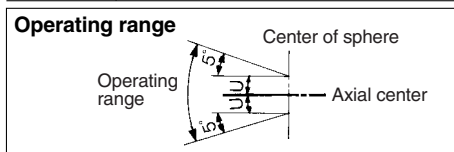


# Floating Joint: Standard Type

## Series JA

### Specifications

Operating pressure	Pneumatic cylinder: 1 MPa or less
	Hydraulic cylinder: 3.5 MPa or less
Mounting	Basic style, Flange style, Foot style



Series JA

### ⚠ Precautions

Be sure to read before handling.  
Refer to pages 10-24-3 to 10-24-6 for Safety Instructions and Actuator Precautions.

### Mounting

#### ⚠ Warning

- To screw the male threads of the rod into the female threads of the socket or the case, make sure that it does not bottom out.  
If the floating joint is used with its rod bottom out, the stud will not be able to float, causing damage.  
For the screw-in depth of the female threads, refer to the dimensions (page 10-19-4). As a rule, after the rod bottoms out, back off 1 to 2 turns.
- When screwing stud or socket, or case in the driven object, make sure to screw them in the state that dust cover has been removed from the case. If screwing without removing dust cover, duct cover might be broken.
- To use a floating joint to connect the cylinder rod to a driven body, secure it in place by applying a torque that is appropriate for the thread size. Also, if there is a risk of loosening during operation, take measures to prevent loosening, such as using a locking pin or thread adhesive.  
In the event that the connected portion becomes loose, the driven body might lose control or fall off, leading to equipment damage or injury to personnel.
- Do not use for rotational applications, because it is not a fitting designed for rotational axis.

### Maintenance

#### ⚠ Warning

- Do not reuse if disassembled.  
High strength adhesive is applied to the portion of the connection that is threaded to prevent it from loosening, and it must not be disassembled. If it is forcefully disassembled, it could lead to damage.

### Model/Specifications

Model	Applicable bore size (mm)	Applicable cylinder nominal thread size	Maximum operating tension and compression force (N)			Allowable eccentricity U (mm)	Rotating angle
			Basic style	Flange style	Foot style		
<b>Standard/Thread nominal size</b>							
JA6-3-050	6	M3 x 0.5	19	—	—	0.5	±5°
JA10-4-070	10	M4 x 0.7	54	—	—	0.5	
JA15-5-080	10, 15	M5 x 0.8	123	—	—	0.5	
JA15-6-100	15	M6 x 1	123	—	—	0.5	
JA□20-8-125	20	M8 x 1.25	1100	1100	1000*	0.5	
JA□30-10-125	25, 30	M10 x 1.25	2500	2500	2000*	0.5	
JA□40-14-150	40	M14 x 1.5	6000	4400	4400	0.75	
JA□63-18-150	50, 63	M18 x 1.5	11000	11000	9000*	1	
JA□80-22-150	80	M22 x 1.5	18000	18000	14000*	1.25	
JA□100-26-150	100	M26 x 1.5	28000	28000	22000*	2	
JA□140-30-150	125, 140	M30 x 1.5	54000	36000*	36000*	2.5	
JA□160-36-150	160	M36 x 1.5	71000	55000*	55000*	3	
<b>Option/Thread nominal size</b>							
JA□20-8-100	20	M8 x 1	1100	1100	1000*	0.5	±5°
JA□25-10-150	25	M10 x 1.5	2500	2500	2000	0.5	
JA□32-10-100	32	M10 x 1	2500*	2500*	2000*	0.5	
JA□40-12-125	30, 40	M12 x 1.25	4400	4400	4400	0.75	
JA□40-12-150	40	M12 x 1.5	4400	4400	4400	0.75	
JA□40-12-175	30, 40	M12 x 1.75	4400	4400	4400	0.75	
JA□50-16-150	50	M16 x 1.5	11000	11000	9000	1	
JA□63-16-200	50, 63	M16 x 2	11000	11000	9000*	1	
JA□80-20-250	80	M20 x 2.5	18000	18000	14000*	1.25	
JA□100-24-300	100	M24 x 3	28000	28000	22000*	2	
JA□100-27-150	100	M27 x 1.5	28000	28000	22000*	2	
JA□125-27-200	125	M27 x 2	28000*	28000*	22000*	2	
JA□160-33-200	160	M33 x 2	71000	55000*	55000*	3	

