



EXPERT IN PROCESS VALVE



**PV3B0** Series  
**Angle seat valve (Weld end)**

### ◆ How to Order

**PV 3B 0 0<sup>⑧</sup> PX 015 50 NC S M**

**Series**  
3A butt weld ends  
3B socket weld ends

**Type of Actuator**  
P nylon PA66 clean port  
PX nylon PA66 built-in SS liner NAMUR port  
PR nylon PA66 built-in SS liner clean port  
SD S.S. polished actuator  
S S.S. actuator  
A aluminium actuator  
AE aluminium actuator built-in liner

**Port size**  
08 1/4"  
010 3/8"  
015 1/2"  
020 3/4"  
025 1"  
032 1-1/4"  
040 1-1/2"  
050 2"  
065 2-1/2"  
080 3"  
100 4"

**Acting type**  
S Single acting  
D Double acting

**Control Function**  
NO Normally Open  
NC Normally Closed  
DA Liberty (double acting)

**Flow Direction**  
M flow direction above seat  
G flow direction below seat  
T flow via two way

**Seal/Seat**  
Blank NBR PTFE  
B1 NBR VITON  
V1 VITON PTFE  
V2 VITON PEEK

**Body material**  
Blank S.S.304  
T1 S.S.316  
T2 S.S.316L  
T3<sup>⑥</sup> Gunmetal (Rg5)

**Solenoid Valve**  
SV1 AX23-06/08 S.S parts  
SV1A SV1B SV1C 3/2-way solenoid valve 3V1-06  
SV2 3/2-way solenoid valve EV25/23-31-10  
SV3 5/2-way change-over NAMUR solenoid valve EV2531M-10  
SV4 5/2-way NAMUR solenoid valve DX23-06/08 brass body  
SV5 3/2-way solenoid valve

**Type of Stem**  
0 standard stem  
1 midi stem  
2 mini stem  
3 no stem<sup>⑤</sup>

**Actuator Size**

	Standard Actuator Size mm						
	P	S <sup>①</sup>	A	AE	SD	PX	PR <sup>②</sup>
DN08	40,50	27,32,40,50	40,50	50,70	40,50	40,50	32,40
DN10	40,50	27,32,40,50	40,50	50,70	40,50	40,50	32,40,50
DN15	40,50	27,32,40,50	40,50	50,70	40,50	40,50	32,40,50
DN20	40,50,63	40,50,63	40,50,63	50,70,100	40,50,63	40,50,63	32,40,50,63
DN25	50,63,80,100	50,63,90,125	50,63,80	50,70,100	50,63,90	50,63,90	50,63,90
DN32	63,80,100	63,90,125	63,80	70,100,125	63,90	63,90	63,90
DN40	63,80,100	63,90,125	63,80	70,100,125	63,90	63,90	63,90
DN50	63,80,100	63,90,125	63,80	70,100,125	63,90	63,90	63,90
DN65	80,100	90,125	80	100,125,150	90	90	90,110
DN80	100,125	125,160		125,150,110	110	110	110
DN100	125	125,160		125,150,110	110	110	110

**Accessories**

**Proximity Switch for Position Feedback**  
VM424 VM414 VM314

**Manual Overrid for Stroke Limiting**  
VM10 VM20

**Process Controller**  
VT505 VT545 VT535

**Position locator**  
VT525 VT515

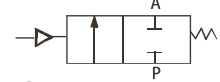
Note: ① serie S 27/32mm is mainly used in filling valve.  
② serie PR 32mm is mainly used in mini type angle seat valve.  
③ serie AD 32mm is mainly used in compact angle seat valve.  
④ serie AX 32mm is mainly used in mini compact angle seat valve.  
⑤ this code only works with AD & AX actuators.  
⑥ this code only works with Series PV600.  
⑦ 更多电磁阀款式选择参考附件单元。  
⑧ 同系列产品的不同分类，例如PV100为标准内螺纹阀体，PV101为经典内螺纹阀体，PV102为紧凑型内螺纹阀体。

