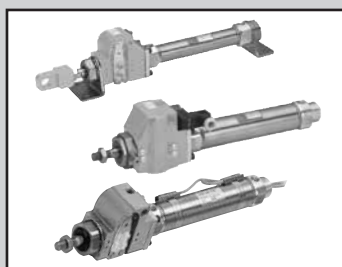


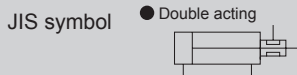
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending



Brake cylinder Small bore size/swaging
Double acting/double acting/with valve for brake

JSK2/JSK2-V Series

● Bore size: $\phi 20/\phi 25/\phi 32/\phi 40$



Specifications

Item	JSK2				JSK2-V				
	Bore size	mm	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$	$\phi 20$	$\phi 25$	$\phi 32$
Actuation	Double acting				Double acting/with valve				
Working fluid	Compressed air								
Max. working pressure	MPa	1.0 (≈ 150 psi, 10 bar)				0.6 (≈ 87 psi, 6 bar)			
Min. working pressure	MPa	0.35 (≈ 51 psi, 3.5 bar)				0.35 (≈ 51 psi, 3.5 bar)			
Proof pressure	MPa	1.6 (≈ 230 psi, 16 bar)							
Ambient temperature	$^{\circ}\text{C}$	-10 (14 $^{\circ}\text{F}$) to 60 (140 $^{\circ}\text{F}$) (no freezing)				-10 (14 $^{\circ}\text{F}$) to 50 (122 $^{\circ}\text{F}$) (no freezing)			
Port size	Brake section	M5	Rc1/8		M5	Rc1/8			
	Cylinder port	Rc1/8				Rc1/8			
Stroke tolerance	mm	$^{+2.0}_0$ (to 200), $^{+2.4}_0$ (200 to)							
Working piston speed	mm/s	50 to 500							
Cushion	Rubber cushion								
Lubrication	Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)								
Holding force	N	186	431	431	765	186	431	431	765
Allowable absorbed energy	J	0.166	0.308	0.424	0.639	0.166	0.308	0.424	0.639

Electrical specification for brake valve

Item	JSK2-V-VALVE-KIT- Voltage		
	100 AC(50/60 Hz)	200 AC(50/60 Hz)	24 DC
Rated voltage (V)	100 AC(50/60 Hz)	200 AC(50/60 Hz)	24 DC
Starting current (A)	0.056/0.044	0.034/0.026	0.075
Holding current (A)	0.028/0.022	0.017/0.013	
Power consumption (W)	1.8/1.4	2.1/1.6	1.8
Voltage fluctuation range	$\pm 10\%$		
Thermal class	Class B molded coil		

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

●*2 : Refer to "Pneumatic Valves (CB-023SA)" for details on valves (P5136 Series).

Stroke

Bore size (mm)	Standard stroke (mm)	Max. stroke (mm)		Min. stroke (mm)	
		Without bellows	With bellows	Without bellows	With bellows
$\phi 20$	25/50/75/100/125/150 175/200/250/300	700	600	5	5
$\phi 25$					
$\phi 30$					
$\phi 40$					

The min. stroke varies depending on the switch mounting method. Refer to the following table.

Min. stroke with switch

(Unit: mm)

Switch quantity	1						2						3					
	Proximity			Reed			Proximity			Reed			Proximity			Reed		
	T2,T3	T1,T*Y	T*W	T0,T5	T8	T2,T3	T1,T*Y	T*W	T0,T5	T8	T2,T3	T1,T*Y	T*W	T0,T5	T8			
$\phi 20$	10						25	35	30	25	35	50	55	55	50	55		
$\phi 25$	10						25	35	30	25	35	50	55	55	50	55		
$\phi 32$	10						25	35	30	25	35	50	55	55	50	55		
$\phi 40$	10						25	35	30	25	35	50	55	55	50	55		

*1: Up to 3 switches can be mounted.

Switch specifications

● 1-color/2-color LED

Item	Proximity 2-wire		Proximity 3-wire				Reed 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		
Applications	Programmable controller For relay, compact solenoid valve	Dedicated for programmable controller		For programmable controller, relay				For programmable controller, relay	Programmable controller, relay IC circuit (no indicator lamp), for serial connection		For programmable controller, relay			
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	100/110 VAC	5/12/24 VDC	100/110 VAC	12/24 VDC	110 VAC	220 VAC
Load current	5 to 100mA	5 to 20 mA (*3)		100 mA or less		50 mA or less		5 to 50mA	7 to 20mA	50 mA or less	20 mA or less	5 to 50mA	7 to 20mA	7 to 10mA
Indicator lamp	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)		
Leakage current	1 mA or less with 100 VAC, 2 mA or less with 200 VAC	1 mA or less		10 µA or less				0mA						
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		1 m: 33		1 m: 33		
	3 m: 87	3 m: 49	3 m: 87	3 m: 49	3 m: 49	3 m: 87	3 m: 49	3 m: 49		3 m: 87		3 m: 87		
	5 m: 142	5 m: 80	5 m: 142	5 m: 80	5 m: 80	5 m: 142	5 m: 80	5 m: 80		5 m: 142		5 m: 142		

*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)

Cylinder weight

● JSK2

(Unit: kg)

Item/mounting	Product weight when stroke (S) = 0 mm						Switch weight	Switch rail + band weight	Additional weight per S = 10 mm
	Bore size (mm)	Basic (00)	Axial foot (LB)	Flange (FA)	Clevis (CA)	Clevis (CC)			
ø20	0.67	0.82	0.73	0.82	0.68	0.72	Refer to the weight in the Use this as a reference.	0.005	0.01
ø25	1.18	1.44	1.33	1.42	1.18	1.28		0.005	0.01
ø32	1.22	1.48	1.37	1.46	1.22	1.32		0.009	0.02
ø40	1.91	2.17	2.06	2.15	1.93	2.07		0.009	0.02

● JSK2-V (with valve)

(Unit: kg)

Item/mounting	Product weight when stroke (S) = 0 mm						Switch weight	Switch rail + band weight	Additional weight per S = 10 mm
	Bore size (mm)	Basic (00)	Axial foot (LB)	Flange (FA)	Clevis (CA)	Clevis (CC)			
ø20	0.72	0.87	0.78	0.87	0.73	0.77	Refer to the weight in the Use this as a reference.	0.005	0.01
ø25	1.23	1.49	1.38	1.47	1.23	1.33		0.005	0.01
ø32	1.27	1.53	1.42	1.51	1.27	1.37		0.009	0.02
ø40	1.96	2.22	2.11	2.20	1.98	2.12		0.009	0.02

(Example) JSK2-V-LB-20-100-2-TOH-D	Product weight when S = 0 mm.....	0.87 kg
	Additional weight when S = 100 mm.....	0.01 × $\frac{100}{10}$ = 0.1kg
	Weight of 2 switches.....	0.018 × 2 = 0.036kg
	Weight of switch rail + 2 bands.....	0.005 × 2 = 0.010kg
	Product weight	0.87kg + 0.1kg + 0.036kg + 0.010kg = 1.016kg

Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa						
		0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø20	Push	1.26 × 10 ²	1.57 × 10 ²	1.88 × 10 ²	2.20 × 10 ²	2.51 × 10 ²	2.83 × 10 ²	3.14 × 10 ²
	Pull	94.2	1.18 × 10 ²	1.41 × 10 ²	1.65 × 10 ²	1.88 × 10 ²	2.12 × 10 ²	2.36 × 10 ²
ø25	Push	1.96 × 10 ²	2.45 × 10 ²	2.95 × 10 ²	3.44 × 10 ²	3.93 × 10 ²	4.42 × 10 ²	4.91 × 10 ²
	Pull	1.51 × 10 ²	1.89 × 10 ²	2.27 × 10 ²	2.64 × 10 ²	3.02 × 10 ²	3.40 × 10 ²	3.78 × 10 ²
ø32	Push	3.22 × 10 ²	4.02 × 10 ²	4.83 × 10 ²	5.63 × 10 ²	6.43 × 10 ²	7.24 × 10 ²	8.04 × 10 ²
	Pull	2.76 × 10 ²	3.46 × 10 ²	4.15 × 10 ²	4.84 × 10 ²	5.53 × 10 ²	6.22 × 10 ²	6.91 × 10 ²
ø40	Push	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	4.41 × 10 ²	5.51 × 10 ²	6.62 × 10 ²	7.72 × 10 ²	8.82 × 10 ²	9.92 × 10 ²	1.10 × 10 ³

- 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
- RRR
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MedHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

JSK2/JSK2-V Series

How to order

● Without valve

Without switch (built-in magnet for switch)

JSK2 - **LB** - **20** - **50** - **J** **I**

With switch (built-in magnet for switch)

JSK2 - **LB** - **20** - **50** - **T0H** - **R** - **J** **I**

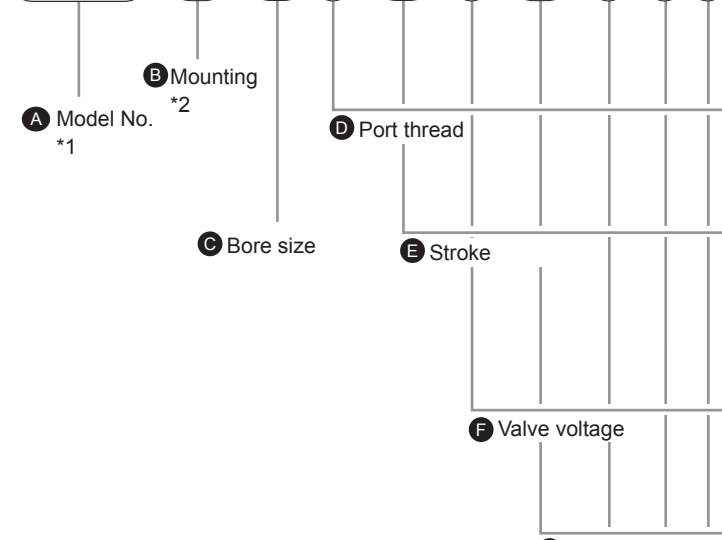
● With valve for brake

Without switch (built-in magnet for switch)

JSK2-V - **LB** - **20** - **50** - **1** - **J** **I**

With switch (built-in magnet for switch)

JSK2-V - **LB** - **20** - **50** - **1** - **T0H** - **R** - **J** **I**



⚠ Precautions for model No. selection

- *1 : Low hydraulic can also be supplied as made-to-order product
Model numbers are JSK2-H and JSK2-VH.
- *2 : For a TA mounting, the brake section with cover and the clevis bracket cannot be selected together since they may interfere with each other.
- *3 : For the min. stroke with switch and the max. and min. strokes with bellows, refer to page 706.
- *4 : The instantaneous max. temperature is the temperature when sparks, cutting chips, etc., instantaneously contact the bellows.
- *5 : "I" and "Y" cannot be selected together.
- *6 : Up to three switches can be installed. If four or more switches are required, switch mounting brackets for the extra switches must be prepared separately.
- *7 : For mounting TA (rod side trunnion), the option U (brake section with cover) cannot be selected.

[Example of model No.]

JSK2-V-LB-20-50-1-T0H-R-JI

Model: Brake cylinder with valve

- A** Model No. : With valve
- B** Mounting : Axial foot
- C** Bore size : $\phi 20$ mm
- D** Port thread : Rc thread
- E** Stroke : 50 mm
- F** Valve voltage : 100 VAC
- G** Switch model No.: Reed switch T0H, lead wire 1 m
- H** Switch quantity : 1 on rod side
- I** Option : Bellows
Max. ambient temperature 100°C,
instantaneous max. temperature 200°C
- J** Accessory : Rod eye

H Switch quantity *6

I Option *4 *7

J Accessory *5

A Model No.	
Double acting JSK2	With valve JSK2-V

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

B Mounting		Double acting JSK2	With valve JSK2-V
00	Basic	●	●
LB	Axial foot	●	●
FA	Rod side flange	●	●
CA	Eye bracket	●	●
CC	Eye bracket integrated	●	●
TA	Rod side trunnion	●	●
TB	Head side trunnion	●	●

C Bore size (mm)		Double acting JSK2	With valve JSK2-V
20	$\phi 20$	●	●
25	$\phi 25$	●	●
32	$\phi 32$	●	●
40	$\phi 40$	●	●

D Port thread	
Blank	Rc thread
NN	NPT thread ($\phi 25$ and over) (made-to-order product)
GN	G thread ($\phi 25$ and over) (made-to-order product)

E Stroke (mm)		
Bore size	Stroke *3	Custom stroke
$\phi 20$	5 to 700	In 1 mm increments
$\phi 25$	5 to 700	
$\phi 32$	5 to 700	
$\phi 40$	5 to 700	

F Valve voltage		
1	100 VAC (50/60 Hz)	●
2	200 VAC (50/60 Hz)	●
3	24 VDC	●

G Switch model No.						
Straight lead wire	L-shaped lead wire	Contact	Voltage		Indicator	Lead wire
			AC	DC		
T0H*	T0V*	Reed	●	●	1-color LED	2-wire
T5H*	T5V*		●	●	No indicator lamp	
T8H*	T8V*		●	●	1-color LED	2-wire
T1H*	T1V*		●	●	1-color LED	2-wire
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*		●	●	3-wire	
T3YH*	T3YV*		●	●		
T2JH*	T2JV*		●	●	Off-delay	2-wire

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

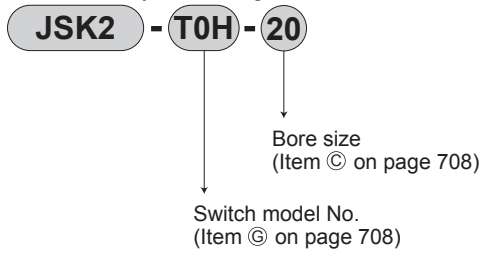
H Switch quantity		
R	1 on rod side	●
H	1 on head side	●
D	2	●
T	3	●

I Option				
		Max. ambient temperature	Instantaneous max. temp	
J	Bellows	100°C	200°C	●
L	Bellows	250°C	400°C	●
M	Piston rod material (stainless steel)			●
V	Boss cutoff			●
U	Brake section with cover			●

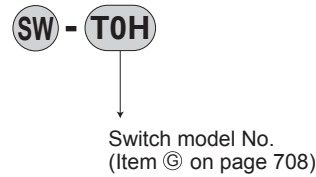
J Accessory		
I	Rod eye	●
Y	Rod clevis (pin, washer, split pin attached)	●
B2	Clevis bracket (pin, snap ring attached)	●

How to order switch

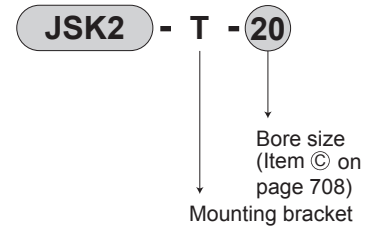
- Switch body + mounting bracket set



- Switch body only



- Mounting bracket set



How to order brake valve

JSK2-V - **VALVE-KIT** - **1**

① Valve voltage

Code	Description
1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	24 VDC

How to order mounting bracket

Bore size (mm)	ø20	ø25	ø32	ø40
Mounting bracket				
Basic (00) *3	M1-00-20	M1-00-30	M1-00-30	M1-00-30
Axial foot (LB)	M1-LB-20	M1-LB-30	M1-LB-30	M1-LB-30
Flange (FA)	M1-FA-20	M1-FA-30	M1-FA-30	M1-FA-30
Eye bracket (CA)	M1-CA-20	M1-CA-30	M1-CA-30	M1-CA-30
Trunnion (TA/TB)	M1-TA-20	M1-TA-30	M1-TA-30	M1-TA-40

*1 : As for mounting brackets, the axial foot and flange include mounting nuts and toothed washers, and the trunnion includes mounting nuts.

2 : For axial foot, 2 sets of the above "M1-LB-" are required.

*3 : Mounting nut, toothed washer only. Although 1 set is attached with the basic of the product (00), use this when needed.

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

JSK2/JSK2-V Series

Material of mounting bracket

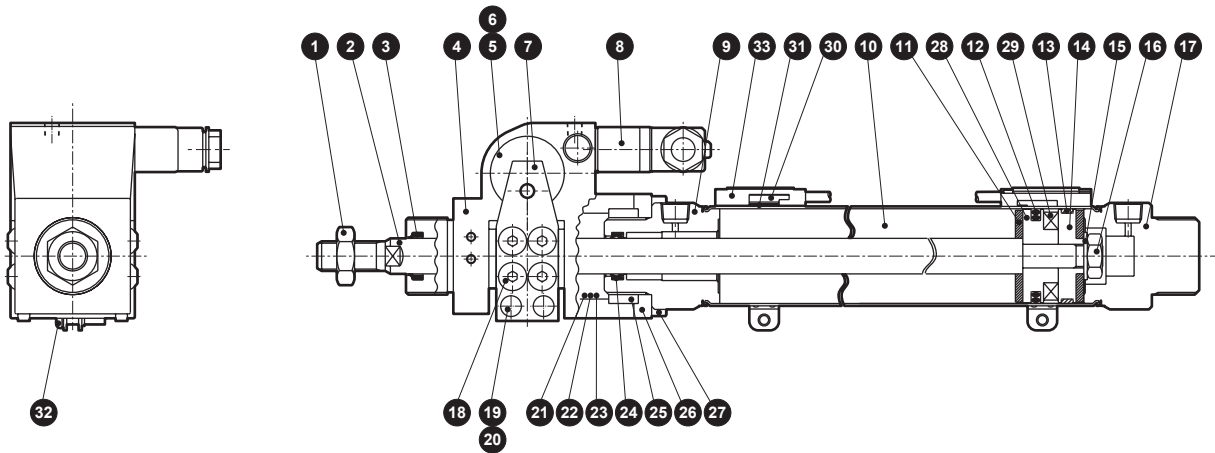
Mounting	Material	Remarks
LB	Steel	Zinc chromate
FA	Steel	Zinc chromate
TA/TB	Steel	Zinc chromate
CA	Steel	Zinc chromate

Note: Mounting bracket will be shipped with the product.

