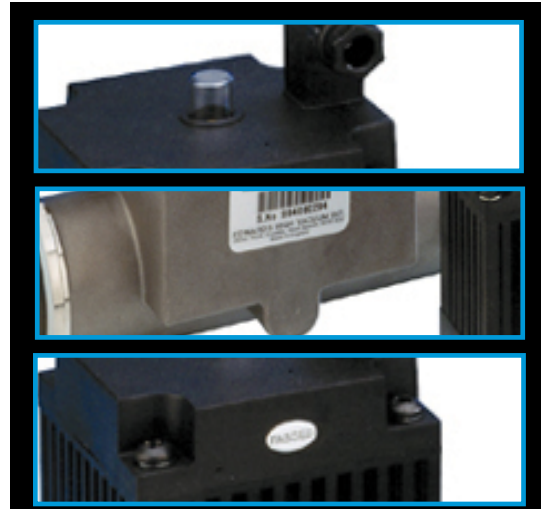


IPVPK PNEUMATIC OPERATION IN-LINE ISOLATION VALVES



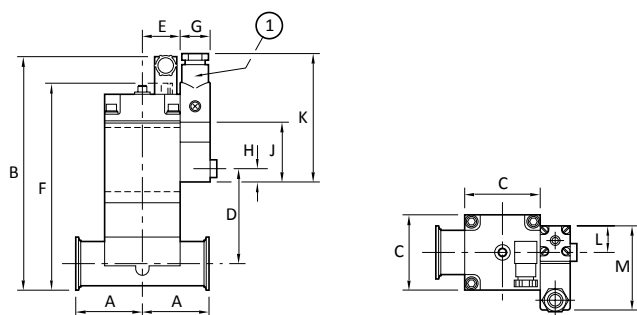
The Edwards range of in-line single acting cylinder, spring return pipeline valves are designed for high speed actuation from standard pneumatic lines, and are offered in sizes NW16, 25, 40 and 50. They are available with aluminium or stainless steel bodies with either O-ring (shaft seal, aluminium only) or bellows sealed.

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.

IPVPK dimension



| | A | B | C | D | E | F | G | H | J | K | L | M |
|--------|----|-------|------|-------|------|-------|----|----|----|----|----|----|
| PV16PK | 40 | 132.9 | 38 | 49.4 | 22.9 | 115.4 | 20 | 10 | 40 | 88 | 19 | 59 |
| PV25PK | 50 | 161.9 | 50.8 | 68.2 | 25.8 | 144.3 | 20 | 10 | 40 | 88 | 19 | 59 |
| PV40PK | 65 | 192.2 | 76.2 | 86.9 | 38.2 | 174.6 | 20 | 10 | 40 | 88 | 19 | 59 |
| PV50PK | 70 | 216.9 | 92 | 101.6 | 38.8 | 199.3 | 20 | 10 | 40 | 88 | 19 | 59 |

1. Optional control valve

Technical Data

| IPVPK | |
|--|---|
| Valve actuation type | Single acting, pneumatically opened, spring closed |
| Pressure range | 1 x 10 ⁻⁹ to 2100 mbar 8 x 10 ⁻¹⁰ to 1575 Torr |
| Maximum pressure differential | |
| Opening | 1000 mbar / 750 Torr |
| Closing | 2100 mbar / 1575 Torr |
| Leak rate | < 1 x 10 ⁻⁹ mbar ls ⁻¹ < 8 x 10 ⁻¹⁰ Torr ls ⁻¹ |
| Pneumatic connector | Rp 1/8 (1/8 inch BSP) * |
| Recommended pneumatic | 24 V, 1.5 A a.c. or d.c. |
| Operating pressure | 2.8 to 4.2 bar / 41 to 61 psi |
| Electrical indicator | Single micro switch ‡ |
| Micro switch electrical rating | 24 V, 1.5 A a.c. or d.c. |
| Max cycle frequency | 900 h ⁻¹ |
| Bellows reliability, MTTF | 5,000,000 cycles |
| Ambient operating temperature | 5-100 °C |
| Maximum baking temperature | 100 °C |
| Construction materials | |
| IPVKA | HE30TF aluminium |
| IPVKS | AISI304 stainless steel |
| Bellows | AISI316L stainless steel |
| O-ring | Fluoroelastomer |
| ‡ Twin micro switch versions are available on request. | |
| | IPV16PK IPV25PK IPV40PK IPV50PK |
| Molecular conductance (ls ⁻¹) | 2 6 18 30 |
| Time to open (ms)* | 60 15 50 50 |
| Time to close (ms)* | 20 41 155 155 |
| Weight | |
| Aluminium (g/oz) | 310/10.9 610/21.4 1500/52.5 - |
| Stainless Steel (g/oz) | 520/18.2 980/34.3 2300/80.5 4000/140 |

* With optional control valve fitted



IPVPK

Ordering information



| Product description | Order no: |
|---|-----------|
| IPV16PKAO, O-ring sealed, aluminium | C41603000 |
| IPV16PKA, bellows sealed, aluminium | C41601000 |
| IPV16PKS, bellows sealed, stainless steel | C41602000 |
| IPV25PKAO, O-ring sealed, aluminium | C41623000 |
| IPV25PKA, bellows sealed, aluminium | C41621000 |
| IPV25PKS, bellows sealed, stainless steel | C41622000 |
| IPV40PKAO, O-ring sealed, aluminium | C41643000 |
| IPV40PKA, bellows sealed, aluminium | C41641000 |
| IPV40PKS, bellows sealed, stainless steel | C41642000 |
| IPV50PKS, bellows sealed, stainless steel | C41662000 |

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 |

Valve body

| Product description | Order no: |
|---------------------|-----------|
| Valve body IPV16KA | C41201802 |
| Valve body IPV16KS | C41602811 |
| Valve body IPV25KA | C41621802 |
| Valve body IPV25KS | C41622811 |
| Valve body IPV40KA | C41641802 |
| Valve body IPV40KS | C41642811 |

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: |
|-----------------------------|-----------|
| Bellows Actuator Assy PV10P | C41111035 |
| Bellows Actuator Assy PV25P | C41311035 |
| Bellows Actuator Assy PV50P | C41515035 |
| Bellows Actuator Assy PV40P | C41411035 |