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# HUMAN/MACHINE DIALOGUE

Push-buttons, Two-hand control units





### **IMPORTANT !**

Before carrying out any service work, ensure that the valve and manifold have been vented.

Remove the primary supply air hose to ensure total disconnection of the air supply before dismantling valves or blank connection blocks.



### **NB !**

All technical data in this catalogue is typical only.

The air quality is decisive for the valve life: see ISO 8573.



### **WARNING — USER RESPONSIBILITY**

#### **FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

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- The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.
- To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

### **Offer of Sale**

Please contact your Parker representation for a detailed "Offer of Sale".

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If you have questions about the products contained in this catalog, or their applications, please contact:  
**Parker Hannifin EMEA Sàrl European Headquarters**  
[parker.com/msge](http://parker.com/msge)

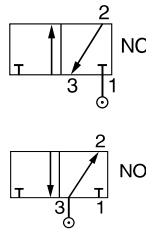
# PUSH BUTTON VALVES

## Ø22 mm PXB-B3•/B4•

- Facia mounted operator
- 3/2 NO or NC
- Pneumatic valves combinable with electrical switches
- Modular construction (up to 3 valves per pushbuttons heads)
- Wide range of actuators



Operating and additional information	
Working pressure PXB-B3•• PXB-B4••	1 to 9 bar 1 to 10 bar
Working temperature	-15 °C to +60 °C
Flow (acc. to ISO 6358) PXB-B3••  PXB-B4••	 Q <sub>max</sub> =60 NI/min Q <sub>n</sub> = 30 NI/min  Q <sub>max</sub> =240 NI/min Q <sub>n</sub> = 120 NI/min
Connections	Ø4 mm straight Push-in as standard Ø4 mm swivel Push-in on request M5 on request



All PXB-B4 valves can be connected either as normally closed 3/2 valve (NC) or normally open 3/2 valve (NO) as required, by connecting the primary air supply to port 1 or port 3.

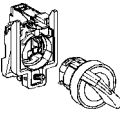






### Spring return pushbuttons - Metal head version - Ø 4 mm straight fittings

	Symbol	Actuator	Return	Operating force at 6 bar. N	Flow NI/min	Weight kg	Order code
		Pushbutton Black	Spring	8.5 6.0	60 240	0.077 0.082	<b>PXB-B3111BA2</b> <b>PXB-B4131BA2</b>
		Pushbutton Green	Spring	8.5 6.0	60 240	0.077 0.082	<b>PXB-B3111BA3</b> <b>PXB-B4131BA3</b>
		Pushbutton Red	Spring	8.5 6.0	60 240	0.077 0.082	<b>PXB-B3111BA4</b> <b>PXB-B4131BA4</b>
		Pushbutton Black	Spring	16.5 14.0	60 240	0.087 0.092	<b>PXB-B3251BA2</b> <b>PXB-B4231BA2</b>

### Mushroom head pushbuttons - Metal head version - Ø 4 mm straight fittings

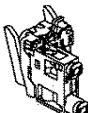



	Symbol	Actuator	Return	Operating force at 6 bar. N	Flow NI/min	Weight kg	Order code
		Pushbutton Ø40 mm Black	Spring	12 6.5	60 240	0.122 0.127	<b>PXB-B3111BC2</b> <b>PXB-B4131BC2</b>
		Latching pushbutton Ø40 mm Red		48 42.5	60 240	0.125 0.127	<b>PXB-B3111BT4</b> <b>PXB-B4131BT4</b>
		Latching pushbutton Ø40 mm Red		49 43.5	60 240	0.125 0.127	<b>PXB-B3121BT4</b> <b>PXB-B4131BT4</b>

## Selector switches - Metal head version - Ø 4 mm straight fittings

	Symbol	Actuator	Return		Flow NI/min	Weight kg	Order code
		Latching selector button 2 positions, Black			60 240	0.092 0.097	<b>PXB-B3111BD2</b> <b>PXB-B4131BD2</b>
		Latching selector button 2 positions, Black			60 240	0.102 0.107	<b>PXB-B3211BD2</b> <b>PXB-B4231BD2</b>
		Latching selector button 2 positions, Black			60 240	0.102 0.107	<b>PXB-3251BD2</b> <b>PXB-B4231BD2</b>
		Latching selector button 3 positions, Black			60 240	0.102 0.107	<b>PXB-B3211BD3</b> <b>PXB-B4231BD3</b>
		Latching selector button 3 positions, Black			60 240	0.102 0.107	<b>PXB-B3251BD3</b> <b>PXB-B4231BD3</b>
		Non latching selector button with long handle 3 positions, Black	Spring		60 240	0.103 0.108	<b>PXB-B3211BJ5</b> <b>PXB-B4231BJ5</b>