However, if the product is supplied with bellows and the mounting bracket is LB, FA, or TA, it will be shipped assembled.

Internal structure and parts list

- JSK2-V (with valve and switch)
- JSK2 (with switch)



Note: This product is a caulked and cannot be disassembled.

Cannot be disassembled

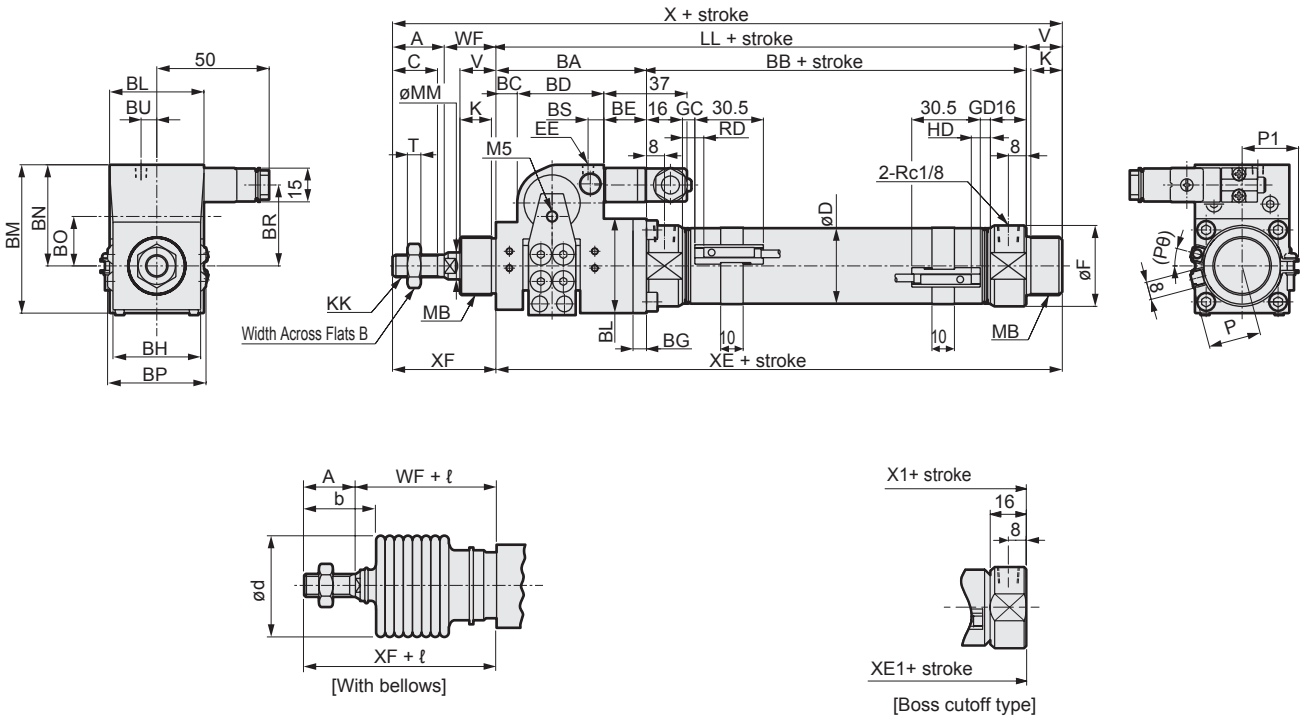
Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Rod nut	Steel	Zinc chromate	18	Hex socket screw	Steel	Black finish treatment
2	Piston rod	ø20/ø25 stainless steel ø32/ø40 steel	Industrial chrome plating	19	Hex socket screw	Steel	Black finish treatment
3	Scraper	Nitrile rubber		20	Brake spring	Steel	Black finish treatment
4	Brake body	Cast iron	Zinc chromate	21	Brake shoe metal	Cast iron	
5	Brake piston	Copper alloy casting		22	Bush	Dry bearing	
6	Piston packing	Nitrile rubber		23	Ring	Steel	
7	Lever	Steel	Zinc chromate	24	Rod packing	Nitrile rubber	
8	Valve for brake release	---	P5136MO	25	Fixed ring	Steel	Zinc chromate
9	Rod cover	Aluminum alloy		26	Square flange	Steel	Zinc chromate
10	Cylinder tube	Stainless steel		27	Hex socket screw	Steel	Black finish treatment
11	Cushion rubber	Urethane rubber		28	Piston A	Aluminum alloy	
12	Piston packing	Nitrile rubber		29	Magnet	Plastic	
13	Wear ring	Acetal resin		With switch			
14	Piston B	Aluminum alloy		30	Switch body	---	
15	Spacer	Steel	Zinc chromate	31	Band	Stainless steel	
16	Hexagon nut	Steel	Zinc chromate	32	Pan head machine screw	Stainless steel	
17	Head cover	Aluminum alloy		33	Switch rail	Stainless steel	

Dimensions



● Basic (00)



RD: Rod side max. sensitivity position

HD: Head side max. sensitivity position

1 : Refer to page 719 for HD, RD and protruding dimensions of T, T8*, and 2-color LED switches.

*2 : The size of the exhaust port of brake section is the same as that of EE.

*3 : l dimensions should be rounded up to the nearest whole number.

*4 : For the dimensions of the accessories, refer to page 731.

Code	Basic (00) basic dimensions																		
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BH	BL	BM	BN	BO	BP	BR	BS	BU	C	D
ø20	20	13	58	66	9	30	19	5	29	34	55	38	19	38	29	4	3.8	18	21.4
ø25	23	17	67	69	9.5	38.5	19	6	39	42	66	45	22	43.8	34.5	7	7	20	26.4
ø32	23	17	67	69	9.5	38.5	19	6	39	42	66	45	22	43.8	34.5	7	7	20	33.6
ø40	25	19	74	73	8	48	18	8	50	50	80.5	55.5	25	52	39.5	7	7	22	41.6
Code	Basic (00) basic dimensions														With switch (T0, T5, T2, T3)				
Bore size (mm)	EE	F	K	KK	LL	MB	MM	T	V	WF	X	XE	XF	GC	GD	RD	HD		
ø20	M5	28	12	M 8 x 1.0	124	M 18 x 1.5	10	5	14	24	182	138	44	4.0	3.0	8.0	7.0		
ø25	Rc1/8	32	14	M 10 x 1.25	136	M 26 x 1.5	12	6	16	23	198	152	46	5.5	4.5	9.5	8.5		
ø32	Rc1/8	36	14	M 10 x 1.25	136	M 26 x 1.5	12	6	16	23	198	152	46	5.5	4.5	9.5	8.5		
ø40	Rc1/8	45	14	M 12 x 1.5	147	M 26 x 1.5	14	7	16	23	211	163	48	7.5	6.5	11.5	10.5		
Code	With switch (T2W, T3W)				With bellows				Boss cutoff type										
Bore size (mm)	GC	GD	RD	HD	P	P1	(Pø)°	b	d	l	X1	XE1							
ø20	6.0	5.0	10.0	9.0	17.3	19.5	22	30	30	(Stroke/3) + 6	168	124							
ø25	7.5	6.5	11.5	10.5	19.8	22.0	18	32	46	(Stroke/3.25) + 7	182	136							
ø32	7.5	6.5	11.5	10.5	24.3	25.5	15	32	46	(Stroke/3.25) + 7	182	136							
ø40	9.5	8.5	13.5	12.5	28.3	29.5	12	34	46	(Stroke/3.25) + 7	195	147							

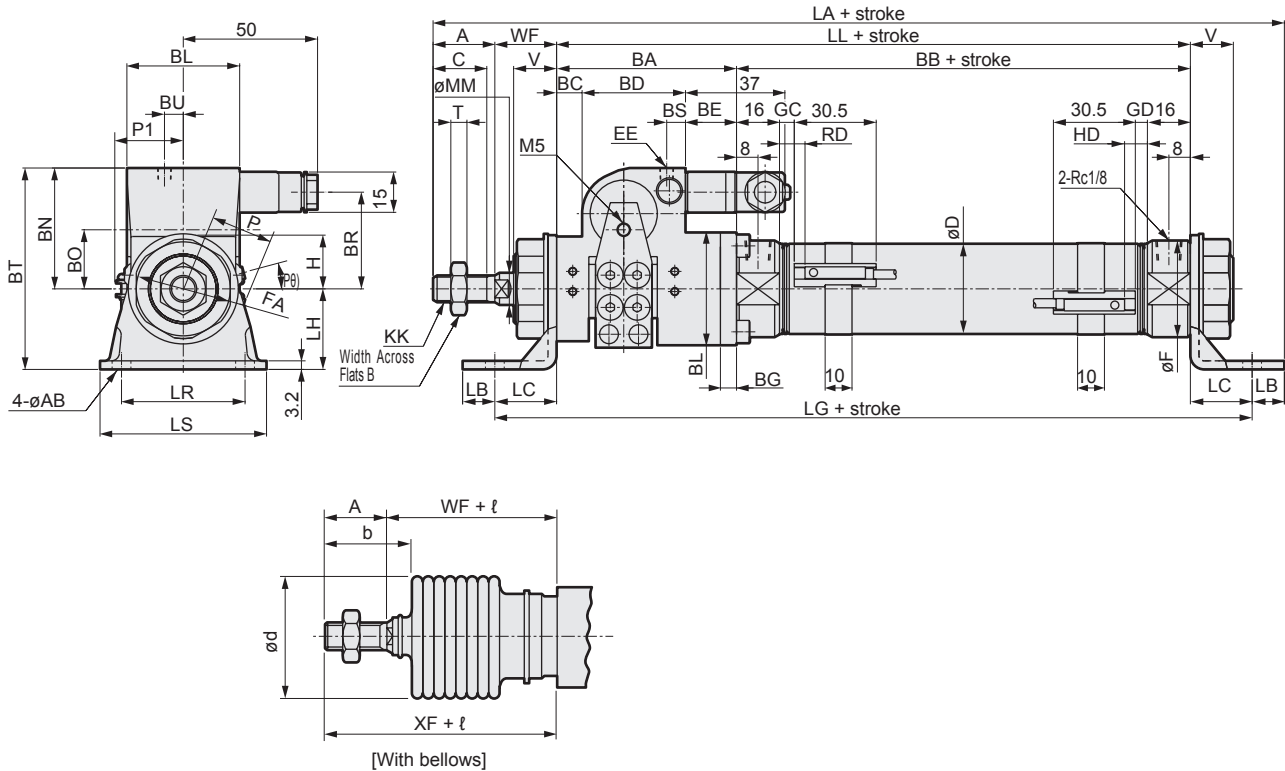
- LCM
- LCR
- LCG
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2**
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk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

JSK2-V Series

Dimensions



● Axial foot (LB)



1 : Refer to page 719 for HD, RD and protruding dimensions of T, T8*, and 2-color LED switches.

*2 : The size of the exhaust port of brake section is the same as that of EE.

*3 : ℓ dimensions should be rounded up to the nearest whole number.

*4 : For the dimensions of the accessories, refer to page 731.

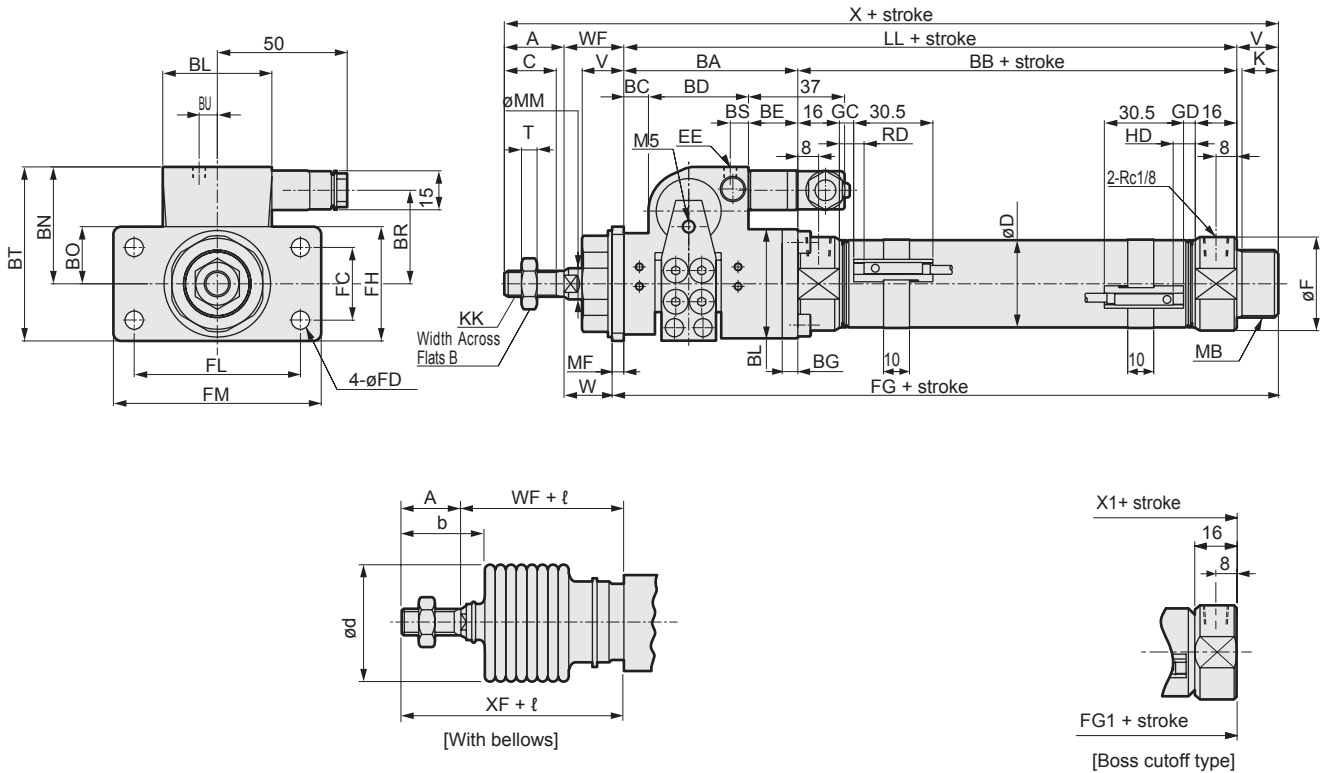
Code	Axial foot (LB) basic dimensions																		
Bore size (mm)	A	AB	B	BA	BB	BC	BD	BE	BG	BL	BT	BN	BO	BR	BS	BU	C	D	EE
∅20	20	6	13	58	66	9	30	19	5	34	63	38	19	29	4	3.8	18	21.4	M5
∅25	23	7	17	67	69	9.5	38.5	19	6	42	75	45	22	34.5	7	7	20	26.4	Rc1/8
∅32	23	7	17	67	69	9.5	38.5	19	6	42	75	45	22	34.5	7	7	20	33.6	Rc1/8
∅40	25	7	19	74	73	8	48	18	8	50	85.5	55.5	25	39.5	7	7	22	41.6	Rc1/8

Code	Mounting dimensions															With switch (T0, T5, T2, T3)			
Bore size (mm)	F	FA	H	KK	LL	MM	T	V	WF	LA	LB	LC	LG	LH	LR	LS	GC	GD	RD
∅20	28	26	15	M 8 x 1.0	124	10	5	14	24	196	10	18	160	25	30	44	4.0	3.0	8.0
∅25	32	35	20	M 10 x 1.25	136	12	6	16	23	217	12	23	182	30	46	62	5.5	4.5	9.5
∅32	36	35	20	M 10 x 1.25	136	12	6	16	23	217	12	23	182	30	46	62	5.5	4.5	9.5
∅40	45	35	20	M 12 x 1.5	147	14	7	16	23	230	12	23	193	30	46	62	7.5	6.5	11.5

Code	With switch (T2W, T3W)					With bellows						
Bore size (mm)	HD	GC	GD	RD	HD	P	P1	(P0 ²)	XF	b	d	ℓ
∅20	7.0	6.0	5.0	10.0	9.0	17.3	19.5	22	44	30	30	(Stroke/3) + 6
∅25	8.5	7.5	6.5	11.5	10.5	19.8	22.0	18	46	32	46	(Stroke/3.25) + 7
∅32	8.5	7.5	6.5	11.5	10.5	24.3	25.5	15	46	32	46	(Stroke/3.25) + 7
∅40	10.5	9.5	8.5	13.5	12.5	28.3	29.5	12	48	34	46	(Stroke/3.25) + 7

Dimensions

● Rod side flange (FA)



1 : Refer to page 719 for HD, RD and protruding dimensions of T, T8*, and 2-color LED switches.

