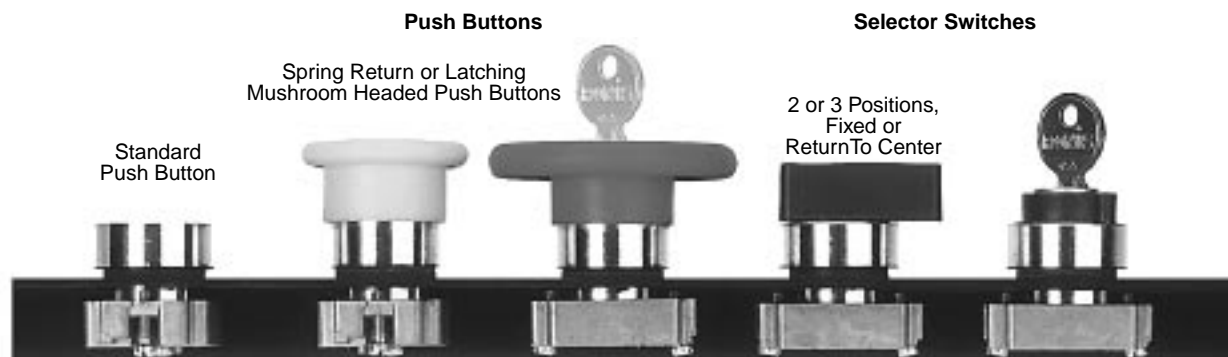


## MODULAR PNEUMATIC / ELECTRIC PUSH BUTTONS

As with electrical contact switches, pneumatic valve modules can be mounted on a number of different operating heads.

- Pneumatic normally non passing (NNP) is equivalent to electrical normally open (N.O.).
- Pneumatic normally passing (NP) is equivalent to electrical normally closed (N.C.).

Note: Electrical switches can be stacked, but the rear connection on pneumatic switches prevents stacking. Therefore, when mixing electrical and pneumatic switch bodies on the same operator, the pneumatic switch must be mounted last.

**PXBB3911****PXBB4932****PXBB4931****C**

With 3/2 Valve Bodies 5/32" Instant Straight Connections

Flush Push Buttons



PXBB3111BA2



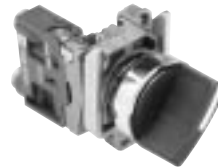
PXBB4131BA2

Part Number	Color	Function	Type of Switching*
PXBB3111BA2	Black	Spring Return	NNP
PXBB3111BA3	Green		
PXBB3111BA4	Red		
PXBB3251BA2	Black	Spring Return	NNP+NP
PXBB4131BA2	Black	Spring Return	Single Universal 3-Way
PXBB4131BA3	Green		
PXBB4131BA4	Red		
PXBB4231BA2	Black	Spring Return	Dual Universal 3-Way

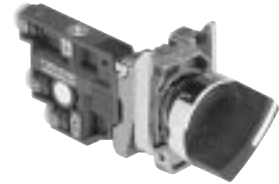
\* Type of switching: Universal 3-way: valve can be connected either as NP or NNP as required by connecting the primary air supply to port 1 or port 3.

Note: Mount up to three valves on mounting ring.

Selector Switches



PXBB3111BD2



PXBB4131BD2

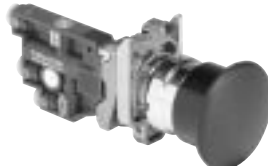
Part Number	Color	Function	Type of Switching*
PXBB3111BD2	Black	2 Maintained	NNP
PXBB3211BD2	Black	Positions with	NNP+NNP
PXBB3251BD2	Black	Std. Handle	NNP+NP
PXBB3211BD3	Black	3 Maintained Positions with Std. Handle	NNP+NNP
PXBB3251BD3	Black		NNP+NP
PXBB3211BJ5	Black	3 Positions, Spring Return to Center with Long Handle	NNP+NNP
PXBB4131BD2	Black	2 Maintained Positions with Std. Handle	Single Universal 3-Way
PXBB4231BD2	Black	2 Maintained Positions with Std. Handle	Dual Universal 3-Way
PXBB4231BD3	Black	3 Maintained Positions with Std. Handle	Dual Universal 3-Way
PXBB4231BJ5	Black	3 Maintained Positions with Long Handle	Dual Universal 3-Way

\* Type of switching: Universal 3-way: valve can be connected either as NP or NNP as required by connecting the primary air supply to port 1 or port 3.

