



**THE ZEEV**  
Engineering The Process



# ZP-045

## Overflow valve

### APPLICATION

The overflow valve is a valve used to perform pressure bypasses for safety purposes in order to protect lines, pumps, accessories, pools, etc. With a sanitary design and fully manufactured in stainless steel, the ZP-045 valve is the most suitable option for protection of facilities in the dairies, food, beverages, pharmaceutical and fine chemicals industries.

### OPERATING PRINCIPLE

Under normal operating conditions, the valve remains closed.

The valve is calibrated to a specific pressure by regulating the spring with the pressure nut. The calibrated pressure is a maximum safety pressure defined to avoid damage of the plant.

When the pressure in the circuit exceeds the calibrated pressure, the valve opens letting the flow pass and reducing the pressure of the pipe system.

The valve can incorporate a handle designed to partially open the valve. When the handle is kept in the open position during the CIP process, the cleaning products can pass through the valve.

### DESIGN AND FEATURES

The valve is normally closed.  
Easy manual adjustment.

### TECHNICAL SPECIFICATIONS

#### Materials

Parts in contact with the product	1.4404 (AISI 316L)
Other stainless steel parts	1.4307 (AISI 304L)
Gaskets in contact with the product	EPDM

#### Surface finish

Internal	Bright polish Ra ≤ 0,8 µm
External	Matt

**Available sizes**DIN EN 10357 serie A  
(previously DIN 11850 series 2)

DN 25 - DN 80

ASTM A269/270

(corresponds to OD pipe)

OD 1" - OD 3"

**Connections**

Weld Male Clamp

**Operating limits**

Maximum working temperature

	121°C	250°F
Maximum working pressure as per spring standard	0 - 300 kPa (0 - 3 bar) 0 - 600 kPa (0 - 6 bar) <sup>1</sup> 0 - 1000 kPa (0 - 10 bar)	0 - 43,5 PSI 0 - 87 PSI <sup>1</sup> 0 - 145 PSI
manual	0 - 300 kPa (0 - 3 bar) 0 - 600 kPa (0 - 6 bar)	0 - 43,5 PSI 0 - 87 PSI

1) standard option

**OPTIONS**

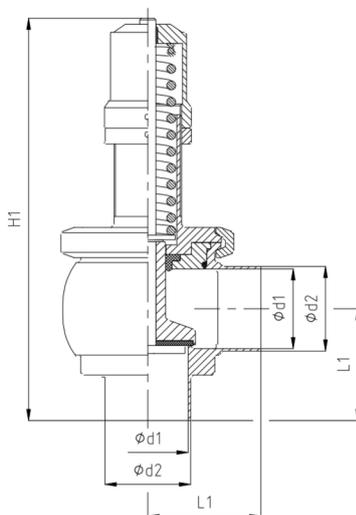
Seat seals in FPM and PTFE1.

Several operating ranges by changing the spring.

The assembly of the handle allows to partially open the valve in order to allow the passage of fluid for CIP cleaning (for use with positive displacement pump bypass).

Safety seal to identify the factory calibration.

1) other seals in FPM

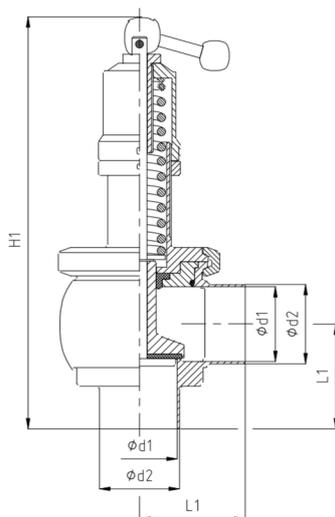
**DIMENSIONS**

	DN	Ød1	Ød2	L1	H1	kg1
	25	26	29	50	219	2,0
	32	32	35	55	226	2,1
	40	38	41	60	238	2,8
DIN	50	50	53	70	252	3,8
	65	66	70	80	289	6,4
	80	81	85	90	302	8,6

1) weld connection

	DN	Ød1	Ød2	L1	H1	kg1
	1"	22,1	25,4	50	219	2,0
	1½"	34,8	38,1	60	238	2,8
OD	2"	47,5	50,8	70	252	3,9
	2½"	60,2	63,5	80	289	6,3
	3"	72,9	76,2	90	302	8,6

1) weld connection



	DN	Ød1	Ød2	L1	H1	kg1
DIN	25	26	29	50	243	2,1
	32	32	35	55	255	2,2
	40	38	41	60	262	2,9
	50	50	53	70	274	3,9
	65	66	70	80	317	6,5
	80	81	85	90	329	8,8

1) weld connection

	DN	Ød1	Ød2	L1	H1	kg1
OD	1"	22,1	25,4	50	243	2,1
	1½"	34,8	38,1	60	262	2,9
	2"	47,5	50,8	70	274	4,0
	2½"	60,2	63,5	80	317	6,4
	3"	72,9	76,2	90	329	8,7

1) weld connection