*2 : The size of the exhaust port of brake section is the same as that of EE.

*3 : l dimensions should be rounded up to the nearest whole number.

*4 : For the dimensions of the accessories, refer to page 731.

Code	Rod side flange (FA) basic dimensions																				
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BT	BL	BN	BO	BR	BS	BU	C	D	EE	F	K	KK
ø20	20	13	58	66	9	30	19	5	55	34	38	19	29	4	3.8	18	21.4	M5	28	12	M 8 x 1.0
ø25	23	17	67	69	9.5	38.5	19	6	67	42	45	22	34.5	7	7	20	26.4	Rc1/8	32	14	M 10 x 1.25
ø32	23	17	67	69	9.5	38.5	19	6	67	42	45	22	34.5	7	7	20	33.6	Rc1/8	36	14	M 10 x 1.25
ø40	25	19	74	73	8	48	18	8	77.5	50	55.5	25	39.5	7	7	22	41.6	Rc1/8	45	14	M 12 x 1.5

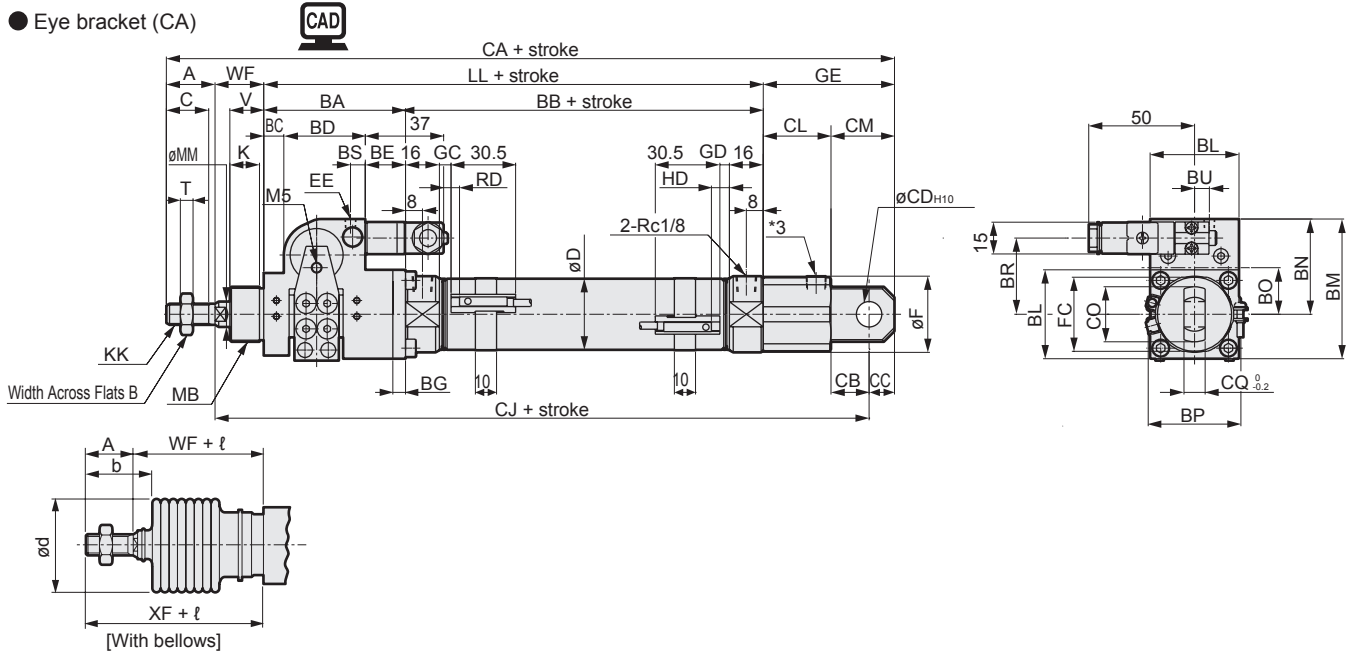
Code	Mounting dimensions															With switch (T0, T5, T2, T3)			
Bore size (mm)	LL	MB	MF	MM	T	V	W	WF	X	FC	FD	FG	FH	FL	FM	GC	GD	RD	HD
ø20	124	M 18 x 1.5	3.2	10	5	14	20.8	24	182	20	6	141.2	34	40	54	4.0	3.0	8.0	7.0
ø25	136	M 26 x 1.5	4.5	12	6	16	18.5	23	198	28	7	156.5	44	64	80	5.5	4.5	9.5	8.5
ø32	136	M 26 x 1.5	4.5	12	6	16	18.5	23	198	28	7	156.5	44	64	80	5.5	4.5	9.5	8.5
ø40	147	M 26 x 1.5	4.5	14	7	16	18.5	23	211	28	7	167.5	44	64	80	7.5	6.5	11.5	10.5

Code	With switch (T2W, T3W)				With bellows			Boss cutoff type		
Bore size (mm)	GC	GD	RD	HD	XF	b	d	l	X1	FG1
ø20	6.0	5.0	10.0	9.0	44	30	30	(Stroke/3) + 6	168	127.2
ø25	7.5	6.5	11.5	10.5	46	32	46	(Stroke/3.25) + 7	182	140.5
ø32	7.5	6.5	11.5	10.5	46	32	46	(Stroke/3.25) + 7	182	140.5
ø40	9.5	8.5	13.5	12.5	48	34	46	(Stroke/3.25) + 7	195	151.5

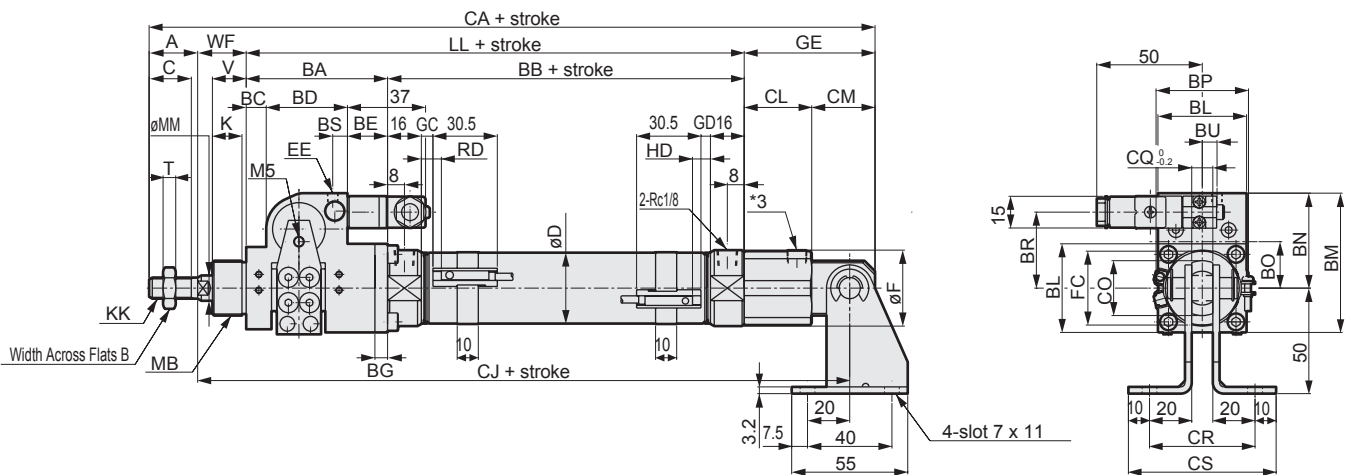
- LCM
- LCR
- LCG
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2**
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk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

Dimensions

● Eye bracket (CA)



● Eye bracket (CA) with bracket (option)



1 : Refer to page 719 for HD, RD and protruding dimensions of T, T8*, and 2-color LED switches.

*2 : The size of the exhaust port of brake section is the same as that of EE.

*3 : It is not a piping port.

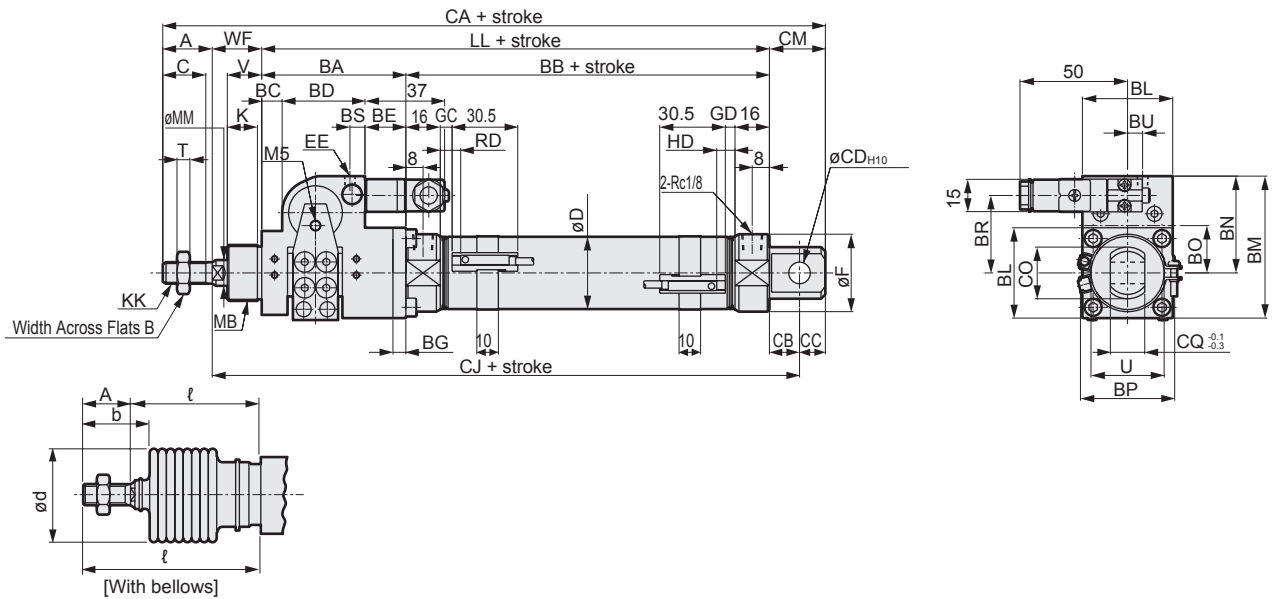
*4 : ℓ dimensions should be rounded up to the nearest whole number.

*5 : For the dimensions of the accessories, refer to page 731.

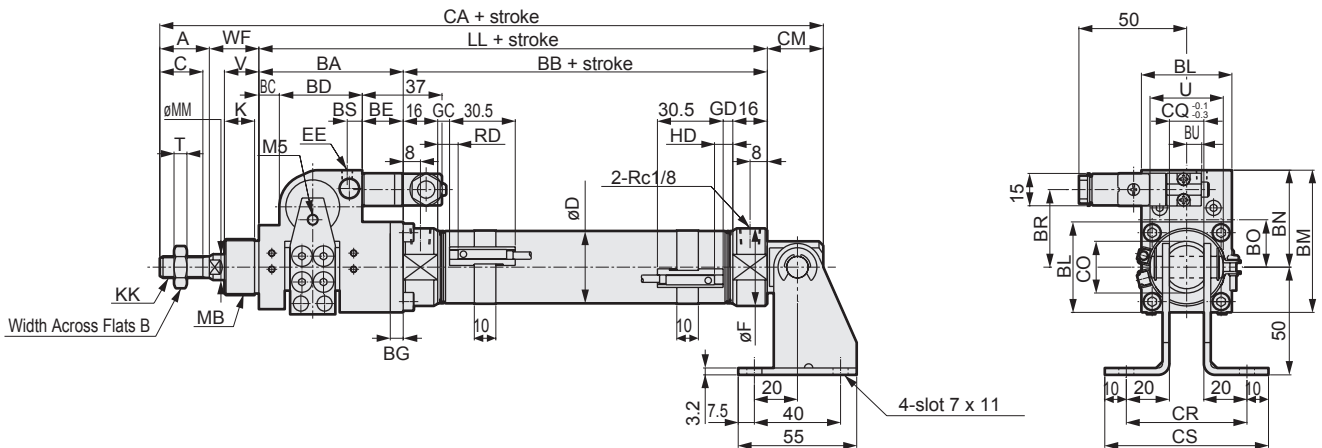
Code	Eye bracket (CA) basic dimensions																					
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BL	BM	BN	BO	BP	BR	BS	BU	C	D	EE	F	FC	GE
ϕ 20	20	13	58	66	9	30	19	5	34	55	38	19	38	29	4	3.8	18	21.4	M5	28	26	55
ϕ 25	23	17	67	69	9.5	38.5	19	6	42	66	45	22	43.8	34.5	7	7	20	26.4	Rc1/8	32	35	62
ϕ 32	23	17	67	69	9.5	38.5	19	6	42	66	45	22	43.8	34.5	7	7	20	33.6	Rc1/8	36	35	62
ϕ 40	25	19	73	73	8	48	18	8	50	80.5	55.5	25	52	39.5	7	7	22	41.6	Rc1/8	45	35	62
Code	Mounting dimensions																					
Bore size (mm)	K	KK	LL	MB	MM	T	V	WF	CA	CB	CC	CD	CJ	CL	CM	CO	CQ	CR	CS			
ϕ 20	12	M 8 x 1.0	124	M 18 x 1.5	10	5	14	24	223	14	10	10	193	31	24	22	8	48	68			
ϕ 25	14	M 10 x 1.25	135	M 26 x 1.5	12	6	16	23	244	18	12	12	209	32	30	26	10	50	70			
ϕ 32	14	M 10 x 1.25	136	M 26 x 1.5	12	6	16	23	244	18	12	12	209	32	30	26	10	50	70			
ϕ 40	14	M 12 x 1.5	147	M 26 x 1.5	14	7	16	23	257	18	12	12	220	32	30	26	10	50	70			
Code	With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows													
Bore size (mm)	GC	GD	RD	HD	GC	GD	RD	HD	XF	b	d	ℓ										
ϕ 20	4.0	3.0	8.0	7.0	6.0	5.0	10.0	9.0	44	30	30	(Stroke/3) + 6										
ϕ 25	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke/3.25) + 7										
ϕ 32	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke/3.25) + 7										
ϕ 40	7.5	6.5	11.5	10.5	9.5	8.5	13.5	12.5	48	34	46	(Stroke/3.25) + 7										

Dimensions

● Eye bracket integrated (CC)



● Eye bracket integrated (CC) with bracket (option)



1 : Refer to page 719 for HD, RD and protruding dimensions of T, T8*, and 2-color LED switches.

*2 : The size of the exhaust port of brake section is the same as that of EE.

*3 : l dimensions should be rounded up to the nearest whole number.

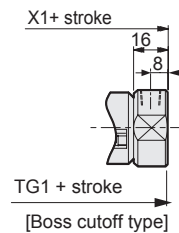
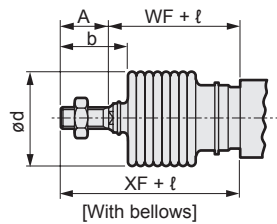
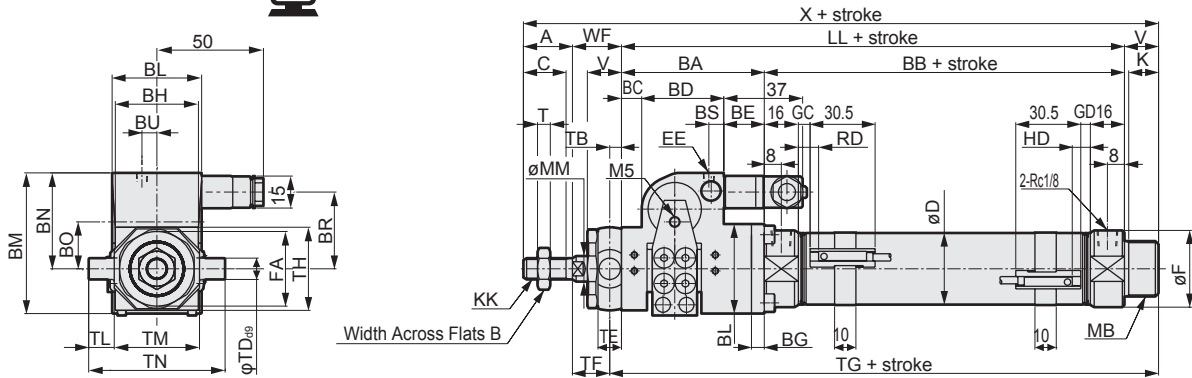
*4 : For the dimensions of the accessories, refer to page 731.