Mushroom Head  
Push Buttons  
(40mm Diameter)



PXBB3111BC2



PXBB4131BC2

Part Number	Color	Function	Type of Switching*
PXBB3111BC2	Black	Spring Return	NNP
PXBB3111BT4	Red	Push-Pul	
PXBB3121BT4	Red	Push-Pull	NP
PXBB4131BC2	Black	Spring Return	Single Universal 3-Way
PXBB4131BT4	Red	Push-Pull	

\* Type of switching: Universal 3-way: valve can be connected either as NP or NNP as required by connecting the primary air supply to port 1 or port 3.

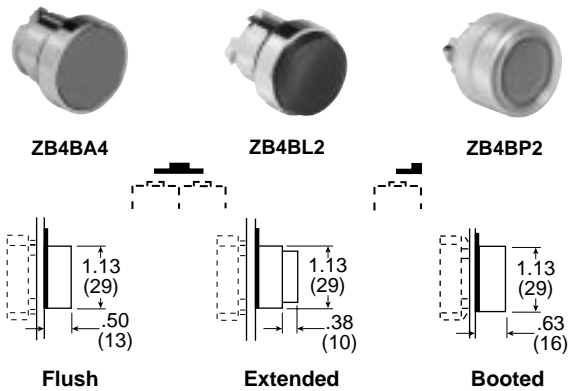
Note: Mount up to three valves on mounting ring.

Note: 0.9" Dia. Hole required for mounting.

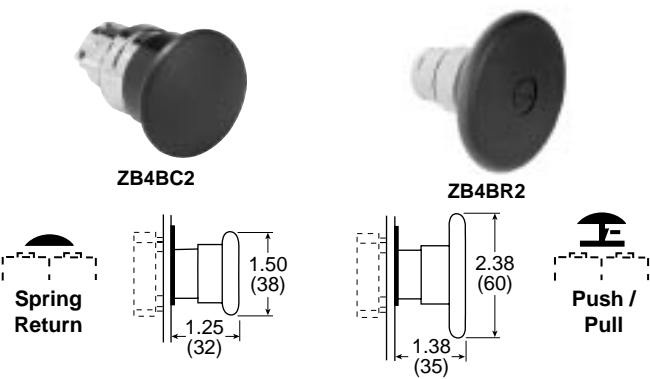
BOLD ITEMS ARE MOST POPULAR.

For Use With PXBB Valve Bodies and ZBE Electrical Switch Bodies

Push Buttons



Mushroom Head Push Buttons



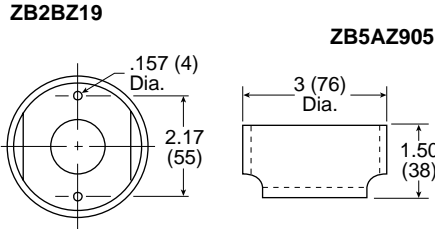
Plastic Head ZB5**	Metal Head ZB4*			
Part Number	Part Number	Color	Function	Description
ZB5AA2	ZB4BA2	Black	Spring Return	Flush
ZB5AA3	ZB4BA3	Green		
ZB5AA4	ZB4BA4	Red		
—	ZB4BA5	Yellow		
—	ZB4BA6	Blue		
ZB5AL2	ZB4BL2	Black	Spring Return	Extended
ZB5AL3	ZB4BL3	Green		
ZB5AL4	ZB4BL4	Red		
—	ZB4BL5	Yellow	Spring Return	Booted
—	ZB4BP2	Black		
—	ZB4BP3	Green		
—	ZB4BP4	Red		

\* ZB4\*\*\* Model Numbers are Metal Head Operators  
\*\* ZB5\*\*\* Model Numbers are Plastic Head Operators

