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**pneumatics**  
process control  
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# Limit Switches, Bleed sensors

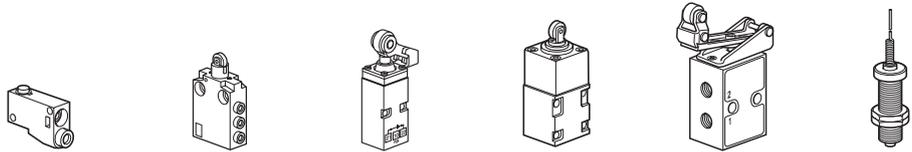
PDE2629TCUK August 2009



ENGINEERING YOUR SUCCESS.

## Limit Switches and Bleed Sensors

<b>Limit switches Control and process only</b>	<b>Bleed Sensors</b>
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Series	Miniature	Compact	K-series	J-series	M43	PXF
Connection, * Push-in	Ø4*	Ø4*	Ø4* or M5	Ø4*	M5	Ø4* or M5
Flow at 6 bar, Qn l/s Qmax l/s Cv	1	4,2	2	3,5	1 1,89 0,127	3
Pipeable exhaust		No	Yes	No	Yes	No
Working temperature	-15 to +60°C	-15 to +60°C	-15 to +60°C	-15 to +60°C	-10 to +80°C	-15 to +60°C
Pneumatic switching	3/2 NC	3/2 NC	3/2 NC 3/2 NO	3/2 NC 3/2 NO	3/2 NC	
Construction material	Zinc die cast	Zinc die cast	Zinc die cast	Turrethead Zinc die cast, brass	Zinc die cast	Brass
Interchangeable with electrical version		Yes	Yes	Yes		
Actuator type						
Air hydraulic oil, fresh water, brine						
Plunger	●	●	●	●	●	
Roller		●		●	●	
Roller plunger		●	●	●		
Roller lever	●		●		●	
Whisker			●	●		
Variable offset lever			●	●		
Ball operated						
Cam				●		
Refer to page	5	5	6	8	15	16

- High durability
- Very good repeat accuracy
- Design for process duty cycle
- Push-in or threaded connection
- Versatile and easily maintained
- Wide range of body size and actuator style



**Operating information**

Working pressure;  
 PXC-M101, PXC-M111, PXC-M121,  
 PXC-M521, PXC-M601,  
 PXC-J: 3-8 bar  
 PXC-K: 3-9 bar

Working temperature -15 °C to +60 °C

	<b>PXC-M101</b>	<b>PXC-M111</b>	<b>PXC-M121</b>	<b>PXC-M521/ PXC-M601</b>
Flow: (acc. to ISO 6358)	Qmax= 60	60	85	250 l/s
		<b>PXC-K</b>	<b>PXC-J</b>	
Flow: (acc. to ISO 6358)	Qmax=	210	210 l/s	

### 3/2 miniatures limit switches

With Ø4 mm Push-in connections (M5 on request)

#### Bore Ø1,5 mm, flow 60 NI/min

Symbol	Actuator	Return	Operating forces at 6 bar, N	Weight kg	Order code
	Steel plunger	Spring	11	0,030	<b>PXC-M111</b>
	Steel plunger	Spring	11	0,030	<b>PXC-M101</b>
	Plastic roller lever			0,008	<b>PXC-Z11</b>
	Plastic roller lever, one way trip			0,008	<b>PXC-Z12</b>

#### Bore Ø1,5 mm, flow 85 NI/min

Symbol	Actuator	Return	Operating forces at 6 bar, N	Weight kg	Order code
	Plastic roller	Spring	4,5	0,040	<b>PXC-M121</b>
	Steel roller	Spring	4,5	0,045	<b>PXC-M131</b>

#### Bore Ø2,5 mm, flow 250 NI/min

Symbol	Actuator	Return	Operating forces at 6 bar, N	Weight kg	Order code
	Plastic roller	Spring	7	0,060	<b>PXC-M521</b>

### 3/2 compact limit switches

With Ø4 mm Push-in connections  
with pipeable exhaust port

#### Bore Ø2,5 mm, flow 250 NI/min

With plunger head

Symbol	Actuator	Return	Operating forces at 6 bar, N	Weight kg	Order code
	Steel plunger	Spring	24	0,150	<b>PXC-M601A110</b>

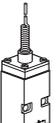
	Symbol	Actuator	Return	Operating forces at 6 bar, N	Weight kg	Order code
		Steel roller plunger	Spring	24	0,160	<b>PXC-M601A102</b>
		90° steel roller plunger	Spring	24	0,160	<b>PXC-M601A103</b>

### 3/2 limit switches “K series”

With Ø4 mm Push-in connections  
with pipeable exhaust port  
snap action and low operating force

#### Bore Ø3 mm

With plunger

	Symbol	Actuator	Return	Operating forces at 6 bar, N	Weight kg	Order code
		Steel plunger	Spring	16 N	0,270	<b>PXC-K21101</b>
		Steel plunger	Spring	16 N	0,270	<b>PXC-K22101</b>
		Steel roller plunger	Spring	16 N	0,310	<b>PXC-K21102</b>
		Steel roller plunger	Spring	16 N	0,310	<b>PXC-K22102</b>
		Plastic roller plunger	Spring	16 N	0,320	<b>PXC-K21121</b>
		Plastic roller plunger	Spring	16 N	0,320	<b>PXC-K22121</b>
		Whisker	Spring	0,05 Nm	0,270	<b>PXC-K21106</b>
		Whisker	Spring	0,05 Nm	0,270	<b>PXC-K22106</b>
		Plastic roller lever *	Spring	0,21 Nm	0,360	<b>PXC-K2110531</b>
		Plastic roller lever *	Spring	0,21 Nm	0,360	<b>PXC-K2210531</b>
		Adjustable lever with Delrin roller *	Spring	0,21 Nm	0,360	<b>PXC-K2110541</b>
		Adjustable lever with Delrin roller	Spring	0,21 Nm	0,360	<b>PXC-K2210541</b>

\* Direction of actuation can be set as required

- from right and left
- from right
- from left

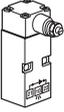
3/2 limit switches “K series”

Bore Ø3 mm

Pneumatic switch bodies, for use in association with all ZCK-D.. series operating heads

Symbol	Actuator	Return	Operating forces at 6 bar, N	Weight kg	Order code
	-	-	16	0,320	PXC-K211
	-	-	16	0,320	PXC-K221

Pneumatic switch bodies with rotary heads  
 Direction of actuation can be set as required:  
 - From right and left  
 - From right  
 - From left

Symbol	Actuator	Return	Operating forces at 6 bar, Nm	Weight kg	Order code
	Rotary head	Spring	0,21	0,340	PXC-K21105
	Rotary head	Spring	0,21	0,340	PXC-K22105

	Actuator	Weight kg	Order code
<b>Rod</b>	Ø3 mm fibre glass	0,025	ZCK-Y55
	Square steel 3 mm	0,025	ZCK-Y54
<b>Spring rod</b>	Plastic	0,010	ZCK-Y81
	Metal	0,030	ZCK-Y91