Code	Eye bracket integrated (CC) basic dimensions																			
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BL	BM	BN	BO	BP	BR	BS	BU	C	D	EE	F
ø20	20	13	58	66	9	30	19	5	34	55	38	19	38	29	4	3.8	18	21.4	M5	28
ø25	23	17	67	69	9.5	38.5	19	6	42	66	45	22	43.8	34.5	7	7	20	26.4	Rc1/8	32
ø32	23	17	67	69	9.5	38.5	19	6	42	66	45	22	43.8	34.5	7	7	20	33.6	Rc1/8	36
ø40	25	19	74	73	8	48	18	8	50	80.5	55.5	25	52	39.5	7	7	22	41.6	Rc1/8	45
Code											Mounting dimensions									
Bore size (mm)	K	KK	LL	MB	MM	T	U	V	WF	CA	CB	CC	CD	CJ	CM	CO	CQ	CR	CS	
ø20	12	M 8 x 1.0	124	M 18 x 1.5	10	5	24	14	24	189	12	9	8	160	21	22	16	56	76	
ø25	14	M 10 x 1.25	135	M 26 x 1.5	12	6	30	16	23	203	12	9	8	171	21	24	16	56	76	
ø32	14	M 10 x 1.25	136	M 26 x 1.5	12	6	34	16	23	208	14	12	10	173	26	24	16	56	76	
ø40	14	M 12 x 1.5	147	M 26 x 1.5	14	7	43	16	23	225	16	14	12	186	30	30	20	60	80	
Code	With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows											
Bore size (mm)	GC	GD	RD	HD	GC	GD	RD	HD	XF	b	d	l								
ø20	4.0	3.0	8.0	7.0	6.0	5.0	10.0	9.0	44	30	30	(Stroke/3) + 6								
ø25	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke/3.25) + 7								
ø32	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke/3.25) + 7								
ø40	7.5	6.5	11.5	10.5	9.5	8.5	13.5	12.5	48	34	46	(Stroke/3.25) + 7								

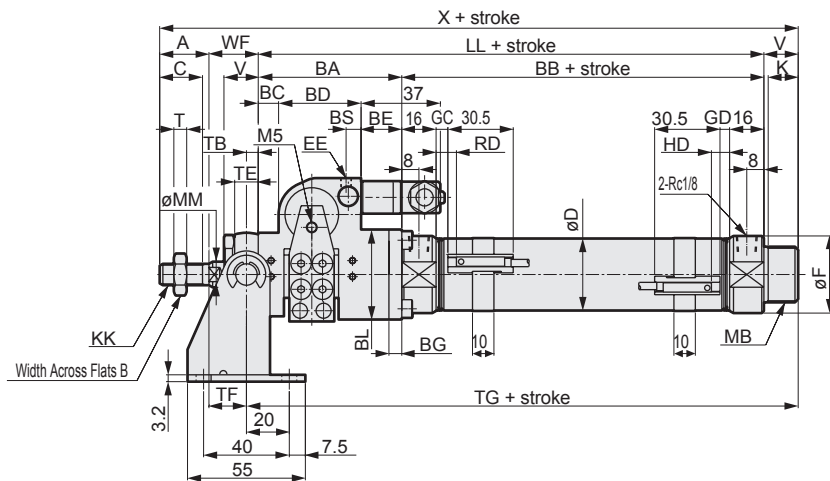
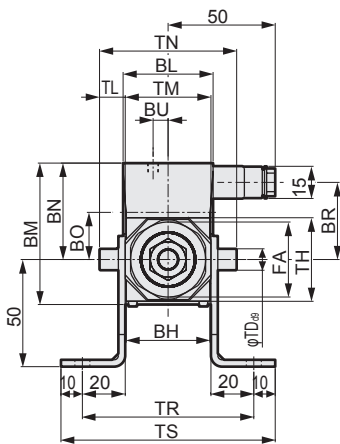
- LCM
- LCR
- LCG
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2**
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk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

Dimensions

● Rod side trunnion (TA)



● Rod type trunnion (TA) with bracket (option)



1 : Refer to page 719 for HD, RD and protruding dimensions of T, T8*, and 2-color LED switches.

*2: The size of the exhaust port of brake section is the same as that of EE.

*3: l dimensions should be rounded up to the nearest whole number.

*4: Option with bracket cannot be selected for the brake section with cover "U".

*5 : For the dimensions of the accessories, refer to page 731.

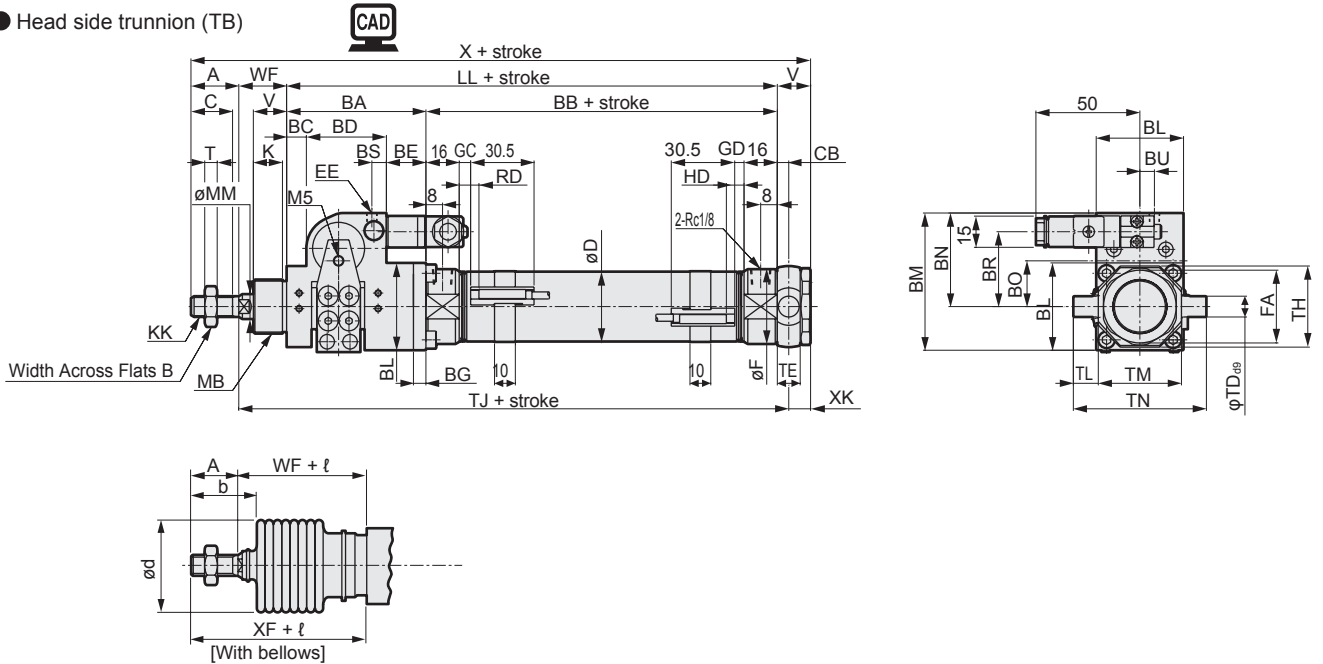
Code	Rod side trunnion (TA)																					
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BH	BL	BM	BN	BO	BR	BS	BU	C	D	EE	F	FA	K
ø20	20	13	58	66	9	30	19	5	29	34	55	38	19	29	4	3.8	18	21.4	M5	28	26	12
ø25	23	17	67	69	9.5	38.5	19	6	39	42	66	45	22	34.5	7	7	20	26.4	Rc1/8	32	35	14
ø32	23	17	67	69	9.5	38.5	19	6	39	42	66	45	22	34.5	7	7	20	33.6	Rc1/8	36	35	14
ø40	25	19	74	73	8	48	18	8	50	50	80.5	55.5	25	39.5	7	7	22	41.6	Rc1/8	45	35	14

Code	Mounting dimensions																		
Bore size (mm)	KK	LL	MB	MM	T	TL	TM	TR	TS	V	WF	X	TB	TD	TE	TF	TG	TH	TL
ø20	M 8 x 1.0	124	M 18 x 1.5	10	5	8	30	70	90	14	24	182	4.5	8	9	19.5	142.5	29.5	8
ø25	M 10 x 1.25	136	M 26 x 1.5	12	6	12	40	80	100	16	23	198	5.5	10	11	17.5	157.5	39	12
ø32	M 10 x 1.25	136	M 26 x 1.5	12	6	12	40	80	100	16	23	198	5.5	10	11	17.5	157.5	39	12
ø40	M 12 x 1.5	147	M 26 x 1.5	14	7	9.5	53	93	113	16	23	211	5.5	10	11	17.5	168.5	44	9.5

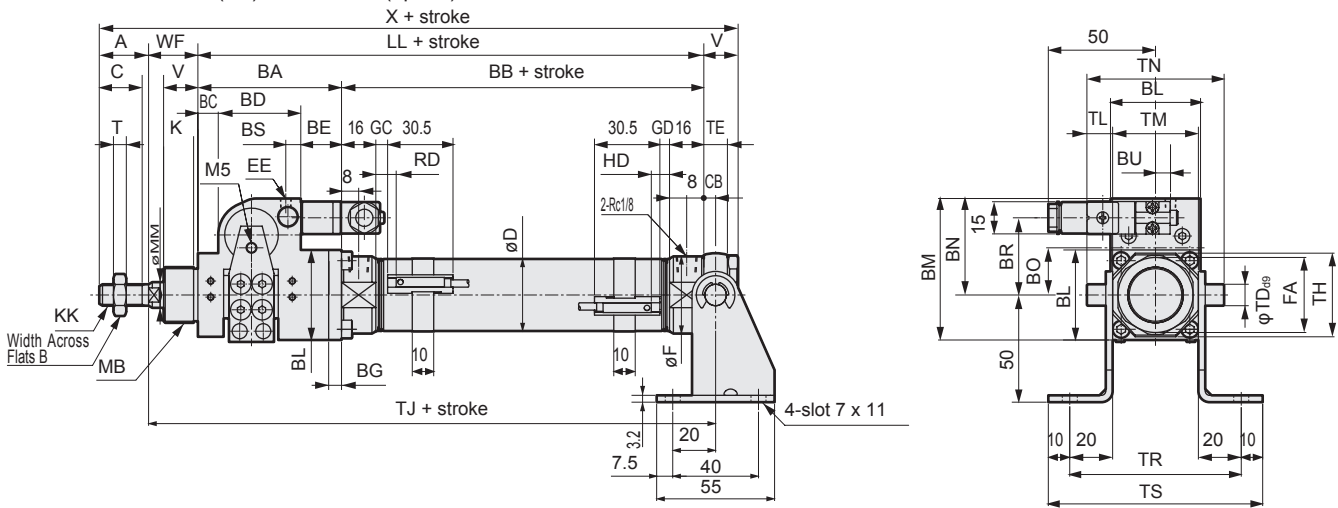
Code	With switch (T0, T5, T2, T3)										With switch (T2W, T3W)				With bellows			Boss cutoff type	
Bore size (mm)	TM	TN	GC	GD	RD	HD	GC	GD	RD	HD	XF	b	d	l		X1	TG1		
ø20	30	46	4.0	3.0	8.0	7.0	6.0	5.0	10.0	9.0	44	30	30	(Stroke/3) + 6		168	128.5		
ø25	40	64	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke/3.25) + 7		182	141.5		
ø32	40	64	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke/3.25) + 7		182	141.5		
ø40	53	72	7.5	6.5	11.5	10.5	9.5	8.5	13.5	12.5	48	34	46	(Stroke/3.25) + 7		195	152.5		

Dimensions

● Head side trunnion (TB)



● Head side trunnion (TB) with bracket (option)



1 : Refer to page 719 for HD, RD and protruding dimensions of T, T8*, and 2-color LED switches.

*2 : The size of the exhaust port of brake section is the same as that of EE.

*3 : ℓ dimensions should be rounded up to the nearest whole number.

*4 : For the dimensions of the accessories, refer to page 731.

Code	Head side trunnion (TB) basic dimensions																				
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BL	BM	BN	BO	BR	BS	BU	C	CB	D	EE	F	FA
ø20	20	13	58	66	9	30	19	5	34	55	38	19	29	4	3.8	18	4.5	21.4	M5	28	26
ø25	23	17	67	69	9.5	38.5	19	6	42	66	45	22	34.5	7	7	20	5.5	26.4	Rc1/8	32	35
ø32	23	17	67	69	9.5	38.5	19	6	42	66	45	22	34.5	7	7	20	5.5	33.6	Rc1/8	36	35
ø40	25	19	74	73	8	48	18	8	50	80.5	55.5	25	39.5	7	7	22	5.5	41.6	Rc1/8	45	35
Code												Mounting dimensions									
Bore size (mm)	K	KK	LL	MB	MM	T	V	WF	X	XK	TD	TE	TH	TJ	TL	TM	TN	TR	TS		
ø20	12	M 8 x 1.0	124	M 18 x 1.5	10	5	14	24	182	9.5	8	9	29.5	152.5	8	30	46	70	90		
ø25	14	M 10 x 1.25	136	M 26 x 1.5	12	6	16	23	198	10.5	10	11	39	164.5	12	40	64	80	100		
ø32	14	M 10 x 1.25	136	M 26 x 1.5	12	6	16	23	198	10.5	10	11	39	164.5	12	40	64	80	100		
ø40	14	M 12 x 1.5	147	M 26 x 1.5	14	7	16	23	211	10.5	10	11	44	175.5	9.5	53	72	93	113		
Code	With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows												
Bore size (mm)	GC	GD	RD	HD	GC	GD	RD	HD	XF	b	d	ℓ									
ø20	4.0	3.0	8.0	7.0	6.0	5.0	10.0	9.0	44	30	30	(Stroke/3) + 6									
ø25	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke/3.25) + 7									
ø32	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke/3.25) + 7									
ø40	7.5	6.5	11.5	10.5	9.5	8.5	13.5	12.5	48	34	46	(Stroke/3.25) + 7									

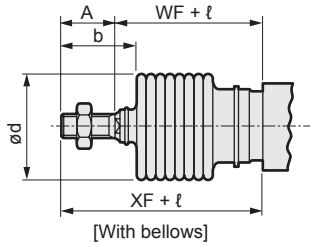
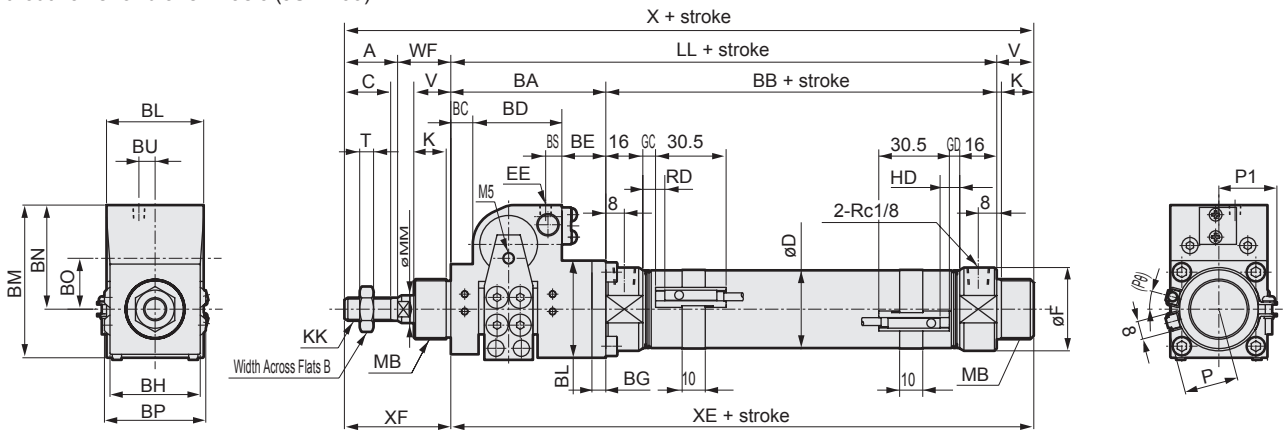
- LCM
- LCR
- LCG
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2**
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk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

JSK2 Series

Dimensions



● Without valve for brake / Basic (JSK2-00)



- *1 : Refer to page 719 for HD, RD and protruding dimensions of T*, T8*, and 2-color LED switches.
- *2 : The mounting dimensions are the same as those of JSK2-V (with valve). Refer to pages 712 to 717.
- *3 : l dimensions should be rounded up to the nearest whole number.
- *4 : For the dimensions of the accessories, refer to page 731.