## Switch bodies with operating metal head mounting - Ø 4 mm straight fittings

For use with ZB4 operating heads

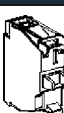


	Symbol	Actuator	Return	Operating force at 6 bar, N	Flow NI/min	Weight kg	Order code
		Plunger	Spring	7	60	0.048	<b>PXB-B3111B</b> <b>PXB-B4131B</b>
				4.5	240	0.053	
		Plunger	Spring	8	60	0.048	<b>PXB-B3121B</b> <b>PXB-B4131B</b>
				4.5	240	0.053	

## Additional switch valves - Ø 4 mm straight fittings

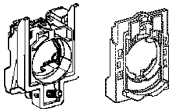
For use with ZB4 and ZB5 operating heads and mounting blocks

	Symbol	Actuator	Return	Operating force at 6 bar, N	Flow NI/min	Weight kg	Order code
		Plunger Straight connection	Spring	7	60	0.010	<b>PXB-B3911</b> <b>PXB-B4931</b>
				4.5	240	0.015	
		Plunger Straight connection	Spring	8	60	0.010	<b>PXB-B3921</b> <b>PXB-B4931</b>
				4.5	240	0.015	
		Plunger Swivel connection	Spring	7	60	0.015	<b>PXB-B3912</b> <b>PXB-B4932</b>
				4.5	240	0.021	
		Plunger Swivel connection	Spring	8	60	0.015	<b>PXB-B3922</b> <b>PXB-B4932</b>
				4.5	240	0.021	

## Electrical contact blocks

	Connections	Type of contact	Weight kg	Order code
	Can be combined with pneumatic valve blocks, enabling pneumatic and electric signals to be provided from a single control unit.	Normally open (NO) 	0.011	<b>ZBE-101</b>
		Normally closed (NC) 	0.011	<b>ZBE-102</b>




## Mounting block for valves and operating heads

	Description	For Metal head ZB4		For Plastic head ZB5	
		Weight kg	Order code	Weight kg	Order code
	Mounting block for valves and operating heads: to make up a complete push button with one operating head and switch valves.	0.038	<b>ZB4-BZ009</b>	0.006	<b>ZB5-AZ009</b>


## Operating heads

For use with PXB-B3. and PXB-B4. switch bodies


## Spring return pushbuttons

	Description	Colour	Metal head		Plastic Head	
			Weight kg	Order code	Weight kg	Order code
	Flush	Black	0.029	<b>ZB4-BA2</b>	0.018	<b>ZB5-AA2</b>
		Green	0.029	<b>ZB4-BA3</b>	0.018	<b>ZB5-AA3</b>
		Red	0.029	<b>ZB4-BA4</b>	0.018	<b>ZB5-AA4</b>
		6 color caps	0.029	<b>ZB4-BA9</b>	0.018	<b>ZB5-AA9</b>
	Projecting	Black	0.030	<b>ZB4-BL2</b>	0.019	<b>ZB5-AL2</b>
		Green	0.030	<b>ZB4-BL3</b>	0.019	<b>ZB5-AL3</b>
		Red	0.030	<b>ZB4-BL4</b>	0.019	<b>ZB5-AL4</b>
	Flush booted	Black	0.034	<b>ZB4-BP2</b>		



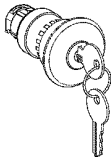
## Push/push pushbuttons

	Description	Colour	Metal head			
			Weight kg	Order code		
	Flush	Black	0.029	<b>ZB4-BH02</b>		
		Green	0.029	<b>ZB4-BH03</b>		
		Red	0.029	<b>ZB4-BH04</b>		

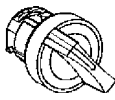
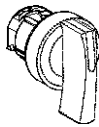

## Double headed spring return pushbuttons

	Description	Colour Marking	Metal head			
			Weight kg	Order code		
	Flush	Green/Red I/O	0.047	<b>ZB4-BA7341</b>		