### 3/2 limit switches “J series”

With **Ø4 mm Push-in connections** (M5 or G1/8 on request)

With pipeable exhaust port

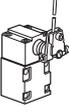
Snap action and low operating force

#### Bore Ø3 mm

With plunger head

	Symbol	Actuator	Return	Operating forces at 6 bar, N	Weight kg	Order code
		Steel plunger	Spring	16	0,515	<b>PXC-J11161</b>
		Steel plunger	Spring	16	0,515	<b>PXC-J12161</b>
		Steel roller plunger	Spring	16	0,525	<b>PXC-J11162</b>
		Steel roller plunger	Spring	16	0,525	<b>PXC-J12162</b>
		Whisker	Spring	16	0,510	<b>PXC-J11170</b>
		Whisker	Spring	16	0,510	<b>PXC-J12170</b>

With rotary head and operating lever

	Symbol	Actuator	Direction of actuation	Return	Operating forces at 6 bar, N	Weight kg	Order code
		Rigid rod	Right AND left	Spring	0,05	0,570	<b>PXC-J1110151</b>
		Rigid rod	Right AND left	Spring	0,05	0,570	<b>PXC-J1210151</b>
		Rigid rod	Right OR left	Spring	0,05	0,570	<b>PXC-J1110551</b>
		Rigid rod	Right OR left	Spring	0,05	0,570	<b>PXC-J1210551</b>

With rotary head and operating lever

	Symbol	Actuator	Direction of actuation	Return	Operating forces at 6 bar, N	Weight kg	Order code
		Delrin roller lever	Right AND left	Spring	0,25	0,565	<b>PXC-J1110111</b>
				Spring	0,25	0,565	<b>PXC-J1210111</b>
		Delrin roller lever	Right OR left	Spring	0,25	0,565	<b>PXC-J1110511</b>
				Spring	0,25	0,565	<b>PXC-J1210511</b>
		Variable length lever with thermoplastic roller	Right AND left	Spring	0,25	0,580	<b>PXC-J1110131</b>
				Spring	0,25	0,580	<b>PXC-J1210131</b>
		Variable length lever with thermoplastic roller	Right OR left	Spring	0,25	0,580	<b>PXC-J1110531</b>
				Spring	0,25	0,580	<b>PXC-J1210531</b>

### 3/2 limit switches “J series”

#### With G1/8 connection

With pipeable exhaust port

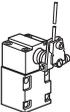
Snap action and low operating force

#### Bore Ø3 mm

With plunger head

	Symbol	Actuator	Return	Operating forces at 6 bar, N	Weight kg	Order code
		Steel plunger	Spring	16	0,515	<b>PXC-J11861</b>
		Steel plunger	Spring	16	0,515	<b>PXC-J12861</b>
		Steel roller plunger	Spring	16	0,525	<b>PXC-J11862</b>
		Steel roller plunger	Spring	16	0,525	<b>PXC-J12862</b>
		Whisker	Spring	16	0,510	<b>PXC-J11870</b>
		Whisker	Spring	16	0,510	<b>PXC-J12870</b>

With rotary head and operating lever

	Symbol	Actuator	Direction of actuation	Return	Operating forces at 6 bar, Nm	Weight kg	Order code
		Rigid rod	Right AND left	Spring	0,05	0,570	<b>PXC-J1180151</b>
		Rigid rod	Right AND left	Spring	0,05	0,570	<b>PXC-J1280151</b>
		Rigid rod	Right OR left	Spring	0,05	0,570	<b>PXC-J1180551</b>
		Rigid rod	Right OR left	Spring	0,05	0,570	<b>PXC-J1280551</b>

With rotary head and operating lever

	Symbol	Actuator	Direction of actuation	Return	Operating forces at 6 bar, Nm	Weight kg	Order code
		Delrin roller lever	Right AND left	Spring	0,25	0,565	<b>PXC-J1180111</b>
	Spring			0,25	0,565	<b>PXC-J1280111</b>	
		Delrin roller lever	Right OR left	Spring	0,25	0,565	<b>PXC-J1180511</b>
				Spring	0,25	0,565	<b>PXC-J1280511</b>
		Variable length lever with thermoplastic roller	Right AND left	Spring	0,25	0,580	<b>PXC-J1180131</b>
				Spring	0,25	0,580	<b>PXC-J1280131</b>
		Variable length lever with thermoplastic roller	Right OR left	Spring	0,25	0,580	<b>PXC-J1180531</b>
				Spring	0,25	0,580	<b>PXC-J1280531</b>

### 3/2 limit switches “J series”

With Ø4 mm Push-in connections

#### Bore Ø3 mm

Pneumatic switch bodies\*

For use in association with all **ZC2-JC** operating heads

	Symbol	Actuator	Return	Operating forces at 6 bar, N	Weight kg	Order code
		-	Spring	16	0,320	<b>PXC-J111</b>
		-	Spring	16	0,320	<b>PXC-J121</b>

	Symbol	Actuator	Direction of actuation	Return	Operating forces at 6 bar, Nm	Weight kg	Order code
		-	Right AND left	Spring	0,05	0,535	<b>PXC-J11101</b>
		-	Right AND left	Spring	0,05	0,535	<b>PXC-J12101</b>
		-	Right OR left	Spring	0,05	0,535	<b>PXC-J11105</b>
		-	Right OR left	Spring	0,05	0,535	<b>PXC-J12105</b>

	Actuator	Weight kg	Order code
	Steel roller lever	0,040	<b>ZC2-JY13</b>
	Spring plastic rod	0,040	<b>ZC2-JY81</b>
	Spring metal rod	0,040	<b>ZC2-JY91</b>
	Variable length lever with delrin roller	0,050	<b>ZC2-JY41</b>

\* The switch bodies are available with G1/8 threaded connection. Replace the 3rd digit in the reference by 8. Example PXC-J11861

## 3/2 limit switches “J series”

With G1/8 connection

### Bore Ø3 mm

Pneumatic switch bodies\*

For use in association with all **ZC2-JC** operating heads

Symbol	Actuator	Return	Operating forces at 6 bar, N	Weight kg	Order code
	-	-	16	0,320	<b>PXC-J118</b>
	-	-	16	0,320	<b>PXC-J128</b>

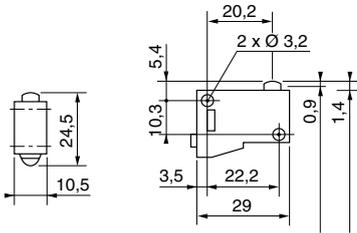
Symbol	Actuator	Direction of actuation	Return	Operating forces at 6 bar, Nm	Weight kg	Order code
	-	Right AND left	Spring	0,05	0,535	<b>PXC-J11801</b>
	-	Right AND left	Spring	0,05	0,535	<b>PXC-J12801</b>
	-	Right OR left	Spring	0,05	0,535	<b>PXC-J11805</b>
	-	Right OR left	Spring	0,05	0,535	<b>PXC-J12805</b>

