

## Common specifications

Item	Specifications
Working fluid	Compressed air (no lubrication)
Max. working pressure MPa <sup>*1</sup>	0.8 ( $\approx$ 120 psi, 8 bar)
Min. working pressure MPa	0.3 ( $\approx$ 44 psi, 3 bar)
Fluid temperature °C	5 (41°F) to 60 (140°F)
Ambient temperature °C <sup>*2</sup>	0 (32°F) to 60 (140°F) (no freezing)
Effective cross-sectional area mm <sup>2</sup> <sup>*3</sup>	2
Port size	$\varnothing$ 4
Compatible tube	O.D. $\varnothing$ 4.0, I.D. $\varnothing$ 2.5, hard nylon tube, soft nylon tube F-1504

\*1: The max. working pressure of the air counter (PCT, PCP) is 0.6 MPa.

\*2: The ambient temperature range for the solenoid valve PRS is 0 to +40°C.

\*3: The effective cross-sectional area of the limit switch (miniature) is 0.7 mm<sup>2</sup>.

F.R.L.

F.R.

F (Filtr)

R (Reg)

L (Lub)

Drain Separ

Mech

Press SW

Res press

exh valve

SlowStart

Anti-bac/Bac-

remove Filtr

Film

Resist FR

Oil-ProhR

Med

Press FR

No Cu/

PTFE FRL

Outfrs FRL

Adapter

Joiner

Press

Gauge

CompFRL

LgFRL

PrecsR

VacF/R

Clean FR

ElecPneuR

AirBoost

Speed Ctrl

Silncr

CheckV/

other

Fit/Tube

Nozzle

Air Unit

PrecsCompn

Electro

Press SW

ContactSW

AirSens

PresSW

Cool

Air Flo

Sens/Ctrl

WaterRtSens

TotAirSys

(Total Air)

TotAirSys

(Gamma)

Gas

generator

RefrDry

DesicDry

HiPolymDry

MainFiltr

Dischrg

etc

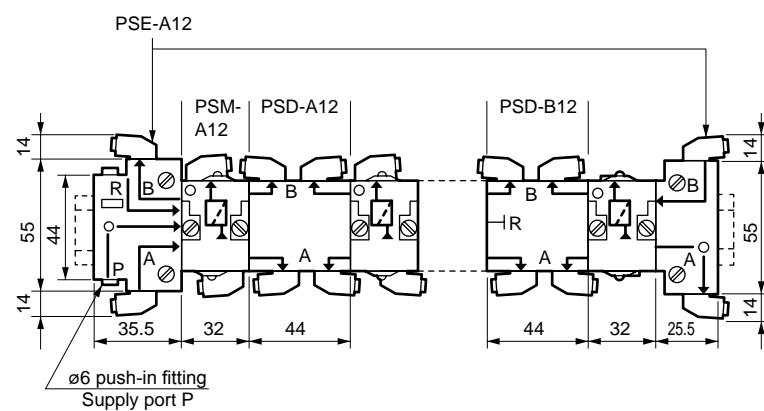
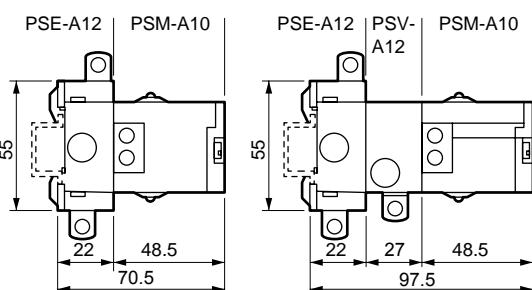
Ending

# V System

F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech
Press SW
Res press
exh valve
SlowStart
Anti-bac/Bac- remove Filt
Film Resist FR
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Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner
Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo
Sens/Ctrl
WaterR/Sens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending

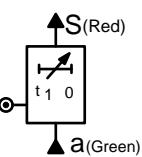
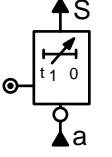
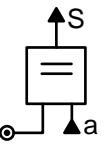
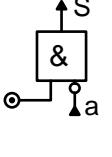
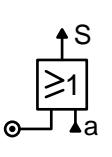
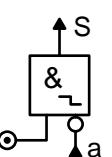
## PLC

Appearance	Symbol	Part name	Model No.	Weight (kg)
PLC element				
● PSM-A12		With manual button	PSM-A12	0.175
		With push-in swivel fitting		
		With indicator		
Body only				
		PSM-A10	0.135	
Sub-base only				
		PSB-A12	0.040	
PLC sub-base V type				
● PSV-A12		With push-in swivel fitting	PSV-A12	0.045
PLC AND element				
● PSL-A12		With push-in swivel fitting	PSL-A12	0.035
		With indicator		
PLC I/O block				
● PSE-A12		With push-in swivel fitting	PSE-A12	0.080
		With port P indicator		
PLC branch block				
● PSE-A12		With push-in swivel fitting	PSD-A12	0.050
● PSD-B12		R type (Port R signal braking)	PSD-B12	0.050



● Note: Use a Ø6 tube for the supply port P and Ø4 tubes for all other ports.

## Relay

Appearance	Symbol	Part name	Model No.	Weight (kg)
		Timer (on-delay) ● With sub-base push-in swivel fitting	PRT-E12 PRT-A12 PRT-B12	0.165 0.165 0.165
● PRT-A12		● 0.1 to 3 sec ● 0.1 to 30 sec ● 10 to 180 sec		
		Timer (off-delay)	PRT-F12 PRT-C12 PRT-D12	0.165 0.165 0.165
● PLJ-C12		● 0.1 to 3 sec ● 0.1 to 30 sec ● 10 to 180 sec		
		YES element	PLJ-C12	0.065
● PLL-C12		● With sub-base push-in swivel fitting With push-in swivel fitting (Operation) Output S is issued when there is signal a.		
		NOT element	PLN-C12	0.065
● PLN-C12		● With sub-base push-in swivel fitting (Operation) Output S is issued when there is no signal a.		
		AND element	PLL-C12	0.065
● PLK-C12		● Sub-base push-in swivel fitting		
		OR element	PLK-C12	0.065
● PLN-D12		● Sub-base push-in swivel fitting		
 Cautions for relay	All relay sub-bases are based on PZU-A12. If the sub-base PZU-C12 is required, order the body and sub-base separately. When ordering only the relay body, change the suffix of the model No. from 12 to 10. For the sub-base relay PL-□-12 other than on-delay timer PRT-A12 and threshold element PLN-D12, the body PL-□-10 and sub-base PZU-A12 are shipped in separate containers.	PLN-D12	0.065	

On-delay timer: Output S is issued after signal a is input and the set time has elapsed.  
Off-delay timer: Output S is constantly issued. Output S stops when signal a is input and the set time has elapsed.

