

Edwards SP Speedivalves are diaphragm sealed in-line, isolation valves. The construction consists essentially of a flexible elastomer diaphragm which is sealed onto a lightly polished seat by a screw thread mechanism. The mechanism is isolated from the system by the diaphragm resulting in an extremely rugged and 'dirty' system tolerant valve.

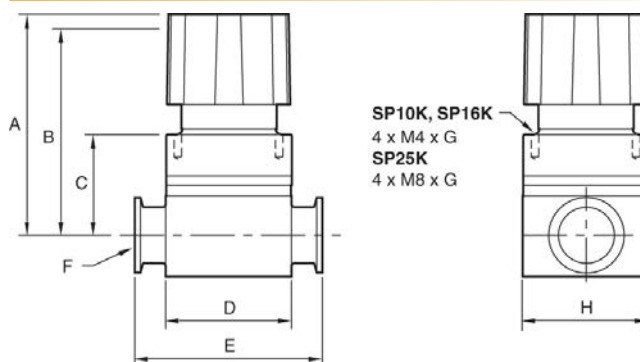
The valve terminates in NW flanges and can be pipeline supported or panel mounted. (SP40K is pipeline supported only)



Features & Benefits

- Easy to operate with visual indication of valve open (SP10K to SP25K)
- Leak tight to better than 10^{-6} mbar l s⁻¹ / 8×10^{-7} Torr l s⁻¹
- Diaphragm completely isolates mechanism from vacuum system
- Extremely rugged and 'dirty' system tolerant
- Will withstand 9 bar overpressure (SP10K to SP40K, with Co-Seal)

Dimensions



	A	B	C	D	E	F	G	H
Model	Open	Closed						
SP10K	71	64	33.5	42	60	NW10	8	43
SP16K	71	64	33.5	42	80	NW16	8	43
SP25K	123	111	51	67	100	NW25	12	72
SP40K	130	-	-	105	130	NW40	-	96

Technical Data

Construction materials

Body	Aluminum alloy to BS1490
Handwheel and bonnet	Glass reinforced plastics
Diaphragms	Nitrile or Fluoroelastomer

Leak rate (1 bar / 14.5 psi differential)

Valve (overall and across seat)	10^{-6} mbar l s ⁻¹ / 8×10^{-7} Torr l s ⁻¹
Coupling	10^{-7} mbar l s ⁻¹ / 8×10^{-8} Torr l s ⁻¹

Molecular conductance

SP10K, SP16K	1.7 l s ⁻¹
SP25K	9.0 l s ⁻¹
SP40K	23.3 l s ⁻¹

Pressure rating using Co-Seal 9 bar / 131 psi

Ambient operating range 0 to 40 °C

Ambient storage range -10 to 40 °C

Panel thickness 3 mm / 0.117 in maximum

Weight

SP10K	230 g / 8.1 oz
SP16K	240 g / 8.4 oz
SP25K	760 g / 26.6 oz
SP40K	2300 g / 80.5 oz

Baking temperature 60 °C

Ordering Information

Product Description

Product Description	Order No.
SP10K, Nitrile Diaphragm	C33105000
SP10K, Fluoroelastomer Diaphragm	C33155000
SP16K, Nitrile Diaphragm	C33205000
SP16K, Fluoroelastomer Diaphragm	C33255000
SP25K, Nitrile Diaphragm	C33305000
SP25K, Fluoroelastomer Diaphragm	C33355000
SP40K, Nitrile Diaphragm	C33405000
SP40K, Fluoroelastomer Diaphragm	C33455000

Accessories & Spares

Accessories & Spares	Order No.
Fluoroelastomer Diaphragm for SP10/16	C33155800
Fluoroelastomer Diaphragm for SP25	C33355800
Fluoroelastomer Diaphragm for SP40	C33455800
Nitrile Diaphragm for SP10/16	C33105800
Nitrile Diaphragm for SP25	C33305800
Nitrile Diaphragm for SP40	C33405800