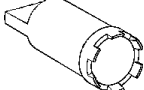
## Spring return pushbuttons

	Description	Function	Colour	Metal head		Plastic Head	
				Weight kg	Order code	Weight kg	Order code
	Ø40 mm Mushroom head	Spring return	Black Green Red	0.074 0.074 0.074	<b>ZB4-BC2</b> <b>ZB4-BC3</b> <b>ZB4-BC4</b>		
		Latching push-pull	Red	0.077	<b>ZB4-BT4</b>		
	Ø60 mm Mushroom head	Spring return	Black	0.093	<b>ZB4-BR2</b>		
	Ø40 mm Mushroom head	Latching Turn to release	Red	0.070	<b>ZB4-BS54</b>	0.044	<b>ZB5-AS54</b>
		Latching Release by Ronis key N°455	Red	0.070	<b>ZB4-BS14</b>		

## Selector switches

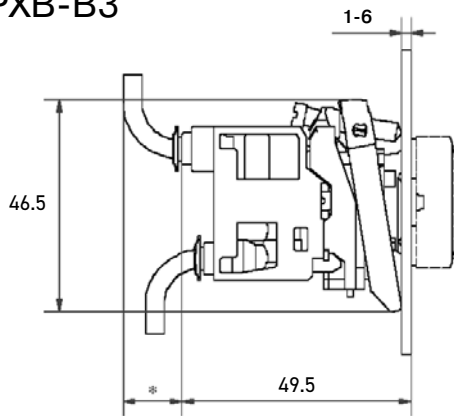
	Description	Function		Metal head		Plastic Head	
				Weight kg	Order code	Weight kg	Order code
	Standard, black handle	2 positions	Stay put	0.044	<b>ZB4-BD2</b>	0.024	<b>ZB5-AD2</b>
		3 positions	Stay put	0.044	<b>ZB4-BD3</b>	0.024	<b>ZB5-AD3</b>
		3 spring return to centre		0.044	<b>ZB4-BD5</b>	0.024	<b>ZB5-AD5</b>
	Long black handle	2 positions	Stay put	0.045	<b>ZB4-BJ2</b>		
		3 positions	Stay put	0.045	<b>ZB4-BJ3</b>		
			Spring return to centre	0.045	<b>ZB4-BJ5</b>		
			1 spring return from left to centre	0.045	<b>ZB4-BJ7</b>		
	Description	Function	Key with drawal	Weight kg	Order code		
	Key operated (Ronis key N° 455)	2 stay put positions	Left	0.069	<b>ZB4-BG2</b>		
			Left and right	0.069	<b>ZB4-BG4</b>		

## Tools

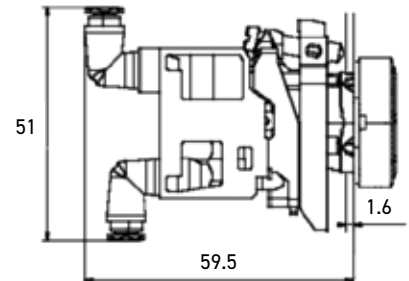
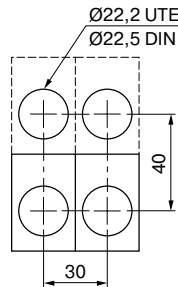
	Description	Weight kg	Order code		
	ZB5 head nut tool	0.160	<b>ZB5-AZ905</b>		

## Dimensions

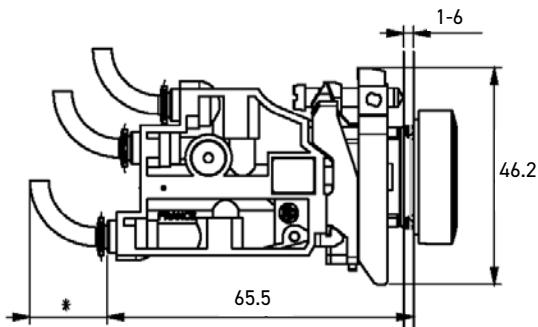
### PXB-B3



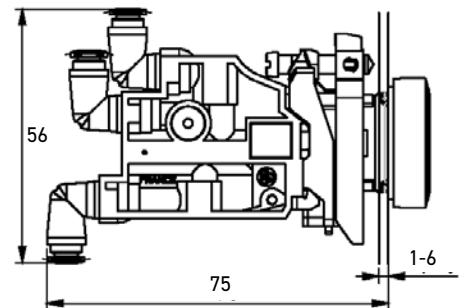
Body width 30 mm  
 \* With 2 x 4 mm tube = 10  
 With 2,7 x 4 mm tube = 15