Actuator	Weight kg	Order code
 Steel roller lever	0,040	<b>ZC2-JY13</b>
 Spring plastic rod	0,040	<b>ZC2-JY81</b>
 Spring metal rod	0,040	<b>ZC2-JY91</b>
 Variable length lever with delrin roller	0,050	<b>ZC2-JY41</b>

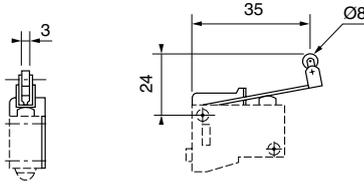
Dimensions, Limit switches, Series PXC

3/2 miniature limit switches

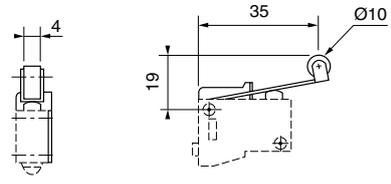
PXC-M111



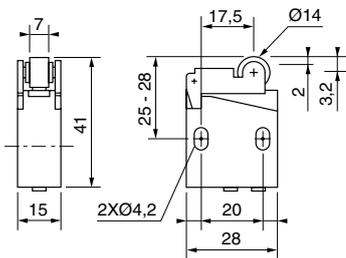
PXC-Z12



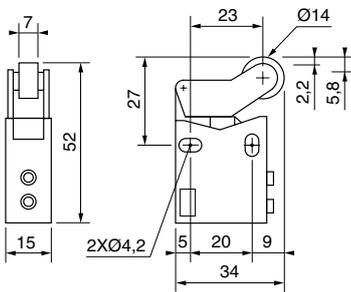
PXC-Z11



PXC-M121 - PXC-M131

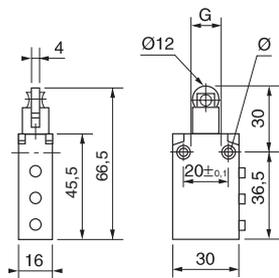


PXC-M521

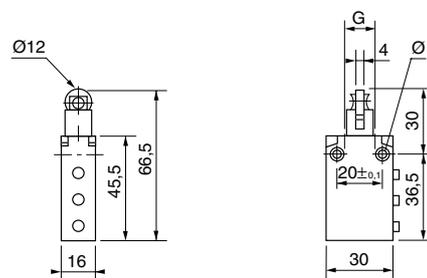


3/2 compact limit switches

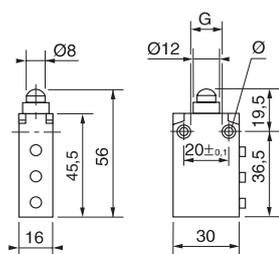
PXC-M601A102



PXC-M601A103

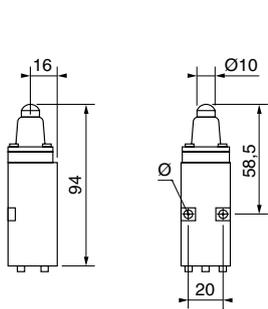


PXC-M601A110

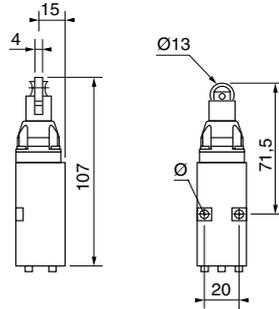


With plunger heads

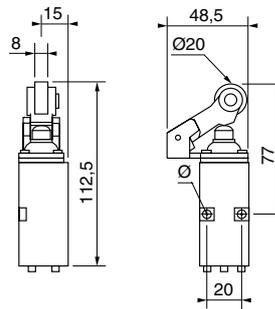
PXC-K21101, PXC-K22101



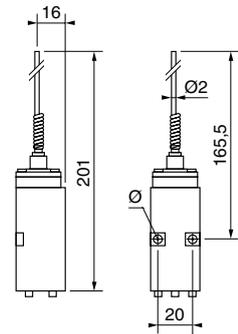
PXC-K21102, PXC-K22102



PXC-K21121, PXC-K22121

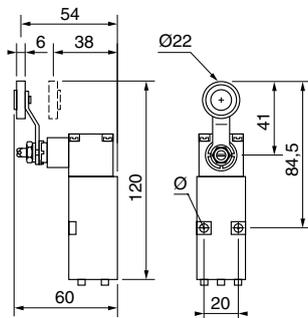


PXC-K21106, PXC-K22106

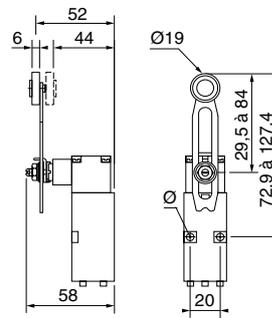


With rotary heads and operating levers

PXC-K21110531, PXC-K2210531



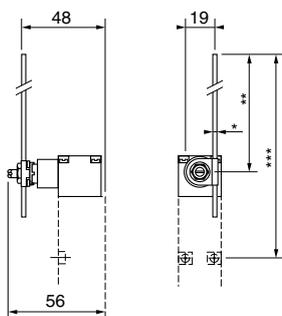
PXC-K21110541, PXC-K2210541



Ø=2 holes Ø5,2 mm

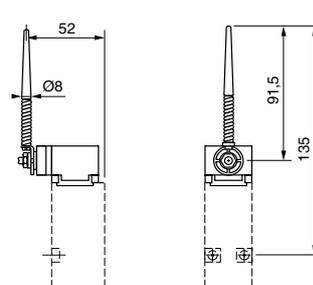
With rotary heads and operating levers

ZCK-Y54, ZCK-Y55

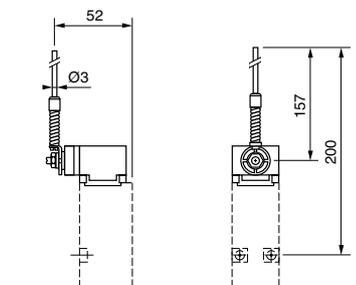


ZCK-Y55	ZCK-Y54
* Ø3	∇ 3
** 11 to 115	11 to 115
*** 53 to 158	53 to 158

ZCK-Y81

