

# Float Valves

## Float Valves for External Installation on Tanks NV 55e



Level Regulating Valve with Release

### Technical Data

|                        |                           |
|------------------------|---------------------------|
| Connection DN          | 15 - 150                  |
| Nominal Pressure PN    | 16 - 40                   |
| Operating Pressure     | 0 - 16 bar                |
| K <sub>vs</sub> -Value | 4 - 160 m <sup>3</sup> /h |
| Temperature            | 130 °C                    |
| Medium                 | liquids                   |

### Description

Float valves automatically control liquid levels in sealed or open (non-pressurised) tanks and vessels without requiring external energy. The float registers the liquid level and directly controls the valve via a lever. A change in the liquid level immediately results in a changed flow volume.

NV 55e is a pipeline valve complete with tank connecting flange for vertical flow. The valve cone is fitted with a soft seal.

The valves are fitted with a float bar on which a float featuring an inner tube is mounted. By changing the position of the float on the bar the required liquid level is infinitely variable.

The following note applies to float valves fitted with float bars: If the liquid level is below the float bar i.e. if the float points downwards, a guide for the float bar should be installed.

When enquiring or ordering please quote the suffix letters given below:

Z = inlet. Valve closes when float rises

A = outlet. Valve closes when float drops

w = horizontal flow

o = upward flow

u = downward flow

example: float valve Z/o (inlet valve for vertical flow upwards)

### Standard

- » Float bar stainless steel
- » Cylindrical float SR 8 stainless steel
- » Stem seal to the reservoir

### Options

- » Rubber or plastic coating for corrosive media
- » Various seal materials suitable for your medium
- » Special versions on request

Operating instructions, know how and safety instructions must be observed. All the pressure has always been indicated as overpressure. We reserve the right to alter technical specifications without notice.



### K<sub>vs</sub>-Values [m<sup>3</sup>/h]

|  |    |    |    |    |    |
|--|----|----|----|----|----|
| nom. diam. DN                            | 15 | 20 | 25 | 40 | 50 |
| K <sub>vs</sub> -value m <sup>3</sup> /h | 4  | 5  | 6  | 20 | 32 |

### K<sub>vs</sub>-Values [m<sup>3</sup>/h]

|  |    |    |     |     |     |
|--|----|----|-----|-----|-----|
| nom. diam. DN                            | 65 | 80 | 100 | 125 | 150 |
| K <sub>vs</sub> -value m <sup>3</sup> /h | 50 | 80 | 100 | 140 | 160 |

# Float Valves

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| Materials          |                                      |
|--------------------|--------------------------------------|
| Body               | cast steel optional CrNiMo-steel     |
| Cone and Seat      | grey cast iron, chromium steel       |
| Piston and Spindle | chromium steel optional CrNiMo-steel |
| Valve Seal         | EPDM                                 |
| Linkage            | steel zincd or steel                 |
| Float Rod          | CrNiMo-steel                         |
| Float              | CrNiMo-steel                         |

| Dimensions [mm] and Weights [kg] PN 16** |                     |     |     |     |     |     |     |     |     |     |
|--|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| size                                     | nominal diameter DN |     |     |     |     |     |     |     |     |     |
|  | 15                  | 20  | 25  | 40  | 50  | 65  | 80  | 100 | 125 | 150 |
| A*                                       | 130                 | 150 | 160 | 200 | 230 | 290 | 310 | 350 | 400 | 480 |
| B  | 180                 | 180 | 180 | 200 | 200 | 300 | 300 | 300 | 340 | 410 |
| C  | 55                  | 55  | 55  | 125 | 125 | 105 | 105 | 105 | 185 | 200 |
| D  | 95                  | 95  | 95  | 115 | 115 | 175 | 175 | 175 | 235 | 255 |
| E  | 210                 | 210 | 210 | 280 | 280 | 420 | 420 | 420 | 420 | 490 |
| F  | 30                  | 30  | 30  | 40  | 40  | 60  | 60  | 60  | 60  | 70  |
| H  | 100                 | 100 | 100 | 125 | 125 | 200 | 200 | 200 | 250 | 250 |

| Weights without float |    |    |    |    |    |    |    |    |     |     |
|-----------------------|----|----|----|----|----|----|----|----|-----|-----|
| kg                    | 10 | 11 | 12 | 21 | 24 | 45 | 53 | 65 | 103 | 133 |
|                       |    |    |    |    |    |    |    |    |     |     |

\* Overall length tolerances in acc. with DIN EN 558

\*\* PN 25/40 on request

| Dimensions Cylindrical Float SR 8 [mm] (ø = Höhe) * |     |     |     |     |     |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| nom. diam. DN                                       | 15  | 20  | 25  | 40  | 50  | 65  | 80  | 100 | 125 | 150 |
| float ø mm  | 200 | 200 | 200 | 280 | 280 | 305 | 305 | 305 | 340 | 340 |

\* weights see sheet SR 2.1....

| Customs Tariff Number |  |
|-----------------------|--|
| 84818059              |  |

Special designs on request.  
The pressure has always been indicated as overpressure.  
Mankenberg reserves the right to alter or improve the designs or specifications of the products described herein without notice.

### Dimensional Drawing

