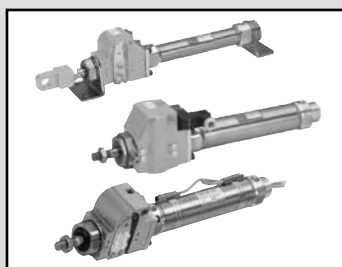


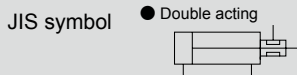
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending



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	mm	JSK2				JSK2-V			
		$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$
Bore size		$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$
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 length

Bore size (mm)	Standard stroke length (mm)	Max. stroke length (mm)		Min. stroke length (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 length varies depending on the switch mounting method. Refer to the following table.

Min. stroke length 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 display

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	For programmable controller, relay, compact solenoid valve	Dedicated for programmable controller			For programmable controller, relay				For programmable controller, relay	For programmable controller, relay, I ² C 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 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 or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 mA
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)		Without indicator lamp		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						
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			
	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			
	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			

*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 length (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 switch specifications.	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 length (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 switch specifications.	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 ..	$0.01 \times \frac{100}{10} = 0.1$ kg
	Weight of 2 switches.....	$0.018 \times 2 = 0.036$ kg
	Weight of switch rail + 2 bands.....	$0.005 \times 2 = 0.010$ kg
	Product weight.....	$0.87 \text{ kg} + 0.1 \text{ kg} + 0.036 \text{ kg} + 0.010 \text{ kg} = 1.016$ kg

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
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/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**

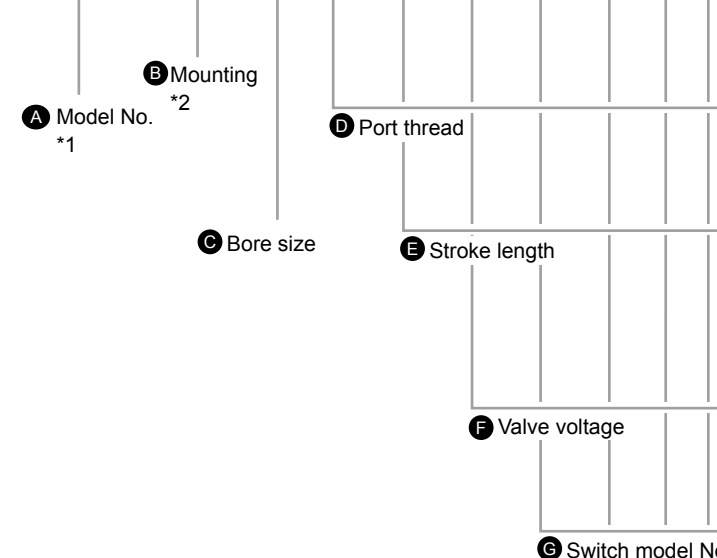
● With valve for brake

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 length with switch and the max. and min. stroke lengths 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 : $\varnothing 20$ mm
- D** Port thread : Rc thread
- E** Stroke length : 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

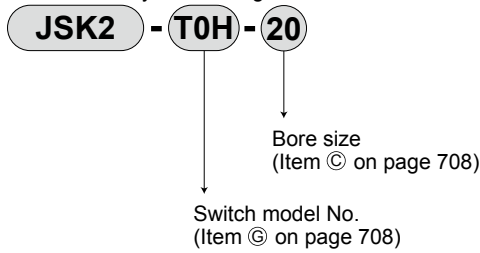
J Accessory *5

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

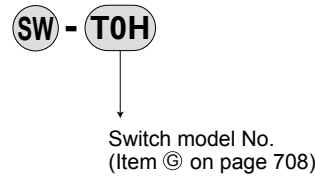
Code	Description	Double acting JSK2	With valve JSK2-V			
B Mounting						
00	Basic	●	●			
LB	Axial foot	●	●			
FA	Rod side flange	●	●			
CA	Eye bracket	●	●			
CC	Eye bracket integrated	●	●			
TA	Rod side trunnion	●	●			
TB	Head side trunnion	●	●			
C Bore size (mm)						
20	$\varnothing 20$	●	●			
25	$\varnothing 25$	●	●			
32	$\varnothing 32$	●	●			
40	$\varnothing 40$	●	●			
D Port thread						
Blank	Rc thread					
NN	NPT thread ($\varnothing 25$ and over) (made-to-order product)					
GN	G thread ($\varnothing 25$ and over) (made-to-order product)					
E Stroke length (mm)						
Bore size	Stroke length *3	Custom stroke length				
$\varnothing 20$	5 to 700	In 1 mm increments				
$\varnothing 25$	5 to 700					
$\varnothing 32$	5 to 700					
$\varnothing 40$	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.						
Axial lead wire	Radial lead wire	Contact	Voltage	Display	Lead wire	
T0H*	T0V*	Reed	AC	●	1-color display Without indicator lamp	2-wire
T5H*	T5V*		DC	●		
T8H*	T8V*		●	●	1-color display	2-wire
T1H*	T1V*		●	●	1-color display	2-wire
T2H*	T2V*	Proximity	●	●	1-color display	2-wire
T3H*	T3V*		●	●	1-color display	3-wire
T3PH*	T3PV*		●	●	1-color display	3-wire
T2WH*	T2WV*		●	●	2-color display	2-wire
T2YH*	T2YV*		●	●		
T3WH*	T3WV*		●	●	3-wire	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

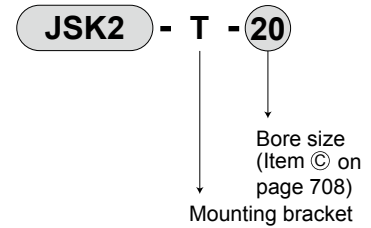
- Switch body + mounting bracket set



- Switch body only



- Mounting bracket set



How to order brake valve



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

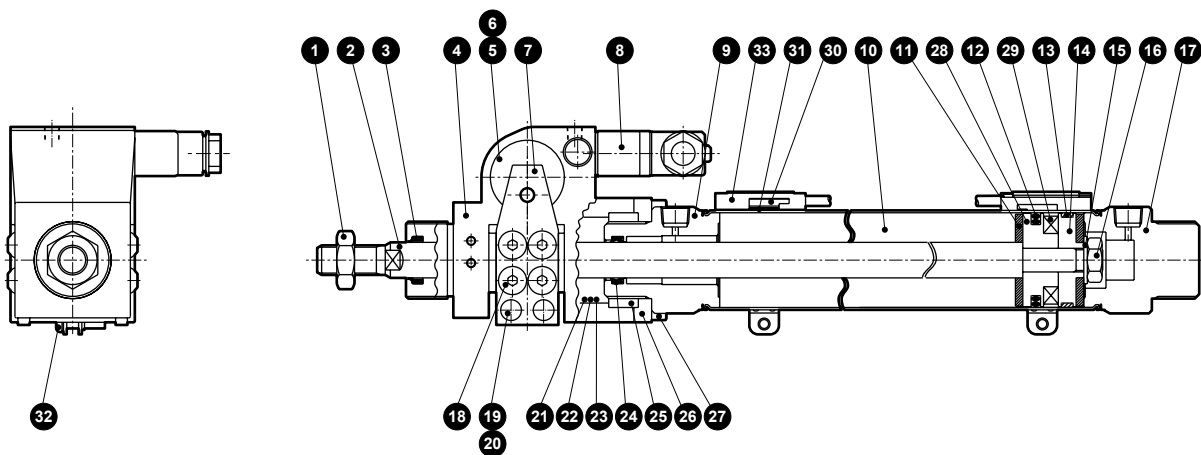
Mounting	Material	Remarks
LB	Steel	Zinc chromate
FA	Steel	Zinc chromate
TA/TB	Steel	Zinc chromate
CA	Steel	Zinc chromate

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

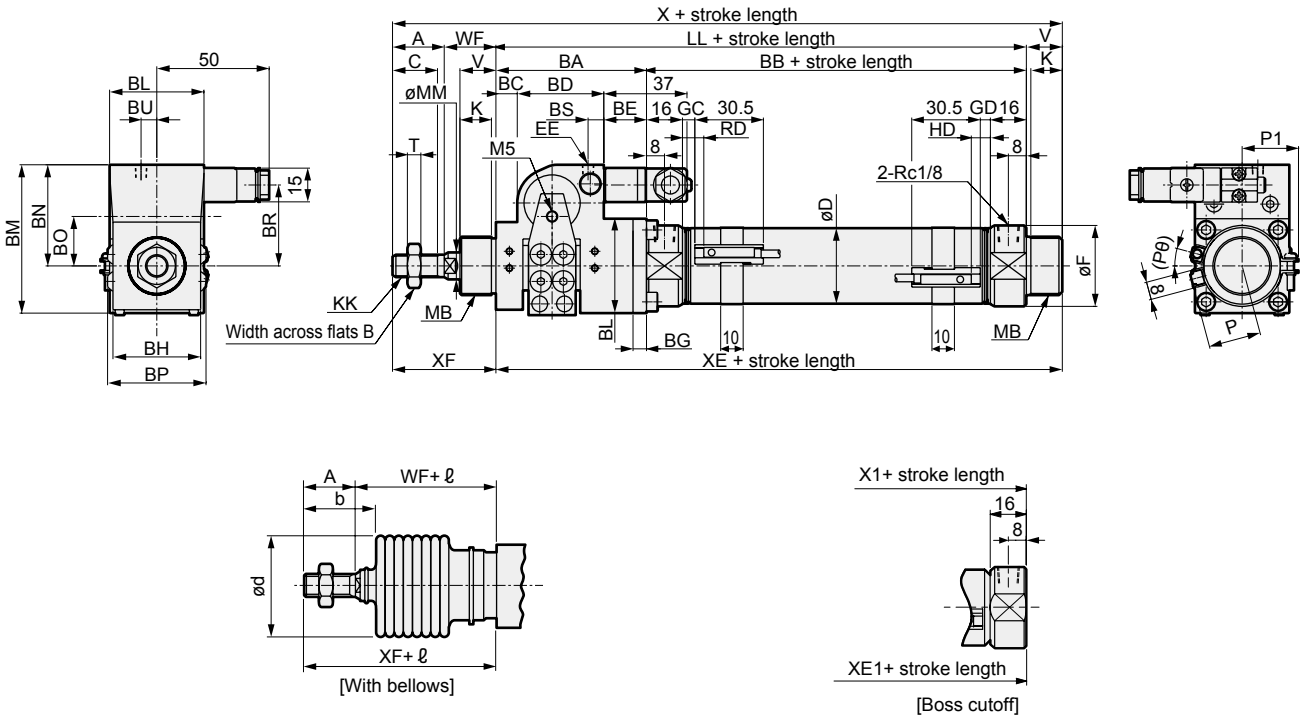
Parts list

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 display switches.

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

*3 : For the l dimension, round up below the decimal point.