Part Number*	Color	Function	Description
ZB4BC2	Black	Spring Return	Ø 40mm Head
ZB4BC3	Green		
ZB4BC4	Red		
ZB4BT2	Black	Latching Push-Pull	
ZB4BT4	Red		
ZB4BR2	Black	Spring Return	Ø 60mm Head
ZB4BR3	Green		
ZB4BR4	Red		

\* ZB4\*\*\* Model Numbers are Metal Head Operators

Mounting Accessories



Push / Push Buttons



ZB4BH02

Part Number*	Color	Function	Description
ZB4BH02	Black	Detent 2-Position	Flush
ZB4BH03	Green		
ZB4BH04	Red		

\* ZB4\*\*\*\* Model Numbers are Metal Head Operators

Part Number	Color	Description
ZB2BZ19	Black Plastic	Guard for 60mm Mushroom Heads
ZB5AZ905	—	Plastic Head (ZB5) Mounting Nut Tightening Tool

NOTE: BOLD ITEMS ARE READY (STOCK)

For Use With PXBB Variable Composition Switch Bodies

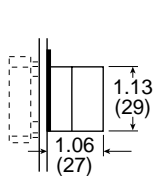
Selector Switches



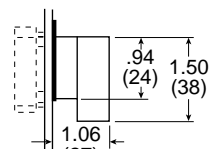
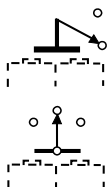
ZB4BD3



ZB4BJ3



Standard Selector

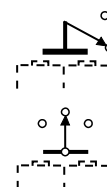
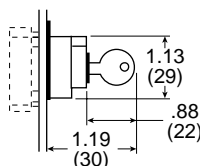


Knob Lever

Key Operated Selectors



ZB4BG2



Standard Black Handle		
Part Number*	Description	Function
ZB4BD2	Maintained	2-Positions
ZB4BD4	Spring Return from Right to Left	
ZB4BD3	Maintained	3-Positions
ZB4BD5	Spring Return to Center from Left and Right	
ZB4BD7	Maintained Right Spring Return from Left to Center	3-Positions
ZB4BD8	Maintained Left Spring Return from Right to Center	3-Positions
Long Black Handle		
ZB4BJ2	Maintained	2-Positions
ZB4BJ4	Spring Return from Right to Left	
ZB4BJ3	Maintained	3-Positions
ZB4BJ5	Spring Return to Center from Left and Right	

\* ZB4\*\*\* Model Numbers are Metal Head Operators

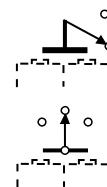
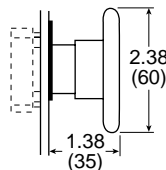
Key Operated		
Part Number*	Key Withdrawal	Function
ZB4BG2	Left	2 Maintained
ZB4BG4	Left and Right	Positions
ZB4BG3	Center	3 Maintained
ZB4BG5	Left and Right	Positions
ZB4BG7	Center	3 Positions 2 Spring Return to Center

\* ZB4\*\*\* Model Numbers are Metal Head Operators

Mushroom Head Push Buttons with Key Select



ZB4BS24



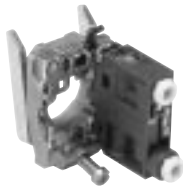
Part Number*	Color	Function	Description
ZB4BS54	Red	Latching Turn to Release	Ø 40mm Head
ZB4BS14	Red	Key Latching	
ZB4BS64	Red	Latching Turn to Release	Ø 60mm Head
ZB4BS24	Red	Key Latching	

\* ZB4\*\*\*\* Model Numbers are Metal Head Operators

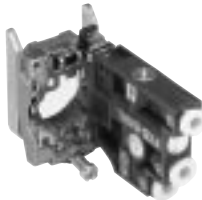
Note: Bold Items are Ready (Stock)

For Use With 22mm (7/8") Metal Operating Heads 5/32" Instant Connections

3/2 Valve Bodies with  
Mounting Ring



PXBB3111B



PXBB4131B

Part Number	Connections	Function	Type of Switching*
PXBB3111B	5/32" Instant	3/2	NNP
PXBB3121B	5/32" Instant	3/2	NP
PXBB4131B	5/32" Instant	3/2	Universal 3-Way

Note: • Mount up to 3 valves on mounting ring for push buttons.  
• Mount up to 2 valves on mounting ring for selector switches,  
Valves **cannot** be mounted in center position.