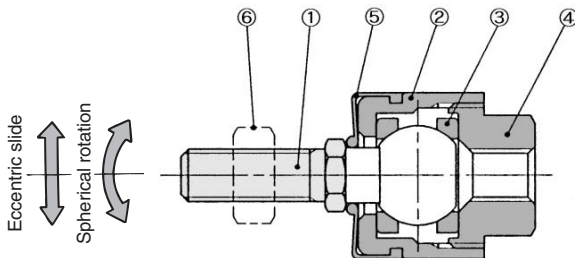
\* For 3.5 MPa hydraulic cylinders, operate within the maximum tension and compression force.

### How to Order

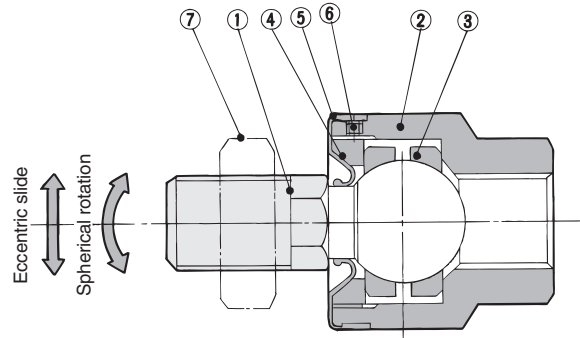
JA		F	40	14-150	X11
Mounting style		Thread nominal size (Standard)		Option	
Nil	Basic style	Nominal thread size		X11 High temperature specifications -5 to 100°C	
F	Flange style	Applicable cylinder nominal thread size			
L	Foot style	Applicable bore size (mm)			
Standard	Model	Symbol	Applicable bore size (mm)	3-050	M3 x 0.5
		6	6	4-070	M4 x 0.7
		10	10	5-080	M5 x 0.8
		15	10, 15	6-100	M6 x 1
		20	20	8-125	M8 x 1.25
		30	25, 30	10-125	M10 x 1.25
		40	40	14-150	M14 x 1.5
		63	50, 63	18-150	M18 x 1.5
		80	80	22-150	M22 x 1.5
		100	100	26-150	M26 x 1.5
	140	125, 140	30-150	M30 x 1.5	
	160	160	36-150	M36 x 1.5	

## Construction

ø6 to ø15



ø20 to ø160



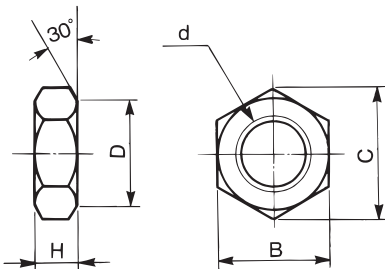
### Component Parts

No.	Description	Material	Note
①	Stud	Free-cutting steel	
②	Case	Brass	
③	Ring	Stainless steel	
④	Socket	Brass	
⑤	Dust cover	Synthetic rubber	
⑥	Rod end nut	Low carbon steel wire rod	

No.	Description	Material	Note
①	Stud	Chromium molybdenum steel	
②	Case	Carbon steel	
③	Ring	Chromium molybdenum steel	
④	Cap	Carbon steel	
⑤	Dust cover	Synthetic rubber	
⑥	Set screw	Carbon steel	
⑦	Rod end nut	Carbon steel	
⑧	Flange	Rolled steel	
⑨	Foot	Rolled steel	

