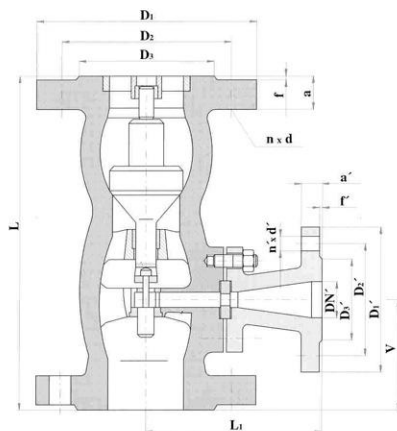


# Vertical check valve with automatic relief

Z 40 117-540

PN 40



## 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.

## 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	4,00
250	3,44
300	3,09

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.

DN	DN'	L	L <sub>1</sub>	V	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	a	f	d	n	D <sub>1</sub> '	D <sub>2</sub> '	D <sub>3</sub> '	a'	f'	n'	d'	kg
65	25	290	150	90	185	145	122	22	3	18	8	115	85	68	18	2	4	14	24
80	25	310	154	100	200	160	133	24	3	18	8	115	85	68	18	2	4	14	26
100	40	350	200	110	235	190	158	24	3	22	8	150	110	88	18	3	4	18	41
125	40	400	210	125	270	220	184	26	3	26	8	150	110	88	18	3	4	18	55
150	65	480	260	160	300	250	212	28	3	26	8	185	145	122	22	3	8	18	80
200	65	600	310	165	375	320	285	34	3	30	12	185	145	122	22	3	8	18	160
250	65	730	340	205	205	328	345	38	3	33	12	185	145	122	22	3	8	18	246