*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															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	M8×1.0	124	M18×1.5	10	5	14	24	182	138	44	4.0	3.0	8.0	7.0	
ø25	Rc1/8	32	14	M10×1.25	136	M26×1.5	12	6	16	23	198	152	46	5.5	4.5	9.5	8.5	
ø32	Rc1/8	36	14	M10×1.25	136	M26×1.5	12	6	16	23	198	152	46	5.5	4.5	9.5	8.5	
ø40	Rc1/8	45	14	M12×1.5	147	M26×1.5	14	7	16	23	211	163	48	7.5	6.5	11.5	10.5	

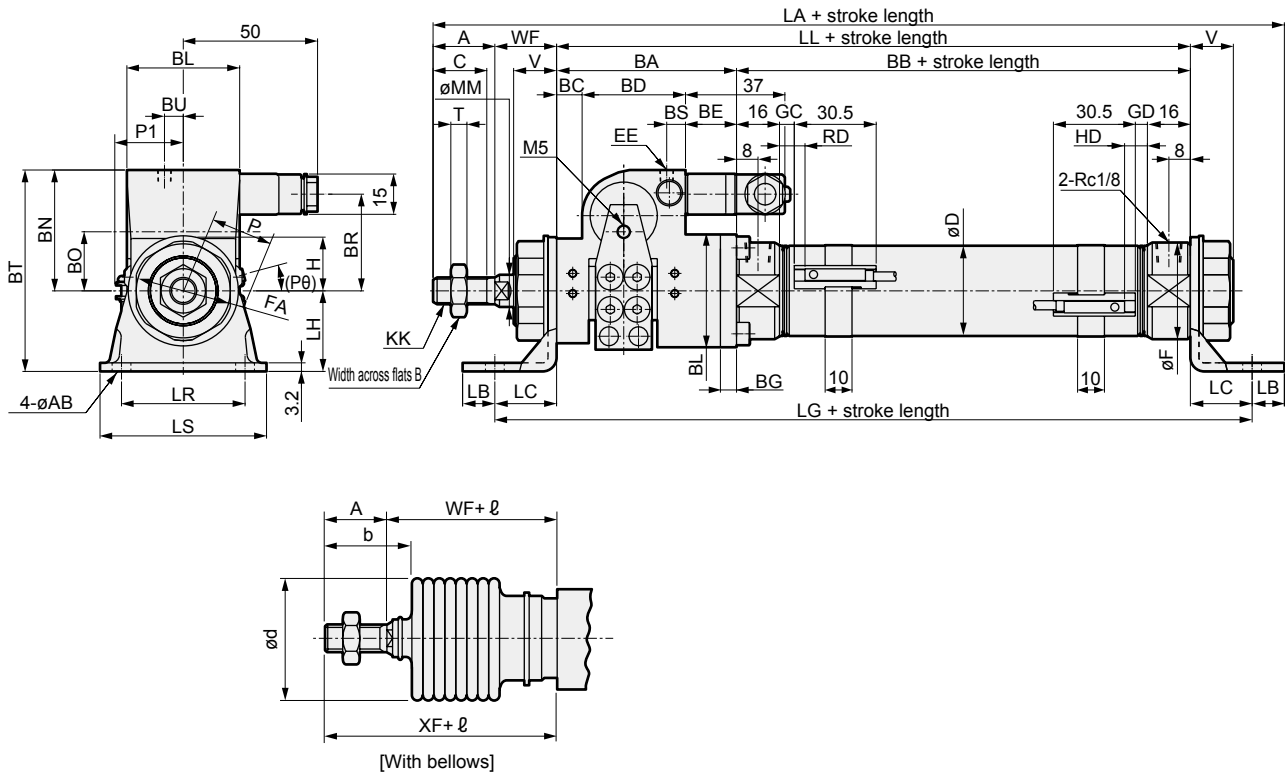
Code	With switch (T2W, T3W)				With bellows				Boss cutoff			
Bore size (mm)	GC	GD	RD	HD	P	P1	(P0)*	b	d	l	X1	XE1
ø20	6.0	5.0	10.0	9.0	17.3	19.5	22	30	30	(Stroke length/3) + 6	168	124
ø25	7.5	6.5	11.5	10.5	19.8	22.0	18	32	46	(Stroke length/3.25) + 7	182	136
ø32	7.5	6.5	11.5	10.5	24.3	25.5	15	32	46	(Stroke length/3.25) + 7	182	136
ø40	9.5	8.5	13.5	12.5	28.3	29.5	12	34	46	(Stroke length/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

Dimensions



● Axial foot (LB)



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

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

*3 : For the ℓ dimension, round up below the decimal point.

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

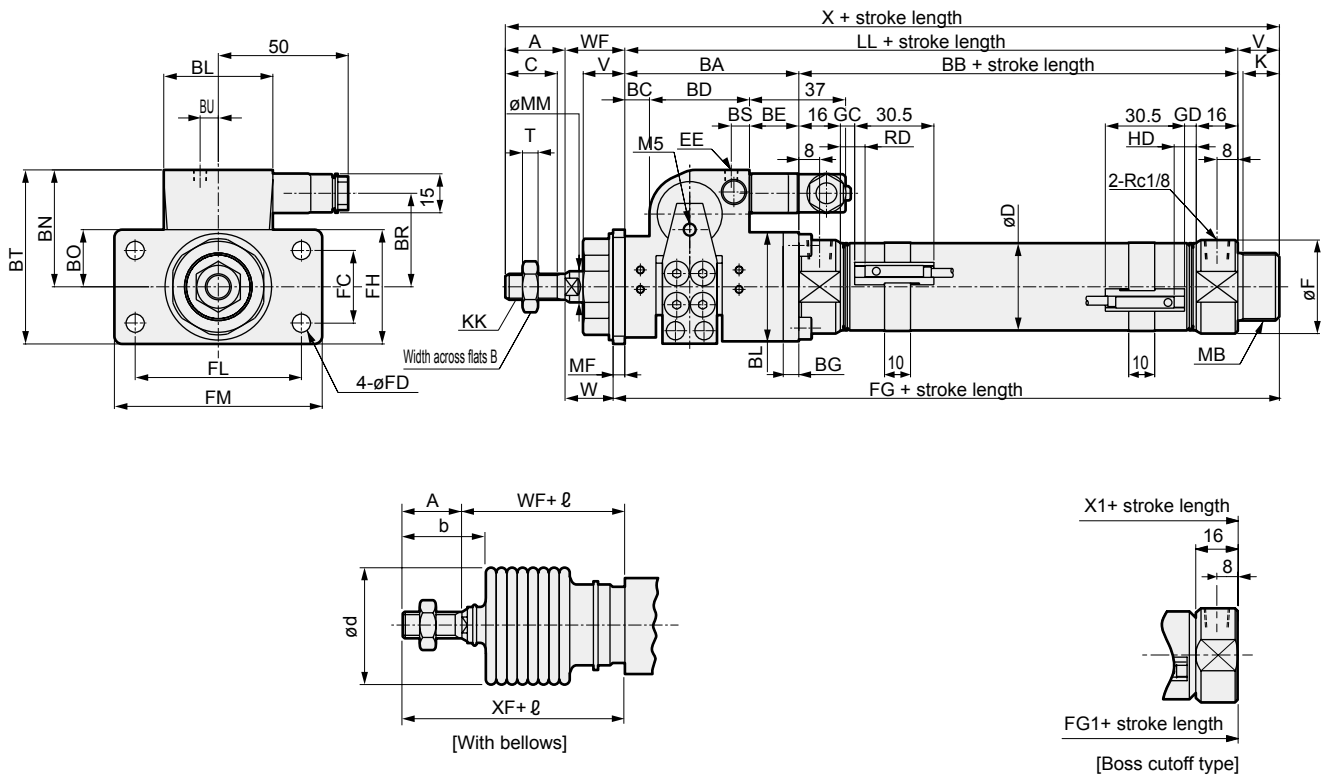
Code	Axial foot (LB) basic dimensions																		
Bore size (mm)	A	AB	B	BA	BB	BC	BD	BE	BG	BL	BT	BN	BO	BR	BS	BU	C	D	EE
$\phi 20$	20	6	13	58	66	9	30	19	5	34	63	38	19	29	4	3.8	18	21.4	M5
$\phi 25$	23	7	17	67	69	9.5	38.5	19	6	42	75	45	22	34.5	7	7	20	26.4	Rc1/8
$\phi 32$	23	7	17	67	69	9.5	38.5	19	6	42	75	45	22	34.5	7	7	20	33.6	Rc1/8
$\phi 40$	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
$\phi 20$	28	26	15	M8×1.0	124	10	5	14	24	196	10	18	160	25	30	44	4.0	3.0	8.0
$\phi 25$	32	35	20	M10×1.25	136	12	6	16	23	217	12	23	182	30	46	62	5.5	4.5	9.5
$\phi 32$	36	35	20	M10×1.25	136	12	6	16	23	217	12	23	182	30	46	62	5.5	4.5	9.5
$\phi 40$	45	35	20	M12×1.5	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	(P θ)	XF	b	d	ℓ
$\phi 20$	7.0	6.0	5.0	10.0	9.0	17.3	19.5	22	44	30	30	(Stroke length/3) + 6
$\phi 25$	8.5	7.5	6.5	11.5	10.5	19.8	22.0	18	46	32	46	(Stroke length/3.25) + 7
$\phi 32$	8.5	7.5	6.5	11.5	10.5	24.3	25.5	15	46	32	46	(Stroke length/3.25) + 7
$\phi 40$	10.5	9.5	8.5	13.5	12.5	28.3	29.5	12	48	34	46	(Stroke length/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 display switches.

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

*3 : For the l dimension, round up below the decimal point.

*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	M8×1.0
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	M10×1.25
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	M10×1.25
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	M12×1.5

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	M18×1.5	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	M26×1.5	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	M26×1.5	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	M26×1.5	4.5	14	7	16	18.5	23	211	28	7	167.5	44	64	80	7.5	6.5	11.5	10.5

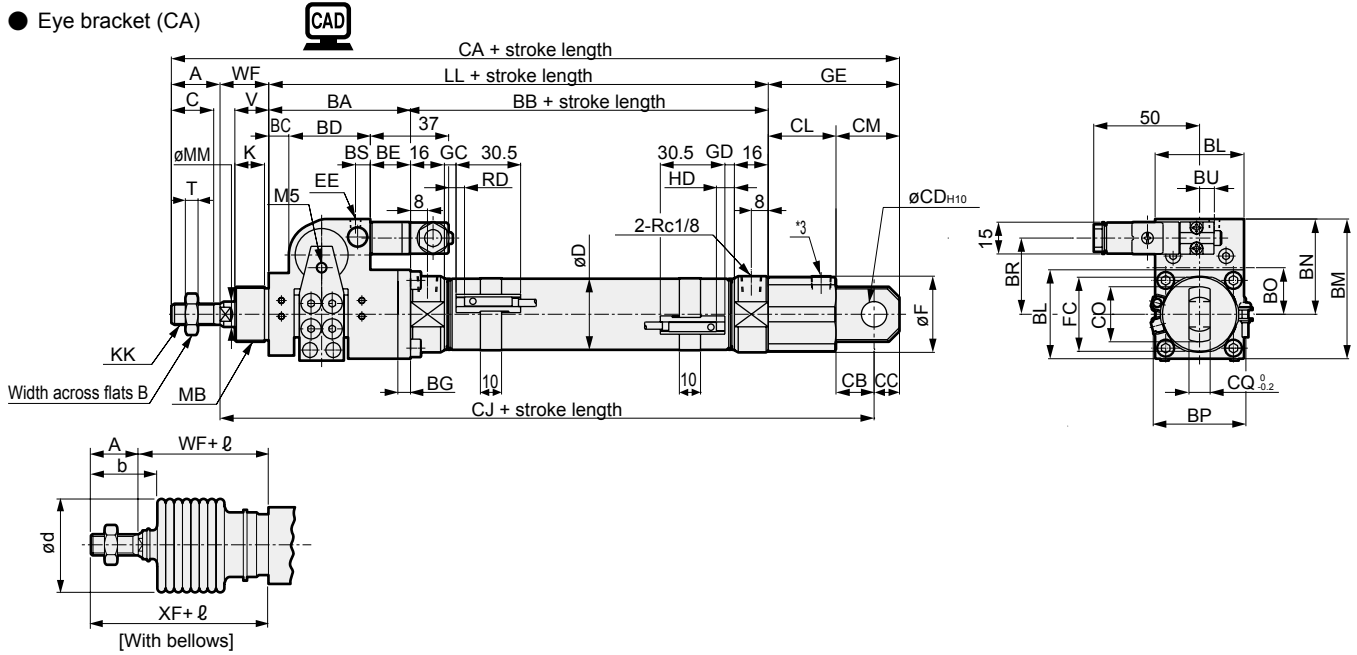
Code	With switch (T2W, T3W)				With bellows			Boss cutoff type		
Bore size (mm)	GC	GD	RD	HD	XF	b	d	l	X1	FG1
ø20	6.0	5.0	10.0	9.0	44	30	30	(Stroke length/3) + 6	168	127.2
ø25	7.5	6.5	11.5	10.5	46	32	46	(Stroke length/3.25) + 7	182	140.5
ø32	7.5	6.5	11.5	10.5	46	32	46	(Stroke length/3.25) + 7	182	140.5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

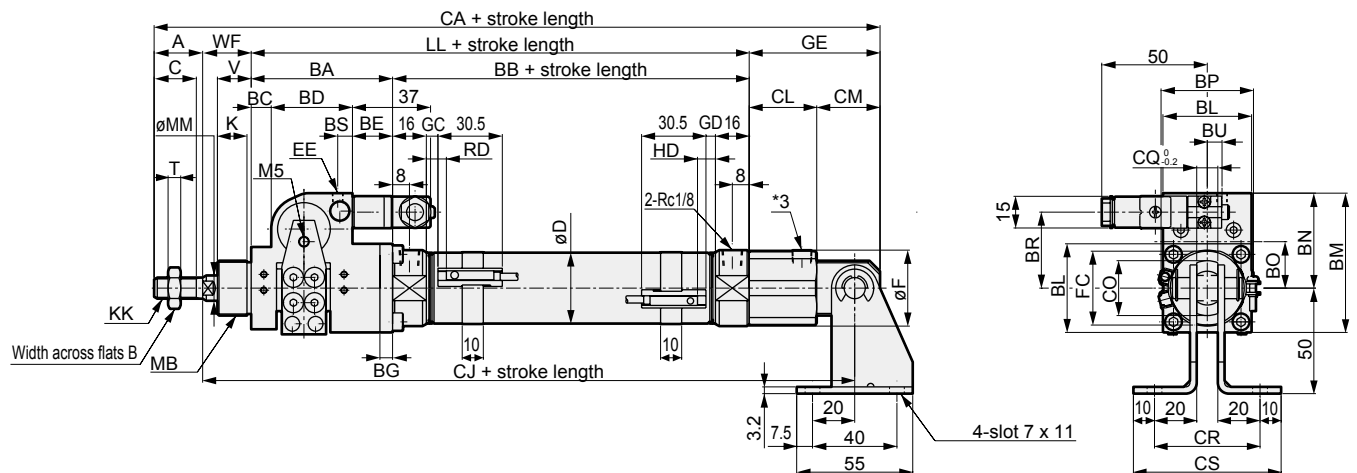
JSK2-V Series

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 display switches.

