

PNEUMATIC VALVES | Brass Heavy Duty PE Series

PE | Mechanically Operated

- Heavy duty brass valves, mechanically operated
- 3/2, 5/2, 5/3
- Port size : 1/4" & 1/2" BSP & NPT

Application

- Suitable for use in aggressive environments such as mining, cement manufacturing and flour milling industries.

Technical Data

| | |
|---------------------|--|
| Fluid | Air / Inert gas / Water |
| Operation pressure | -1 to 10 bar |
| Ambient temperature | -5° to 55°C (option for FKM seals) up to 150° C |
| Lubrication | Not required (use turbine oil class ISO VG32 if lubricated) |
| Port size | 1/4" & 1/2" BSP or NPT |
| Flow rate (Air) | 1/4" port size = 1,100 L/min (at 5.5 bar) 1/2" port size = 3,500 L/min (at 5.5 bar) |



Lever



Lever Protec



Foot Return Spring



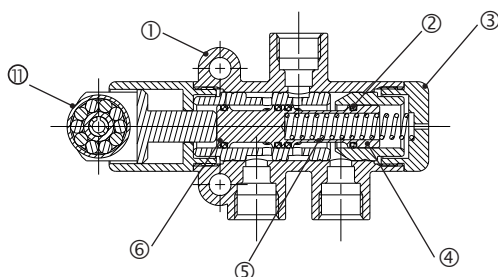
Roller-Spring



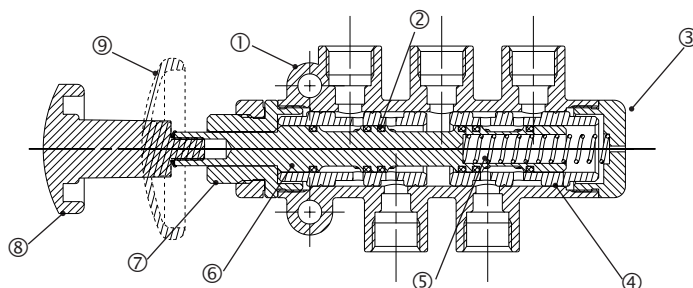
Push-Spring

Construction

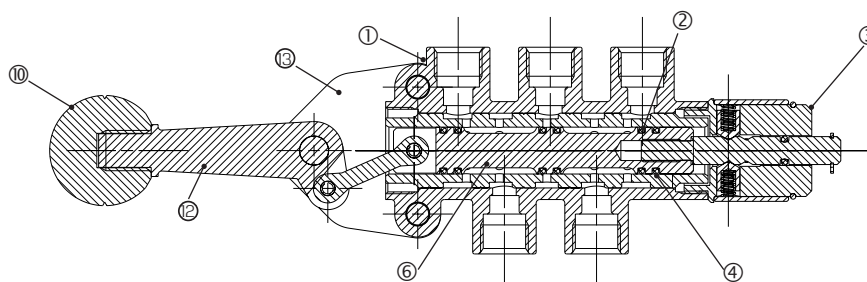
3 port Roller-Spring valve



5 port Push-Spring valve



5 port, 3 Position Stable Lever valve



Component Parts

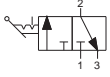
| No. | Description | Material |
|-----|----------------------|---|
| 1 | Body | Brass * |
| 2 | "O" ring | NBR or FKM |
| 3 | End cover | Brass |
| 4 | Sleeve | Brass |
| 5 | Spring | - |
| 6 | Spool | Brass |
| 7 | Panel Nut | Brass |
| 8 | Small button 35.8 mm | Color : Green Red Black Plastic |
| 9 | Large button 50.2 mm | |
| 10 | Operator knob | Plastic (Black) |
| 11 | Roller | - |
| 12 | Control handle | Mazak |
| 13 | Side plate | Zinc coated steel |

* Painted with grey polyester

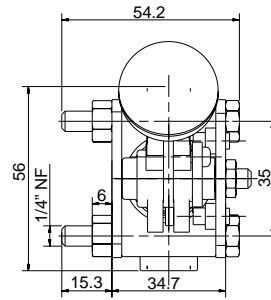
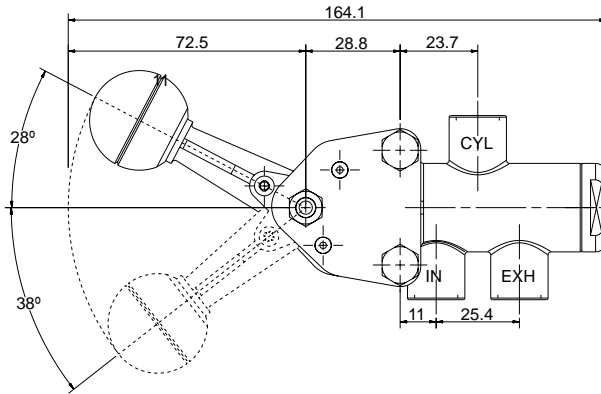
PNEUMATIC VALVES | Brass Heavy Duty PE Series

PE | Mechanically Operated

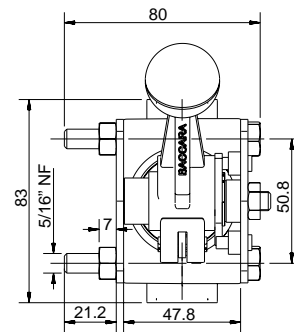
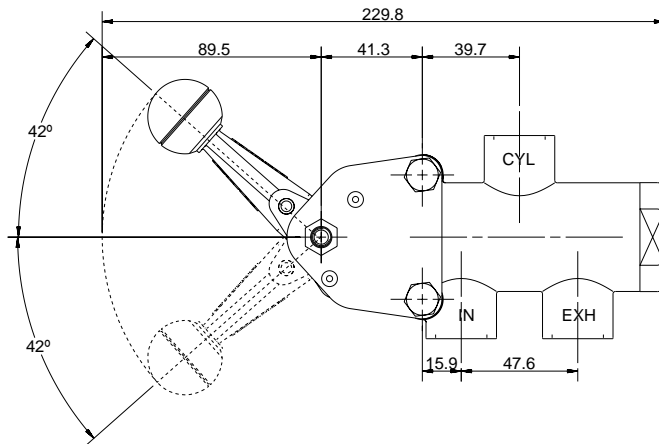
PEM3-L | Stable Lever | 1/4", 1/2" | 3 port



Port size : 1/4"



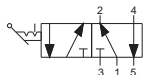
Port size : 1/2"



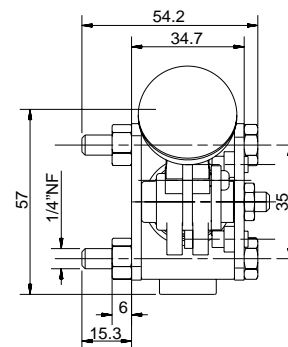
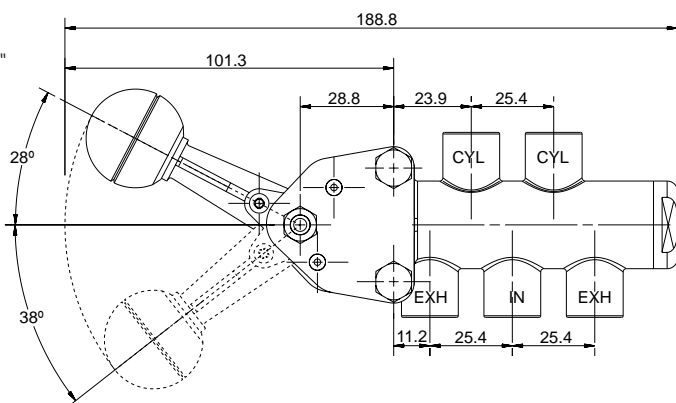
How to Order

| PEM3 | - | PORT SIZE | - | L | - | SEAL MATERIAL |
|------|---|-----------|---|---|---|---------------|
| | | 1/4" BSP | | 0 | | NBR N |
| | | 1/4" NPT | | 1 | | FKM V |
| | | 1/2" BSP | | 2 | | |
| | | 1/2" NPT | | 3 | | |