### PXB-B4

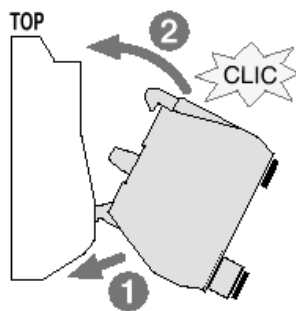


Body width 30 mm  
 \* With 2 x 4 mm tube = 10  
 With 2,7 x 4 mm tube = 15

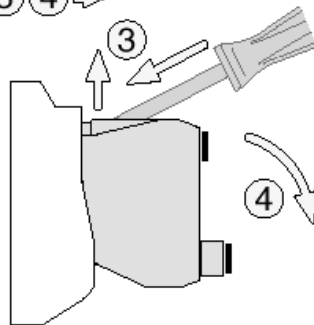


## Assembling of PXB-B3. and PXB-B4. valves on mounting block

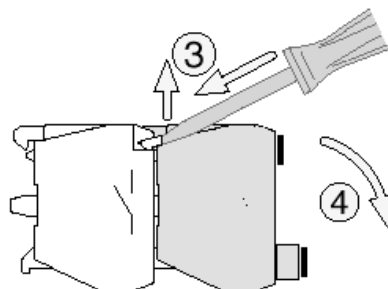
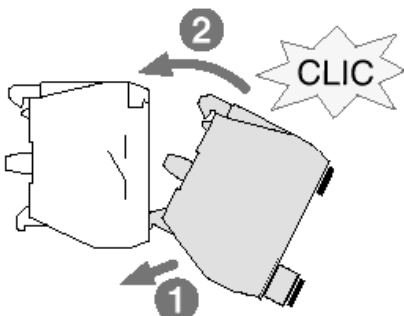
➔ ① ② ←



← ③ ④ ➔



## Assembling of PXB-B3. and PXB-B4. valves on the back of the electrical contact



# VISUAL INDICATORS

## Ø22 and Ø30 mm – PXV

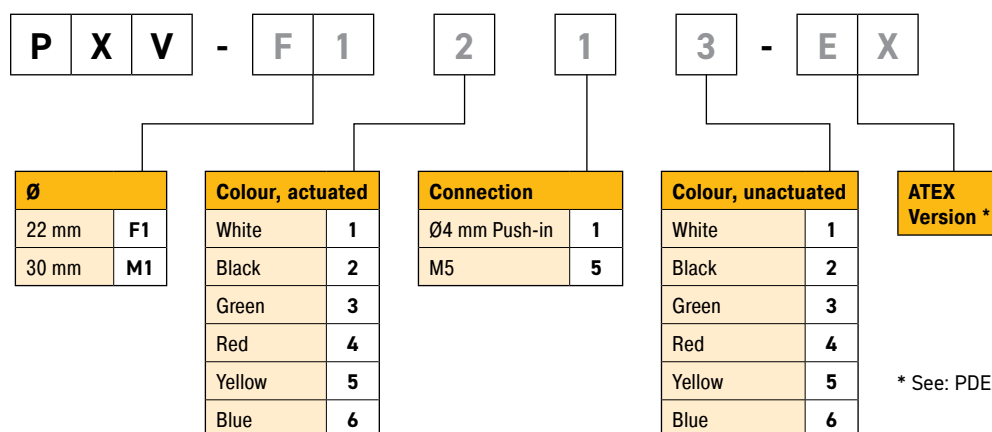
- Lightning fast response
- Simple long life mechanism
- Very high contrast
- All around visibility
- One single pipe connection
- Effective aid to diagnostics



Operating information	
Working pressure	1-8 bar
Working temperature	-15 °C to +60 °C


Operating and additional information	
Connections	Ø4 mm straight Push-in as standard

### Order key




## Ø22 mm Visual Indicators

Black plastic bezel In the actuated mode

Symbol	Colour *	Weight kg	Order code	
	Green	0.080	<b>PXV-F131</b>	
	Red	0.080	<b>PXV-F141</b>	
	Yellow	0.080	<b>PXV-F151</b>	
	Blue	0.080	<b>PXV-F161</b>	
	White	0.080	<b>PXV-F111</b>	

## Ø22 mm Visual Indicators

Black plastic bezel In the unactuated mode

Symbol	Colour *	Weight kg	Order code	
	Green	0.080	<b>PXV-F1213</b>	
	Red	0.080	<b>PXV-F1214</b>	
	Yellow	0.080	<b>PXV-F1215</b>	
	Blue	0.080	<b>PXV-F1216</b>	
	White	0.080	<b>PXV-F1211</b>	

\* The pneumatic indicators are black in one position and coloured in the other.