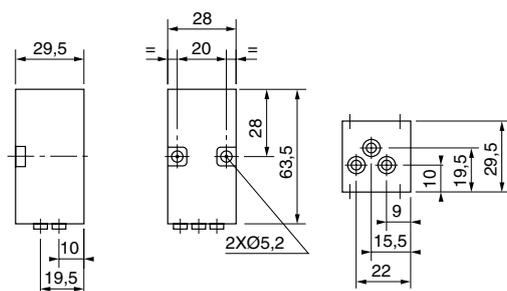


ZCK-Y91



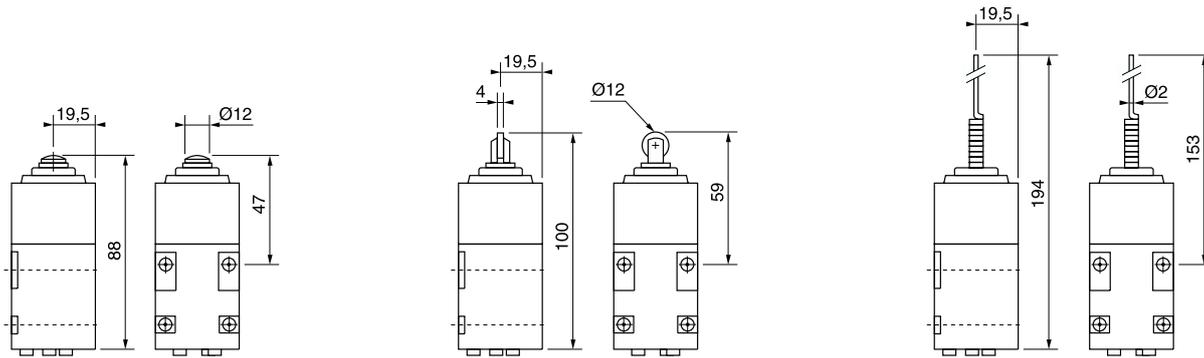
Pneumatic switch bodies

PXC-K211, PXC-K221



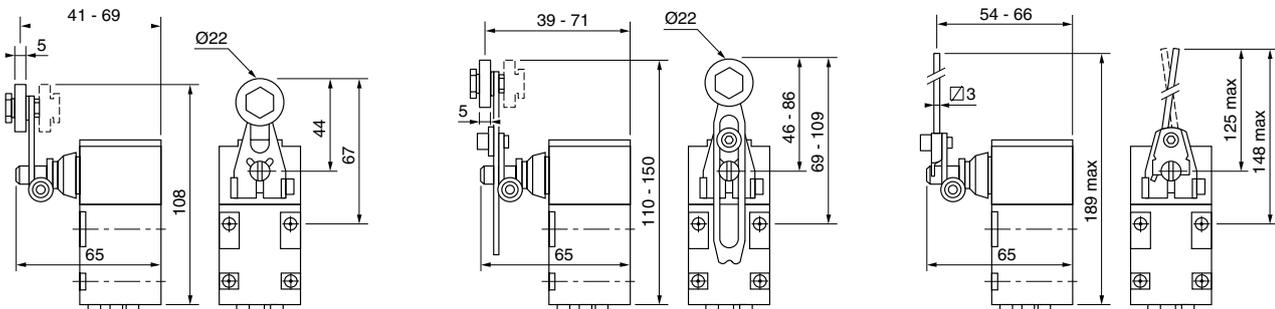
With plunger heads

PXC-J11161, PXC-J12161 PXC-J11162, PXC-J12162 PXC-J11170, PXC-J12170



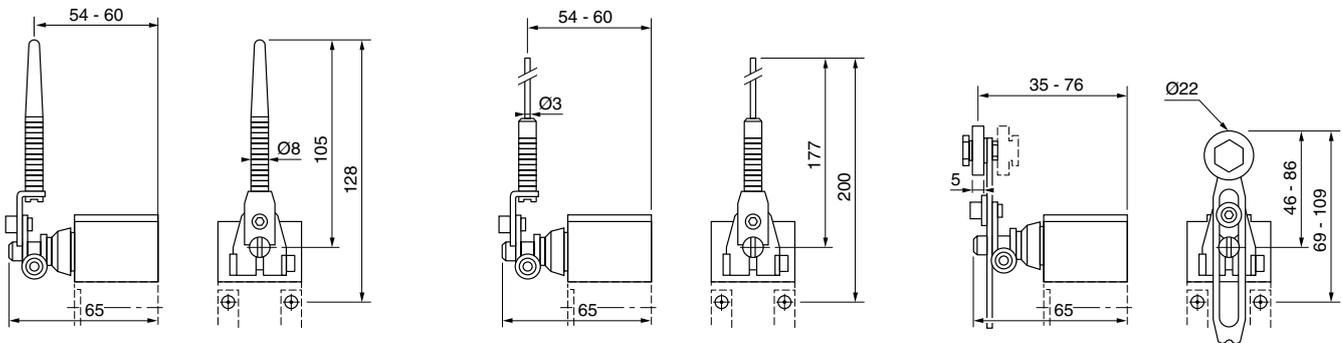
With rotary heads and operating levers

PXC-J1110111, J1210111, J1110511, J1210511 PXC-J1110131, J1210131, J1110531, J1210531 PXC-J1110151, J1210151, J1110551, J1210551



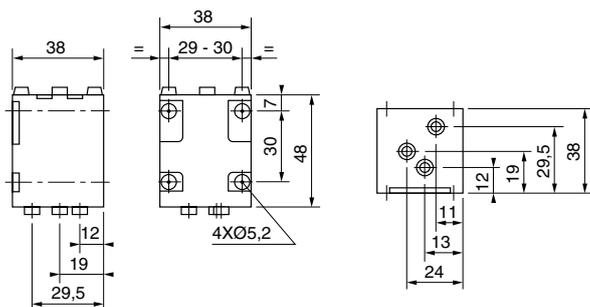
With rotary heads and operating levers

ZC2-JY81 ZC2-JY91 ZC2-JY41



Pneumatic switch bodies

PXC-J111, PXC-J121



- Ultra small size
- Light actuation forces
- Spring return as standard
- 3/2 NC as standard
- M5 body ported
- Lever adjustment on roller options



### Operating information

Working temperature	-10 °C to +80 °C	Flow;	C=0,27
Working pressure	0-7 bar	(acc. to ISO 6358)	b=0,26
Port size	M5		Qn=1 l/s
			Qmax=1,89 l/s
			Cv=0,127

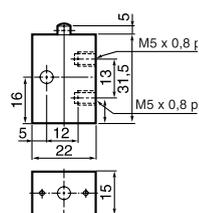
### Main data for Mechanically operated valves, M43303 Series

Symbol	Actuator	Return	Operating force at 6 bar, N	Weight kg	Order code
	Plunger	Spring	18	0,054	<b>M43303C</b>
	Roller-Lever	Spring	10	0,058	<b>M43303R</b>
	Roller, one way trip	Spring	10	0,060	<b>M43303T</b>
	Ball	Spring	18	0,062	<b>M43303B</b>

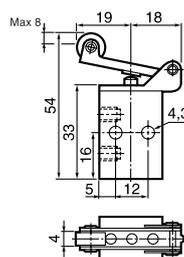
Normally closed only

### Mechanically operated valves

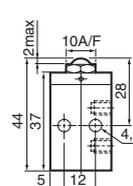
Plunger operated (basic valve)  
M43303C