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F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac/Bac-removal Filtr
Film Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
Outfrs FRL
Adapter Joiner
Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRtSens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFilt
Dischrg etc
Ending

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CompFRL

LgFRL

PrecsR

VacF/R

Clean FR

ElecPneuR

AirBoost

Speed Ctrl

Silncr

CheckV/

other

Fit/Tube

Nozzle

Air Unit

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ContactSW

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(Gamma)

Gas

generator

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HiPolymDry

MainFiltr

Dischrg

etc

Ending

## Relay

Appearance	Symbol	Part name	Model No.	Weight (kg)
<b>Pressure switch</b>				
● PRE-A12	A   B ---   o o     a	● With sub-base push-in swivel fitting With manual button Contact capacity (resistance load) 600 V/10 A	PRE-A12	0.130
<b>Solenoid valve</b>				
● PRS-A121 <sup>F</sup> <sub>M</sub>	A   B ---   o o     a     o     a	● With sub-base push-in swivel fitting With manual button	PRS-A121F(110 VAC) PRS-A121M(220 VAC)	0.165 0.165
<b>Memory element</b>				
● PLM-A12	S ---   o     x     y	● With sub-base push-in swivel fitting ● No sub-base Output S is issued at signal X (setting) Reset at signal y (resetting).	PLM-A12 PLM-A10	0.185 0.135
● PLM-A10				

## Relay sub-base

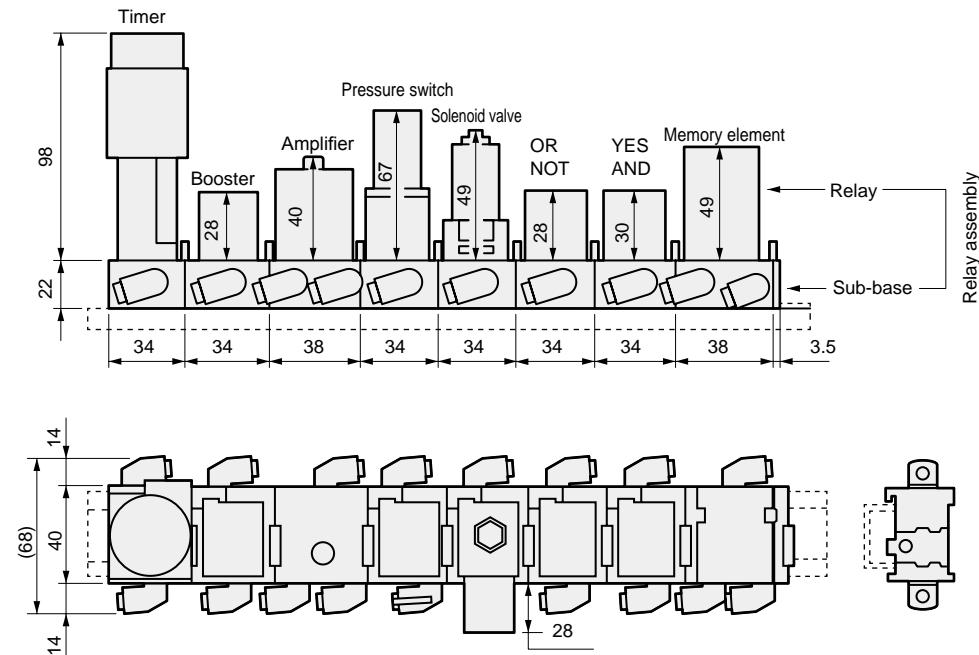
Appearance	Symbol	Part name	Model No.	Weight (kg)
<b>3 port sub-base</b>				
● PZU-A12	A type --- 	● A type	PZU-A12	0.040
● PZU-E12	C type --- 	● C type	PZU-C12	0.045
<b>4 port sub-base</b>				
● PZU-B12	With push-in swivel fitting --- 	● With push-in swivel fitting	PZU-B12	0.050
<b>Input block</b>				
● Applicable to 3 port sub-base YES element NOT element AND element OR element Pressure switch Solenoid valve Timer Threshold element Booster ● Applicable to 4 port sub-base Memory element Amplifier	Input block --- 	● Input block	PZU-E12	0.045

▲ Cautions for relay

For the sub-base relay P□-□12 other than on-delay timer PRT-A12 and threshold element PLN-D12, the body P□-□10 and sub-base PZU-A12 are shipped in separate containers.

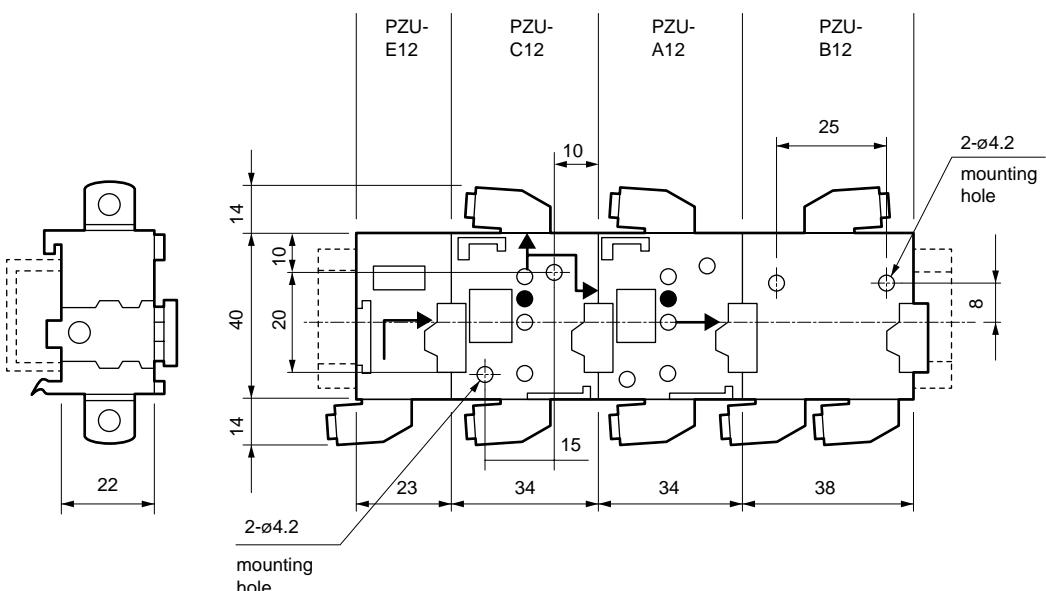
## Manifold installation dimensions

### Mounting dimensions



- The above drawing is an example of relay elements installed on the sub-base with a push-in swivel fitting.