### Accessory Dimensions

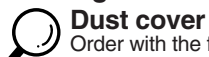
#### Rod end nut



d: Thread nominal size	H	B	C	D
M3 x 0.5	2.4	5.5	6.4	5.3
M4 x 0.7	3.2	7	8.1	6.8
M5 x 0.8	4	8	9.2	7.8
M6 x 1	5	10	11.5	9.8
M8 x 1	5	13	15	12.5
M8 x 1.25	5	13	15	12.5
M10 x 1	6	17	19.6	16.5
M10 x 1.25	6	17	19.6	16.5
M10 x 1.5	6	17	19.6	16.5
M12 x 1.25	7	19	21.9	18
M12 x 1.5	7	19	21.9	18
M12 x 1.75	7	19	21.9	18
M14 x 1.5	8	22	25.4	21
M16 x 1.5	10	24	27.7	23
M16 x 2	10	24	27.7	23
M18 x 1.5	11	27	31.2	26

d: Thread nominal size	H	B	C	D
M20 x 1.5	12	30	34.6	29
M20 x 2.5	12	30	34.6	29
M22 x 1.5	13	32	37	31
M24 x 1.5	14	36	41.6	34
M24 x 2	14	36	41.6	34
M24 x 3	14	36	41.6	34
M26 x 1.5	16	41	47.3	39
M27 x 1.5	16	41	47.3	39
M27 x 2	16	41	47.3	39
M30 x 1.5	18	46	53.1	44
M30 x 2	18	46	53.1	44
M33 x 2	20	50	57.7	48
M36 x 1.5	21	55	63.5	53
M39 x 1.5	23	60	69.3	57
M42 x 3	25	65	75	62
M48 x 1.5	29	75	86.5	72

### Floating Joint Replacement Parts



#### Dust cover

Order with the following part no. if dust cover is damaged.  
Replaceable dust cover is only for the basic style. Flange style and foot style cannot be replaced.

Part no. for dust cover	Applicable model
P2152051	JA6, JA10
P2152052	JA15, JB12, JB16
P215215	JA20, JB20
P215225	JA30, JB30
P215235	JA40, JB40
P215245	JA63, JA50, JB63

Part no. for dust cover	Applicable model
P215255	JA80, JAH40, JB80
P215265	JA100, JAH50, JB100
P215275	JA125, JAH63
P215285	JA140, JAH80, JB140
P215295	JA160, JAH100, JB160

#### Rod end nut

Rod end nut (1 pc.) is attached to the standard type of Series JA and JAH.  
But if it is needed additionally, order it as follows.  
Example.....Rod end nut for JA40-14-150

RE<sub>B</sub><sup>A</sup>

REC

C□X

C□Y

MQ<sub>M</sub><sup>Q</sup>

RHC

MK(2)

RS<sub>G</sub><sup>Q</sup>

RS<sub>A</sub><sup>H</sup>

RZQ

MI<sub>S</sub><sup>W</sup>

CEP1

CE1

CE2

ML2B

C<sub>5</sub>-S

CV

MVGQ

CC

RB

J

D-

-X

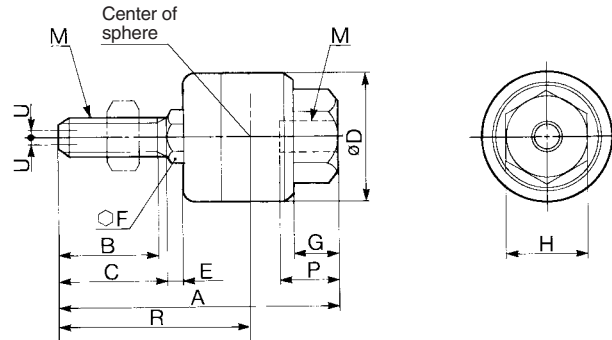
20-

Data

# Series JA

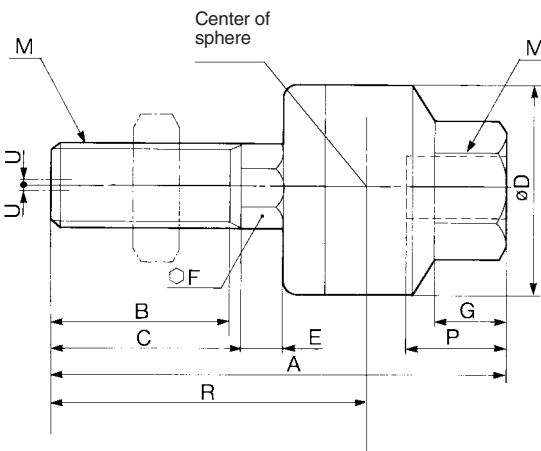
## Basic Style: JA6 to JA160

### JA6 to 15

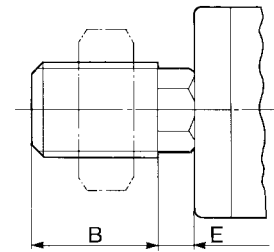


Use the precision spanner for clock 4 mm in the case of mounting male thread of JA6 and JA10.