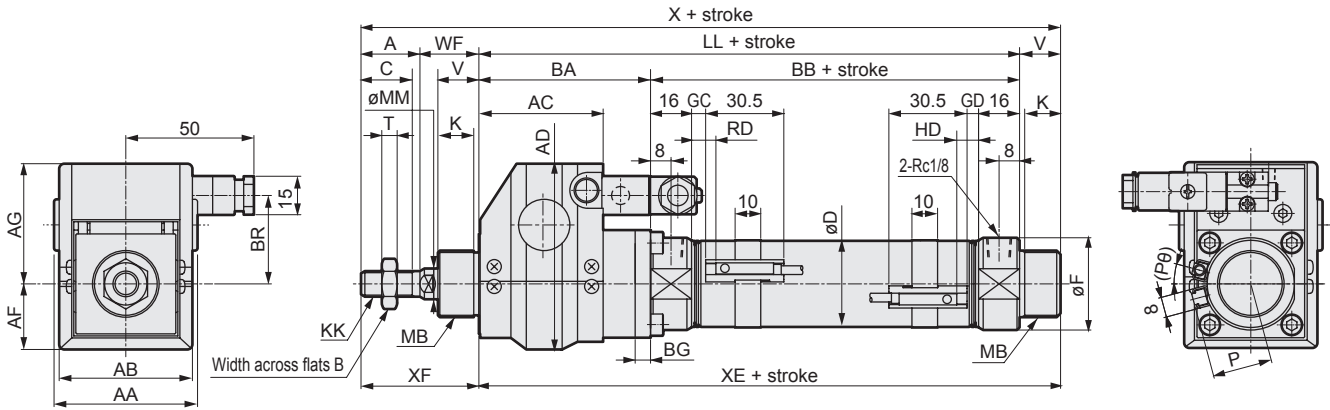
Code	Without valve/basic (JSK2-00) basic dimensions																		
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BH	BL	BM	BN	BO	BP	BS	BU	C	D	EE
ø20	20	13	58	66	9	30	19	5	29	34	55	38	19	38	4	3.8	18	21.4	M5
ø25	23	17	67	69	9.5	38.5	19	6	39	42	66	45	22	43.8	7	7	20	26.4	Rc1/8
ø32	23	17	67	69	9.5	38.5	19	6	39	42	66	45	22	43.8	7	7	20	33.6	Rc1/8
ø40	25	19	74	73	8	48	18	8	50	50	80.5	55.5	25	52	7	7	22	41.6	Rc1/8

Code	Without valve/basic (JSK2-00) basic dimensions												With switch (T0, T5, T2, T3)				With switch (T2W, T3W)		
Bore size (mm)	F	K	KK	LL	MB	MM	T	V	WF	X	XE	XF	GC	GD	RD	HD	GC	GD	RD
ø20	28	12	M 8 x 1.0	124	M 18 x 1.5	10	5	14	24	182	138	44	4.0	3.0	8.0	7.0	6.0	5.0	10.0
ø25	32	14	M 10 x 1.25	136	M 26 x 1.5	12	6	16	23	198	152	46	5.5	4.5	9.5	8.5	7.5	6.5	11.5
ø32	36	14	M 10 x 1.25	136	M 26 x 1.5	12	6	16	23	198	152	46	5.5	4.5	9.5	8.5	7.5	6.5	11.5
ø40	45	14	M 12 x 1.5	147	M 26 x 1.5	14	7	16	23	211	163	48	7.5	6.5	11.5	10.5	9.5	8.5	13.5

Code	With bellows						
Bore size (mm)	HD	P	P1	(P0)°	b	d	ℓ
ø20	9.0	17.3	19.5	22	30	30	(Stroke/3) + 6
ø25	10.5	19.8	22.0	18	32	46	(Stroke/3.25) + 7
ø32	10.5	24.3	25.5	15	32	46	(Stroke/3.25) + 7
ø40	12.5	28.3	29.5	12	34	46	(Stroke/3.25) + 7

Dimensions

- Brake section with cover (U) / Basic (JSK2-00)



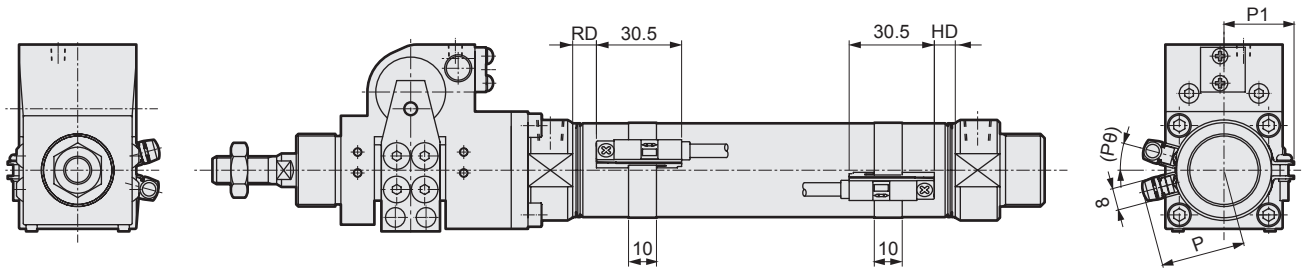
RD: Rod side max. sensitivity position
 HD: Head side max. sensitivity position

Code	Basic (00) basic dimensions																	
Bore size (mm)	A	AA	AB	AC	AD	AF	AG	B	BA	BB	BG	BR	C	D	F	K	KK	LL
ø20	20	51	47	39	58.5	19.5	39	13	58	66	5	29	18	21.4	28	12	M8x1.0	124
ø25	23	56	52	48.5	72.5	25	47.5	17	67	69	6	34.5	20	26.4	32	14	M10x1.25	136
ø32	23	56	52	48.5	72.5	25	47.5	17	67	69	6	34.5	20	33.6	36	14	M10x1.25	136
ø40	25	69	65	56	85.75	28.75	57	19	74	73	8	39.5	22	41.6	45	14	M12x1.5	147

Code	Basic (00) basic dimensions								With switch (T0, T5, T2, T3)				With switch (T2W, T3W)					
Bore size (mm)	MB	MM	T	V	WF	X	XE	XF	GC	GD	RD	HD	GC	GD	RD	HD	P	(Pθ)°
ø20	M18x1.5	10	5	14	24	182	138	44	4.0	3.0	8.0	7.0	6.0	5.0	10.0	9.0	17.3	22
ø25	M26x1.5	12	6	16	23	198	152	46	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	19.8	18
ø32	M26x1.5	12	6	16	23	198	152	46	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	24.3	15
ø40	M26x1.5	14	7	16	23	211	163	48	7.5	6.5	11.5	10.5	9.5	8.5	13.5	12.5	28.3	12

JSK2 Series common dimensions (with T1, T8 switches, with 2-color LED switch)

- JSK2-**-**-T1H/V, T8H/V, T₃²YH/V

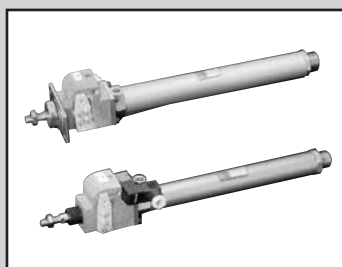


Switch installation dimensions

Code	1-color LED (T1, T8) 2-color LED (T ₃ ² Y)							
	RD *1		HD *2		P		P1	(Pθ)°
	T1, T ₃ ² Y	T8	T1, T ₃ ² Y	T8	T1	T ₃ ² Y, T8		
ø20	7.0	2.0	6.0	1	28.5	23.1	19.5	22
ø25	8.5	3.5	7.5	2.5	31.0	25.6	22.0	18
ø32	8.5	3.5	7.5	2.5	35.5	30.1	25.5	15
ø40	10.5	5.5	9.5	4.5	39.5	34.1	29.5	12

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

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

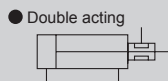


Brake cylinder Small bore size, disassembly
Double acting/double acting/with valve for brake

JSM2/JSM2-V Series

● Bore size: $\varnothing 20/\varnothing 30/\varnothing 40$

JIS symbol



Specifications

Item	JSM2			JSM2-V		
	$\varnothing 20$	$\varnothing 30$	$\varnothing 40$	$\varnothing 20$	$\varnothing 30$	$\varnothing 40$
Bore size mm	$\varnothing 20$	$\varnothing 30$	$\varnothing 40$	$\varnothing 20$	$\varnothing 30$	$\varnothing 40$
Actuation	Double acting			Double acting/with valve		
Working fluid	Compressed air					
Max. working pressure MPa	0.7 (≈ 100 psi, 7 bar)			0.6 (≈ 87 psi, 6 bar)		
Min. working pressure MPa	Brake section	0.35 (≈ 51 psi, 3.5 bar)				
	Cylinder	0.10 (≈ 15 psi, 1 bar)				
Proof pressure MPa	1.05 (≈ 150 psi, 10.5 bar)					
Ambient temperature $^{\circ}\text{C}$	-10 (14 $^{\circ}\text{F}$) to 60 (140 $^{\circ}\text{F}$) (no freezing)			-10 (14 $^{\circ}\text{F}$) to 50 (122 $^{\circ}\text{F}$) (no freezing)		
Port size	Brake section	M5	Rc1/8	M5	Rc1/8	
	Cylinder	Rc1/8				
Stroke tolerance mm	$^{+1.0}_0$ (to 200)			$^{+1.2}_0$ (to 1000)		
Working piston speed mm/s	50 to 500					
Cushion	None					
Lubrication	Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)					
Holding force N	186	431	765	186	431	765
Allowable absorbed energy J	0.024	0.05	0.093	0.024	0.05	0.093

Note: This product cannot absorb high energy generated by external load. We recommend attaching an external shock absorber.

Electrical specification for brake valve

Item	JSM2-V-VALVE-KIT- Voltage		
	100 AC(50/60 Hz)	200 AC(50/60 Hz)	24 DC
Rated voltage (V)	100 AC(50/60 Hz)	200 AC(50/60 Hz)	24 DC
Starting current (A)	0.056/0.044	0.034/0.026	0.075
Holding current (A)	0.028/0.022	0.017/0.013	
Power consumption (W)	1.8/1.4	2.1/1.6	1.8
Voltage fluctuation range	$\pm 10\%$		
Thermal class	Class B molded coil		

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

*2 : Refer to "Pneumatic Valves (CB-023SA)" for details on valves (P5136 Series).

Stroke

Bore size (mm)	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)
$\varnothing 20$	25/50/75/100/125/150 175/200/250/300	700	1
$\varnothing 30$			
$\varnothing 40$			

● For types with switch, minimum stroke varies depending on mounting method. Refer to the following table.
The custom stroke is available in 1 mm increments.

Min. stroke with switch (T-switch)

Switch model No.	1	2	3
T0, T5, T2, T3	10	27	51
T2W, T3W	10	31	55
T2Y, T3Y, T1	10	25	49
T8	10	23	47

Switch specifications (T-switch)

● 1-color/2-color LED

Item	Proximity 2-wire		Proximity 2-wire			Proximity 3-wire				Reed 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		
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		
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	100/110 VAC	5/12/24 VDC	100/110 VAC	12/24 VDC	110 VAC	220 VAC
Load current	5 to 100mA	5 to 20 mA (*3)			100 mA or less		50 mA or less		5 to 50mA	7 to 20mA	50 mA or less	20 mA or less	5 to 50mA	7 to 20mA	7 to 10mA
Indicator lamp	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)		
Leakage current	1 mA or less with 100 VAC, 2 mA or less with 200 VAC	1 mA or less			10 µA or less				0mA						
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: 33	1 m: 18		1 m: 33		1 m: 33		
	3 m: 87	3 m: 49	3 m: 87	3 m: 49	3 m: 49	3 m: 87	3 m: 49	3 m: 87	3 m: 49		3 m: 87		3 m: 87		
	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: 80		5 m: 142		5 m: 142		

*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)

Cylinder weight

(Unit: kg)

Item/mounting	Product weight when stroke (S) = 0 mm					Switch weight	Switch rail + band weight	Valve weight	Additional weight per S = 10 mm
	Bore size (mm)	Basic (00)	Axial foot (LB)	Flange (FA)	Clevis (CA)				
ø20	0.48	0.63	0.54	0.61	0.53	Refer to the weight in the switch specifications.	0.005	0.07	0.01
ø30	0.94	1.20	1.09	1.15	1.04		0.005		0.014
ø40	1.57	1.83	1.72	1.79	0.73		0.009		0.02

(Example) JSM2-V-LB-20-100-2-TOH-D	Product weight when S = 0 mm	0.73 kg
	Additional weight when S = 100 mm	$0.01 \times \frac{100}{10} = 0.1 \text{ kg}$
	Weight of 2 switches	$(0.018 + 0.005) \times 2 = 0.046 \text{ kg}$
	Product weight	$0.73 \text{ kg} + 0.1 \text{ kg} + 0.046 \text{ kg} = 0.88 \text{ kg}$

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
ø20	Push	31.4	47.1	62.8	94.2	1.26×10^2	1.57×10^2	1.88×10^2	2.20×10^2
	Pull	23.6	35.3	47.1	70.7	94.2	1.18×10^2	1.41×10^2	1.65×10^2
ø30	Push	70.7	1.06×10^2	1.41×10^2	2.12×10^2	2.83×10^2	3.53×10^2	4.24×10^2	4.95×10^2
	Pull	59.4	89.1	1.19×10^2	1.78×10^2	2.38×10^2	2.97×10^2	3.56×10^2	4.16×10^2
ø40	Push	1.26×10^2	1.88×10^2	2.51×10^2	3.77×10^2	5.03×10^2	6.28×10^2	7.54×10^2	8.80×10^2
	Pull	1.10×10^2	1.65×10^2	2.21×10^2	3.31×10^2	4.41×10^2	5.51×10^2	6.62×10^2	7.72×10^2

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSM/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

JSM2/JSM2-V Series

How to order

● Without valve

Without switch (built-in magnet for switch)

JSM2 - LB - 20 - 50 ——— **P I**

With switch (built-in magnet for switch)

JSM2 - LB - 20 - 50 ——— **T0H - R - P I**

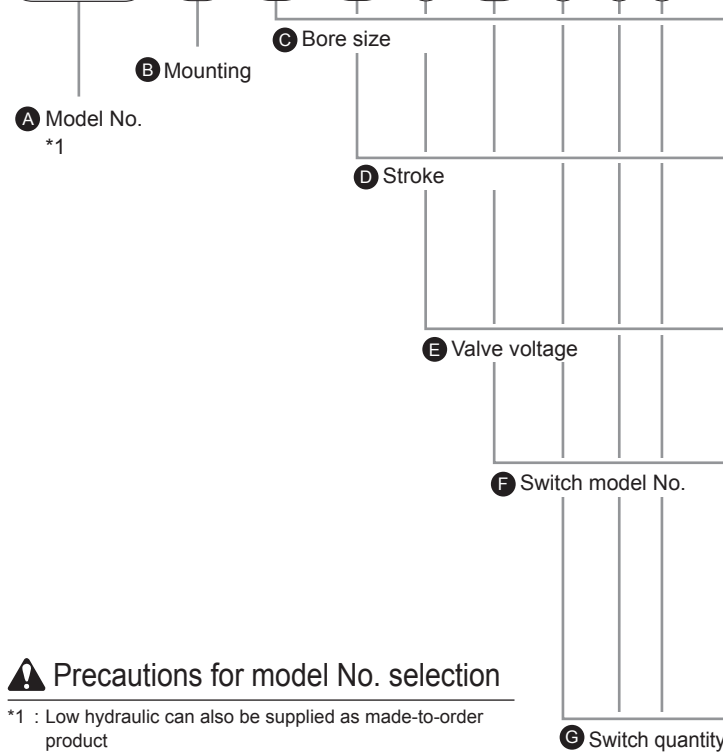
● With valve for brake

Without switch (built-in magnet for switch)

JSM2-V - LB - 20 - 50 - 1 ——— **P I**

With switch (built-in magnet for switch)

JSM2-V - LB - 20 - 50 - 1 ——— **T0H - R - P I**



⚠ Precautions for model No. selection

- *1 : Low hydraulic can also be supplied as made-to-order product
Model numbers are JSM2-H and JSM2-VH.
- *2 : Refer to page 720 for the min. stroke with switch.
- *3 : For a TA mounting, the brake section with cover (U) cannot be selected.

[Example of model No.]

JSM2-V-LB-20-50-1-T0H-R-PI

Model: Brake cylinder with valve for brake

- A** Model No. : With valve
- B** Mounting : Axial foot
- C** Bore size : $\varnothing 20$ mm
- D** Stroke : 50 mm
- E** Valve voltage : 100 VAC
- F** Switch model No. : Reed T0H switch,
- G** Switch quantity : 1 on rod side
- H** Option : Same port position
- I** Accessory : Rod eye

A Model No.	
Double acting	With valve
JSM2	JSM2-V

Code	Description	Double acting	With valve
B Mounting			
00	Basic	●	●
LB	Axial foot	●	●
FA	Rod side flange	●	●
CA	Eye bracket	●	●
TA	Rod side trunnion	●	●
TB	Head side trunnion	●	●

C Bore size (mm)			
20	$\varnothing 20$	●	●
30	$\varnothing 30$	●	●
40	$\varnothing 40$	●	●

D Stroke (mm)		
Bore size	Stroke *2	Custom stroke
$\varnothing 20$	1 to 700	In 1 mm increments
$\varnothing 30$	1 to 700	
$\varnothing 40$	1 to 700	

E Valve voltage			
1	100 VAC (50/60 Hz)	●	●
2	200 VAC (50/60 Hz)	●	●
3	24 VDC	●	●

F Switch model No.			
Refer to the switch model No. table on the following page.			

