

K_V values

Size	½"	¾"	1"
K _V	4.4	7.5	12

For conversion:

C_V (UK) = K_V x 0.963

C_V (US) = K_V x 1.156

Opening pressures in mbar

Differential pressures with zero flow for standard and high temperature springs.

→ Flow direction

All sizes	↑ 25	→ 22.5	↓ 20
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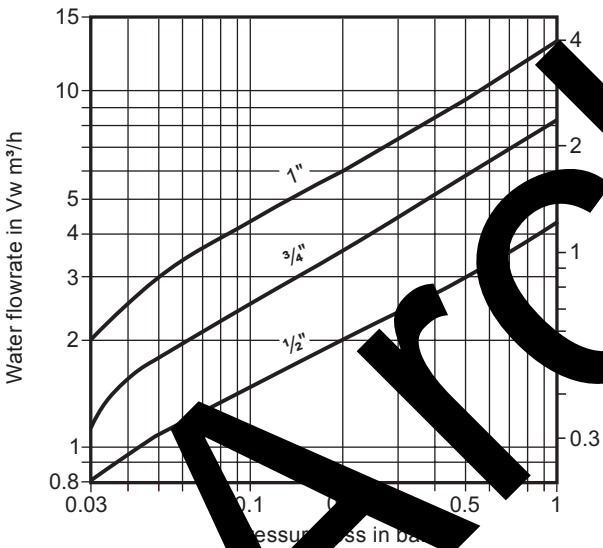
Where lower opening pressures are required, valves without springs can be installed in vertical pipes with bottom-to-top flow.

Without spring and ↑ flow direction

Size	½"	¾"	1"
mbar	3.0	2.5	4.0

Heavy duty springs approximately 700 mbar

Pressure loss diagram



Pressure loss diagram for open valve at 20 °C. The values indicated are applicable for spring loaded valves with horizontal flow. With vertical flow, insignificant deviations occur only within the range of partial opening.

The curves given in the chart are valid for water at 20 °C. To determine the pressure for other fluids the equivalent water volume flowrate must be calculated and used in the graph.

$$\dot{V}_w = \sqrt{\frac{\rho}{1000}} \times \dot{V}$$

\dot{V}_w = Equivalent water volume flow in l/s or m³/h

Where: ρ = Density of fluid kg/m³

\dot{V} = Volume of fluid l/s or m³/h

Pressure loss information for steam, compressed air and gases is available from Spirax Sarco.

How to order

Example: 1 off Spirax Sarco DCV41 austenitic stainless steel bodied disc check valve having ½" screwed BSP connections supplied fitted with a Viton soft seat and certification to EN 10204 3.1 for the body.

Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P601-19) supplied with the product.

The DCV41 disc check valve must be fitted in accordance with the direction of flow arrow indicating correct fluid flow direction. When fitted with a spring, they can be installed in any plane. When supplied without spring, they must be fitted in a vertical flow line with the flow from bottom-to-top.

Note: Disc check valves are non-maintainable (no spares are available). Disc check valves are not suitable for use where heavily pulsating flow exists, such as close to a compressor.

Various options are denoted by a marking on the valve body:-

'N' - High temperature spring - Standard metal seat

'W' - Without spring - Standard metal seat

'WV' - Without spring - Viton seat

'E' - Without spring - EPDM seat

'H' - Heavy duty spring - Standard metal seat

'HV' - Heavy duty spring - Viton seat

'HE' - Heavy duty spring - EPDM seat

'V' - Standard spring - Viton seat

'E' - Standard spring - EPDM seat

No identification indicates a standard spring with a metal disc.

Disposal

If a product which contains a Viton component has been subjected to a temperature approaching 315 °C or higher, then it may have decomposed and formed hydrofluoric acid. Avoid skin contact and inhalation of any fumes as the acid will cause deep skin burns and damage to the respiratory system. Viton must be disposed of in a recognised manner as stated in the Installation and Maintenance Instructions (IM-P601-19). No other ecological hazard is anticipated with the disposal of this product providing due care is taken.