Specifications

- Air Quality –**  
Standard Shop Air, Lubricated or Dry ..... 40 µm Filtration
- Flow –**  
PXBB3• ..... Cv=.08  
PXBB4• ..... Cv=.18
- Materials –**  
Body ..... Polyamide  
Operating Head ..... Zinc Alloy & Plastic
- Operating Positions.....** All Positions
- Operating Pressure –**  
PXBB3• ..... 15 to 115 PSIG (1 to 9 bar)  
PXBB4• ..... 15 to 145 PSIG (1 to 10 bar)
- Ports .....5/32" Instant for Semi-Rigid Nylon or Polyurethane Tube**
- Temperature –**  
Operating .....5°F to 140°F (-15°C to + 60°C)

C

Additional Valve Bodies



PXBB3911



PXBB4932



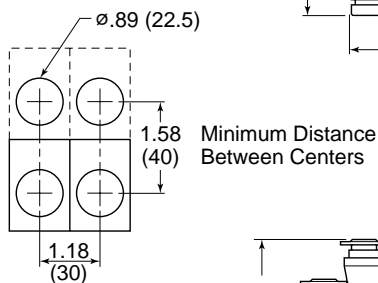
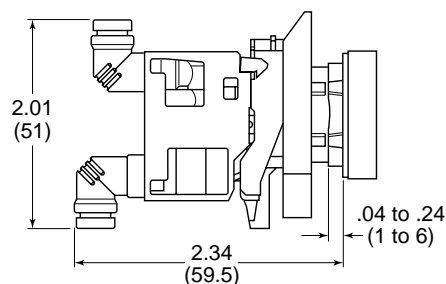
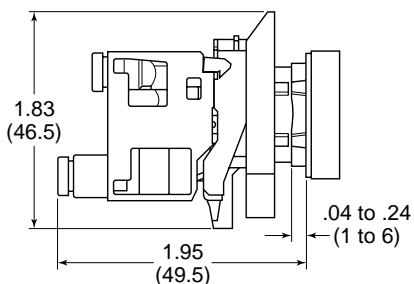
PXBB4931

Part Number	Connections	Function	Type of Switching*
PXBB3911	5/32" Instant Straight	3/2	NNP
PXBB3912	5/32" Instant Swivel		
PXBB3921	5/32" Instant Straigh	3/2	NP
PXBB3922	5/32" Instant Swivel		
PXBB4931	5/32" Instant Straight	3/2	Universal 3-Way
PXBB4932	5/32" Instant Swivel		

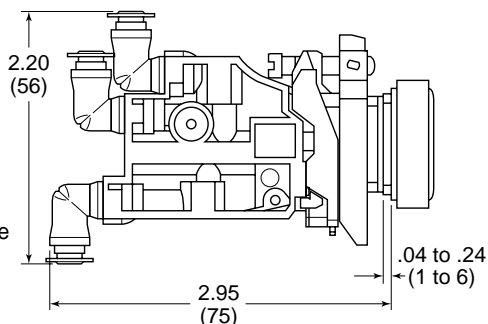
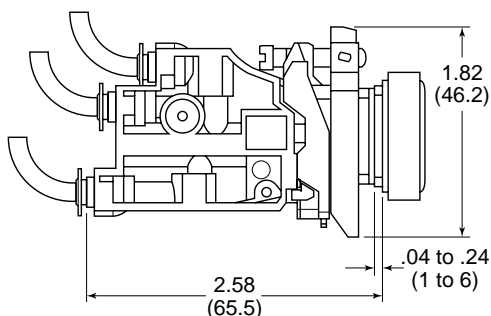
Note: Bold Items are Ready (Stock)



