

# Filters and Valves

High-grade Valves, cost-efficient and flexible



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**GATHER**  
INDUSTRIE

# Filters and Valves

## Inline Filter Type "Mini"



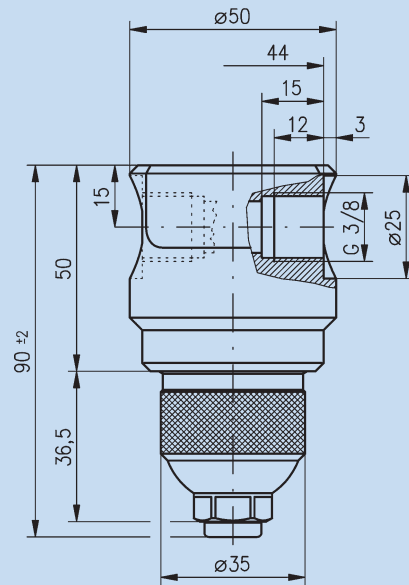
### Technical Data

<b>Max. temperature</b>	+350 °C
<b>Max. system pressure</b>	500 bar
<b>Bursting pressure</b>	above 950 bar
<b>Standard fineness</b>	10 µm
<b>Body</b>	Stainless steel: Nitronic 60/1.4404 alternatively: Hastelloy C276
<b>Filter</b>	Stainless steel: 1.4401 alternatively: Hastelloy C22
<b>Filter surface</b>	48 cm <sup>2</sup>
<b>Filling volume</b>	appr. 18 ml
<b>Connection</b>	G 3/8 female thread
<b>Drain</b>	G 1/8 female thread (tightening torque 24 Nm)

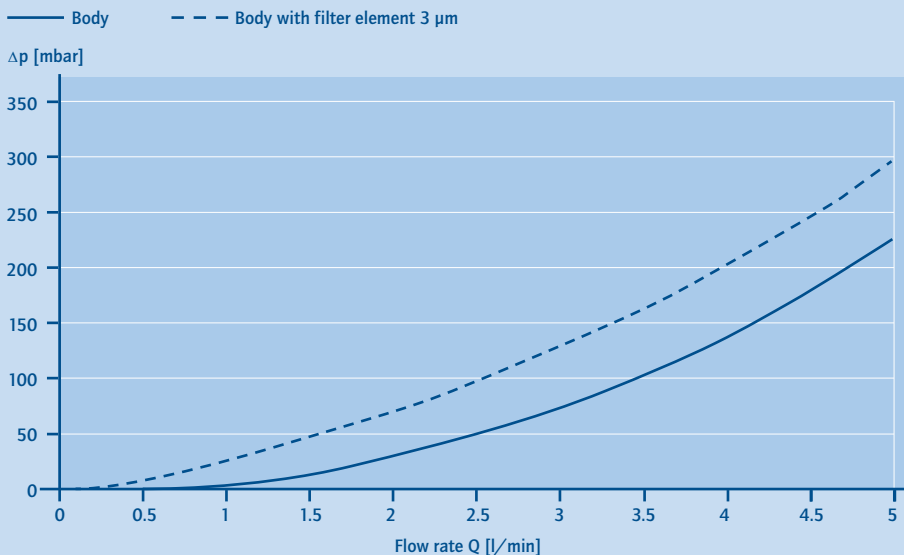
### General Information

Operational necessities govern the design and selection of a filter. The GATHER filter with drain plug is a universal filter designed to operate even under adverse process conditions and is suited for application temperatures of up to +350 °C at system pressures of up to 500 bar (filter body components in this case must be tightened at a torque of 120 Nm). Stainless steel and Hastelloy filter types are available and qualify this equipment for aggressive media service.

The use of "pleated" filter elements enables compact design and large filtering surface (48 cm<sup>2</sup>) with only minimum pressure losses. The filter is thus best suited for pre-filtering service in intake lines, for example to protect GATHER magnetic drive gear pumps.



### Q/p Diagram, Medium: Water



The filter element can be easily cleaned in an ultrasonic bath or by backflushing (also via the drain).

The filter has no inherent heat source and as such is not subject to ATEX provisions. It may thus be used without reservations in hazardous areas.

## Safety valves ÜVG-G1/4 and ÜVG-G1/2

Overflow valves for liquid, gas and steam service



### Description

System-medium controlled overflow valves are simple and compact elements offering precise control efficiency and ease of installation and maintenance. They keep the pressure upstream of the valve constant without the need of any further control elements.

At the cone, the inlet pressure to be controlled is in equilibrium with the force exerted by the valve spring.