### JA20 to 160



### Without C-dimension



Applicable bore size (mm)	Model	M		A	B	C	D	E	F	G	H	Center of sphere R	Maximum thread depth P	Allowable eccentricity U	Maximum operating tension and compression force (N)	Weight (kg)
		Nominal size	Pitch													

**Standard** Pneumatic: Up to 1 MPa Hydraulic: Up to 3.5 MPa

6	JA6-3-050	3	0.5	23.2	7	8	12	1.5	4	3.2	5.5	15	5	0.5	19	0.01
10 (CJ1)	JA10-4-070	4	0.7	26	9	10	12	1.5	4	4	7	17	5.5	0.5	54	0.01
10 (CZ1), 15 (CJ1)	JA15-5-080	5	0.8	34.5	12.5	14	16	2	6	5	10	23	7	0.5	123	0.02
15 (CZ1)	JA15-6-100	6	1	34.5	12.5	14	16	2	6	5	10	23	7	0.5	123	0.02
20	JA20-8-125	8	1.25	44	17.5	—	21	4.5	7	7	13	30.5	8	0.5	1100	0.05
25, 30	JA30-10-125	10	1.25	49.5	19.5	—	24	5	8	8	17	34	9	0.5	2500	0.07
40	JA40-14-150	14	1.5	60	20	—	31	6	11	11	22	38	13	0.75	6000	0.16
50, 63	JA63-18-150	18	1.5	74.5	25	—	41	7.5	14	13.5	27	47.5	15	1	11000	0.31
80	JA80-22-150	22	1.5	89.5	29	—	50	9.5	19	16	32	56.5	18	1.25	18000	0.58
100	JA100-26-150	26	1.5	110	35	—	59.5	11.5	24	20	41	68	24	2	28000	1.08
125, 140	JA140-30-150	30	1.5	152	42	45	79	14	30	22	46	94.5	38	2.5	54000	2.7
160	JA160-36-150	36	1.5	178	52	55	96	16	36	24	55	112	42	3	71000	4.7

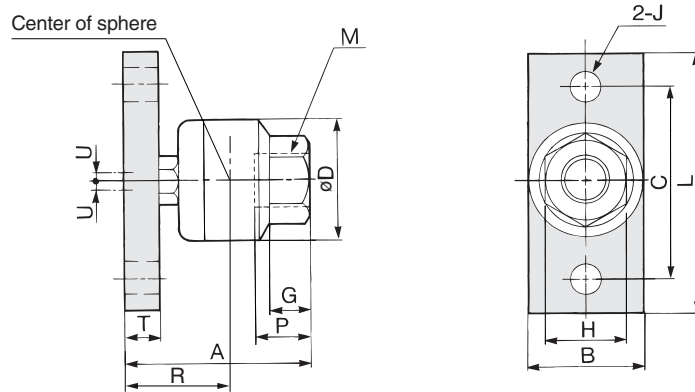
**Option** Pneumatic: Up to 1 MPa Hydraulic: Up to 3.5 MPa