## PXB-B3 Dimensions



## PXB-B4 Dimensions

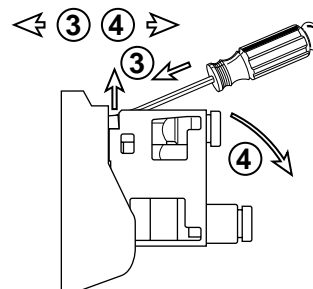
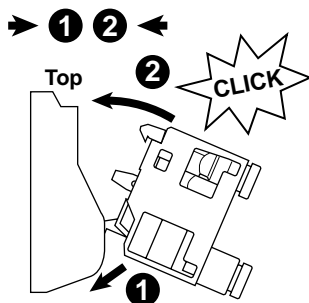


### Tube Bending Radius For PXBB3 and PXBB4

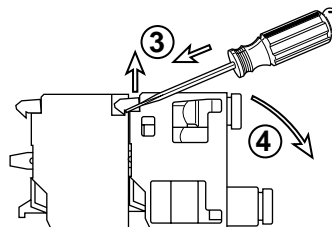
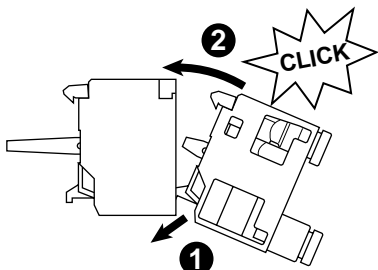
- 4 mm O.D. x 2 mm I.D. Tube  
= Minimum 0.39 (10) Radius
- 4 mm O.D. x 2.7 mm I.D. Tube  
= Minimum 0.59 (15) Radius

## Assembly

### Assembling PXB Valves On Mounting Block



### Assembling PXB Valves On the Back of the Electrical Contact



## For Push Buttons and Visual Indicators

### Legend Plates for PXBB Devices (22mm)



ZBY\*\*\*

Part Number	Description
<b>Without Text For Customer Engraving</b>	
ZBY2101	Black / Red Background (White Letters)
ZBY4101	Yellow / White Background (Black Letters)
<b>With Text For Push Buttons</b>	
ZBY2303	Start
ZBY2304	Stop
ZBY2305	Forward
ZBY2306	Reverse
ZBY2307	Up
ZBY2308	Down
ZBY2309	Right
ZBY2310	Left
ZBY2311	On
ZBY2312	Off
ZBY2313	Open
ZBY2314	Close
ZBY2321	Inch
ZBY2323	Reset
ZBY2326	Power On
ZBY2327	Slow
ZBY2328	Fast
ZBY2330	Emergency Stop
ZBY2334	Run
<b>With Text For 2-Position Selectors</b>	
ZBY2367	Off On
<b>With Text For 3-Position Selectors</b>	
ZBY2387	Hand Off Auto

### Blank Legend Plates for Inscription

<b>For PXBB Devices</b> (2 lines of 11 characters maximum) <b>Please indicate the required text when ordering.</b> (Allow 3 weeks for delivery)	
Part Number	Description
ZBY2002	Black Background / White Letters

### For 22mm Visual Indicators Only

2 lines of 11 characters maximum

**Please indicate the required text when ordering.**  
(Allow 3 weeks for delivery)

Part Number	Description
ZB2BY2002	Black Background / White Letters

### Accessories



ZBE101

#### Electrical Switch Bodies

When combined with pneumatic valves, these contact blocks allow different forms of power to be provided from a single push button. Can be mounted with both types of valves PXBB3 / PXBB4.

**Electrical Specification:** 240V, 10Amp

Part Number	Type of Contact
ZBE101	Normally Open (NO)
ZBE102	Normally Closed (NC)

Note: Plastic Mounting Ring ZB5AZ009 to be used with ZB5 Plastic Operating Heads.

Metal Mounting Ring ZB4BZ009 to be used with ZB4 Metal Operating Heads.



Metal: ZB4BZ009



Plastic: ZB5AZ009

#### Mounting Ring for Valve Bodies, Switch Bodies and Operating Heads

To make up a complete push button with one to three switching elements with 5/32" instant connections, use this mounting block and select the operating heads and bodies in this Section.