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

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

H Option					
		Max. ambient temperature	Instantaneous max. temp		
J	Bellows	100°C	200°C	●	●
L	Bellows	250°C	400°C	●	●
M	Piston rod material (stainless steel)			●	●
P	Same port position			●	●
U	Brake section with cover			●	●

I Accessory			
I	Rod eye	●	●
Y	Rod clevis (pin, washer, split pin attached)	●	●
B2	Clevis bracket (pin, snap ring attached)	●	●

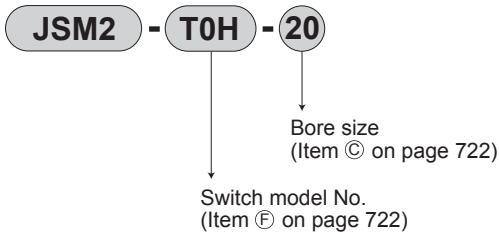
[F] Switch model No.

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

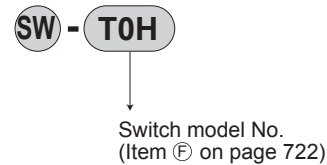
How to order switch

[T-switch]

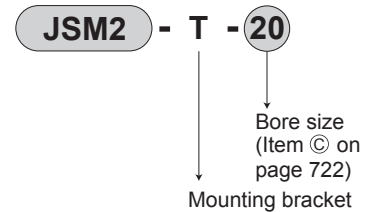
● Switch body + mounting bracket set



● Switch body only



● Mounting bracket set



How to order brake valve



① Valve voltage

Code	Description
1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	24 VDC

How to order mounting bracket

Bore size (mm)	ø20	ø30	ø40
Mounting bracket			
Basic (00) *3	M1-0020	M1-00-30	M1-00-30
Axial foot (LB)	M1-LB-20	M1-LB-30	M1-LB-30
Flange (FA)	M1-FA-20	M1-FA-30	M1-FA-30
Eye bracket (CA)	M1-CA-20	M1-CA-30	M1-CA-30
Trunnion (TA/TB)	M1-TA-20	M1-TA-30	M1-TA-40

*1: As for mounting brackets, the axial foot and flange include mounting nuts and toothed washers, and the trunnion includes mounting nuts.

2: For axial foot, 2 sets of the above "M1-LB-" are required.

*3: Mounting nut, toothed washer only. Although 1 set is attached with the basic of the product (00), use this when needed.

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

JSM2/JSM2-V Series

Material of mounting bracket

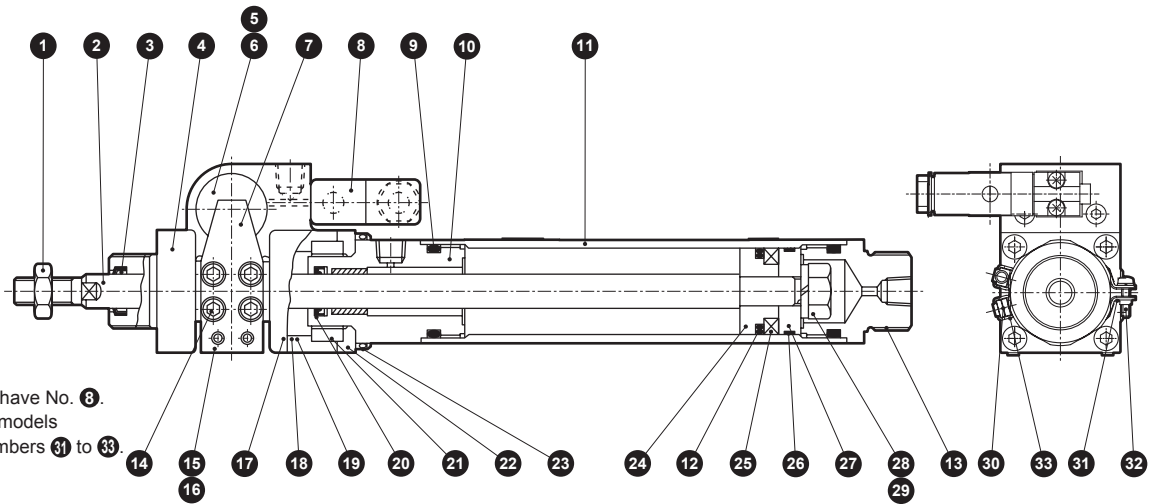
Mounting	Material	Remarks
LB	Steel	Zinc chromate
FA	Steel	Zinc chromate
TA/TB	Steel	Zinc chromate
CA	Steel	Zinc chromate

Note: Mounting bracket will be shipped with the product.

However, if the product is supplied with bellows and the mounting bracket is LB, FA, or TA, it will be shipped assembled.

Internal structure and parts list

- JSM2 (double acting/with switch)
- JSM2-V (with valve and switch)



- Note: JSM2 does not have No. 8.
- Note: The switchless models do not have numbers 31 to 33.

Brake section cannot be disassembled

Parts list

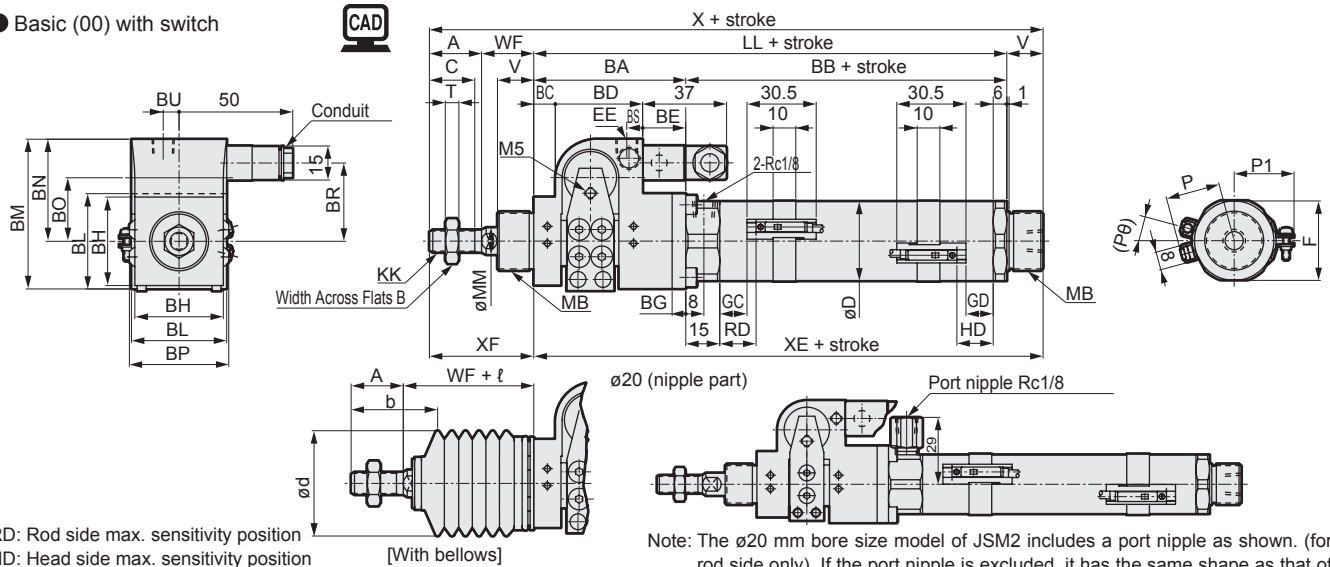
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Rod nut	Steel	Zinc chromate	17	Brake shoe metal	Cast iron	
2	Piston rod	ø20/ø30 stainless steel ø40 carbon steel	Industrial chrome plating	18	Bush	Dry bearing	
3	Scraper	Nitrile rubber		19	Ring	Steel	
4	Brake body	Cast iron	Zinc chromate	20	Rod packing	Nitrile rubber	
5	Brake piston	Copper alloy casting		21	Fixed ring	Steel	Zinc chromate
6	Piston packing	Nitrile rubber		22	Square flange	Steel	Zinc chromate
7	Lever	Steel	Zinc chromate	23	Hex socket screw	Steel	Black finish
8	Valve for brake release	---	P5136MO	24	Piston A	Aluminum alloy	
9	Cylinder gasket	Nitrile rubber		25	Magnet	Plastic	
10	Rod cover	Aluminum alloy		26	Wear ring	Acetal resin	
11	Cylinder tube	Aluminum alloy	Alumite	27	Piston B	Aluminum alloy	
12	Piston packing	Nitrile rubber		28	Hexagon nut	Steel	Zinc chromate
13	Head cover	Aluminum alloy		29	Spring washer	Steel	Zinc chromate
14	Hex socket screw	Steel	Black finish	With switch			
15	Hex socket screw	Steel	Black finish	30	Switch body	---	
16	Brake spring	Steel	Black finish	31	Band	Stainless steel	
				32	Pan head machine screw	Stainless steel	
				33	Switch rail	Stainless steel	

Repair parts list

No./part name	Kit No.	Repair parts No.
Bore size (mm)		
ø20	JSM2-20K	3 9 12
ø30	JSM2-30K	20 27
ø40	JSM2-40K	

Dimensions

● Basic (00) with switch



RD: Rod side max. sensitivity position
HD: Head side max. sensitivity position

*1: The size of the exhaust port of brake section is the same as that of EE.

*2: Conduit on the valve terminal box for $\phi 30$ and $\phi 40$ mm is on the opposite side of that shown in the figure.

*3: For the dimensions of the accessories, refer to page 731.

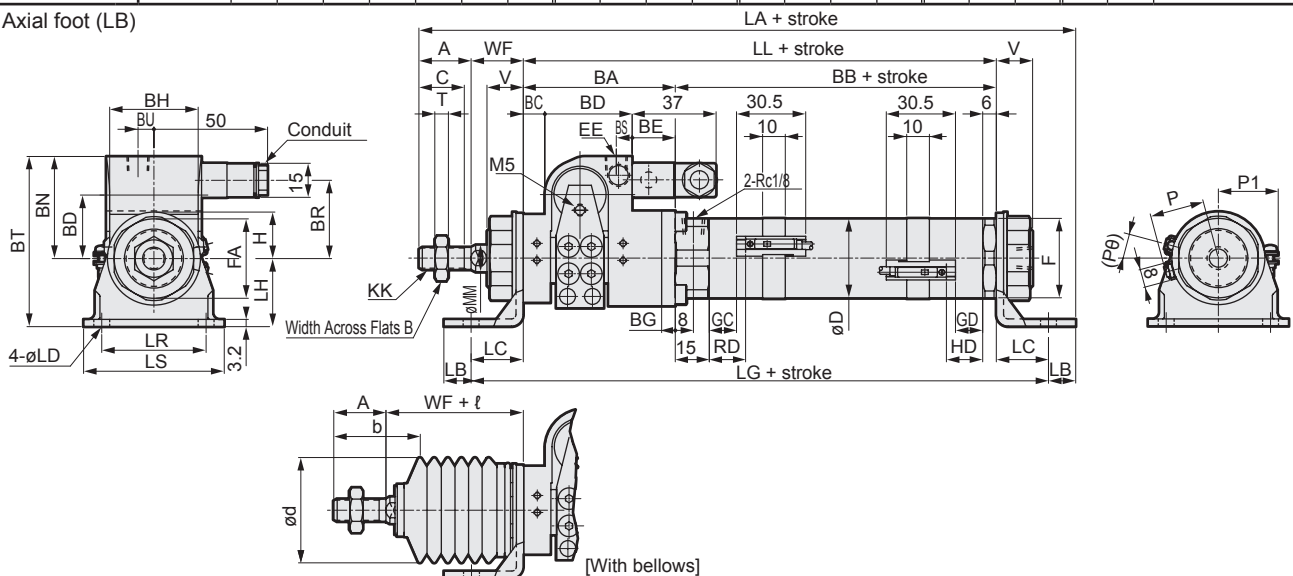
Note: The $\phi 20$ mm bore size model of JSM2 includes a port nipple as shown. (for rod side only). If the port nipple is excluded, it has the same shape as that of $\phi 30$ mm and $\phi 40$ mm bore size cylinders.

*4: ℓ dimensions should be rounded up to the nearest whole number.

Code		Basic (00) basic dimensions																						
Bore size (mm)		A	B	BA	BB	BC	BD	BE	BG	BH	BL	BM	BN	BO	BP	BR	BS	BU	C	D	EE	F	KK	LL
$\phi 20$		20	13	58	66	9	30	19	5	29	34	55	38	19	38	29	4	3.8	18	25	M5	26	M 8 x 1.0	124
$\phi 30$		23	17	67	72	9.5	38.5	19	6	39	42	66	45	22	43.8	34.5	7	7	20	35	Rc1/8	35	M 10 x 1.25	139
$\phi 40$		25	19	74	74	8	48	18	8	50	50	80.5	55	25	52	39.5	7	7	22	45	Rc1/8	46	M 12 x 1.5	148

Code		With switch (T0, T5, T2, T3)										With switch (T2W, T3W)				With bellows							
Bore size (mm)		MB	MM	T	V	WF	X	XE	XF	GC	GD	RD	HD	GC	GD	RD	HD	P	P1	(P/P)	b	d	ℓ
$\phi 20$		M 18 x 1.5	10	5	14	24	182	138	44	9	9	13	13	11	11	15	15	19.5	21	19	32	30	(Stroke/3) + 6
$\phi 30$		M 26 x 1.5	12	6	16	23	201	155	46	12	12	16	16	14	14	18	18	24.5	26	15	38	46	(stroke/3.25) + 7
$\phi 40$		M 26 x 1.5	14	7	16	23	212	164	48	13	13	17	17	15	15	19	19	29.5	31	12	40	46	(stroke/3.25) + 7

● Axial foot (LB)



*1: The size of the exhaust port of brake section is the same as that of EE. *3: ℓ dimensions should be rounded up to the nearest whole number.

*2: For the dimensions of the accessories, refer to page 731.

Code		Axial foot (LB) basic dimensions																						
Bore size (mm)		A	B	BA	BB	BC	BD	BE	BG	BH	BT	BN	BO	BR	BS	BU	C	D	EE	F	FA	H	KK	LL
$\phi 20$		20	13	58	66	9	30	19	5	29	63	38	19	29	4	3.8	18	25	M5	26	26	15	M 8 x 1.0	124
$\phi 30$		23	17	67	72	9.5	38.5	19	6	39	75	45	22	34.5	7	7	20	35	Rc1/8	35	35	20	M 10 x 1.25	139
$\phi 40$		25	19	74	74	8	48	18	8	50	85.5	55.5	25	39.5	7	7	22	45	Rc1/8	46	35	20	M 12 x 1.5	148

Code		Mounting dimensions										With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows							
Bore size (mm)		MM	T	V	WF	LA	LB	LC	LD	LG	LH	LR	LS	GC	GD	RD	HD	GC	GD	RD	HD	P	P1	(P/P)	b	d	ℓ
$\phi 20$		10	5	14	24	196	10	18	6	160	25	30	44	9	9	13	13	11	11	15	15	19.5	21	19	32	30	(Stroke/3) + 6
$\phi 30$		12	6	16	23	220	12	23	7	185	30	46	62	12	12	16	16	14	14	18	18	24.5	26	15	38	46	(stroke/3.25) + 7
$\phi 40$		14	7	16	23	231	12	23	7	194	30	46	62	13	13	17	17	15	15	19	19	29.5	31	12	40	46	(stroke/3.25) + 7

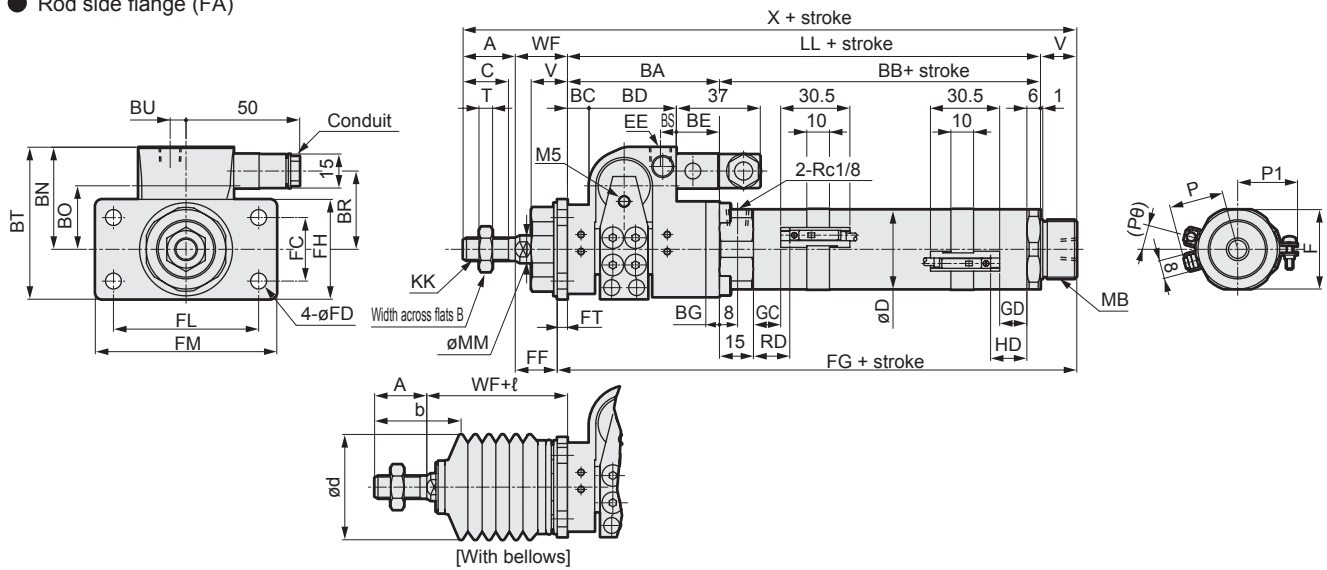
- LCM
- LCR
- LCG
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- ROC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RJ3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

