62.5	72	24	83.5	19	38	30	12.5	44	16	4	16
ø50	39	M12	Rc1/8	Rc1/8	26	62.5	79.5	24	83.5	19	38	30	12.5	44	16	4	16
ø63	44.5	M14	Rc1/4	Rc1/4	30	71.5	84.5	25	82.5	17	39	30	16	53	25	9	21
ø80	54.5	M16	Rc1/4	Rc1/4	30	71.5	98	25	82.5	17	39	30	16	53	25	9	21
ø100	65.5	M18	*1			35	77.5	113	21	86.5	*1						

Code	With bellows														
Bore size (mm)	A	b	d	WF	ℓ										
					50 or less	Over 50 to 100	Over 100 to 150	Over 150 to 200	Over 200 to 300	Over 300 to 400	Over 400 to 500	Over 500 to 600	Over 600 to 700	Over 700 to 750	
ø40	30	35	40	21	30	43	55	68	93	118	143	-	-	-	
ø50	35	42	47	23	31	44	56	69	94	119	144	169	-	-	
ø63	35	42	47	23	31	44	56	69	94	119	144	169	-	-	
ø80	40	50	53	32	29	42	54	67	92	117	142	167	192	204	
ø100	40	52.5	61	32	29	42	54	67	92	117	142	167	192	204	

* Dimensions other than those listed above are the same as those of double acting/single rod. Refer to pages 748 to 756.

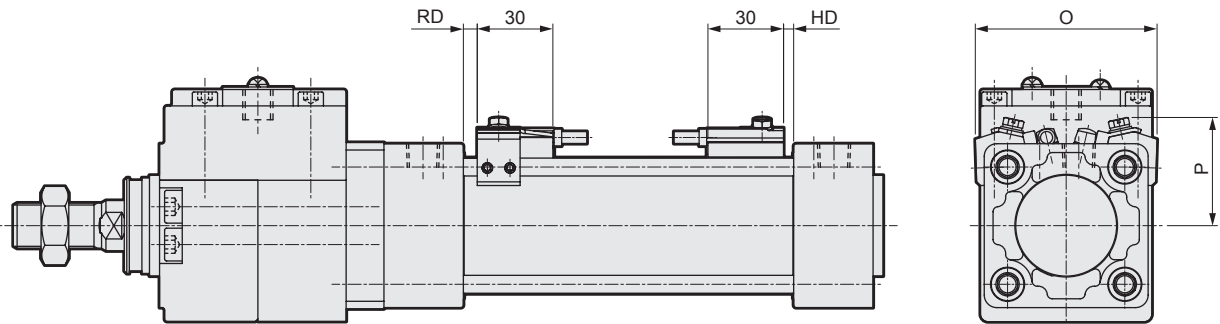
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

JSG/JSG-V Series

JSG Series common Dimensions with switch



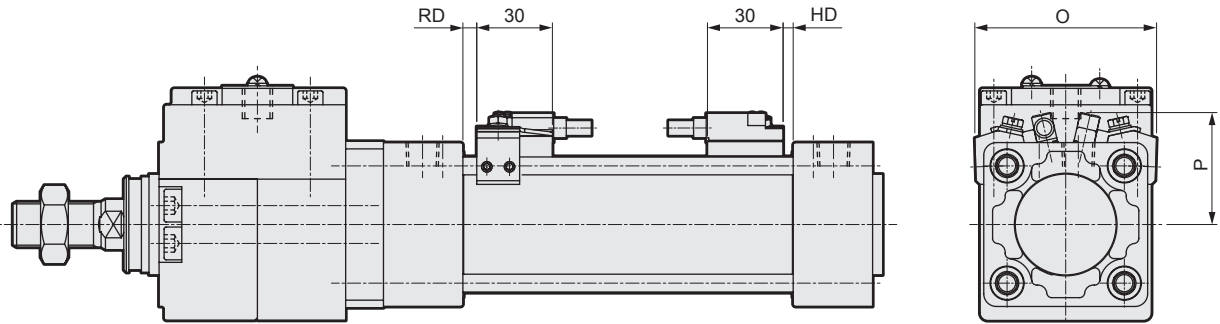
● With T2Y, T3Y, T2J, T8 switches



Code	With T2Y, T3Y, T2J, T8 switches					
Bore size (mm)	O	P	T2Y, T3Y, T2J		T8	
			RD	HD	RD	HD
ø40	66	41	4(7)	4(7)	0(2)	0(2)
ø50	72	43	5.5(9.5)	4(8)	0.5(4.5)	0(3)
ø63	83	48	5.5(9.5)	4(8)	0.5(4.5)	0(3)
ø80	104	57	11.5(16.5)	5(10)	6.5(11.5)	0(5)
ø100	121	63	11(16)	5.5(10.5)	6(11)	0.5(5.5)

*1: Dimensions in () are for the rubber cushion.