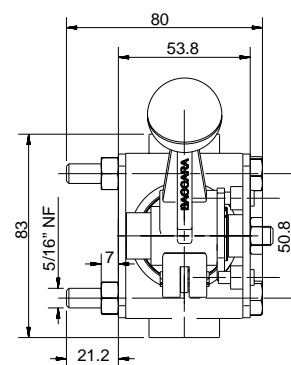
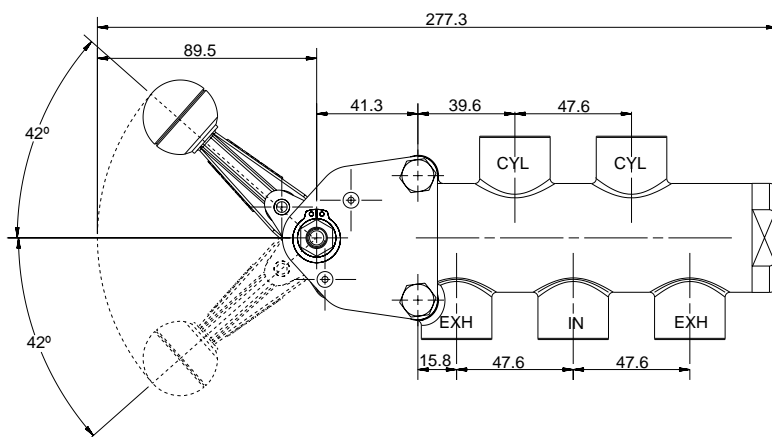
PEM5-L | Stable Lever | 1/4", 1/2" | 5 port



Port size : 1/4"



Port size : 1/2"



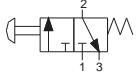
How to Order

| PEM5 | - | PORT SIZE | - | L | - | SEAL MATERIAL |
|------|---|-----------|---|---|---|---------------|
| | | 1/4" BSP | 0 | | | NBR N |
| | | 1/4" NPT | 1 | | | FKM V |
| | | 1/2" BSP | 2 | | | |
| | | 1/2" NPT | 3 | | | |

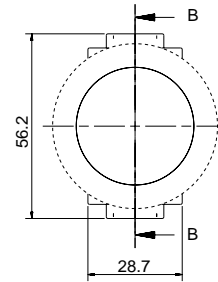
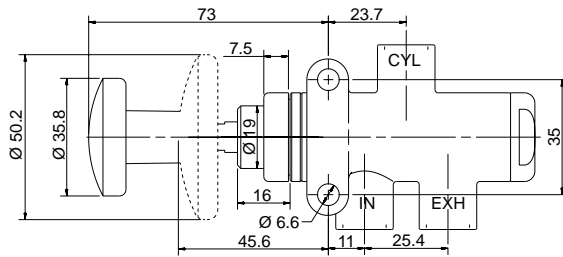
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PE | Mechanically Operated

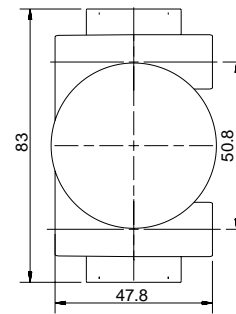
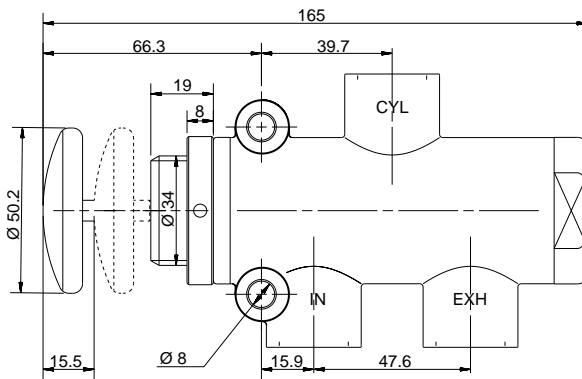
PEM3-PS | Push-Spring | 1/4", 1/2" | 3 port



Port size : 1/4"



Port size : 1/2"



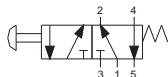
How to Order

| PEM3 | PORT SIZE | PS | SEAL MATERIAL | BUTTON SIZE | COLOR OF BUTTON | |
|------|-----------|----|---------------|-------------|-----------------------|------------------------|
| | 1/4" BSP | 0 | NBR | N | 35.8 1 ⁽¹⁾ | Red R |
| | 1/4" NPT | 1 | FKM | V | 50.2 2 | Green G ⁽²⁾ |
| | 1/2" BSP | 2 | | | | Black B ⁽²⁾ |
| | 1/2" NPT | 3 | | | | |

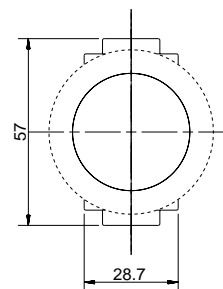
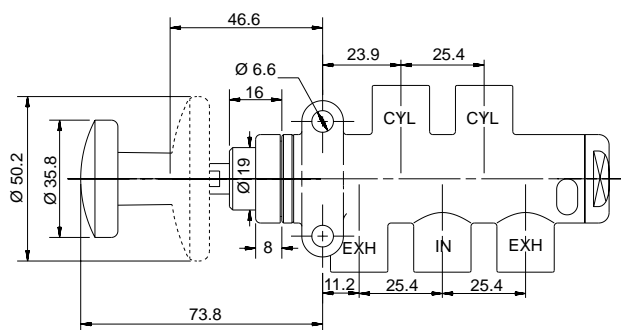
(1) This size is an option for 1/2" valves

(2) Optional

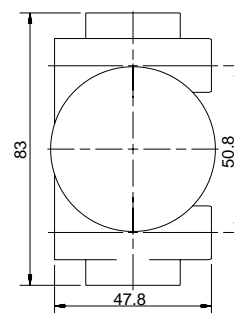
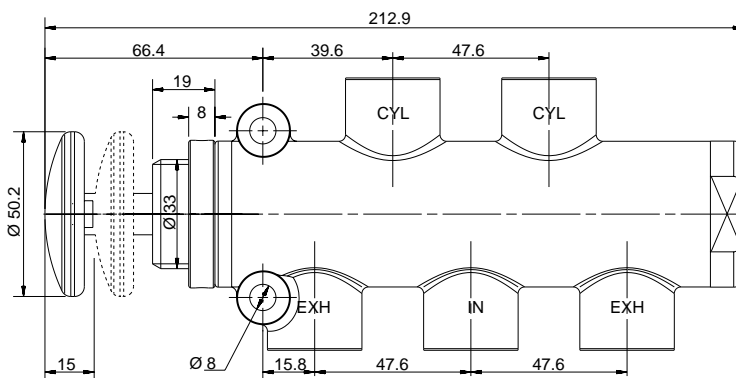
PEM5-PS | Push-Spring | 1/4", 1/2" | 5 port



Port size : 1/4"



Port size : 1/2"



How to Order

| PEM5 | PORT SIZE | PS | SEAL MATERIAL | BUTTON SIZE | COLOR OF BUTTON | |
|------|-----------|----|---------------|-------------|-----------------------|------------------------|
| | 1/4" BSP | 0 | NBR | N | 35.8 1 ⁽¹⁾ | Red R |
| | 1/4" NPT | 1 | FKM | V | 50.2 2 | Green G ⁽²⁾ |
| | 1/2" BSP | 2 | | | | Black B ⁽²⁾ |
| | 1/2" NPT | 3 | | | | |

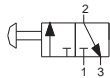
(1) This size is an option for 1/2" valves