JSM2-V Series

Dimensions



● Rod side flange (FA)

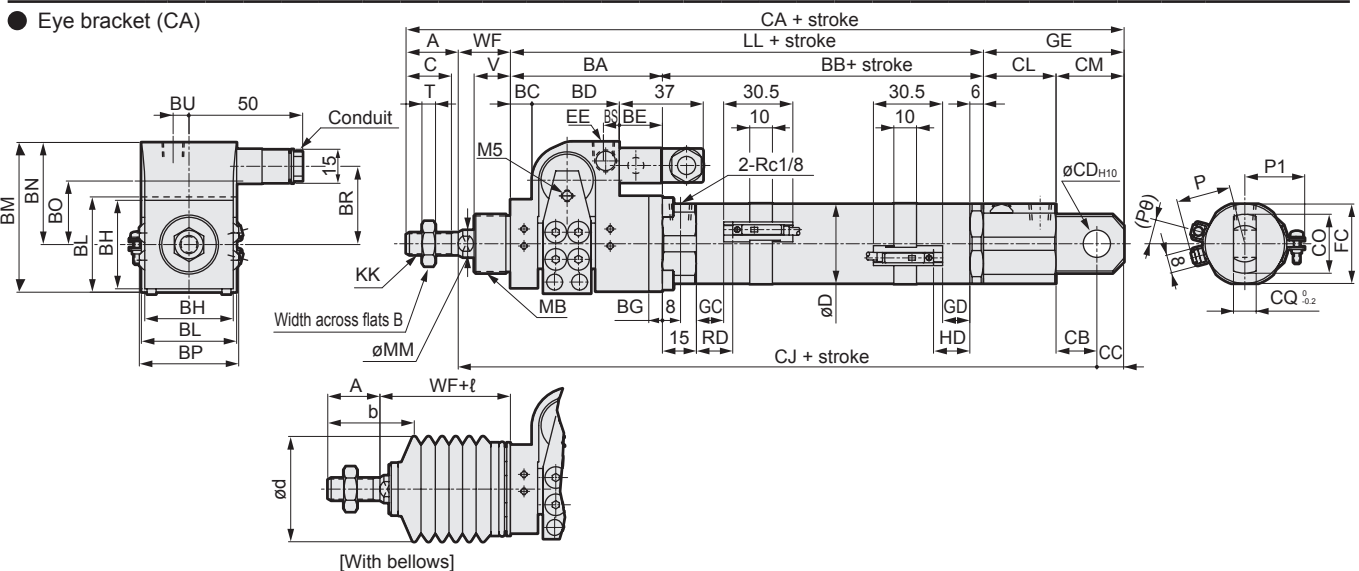


*1 : The size of the exhaust port of brake section is the same as that of EE. *3 : ℓ dimensions should be rounded up to the nearest whole number.
 *2 : For the dimensions of the accessories, refer to page 731.

Code		Rod side flange (FA) basic dimensions																						
Bore size (mm)		A	B	BA	BB	BC	BD	BE	BG	BT	BN	BO	BR	BS	BU	C	D	EE	F	KK	LL	MB	MM	MB
∅20		20	13	58	66	9	30	19	5	55	38	19	29	4	3.8	18	25	M5	26	M8x1.0	124	M18x1.5	10	M18x1.5
∅30		23	17	67	72	9.5	38.5	19	6	67	45.5	22	34.5	7	7	20	35	Rc1/8	35	M10x1.25	139	M26x1.5	12	M26x1.5
∅40		25	19	74	74	8	48	18	8	77.5	55.5	25	39.5	7	7	22	45	Rc1/8	46	M12x1.5	148	M26x1.5	14	M26x1.5

Code		Mounting dimensions												With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows						
Bore size (mm)		MM	T	V	WF	X	FC	FD	FF	FG	FH	FL	FM	FT	GC	GD	RD	HD	GC	GD	RD	HD	P	P1	(P)°	b	d	ℓ
∅20		10	5	14	24	182	20	6	20.8	141.2	34	40	54	3.2	9	9	13	13	11	11	15	15	19.5	21	19	32	30	(Stroke/3) + 6
∅30		12	6	16	23	201	28	7	18.5	159.5	44	64	80	4.5	12	12	16	16	14	14	18	18	24.5	26	15	38	46	(Stroke/3.25) + 7
∅40		14	7	16	23	212	28	7	18.5	168.5	44	64	80	4.5	13	13	17	17	15	15	19	19	29.5	31	12	40	46	(Stroke/3.25) + 7

● Eye bracket (CA)



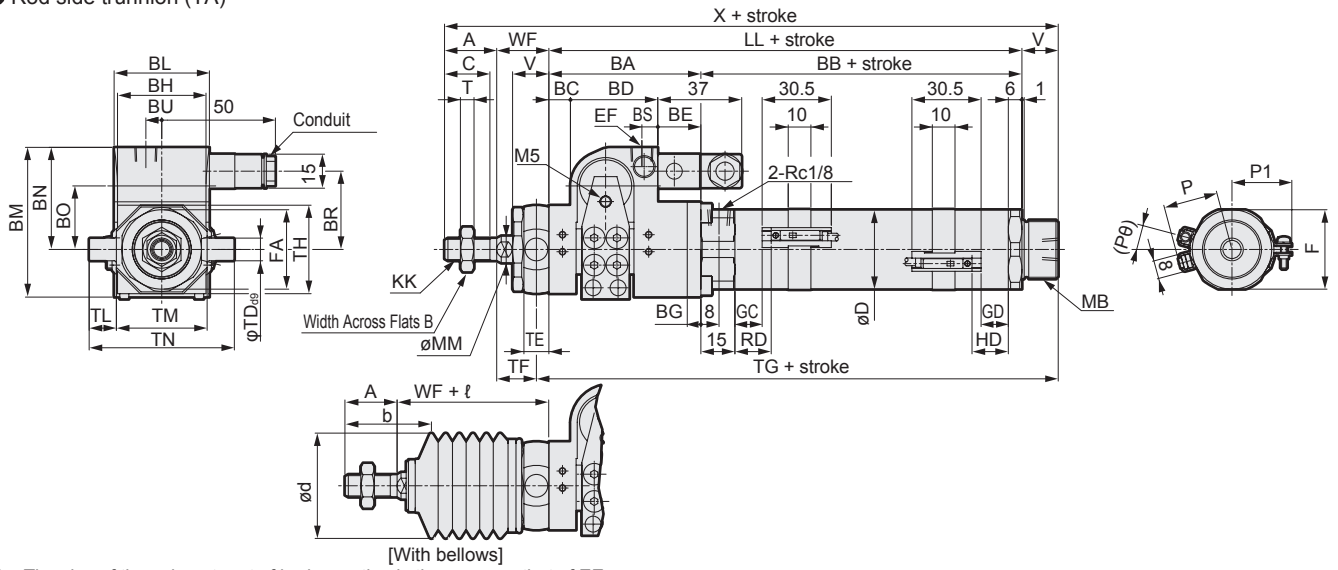
*1 : The size of the exhaust port of brake section is the same as that of EE. *2 : For the dimensions of the accessories, refer to page 731.
 *3 : ℓ dimensions should be rounded up to the nearest whole number.

Code		Eye bracket (CA) basic dimensions																							
Bore size (mm)		A	B	BA	BB	BC	BD	BE	BG	BL	BM	BN	BO	BP	BR	BS	BU	C	D	EE	F	GE	KK	LL	MB
∅20		20	13	58	66	9	30	19	5	34	55	38	19	38	29	4	3.8	18	25	M5	26	55	M8x1.0	124	M18x1.5
∅30		23	17	67	72	9.5	38.5	19	6	42	66	45	22	43.8	34.5	7	7	20	35	Rc1/8	35	62	M10x1.25	139	M26x1.5
∅40		25	19	74	74	8	48	18	8	50	80.5	55.5	25	52	39.5	7	7	22	45	Rc1/8	35	62	M12x1.5	148	M26x1.5

Code		Mounting dimensions												With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows							
Bore size (mm)		MM	T	V	WF	CA	CB	CC	CD	CJ	CL	CM	CN	CO	CQ	GC	GD	RD	HD	GC	GD	RD	HD	P	P1	(P)°	b	d	ℓ
∅20		10	5	14	24	223	14	10	10	193	31	24	8	22	8	9	9	13	13	11	11	15	15	19.5	21	19	32	30	(Stroke/3) + 6
∅30		12	6	16	23	247	18	12	12	212	32	30	7	26	10	12	12	16	16	14	14	18	18	24.5	26	15	38	46	(Stroke/3.25) + 7
∅40		14	7	16	23	258	18	12	12	221	32	30	7	26	10	13	13	17	17	15	15	19	19	29.5	31	12	40	46	(Stroke/3.25) + 7

Dimensions

● Rod side trunnion (TA)

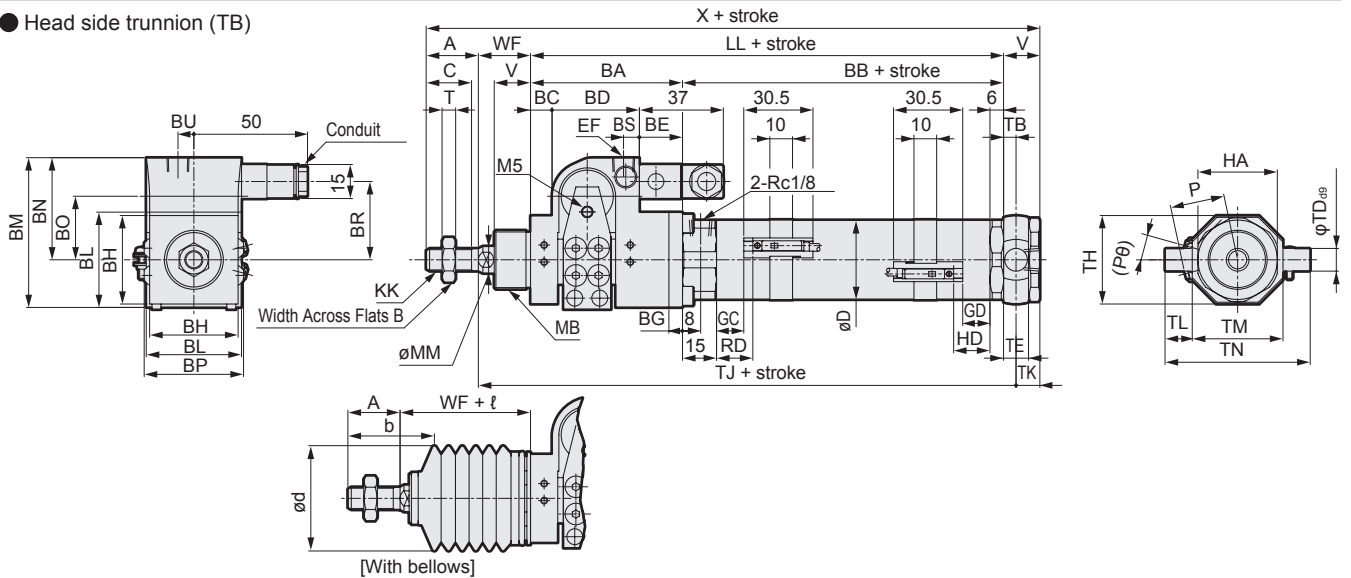


*1 : The size of the exhaust port of brake section is the same as that of EE. *3: ℓ dimensions should be rounded up to the nearest whole number.
 *2 : For the dimensions of the accessories, refer to page 731.

Code	Rod side trunnion (TA) basic dimensions																							
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BH	BL	BM	BN	BO	BR	BS	BU	C	D	EE	F	FA	KK	LL	MB
ø20	20	13	58	66	9	30	19	5	29	34	55	38	19	29	4	3.8	18	25	M5	26	26	M 8 x 1.0	124	M 18 x 1.5
ø30	23	17	67	72	9.5	38.5	19	6	39	42	66	45.5	22	34.5	7	7	20	35	Rc1/8	35	35	M 10 x 1.25	139	M 26 x 1.5
ø40	25	19	74	74	8	48	18	8	50	50	80.5	55.5	25	39.5	7	7	22	45	Rc1/8	46	35	M 12 x 1.5	148	M 26 x 1.5

Code	Mounting dimensions										With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows									
Bore size (mm)	MM	T	V	WF	X	TB	TD	TE	TF	TG	TH	TL	TM	TN	GC	GD	RD	HD	GC	GD	RD	HD	P	P1	(P8)°	b	d	ℓ
ø20	10	5	14	24	182	4.5	8	9	19.5	142.5	29.5	8	30	46	9	9	13	13	11	11	15	15	19.5	21	19	32	30	(Stroke/3) + 6
ø30	12	6	16	23	201	5.5	10	11	17.5	160.5	39	12	40	64	12	12	16	16	14	14	18	18	24.5	26	15	38	46	(stroke/3.25) + 7
ø40	14	7	16	23	212	5.5	10	11	17.5	169.5	44	9.5	53	72	13	13	17	17	15	15	19	19	29.5	31	12	40	46	(stroke/3.25) + 7

● Head side trunnion (TB)



*1 : The size of the exhaust port of brake section is the same as that of EE. *3: ℓ dimensions should be rounded up to the nearest whole number.
 *2 : For the dimensions of the accessories, refer to page 731.

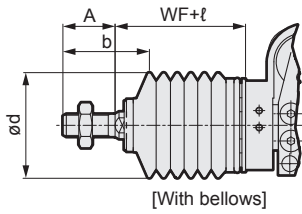
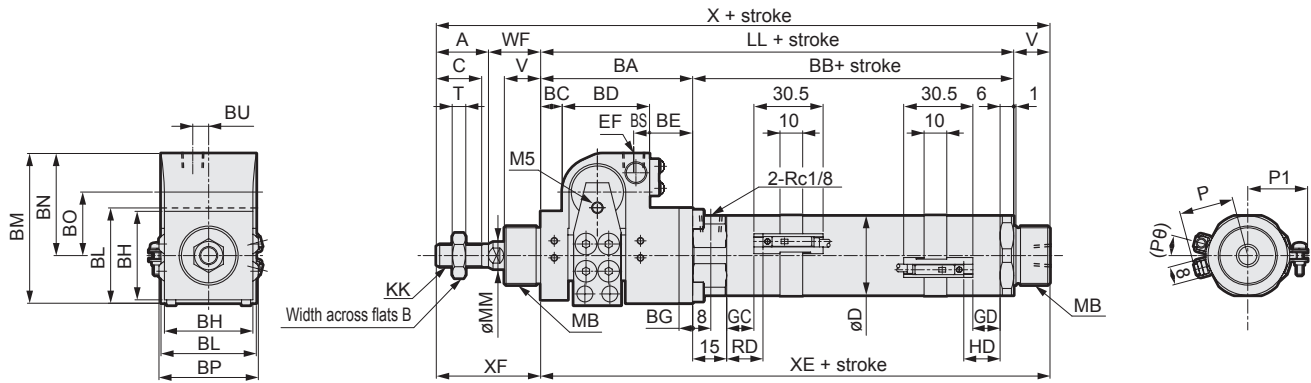
Code	Head side trunnion (TB) basic dimensions																						
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BL	BM	BN	BO	BR	BS	BU	C	D	EE	FA	KK	LL	MB	MM
ø20	20	13	58	66	9	30	19	5	34	55	38	19	29	4	3.8	18	25	M5	26	M 8 x 1.0	124	M 18 x 1.5	10
ø30	23	17	67	72	9.5	38.5	19	6	42	66	45	22	34.5	7	4	20	35	Rc1/8	35	M 10 x 1.25	139	M 26 x 1.5	12
ø40	25	19	74	74	8	48	18	8	50	80.5	55.5	25	39.5	7	7	22	45	Rc1/8	35	M 12 x 1.5	148	M 26 x 1.5	14

Code	Mounting dimensions										With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows							
Bore size (mm)	T	V	WF	X	TB	TD	TE	TH	TJ	TK	TL	TM	TN	GC	GD	RD	HD	GC	GD	RD	HD	P	(P8)°	b	d	ℓ
ø20	5	14	24	182	4.5	8	9	29.5	152.5	9.5	8	30	46	9	9	13	13	11	11	15	15	19.5	19	32	30	(Stroke/3) + 6
ø30	6	16	23	201	5.5	10	11	39	167.5	10.5	12	40	64	12	12	16	16	14	14	18	18	24.5	15	38	46	(stroke/3.25) + 7
ø40	7	16	23	212	5.5	10	11	44	176.5	10.5	9.5	53	72	13	13	17	17	15	15	19	19	29.5	12	40	46	(stroke/3.25) + 7

- 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
- RJ3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

Dimensions

● Without valve, basic (JSM2-00)



*1 : The mounting dimensions are the same as those of JSM2-V (with valve for brake). Refer to pages 725 to 727.

