



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**HV gate valve, Series 091, DN 160 (ID 6'')**  
**Ordering No. 09144-JE01**

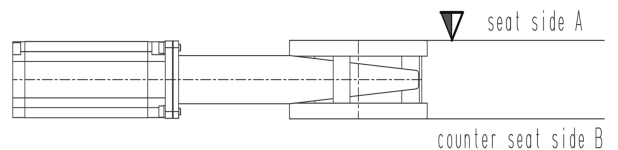
### Description

|  |   |
|--|---|
| Flange                                 | JIS flange 100  |
| Actuator                               | Manual actuator with detachable handle, self locking in any position, visual position indicator |
| Number of turns needed for full stroke | 41 Turns  |
| Feedthrough                            | Bellows feedthrough   |

### Technical data

|                                   |   |
|-----------------------------------|---|
| Leak rate                         |   |
| – Valve body                      | $< 1 \cdot 10^{-9} \text{ mbar ls}^{-1}$        |
| – Valve seat                      | $< 1 \cdot 10^{-7} \text{ mbar ls}^{-1}$        |
| Pressure range                    | $1 \cdot 10^{-8} \text{ mbar}$ to 1.2 bar (abs) |
| Differential pressure on the gate | $\leq 1.2 \text{ bar}$                          |
| Conductance (molecular flow)      | $5\,000 \text{ ls}^{-1}$                        |

Max. differential pressure at opening in closing and opening direction with influence to the cycle life



|   |   |
|---|---|
| – Higher pressure on seat side A, the differential pressure acts in opening direction         | $\leq 1.0 \text{ bar}$ with full cycle life           |
| – Higher pressure on counter seat side B, the differential pressure acts in closing direction | $\leq 30 \text{ mbar}$ with full cycle life           |
| – Higher pressure on counter seat side B, the differential pressure acts in closing direction | $\leq 1.0 \text{ bar}$ with reduced cycle life        |
| Cycles until first service  | 5 000 (unheated and under clean conditions)           |
| Bellows cycles  | 100 000 (unheated and under clean conditions)         |
| Bake-out temperature  |   |
| – Valve body  | $\leq 150 \text{ }^\circ\text{C}$ (bake-out max. 24h) |
| – Actuator  | $\leq 100 \text{ }^\circ\text{C}$                     |

|                 |                          |                 |
|-----------------|--------------------------|-----------------|
| Created by: HDE | Release date: 2014-03-19 | 1 of 2          |
| Modified by:    | Release date:            | <b>603261EA</b> |



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|                                 |                             |
|---------------------------------|-----------------------------|
| Heating and cooling rate        | 50 °C h <sup>-1</sup>       |
| Material                        |                             |
| – Valve body                    | AISI 304 (1.4301)           |
| – Bonnet                        | EN AW-5083 (3.3547)         |
| – Gate                          | AISI 304 (1.4301), (1.4308) |
| – Parts (in contact with media) | A2 Ni-Teflon coated, PEEK   |
| – Bellows                       | AISI 633, (AM350)           |
| Seal                            |                             |
| – Bonnet                        | FKM (Viton <sup>®</sup> )   |
| – Gate                          | FKM (Viton <sup>®</sup> )   |
| – Actuator                      | FKM (Viton <sup>®</sup> )   |
| Mounting position               | any                         |
| Weight                          | approx. 16 kg / 35.3 lbs    |

|                 |                          |                 |
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