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

*3 : Not piping port.

*4 : For the ℓ dimension, round up below the decimal point.

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

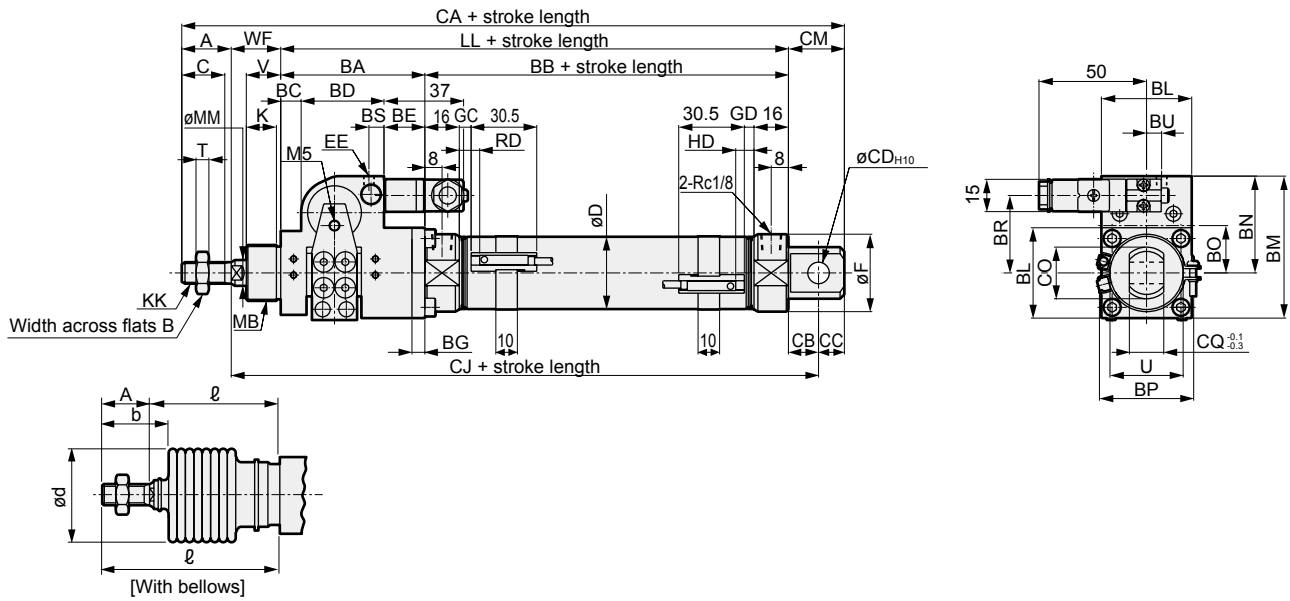
Code	Eye bracket (CA) basic dimensions																					
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BL	BM	BN	BO	BP	BR	BS	BU	C	D	EE	F	FC	GE
ø20	20	13	58	66	9	30	19	5	34	55	38	19	38	29	4	3.8	18	21.4	M5	28	26	55
ø25	23	17	67	69	9.5	38.5	19	6	42	66	45	22	43.8	34.5	7	7	20	26.4	Rc1/8	32	35	62
ø32	23	17	67	69	9.5	38.5	19	6	42	66	45	22	43.8	34.5	7	7	20	33.6	Rc1/8	36	35	62
ø40	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
ø20	12	M8×1.0	124	M18×1.5	10	5	14	24	223	14	10	10	193	31	24	22	8	48	68
ø25	14	M10×1.25	135	M26×1.5	12	6	16	23	244	18	12	12	209	32	30	26	10	50	70
ø32	14	M10×1.25	136	M26×1.5	12	6	16	23	244	18	12	12	209	32	30	26	10	50	70
ø40	14	M12×1.5	147	M26×1.5	14	7	16	23	257	18	12	12	220	32	30	26	10	50	70

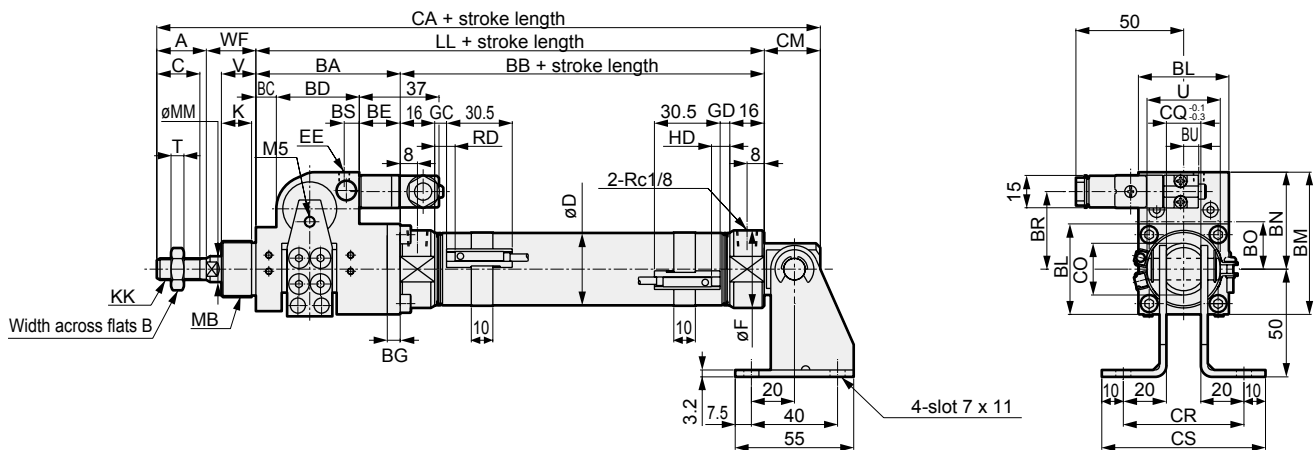
Code	With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows			
Bore size (mm)	GC	GD	RD	HD	GC	GD	RD	HD	XF	b	d	ℓ
ø20	4.0	3.0	8.0	7.0	6.0	5.0	10.0	9.0	44	30	30	(Stroke length/3) + 6
ø25	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke length/3.25) + 7
ø32	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke length/3.25) + 7
ø40	7.5	6.5	11.5	10.5	9.5	8.5	13.5	12.5	48	34	46	(Stroke length/3.25) + 7

Dimensions

- Eye bracket integrated (CC)



- Eye bracket (CC) with bracket (option)



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

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

*3 : For the l dimension, round up below the decimal point.

*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

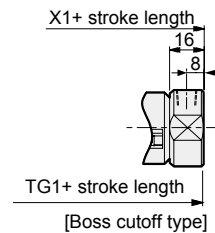
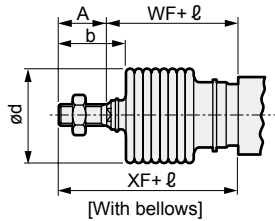
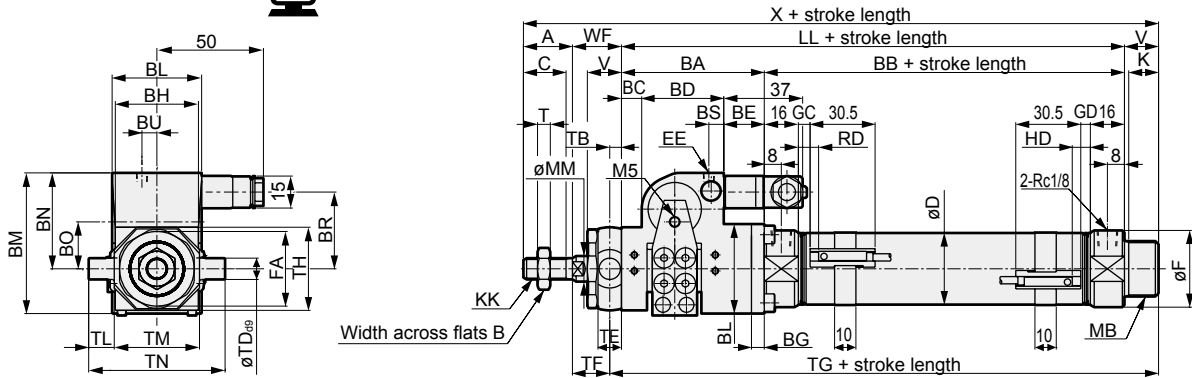
Code	Mounting dimensions																		
Bore size (mm)	K	KK	LL	MB	MM	T	U	V	WF	CA	CB	CC	CD	CJ	CM	CO	CQ	CR	CS
ø20	12	M8×1.0	124	M18×1.5	10	5	24	14	24	189	12	9	8	160	21	22	16	56	76
ø25	14	M10×1.25	135	M26×1.5	12	6	30	16	23	203	12	9	8	171	21	24	16	56	76
ø32	14	M10×1.25	136	M26×1.5	12	6	34	16	23	208	14	12	10	173	26	24	16	56	76
ø40	14	M12×1.5	147	M26×1.5	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			l	
Bore size (mm)	GC	GD	RD	HD	GC	GD	RD	HD	XF	b	d	
ø20	4.0	3.0	8.0	7.0	6.0	5.0	10.0	9.0	44	30	30	(Stroke length/3) + 6
ø25	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke length/3.25) + 7
ø32	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke length/3.25) + 7
ø40	7.5	6.5	11.5	10.5	9.5	8.5	13.5	12.5	48	34	46	(Stroke length/3.25) + 7

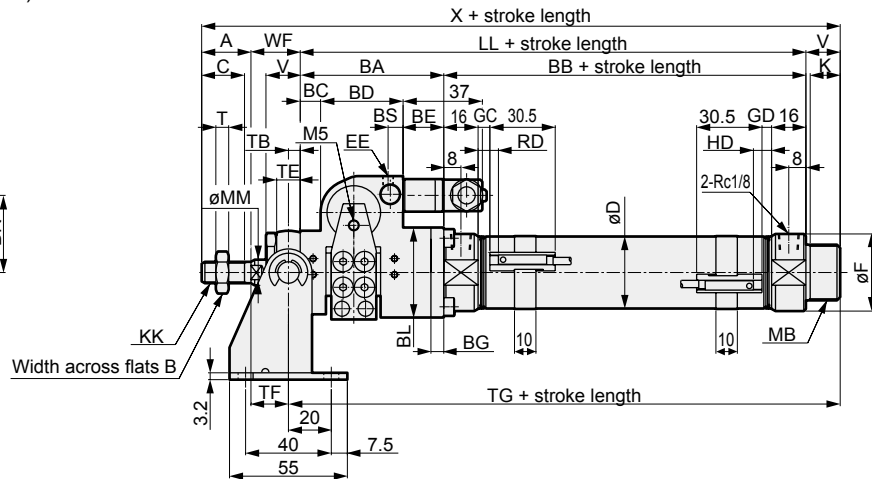
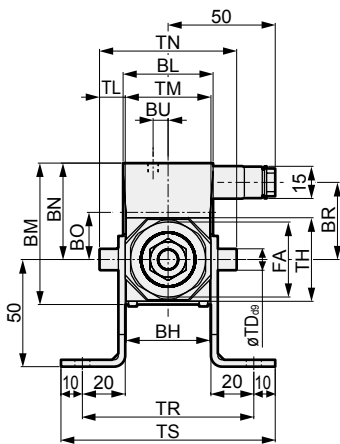
- LCM
- LCR
- LCG
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2**
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk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

Dimensions

● Rod side trunnion (TA)



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



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

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

*3 : For the l dimension, round up below the decimal point.