(2) Optional

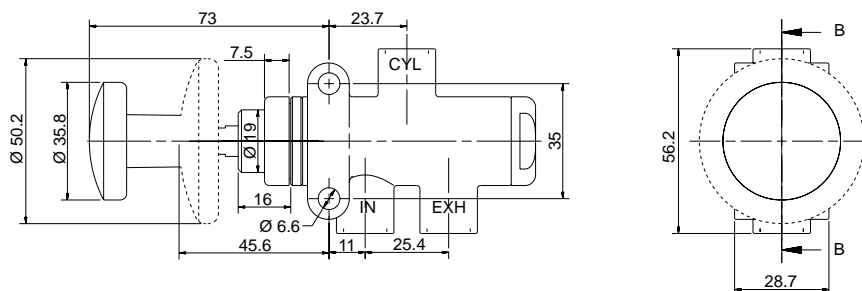
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PE | Mechanically Operated

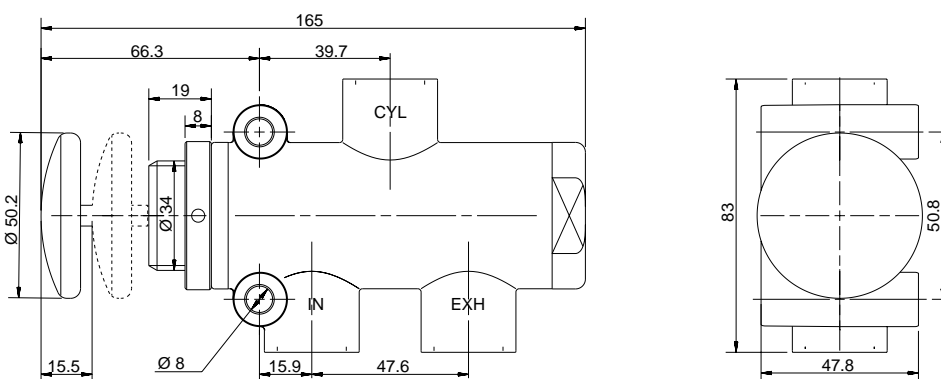
PEM3-PP | Push-Pull | 1/4", 1/2" | 3 port



Port size : 1/4"



Port size : 1/2"

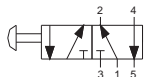


How to Order

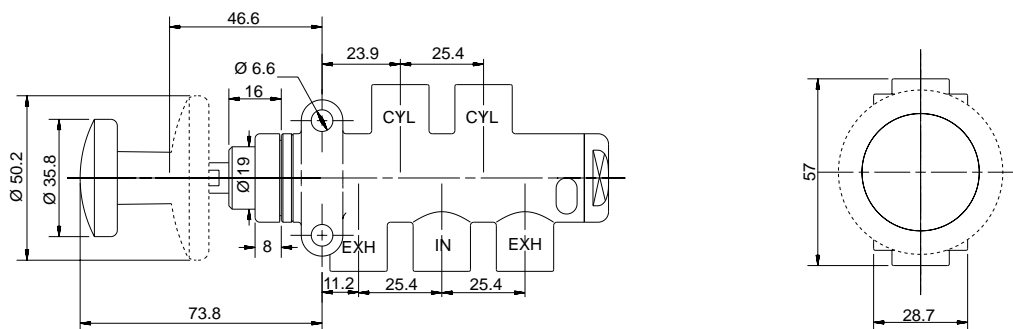
| PEM3 | PORT SIZE | PP | SEAL MATERIAL | BUTTON SIZE | COLOR OF BUTTON |
|------|------------|----|---------------|-----------------------|------------------------|
| | 1/4" BSP 0 | | NBR N | 35.8 1 ⁽¹⁾ | Black B |
| | 1/4" NPT 1 | | FKM V | 50.2 2 | Green G ⁽²⁾ |
| | 1/2" BSP 2 | | | | Red R ⁽²⁾ |
| | 1/2" NPT 3 | | | | |

(1) This size is an option for 1/2" valves
(2) Optional

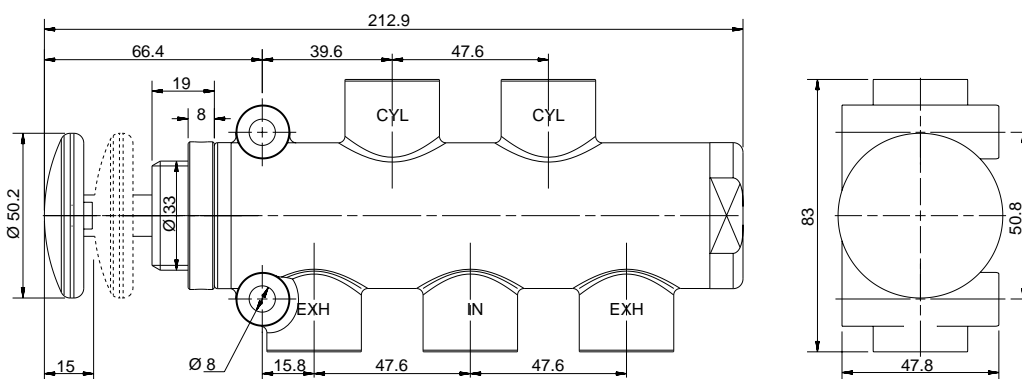
PEM5-PP | Push-Pull | 1/4", 1/2" | 5 port



Port size : 1/4"



Port size : 1/2"



How to Order

| PEM5 | PORT SIZE | PP | SEAL MATERIAL | BUTTON SIZE | COLOR OF BUTTON | |
|------|-----------|----|---------------|-------------|-----------------------|------------------------|
| | 1/4" BSP | 0 | NBR | N | 35.8 1 ⁽¹⁾ | Black B |
| | 1/4" NPT | 1 | FKM | V | 50.2 2 | Green G ⁽²⁾ |
| | 1/2" BSP | 2 | | | | Red R ⁽²⁾ |
| | 1/2" NPT | 3 | | | | |

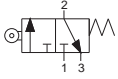
(1) This size is an option for 1/2" valves

(2) Optional

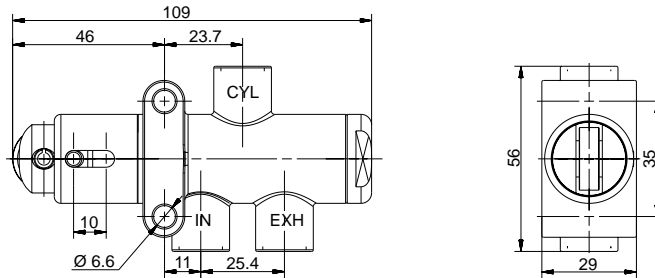
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PEM3-RS | Roller-Spring | 1/4", 1/2" | 3 port

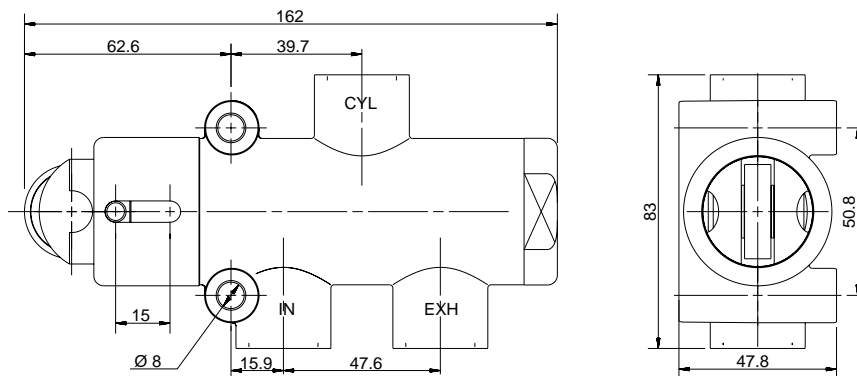


Port size : 1/4"



*Roller fixed at 90°

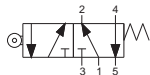
Port size : 1/2"