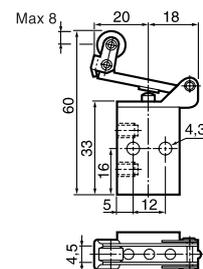
Roller lever operated  
M43303R



Ball operated  
M43303B



One way roller trip operated  
M43303T

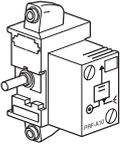


## Bleed sensors

For use with PRF-A12 relay

	Symbol	Connection	Actuator	Return	Operating forces at 6 bar, N	Weight kg	Order code
		Ø4 mm Push-in	Direct	-	3 N	0,030	<b>PXF-A111</b>
		M5	Direct	-	3 N	0,030	<b>PXF-A115</b>
		Ø4 mm Push-in	Ball roller	Spring	3 N	0,035	<b>PXF-A121</b>
		M5	Ball roller	Spring	3 N	0,035	<b>PXF-A125</b>
		Ø4 mm Push-in	Whisker	Spring	0,125 Nm	0,035	<b>PXF-A131</b>
		M5	Whisker	Spring	0,125 Nm	0,035	<b>PXF-A135</b>

## Bleed sensor relay

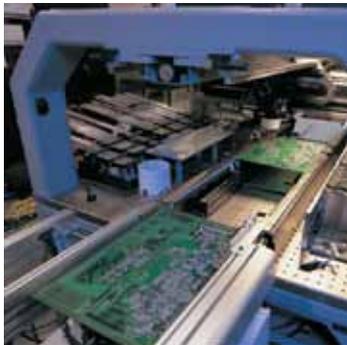
	Symbol	Connection	Function	Weight kg	Order code
		Ø4 mm Push-in	Provides a supply to a bleed sensor and generates a pneumatic signal equal to its supply pressure when the bleed sensor operates	0,070	<b>PRF-A12</b>

## Application

Bleed sensors make it possible to sense very low actuating forces or small movements and are very compact. They are easy to install and connect as they only require a single tube. However, the length of the interconnecting tube must remain short if quick response times are required.



aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
hydraulics  
**pneumatics**  
process control  
sealing & shielding



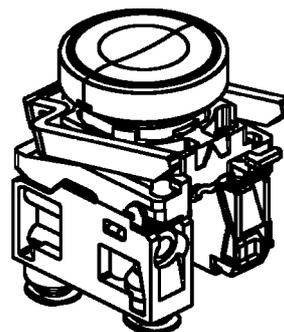
# Boutons et voyants pneumatiques

Catalogue PDE2587TCFR Décembre 2014



ENGINEERING YOUR SUCCESS.

- Montage sur panneau par face avant
- 3/2 NO ou NF
- Signaux de sortie pneumatique ou électrique
- Assemblage modulaire (jusqu'à 3 vannes par tête / et jusqu'à 2 vannes fonction pousser tirer, bouton tête rouge)
- Gamme complète de têtes de commande



### Caractéristiques d'utilisation et informations complémentaires

Pression d'utilisation		Raccordement	Ø4 mm droit, instantané
PXB-B3••	1 à 9 bar		Ø4 mm coudé, instantané
PXB-B4••	1 à 10 bar		M5 sur demande

Température de fonctionnement -15 °C à +60 °C

#### Débit

(conforme à ISO 6358)

**PXB-B3••** Q<sub>max</sub>=60 l/min  
Q<sub>n</sub>=30 l/min

**PXB-B4••** Q<sub>max</sub>=200 l/min  
Q<sub>n</sub>=100 l/min

NF Toutes les vannes PXB-B4 peuvent être raccordées soit comme 3/2 normalement fermé (NF) soit comme 3/2 normalement ouvert (NO), en raccordant l'alimentation d'air primaire à l'orifice 1 ou 3.

NO

### Boutons poussoirs à impulsion avec vanne - Version tête métal - Racc. droit Ø 4 mm

Symbole	Vanne	Rappel	Force d'actionnement à 6 bar, N	Débit NI/min	Masse kg	Référence
	Bouton poussoir Noir	Ressort	8,5 6,0	60 240	0,077 0,082	<b>PXB-B3111BA2</b> <b>PXB-B4131BA2</b>
	Bouton poussoir Vert	Ressort	8,5 6,0	60 240	0,077 0,082	<b>PXB-B3111BA3</b> <b>PXB-B4131BA3</b>
	Bouton poussoir Rouge	Ressort	8,5 6,0	60 240	0,077 0,082	<b>PXB-B3111BA4</b> <b>PXB-B4131BA4</b>
	Bouton poussoir Noir	Ressort	16,5 14,0	60 240	0,087 0,092	<b>PXB-B3251BA2</b> <b>PXB-B4231BA2</b>

### Boutons poussoirs "coup de poing" - Version tête métal - Racc. droit Ø 4 mm

Symbole	Vanne	Rappel	Force d'actionnement à 6 bar, N	Débit NI/min	Masse kg	Référence
	"coup de poing" Ø40 mm Noir	Ressort	12 6,5	60 240	0,122 0,127	<b>PXB-B3111BC2</b> <b>PXB-B4131BC2</b>
	"coup de poing" Ø40 mm Rouge		48 42,5	60 240	0,125 0,127	<b>PXB-B3111BT4</b> <b>PXB-B4131BT4</b>
	"coup de poing" indexé Ø40 mm Rouge		49 43,5	60 240	0,125 0,127	<b>PXB-B3121BT4</b> <b>PXB-B4131BT4</b>

## Boutons tournants avec vannes - Version tête métal - Racc. droit Ø 4 mm

Symbole	Vanne	Rappel	Débit NI/min	Masse kg	Référence
	Bouton tournant indexé 2 positions, Noir		60 240	0,092 0,097	<b>PXB-B3111BD2</b> <b>PXB-B4131BD2</b>
	Bouton tournant indexé 2 positions, Noir		60 240	0,102 0,107	<b>PXB-B3211BD2</b> <b>PXB-B4231BD2</b>
	Bouton tournant indexé 2 positions, Black		60 240	0,102 0,107	<b>PXB-B3251BD2</b> <b>PXB-B4231BD2</b>
	Bouton tournant indexé 3 positions, Noir		60 240	0,102 0,107	<b>PXB-B3211BD3</b> <b>PXB-B4231BD3</b>
	Bouton tournant indexé 3 positions, Noir		60 240	0,102 0,107	<b>PXB-B3251BD3</b> <b>PXB-B4231BD3</b>
	Bouton tournant à impulsion avec levier long 3 positions, Noir	Ressort	60 240	0,103 0,108	<b>PXB-B3211BJ5</b> <b>PXB-B4231BJ5</b>

## Vannes pneumatiques avec support de montage métal - Racc. droit Ø 4 mm

A utiliser avec les têtes de commande ZB4-B.