*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.

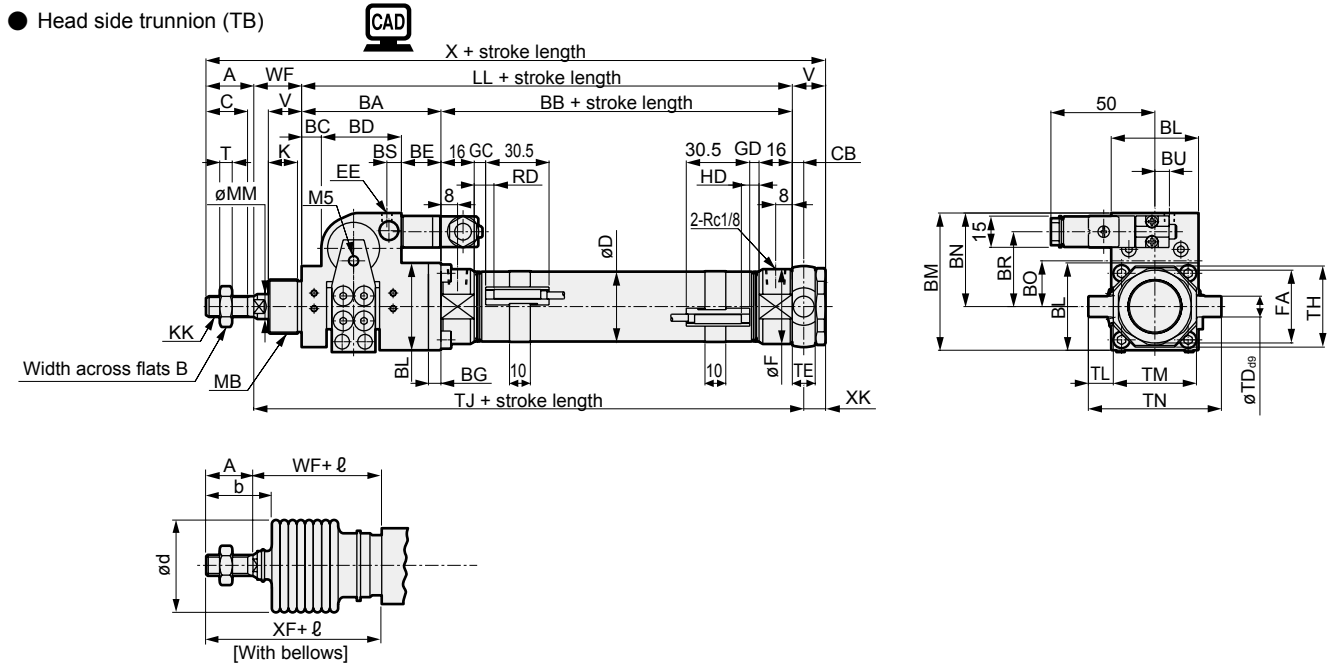
Code	Rod side trunnion (TA)																					
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BH	BL	BM	BN	BO	BR	BS	BU	C	D	EE	F	FA	K
ø20	20	13	58	66	9	30	19	5	29	34	55	38	19	29	4	3.8	18	21.4	M5	28	26	12
ø25	23	17	67	69	9.5	38.5	19	6	39	42	66	45	22	34.5	7	7	20	26.4	Rc1/8	32	35	14
ø32	23	17	67	69	9.5	38.5	19	6	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	M8×1.0	124	M18×1.5	10	5	8	30	70	90	14	24	182	4.5	8	9	19.5	142.5	29.5	8
ø25	M10×1.25	136	M26×1.5	12	6	12	40	80	100	16	23	198	5.5	10	11	17.5	157.5	39	12
ø32	M10×1.25	136	M26×1.5	12	6	12	40	80	100	16	23	198	5.5	10	11	17.5	157.5	39	12
ø40	M12×1.5	147	M26×1.5	14	7	9.5	53	93	113	16	23	211	5.5	10	11	17.5	168.5	44	9.5

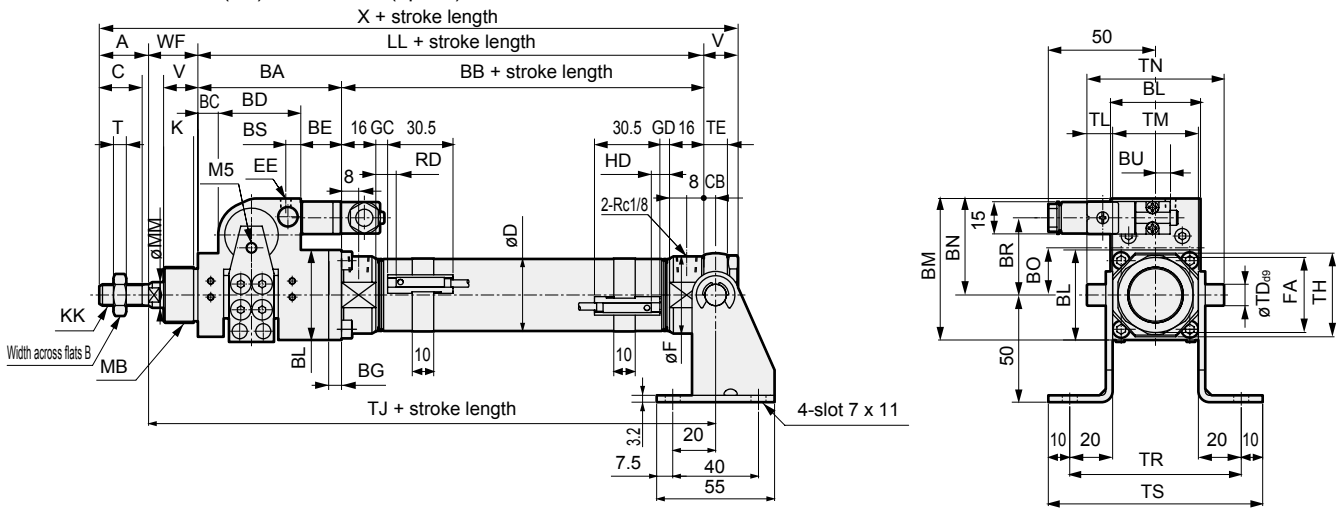
Code	With switch (T0, T5, T2, T3)										With switch (T2W, T3W)			With bellows			Boss cutoff	
Bore size (mm)	TM	TN	GC	GD	RD	HD	GC	GD	RD	HD	XF	b	d	l		X1	TG1	
ø20	30	46	4.0	3.0	8.0	7.0	6.0	5.0	10.0	9.0	44	30	30	(Stroke length/3) + 6		168	128.5	
ø25	40	64	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke length/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 length/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 length/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 display switches.

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

*3 : For the ℓ dimension, round up below the decimal point.

*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
∅20	20	13	58	66	9	30	19	5	34	55	38	19	29	4	3.8	18	4.5	21.4	M5	28	26
∅25	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
∅32	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
∅40	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
∅20	12	M8×1.0	124	M18×1.5	10	5	14	24	182	9.5	8	9	29.5	152.5	8	30	46	70	90
∅25	14	M10×1.25	136	M26×1.5	12	6	16	23	198	10.5	10	11	39	164.5	12	40	64	80	100
∅32	14	M10×1.25	136	M26×1.5	12	6	16	23	198	10.5	10	11	39	164.5	12	40	64	80	100
∅40	14	M12×1.5	147	M26×1.5	14	7	16	23	211	10.5	10	11	44	175.5	9.5	53	72	93	113

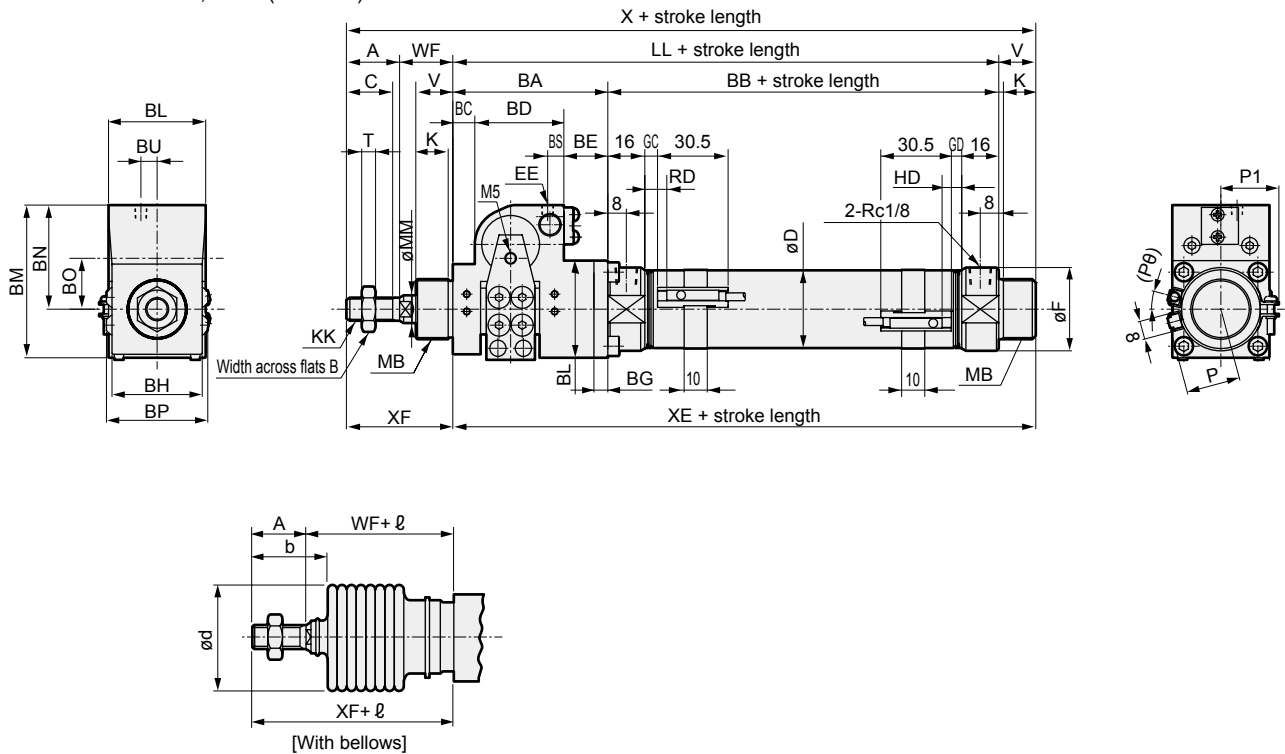
Code	With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows			
Bore size (mm)	GC	GD	RD	HD	GC	GD	RD	HD	XF	b	d	ℓ
∅20	4.0	3.0	8.0	7.0	6.0	5.0	10.0	9.0	44	30	30	(Stroke length/3) + 6
∅25	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke length/3.25) + 7
∅32	5.5	4.5	9.5	8.5	7.5	6.5	11.5	10.5	46	32	46	(Stroke length/3.25) + 7
∅40	7.5	6.5	11.5	10.5	9.5	8.5	13.5	12.5	48	34	46	(Stroke length/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



● Without valve for brake, basic (JSK2-00)



- *1 : Refer to page 719 for HD, RD and protruding dimensions of T*, T8*, and 2-color display switches.
- *2 : The mounting dimensions are the same as those of JSK2-V (with valve). Refer to pages 712 to 717.
- *3 : For the \varnothing dimension, round up below the decimal point.
- *4 : For the dimensions of the accessories, refer to page 731.

