



Power Arm PAW Series  
(Catalog No. CC-1418A)

PowerArm

# PAW-FP1 Series

● Bore size: ø80/ø100/ø125



## Specifications

Item	PAW		
Bore size mm	ø80	ø100	ø125
Working fluid	Compressed air		
Max. working pressure MPa	0.7		
Min. working pressure MPa	0.25 (when option L (with rotation lock) is selected: 0.35)		
Proof pressure MPa	1.05		
Ambient temperature °C	5 to 60		
Cushion	Rubber cushion		
Lubrication	Not available		
Load capacity (0.5 MPa pressurized) kg	30	50	80
Air consumption L/min (ANR)	8	14	25

Note: Values are at air consumption 1 cycle/min. and working pressure 0.7 MPa.

## Movable range

### • With single-axis

Model No.	Movable range Top and bottom(mm)
PAW-S-8 (ø80)	520
PAW-S-X (ø100)	580
PAW-S-Z (ø125)	650

### • With multi-axis

Model No.	Movable range	
	Top and bottom(mm)	Horizontal(mm)
PAW-M-8S	520	1200
PAW-M-XS	580	1400
PAW-M-ZS	650	1600
PAW-M-8X	1100	1300
PAW-M-XZ	1230	1500
PAW-M-8XS	1100	2000
PAW-M-XZS	1230	2300
PAW-M-8XZ	1750	2100

Note: Horizontal movable range is the maximum value at the descending edge of the vertical movable range. See the external dimensions for more information on the movable range.

## Weight

Model No.	Weight (kg)	Optional additional weight (kg)		
		L(Rotation lock mechanism)	R(Tip rotation mechanism)	LR
PAW-M-8	27	0.5	4	5
PAW-M-X	38	0.5	5.5	6.5
PAW-M-Z	71	0.5	7.5	8.5
PAW-M-8S	46	1.0	4	5.5
PAW-M-XS	77	1.0	5.5	7
PAW-M-ZS	123	1.0	7.5	9
PAW-M-8X	58	1.0	4	5.5
PAW-M-XZ	102	1.0	5.5	7
PAW-M-8XS	96	1.5	4	6
PAW-M-XZS	154	1.5	5.5	7.5
PAW-M-8XZ	121	1.5	4	6

Refer to "PowerArm PAW Series (CC-1418A)" for dimensions.