Symbole	Vanne	Rappel	Force d'actionnement à 6 bar, N	Débit NI/min	Masse kg	Référence
	Poussoir	Ressort	7 4,5	60 240	0,048 0,053	<b>PXB-B3111B</b> <b>PXB-B4131B</b>
	Poussoir	Ressort	8 4,5	60 240	0,048 0,053	<b>PXB-B3121B</b> <b>PXB-B4131B</b>

## Vannes pneumatiques additionnelles métal - Racc. droit Ø 4 mm

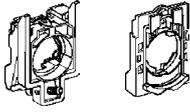
A utiliser avec les supports de montage et têtes de commande ZB4 et ZB5

Symbole	Vanne	Rappel	Force d'actionnement à 6 bar, N	Débit NI/min	Masse kg	Référence
	Poussoir Raccords droits	Ressort	7 4,5	60 240	0,010 0,015	<b>PXB-B3911</b> <b>PXB-B4931</b>
	Poussoir Raccords droits	Ressort	8 4,5	60 240	0,010 0,015	<b>PXB-B3921</b> <b>PXB-B4931</b>
	Poussoir Raccords coudés	Ressort	7 4,5	60 240	0,015 0,021	<b>PXB-B3912</b> <b>PXB-B4932</b>
	Poussoir Raccords coudés	Ressort	8 4,5	60 240	0,015 0,021	<b>PXB-B3922</b> <b>PXB-B4932</b>

## Contacts électriques

Raccordement	Type de contact	Masse kg	Référence
	Peut être combiné avec des vannes pneumatiques, afin d'obtenir des signaux pneumatiques et électriques à partie d'une seule commande.		
	Normalement ouvert (NO)	0,011	<b>ZBE-101</b>
	Normalement fermé (NF)	0,011	<b>ZBE-102</b>

## Support de montage pour vannes et têtes de commande

	Description	Pour tête métal ZB4		Pour tête plastique ZB5	
		Masse kg	Référence	Masse kg	Référence
	<b>Support de montage pour vannes et têtes de commande</b> pour composer un bouton complet comprenant 1 vanne et une tête de commande..	0,038	<b>ZB4-BZ009</b>	0,006	<b>ZB5-AZ009</b>

## Têtes de commande

A utiliser avec vannes PXB-B3. et PXB-B4.

## Boutons à impulsion

	Description	Couleur	Tête métal		Tête plastique	
			Masse kg	Référence	Masse kg	Référence
	A impulsion	Noir	0,029	<b>ZB4-BA2</b>	0,018	<b>ZB5-AA2</b>
		Vert	0,029	<b>ZB4-BA3</b>	0,018	<b>ZB5-AA3</b>
		Rouge	0,029	<b>ZB4-BA4</b>	0,018	<b>ZB5-AA4</b>
		6 coiffes de couleur	0,029	<b>ZB4-BA9</b>	0,018	<b>ZB5-AA9</b>
	Saillant	Noir	0,030	<b>ZB4-BL2</b>	0,019	<b>ZB5-AL2</b>
		Vert	0,030	<b>ZB4-BL3</b>	0,019	<b>ZB5-AL3</b>
		Rouge	0,030	<b>ZB4-BL4</b>	0,019	<b>ZB5-AL4</b>
	Capuchonné	Noir	0,034	<b>ZB4-BP2</b>		

## Boutons poussoirs pousser / pousser

	Description	Couleur	Masse kg	Tête métal
				Référence
	A impulsion	Noir	0,029	<b>ZB4-BH02</b>
		Vert	0,029	<b>ZB4-BH03</b>
		Rouge	0,029	<b>ZB4-BH04</b>

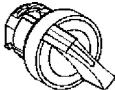
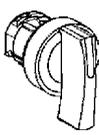
## Double headed spring return pushbuttons

	Description	Couleur marquage	Masse kg	Tête métal
				Référence
	A impulsion	Vert/Rouge I/O	0,047	<b>ZB4-BA8234</b>

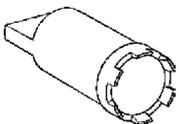
## Boutons poussoirs "coup de poing"

	Description	Fonction	Couleur	Masse kg	Tête métal
					Référence
	"coup de poing" Ø40 mm	Rappel ressort	Noir	0,074	<b>ZB4-BC2</b>
			Vert	0,074	<b>ZB4-BC3</b>
			Rouge	0,074	<b>ZB4-BC4</b>
		A accrochage pousser-tirer	Rouge	0,077	<b>ZB4-BT84</b>
	"coup de poing" Ø60 mm	Rappel ressort	Noir	0,093	<b>ZB4-BR2</b>
	"coup de poing" Ø40 mm	A accrochage Tourner pour réarmer	Rouge	0,070	<b>ZB4-BS844</b>
		A accrochage Réarmement par clé Ronis N°455	Rouge	0,070	<b>ZB4-BS944</b>

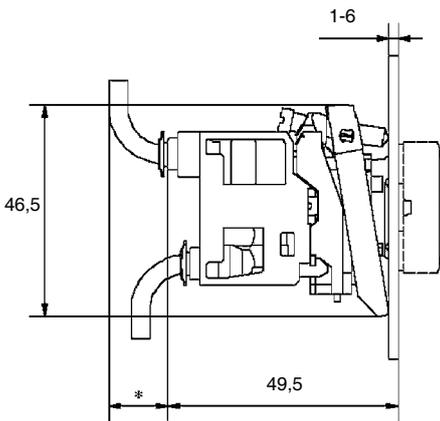
## Sélecteurs

	Description	Fonction	Tête métal		Tête plastique		Référence		
			Masse kg	Référence	Masse kg	Référence			
	Standard, levier noir	2 positions	Indexées	0,044	<b>ZB4-BD2</b>	0,024	<b>ZB5-AD2</b>		
		3 positions	Indexées	0,044	<b>ZB4-BD3</b>	0,024	<b>ZB5-AD3</b>		
		3 positions rappel au centre		0,044	<b>ZB4-BD5</b>	0,024	<b>ZB5-AD5</b>		
	Levier long	2 positions	Indexées	0,045	<b>ZB4-BJ2</b>				
		3 positions	Indexées	0,045	<b>ZB4-BJ3</b>				
			Rappel au centre		0,045	<b>ZB4-BJ5</b>			
			1 rappel de gauche vers centre		0,045	<b>ZB4-BJ7</b>			
	Description	Fonction	Retrait de la clé	Masse kg	Référence				
					<b>Commande par clé</b>	2 positions	A gauche	0,069	<b>ZB4-BG2</b>
					(Clé Ronis N° 455)	indexées	A gauche et à droite	0,069	<b>ZB4-BG4</b>

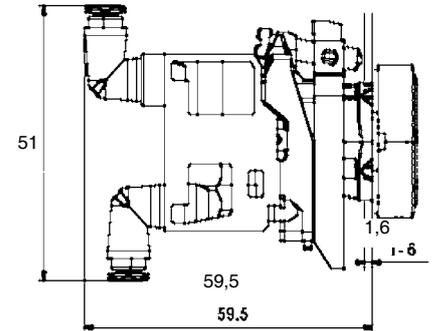
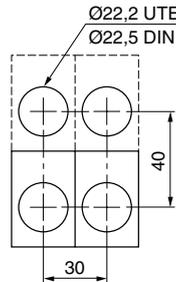
## Outils