● With T1, T2YD, T2YDT-switches



Code	With T1, T2YD, T2YDT-switches			
	Bore size (mm)	O	P	
ø40	66	41		RD HD
ø50	72	44		5.5(9.5) 4(8)
ø63	83	50		5.5(9.5) 4(8)
ø80	104	57		11.5(16.5) 5(10)
ø100	121	64		11(16) 5.5(10.5)

*1: Dimensions in () are for the rubber cushion.

JSG Series common accessory dimensions (rod eye, clevis, bracket)

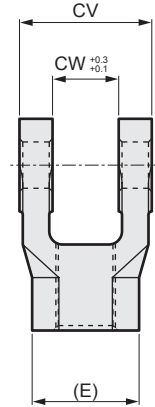
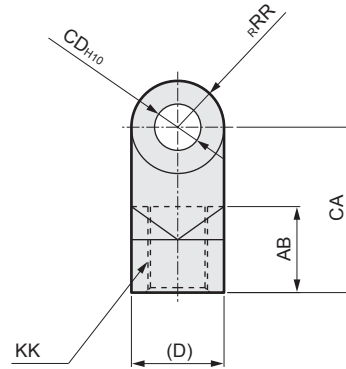
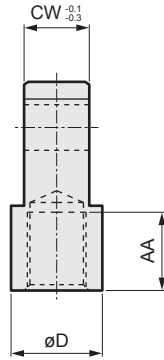
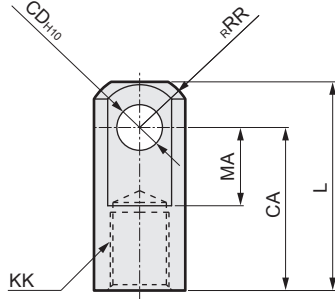


● Rod eye (I)

Material: Steel
Painting

● Rod clevis (Y)

Material: Cast iron
Painting



Model No.	Bore size (mm)	AA	CA	CD	CW	D	KK	L	MA	RR	Wt (kg)
SCG-I-40	40	19	40	10	14	22	M14×1.5	50	19	12.5	0.07
SCG-I-50	50,63	24	50	14	20	28	M18×1.5	64	24	16.5	0.20
SCG-I-80	80	26	60	22	30	40	M22×1.5	80	34	23.5	0.52
SCG-I-100	100	26	60	22	30	40	M26×1.5	80	34	23.5	0.48

Model No.	Bore size (mm)	AB	CA	CD	CV	CW	D	E	KK	RR	Wt (kg)
SCG-Y-40	40	21	40	10	28	14	22	22.4	M14×1.5	11	0.13
SCG-Y-50	50,63	26	50	14	40	20	28	29.3	M18×1.5	14	0.30
SCG-Y-80	80	31	65	22	60	30	40	43.2	M22×1.5	20	0.94
SCG-Y-100	100	31	65	22	60	30	40	43.2	M26×1.5	20	0.92

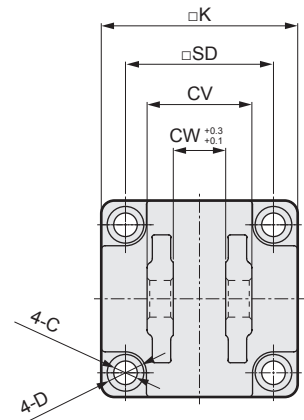
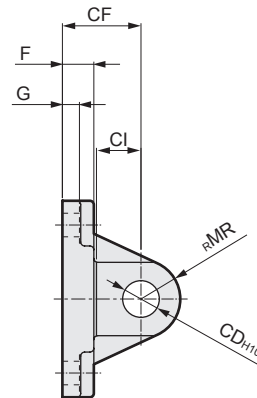
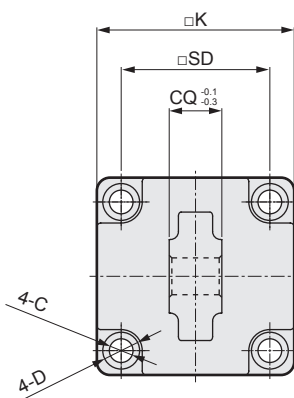
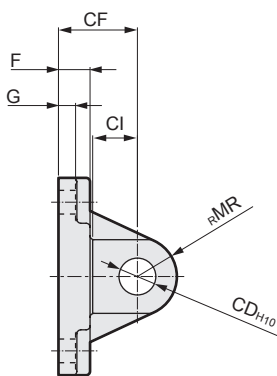
Note: A pin, a split pin and a plain washer are attached.