20	JA20-8-100	8	1	44	17.5	—	21	4.5	7	7	13	30.5	8	0.5	1100	0.05
25	JA25-10-150	10	1.5	49.5	19.5	—	24	5	8	8	17	34	9	0.5	2500	0.07
32	JA32-10-100	10	1	49.5	19.5	—	24	5	8	8	17	34	9	0.5	2500*	0.07
30, 40	JA40-12-125	12	1.25	60	20	—	31	6	11	11	22	38	13	0.75	4400	0.16
40	JA40-12-150	12	1.5	60	20	—	31	6	11	11	22	38	13	0.75	4400	0.16
30, 40	JA40-12-175	12	1.75	60	20	—	31	6	11	11	22	38	13	0.75	4400	0.16
50	JA50-16-150	16	1.5	71.5	22	—	41	7.5	14	13.5	27	44.5	15	1	11000	0.3
50, 63	JA63-16-200	16	2	71.5	22	—	41	7.5	14	13.5	27	44.5	15	1	11000	0.3
80	JA80-20-250	20	2.5	90.5	27	30	50	9.5	19	16	32	57.5	18	1.25	18000	0.6
100	JA100-24-300	24	3	110	32	35	59.5	11.5	24	20	41	68	24	2	28000	1.05
100	JA100-27-150	27	1.5	110	35	—	59.5	11.5	24	20	41	68	24	2	28000	1.08
125	JA125-27-200	27	2	123	34	38	66	13	27	20	41	77	24	2	28000*	1.5
160	JA160-33-200	33	2	165	38	42	96	16	36	24	55	99	42	3	71000	4.5

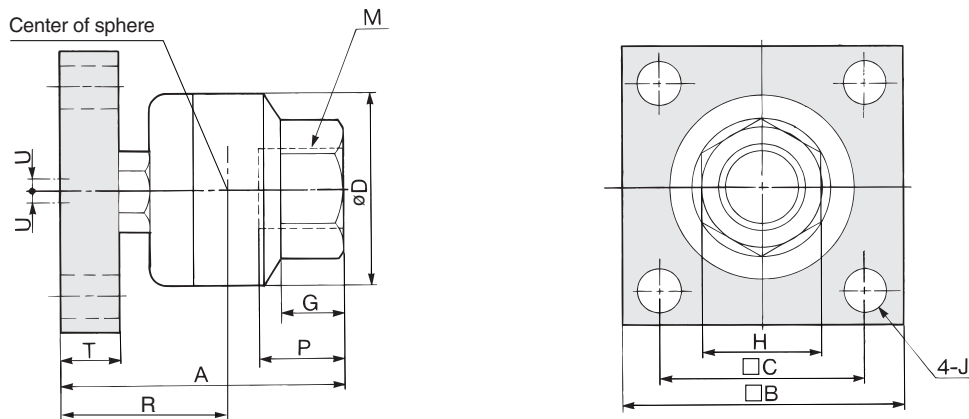
\* For 3.5 MPa hydraulic cylinders, operate within the maximum tension and compression force.

## Flange Style: JAF20 to JAF160

### JAF20 to 40



### JAF50 to 160



Applicable bore size (mm)	Model	M		A	B	L	C	D	T	J	G	H	Center of sphere R	Maximum thread depth P	Allowable eccentricity U	Maximum operating tension and compression force (N)	Weight (kg)
		Nominal size	Pitch														
<b>Standard</b> Pneumatic: Up to 1 MPa Hydraulic: Up to 3.5 MPa																	
20	JAF20-8-125	8	1.25	32.5	19	48	36	21	6	6.6	7	13	19	8	0.5	1100	0.08
25, 30	JAF30-10-125	10	1.25	36	25	52	40	24	6	6.6	8	17	20.5	9	0.5	2500	0.12
40	JAF40-14-150	14	1.5	49	32	70	52	31	9	9	11	22	27	13	0.75	4400	0.28
50, 63	JAF63-18-150	18	1.5	61.5	65	—	45	41	12	9	13.5	27	34.5	15	1	11000	0.63
80	JAF80-22-150	22	1.5	76.5	75	—	55	50	16	11	16	32	43.5	18	1.25	18000	1.15
100	JAF100-26-150	26	1.5	94	90	—	65	59.5	19	11	20	41	52	24	2	28000	2.07
125, 140	JAF140-30-150	30	1.5	131	125	—	82	79	24	18	22	46	73.5	38	2.5	36000*	5.2
160	JAF160-36-150	36	1.5	152	150	—	100	96	29	22	24	55	86	42	3	55000*	9

