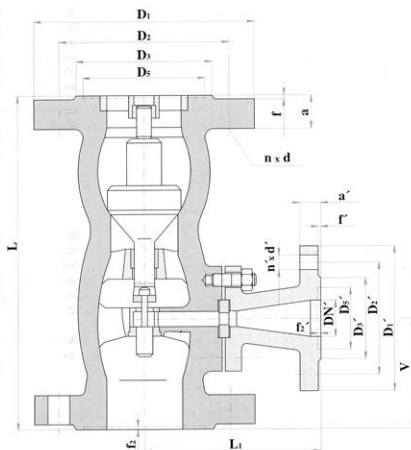


# Vertical check valve with automatic relief

Z 40 117-563

PN 63



## Application

Self-acting valve which prevents reverse flow of the service fluid, suitably mainly for use in delivery pipeline of centrifugal pumps. For use with water, steam, on special request also for other non-aggressive liquids and gases for service pressures and temperatures:

Temperature [°C]	Pressure [MPa]
200	6,30
250	5,42
300	4,87

If tightness is required, it is necessary to install into pipeline also a shut-off valve, besides the check valve.

## Technical description

The disc sits on welded sealing surface in the body/pump pipelines. The disc is seated in two guides. The position of the disc controls the relief valve, which closes or opens flow through the relief channel. Minimum amount of released fluid is determined by a throttling orifice plate, which size depends on current flow and pressure ratios.

## Connecting and face-to-face dimensions

Flange connecting dimensions as per ČSN 13 1060 and ČSN 13 1061, DIN 2501.

Face-to-face dimensions as per ČSN EN 558, DIN 3202 F1.

Relief channel connecting flange as per PN 40.

Basic face-to-face and connecting dimensions are given in the table.

## Material

Body	carbon steel (42 2643, GS-C25)
Disc guide	carbon steel
Disc	stainless steel (13 Cr)
Orifice plate	REAL 096
Expander	carbon steel

## Testing

The valve is tested as per ČSN 13 3060, part 2, DIN 3230.

## Installation

The valve must be installed only into vertical pipeline with the inserted guide upwards.

## Operation

The valve is self-acting, using the pressure of the service fluid on the disc, which closes to prevent reverse medium flow.

DN	DN'	L	L <sub>1</sub>	V	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>5</sub>	a	f	f <sub>1</sub>	f <sub>2</sub>	d	n	D <sub>1</sub> '	D <sub>2</sub> '	D <sub>3</sub> '	D <sub>5</sub> '	a'	f'	n'	d'	kg
65	25	340	192	110	205	160	122	110	26	3	3	3	22	8	140	100	-	58	24	2	4	18	40
80	25	380	200	120	215	170	133	121	28	3	3	3	22	8	140	100	-	58	24	2	4	18	46
100	40	430	215	125	250	200	158	150	30	3	3,5	3	26	8	170	125	-	76	26	3	4	22	64
125	40	500	230	140	295	240	184	176	34	3	3,5	3	30	8	170	125	88	76	26	3	4	22	68
150	65	550	230	190	345	280	212	204	36	3	3,5	3	33	8	220	170	122	110	30	3	8	26	120
200	65	650	307	205	415	345	285	260	42	3	3,5	3	36	12	220	170	140	110	30	3	8	26	184