### Sub-base installation dimensions

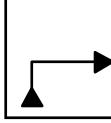
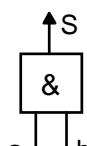
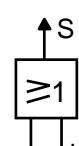
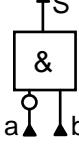


- Use Ø4 tubes for all connection ports.
- Can be attached to the rail in a single touch.
- For mounting rails, use those (35 mm width) that conform to the DIN standard.  
(DIN rail for pneumatic valves MN4GA and 4GB Series can be purchased.)

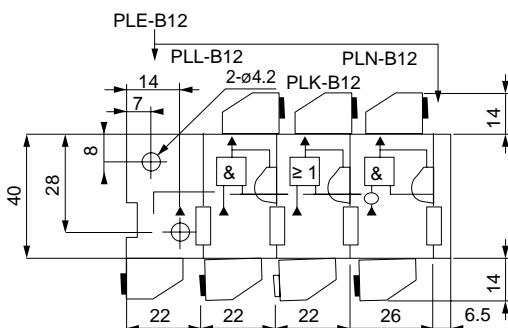
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Anti-bac/Bac-removal Filter
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Adapter Joiner
Press Gauge
CompFRL
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PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRtSens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFrl
Dischrg etc
Ending

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SlowStart
Anti-bac Bac- remove Filt
Film Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
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Adapter Joiner
Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo
Sens/Ctrl
WaterR/Sens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending

## Integrated (logic element)

Appearance	Symbol	Part name	Model No.	Weight (kg)
		Side block		
● PLE-B12		● With push-in swivel fitting	PLE-B12	0.075
		AND element		
● PLL-B12		● With push-in swivel fitting (Operation) Output S is issued when both signals a and b are input.	PLL-B12	0.080
		OR element		
● PLK-B12		● With push-in swivel fitting (Operation) Output S is issued when signal a or b, or both are input.	PLK-B12	0.080
		NOT element		
● PLN-B12		● With push-in swivel fitting (Operation) Output S is issued when signal b is input and signal a is not.	PLN-B12	0.080

## Mounting dimensions



● Use ø4 tubes for all connection ports.

The integrated element is connected through a selector.

The following two methods are used.

- 1) Cascade line connection
- 2) COM line connection

Using the selector

The integrated element is connected through a selector.

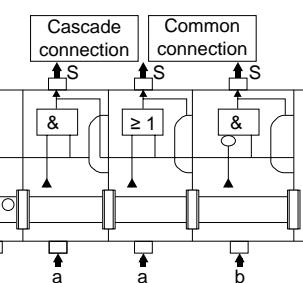
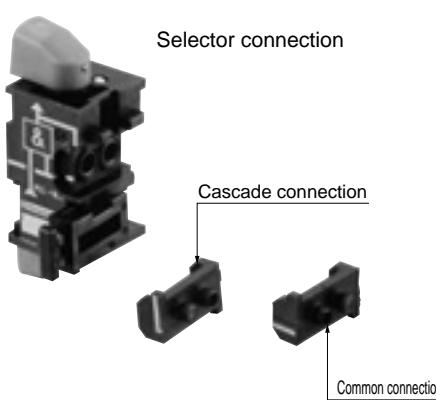
The following two methods are used.

1. Cascade connection

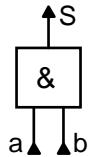
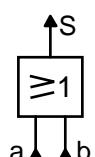
When the element selector is set in a cascade state, it is internally connected to inside board b. The circuit is called a cascade circuit when all elements are set in a cascade state.

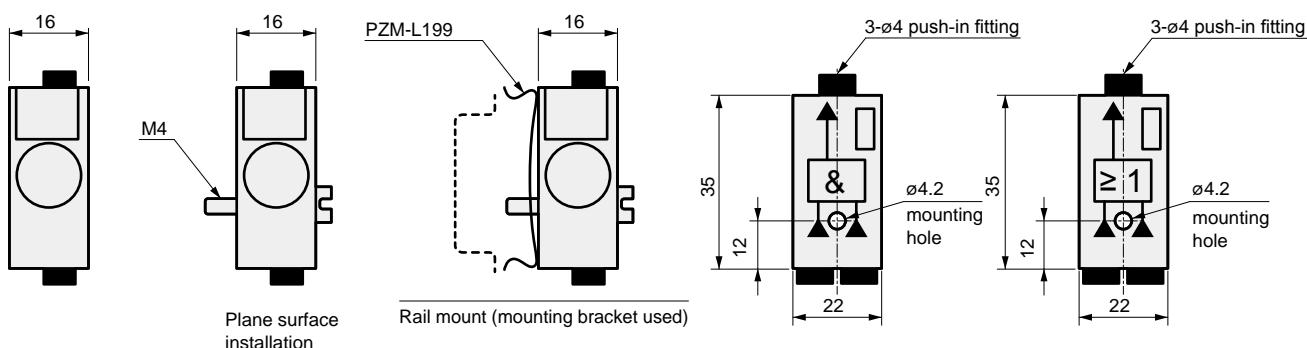
2. Common connection

When the element selector is set in a common connection state, each element's inside board b is connected straight. The circuit is called a common input circuit when all elements are connected in a common state.



**Line type (logic element)**

Appearance	Symbol	Part name	Model No.	Weight (kg)
		AND element ● With push-in fitting	PLL-A11	0.065
● PLL-A11				
		OR element ● With push-in fitting	PLK-A11	0.065
● PLK-A11				
		Mounting bracket (including mounting screws) ● Used for rail installation.	PZM-L199	0.015
● PZM-L199				

**Mounting dimensions**

F.R.L.  
F.R.  
F (Filtr)  
R (Reg)  
L (Lub)  
Drain Separ  
Mech Press SW  
Res press exh valve  
SlowStart  
Anti-bac/Bac remove Filtr  
Film Resist FR  
Oil-ProhR  
Med Press FR  
No Cu/ PTFE FRL  
Outfrs FRL  
Adapter Joiner  
Press Gauge  
CompFRL  
LgFRL  
PrecsR  
VacF/R  
Clean FR  
ElecPneuR  
AirBoost  
Speed Ctrl  
Silncr  
CheckV/ other  
Fit/Tube  
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Air Unit  
PrecsCompn  
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Air Flo Sens/Ctrl  
WaterRtSens  
TotAirSys (Total Air)  
TotAirSys (Gamma)  
Gas generator  
RefrDry  
DesicDry  
HiPolymDry  
MainFiltr  
Dischrg etc  
Ending