	Description	Masse kg	Référence
	Clé pour tête ZB5	0,160	<b>ZB5-AZ905</b>

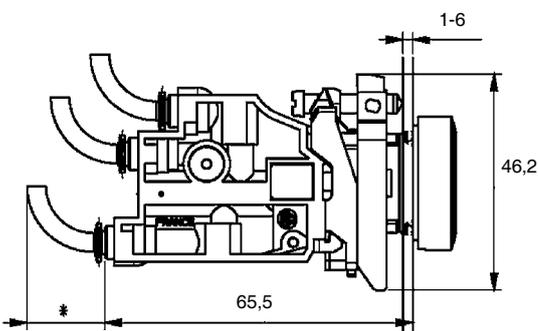
**PXB-B3**



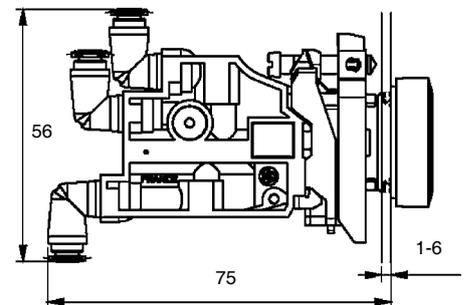
Largeur du corps 30 mm  
 \* Avec tube 2 x 4 mm = 10  
 Avec tube 2,7 x 4 mm = 15



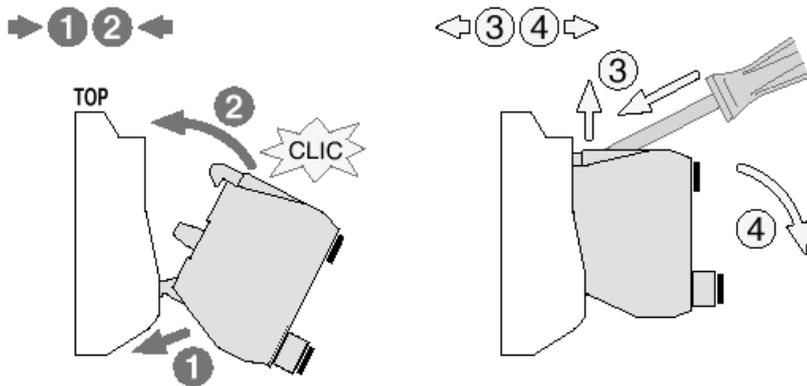
**PXB-B4**



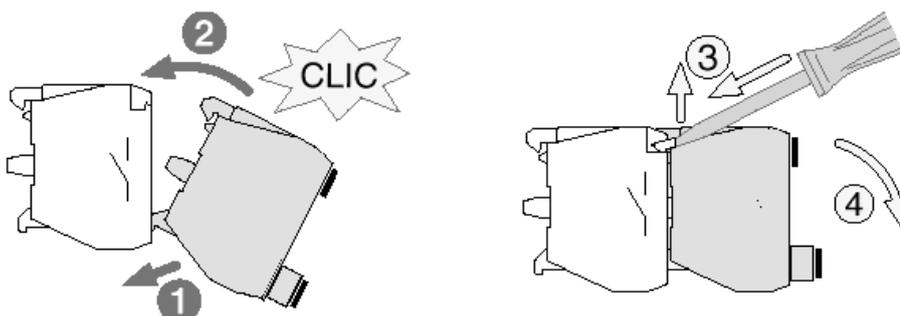
Largeur du corps 30 mm  
 \* Avec tube 2 x 4 mm = 10  
 Avec tube 2,7 x 4 mm = 15



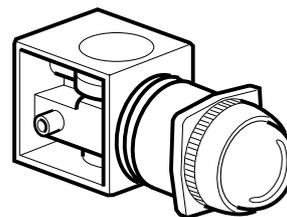
**Assemblage des vannes PXB-B3. et PXB-B4. sur le support de montage**



**Assemblage des vannes PXB-B3. et PXB-B4. à l'arrière d'un bloc électrique**



- Commutation éclair
- Mécanisme simple et robuste
- Contraste élevé
- Visibilité panoramique
- Raccordement monotube
- Aide efficace au diagnostic



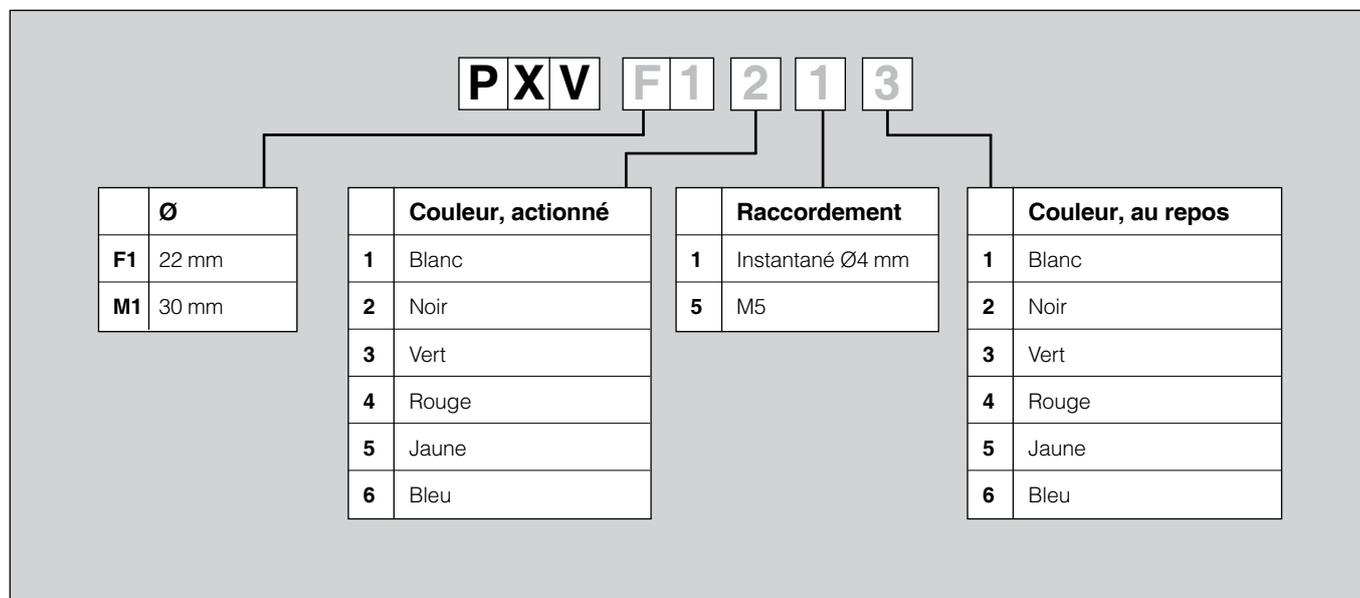
### Caractéristiques d'utilisation

Pression d'utilisation 1-8 bar  
 Température de fonctionnement -15 °C à +60 °C

### Options et information complémentaires

Raccordement Instantané droit Ø 4 mm  
 en standard

### Composition de la référence de commande



### Voyants Ø22 mm

Colletette polymère noir  
A l'état actionn

Symbole	Couleur*	Masse kg	Référence
	Vert	0,080	<b>PXV-F131</b>
	Rouge	0,080	<b>PXV-F141</b>
	Jaune	0,080	<b>PXV-F151</b>
	Bleu	0,080	<b>PXV-F161</b>
	Blanc	0,080	<b>PXV-F111</b>

