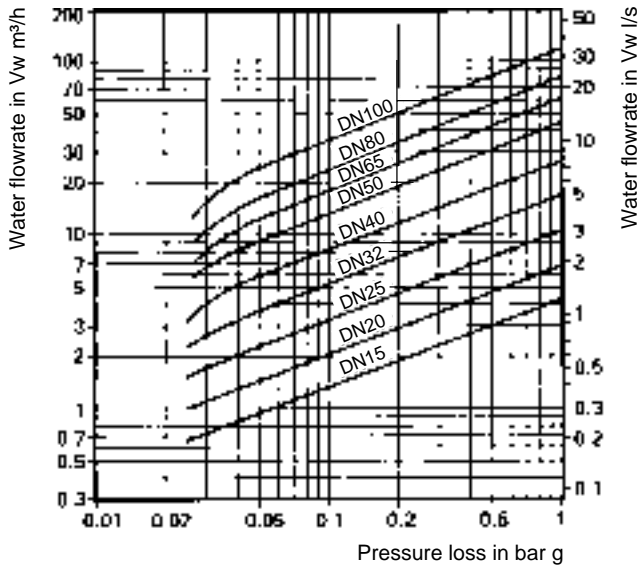


## Pressure loss diagram



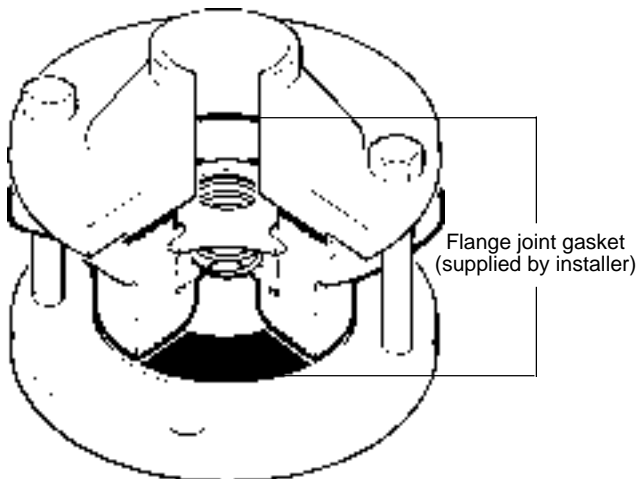
Pressure loss diagram with open valve at 20°C. The values indicated are applicable to spring loaded valves with horizontal flow. With vertical flow, insignificant deviations occur only within the range of partial opening. The curves given in the chart are valid for water at 20°C. To determine the pressure drop for other fluids the equivalent water volume flowrate must be calculated and used in the graph.

$$V_w = \sqrt{\frac{Q}{1000}} \times V$$

$V_w$  = Equivalent water volume flow in l/s or m<sup>3</sup>/h  
 $Q$  = Density of fluid kg/m<sup>3</sup>  
 $V$  = Volume of fluid l/s or m<sup>3</sup>/h.

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

## Installation

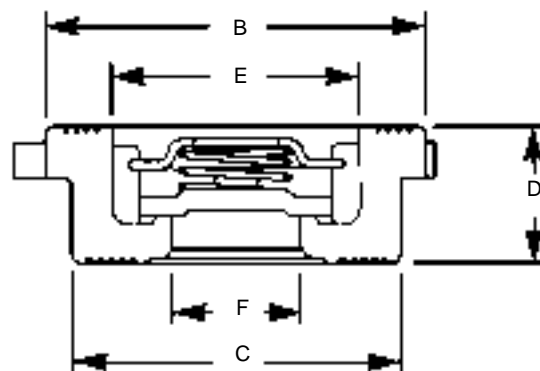
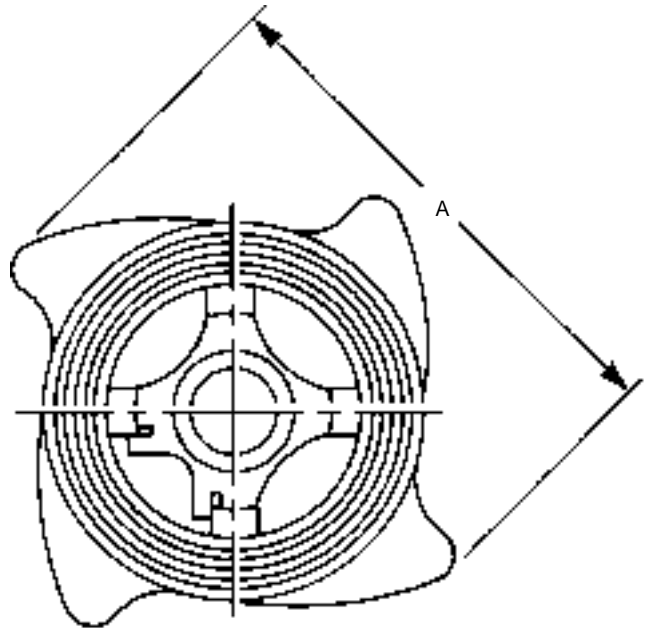


DCV disc check valves must be fitted in accordance with the direction of flow arrow indicating correct fluid flow direction. When fitted with a spring they can be installed in any plane. When supplied without a spring these must be fitted in a vertical flow line with the flow from bottom to top. The 'cam' design of the body allows the various flange types to be accommodated. The body is rotated to touch the flange joint bolts ensuring that the valve is centred in the pipeline. This is fully detailed in the Installation Instructions supplied with each DCV.

**Note:** Disc check valves are not suitable for use where heavily pulsating flow exists, such as close to a compressor.

## Dimensions (approximate) in millimetres

Size	A	B	C	D	E	F	Weight kg	
							DCV1	DCV2 & 3
DN15	60	43	38	16	29	15	0.13	0.11
DN20	69.5	53	45	19	35.7	20	0.19	0.17
DN25	80.5	63	55	22	44	25	0.32	0.28
DN32	90.5	75	68	28	54.5	32	0.55	0.47
DN40	101	85	79	31.5	65.5	40	0.74	0.64
DN50	115	95	93	40	77	50	1.25	1.11
DN65	142	115	113	46	97.5	65	1.87	1.64
DN80	154	133	128	50	111.5	80	2.42	2.21
DN100	184	154	148	60	130	100	3.81	3.31



## How to specify

Spirax Sarco DCV 3 disc check valve for fitting between BS 4504 PN25 Flanges.

### Valve bodies that are marked with:-

'N'	- Nimonic spring	- Standard metal disc
'W'	- Without spring	- Standard metal disc
'H'	- Heavy duty spring	- Standard metal disc
'V'	- Standard spring	- Viton soft faced disc
'E'	- Standard spring	- EPDM soft faced disc
'WV'	- Without spring	- Viton soft faced disc
'WE'	- Without spring	- EPDM soft faced disc
'HV'	- Heavy duty spring	- Viton soft faced disc
'HE'	- Heavy duty spring	- EPDM soft faced disc
'T'	- Valves tested to DIN 3230 part 3, B03	

No identification indicates a standard spring with a metal disc.