

# PVPK PNEUMATIC OPERATION RIGHT ANGLE ISOLATION VALVES



The range of single acting cylinder, spring return pipeline valves is designed for high speed actuation from standard pneumatic lines, and are offered in sizes NW10, 16, 25, 40 and 50.

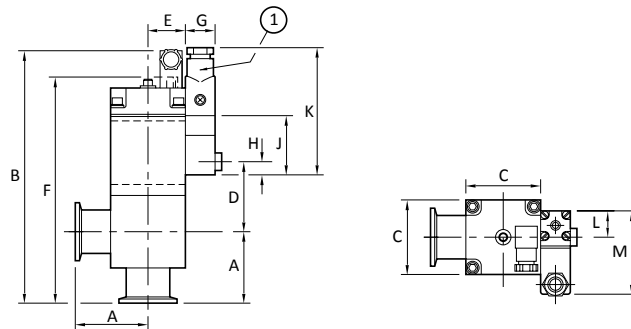
They are available with aluminium or stainless steel bodies with either O-ring (shaft seal Aluminium only) or bellows seal.

The valves are designed for long life duties, with a MTTF of 5,000,000 cycles for both bellows and 'O' ring sealed versions providing long intervals between services.

## Features and benefits

- Improved lifetime, mean-time-to-failure now 5,000,000 cycles.
- Electrical and visual indication of valve status.
- Fast acting – 20 ms to close (PV16).
- Available in aluminium or stainless steel.
- Choice of bellows or 'O' ring shaft sealing with aluminium bodies.

## PVPK Dimension



	A	B	C	D	E	F	G	H	J	K	L	M
PV10PK	30	139.5	38	41	25	122	20	10	40	88	19	59
PV16PK	40	149.5	38	41	25	132	20	10	40	88	19	59
PV25PK	50	171.3	50.8	47.6	28	153.7	20	10	40	88	19	59
PV40PK	65	200.6	76.2	57.8	41	183	20	10	40	88	19	59
PV50PK	70	218	92	70	41	200	20	10	40	88	19	59

① Optional control valve



## Technical Data

PVPK	
Valve actuation type	Single acting, pneumatically opened, spring closed
Pressure range	1 x 10 <sup>-9</sup> to 2100 mbar/8 x 10 <sup>-10</sup> to 1575 Torr
Max pressure differential	
Opening	1000 mbar/750 Torr
Closing	2100 mbar/1575 Torr
Leak rate	< 1 x 10 <sup>-9</sup> mbar ls <sup>-1</sup> / < 8 x 10 <sup>-10</sup> Torr ls <sup>-1</sup>
Pneumatic connector	Rp 1/8 (1/8 inch BSP) *
Pneumatic operating pressure	2.8 to 4.2 bar/41 to 61 psi
Electrical indicator	Single microswitch ‡
Microswitch electrical rating	24 V, 1.5 A a.c. or d.c.
Max cycle frequency	900 h <sup>-1</sup>
Bellows reliability, MTTF	5,000,000 cycles
Ambient operating temp	5-100 °C
Maximum baking temp	100 °C
Construction materials	
PVPKA	HE30TF aluminium
PVPKS	AISI304 stainless steel
Bellows	AISI316L stainless steel
O-ring	Fluoroelastomer

\* With optional control valve fitted

PVPK		
Molecular conductance (ls <sup>-1</sup> )	Right angled	
PV10PK	3	
PV16PK	4	
PV25PK	10	
PV40PK	40	
PV50PK	50	
	Time to open (ms)*	Time to close (ms)*
PV10/16PK	60	20
PV25PK	15	41
PV40PK	50	155
PV50PK	50	155
Weight	Aluminium	Stainless Steel
PV16PK	310 g/10.9 oz	520 g/18.2 oz
PV25PK	610 g/21.4 oz	980 g/34.3 oz
PV40PK	1500 g/52.5 oz	2300 g/80.5 oz
PV50PK	2000 g/70.5 oz	4000 g/140 oz

## PVPK

### Ordering information

Product description	Order no:
PV10PKAO, O-ring sealed, aluminium	C41113000
PV10PKA, bellows sealed, aluminium	C41111000
PV16PKAO, O-ring sealed, aluminium	C41213000
PV16PKA, bellows sealed, aluminium	C41211000
PV16PKS, bellows sealed, stainless steel	C41215000
PV25PKAO, O-ring sealed, aluminium	C41313000
PV25PKA, bellows sealed, aluminium	C41311000
PV25PKS, bellows sealed, stainless steel	C41315000
PV40PKAO, O-ring sealed, aluminium	C41413000
PV40PKA, bellows sealed, aluminium	C41411000
PV40PKS, bellows sealed, stainless steel	C41415000
PV50PKA, bellows sealed, aluminium	C41510000
PV50PKS, bellows sealed, stainless steel	C41515000

### Spares Kit Valve Seals

Product description	Order no:
Spares Kit Valve Seals PVPK10/16	C41111800
Spares Kit Valve Seals PV25PK	C41311800
Spares Kit Valve Seals PV40PK	C41411800

### O-Ring kit

Product description	Order no:
PV50MK O-Ring kit	C41501800

### Top Cap Assembly

Product description	Order no:
Top Cap Assembly PV10/16P	C41111821
Top Cap Assy PV25P	C41311821
Top Cap Assembly PV40P	C41411821

### Actuator

Product description	Order no:
PV10P O Ring Actuator Assembly	C41113035
PV25P O Ring Actuator Assembly	C41313035
PV40P O Ring Actuator Assembly	C41413035
Bellows Actuator Assy PV10P	C41111035
Bellows Actuator Assy PV25P	C41311035
Bellows Actuator Assy PV50P	C41515035
Bellows Actuator Assy PV40P	C41411035



### Valve body

Product description	Order no:
Valve body PV10KA	C41101816
Valve body PV16KA	C41201816
Valve body PV16KS	C41602801
Valve body PV25KA	C41301816
Valve body PV25KS	C41622801
Valve body PV40KA	C41401816
Valve body PV40KS	C41642801
Valve body PV50KA	C41662816
Valve body PV50KS	C41662801

### Electropneumatic Control Valve

Product description	Order no:
3 Port Electropneumatic Control Valve 24 V d.c.	H06200124
3 Port Electropneumatic Control Valve 24 V a.c.	H06200125
3 Port Electropneumatic Control Valve 110 V a.c.	H06200126
3 Port Electropneumatic Control Valve 230 V a.c.	H06200138