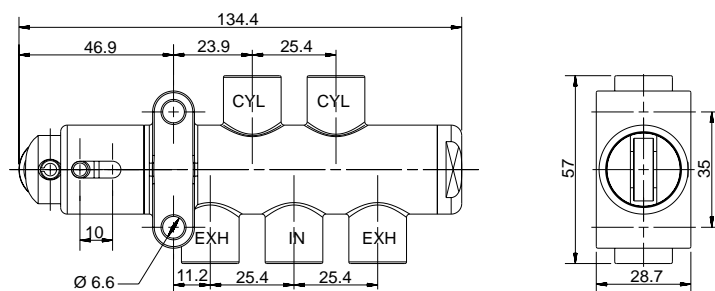
How to Order

| PEM3 | PORT SIZE | RS | SEAL MATERIAL | ROLLER POSITION | | |
|------|-----------|----|---------------|-----------------|------|---|
| | 1/4" BSP | 0 | NBR | N | 180° | 1 |
| | 1/4" NPT | 1 | FKM | V | 90° | 2 |
| | 1/2" BSP | 2 | | | | |
| | 1/2" NPT | 3 | | | | |

PEM5-RS | Roller-Spring | 1/4", 1/2" | 5 port

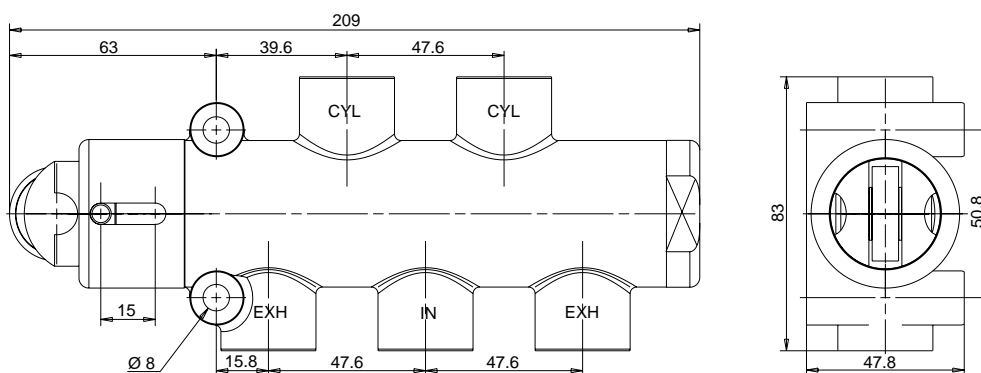


Port size : 1/4"



*Roller fixed at 180°

Port size : 1/2"



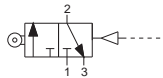
How to Order

| PEM5 | PORT SIZE | RS | SEAL MATERIAL | ROLLER POSITION |
|------|-----------|----|---------------|-----------------|
| | 1/4" BSP | 0 | NBR N | 180° 1 |
| | 1/4" NPT | 1 | FKM V | 90° 2 |
| | 1/2" BSP | 2 | | |
| | 1/2" NPT | 3 | | |

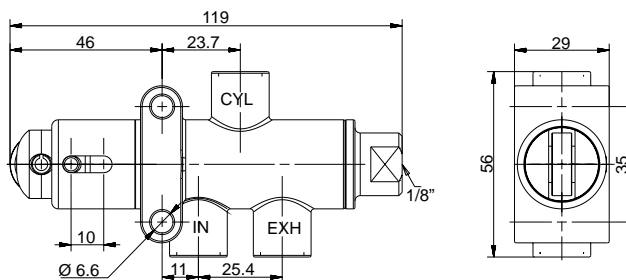
PNEUMATIC VALVES | Brass Heavy Duty PE Series

PE | Mechanically Operated

PEM3-RA | Roller-Air | 1/4", 1/2" | 3 port

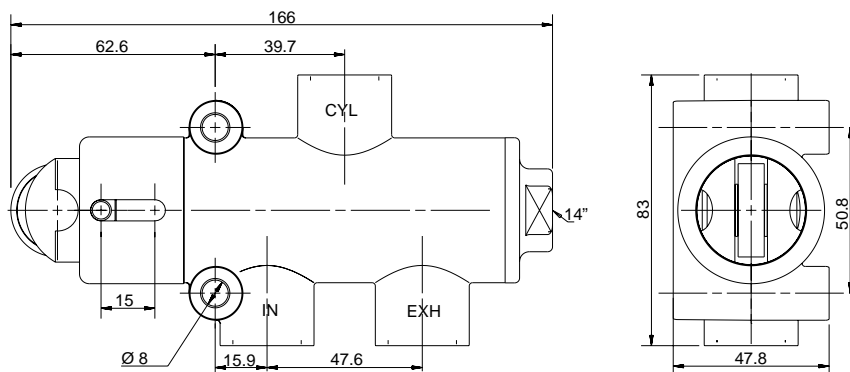


Port size : 1/4"



*Roller fixed at 90°

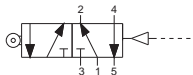
Port size : 1/2"



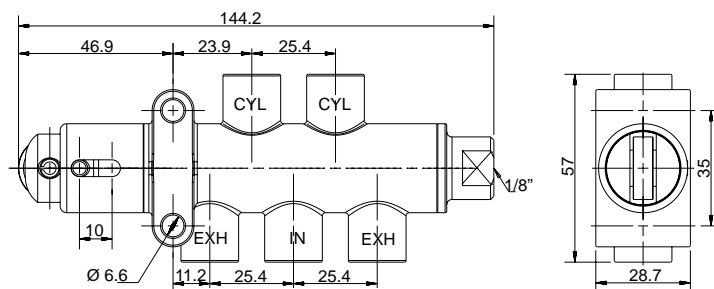
How to Order

| PEM3 | PORT SIZE | RA | SEAL MATERIAL | ROLLER POSITION |
|------|-----------|----|---------------|-----------------|
| | 1/4" BSP | 0 | NBR N | 180° 1 |
| | 1/4" NPT | 1 | FKM V | 90° 2 |
| | 1/2" BSP | 2 | | |
| | 1/2" NPT | 3 | | |

PEM5-RA | Roller-Air | 1/4", 1/2" | 5 port

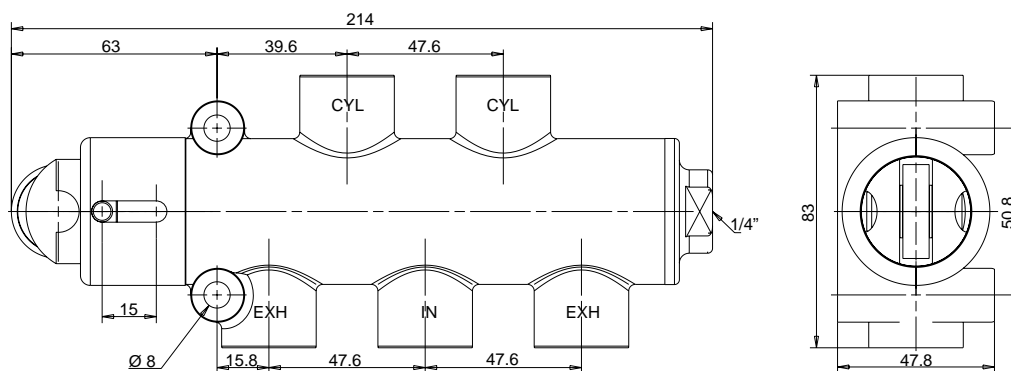


Port size : 1/4"



*Roller fixed at 180°

Port size : 1/2"



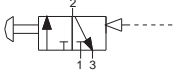
How to Order

| PEM5 | PORT SIZE | RA | SEAL MATERIAL | ROLLER POSITION | | |
|------|-----------|----|---------------|-----------------|------|---|
| | 1/4" BSP | 0 | NBR | N | 180° | 1 |
| | 1/4" NPT | 1 | FKM | V | 90° | 2 |
| | 1/2" BSP | 2 | | | | |
| | 1/2" NPT | 3 | | | | |