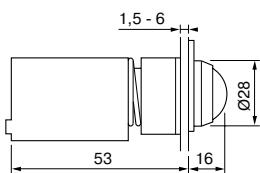
The coloured position corresponds either to the presence of pressure (actuated mode) or the absence of pressure (unactuated mode). For two different colours on the same indicator, please consult Technical Sales Department.

\*\* Visual indicators Ø 30 mm on request.

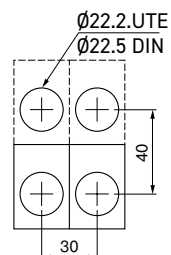
## Dimensions

Ø22 mm visual indicators

PXV-F1..



Minimum distance between centres



# TWO-HAND CONTROL UNITS

## PXP

- Ergonomical design
- Robust polymer enclosure
- Meet requirements for protection against accidental operation and tampering
- Conforms to EN ISO 13851 (previous NF EN 574) requirements

These units are indispensable for ensuring that both operator's hands are occupied for reasons of safety. Both push-buttons must be operated simultaneously to produce an output signal.



Specification	
Valve body	High grade polymer
Seals	Nitrile, NBR
Enclosure	High grade polymer

Operating information	
Working pressure	3-8 bar
Working temperature	0 °C to +60 °C
Air quality	Air or inert gas, filtered $\leq 5\mu$ (according to ISO 8573-1: 2010 Class 3:4:3) - lubricated
Simultaneity	$>0.12s <0.5s$

Conformity to standard
Conformity to Machinery Directive n° 2006/42/EC EC type examination certificate issued by INERIS - Parc Technologique ALATA - F-60550 Verneuil en Halatte Notified body with identification no. 0080



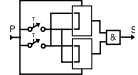
Description	Function	Order code	CE Type examination Certificate	Level of Compliance	
				EN ISO 13851	NF EN ISO 13849-1
Control module	Logic unit	<b>PXP-A11-A</b>	0080.5130.520.12.17.0066	III A	Cat 1 PLc
Two-hand control device polyester enclosure	Single control	<b>PXP-C111-A</b>	0080.5130.520.12.17.0067	III A	Cat 1 PLc
Two-hand control device polyester enclosure	Dual control	<b>PXP-D121-A</b>	0080.5130.520.12.17.0069	III B	Cat 3 PLd

## Control module only

	Symbol	Connections	Weight kg	Order code
		Ø4 mm Push-in	0.250	<b>PXP-A11-A</b>

## Complete units

Polyester enclosure, with two mushrooms head pushbuttons and control module(s)

	Symbol	Connections	Number of control modules	Weight kg	Order code
		Ø4 mm Push-in	1	1.000	<b>PXP-C111-A</b>
		Ø4 mm Push-in	2	1.000	<b>PXP-D121-A</b>

\* The pneumatic indicators are black in one position and coloured in the other.

The coloured position corresponds either to the presence of pressure (actuated mode) or the absence of pressure (unactuated mode). For two different colours on the same indicator, please consult Technical Sales Department.

\*\* Visual indicators Ø 30 mm on request.

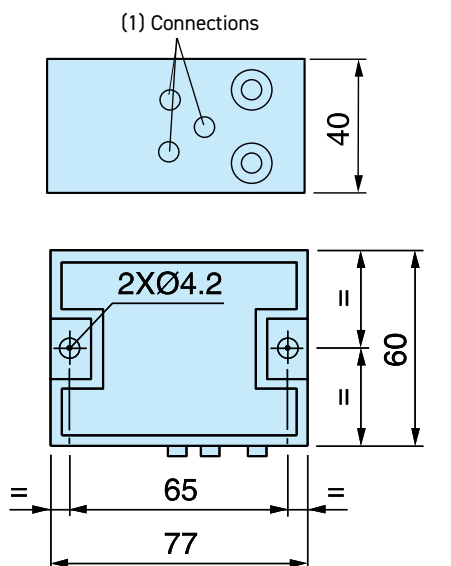
## Spare parts for two-hand control units

Description	Base component	Weight kg	Order code
1 guard for two-hand control	PXP-C111-A PXP-D121-A	0.050	<b>PPR-L15</b>

## Dimensions, two-hand control unit, PXP Series

All dimensions in mm unless otherwise stated

### PXP-A11-A



(2) Pressure supply orifice  $\varnothing$  4 mm (push-in)

(3) Output signal orifice  $\varnothing$  4 mm (push-in)

### PXP-C111-A and PXP-D121-A