## GENERAL FEATURES

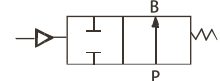
- High flow due to angle seat design
- Anti-waterhammer design (fluid entry under the disc)
- Standard gland packing suitable for Vacuum up to 10<sup>-2</sup>mbar
- Wide range of piston-type operators (32 - 40 - 50- 63 - 90 - 110 -125 -150 - 160mm dia.) rotatable through 360°, for maximum performance at different minimum pilot pressures
- High performance, maintenance-free stuffing box
- Valve body material: AISI 304, AISI 316, AISI316L and Gunmetal
- Valve ends: Female thread, Male thread, Butt welds, Socket welds, Flange ends, and Tri-clamp ends.
- Range available from 1/4" to 4" in the double acting versions, spring return N.C. from above and below the seat, spring return N.O. from below the seat.
- The variations in the actioning of the valve, the several combinations and the possibility to intercept the fluid from above or below the seat, originate multiple versions of the automatic valve.
- On the basis of the kind of valve and the variations of pressure that must be intercepted, the necessary control pressure can be individuated, and consequently, the code for the corresponding valve.

## ◆ Symbol

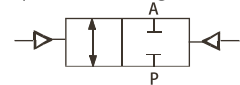
**Control Function A**  
 (closed by spring force in rest position)



**Control Function B**  
 (open in rest position)



**Control Function I**  
 (double acting actuator)



## ◆ Characteristics

Orifice	DN08...100	
Body materials	Cast stainless steel 304,316,316L, gunmetal	
Actuator material	PA (Glass fibre filled PA) Stainless steel 304 Aluminium	
Seal material	PTFE(NBR,FKM,EPDM on request)	
Medium	Air, water, alcohol, oils, fuel, hydraulic fluids, salt solution, alkali solutions, organic solvents, steam	
Pressure	0-16Bar (steam from 180°C, from 0 to 10Bar) depending on the size and model chosen (see catalogue for details)	
Viscosity	Max.600cst (mm <sup>2</sup> /s)	
Packing gland (with silicone grease)	PTFE V-ring with spring compensation	
Medium temperature	-10 to +180 °C with PTFE seal	
Ambient temperature	PA nylon -10 to 90 °C Stainless steel -10 to 150 °C Aluminium -10 to 150 °C	
Installation	As required, preferably with actuator in upright position The valves can be mounted in any position without affecting operation Pipe connections (G*) have standard combination thread according to ISO 228/1 and ISO 7/1 Installation/maintenance instructions are included with each valve	
Control medium	Neutral gases, air	
Max.pilot pressure	PA nylon actuator size Φ32...63 10 bar PA nylon actuator size Φ90...110 8 bar Stainless steel 10 bar Aluminium 10 bar	
Connection	Female thread ends Male thread ends Butt weld ends Socket weld ends Flange ends Tri-clamp ends Gunmetal body	DN08...DN80 DN15...DN65 DN15...DN65 DN15...DN65 DN15...DN100 DN15...DN65 DN13...DN65

## ◆ Options and accessories

- Signaling box or compact signaling unit
- Stroke limiter for opening
- Manual safety device
- Positioner for proportional control
- Optical position indicator on 32, 40, 50, 63, 90, 110,125,150,160mm.
- NAMUR port mounting pilot is optional, except to 32mm
- NET-INOX passivation treatment on stainless steel body valve
- ATEX 94/9/EC versions for potentially explosive atmospheres
- Polit operated drain valve assembly with electronic timer (see solenoids, coils & Accessories sections)
- Male thread, Weld end, clamp and flange end connections are available on request
- Vacuum applications up to 9x10<sup>-3</sup> mbar