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ElecPneuR  
AirBoost  
Speed Ctrl

Silncr  
CheckV/other  
Fit/Tube

Nozzle

Air Unit

PrecsCompn  
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ContactSW  
AirSens  
PresSW Cool  
Air Flo  
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WaterRisSens

TotAirSys (Total Air)  
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Gas generator

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HiPolymDry  
MainFiltr  
Dischrg etc

Ending

## Air lamp

### Appearance



● PXV-M1

### Type of color

Air lamp

- Green with push-in fitting
- Orange with push-in fitting
- Yellow with push-in fitting

### Model No.

PXV-M131

### Weight (kg)

0.085

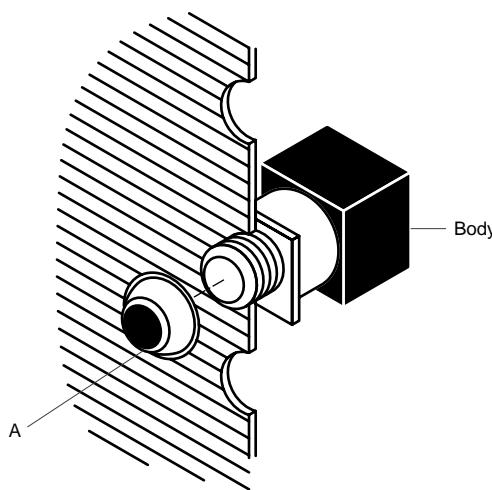
PXV-M141

0.085

PXV-M151

0.085

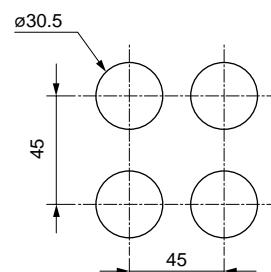
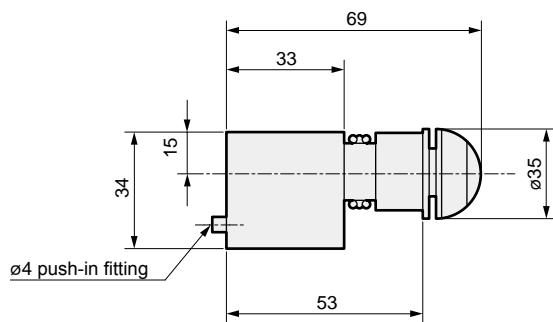
## Installation explanation



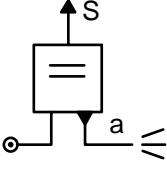
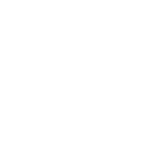
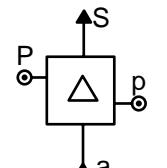
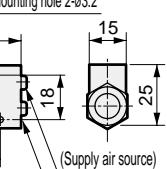
When installing on a panel, turn lens (A) to the left to remove it. Insert the body from the back of the panel, then turn lens (A) to the right to fix it in place.

\* Colors shown above are used when supplying air.

## Mounting dimensions



(Mounting hole plate thickness: t1.5 to 6)

Element and sensor				
Appearance	Symbol	Part name	Model No.	Weight (kg)
		Booster ● With sub-base push-in swivel fitting Booster signal a is connected to the limit sensor on the machine. Booster output S is issued by closing the bleed hole on the end of the limit sensor.	PRF-A12	0.070
● PRF-A12				
		Limit sensor touch type ● Push-in fitting	PXF-A111	0.030
● PXF-A111				
		Limit sensor ball roller ● Push-in fitting	PXF-A121	0.035
● PXF-A121				
		Limit sensor wire ● Push-in fitting	PXF-A131	0.035
● PXF-A131				
		Amplifier ● With sub-base push-in swivel fitting With manual button Fine pressure signal a from the proximity sensor, etc., is amplified to the supply pressure to issue output S.	PRD-A12	0.175
● PRD-A12				
		Proximity sensor ● Push-in fitting	PXD-A111	0.060
● PXD-A111				

**⚠ Element and sensor cautions** The body PRF-A10 and sub-base PZU-A12 are shipped in separate containers for the booster PRF-A12. The body PRD-A10 and sub-base PZU-B12 are shipped in separate containers for the amplifier PRD-A12.

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CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterR/Sens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending

## Pushbutton switch/switch body (separated)

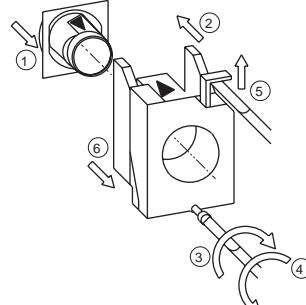
Outline drawing	Symbol	Part name	Model No.	Weight (kg)
		Discrete switch body NC (with switch head installation base) ● Flow rate 60 l/min. (ANR) (at pressure of 0.6 MPa)	PXB-B 3111B	0.048
		Discrete switch body NO (with switch head installation base) ● Flow rate 60 l/min. (ANR) (at pressure of 0.6 MPa)	PXB-B 3121B	0.048
		Only switch body NC ● Flow rate 60 l/min. (ANR) (at pressure of 0.6 MPa)	PXB-B 3911	0.010
		Only switch body NO ● Flow rate 60 l/min. (ANR) (at pressure of 0.6 MPa)	PXB-B 3921	0.010

### Safety Precautions

#### ◆ Installing on and removing from the panel

##### Mounting

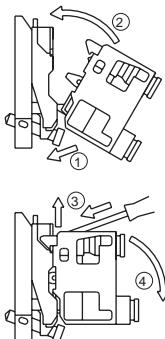
- (1) With the arrow facing up, push in the switch head from the front of the panel.
  - (2) Push in the switch body, aligning the arrow on it with the arrow on the switch head.
  - (3) Tighten the fixing screw on the bottom. (Tightening torque: Max. 0.8 N·m)
- Removal: <sup>①</sup>p(4) Loosen the fixing screw on the bottom.
- (5) Lift up the switch body hook with a flathead screwdriver.
  - (6) Pull out the entire switch body.



#### ◆ Installing and removing the switch body on/from the installation base

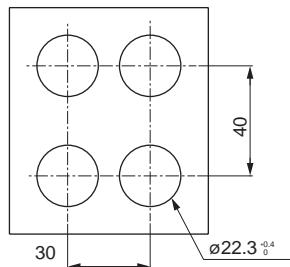
##### Mounting

- (1) Align the protrusion on the bottom of the switch body with the groove on the bottom of the mounting base.
  - (2) Push in the top part until it clicks.
- Removal: <sup>③</sup>p(3) Lift up the bracket on the top of the switch body with a flathead screwdriver.
- (4) Remove the switch body.



