Energieversorgung aus einer Hand

Operating and Maintenance Instruction
PILOTGAS-FILTER
G450

Filter

The Experts in Energy Supply

Contents

G450 PILOTGAS-FILTER

Type: G450 **standard**
G450S **with special internals**

1. DESCRIPTION

The pilotgas-Filter G450 is part of all gas pressure regulating decices driven by auxiliary energy according EN334 a purified supply of required fine dust filtering pilot- gas make.

the design of the filter part is designed that it withstands the full highpressure
Details about the cooperation of regulator / positioner are given in the single information leaflets of the positioners.

Working procedure see chapter 3.

Abbreviations

Type G450 PN100	Filter for operating ranges pressure range up to PN100 bar.

Further details about abbreviations are described in EN334

Advantages
Simple , robust construction , fine filtering , high filter area and large collection housing guarantee stable regulation behaviour even at extreme operations , low maintenance expense , universally usable.

2. CONSTRUCTION AND TECHNICAL DATA

CONSTRUCTION
The filter is divided into body and a screwed fine filterpart

MATERIALS

- Valve Body	: Aluminium – anodized
- Cover	: carbon Steel – galvanized
- Sealrings	: NBR

TYPES OF GASES
The standard construction is suitable for dry , non – aggressive gases like

Natural gas , Propan , Butan , Air or Nitrogen

The standard operation temperatures are between -20°C…to +60°C

In special between -50°C…to 100°C

PRESSURE RANGE

Inlet pressure 100bar(ü)

maximum differential pressure 100 bar

QUALITY
The filter described in this information leaflet together with the respective positioner fulfils the demands of EN334 in in all respects.

3. WAY OF OPERATION

(see directional arrow)

4. TROUBLESHOOTING

Pollution of the fine filter insert

Irregular operating of the gaspressure regulator might also be caused by the auxiliary units, i.e. stabilizer G10_ / G25 or the pilot.

Consult Bulletins G10_ / G25 or G61_.

4.1 REGULATOR DOES NOT OPEN

Check:
a) Inlet gas flow.
b) Broken regulator diaphragm.
c) Feed to pilot.
d) Tripped latch mechanism.

4.2 OUTLET PRESSURE DECREASES

Check:
a) Insufficient feed flow.
b) Demand greater than regulator capacity.
c) Irregular pilot feed.
d) Clogged inlet filter G45_.
e) Pressure of the stabilizer reducer G10_ / G25 to low.

4.3 OUTLET PRESSURE INCREASES

CONSULT BULLETINS of the gas pressure regulator

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4.4 HUNTING

Check:
a) Improperly positioned impulse connections.
b) Insufficient gas demand.
c) Faulty setting of inlet and outlet adjustment orifices (see regulator Bulletin).

4.5. FREEZING

Check:
a) Pilot gas Heating
b) Insufficient gas demand

5. PERIODIC CHECKS

it is recommended that regulator, pilot ,filter and latch mechanism be checked for wear regulary.

Slowly close the outlet valve and check line pressure between it and regulator.
A slight increase in pressure should be detected: this results form overload due to closing and is followed by pressure stabilization / reducer.
If, however, outlet pressure continues to rise, then seal is defective. Check if leak is coming from regulator or pilot , and service.

7. MAINTENANCE

7.1 IMPORTANT

Servicing should be carried out by qualified, skilled personal. For further information, please contact our Technical Assistants Department or our authorized dealers.

Before servicing, shut off regulator inlet and outlet. Make sure there is no gas under pressure in the regulator body by closing inlet and outlet fittings. Upon completing maintenance, use soapy water to check proper sealing.

7.2 REPLACING FINE FILTER CARTRIGES

IN ACCORDING SPARE PART LIST : 450.200VA01

a) Remove all connections holding down the covers.
b) Remove screws (Pos7) and lift housing cover assembly up.
c) Unscrew filtering cartridges (Pos2) and cleaning of the filter housing.
d) Check seal ring (Pos5). If worn or scored, replace.
e) Reassemble by reversing the above steps, taking care not to damage seal ring (Pos5).

7.3 GENERAL MAINTENANCE

according as chapter 6.2

7.4 REASSEMBLING

Lubricate all seals with MOLYKOTE 55M and be very careful not to damage them when reassembling.
Reassemble the parts by reversing the steps in 6.2. above. As you precede make sure that's move freely and without friction.

