



Filling valve platform with PD technology

Applications

- Filling processes in hygienic and aseptic plants in the pharmaceutical, biotechnology, food and beverage industries
- All types of media for filling machines (vacuum, liquid, gaseous)
- Suitable for media containing oil and fat

Features

- High Kv values through innovative sealing geometry
- Simple and fast servicing thanks to cartridge spare parts system
- Resistant sealing from modified PTFE (TFM™) – no retightening required
- High number of switching cycles (over 10 million) with freely programmable fill speed

Pneumatically operated filling valve GEMÜ F40

Description

The 2/2-way filling valve GEMÜ F40 is designed for filling processes in aseptic and hygienic areas of application. The "Normally closed" and "Normally open" control functions are available.

Actuator features

- Compact design due to control air connector at the top
- Stroke limiter, positioner and position indicator optionally available
- Control pressure 6 bar
- ATEX version optionally available
- Only one assembly tool required

Application examples

- Filling of liquid and viscous media
- Pre-evacuation, gas injection, inert gas injection overlay
- Offers washing functions for the removal of broken glass in filling systems
- Filling pressure control
- Duration and cycle programs for sanitizing the filling machine
- Filling of fibrous or pulp containing media
- CIP/SIP and autoclavable processes



GEMÜ F40



Construction

flexible
mounting for stroke
limiters or electrical
position indicators and
positioners

compact
space-saving design
thanks to control air
connector at the top

simple
fast servicing thanks to
innovative cartridge spare
parts system

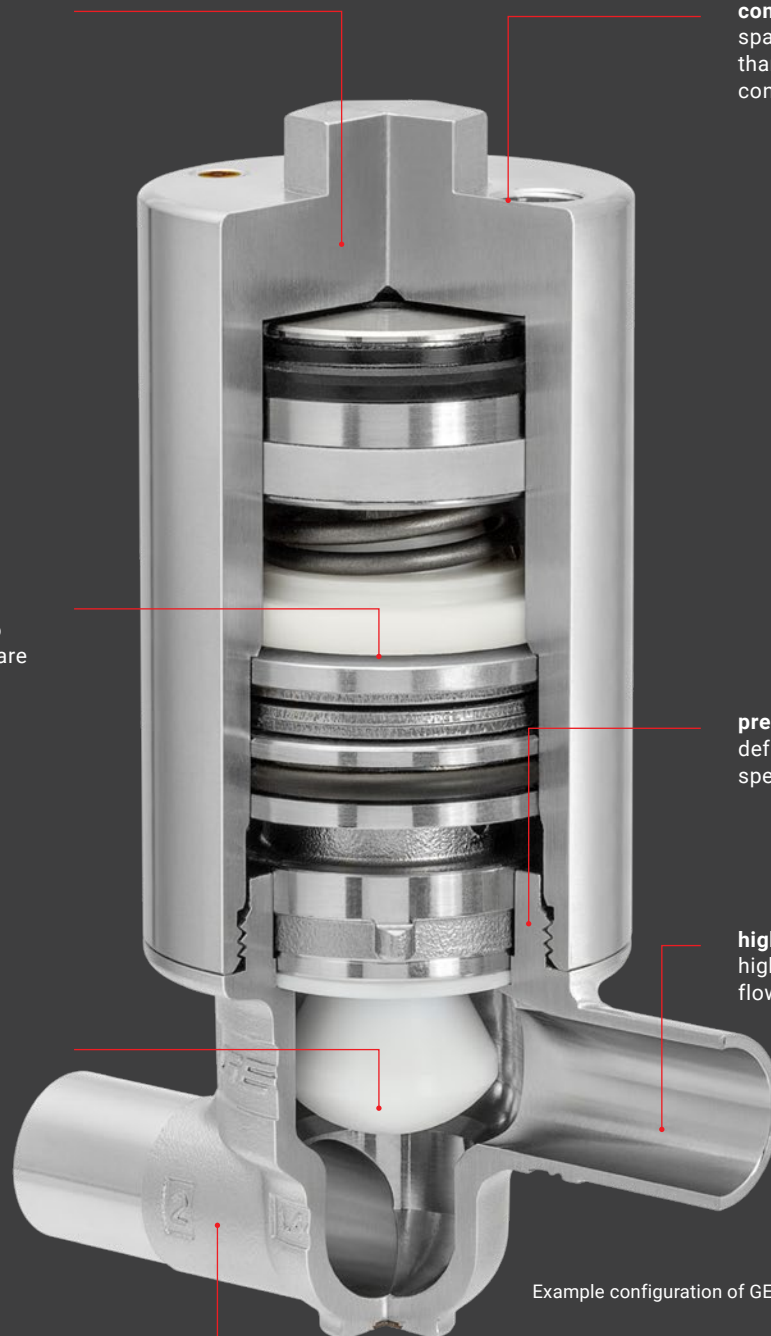
precise
defined assembly with
specified torque