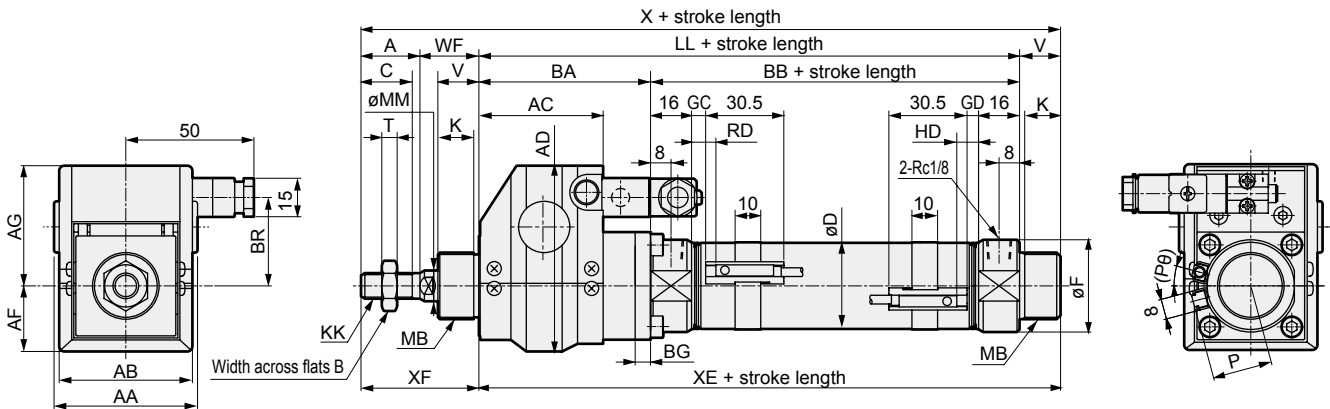
Code	Without valve/basic (JSK2-00) basic dimensions																		
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BH	BL	BM	BN	BO	BP	BS	BU	C	D	EE
$\varnothing 20$	20	13	58	66	9	30	19	5	29	34	55	38	19	38	4	3.8	18	21.4	M5
$\varnothing 25$	23	17	67	69	9.5	38.5	19	6	39	42	66	45	22	43.8	7	7	20	26.4	Rc1/8
$\varnothing 32$	23	17	67	69	9.5	38.5	19	6	39	42	66	45	22	43.8	7	7	20	33.6	Rc1/8
$\varnothing 40$	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
$\varnothing 20$	28	12	M8 × 1.0	124	M18 × 1.5	10	5	14	24	182	138	44	4.0	3.0	8.0	7.0	6.0	5.0	10.0
$\varnothing 25$	32	14	M10 × 1.25	136	M26 × 1.5	12	6	16	23	198	152	46	5.5	4.5	9.5	8.5	7.5	6.5	11.5
$\varnothing 32$	36	14	M10 × 1.25	136	M26 × 1.5	12	6	16	23	198	152	46	5.5	4.5	9.5	8.5	7.5	6.5	11.5
$\varnothing 40$	45	14	M12 × 1.5	147	M26 × 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	(P θ) ^o	b	d	\varnothing
$\varnothing 20$	9.0	17.3	19.5	22	30	30	(Stroke length/3) + 6
$\varnothing 25$	10.5	19.8	22.0	18	32	46	(Stroke length/3.25) + 7
$\varnothing 32$	10.5	24.3	25.5	15	32	46	(Stroke length/3.25) + 7
$\varnothing 40$	12.5	28.3	29.5	12	34	46	(Stroke length/3.25) + 7

Dimensions

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



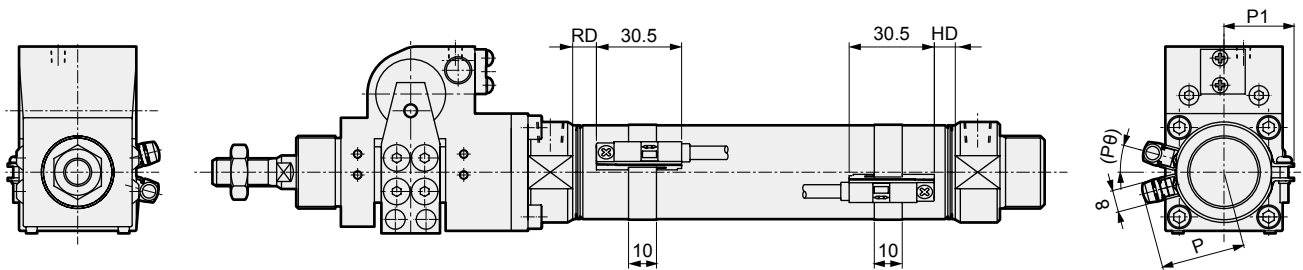
RD: Rod side max. sensitivity position
 HD: Head side max. sensitivity position

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	M8×1.0	124
ø25	23	56	52	48.5	72.5	25	47.5	17	67	69	6	34.5	20	26.4	32	14	M10×1.25	136
ø32	23	56	52	48.5	72.5	25	47.5	17	67	69	6	34.5	20	33.6	36	14	M10×1.25	136
ø40	25	69	65	56	85.75	28.75	57	19	74	73	8	39.5	22	41.6	45	14	M12×1.5	147

Code									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	M18×1.5	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	M26×1.5	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	M26×1.5	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	M26×1.5	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 display switch)

- JSK2-**-**-T1H/V, T8H/V, T₃²YH/V

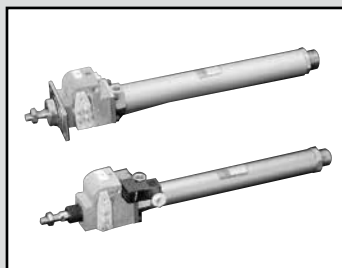


Switch installation dimensions

Code	1-color display (T1, T8) 2-color display (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

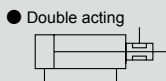


Brake cylinder Small bore size, disassembly
Double acting/double acting/with valve for brake

JSM2/JSM2-V Series

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

JIS symbol



Specifications

Item	JSM2			JSM2-V		
	$\phi 20$	$\phi 30$	$\phi 40$	$\phi 20$	$\phi 30$	$\phi 40$
Bore size mm	$\phi 20$	$\phi 30$	$\phi 40$	$\phi 20$	$\phi 30$	$\phi 40$
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	0.35 (≈ 51 psi, 3.5 bar)					
	Brake section					
MPa	0.10 (≈ 15 psi, 1 bar)					
	Cylinder					
Proof pressure MPa	1.05 (≈ 150 psi, 10.5 bar)					
Ambient temperature $^{\circ}\text{C}$	-10 (14°F) to 60 (140°F) (no freezing)			-10 (14°F) to 50 (122°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 length

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

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

Min. stroke length 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 type switch)

- 1-color/2-color display

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 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 or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 mA
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)		Without indicator lamp		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						
Weight g	1 m:33	1 m:18	1 m:33	1 m:18	1 m:18	1 m:18	1 m:33	1 m:18	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:49	3 m:87	3 m:49	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:80	5 m:142	5 m:80	5 m:80	5 m:80		5 m:80		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 length (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

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

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**

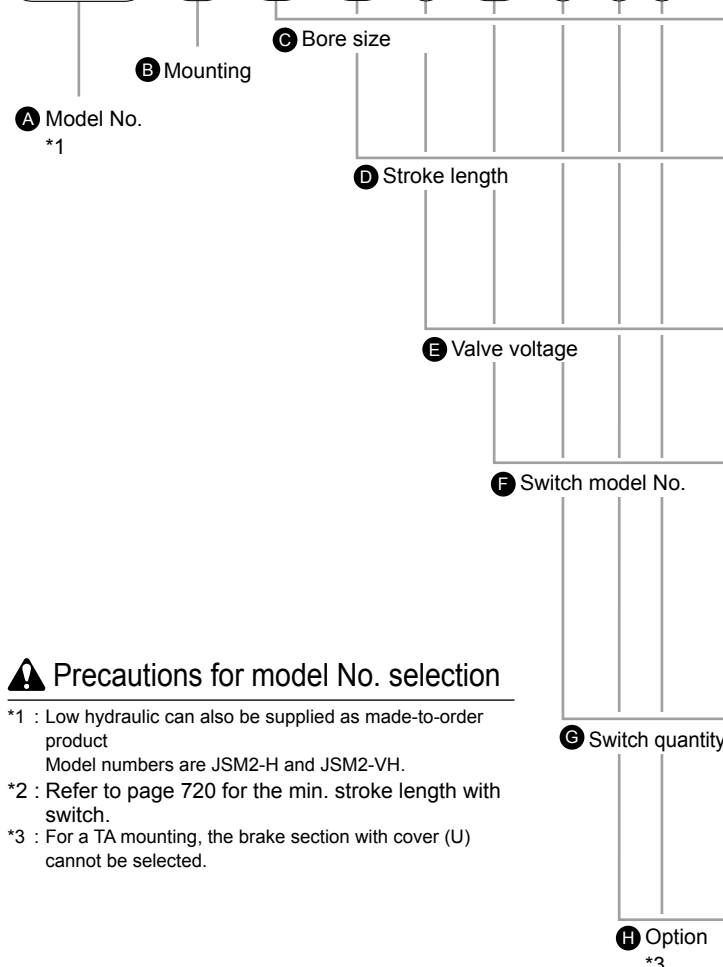
● With valve for brake

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 length 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 length : 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 length (mm)			
Bore size	Stroke length *2	Custom stroke length	
$\varnothing 20$	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)			●	●

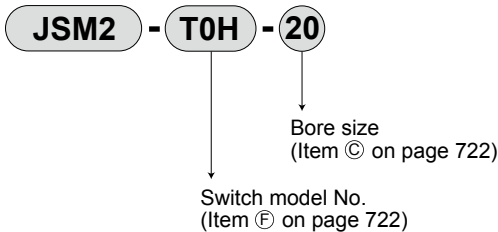
[F] Switch model No.

T type switch						
Axial lead wire	Radial lead wire	Contact	Voltage		Display	Lead wire
			AC	DC		
TOH*	TOV*	Reed	●	●	1-color display	2-wire
T5H*	T5V*		●	●	Without indicator lamp	
T8H*	T8V*		●	●	1-color display	
T1H*	T1V*	Proximity	●		1-color display	2-wire
T2H*	T2V*			●		
T3H*	T3V*			●	1-color display	3-wire
T3PH*	T3PV*			●		
T2WH*	T2WV*			●		
T2YH*	T2YV*			●	2-color display	2-wire
T3WH*	T3WV*			●		
T3YH*	T3YV*			●	2-color display	3-wire
T2JH*	T2JV*			●		
				Off-delay	2-wire	

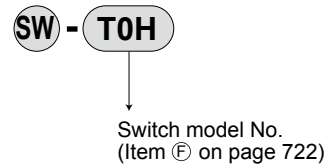
How to order switch

[T type switch]

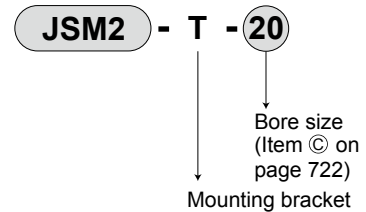
● Switch body + mounting bracket set



● 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
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*
JSM2
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