### How to order

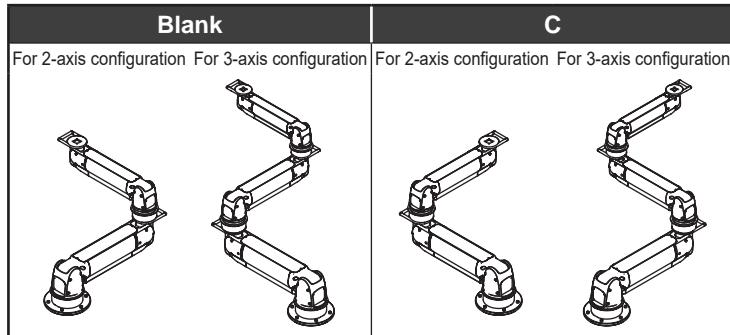
**PAW - M - 8X - R - FP1**

A Number of sections

B Combination contents

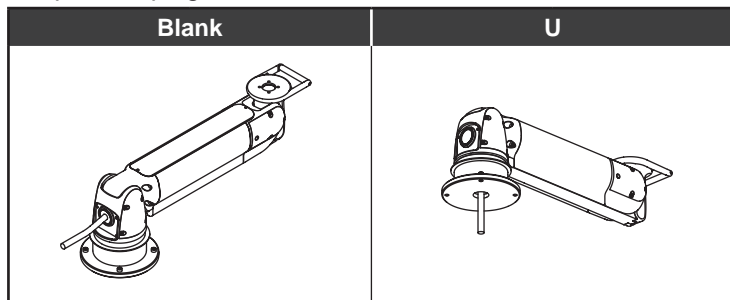
C Option

#### C Option: Bending direction



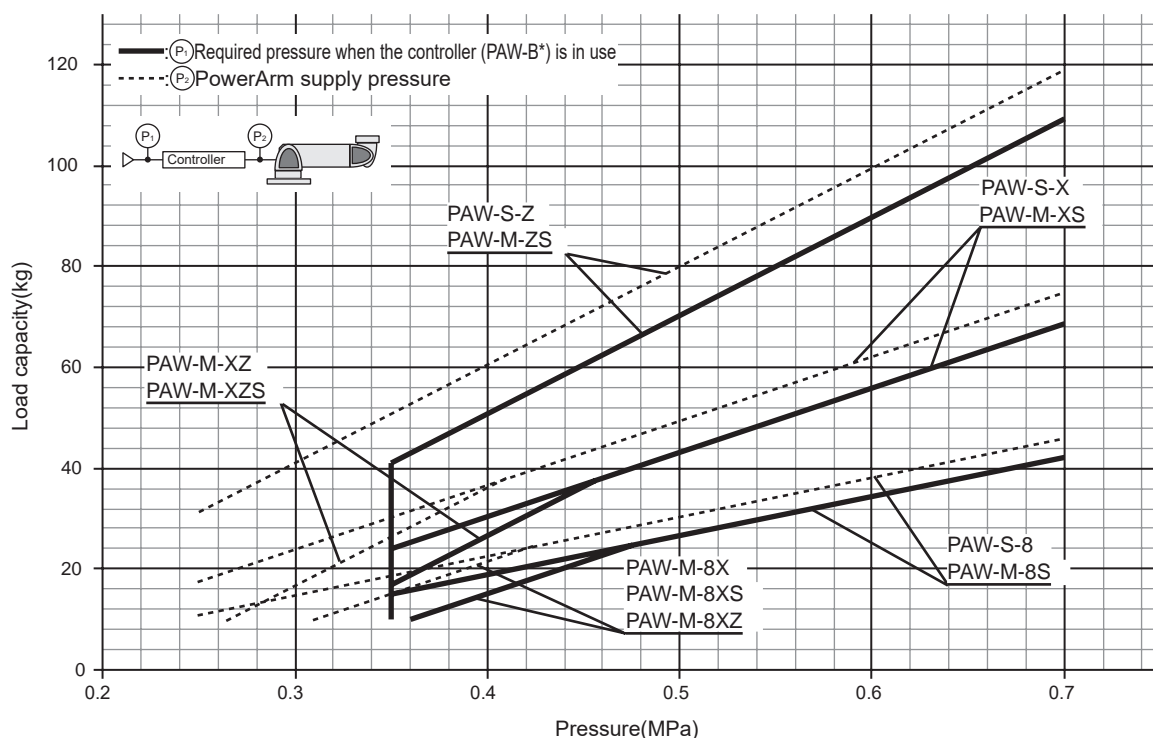
\* C is not available for single axis (PAW-S).

#### C Option: Piping leadout direction



\* Piping holes at the mounting surface center are required for U.

### Load capacity with respect to pressure



\*1: Indicates the load capacity with the optional tip rotation mechanism mounted.

\*2: Pressure supplied to the controller should be increased, depending on the operating frequency and speed.

\*3: Attachment weight is not included.

\*4: While the load capacity properties are such that it alters slightly according to the arm rise angle, this graph shows the lower limit values.

A Number of sections	
Single Shaft	Multi Shaft
S	M

Code	Description	S	M
B Combination contents			
8	ø80 single-axis	●	
X	ø100 single-axis	●	
Z	ø125 single-axis	●	
8S	ø80 + SCARA arm		●
XS	ø100 + SCARA arm		●
ZS	ø125 + SCARA arm		●
8X	ø80+ø100		●
XZ	ø100+ø125		●
8XS	ø80 + ø100 + SCARA arm		●
XZS	ø100 + ø125 + SCARA arm		●
8XZ	ø80+ø100+ø125		●

#### C Option

Code	Description	S	M
L	Rotation lock mechanism *1	●	●
R	Tip rotation mechanism	●	●
C	Bending direction (Refer to the figure at left)		●
U	Piping leadout direction (Refer to the figure at left)	●	●

\*1 A mechanism designed to hold the force applied in rotational directions. It is not designed to stop the dynamic rotational force.

\*2 Contact CKD Sales if the attachments are compatible with FP1.

\*3 Cannot be applied to transport of food not packed.

Electric actuator	Pneumatic cylinders	Assistive device	Pneumatic valves	Electric Component	Vacuum components	Main line components	Fluid control valves	Main line components	Anti-bacterial/bacteria-removing filter	Vacuum components	Fluid control valves



Power Arm PAW Series  
(Catalog No. CC-1418A)

Palletizing specifications

# PAW-A\*-FP1 Series

RoHS

## Specifications

Item	PAW-AS-45	PAW-AS-45-S	PAW-AZ-110	PAW-AZ-110-S
Working fluid	Compressed air			
Max. working pressure MPa	0.7			
Min. working pressure MPa	0.25 (when option L (with rotation lock) is selected: 0.35)			
Proof pressure MPa	1.05			
Ambient temperature °C	5 to 60			
Lubrication	Not available			
Load capacity (0.5 MPa pressurized) kg	53	53	43	47
When controller (PAW-B*) is used	47	47	32	36
Air consumption (*1) L/min (ANR)	11		35	
Product weight (*2) kg	164	161	183	180
Vertical movable range of transport section mm	450		1100	
Max. movable radius of transport section mm	2000	1600	2100	1700

\*1: Air consumption represents a value with 1 return/min and 0.7 MPa working pressure.