resistant
sealing made from
PTFE (TFM™)

high flow rate
high Kv values thanks to
flow characteristics

variable
also available as a
customized block solution

**can be documented
and traced**
valve bodies and
actuators are compatible
with CONEXO



Example configuration of GEMÜ F40

Technical information

Technical specifications

- **Nominal sizes:**
DN 8 to 25
- **Connection types:**
Butt weld spigots, clamps
- **Body materials:**
Stainless steel 1.4435/316L (investment casting),
1.4435/316L (block material)
- **Surface finish:**
Ra ≤ 0.8 μm (investment casting);
Ra ≤ 0.4 μm, electropolished (block material)
- **Seal materials:**
Modified PTFE (TFM™)
- **Operating pressure*:**
0 to 7 bar
- **Approvals:**
FDA, USP Class VI

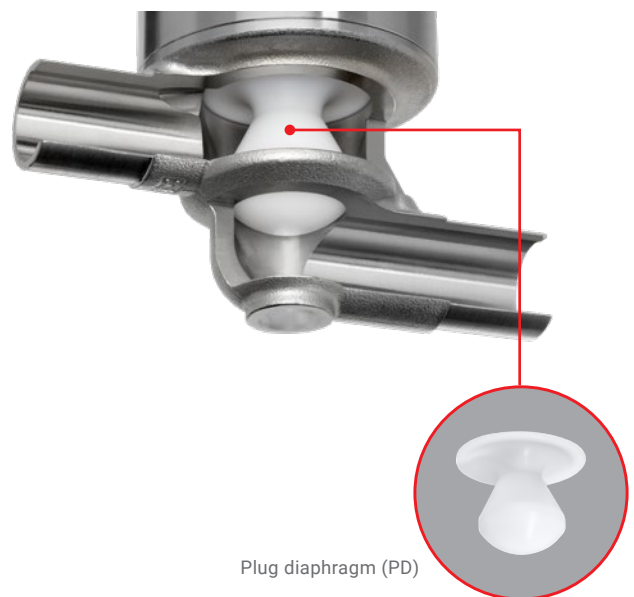
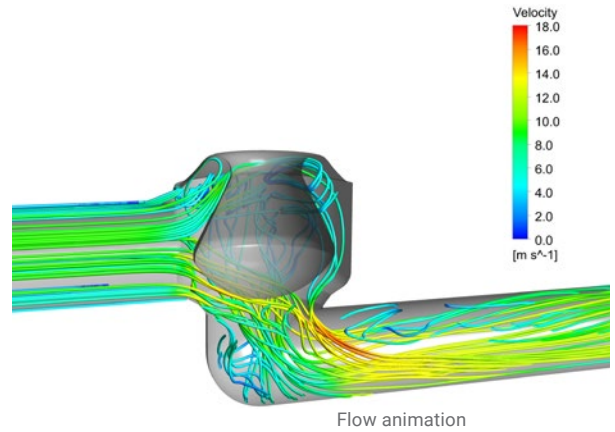
* Depending on version and/or operating parameters

Servicing – fast and simple

- Quick-lock connector system
- Innovative cartridge spare parts system
- No retightening of the seal

PD Technology

- Unique sealing concept with highly resistant plug PTFE diaphragms (TFM™)
- Hermetic separation of the actuator from the medium flow
- Significantly reduced deadleg in comparison with bellows
- Effective cleanability
- Won the AICHEMIA Innovation Award 2018 in the “Valves/seals” category



Motorized filling valve GEMÜ F60 servoDrive

Description

The motorized 2/2-way filling valve GEMÜ F60 servoDrive is designed for extremely precise and fast filling processes in aseptic and hygienic areas of application. The valve enables activation in real-time, ultra-quick load cycles and high flow rates.

Actuator features

- Actuator speeds of up to 200 mm/s can be implemented
- Extremely high positioning accuracy (approx. $\pm 20 \mu\text{m}$), at a repeatability of up to $\pm 10 \mu\text{m}$
- Freely programmable filling speeds over the filling time for adaptation to diverse media, container geometries, etc.
- Maximum flexibility since any fill curves can be realized
- Can be used for positioning and process control
- Can be integrated into bus and control environments
- Stainless steel version in IP69K

Application examples

- Filling of fibrous or pulp containing media
- Filling of medicines using a linear filler
- Aseptic filling in cleanrooms and isolators



GEMÜ F60 servoDrive