#### ◆ Minimum panel cut dimension

Panel plate thickness: 1 to 6 mm



Model No. of push button

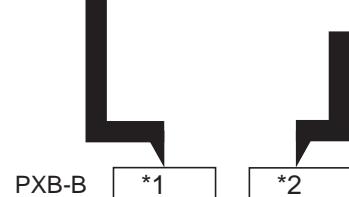
Model No. of only switch body: PXB-B

\*1  
\*2

Model No. of only switch head: ZB4-B

\*1  
\*2

Model No. of switch combination: PXB-B



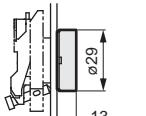
## Switch head (separated)

### ◇ Pushbutton head

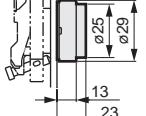
#### Outline drawing



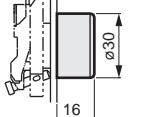
● Flat



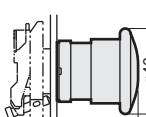
● Protrusion



● Dust-proof



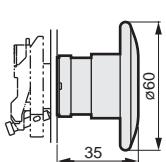
● Mushroom



Model No.	L
ZB4-BC□	32
ZB4-BT84	38.5
ZB4-BS844	39.5



● Large mushroom



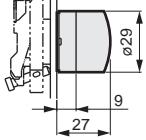
Type	Actuation	Color	Model No.	Weight (kg)
Flat shape	Momentary (Automatic return)	Black	ZB4-B A2	0.029
		Green	ZB4-B A3	0.029
		Red	ZB4-B A4	0.029
		Yellow	ZB4-B A5	0.029
Extension	Momentary (Automatic return)	Black	ZB4-B L2	0.030
		Green	ZB4-B L3	0.030
		Red	ZB4-B L4	0.030
		Yellow	ZB4-B L5	0.030
Dust-proof	Momentary (Automatic return)	Black	ZB4-B P2	0.031
Mushroom (Head diameter ø40 mm)	Momentary (Automatic return)	Black	ZB4-B C2	0.072
		Green	ZB4-B C3	0.072
		Red	ZB4-B C4	0.072
		Yellow	ZB4-B C5	0.072
Latch, push/pull	Red	ZB4-B T84	0.078	
		ZB4-B S844	0.073	
Large mushroom (Head diameter ø60 mm)	Momentary (Automatic return)	Black	ZB4-B R2	0.093

### ◇ Selector head

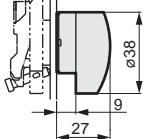
#### Outline drawing



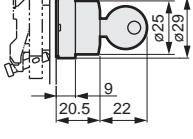
● Standard handle



● Long handle



● Select type with key



Type	Actuation	Model No.	Weight (kg)
Standard handle, black	2-position self-hold	ZB4-B D2	0.044
	3-position self-hold	ZB4-B D3	0.044
Long handle, black	2-position self-hold	ZB4-B J2	0.044
	3-position self-hold	ZB4-B J3	0.044
	3-position automatic return	ZB4-B J5	0.044
	3-position left side automatic reset/ right side self-hold	ZB4-B J7	0.044
Select type with key	2-position self-hold	ZB4-B G2	0.069
	2-position self-hold	ZB4-B G4	0.069

indicates the key release position.

Model No. of switch body and switch head combination

(Example) Combination of discrete switch body NC and  
mushroom redhead Model No.: PXB-B3111BC4.

F.R.L.

F.R.

F (Filtr)

R (Reg)

L (Lub)

Drain

Separ

Mech

Press SW

Res press

exh valve

SlowStart

Anti-bac/Bac-

remove Fil

Film

Resist FR

Oil-ProhR

Med

Press FR

No Cu/

PTFE FRL

Outfrs FRL

Adapter

Joiner

Press

Gauge

CompFRL

LgFRL

PrecsR

VacF/R

Clean FR

ElecPneuR

AirBoost

Speed Ctrl

Silncr

CheckV/

other

Fit/Tube

Nozzle

Air Unit

PrecsCompn

Electro

Press SW

ContactSW

AirSens

PresSW

Cool

Air Flo

Sens/Ctrl

WaterRtSens

TotAirSys

(Total Air)

TotAirSys

(Gamma)

Gas

generator

RefrDry

DesicDry

HiPolymDry

MainFiltlr

Dischrg

etc

Ending

F.R.L.  
F.R.  
F (Filtr)  
R (Reg)  
L (Lub)  
Drain Separ  
Mech Press SW  
Res press exh valve  
SlowStart  
Anti-bac Bac- remove Filt  
Film Resist FR  
Oil-ProhR  
Med Press FR  
No Cu/ PTFE FRL  
Outdrs FRL  
Adapter Joiner  
Press Gauge  
CompFRL  
LgFRL  
PrecsR  
VacF/R  
Clean FR  
ElecPneuR  
AirBoost  
Speed Ctrl  
Silncr  
CheckV/ other  
Fit/Tube  
Nozzle  
Air Unit  
PrecsCompn  
Electro Press SW  
ContactSW  
AirSens  
PresSW Cool  
Air Flo  
Sens/Ctrl  
WaterRiSens  
TotAirSys (Total Air)  
TotAirSys (Gamma)  
Gas generator  
RefrDry  
DesicDry  
HiPolymDry  
MainFiltr  
Dischrg etc  
Ending

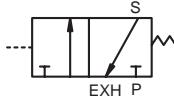
## Miniature limit switch

Appearance	Code	Part name	Model No.	Weight (kg)
		Plunger push-in fitting Direct acting 3-port valve NC EXH is released into the atmosphere. JIS symbol 	PXC-M111	0.030
● PXC-M111				
			PXC-M121	0.040
● PXC-M121				
			PXC-M521	0.060
● PXC-M521				

## Attachment for PXC-M111

Appearance	Code	Part name	Model No.	Weight (kg)
		Roller lever		
● PXC-Z11			PXC-Z11	0.008

**Compact limit switch**

Appearance	Symbol	Part name	Model No.	Weight (kg)
		Plunger Direct acting 3-port valve NC. JIS symbol	PXC-M601A110	0.150
● PXC-M601A110				
		Roller plunger	PXC-M601A102	0.160
● PXC-M601A102				
		Cross roller plunger	PXC-M601A103	0.160
● PXC-M601A103				