\*2: When Option L (with a rotation lock) is selected, an additional 2 kg is added respectively.

\*3: Refer to "PowerArm PAW Series (No.CC-1418A)" for the load capacity when an offset is used.

## How to order

**PAW - AS-45 - LC - FP1**

**A** Vertical operating range / max. rotational radius

**B** Option

Code	Description	
<b>A</b>	<b>Vertical operation range/Max. rotation radius *1</b>	
	Vertical operation range	Max. rotation radius
<b>AS-45</b>	450 mm	2,000 mm
<b>AS-45-S</b>	450 mm	1,600 mm
<b>AZ-110</b>	1,100 mm	2,100 mm
<b>AZ-110-S</b>	1,100 mm	1,700 mm

**B** Option

<b>L</b>	Rotation lock mechanism *2
<b>C</b>	Bending direction (refer to diag. below)

\*1 If the vertical operating range / max. rotational radius is exceeded, consult with CKD.

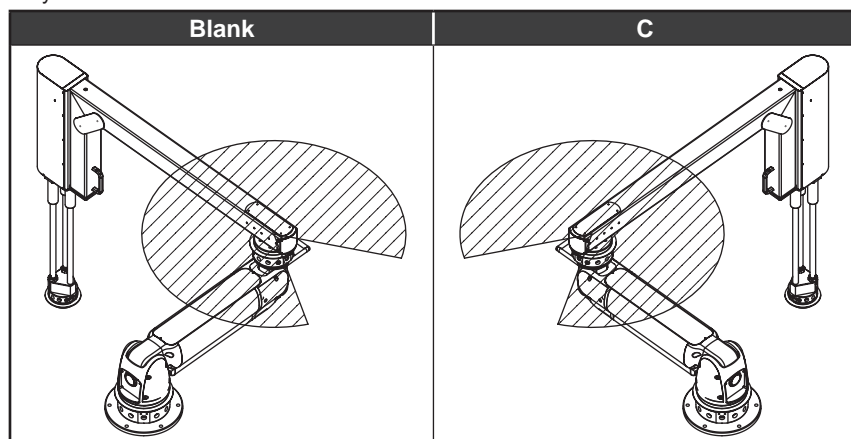
\*2 A mechanism designed to hold the force applied in rotational directions. It is not designed to stop dynamic rotation.

\*3 Contact CKD if the attachments are compatible with FP1. Contact CKD for details.

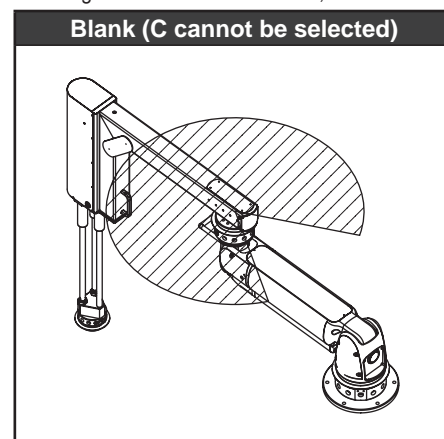
\*4 Cannot be applied to transport of food not packed.