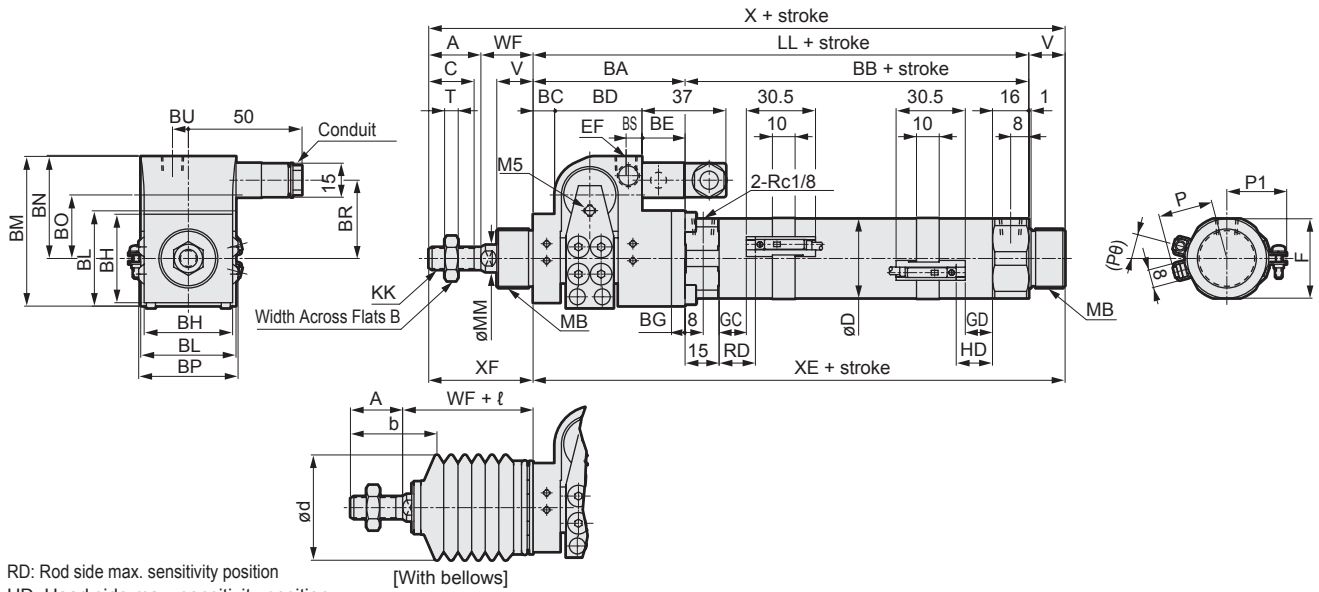
*2 : For the dimensions of the accessories, refer to page 731.

*3 : ℓ dimensions should be rounded up to the nearest whole number.

Code	Without valve, basic (JSM2-00) basic dimensions																					
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BH	BL	BM	BN	BO	BP	BS	BU	C	D	EE	F	KK	LL
ø20	20	13	58	66	9	30	19	5	29	34	55	38	25	38	4	3.8	18	25	M5	26	M8x1.0	124
ø30	23	17	67	72	9.5	38.5	19	6	39	42	66	45	32	43.8	7	7	20	35	Rc1/8	35	M10x1.25	139
ø40	25	19	74	74	8	48	18	8	50	50	80.5	55.5	36.5	52	7	7	22	45	Rc1/8	46	M12x1.5	148
Code	Without valve, basic (JSM2-00) basic dimensions										With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows			
Bore size (mm)	MB	MM	T	V	WF	X	XE	XF	GC	GD	RD	HD	GC	GD	RD	HD	P	(Pθ)°	b	d	ℓ	
ø20	M18x1.5	10	5	14	24	182	138	44	9	9	13	13	11	11	15	15	19.5	19	32	30	(Stroke/3) + 6	
ø30	M26x1.5	12	6	16	23	201	155	46	12	12	16	16	14	14	18	18	24.5	15	38	46	(Stroke/3.25) + 7	
ø40	M26x1.5	14	7	16	23	212	164	48	13	13	17	17	15	15	19	19	29.5	12	40	46	(Stroke/3.25) + 7	

Dimensions

- Same port position (P)/basic (JSM2-00)

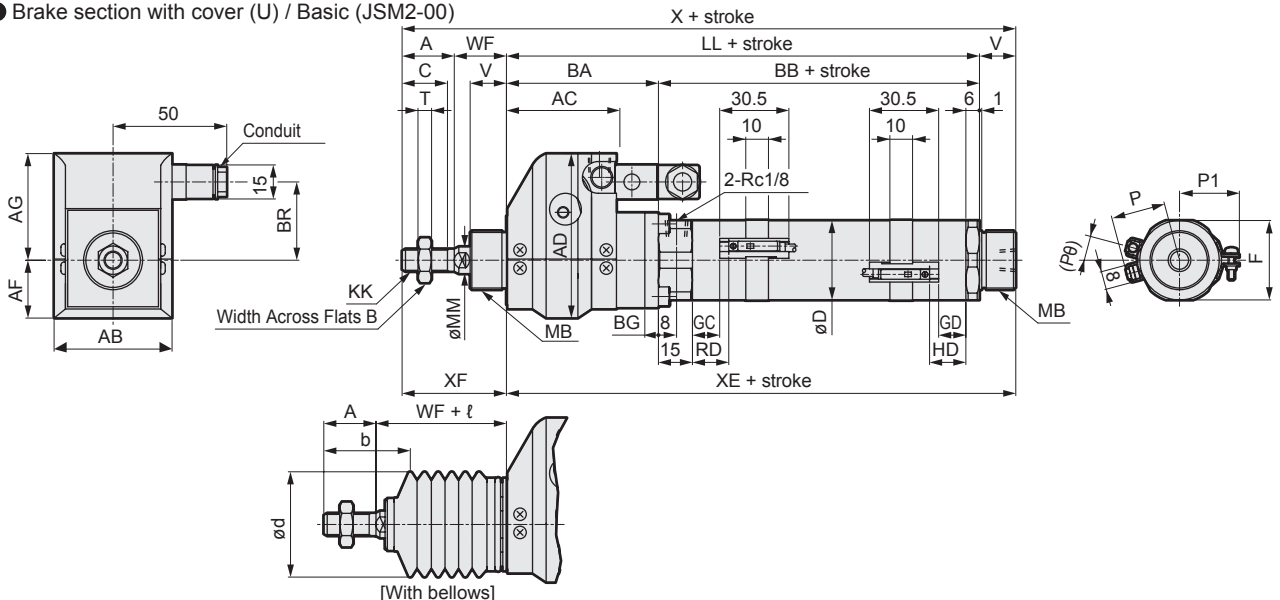


RD: Rod side max. sensitivity position
 HD: Head side max. sensitivity position

Code	Basic (00) basic dimensions																	
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BS	C	D	EE	F	KK	LL	MB	MM	T
ø20	20	13	58	76	9	30	19	5	4	18	25	M5	26	M 8 x 1.0	134	M 18 x 1.5	10	5
ø30	23	17	67	82	9.5	38.5	19	6	7	20	35	Rc1/8	35	M 10 x 1.25	149	M 26 x 1.5	12	6
ø40	25	19	74	84	8	48	18	8	7	22	45	Rc1/8	46	M 12 x 1.5	158	M 26 x 1.5	14	7

Code	With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows										
Bore size (mm)	V	WF	X	XE	XF	GC	GD	RD	HD	GC	GD	RD	HD	P	P1	(P0)°	b	d	ℓ
ø20	14	24	192	138	44	9	9	13	13	11	11	15	15	19.5	21	19	32	30	(Stroke/3) + 6
ø30	16	23	211	155	46	12	12	16	16	14	14	18	18	24.5	26	15	38	46	(stroke/3.25) + 7
ø40	16	23	222	164	48	13	13	17	17	15	15	19	19	29.5	31	12	40	46	(stroke/3.25) + 7

- Brake section with cover (U) / Basic (JSM2-00)



Code	Basic (00) basic dimensions																	
Bore size (mm)	A	AB	AC	AD	AF	AG	B	BA	BB	BG	BR	C	D	F	KK	LL	MB	MM
ø20	20	47	39	58.5	19.5	39	13	58	66	5	29	18	25	26	M 8 x 1.0	124	M 18 x 1.5	10
ø30	23	52	48.5	72.5	25	47.5	17	67	72	6	34.5	20	35	35	M 10 x 1.25	139	M 26 x 1.5	12
ø40	25	65	56	85.75	28.75	57	19	74	74	8	39.5	22	45	46	M 12 x 1.5	148	M 26 x 1.5	14

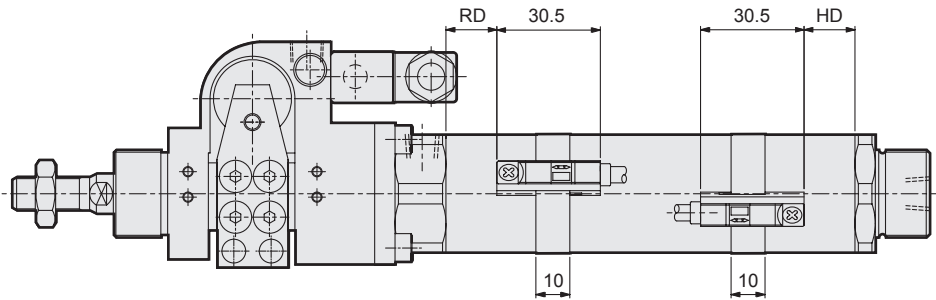
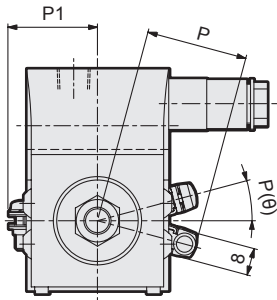
Code	With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows											
Bore size (mm)	T	V	WF	X	XE	XF	GC	GD	RD	HD	GC	GD	RD	HD	P	P1	(P0)°	b	d	ℓ
ø20	5	14	24	182	138	44	9	9	13	13	11	11	15	15	19.5	21	19	32	30	(Stroke/3) + 6
ø30	6	16	23	201	155	46	12	12	16	16	14	14	18	18	24.5	26	15	38	46	(stroke/3.25) + 7
ø40	7	16	23	212	164	48	13	13	17	17	15	15	19	19	29.5	31	12	40	46	(stroke/3.25) + 7

- 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

JSM2/JSM2-V Series

JSM2 Series common dimensions (with T1, T8 switches, with 2-color LED switch)

● JSM2-**-**-T1H/V, T8H/V, T_{2/3}YH/V



Switch installation dimensions

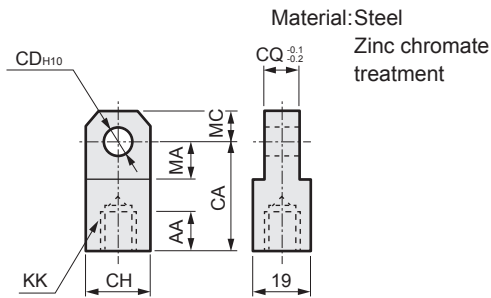
Code	1-color LED (T1, T8) 2-color LED (T2/3 Y)							
	RD		HD		P		P1	(P0)°
	T1,T2/3Y,T2J	T8	T1,T2/3Y,T2J	T8	T2/3Y,T8,T2J	T1		
Bore size (mm)								
ø20	12	7	12	7	25	30	21	19
ø30	15	10	15	10	30	35	26	15
ø40	16	11	16	11	36	41	31	12

JSK2/JSM2 Series

Common accessory dimensions

JSK2/JSM2 Series common accessory dimensions (rod eye, bracket, pin)

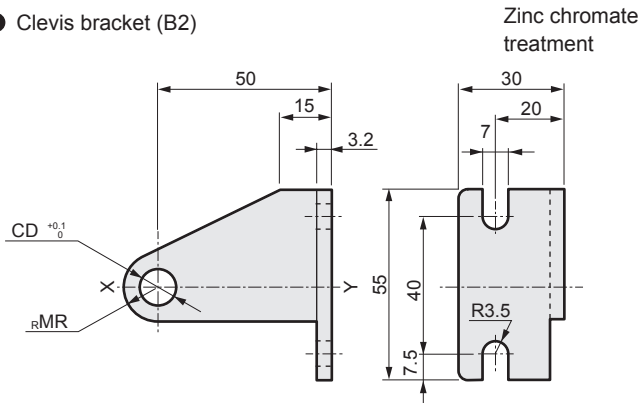
● Rod eye (I)



Model No.	Applicable bore size (mm)	AA	CA	CD	CH	CQ	KK	MA	MC	Wt (g)
M1-I-20	20	14	30	10	19	8	M8x1.0	13	10	60
M1-I-30	25/30/32	14	36	12	25	10	M10x1.25	16	12	106
M1-I-40	40	14	36	12	25	10	M12x1.5	16	12	100

Material: Steel

● Clevis bracket (B2)



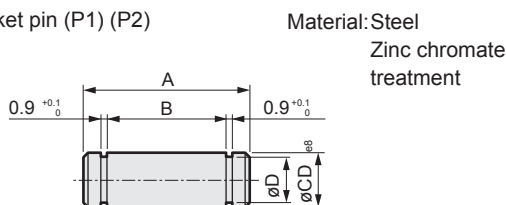
Model No.	Compatibility	Applicable bore size (mm)	CD	MR	Weight (g)
M1-B2-20-CC	JSK2-CC	20/25	8	8	145
M1-B2-30-CC		32	10	11	163
M1-B2-40-CC		40	12	11	170
M1-B2-20-CA	JSK2-CA	20	10	11	158
M1-B2-30-CA	JSM2-CA	25/32/40	12	11	162
M1-B2-20-TA	JSK2-TA/TB	20	8	8	132
M1-B2-30-TA	JSM2-TA/TB	25/32/40	10	11	142

*1 : One pair is composed of two pieces with XY symmetry.

*2 : The model No. above includes snap rings and pins. 2 pieces are included in a set. (However, the pin and snap rings are not included with the trunnion.)

*3 : For mounting TA, this cannot be attached to the brake section with cover (U).

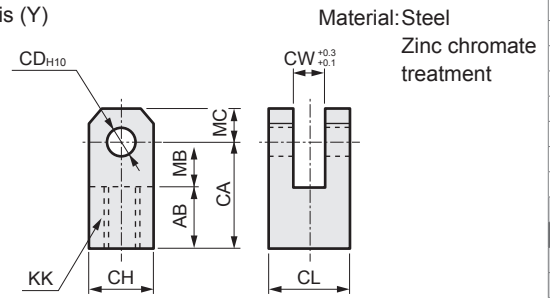
● Clevis bracket pin (P1) (P2)



Model No.	Compatible model and bore size (mm)	A	B	CD	D	Applicable snap ring	Weight (g)
M1-P1-20	JSK2-CC-20/25	33	28	8	7	E type 7	13
M1-P1-30	JSK2-CC-32	33	28	10	9	E type 9	21
M1-P1-40	JSK2-CC-40	37	32	12	9	E type 9	32
M1-P2-20	JSK2-CA-20 JSM2-CA-20	25	20	10	9	E type 9	16
M1-P2-30	JSK2-CA-25/32/40 JSM2-CA-30/40	27	22	12	9	E type 9	24

Note: A pin and snap ring for bracket use are attached with the product. (However, the pin and snap rings are not included with the trunnion.)

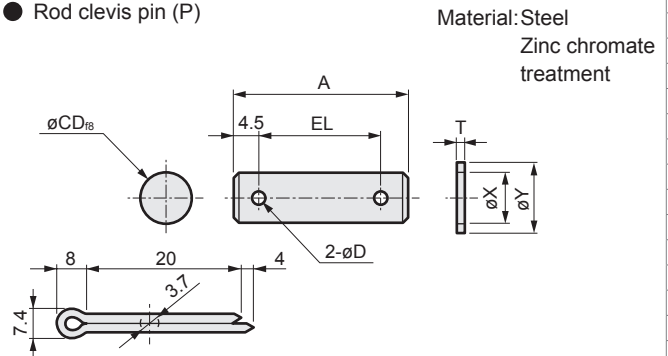
● Rod clevis (Y)



Model No.	Applicable bore size (mm)	AB	CA	CD	CH	CL	CW	KK	MB	MC	Wt (g)
M1-Y-20	20	17	30	10	19	19	8	M8x1.0	13	10	99
M1-Y-30	25/30/32	20	36	12	25	25	10	M10x1.25	16	12	197
M1-Y-40	40	20	36	12	25	25	10	M12x1.5	16	12	193

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

● Rod clevis pin (P)



Model No.	Applicable bore size (mm)	A	D	CD	EL	T	X	Y	Weight (g)
M1-P-20	20	37	4	10	28	1.6	10.5	18	29
M1-P-30	25/30/32/40	46	4	12	37	2.5	12.5	22	50

Note: A pin, a washer and a split pin for rod clevis use are attached with the product.

- 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