**Attachment**

Appearance	Symbol	Part name	Model No.	Weight (kg)
		One way roller lever	XCM-Z24	0.080
● XCM-Z24				

F.R.L.  
F.R.  
F (Filtr)  
R (Reg)  
L (Lub)  
Drain Separ  
Mech Press SW  
Res press exh valve  
SlowStart  
Anti-bac/Bac- remove Filtr  
Film Resist FR  
Oil-ProhR  
Med Press FR  
No Cu/ PTFE FRL  
Outfrs FRL  
Adapter Joiner  
Press Gauge  
CompFRL  
LgFRL  
PrecsR  
VacF/R  
Clean FR  
ElecPneuR  
AirBoost  
Speed Ctrl  
Silncr  
CheckV/ other  
Fit/Tube  
Nozzle  
Air Unit  
PrecsCompn  
Electro Press SW  
ContactSW  
AirSens  
PresSW Cool  
Air Flo Sens/Ctrl  
WaterRtSens  
TotAirSys (Total Air)  
TotAirSys (Gamma)  
Gas generator  
RefrDry  
DesicDry  
HiPolymDry  
MainFiltr  
Dischrg etc  
Ending

F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac remove Filt
Film Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner
Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRlSens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending

## Compact limit switch specifications

### Specifications

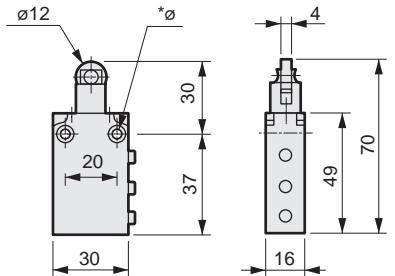
Item	PXC-M601A110	PXC-M601A102	PXC-M601A103	PXC-M601A110 +XCM-Z24	PXC-M111	PXC-M121	PXC-M521
Max. operating speed	0.5 m/s	0.1 m/s	0.1 m/s	0.5 m/s	0.5 m/s	1.0 m/s	1.0 m/s
Operating distance: A *1	1.7 mm	1.7 mm	1.7 mm	9.4 mm(A)	0.9 mm	2.0 mm	2.2 mm
Max. distance: B	5.0 mm	5.0 mm	5.0 mm	-	1.4 mm	3.2 mm	5.8 mm
Return distance	0.3 mm	0.2 mm	0.2 mm	1.2 mm(A)	0.15 mm	0.3 mm	0.5 mm
Min. operating force *1	24 N	23 N	23 N	19 N	11 N	4.5 N	7 N

\*1: Value at supply pressure of 0.6 MPa.

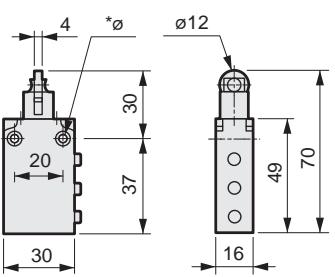
## Compact limit switch

### Dimensions

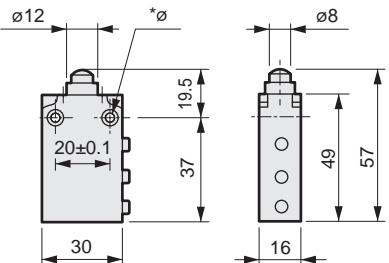
● PXC-M601A102



● PXC-M601A103

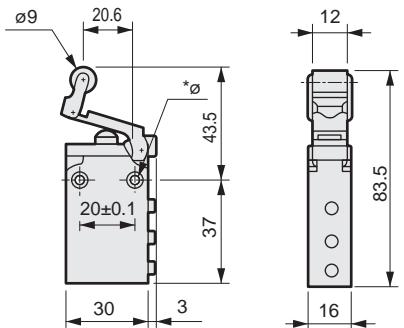


● PXC-M601A110



● PXC-M601A110+

XCM-Z24



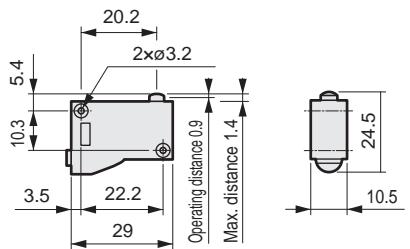
\* Ø hole detailed dimensions

2-Ø4.3 through

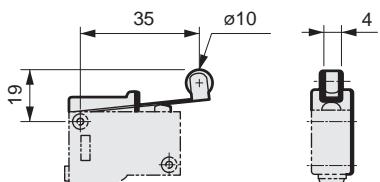
2-spot face diameter Ø8.2

spot face depth 4

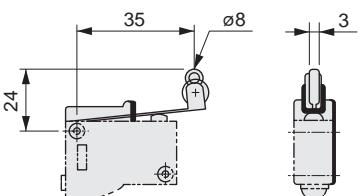
● PXC-M111



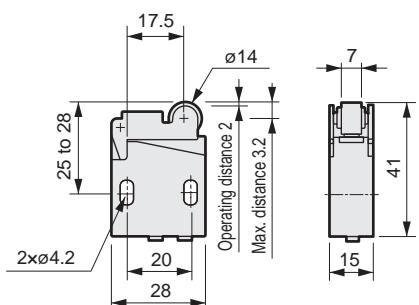
● PXC-Z11



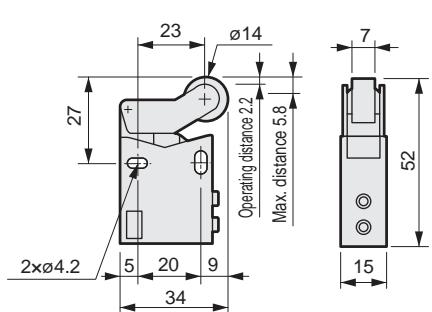
● PXC-Z12



● PXC-M121



● PXC-M521



F.R.L.

F.R.

F (Filtr)

R (Reg)

L (Lub)

Drain

Separ

Mech

Press SW

Res press

exh valve

SlowStart

Anti-bac/Bac-

remove Fil

Film

Resist FR

Oil-ProhR

Med

Press FR

No Cu/

PTFE FRL

Outfrs FRL

Adapter

Joiner

Press

Gauge

CompFRL

LgFRL

PrecsR

VacF/R

Clean FR

ElecPneuR

AirBoost

Speed Ctrl

Silncr

CheckV/

other

Fit/Tube

Nozzle

Air Unit

PrecsCompn

Electro

Press SW

ContactSW

AirSens

PresSW

Cool

Air Flo

Sens/Ctrl

WaterRtSens

TotAirSys

(Total Air)

TotAirSys

(Gamma)

Gas

generator

RefrDry

DesicDry

HiPolymDry

MainFiltr

Dischrg

etc

Ending

F.R.L.

