

SPEEDIVALVE

edwardsvacuum.com**Edwards SP Speedivalves are diaphragm sealed in-line, isolation valves.**

The construction consists essentially of a flexible elastomeric 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).



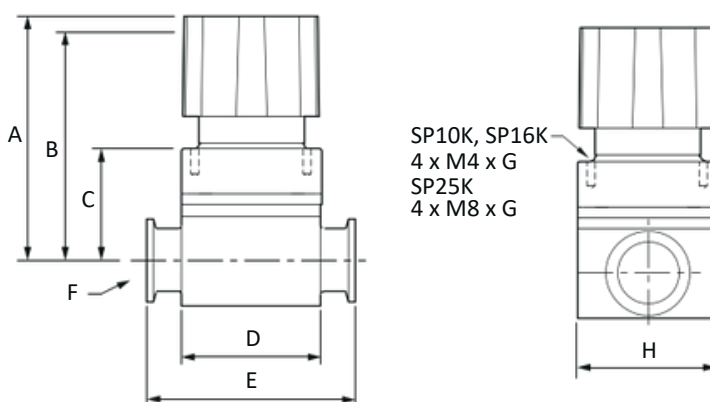
FEATURES AND BENEFITS

- Easy to operate with visual indication of valve open (SP10K to SP25K).
- Leak tight to better than 1×10^{-6} mbar ls⁻¹ (1×10^{-7} Torr ls⁻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).

TECHNICAL DATA

Speedivalve	
Construction materials	
Body	Aluminium alloy to BS1490
Hand wheel and bonnet	Glass reinforced plastics
Diaphragms	Nitrile or Fluoroelastomer
Leak rate (1 bar / 14.5 psi differential)	
Valve (overall and across seat)	1×10^{-6} mbar ls ⁻¹ (1×10^{-7} Torr ls ⁻¹)
Coupling	1×10^{-7} mbar ls ⁻¹ (1×10^{-8} Torr ls ⁻¹)
Molecular conductance	
SP10K, SP16K	1.7 ls ⁻¹
SP25K	9.0 ls ⁻¹
SP40K	23.3 ls ⁻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

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

ORDERING INFORMATION

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

Description	Order No.
Replacement Fluoroelastomer Diaphragms	
Fluoroelastomer Diaphragm for SP10/16	C33155800
Fluoroelastomer Diaphragm for SP25	C33355800
Fluoroelastomer Diaphragm for SP40	C33455800
Replacement Nitrile Diaphragms	
Nitrile Diaphragm for SP10/16	C33105800
Nitrile Diaphragm for SP25	C33305800
Nitrile Diaphragm for SP40	C33405800

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