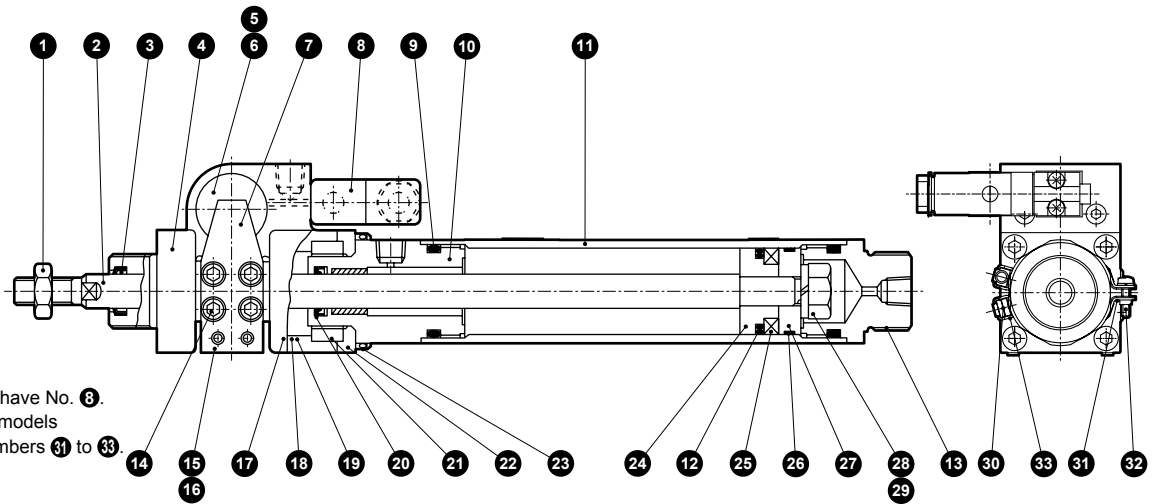
Mounting	Material	Remarks
LB	Steel	Zinc chromate
FA	Steel	Zinc chromate
TA/TB	Steel	Zinc chromate
CA	Steel	Zinc chromate

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

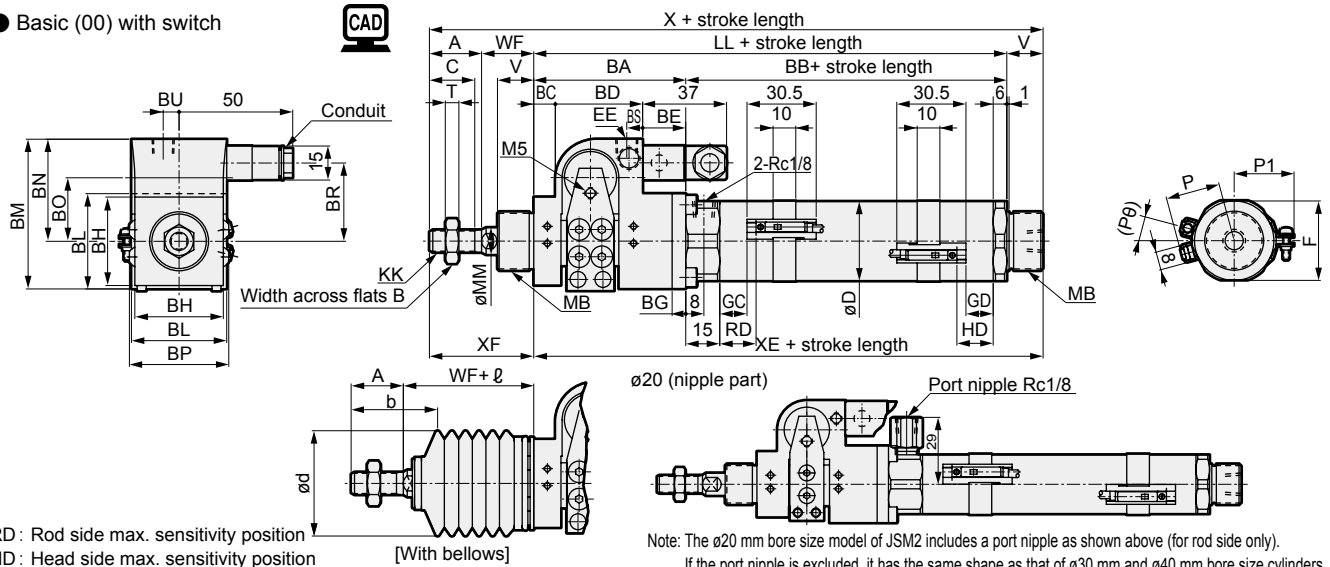
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Rod nut	Steel	Zinc chromate	17	Brake shoe metal	Cast iron	
2	Piston rod	ø20/ø30 stainless steel ø40 carbon steel	Industrial chrome plating	18	Bush	Dry bearing	
3	Scraper	Nitrile rubber		19	Ring	Steel	
4	Brake body	Cast iron	Zinc chromate	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 ø30 and ø40 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 ø20 mm bore size model of JSM2 includes a port nipple as shown above (for rod side only).

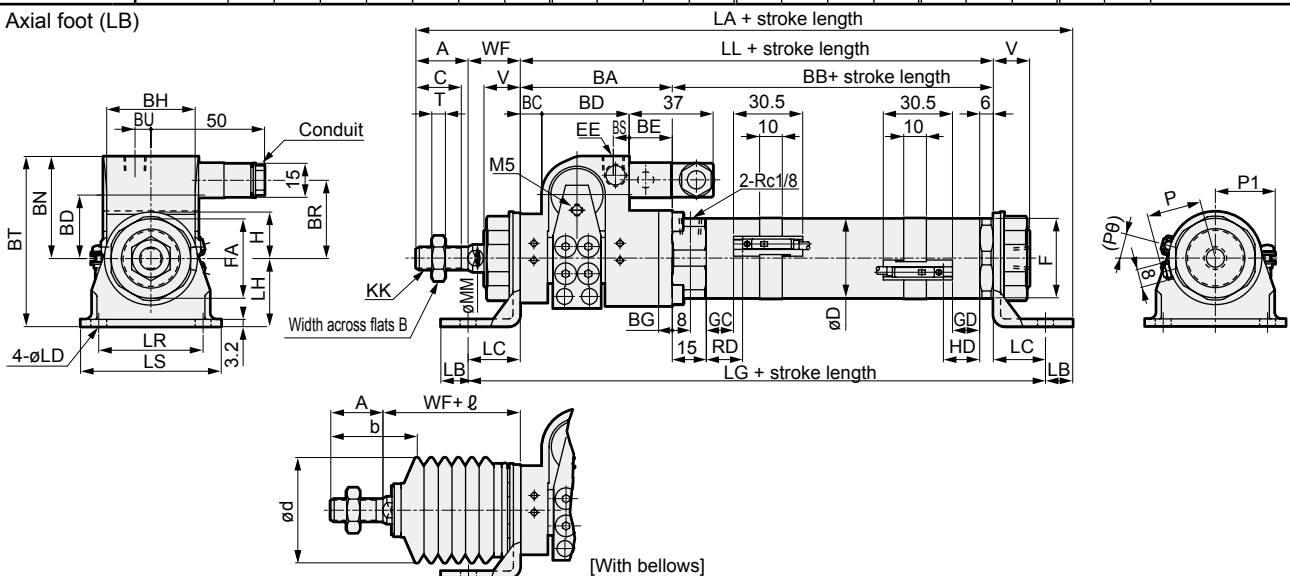
If the port nipple is excluded, it has the same shape as that of ø30 mm and ø40 mm bore size cylinders.

*4 : For the ℓ dimension, round up below the decimal point.

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
ø20	20	13	58	66	9	30	19	5	29	34	55	38	19	38	29	4	3.8	18	25	M5	26	M8×1.0	124
ø30	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	M10×1.25	139
ø40	25	19	74	74	8	48	18	8	50	50	80.5	55	25	52	39.5	7	7	22	45	Rc1/8	46	M12×1.5	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	(Pθ)°	b	d	ℓ
ø20	M18×1.5	10	5	14	24	182	138	44	9	9	13	13	11	11	15	15	19.5	21	19	32	30	(Stroke length/3) + 6
ø30	M26×1.5	12	6	16	23	201	155	46	12	12	16	16	14	14	18	18	24.5	26	15	38	46	(Stroke length/3.25) + 7
ø40	M26×1.5	14	7	16	23	212	164	48	13	13	17	17	15	15	19	19	29.5	31	12	40	46	(Stroke length/3.25) + 7

● Axial foot (LB)



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

*3 : For the ℓ dimension, round up below the decimal point.

*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
ø20	20	13	58	66	9	30	19	5	29	63	38	19	29	4	3.8	18	25	M5	26	26	15	M8×1.0	124
ø30	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	M10×1.25	139
ø40	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	M12×1.5	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	(Pθ)°	b	d	ℓ
ø20	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 length/3) + 6
ø30	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 length/3.25) + 7
ø40	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 length/3.25) + 7

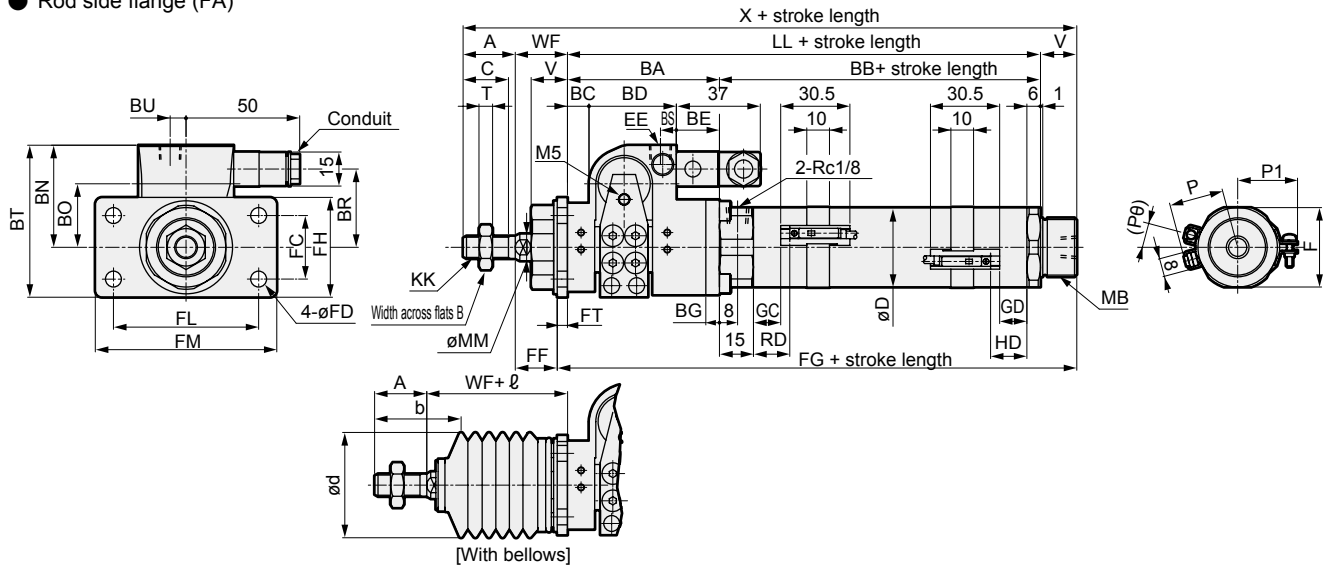
- LCM
- LCR
- LCG
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RJ3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

JSM2-V Series

Dimensions



● Rod side flange (FA)

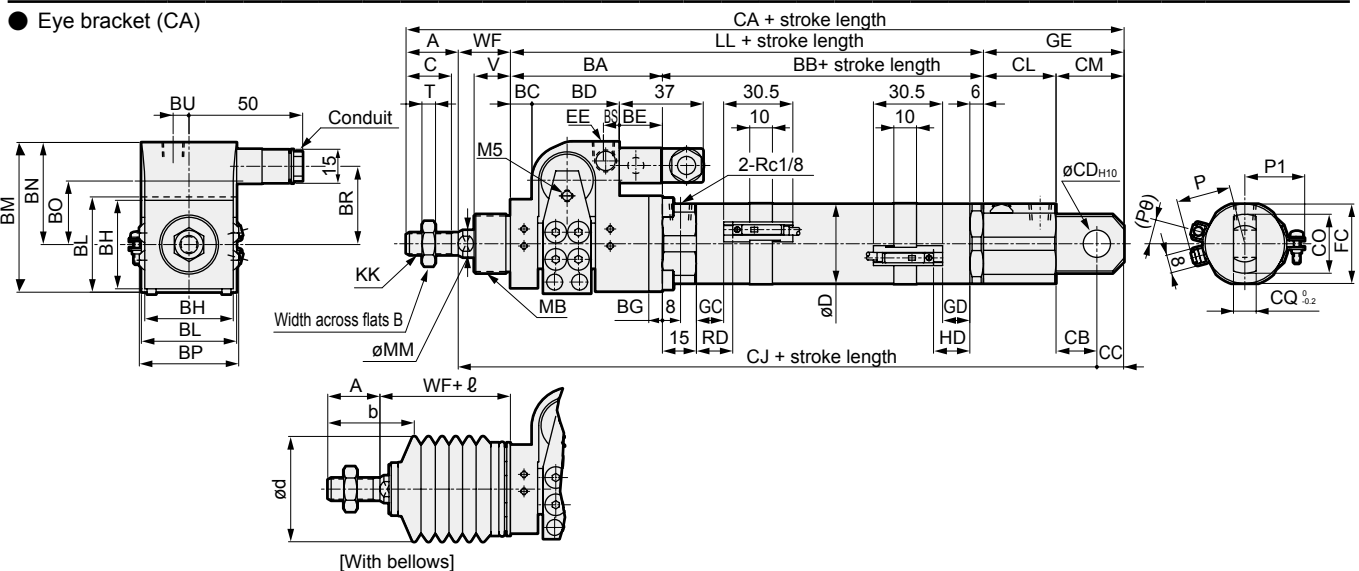


*1 : The size of the exhaust port of brake section is the same as that of EE. *3 : For the \varnothing dimension, round up below the decimal point.
 *2 : For the dimensions of the accessories, refer to page 731.