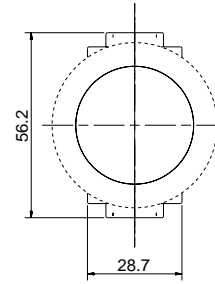
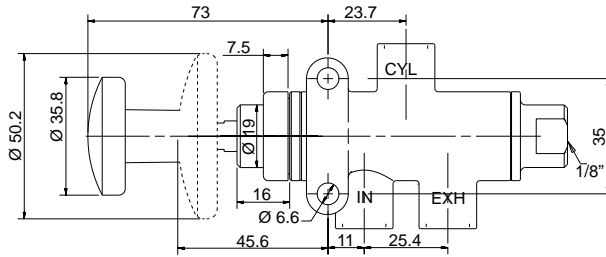
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PE | Mechanically Operated

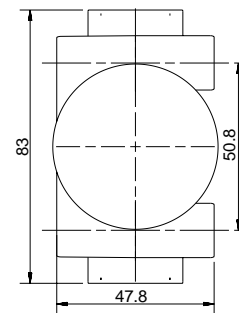
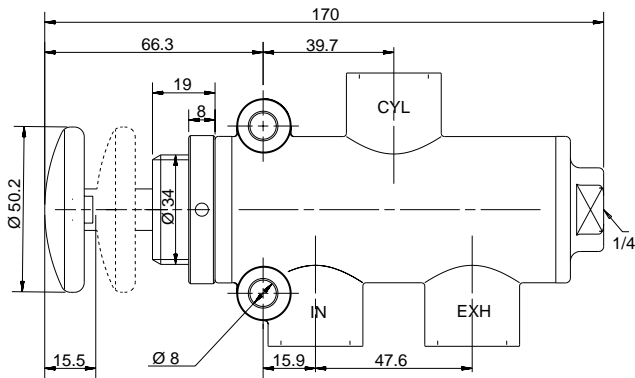
PEM3-PPA | Push-Pull Air | 1/4", 1/2" | 3 port



Port size : 1/4"



Port size : 1/2"



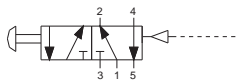
How to Order

| PEM3 | PORT SIZE | PPA | SEAL MATERIAL | BUTTON SIZE | COLOR OF BUTTON |
|------|------------|-----|---------------|-----------------------|------------------------|
| | 1/4" BSP 0 | | NBR N | 35.8 1 ⁽¹⁾ | Green G |
| | 1/4" NPT 1 | | FKM V | 50.2 2 | Black B ⁽²⁾ |
| | 1/2" BSP 2 | | | | Red R ⁽²⁾ |
| | 1/2" NPT 3 | | | | |

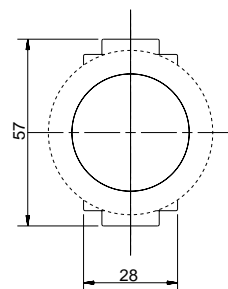
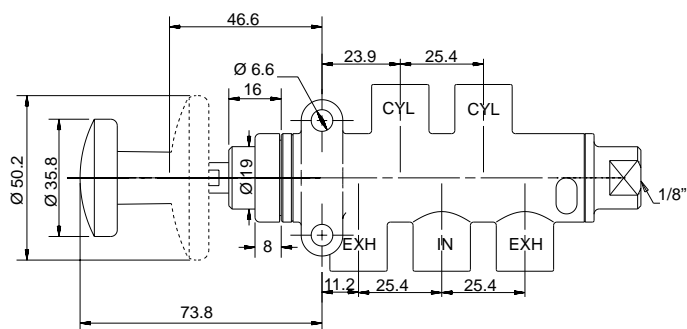
(1) This size is an option for 1/2" valves

(2) Optional

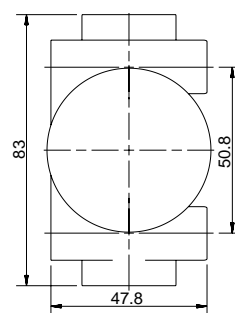
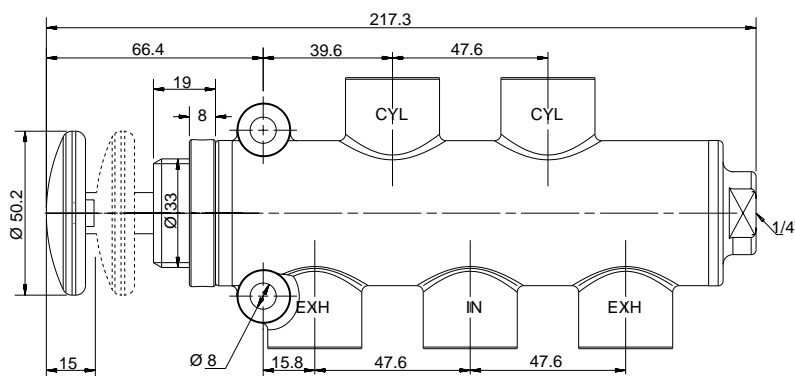
PEM5-PPA | Push-Pull Air | 1/4", 1/2" | 5 port



Port size : 1/4"



Port size : 1/2"



How to Order

| PEM5 | PORT SIZE | PPA | SEAL MATERIAL | BUTTON SIZE | COLOR OF BUTTON |
|------|------------|-----|---------------|-----------------------|------------------------|
| | 1/4" BSP 0 | | NBR N | 35.8 1 ⁽¹⁾ | Green G |
| | 1/4" NPT 1 | | FKM V | 50.2 2 | Black B ⁽²⁾ |
| | 1/2" BSP 2 | | | | Red R ⁽²⁾ |
| | 1/2" NPT 3 | | | | |

(1) This size is an option for 1/2" valves

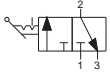
(2) Optional

PNEUMATIC VALVES | Brass Heavy Duty

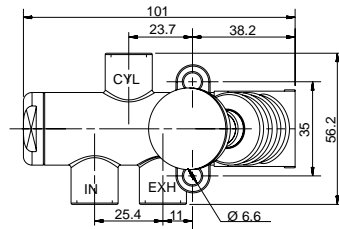
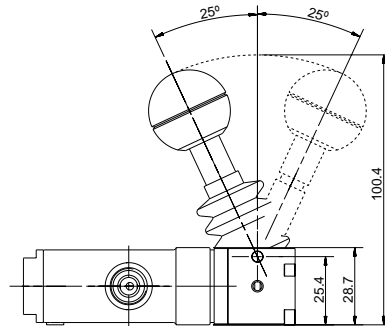
PE Series

PE | Mechanically Operated

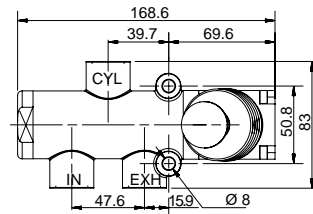
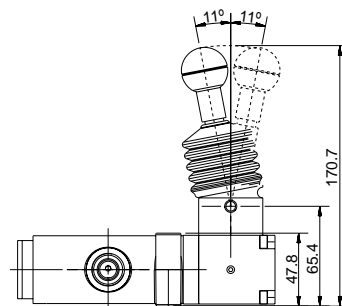
PEM3-L90 | Stable Lever Protec | 1/4", 1/2" | 3 port



Port size : 1/4"



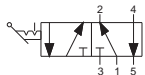
Port size : 1/2"



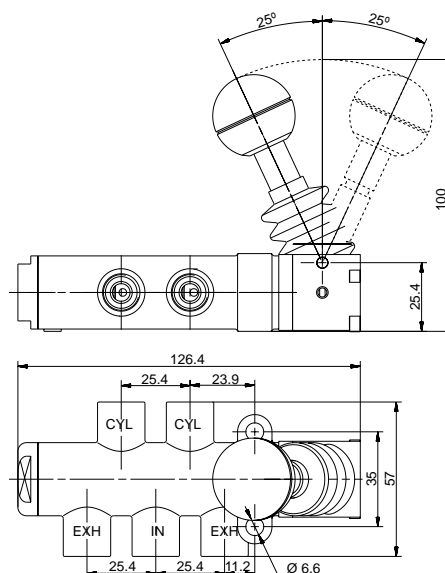
How to Order

| | | | | | | |
|------|---|-----------|---|-----|---|---------------|
| PEM3 | - | PORT SIZE | - | L90 | - | SEAL MATERIAL |
| | | 1/4" BSP | 0 | | | NBR N |
| | | 1/4" NPT | 1 | | | FKM V |
| | | 1/2" BSP | 2 | | | |
| | | 1/2" NPT | 3 | | | |