● Eye bracket (B1)

Material: Cast iron
Painting

● Clevis bracket (B2)

Material: Cast iron
Painting



Model No.	Bore size (mm)	C	CD	CF	CI	CQ	D	F	G	K	MR	SD	Wt (kg)
SCG-B1-40	40	6.6	10	23	13	14	11	9	4.5	52	11	38	0.16
SCG-B1-50	50	9	14	30	17	20	14	12	6.5	65	15	46.5	0.38
SCG-B1-63	63	9	14	30	17	20	14	12	6.5	75	15	56.5	0.48
SCG-B1-80	80	11	22	42	26	30	17	15	8.5	95	23	72	1.19
SCG-B1-100	100	11	22	42	26	30	17	15	8.5	114	23	89	1.56

Model No.	Bore size (mm)	C	CD	CF	CI	CV	CW	D	F	G	K	MR	SD	Wt (kg)
SCG-B2-40	40	6.6	10	23	13	28	14	11	9	4.5	52	11	38	0.20
SCG-B2-50	50	9	14	30	17	40	20	14	12	6.5	65	15	46.5	0.46
SCG-B2-63	63	9	14	30	17	40	20	14	12	6.5	75	15	56.5	0.58
SCG-B2-80	80	11	22	42	26	60	30	17	15	8.5	95	23	72	1.52
SCG-B2-100	100	11	22	42	26	60	30	17	15	8.5	114	23	89	1.91

Note: A pin, a split pin and a plain washer are attached.

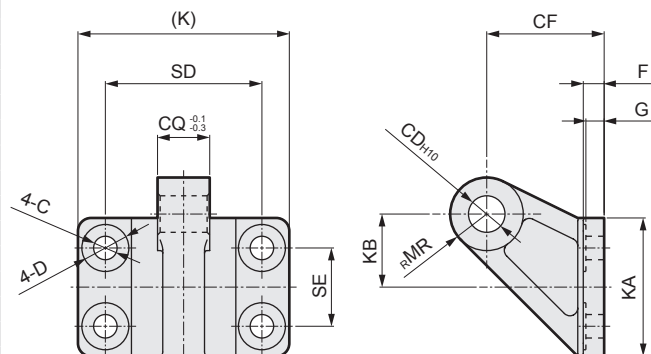
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechMol/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

Accessory dimensions



● Eye bracket (B3)

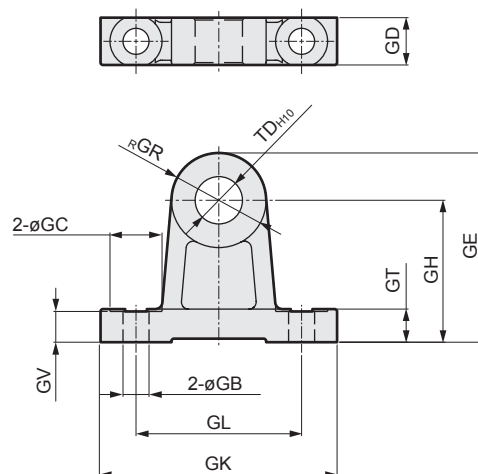
Material: Cast iron
Painting



Model No.	Bore size (mm)	C	CD	CF	CQ	D	F	G	K	KA	KB	MR	SD	SE	Wt (kg)
SCG-B3-32	40	6.6	10	33	14	15	7	6	62	42	21	10	44	22	0.21
SCG-B3-50	50,63	9	14	45	20	18	8	7	81	53	28	14	60	30	0.45
SCG-B3-80	80,100	11	22	65	30	22	10	9	111	73	41.5	22	86	45	1.23

● Trunnion No. 2 bracket (B4)

Material: Cast iron
Painting

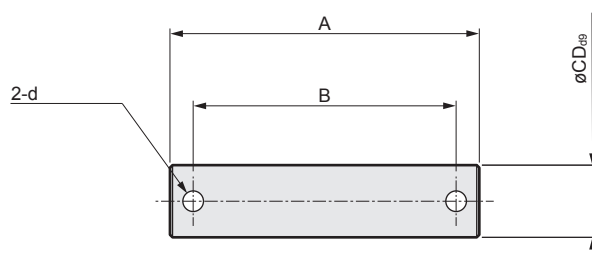


Model No.	Bore size (mm)	GB	GC	GD	GE	GR	GH	GK	GL	GT	GV	TD	Wt (kg)
SCG-B4-40	40,50	9	18	17	60	30	45	80	60	12	11	16	0.43
SCG-B4-63	63,80	11	22	20	80	40	60	100	70	14	13	20	0.87
SCG-B4-100	100	13.5	24	26	100	50	75	120	90	17	16	25	1.75

Note: The bracket is provided as 2 pcs./set.

● Pin (P)

Material: Steel
Zinc chromate treatment



Model No.	Applicable bore size (mm)	A	B	CD	d	Weight (kg)
SCG-P-32	40	44	36	10	3	0.04
SCG-P-50	50,63	60	51	14	4	0.10
SCG-P-80	80,100	82	72	22	4	0.34

Note: Split pin and plain washer are attached.