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
ø20		20	13	58	66	9	30	19	5	55	38	19	29	4	3.8	18	25	M5	26	M8×1.0	124	M18×1.5	10	M18×1.5
ø30		23	17	67	72	9.5	38.5	19	6	67	45.5	22	34.5	7	7	20	35	Rc1/8	35	M10×1.25	139	M26×1.5	12	M26×1.5
ø40		25	19	74	74	8	48	18	8	77.5	55.5	25	39.5	7	7	22	45	Rc1/8	46	M12×1.5	148	M26×1.5	14	M26×1.5

Code		Mounting dimensions												With switch (T0, T5, T2, T3)				With switch (T2W, T3W)				With bellows						
Bore size (mm)		MM	T	V	WF	X	FC	FD	FF	FG	FH	FL	FM	FT	GC	GD	RD	HD	GC	GD	RD	HD	P	P1	(P)°	b	d	\varnothing
ø20		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 length/3) + 6
ø30		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 length/3.25) + 7
ø40		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 length/3.25) + 7

● Eye bracket (CA)



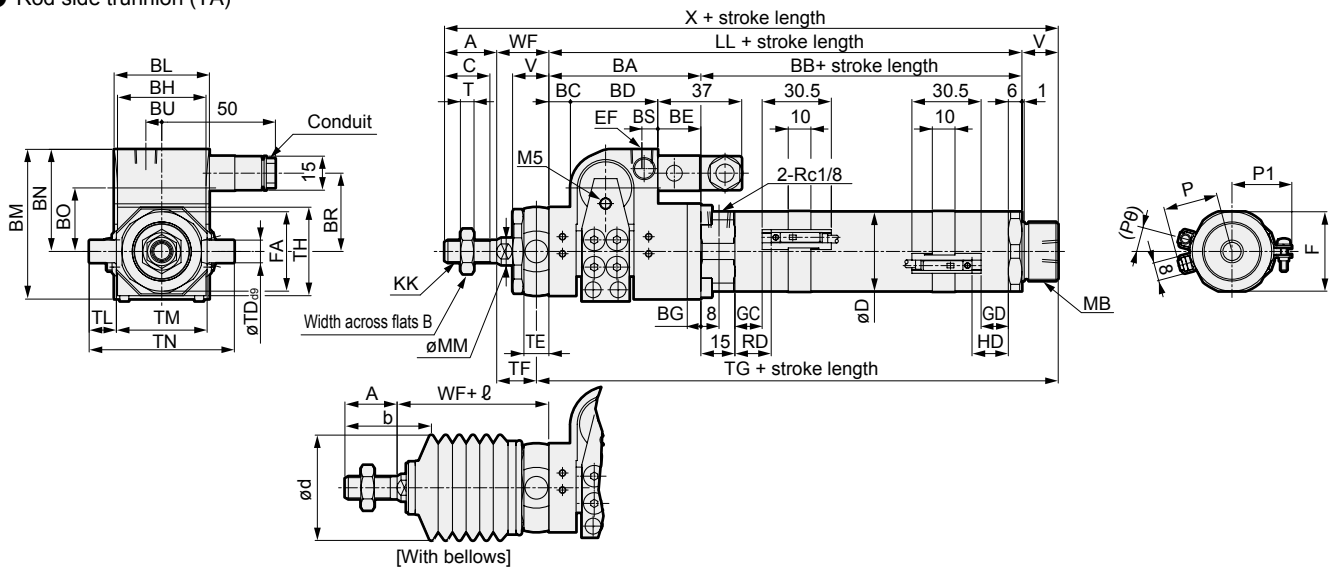
*1 : The size of the exhaust port of brake section is the same as that of EE. *2 : For the dimensions of the accessories, refer to page 731.
 *3 : For the \varnothing dimension, round up below the decimal point.

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
ø20		20	13	58	66	9	30	19	5	34	55	38	19	38	29	4	3.8	18	25	M5	26	55	M8×1.0	124	M18×1.5
ø30		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	M10×1.25	139	M26×1.5
ø40		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	M12×1.5	148	M26×1.5

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	\varnothing
ø20		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
ø30		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
ø40		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)

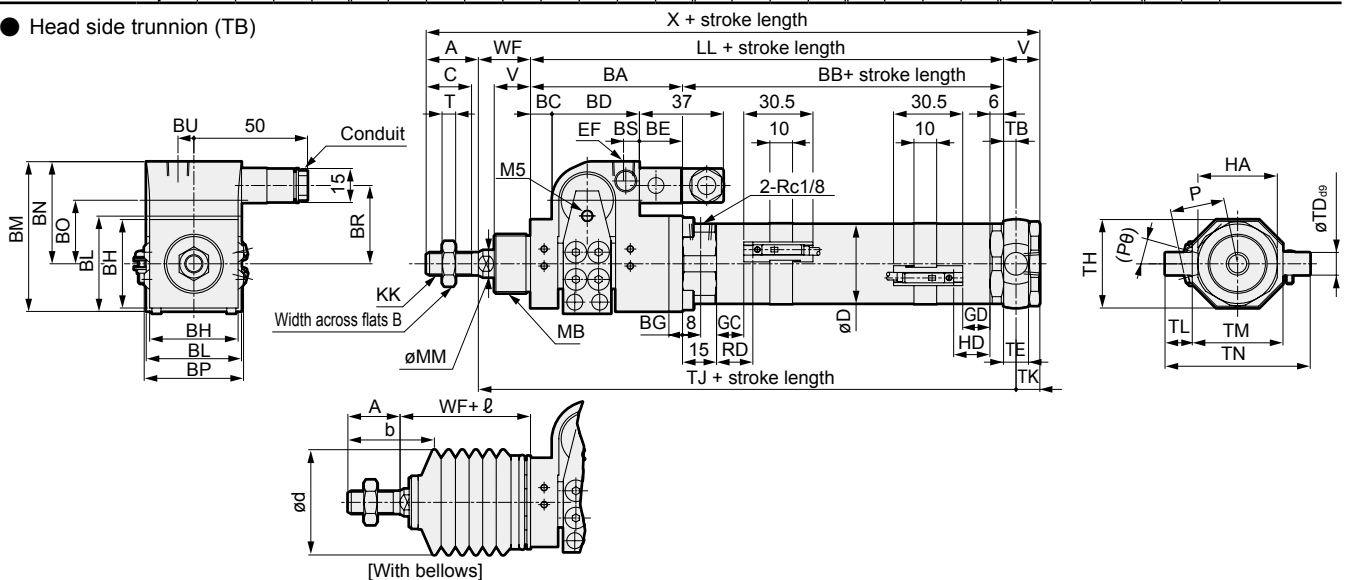


*1 : The size of the exhaust port of brake section is the same as that of EE. *3 : For the \varnothing dimension, round up below the decimal point.
 *2 : For the dimensions of the accessories, refer to page 731.

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	M8×1.0	124	M18×1.5
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	M10×1.25	139	M26×1.5
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	M12×1.5	148	M26×1.5

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	(P0) ^o	b	d	\varnothing
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 length/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 length/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 length/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 : For the \varnothing dimension, round up below the decimal point.
 *2 : For the dimensions of the accessories, refer to page 731.

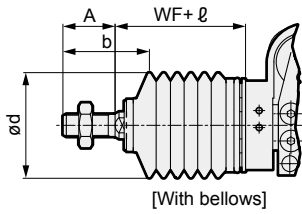
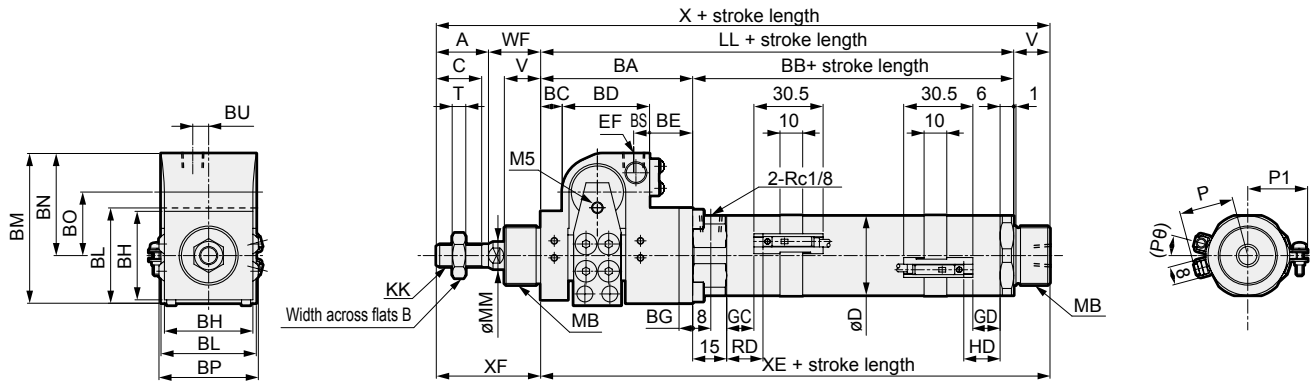
Code	Head side trunnion (TB) basic dimensions																							
Bore size (mm)	A	B	BA	BB	BC	BD	BE	BG	BH	BL	BM	BN	BO	BR	BS	BU	C	D	EE	FA	KK	LL	MB	MM
ø20	20	13	58	66	9	30	19	5	34	55	38	19	29	4	3.8	18	25	M5	26	M8×1.0	124	M18×1.5	10	
ø30	23	17	67	72	9.5	38.5	19	6	42	66	45	22	34.5	7	4	20	35	Rc1/8	35	M10×1.25	139	M26×1.5	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	M12×1.5	148	M26×1.5	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	(P0) ^o	b	d	\varnothing
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 length/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 length/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 length/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.

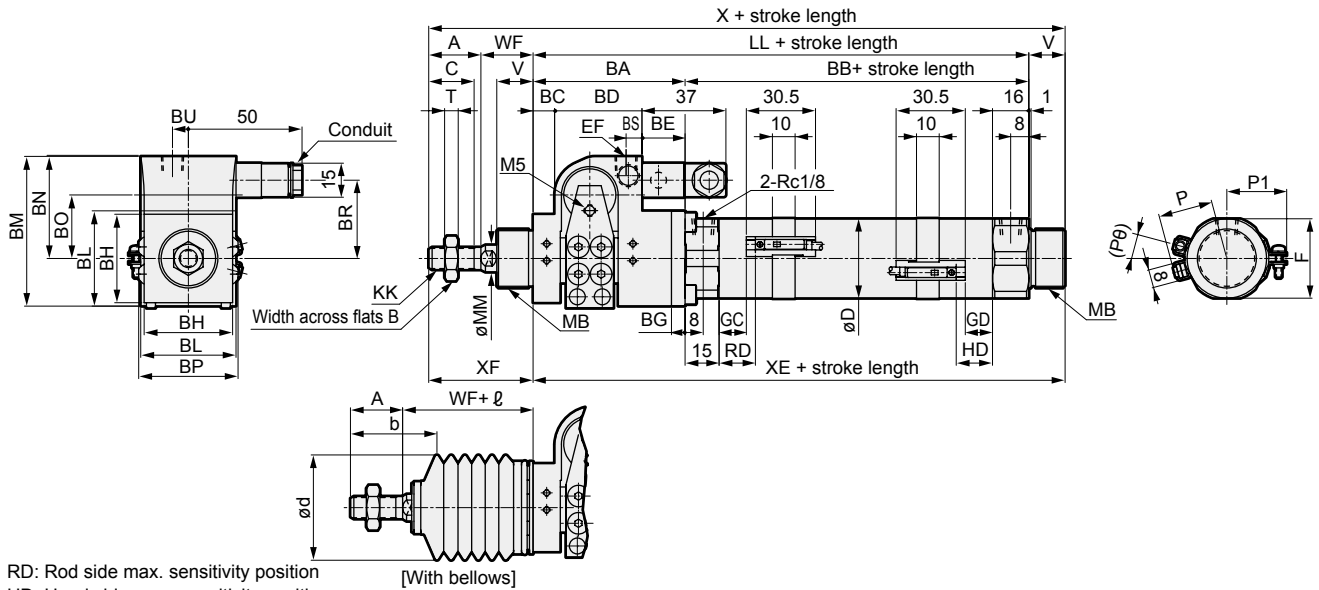
*3 : For the l dimension, round up below the decimal point.