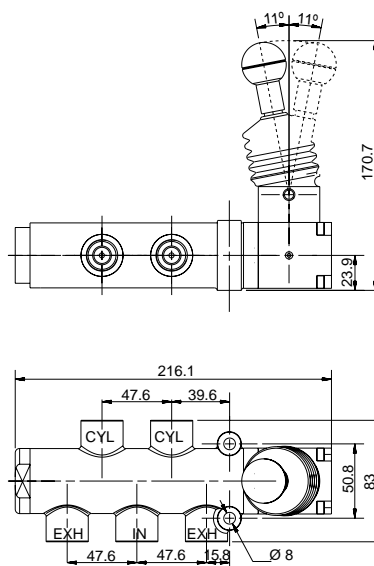
PEM5-L90 | Stable Lever Protec | 1/4", 1/2" | 5 port



Port size : 1/4"



Port size : 1/2"



How to Order

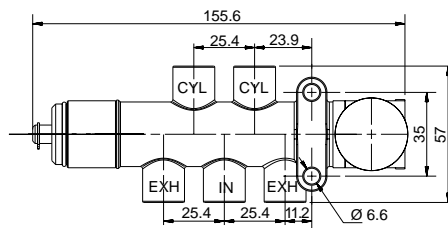
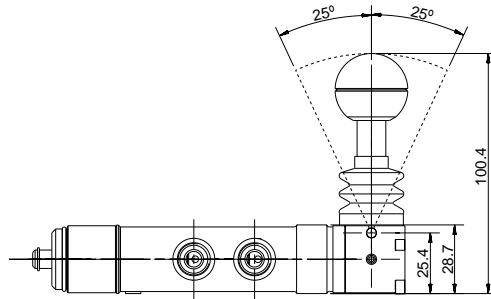
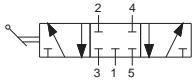
| PEM5 | - | PORT SIZE | - | L90 | - | SEAL MATERIAL |
|------|---|-----------|---|-----|---|---------------|
| | | 1/4" BSP | 0 | | | NBR N |
| | | 1/4" NPT | 1 | | | FKM V |
| | | 1/2" BSP | 2 | | | |
| | | 1/2" NPT | 3 | | | |

PNEUMATIC VALVES | Brass Heavy Duty

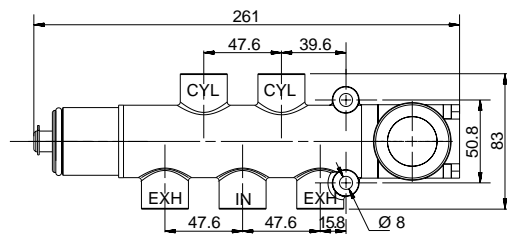
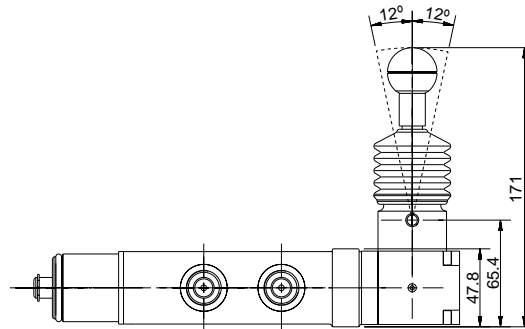
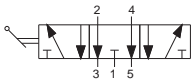
PE Series

PE | Mechanically Operated

PEM5-D90-M | 3 Position Closed Center-Lever Protec Stable | 1/4" | 5 port



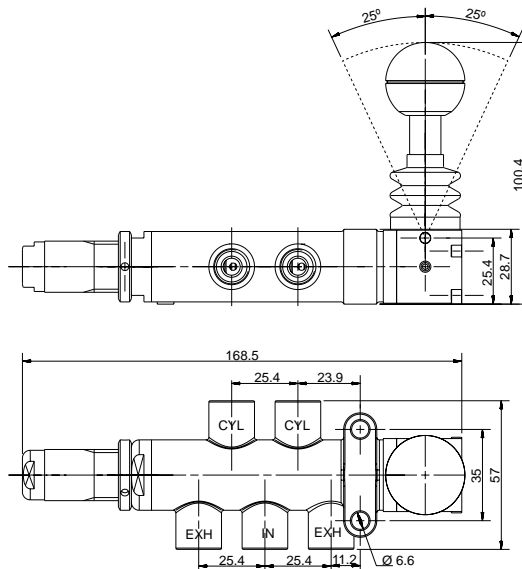
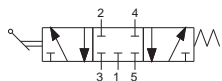
PEM5-D90-W | 3 Position Exhaust Center-Lever Protec Stable | 1/2" | 5 port



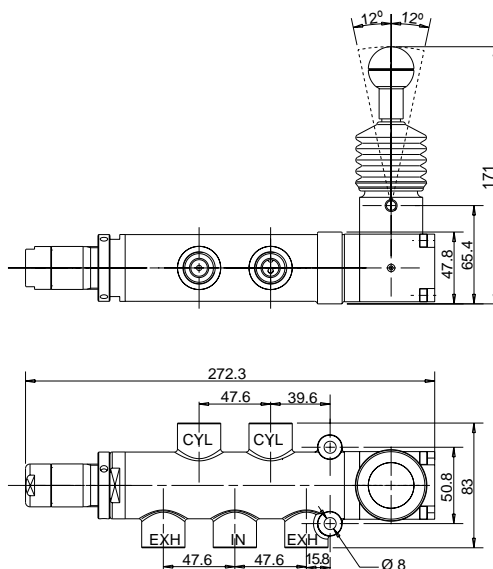
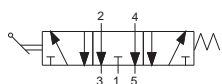
How to Order

| PEM5 | PORT SIZE | FUNCTION | D90 | SEAL MATERIAL |
|------|------------|----------|-----|---------------|
| | 1/4" BSP 0 | Closed | M | NBR N |
| | 1/4" NPT 1 | Center | M | FKM V |
| | 1/2" BSP 2 | Exhaust | W | |
| | 1/2" NPT 3 | Center | W | |

PEM5-S90-P | 3 Position Closed Center-Lever Protec Return to Center | 1/4" | 5 port



PEM5-S90-U | 3 Position Exhaust Center-Lever Protec Return to Center | 1/2" | 5 port



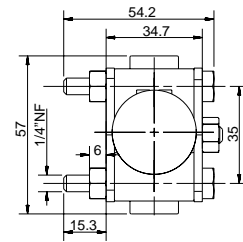
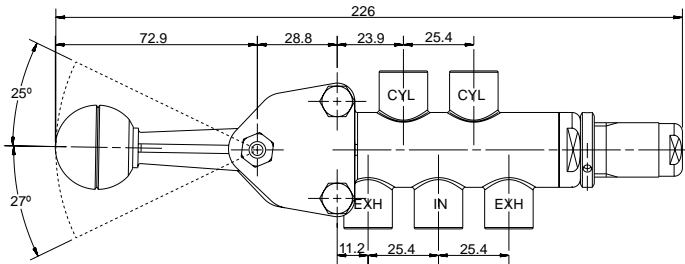
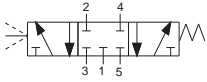
How to Order

| PEM5 | PORT SIZE | FUNCTION | S90 | SEAL MATERIAL |
|------|-----------|-----------|-----|---------------|
| | 1/4" BSP | 0 Closed | | NBR N |
| | 1/4" NPT | 1 Center | | FKM V |
| | 1/2" BSP | 2 Exhaust | | |
| | 1/2" NPT | 3 Center | | |