- TÜV approved
- TA-Luft compliant
- FDA compliant

### Advantages

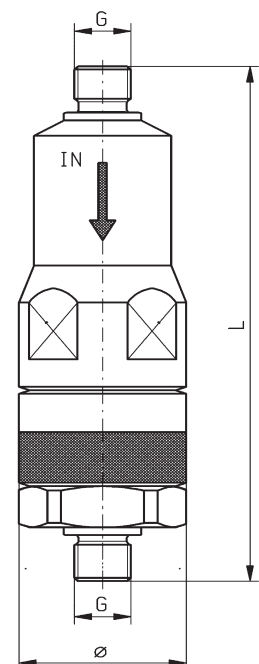
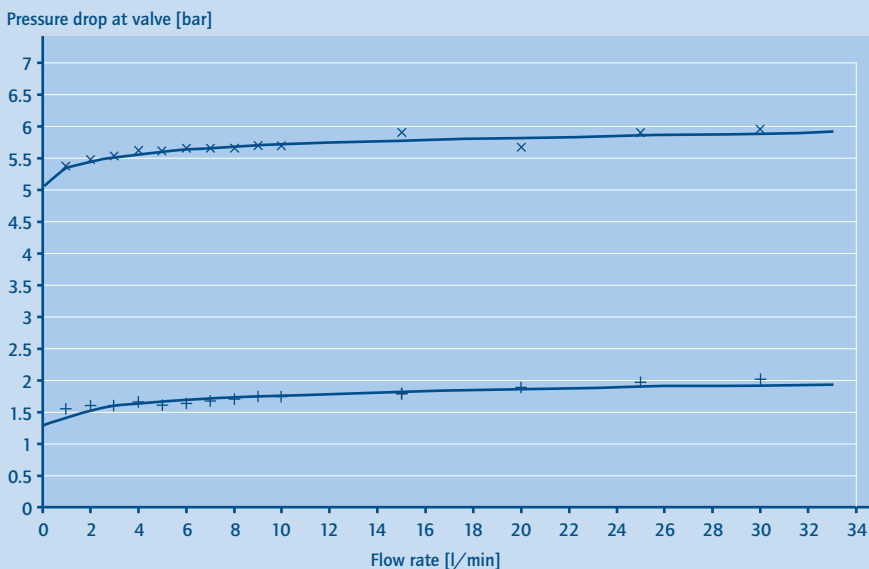
- compact and straight design
- optimum mounting location freely selectable
- minimum pressure loss (control range 1:35)

### Technical Data

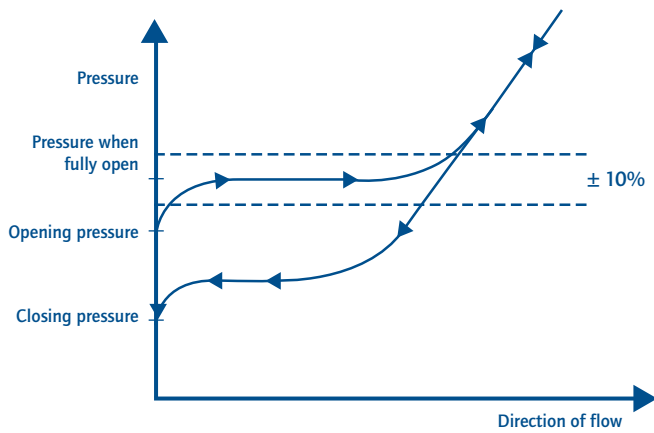
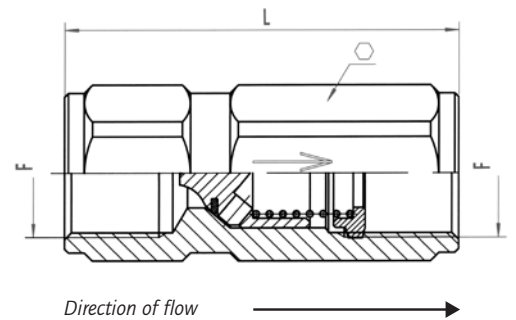
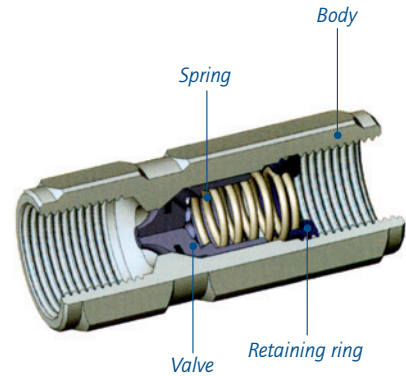
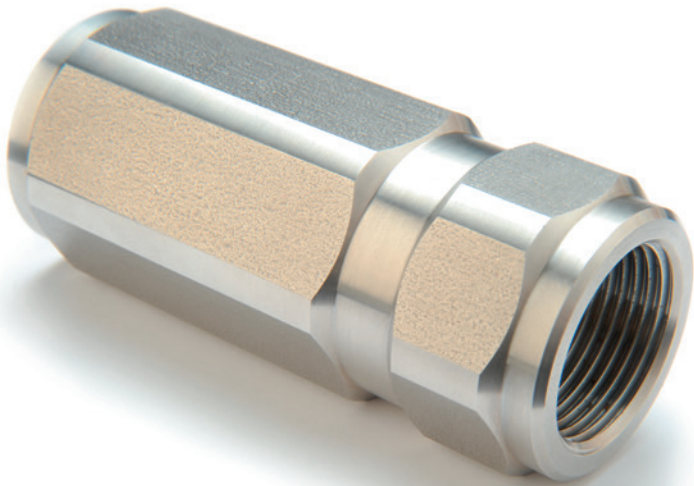
<b>Material</b>	Stainless steel (1.4571)
<b>Seals</b>	FFKM (FDA conform, white) -15 °C to +300 °C different o-ring materials on inquiry
<b>Actuating pressure</b>	steplessly variable
<b>Connections</b>	Tube couplings or as specified by client