**B** Option: Bending direction

Only PAW-AS-45 and PAW-AZ-110 can be selected

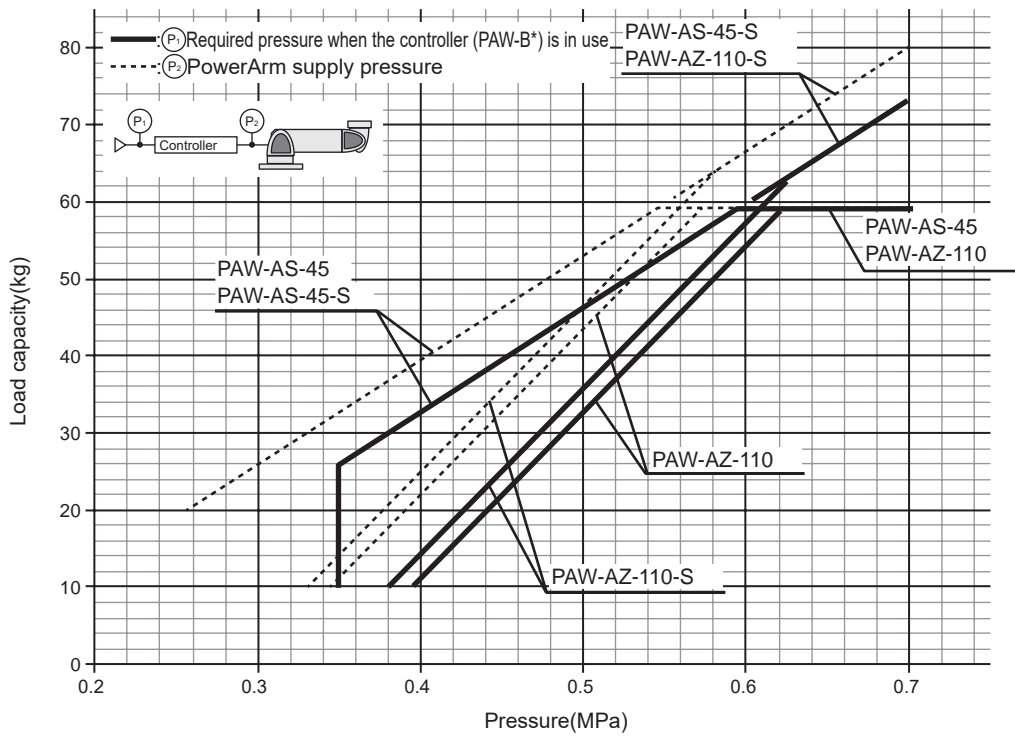


\*Bending direction of PAW-AS-45-S, PAW-AZ-110-S



Refer to "PowerArm PAW Series (CC-1418A)" for dimensions.

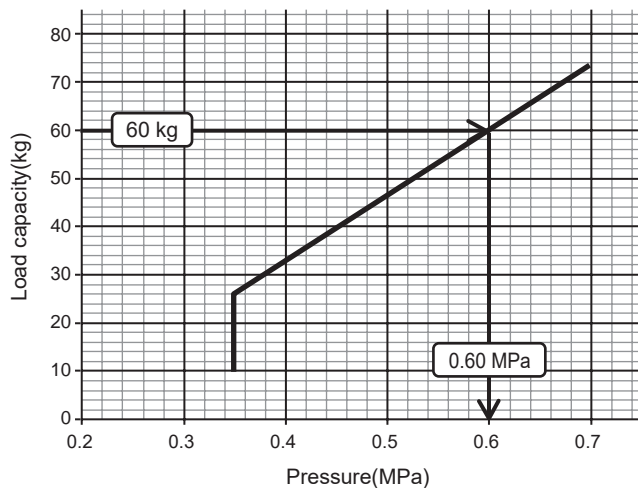
Load capacity with respect to pressure



\*1: Pressure supplied to the controller should be increased, depending on the operating frequency and speed.  
 \*2: Load capacity is the sum of weights of the “workpiece, attachment, and operation box”.

[Selection example 1]

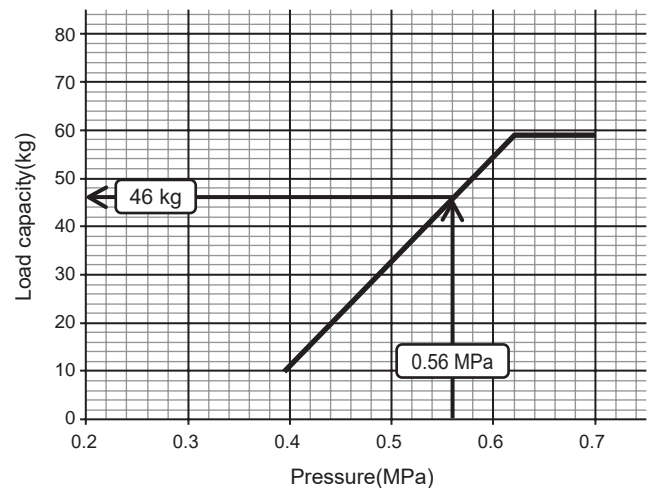
Model: PAW-AS-45-S Controller: PAW-BH1  
 Workpiece weight: 40kg, Operation Box weight: 9 kg,  
 Cardboard box suction attachment weight: 11kg For total 60kg



Pressure supplied to the controller will need to be 0.60 MPa.

[Selection example 2]

Model: PAW-AZ-110 Controller: PAW-BS2  
 Operation box weight: 9 kg, hook attachment weight: 2 kg  
 When pressure supplied to the controller is 0.56 MPa



The weight of Operation Box (46 kg) and Hook Attachment (9 kg) subtracted from the Load Capacity (2 kg) leaves 35 kg, which is the maximum workpiece weight that can be transported.

Electric actuator	Pneumatic cylinders	Assistive device	Pneumatic valves	FRL/Auxiliary Components Electronic Component	Vacuum components	Main line components	Fluid control valves	Main line components	Anti-bacterial/bacteria-removing filter	Vacuum components	Fluid control valves