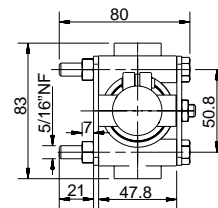
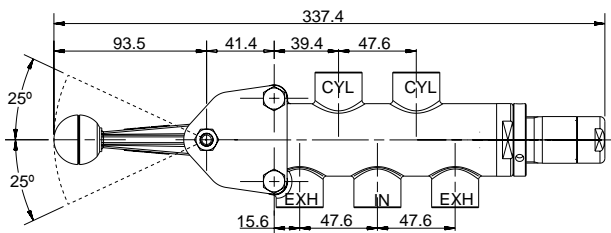
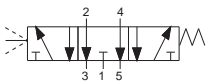
PNEUMATIC VALVES | Brass Heavy Duty PE Series

PE | Mechanically Operated

PEM5-S-P | 3 Position Closed Center-Lever Return to Center | 1/4" | 5 port



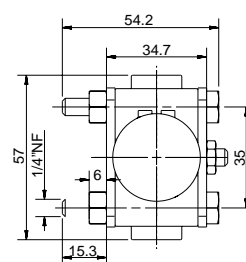
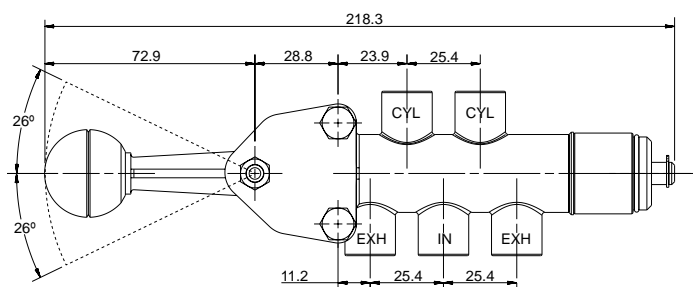
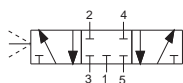
PEM5-S-U | 3 Position Exhaust Center-Lever Return to Center | 1/2" | 5 port



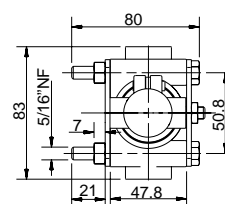
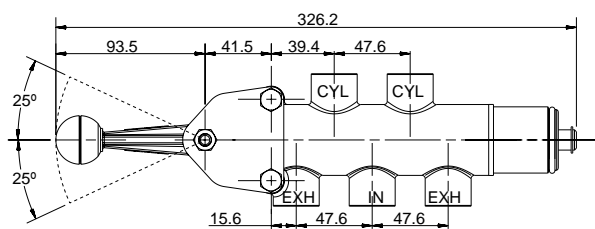
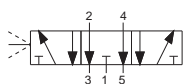
How to Order

| PEM5 | PORT SIZE | FUNCTION | S | SEAL MATERIAL |
|------|------------|---------------|---|---------------|
| | 1/4" BSP 0 | Closed Center | P | NBR N |
| | 1/4" NPT 1 | Center | | FKM V |
| | 1/2" BSP 2 | Exhaust | U | |
| | 1/2" NPT 3 | Center | | |

PEM5-D-M | 3 Position Closed Center-Lever Stable | 1/4" | 5 port



PEM5-D-W | 3 Position Exhaust Center-Lever Stable | 1/2" | 5 port



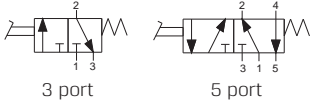
How to Order

| PEM5 | PORT SIZE | FUNCTION | D | SEAL MATERIAL | |
|------|-----------|----------|---------|---------------|---|
| | 1/4" BSP | 0 | Closed | NBR | N |
| | 1/4" NPT | 1 | Center | FKM | V |
| | 1/2" BSP | 2 | Exhaust | | |
| | 1/2" NPT | 3 | Center | | |

PNEUMATIC VALVES | Brass Heavy Duty PE Series

PE | Mechanically Operated

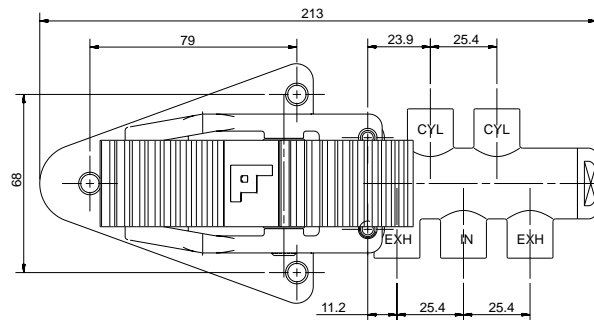
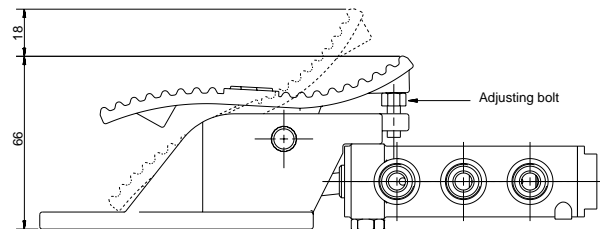
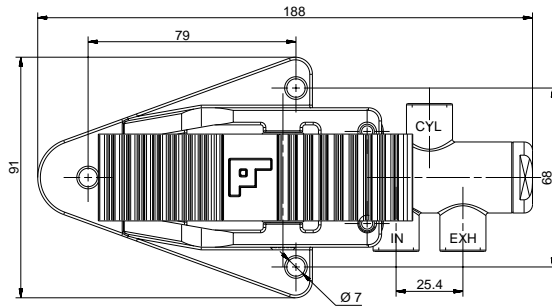
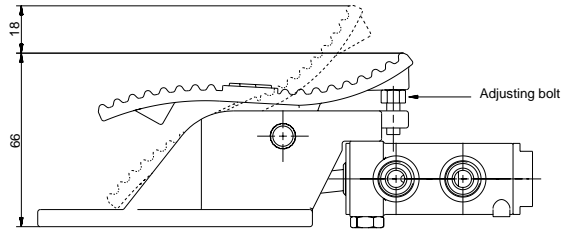
PEM5-PDS | Foot Return Spring | 1/4" | 3 & 5 port



Function : 3 port



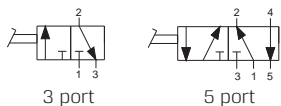
Function : 5 port



How to Order

| PEM | PORT SIZE | FUNCTION | PDS | SEAL MATERIAL |
|-----|------------|----------|-----|---------------|
| | 1/4" BSP 0 | 3 port 3 | | NBR N |
| | 1/4" NPT 1 | 5 port 5 | | FKM V |

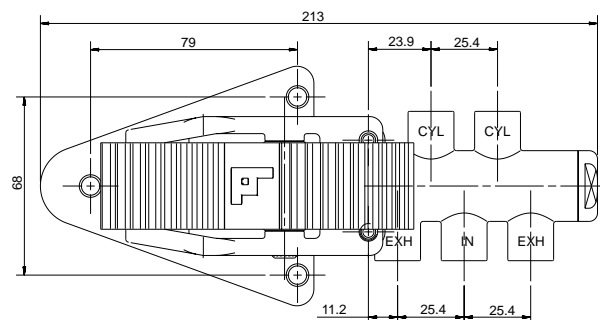
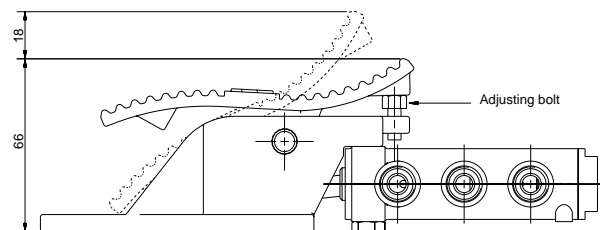
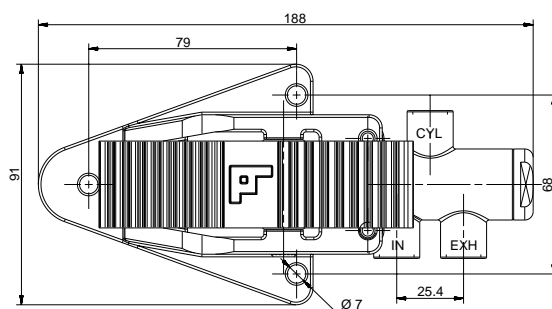
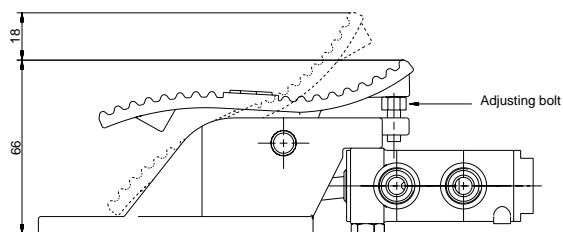
PEM5-PD | Foot Return Foot | 1/4" | 3 & 5 port