Part Number	Description
ZB4BZ009	Metal Mounting Ring
ZB5AZ009	Plastic Mounting Ring

To make up a complete selector switch with one or two switching elements with 5/32" instant connections, use this mounting block and select the operating heads and bodies in this Section.

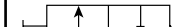
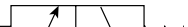

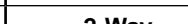
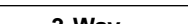
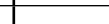
Part Number	Description
ZB4BZ009	Metal Mounting Ring
ZB5AZ009	Plastic Mounting Ring

**Note:** To release push button from mounting ring, pull lever on top of mounting ring up and remove push button operator. To assemble push button operator to mounting ring, align arrows and snap into place.

**Note: Bold Items are Ready (Stock)**



Functionality Explanation

Fluid Power			Universal Description	Electrical	
Function	Symbol			Function	Symbol
Normally Closed (N.C.)			Normally Non-Passing (NNP)	Normally Open (N.O.)	
Normally Open (N.O.)			Normally Passing (NP)	Normally Closed (N.C.)	

**Type of Switching:** Universal 3-Way: Valve can be connected either as NP or NNP as required by connecting the primary air supply to port 1 or port 3.

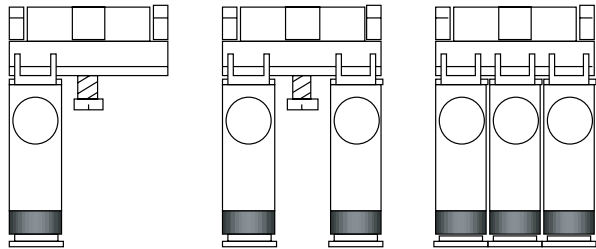


- C
- NNP: Normally Non-Passing.
  - NP: Normally Passing.
  - NNP + NNP: Double Switch Body, Both Normally Non-Passing.
  - NNP + NP: Normally Non passing and Normally-Passing.
  - NP + NP: Both Normally Passing.

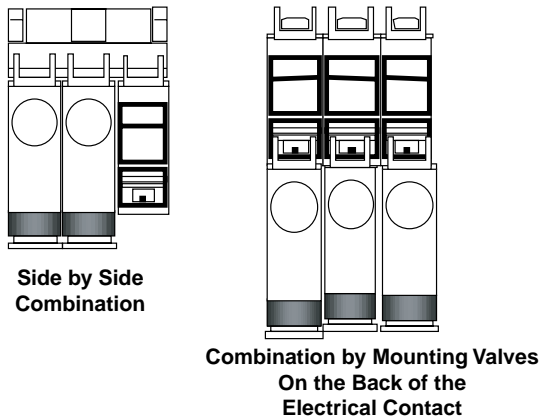
Combination of Output Devices On a Single Mounting Block

Up to 3 output devices (valves or electrical contacts) can be mounted side by side on 1 mounting block.

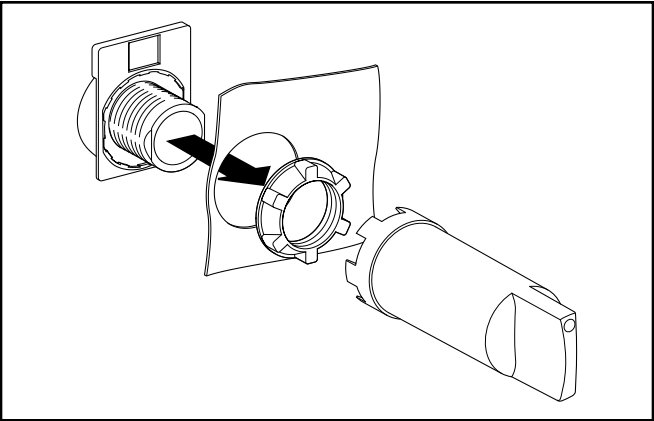
**Note:** The central position can only be activated by push button heads.



Electrical Contacts and Valves can be Combined Either Side by Side, or by Mounting the Valve on the Back of the Electrical Contact.



Assembling Output Devices and Heads On ZB5 Series Mounting Block



Mounting