F.R.

F (Filtr)

R (Reg)

L (Lub)

Drain Separ

Mech

Press SW

Res press

exh valve

SlowStart

Anti-bac/Bac-

remove Filt

Film

Resist FR

Oil-ProhR

Med

Press FR

No Cu/

PTFE FRL

Outdrs FRL

Adapter

Joiner

Press

Gauge

CompFRL

LgFRL

PrecsR

VacF/R

Clean FR

ElecPneuR

AirBoost

Speed Ctrl

Silncr

CheckV/

other

Fit/Tube

Nozzle

Air Unit

PrecsCompn

Electro

Press SW

ContactSW

AirSens

PresSW

Cool

Air Flo

Sens/Ctrl

WaterR/Sens

TotAirSys

(Total Air)

TotAirSys

(Gamma)

Gas

generator

RefrDry

DesicDry

HiPolymDry

MainFiltr

Dischrg

etc

Ending

## Limit switch

### Appearance

### Part name

### Model No.

### Weight (kg)

### Appearance

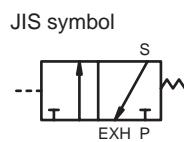
### Part name

### Model No.

### Weight (kg)



● PXC-K211



### NO

### ● Push-in fitting pilot operated 3-port valve NO.

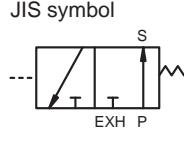
### PXC-K

### 221

### 0.32



● PXC-K221



### Appearance

### Part name

### Model No.

### Weight (kg)

### Plunger

### ZCK-D

### 01

### 0.100



● ZCK-D01



● ZCK-D02



● ZCK-D21  
D23



● ZCK-D06



● ZCK-D08

### Appearance

### Part name

### Model No.

### Weight (kg)

### Roller

### ZCK-D

### 02

### 0.140

### Roller lever

### Resin

### ZCK-D

### 21

### 0.150

### Steel

### ZCK-D

### 23

### 0.160

### Wire

### ZCK-D

### 06

### 0.100

### \* Coil spring type

### ZCK-D

### 08

### 0.035

### How to order (single unit)

- Model No. of switch body only
- Model No. of head only
- Model No. of lever only

PXC-K [ ]

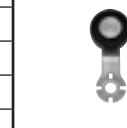
ZCK-D [ ]

ZCK-Y [ ]

## **Rotary head lever actuator**

ZCK-D05

Note: Three output methods can be used by changing the position of the inner cam. Refer to page 1668 for details.



ZCK-Y31



● ZCK-Y41



ZCK-Y55



● ZCK-Y81



● ZCK-Y91

## How to order (combination)

- Model No. of plunger and switch combination
  - Model No. of rotary and switch combination
  - Model No. of lever/rotary and switch combination

● Model No. of lever/rotary and switch combination  
(Example) Switch body, head, lever actuator combination,  
NC, rotary, and resin roller PXC-K211 05 31

\*Made-to-order product.

F.R.L.

F.R.

F (Filtr)

R (Reg)

L (Lub)

Drain Separ

Mech

Press SW

Res press

exh valve

SlowStart

Anti-bac/Bac-

remove Filt

Film

Resist FR

Oil-ProhR

Med

Press FR

No Cu/

PTFE FRL

Outdrs FRL

Adapter

Joiner

Press

Gauge

CompFRL

LgFRL

PrecsR

VacF/R

Clean FR

ElecPneuR

AirBoost

Speed Ctrl

Silncr

CheckV/

other

Fit/Tube

Nozzle

Air Unit

PrecsCompn

Electro

Press SW

ContacSW

AirSens

PresSW

Cool

Air Flo

Sens/Ctrl

WaterR/Sens

TotAirSys

(Total Air)

TotAirSys

(Gamma)

Gas

generator

RefrDry

DesicDry

HiPolymDry

MainFiltr

Dischrg

etc

Ending

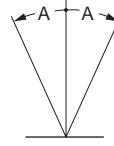
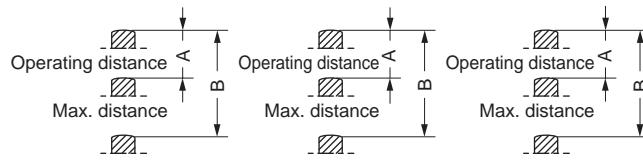
## Limit switch

### Specification PXC-K<sup>21</sup>

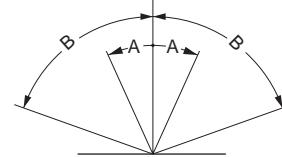
Appearance	Description	ZCK-D01	ZCK-D02	ZCK-D21 ZCK-D23	ZCK-D06 ZCK-D08
● ZCK-D01	Max. operating speed	0.5 m/S	0.5 m/S	1.5 m/S	1 m/S
	Operating distance: A <sup>*1</sup>	0.5 mm	0.5 mm	0.5 mm	-
	Max. distance: B	2.2 mm	2.2 mm	2.6 mm	-
	Return distance	0.2 mm	0.2 mm	0.2 mm	-
	A operating angle <sup>*1</sup>	-	-	-	35°
● ZCK-D02	Return angle	-	-	-	12°
	Min. operating force <sup>*1</sup>	16 N	20 N	15 N	-
	Min. operating torque <sup>*1</sup>	-	-	-	0.12 N.m

\*1: Value at supply pressure of 0.6 MPa.

### ● ZCK-D06



### Rotary head ZCK-D05

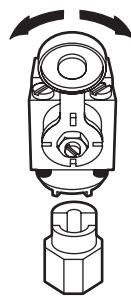


A operating angle *1	31°
B-Max. angle	80°
Return angle	3°
Min. operating torque *1	0.21 N.m

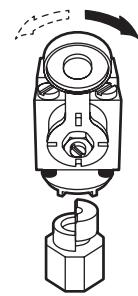
\*1: Value at supply pressure of 0.6 MPa.

#### ● Retrieving the output signal

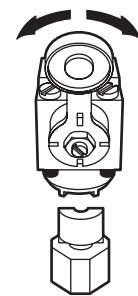
Output signal retrieval is altered by changing the position of the internal cam as shown below.