Function : 3 port



Function : 5 port



How to Order

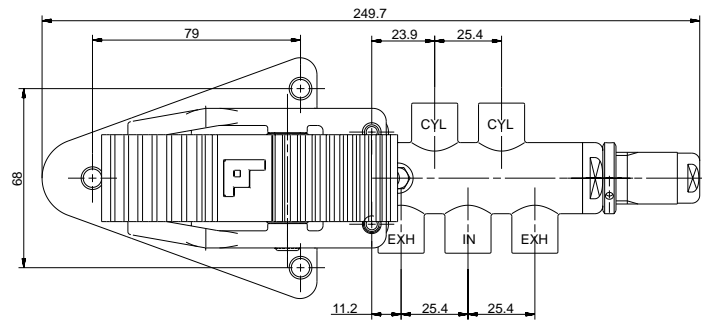
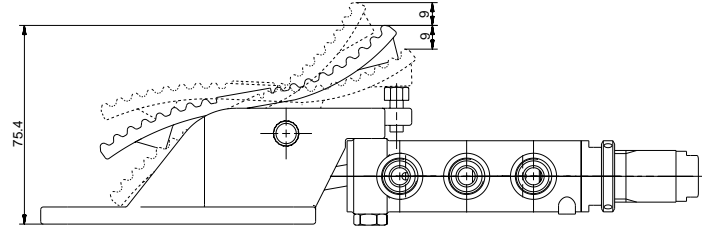
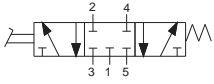
| PEM | PORT SIZE | FUNCTION | PD | SEAL MATERIAL |
|-----|------------|----------|----|---------------|
| | 1/4" BSP 0 | 3 port 3 | | NBR N |
| | 1/4" NPT 1 | 5 port 5 | | FKM V |

PNEUMATIC VALVES | Brass Heavy Duty

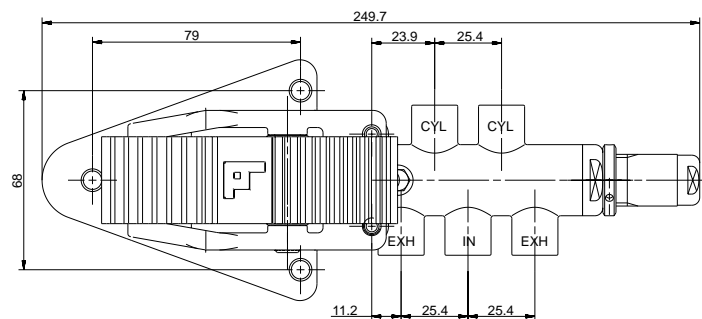
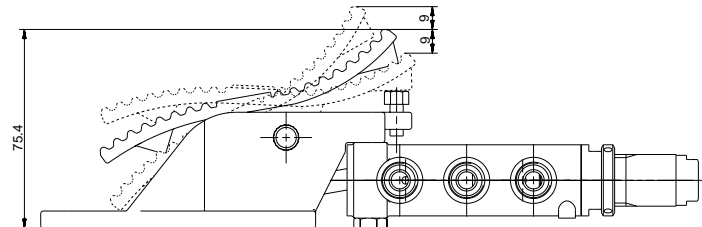
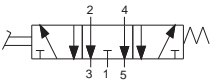
PE Series

PE | Mechanically Operated

PEM5-PE-P | 3 Position Closed Center-Foot
Return to Center | 1/4" | 5 port



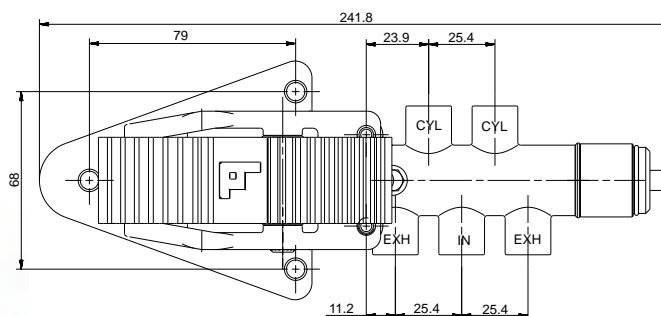
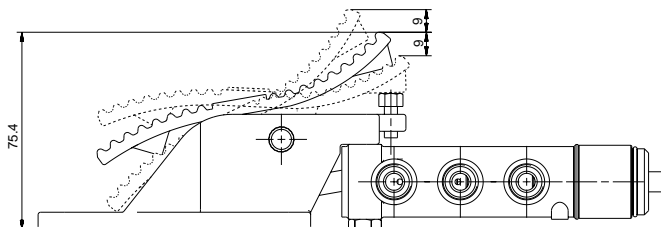
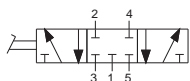
PEM5-PE-U | 3 Position Exhaust Center-Foot
Return to Center | 1/4" | 5 port



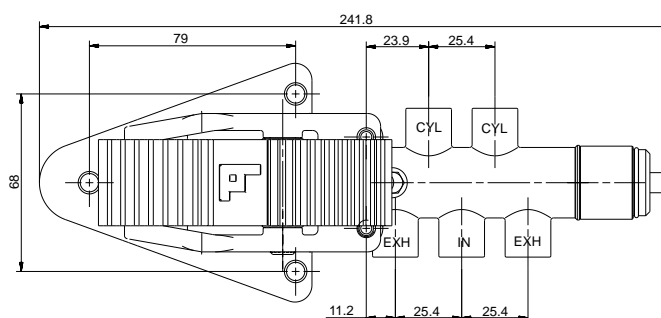
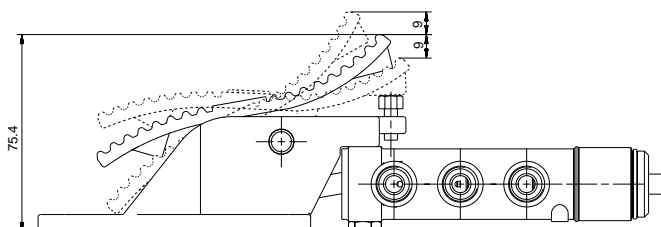
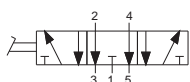
How to Order

| PEM5 | PORT SIZE | FUNCTION | PE | SEAL MATERIAL |
|------|------------|------------------|----|---------------|
| | 1/4" BSP 0 | Closed Center P | | NBR N |
| | 1/4" NPT 1 | Exhaust Center U | | FKM V |

PEM5-PE-M | 3 Position Closed Center-Foot Stable | 1/4" | 5 port



PEM5-PE-W | 3 Position Exhaust Center-Foot Stable | 1/4" | 5 port



How to Order

| PEM5 | PORT SIZE | FUNCTION | PE | SEAL MATERIAL |
|------|------------|------------------|----|---------------|
| | 1/4" BSP 0 | Closed Center M | | NBR N |
| | 1/4" NPT 1 | Exhaust Center W | | FKM V |