### Option Pneumatic: Up to 1 MPa Hydraulic: Up to 3.5 MPa

20	JAF20-8-100	8	1	32.5	19	48	36	21	6	6.6	7	13	19	8	0.5	1100	0.08
25	JAF25-10-150	10	1.5	36	25	52	40	24	6	6.6	8	17	20.5	9	0.5	2500	0.12
32	JAF32-10-100	10	1	36	25	52	40	24	6	6.6	8	17	20.5	9	0.5	2500*	0.12
30, 40	JAF40-12-125	12	1.25	49	32	70	52	31	9	9	11	22	27	13	0.75	4400	0.28
40	JAF40-12-150	12	1.5	49	32	70	52	31	9	9	11	22	27	13	0.75	4400	0.28
30, 40	JAF40-12-175	12	1.75	49	32	70	52	31	9	9	11	22	27	13	0.75	4400	0.28
50	JAF50-16-150	16	1.5	61.5	65	—	45	41	12	9	13.5	27	34.5	15	1	11000	0.63
50, 63	JAF63-16-200	16	2	61.5	65	—	45	41	12	9	13.5	27	34.5	15	1	11000	0.63
80	JAF80-20-250	20	2.5	76.5	75	—	55	50	16	11	16	32	43.5	18	1.25	18000	1.15
100	JAF100-24-300	24	3	94	90	—	65	59.5	19	11	20	41	52	24	2	28000	2.07
100	JAF100-27-150	27	1.5	94	90	—	65	59.5	19	11	20	41	52	24	2	28000	2.07
125	JAF125-27-200	27	2	106	100	—	72	66	21	18	20	41	60	24	2	28000*	2.8
160	JAF160-33-200	33	2	152	150	—	100	96	29	22	24	55	86	42	3	55000*	9

\* For 3.5 MPa hydraulic cylinders, operate within the maximum tension and compression force.

RE<sup>A</sup><sub>B</sub>

REC

C□X

C□Y

MQ<sup>Q</sup><sub>M</sub>

RHC

MK(2)

RS<sup>Q</sup><sub>G</sub>RS<sup>H</sup><sub>A</sub>

RZQ

MI<sup>W</sup><sub>S</sub>

CEP1

CE1

CE2

ML2B

C<sup>1</sup>/<sub>5</sub>-S

CV

MVGQ

CC

RB

J

D-

-X

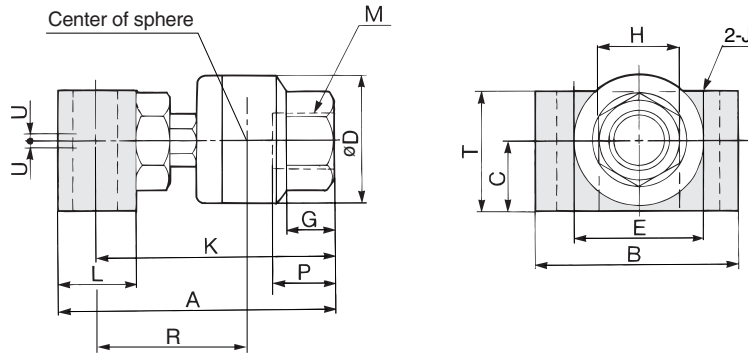
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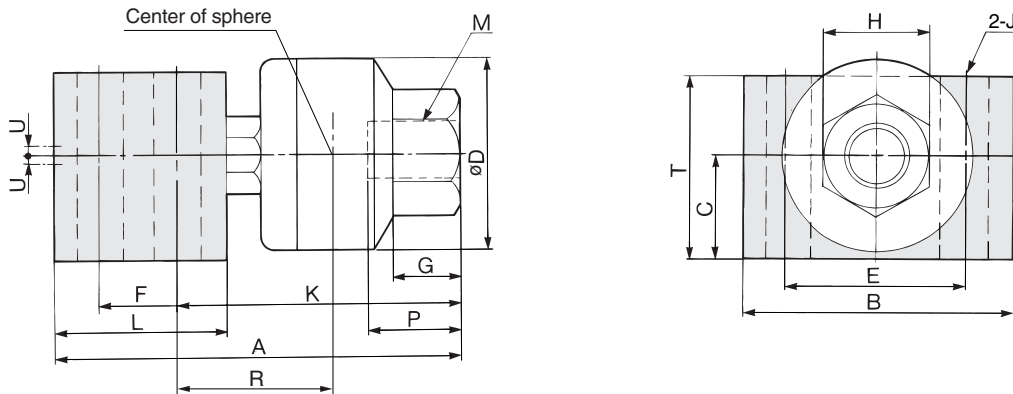
# Series JA