Size	Length L	O. D.	Connection G	Pressure range
DN 6	~135 mm	∅ 44 mm	G 1/4	optional: 1-5 bar or 5-15 bar
DN 12	~143 mm	∅ 54 mm	G 1/2	optional: 1-5 bar or 5-10 bar

### Pressure Drop at ÜVG-G1/2 for Water



## Non-return valve for liquid, gas and steam service



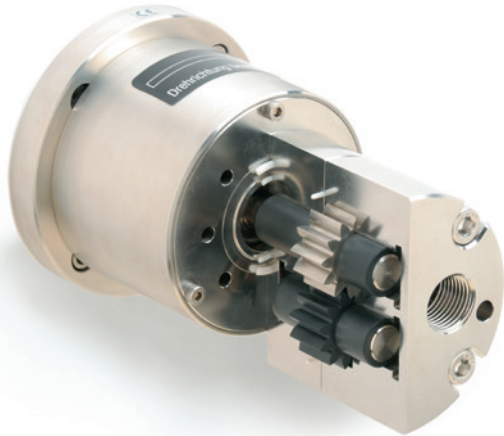
### Technical Data

<b>Material</b>	Stainless steel 1.4404
<b>Seals</b>	Viton (-20 °C to +200 °C) EPDM (-40 °C to +150 °C)
<b>Actuating pressure</b>	1.0 barg (±10%)

Type	DN [mm]	L [mm]	F Connection	Width A/F	Seal	Max. flow*, System pressure
RÜ-G1/8-V RÜ-G1/8-E	3.8	37	G 1/8	16	Viton EPDM	1.0 l/min, 400 bar
RÜ-G1/4-V RÜ-G1/4-E	5.7	50	G 1/4	19	Viton EPDM	4.0 l/min, 400 bar
RÜ-G3/8-V RÜ-G3/8-E	7.6	60	G 3/8	23	Viton EPDM	8.3 l/min, 400 bar
RÜ-G1/2-V RÜ-G1/2-E	10.3	70	G 1/2	27	Viton EPDM	16.7 l/min, 250 bar
RÜ-G3/4-V RÜ-G3/4-E	14.2	86	G 3/4	35	Viton EPDM	35.0 l/min, 250 bar

\* For water at 20 °C and 1.0 mm<sup>2</sup>/s

# The GATHER Products



## Gear Pump and Wankel Pump

GATHER magnetic drive gear pumps are designed for dosing as well as process pump operations. They are complemented by Wankel (rotary piston) pumps featuring excellent conveying and pressurizing performance. The distinctive mark of these hermetically sealed pumps is long service life and non-pulsation dosing, especially of non-lubricating liquid such as water, salt solutions and solvents but also of acid and caustic solutions.

**NEW**

Temperature range:  
-200 °C to +450 °C



## Quick-Disconnect Couplings

The safe, robust and quickly disconnectable hose/tube joining method for almost any liquid and gaseous media.

With double or single shutoff function or unrestricted medium passage in sizes ranging between DN 4 and DN 125. The original Hansen couplings and the flat-face, non-leakage couplings of GATHER's own DBG series are especially versatile.

**NEW**

Temperature range:  
-80 °C to +325 °C



## Filters and Valves

For dosing performance enhancement and gear pump protection GATHER offers tailored accessories:

High-grade overflow valves and filters of stainless steel and Hastelloy as well as simple non-return valves.

*high-grade, robust*

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Quality - Made in Germany



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