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	M8×1.0	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	M10×1.25	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	M12×1.5	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	M18×1.5	10	5	14	24	182	138	44	9	9	13	13	11	11	15	15	19.5	19	32	30	(Stroke length/3) + 6
ø30	M26×1.5	12	6	16	23	201	155	46	12	12	16	16	14	14	18	18	24.5	15	38	46	(Stroke length/3.25) + 7
ø40	M26×1.5	14	7	16	23	212	164	48	13	13	17	17	15	15	19	19	29.5	12	40	46	(Stroke length/3.25) + 7

Dimensions

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

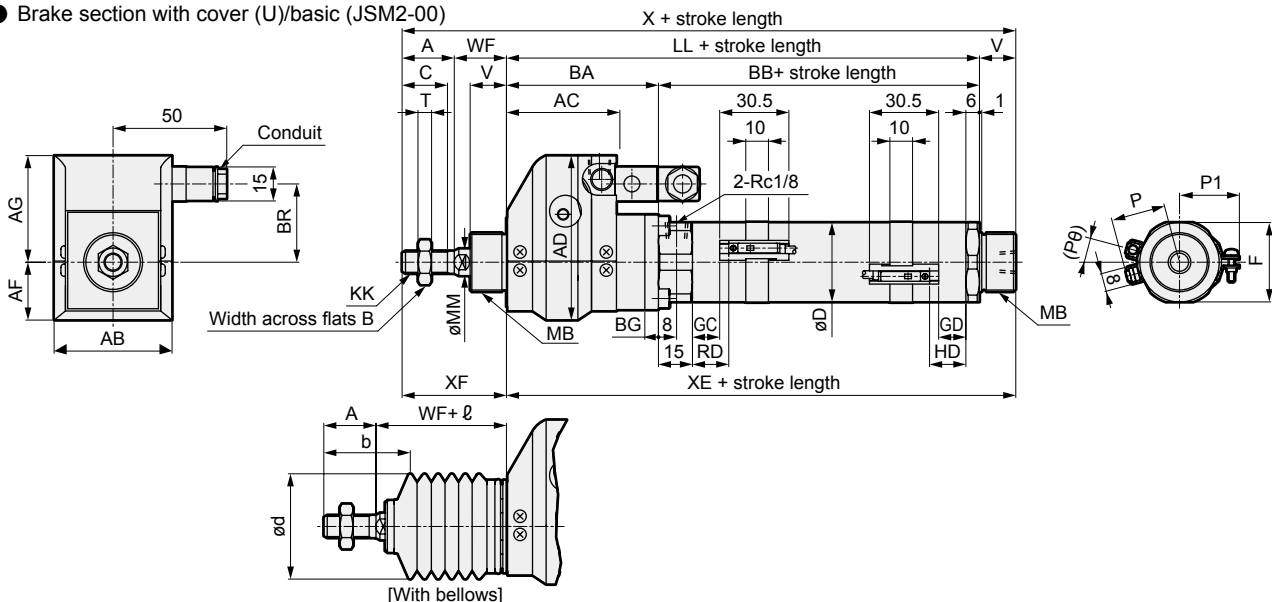


RD: Rod side max. sensitivity position
HD: Head side max. sensitivity position

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
∅20	20	13	58	76	9	30	19	5	4	18	25	M5	26	M8×1.0	134	M18×1.5	10	5
∅30	23	17	67	82	9.5	38.5	19	6	7	20	35	Rc1/8	35	M10×1.25	149	M26×1.5	12	6
∅40	25	19	74	84	8	48	18	8	7	22	45	Rc1/8	46	M12×1.5	158	M26×1.5	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) ^o	b	d	ℓ
∅20	14	24	192	138	44	9	9	13	13	11	11	15	15	19.5	21	19	32	30	(Stroke length/3) + 6
∅30	16	23	211	155	46	12	12	16	16	14	14	18	18	24.5	26	15	38	46	(Stroke length/3.25) + 7
∅40	16	23	222	164	48	13	13	17	17	15	15	19	19	29.5	31	12	40	46	(Stroke length/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
∅20	20	47	39	58.5	19.5	39	13	58	66	5	29	18	25	26	M8×1.0	124	M18×1.5	10
∅30	23	52	48.5	72.5	25	47.5	17	67	72	6	34.5	20	35	35	M10×1.25	139	M26×1.5	12
∅40	25	65	56	85.75	28.75	57	19	74	74	8	39.5	22	45	46	M12×1.5	148	M26×1.5	14

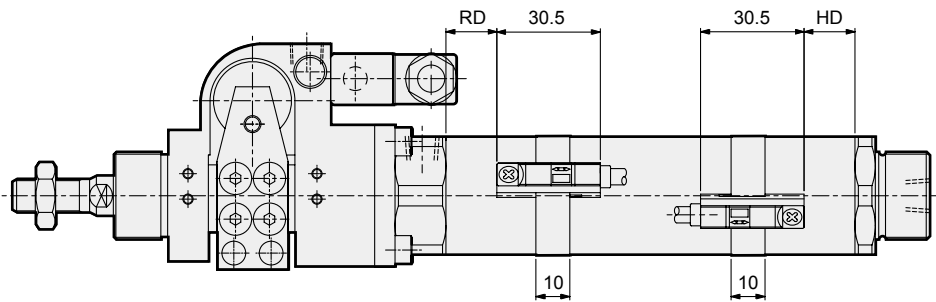
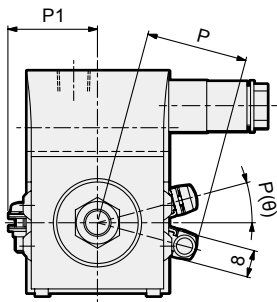
Code	With switch (T0, T5, T2, T3)										With switch (T2W, T3W)				With bellows					
Bore size (mm)	T	V	WF	X	XE	XF	GC	GD	RD	HD	GC	GD	RD	HD	P	P1	(P0) ^o	b	d	ℓ
∅20	5	14	24	182	138	44	9	9	13	13	11	11	15	15	19.5	21	19	32	30	(Stroke length/3) + 6
∅30	6	16	23	201	155	46	12	12	16	16	14	14	18	18	24.5	26	15	38	46	(Stroke length/3.25) + 7
∅40	7	16	23	212	164	48	13	13	17	17	15	15	19	19	29.5	31	12	40	46	(Stroke length/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 display switch)

● JSM2-**-**-T1H/V, T8H/V, T₃YH/V



Switch installation dimensions

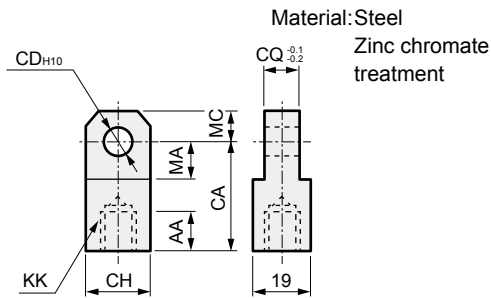
Code	1-color display (T1, T8)		2-color display (T2/3 Y)		P	P1	(Pθ)°
	RD	HD	RD	HD			
Bore size (mm)	T1,T2/3Y,T2J	T8	T1,T2/3Y,T2J	T8	T2/3Y,T8,T2J	T1	
ø20	12	7	12	7	25	30	21
ø30	15	10	15	10	30	35	26
ø40	16	11	16	11	36	41	31

JSK2/JSM2 Series

Common accessory dimensions

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

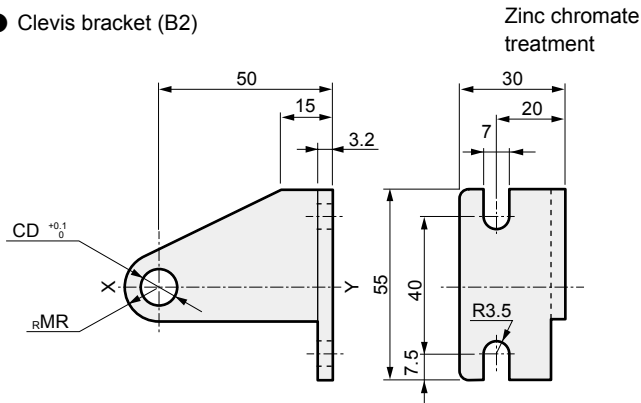
● Rod eye (I)



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	M8×1.0	13	10	60
M1-I-30	25/30/32	14	36	12	25	10	M10×1.25	16	12	106
M1-I-40	40	14	36	12	25	10	M12×1.5	16	12	100

Material: Steel

● Clevis bracket (B2)



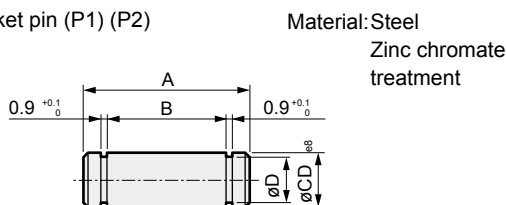
Model No.	Compatibility	Applicable bore size (mm)	CD	MR	Weight (g)
M1-B2-20-CC	JSK2-CC	20/25	8	8	145
M1-B2-30-CC		32	10	11	163
M1-B2-40-CC		40	12	11	170
M1-B2-20-CA	JSK2-CA	20	10	11	158
M1-B2-30-CA	JSM2-CA	25/32/40	12	11	162
M1-B2-20-TA	JSK2-TA/TB	20	8	8	132
M1-B2-30-TA	JSM2-TA/TB	25/32/40	10	11	142

*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).

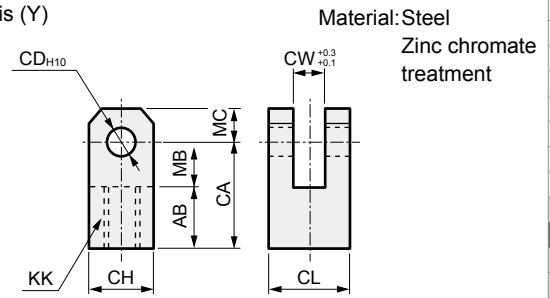
● Clevis bracket pin (P1) (P2)



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.)

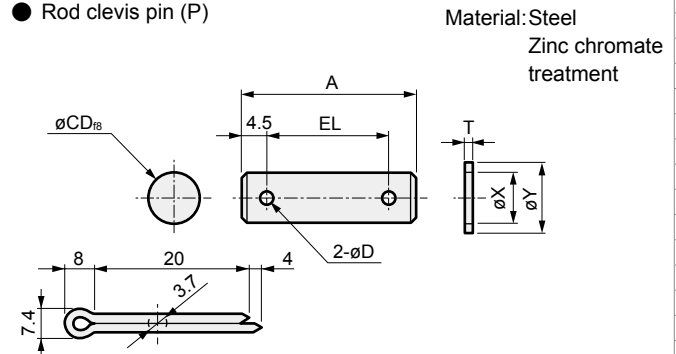
● Rod clevis (Y)



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	M8×1.0	13	10	99
M1-Y-30	25/30/32	20	36	12	25	25	10	M10×1.25	16	12	197
M1-Y-40	40	20	36	12	25	25	10	M12×1.5	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	2	10.5	18	29
M1-P-30	25/30/32/40	46	4	12	37	2.5	13	21	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*
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- FK
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- Ending