## ◆ Applications

- Industrial gas compression and separation
- Biological gas generation
- Industrial steam sterilization and separation
- Heat-exchange system.
- Polystyrene foaming and packaging
- Beverage processing
- Dying and purification
- Filling system
- Mechanical equipment and automation machinery
- Petroleum and chemical industry










PV3BoSD2550NC



PV3BoA2550NC

## ◆ PV3B0 series angle seat valve ordering code

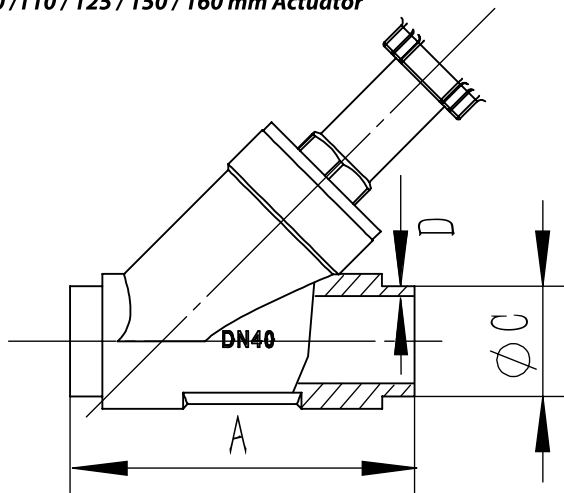
### DN15 - DN65+ Actuator

Shows						
PV3B0PX	PV3B0PR	PV3B0P	PV3B0S	PV3B0SD	PV3B0A	PV3B0AE
						
PA(NAMUR interface)	PA(clean port)	PA(classical clean port)	Stainless steel	Stainless steel (Polished)	Aluminum A	Aluminum AE
Control Pressure	2~10 bar					
Working Pressure	vacuum is as low as -0.9 bar(g)					
Temp. of Medium	-40 ~ +180°C					
Temp. of Ambient	-40 ~ +60°C					
Body Material	304 / 316 / 316L					
Standard of Pipeline interface	DIN EN ISO 1127 / ISO 4200 / DIN 11866 系列B/ DIN 11866 系列 A/ASME BPE / DIN 11866 系列 C / DIN11850-1/ DIN11850-2 / DIN 11850-3					
Optional Accessories	Pilot Valve/Regulating the Cone/Manual Override for Stroke Limiting/Proximity Switch for Position Feedback/Position locator&Process Controller					

## ◆ Dimension [mm]

### DN10 - DN65

#### 40/50/63/80/90/100/110/125/150/160 mm Actuator



#### Body dimension of Weld ends

Port size	DN (mm)	A	DIN11850-1		DIN11850-2		DIN11850-3		DIN EN ISO 1127 / ISO 4200 / DIN 11866 -B		DIN 11850-2 / DIN 11866 -A		NPS	ASME BPE / DIN 11866 - C	
			C	D	C	D	C	D	C	D	C	D			
* 3/8"	DN10	/	12	1.0	13	1.5	14	2.0	/	/	/	/	1/2"	12.7	1.65
* 1/2"	DN15	80	18	1.0	19	1.5	20	2.0	21.3	1.6	19	1.5	3/4"	19.05	1.65
* 3/4"	DN20	88	22	1.0	23	1.5	24	2.0	26.9	1.6	23	1.5	1"	25.4	1.65
* 1"	DN25	98	28	1.0	29	1.5	30	2.0	33.7	2.0	29	1.5	1 1/4"	/	/
* 1 1/4"	DN32	110	34	1.0	35	1.5	36	2.0	42.4	2.0	35	1.5	1 1/2"	38.1	1.65
* 1 1/2"	DN40	128	40	1.0	41	1.5	42	2.0	48.3	2.0	41	1.5	2"	50.8	1.65
* 2"	DN50	145	52	1.0	53	1.5	54	2.0	60.3	2.0	53	1.5	2 1/2"	63.5	1.65
* 2 1/2"	DN65	165			70	2.0			76.1	2.3	70	2.0			