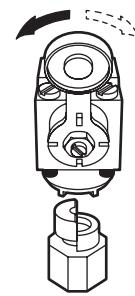
Output signal: Left-right



For right



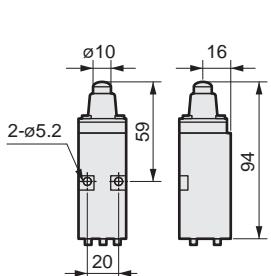
Left-right



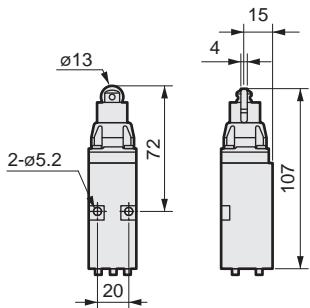
For left

**Limit switch****Dimensions**

● PXC-K21101, PXC-K22101

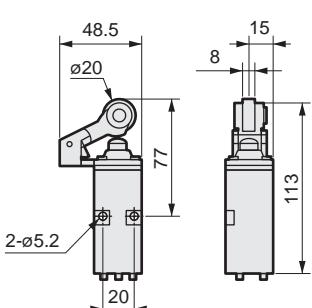


● PXC-K21102, PXC-K22102

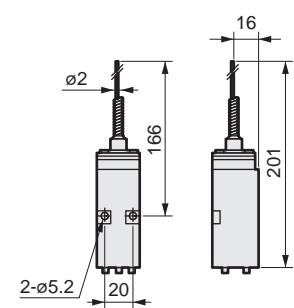


● PXC-K21121, PXC-K22121

K21123 K22123

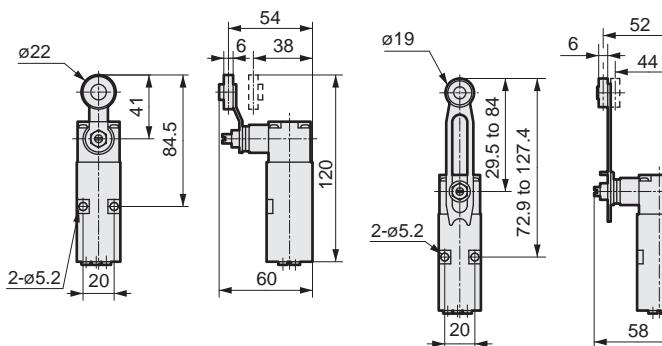


● PXC-K21106, PXC-K22106



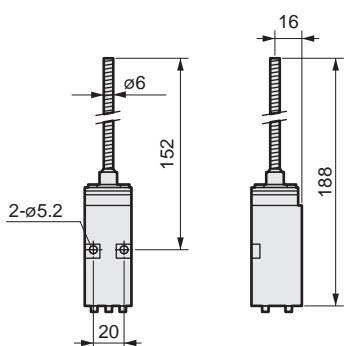
● PXC-K2110531, PXC-K2210531

● PXC-K2110541, PXC-K2210541

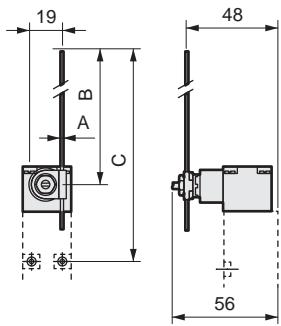


● PXC-K21108

● PXC-K22108

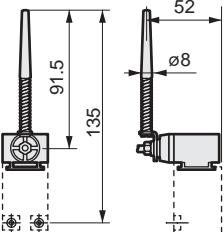


● ZCK-Y54, ZCK-Y55

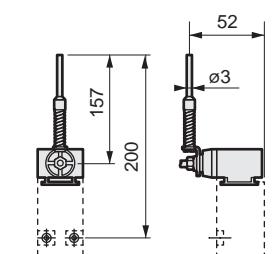


	ZCK-Y55	ZCK-Y54
A	ø3	ø3
B	11 to 115	11 to 115
C	53 to 158	53 to 158

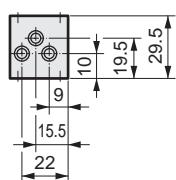
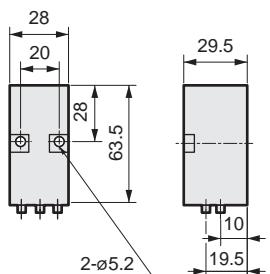
● ZCK-Y81



● ZCK-Y91



● PXC-K211, PXC-K221



- F.R.L.  
F.R.  
F (Filtr)  
R (Reg)  
L (Lub)  
Drain Separ  
Mech Press SW  
Res press exh valve  
SlowStart  
Anti-bac/Bac-removal Filter  
Film Resist FR  
Oil-ProhR  
Med Press FR  
No Cu/ PTFE FRL  
Outfrs FRL  
Adapter Joiner  
Press Gauge  
CompFRL  
LgFRL  
PrecsR  
VacF/R  
Clean FR  
ElecPneu  
AirBoost  
Speed Ctrl  
Silncr  
CheckV/ other  
Fit/Tube  
Nozzle  
Air Unit  
PrecsCompn  
Electro Press SW  
ContactSW  
AirSens  
PresSW Cool  
Air Flo Sens/Ctrl  
WaterRtSens  
TotAirSys (Total Air)  
TotAirSys (Gamma)  
Gas generator  
RefrDry  
DesicDry  
HiPolymDry  
MainFiltr  
Dischrg etc  
Ending

F.R.L.

F.R.

F (Filtr)

R (Reg)

L (Lub)

Drain Separ

Mech

Press SW

Res press

exh valve

SlowStart

Anti-bac/Bac-

remove Filt

Film

Resist FR

Oil-ProhR

Med

Press FR

No Cu/

PTFE FRL

Outdrs FRL

Adapter

Joiner

Press

Gauge

CompFRL

LgFRL

PrecsR

VacF/R

Clean FR

ElecPneuR

AirBoost

Speed Ctrl

Silncr

CheckV/

other

Fit/Tube

Nozzle

Air Unit

PrecsCompn

Electro

Press SW

ContactSW

AirSens

PresSW

Cool

Air Flo

Sens/Ctrl

WaterRiSens

TotAirSys

(Total Air)

TotAirSys

(Gamma)

Gas

generator

RefrDry

DesicDry

HiPolymDry

MainFiltr

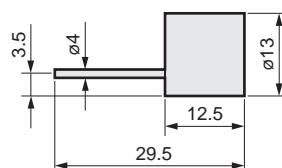
Dischrg

etc

Ending

**Accessory****Appearance****● PXC-X14****● Applications**

Use for PLC, relay, integrated, and line type logical elements, and for terminal blocks.

**Silencer**

<b>Model No.</b>	<b>Weight (kg)</b>
PXC-X14	0.040