### Voyants Ø22 mm

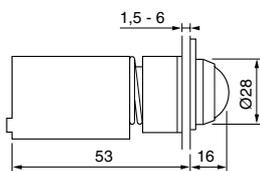
Colletette polymère noir  
Au repos

Symbole	Couleur*	Masse kg	Référence
	Vert	0,080	<b>PXV-F1213</b>
	Rouge	0,080	<b>PXV-F1214</b>
	Jaune	0,080	<b>PXV-F1215</b>
	Bleu	0,080	<b>PXV-F1216</b>
	Blanc	0,080	<b>PXV-F1211</b>

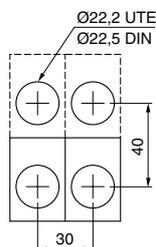
\* Les voyants pneumatiques sont noirs dans une position et colorés dans l'autre.  
Cette position colorée correspond soit à la présence de pression (état actionné) soit à l'absence de pression (état repos).  
Pour deux couleurs différentes sur le même voyant, consulter votre correspondant local.

### Voyants Ø22 mm

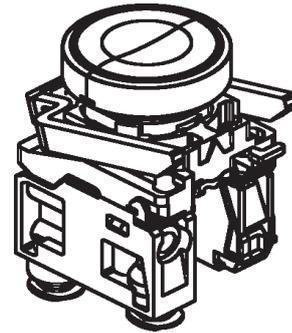
PXV-F1••



### Entraxes minimaux



- 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**

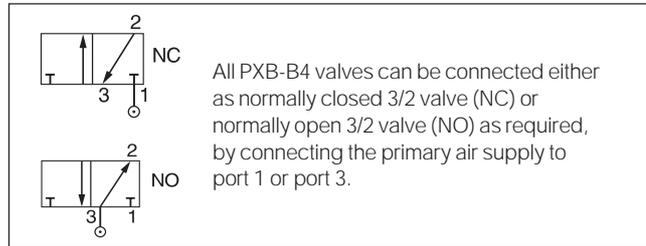
Working pressure  
 PXB-B3•• 1 to 9 bar  
 PXB-B4•• 1 to 10 bar

Working temperature -15 °C to +60 °C

**Flow**  
 (acc. to ISO 6358)  
**PXB-B3••** Q<sub>max</sub>=60 l/min  
 Q<sub>n</sub> = 30 l/min

**PXB-B4••** Q<sub>max</sub>=240 l/min  
 Q<sub>n</sub> = 120 l/min

Connections Ø4 mm straight Push-in as standard  
 Ø4 mm swivel Push-in on request  
 M5 on request



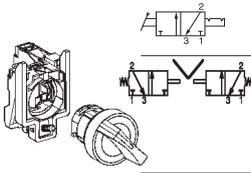
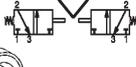
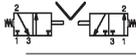
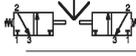
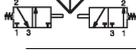
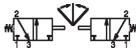
**Spring return pushbuttons - Metal head version - Ø 4 mm straight fittings**

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**

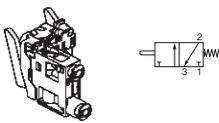
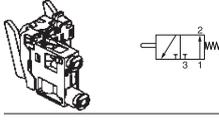
Symbol	Actuator	Return	Operating force at 6 bar, N	Flow NI/min	Weight kg	Order code
	Pushbutton Ø40 mm Black	Spring	12 6,5	60 240	0,122 0,127	<b>PXB-B3111BC2</b> <b>PXB-B4131BC2</b>
	Latching pushbutton Ø40 mm Red		48 42,5	60 240	0,125 0,127	<b>PXB-B3111BT4</b> <b>PXB-B4131BT4</b>
	Latching pushbutton 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	0,092	<b>PXB-B3111BD2</b>
			240	0,097	<b>PXB-B4131BD2</b>
	Latching selector button 2 positions, Black		60	0,102	<b>PXB-B3211BD2</b>
			240	0,107	<b>PXB-B4231BD2</b>
	Latching selector button 2 positions, Black		60	0,102	<b>PXB-B3251BD2</b>
			240	0,107	<b>PXB-B4231BD2</b>
	Latching selector button 3 positions, Black		60	0,102	<b>PXB-B3211BD3</b>
			240	0,107	<b>PXB-B4231BD3</b>
	Latching selector button 3 positions, Black		60	0,102	<b>PXB-B3251BD3</b>
			240	0,107	<b>PXB-B4231BD3</b>
	Non latching selector button with long handle 3 positions, Black	Spring	60	0,103	<b>PXB-B3211BJ5</b>
			240	0,108	<b>PXB-B4231BJ5</b>

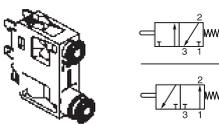
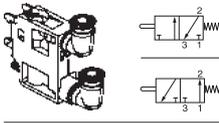
**Switch bodies with operating metal head mounting - Ø 4 mm straight fittings**

For use with ZB4 operating heads

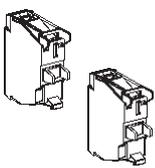
Symbol	Actuator	Return	Operating force at 6 bar, N	Flow NI/min	Weight kg	Order code
	Plunger	Spring	7	60	0,048	<b>PXB-B3111B</b>
			4,5	240	0,053	<b>PXB-B4131B</b>
	Plunger	Spring	8	60	0,048	<b>PXB-B3121B</b>
			4,5	240	0,053	<b>PXB-B4131B</b>

**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>
			4,5	240	0,015	<b>PXB-B4931</b>
	Plunger Straight connection	Spring	8	60	0,010	<b>PXB-B3921</b>
			4,5	240	0,015	<b>PXB-B4931</b>
	Plunger Swivel connection	Spring	7	60	0,015	<b>PXB-B3912</b>
			4,5	240	0,021	<b>PXB-B4932</b>
	Plunger Swivel connection	Spring	8	60	0,015	<b>PXB-B3922</b>
			4,5	240	0,021	<b>PXB-B4932</b>

**Electrical contact blocks**

Connections	Type of contact	Weight kg	Order code
	Normally open (NO)	0,011	<b>ZBE-101</b>
	Normally closed (NC)	0,011	<b>ZBE-102</b>

**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*
<b>PXBB3111B</b>	5/32" Instant	3/2	NNP
<b>PXBB3121B</b>	5/32" Instant	3/2	NP
<b>PXBB4131B</b>	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)

**Additional Valve Bodies**



PXBB3911



PXBB4932



PXBB4931

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

**BOLD ITEMS ARE MOST POPULAR.**