## Foot Style: JAL20 to JAF160

### JAL20 to 100



### JAL125 to 160



Applicable bore size (mm)	Model	M		A	B	C	D	E	F	K	L	T	J	G	H	Center of sphere R	Maximum thread depth P	Allowable eccentricity U	Maximum operating tension and compression force (N)	Weight (kg)
		Nominal size	Pitch																	
(mm)																				
<b>Standard</b> Pneumatic: Up to 1 MPa Hydraulic: Up to 3.5 MPa																				
20	JAL20-8-125	8	1.25	44	30	11.5	21	18	—	38	12	19	6.6	7	13	24.5	8	0.5	1000*	0.09
25, 30	JAL30-10-125	10	1.25	52	42	14	24	24	—	44	16	25	9	8	17	28.5	9	0.5	2000*	0.18
40	JAL40-14-150	14	1.5	67	52	17.5	31	30	—	57.5	19	30	11	11	22	35.5	13	0.75	4400	0.36
50, 63	JAL63-18-150	18	1.5	82.5	56	23	41	34	—	71.5	22	38	11	13.5	27	44.5	15	1	9000*	0.61
80	JAL80-22-150	22	1.5	98.5	70	28	50	42	—	86	25	47	14	16	32	53	18	1.25	14000*	1.09
100	JAL100-26-150	26	1.5	123	80	35	59.5	48	—	107	32	58	16	20	41	65	24	2	22000*	2.03
125, 140	JAL140-30-150	30	1.5	187	96	45	79	60	44	125	80	79	18	22	46	67.5	38	2.5	36000*	6.4
160	JAL160-36-150	36	1.5	213	116	55	96	74	48	144	90	89	22	24	55	78	42	3	55000*	10

### Option Pneumatic: Up to 1 MPa Hydraulic: Up to 3.5 MPa

20	JAL20-8-100	8	1	44	30	11.5	21	18	—	38	12	19	6.6	7	13	24.5	8	0.5	1000*	0.09
25	JAL25-10-150	10	1.5	52	42	14	24	24	—	44	16	25	9	8	17	28.5	9	0.5	2000	0.18
32	JAL32-10-100	10	1	52	42	14	24	24	—	44	16	25	9	8	17	28.5	9	0.5	2000*	0.18
30, 40	JAL40-12-125	12	1.25	67	52	17.5	31	30	—	57.5	19	30	11	11	22	35.5	13	0.75	4400	0.36
40	JAL40-12-150	12	1.5	67	52	17.5	31	30	—	57.5	19	30	11	11	22	35.5	13	0.75	4400	0.36
30, 40	JAL40-12-175	12	1.75	67	52	17.5	31	30	—	57.5	19	30	11	11	22	35.5	13	0.75	4400	0.36
50	JAL50-16-150	16	1.5	82.5	56	23	41	34	—	71.5	22	38	11	13.5	27	44.5	15	1	9000	0.61
50, 63	JAL63-16-200	16	2	82.5	56	23	41	34	—	71.5	22	38	11	13.5	27	44.5	15	1	9000*	0.61
80	JAL80-20-250	20	2.5	98.5	70	28	50	42	—	86	25	47	14	16	32	53	18	1.25	14000*	1.09
100	JAL100-24-300	24	3	123	80	35	59.5	48	—	107	32	58	16	20	41	65	24	2	22000*	2.03
100	JAL100-27-150	27	1.5	123	80	35	59.5	48	—	107	32	58	16	20	41	65	24	2	22000*	2.03
125	JAL125-27-200	27	2	155	88	38	66	54	36	102	70	69	14	20	41	56	24	2	22000*	4.1
160	JAL160-33-200	33	2	213	116	55	96	74	48	144	90	89	22	24	55	78	42	3	55000*	10

\* For 3.5 MPa hydraulic cylinders, operate within the maximum tension and compression force.