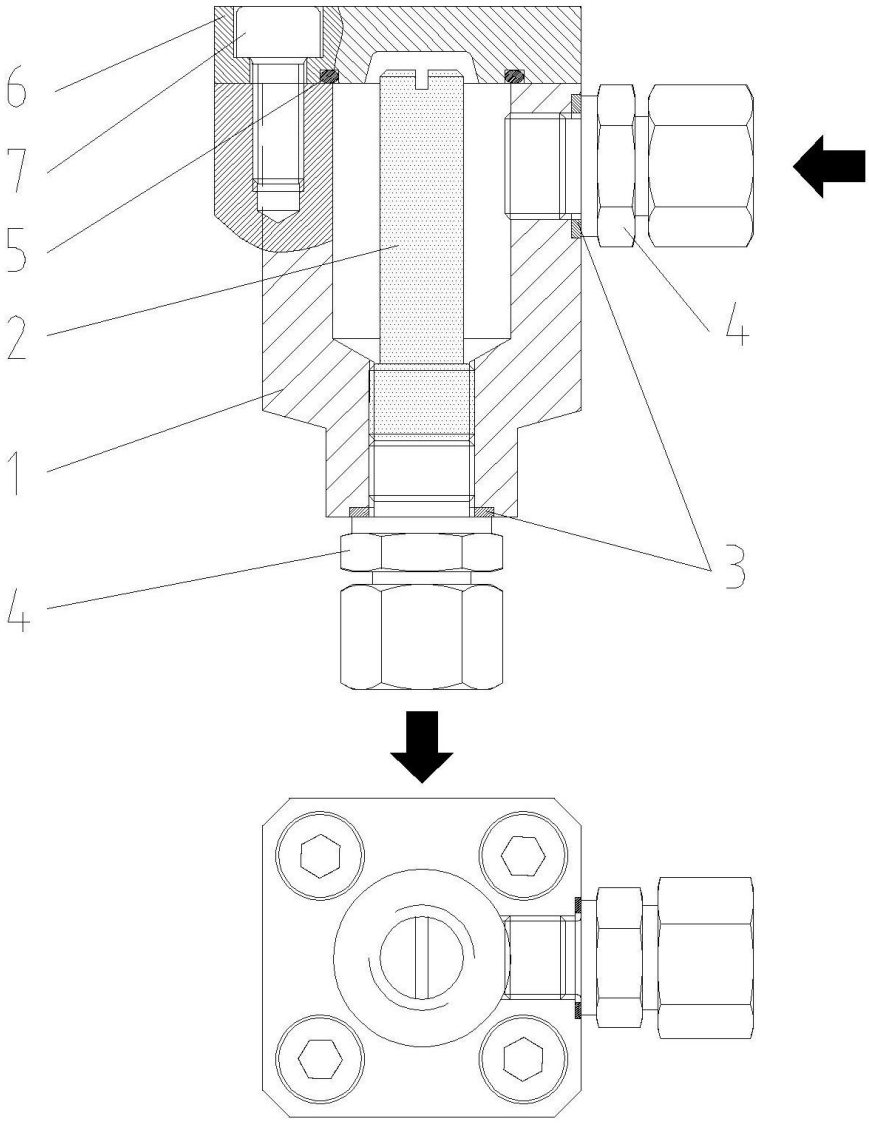
8. ADJUSTING INSTRUCTION

Carry out setting while in operating, using the pilot adjusting screw
(see regulator Bulletin),
and checking pressure on the outlet pressure gauge. A small amount of gas must flow through the regulator during setting. To do this, slightly open inlet and outlet valves. If gas flow has been shut off for technical reasons, loosen an outlet fitting to create a small leak.

Note: Outlet impulse must be fitted in a straight and unobstructed of piping.
Need for safety relief valve fitting shall be fixed time depending on operating conditions.

SPARE PARTS LIST: 450.200VA01

PILOT GAS - FILTER G450 - complete



* Seal kit
***wear part kit

Pos	Discription	Drawing	Code	Pos	Discription	Drawing	Code
1	Filter Body	45.200-001		*5	O-Ring 27		1013603
***2	Fine Filter Cartridges		1029313	6	Housing Cover	45.200-006	
*3	Seal Ring A17		1024790	7	Cylinder-Screw M8		
4	Straight Screw Union						

Checked/approved : _____/ 15.06.2016
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NOTE: In addition to this operating and maintenance manual, all relevant standards and legal provisions concerning start-up, monitoring, maintenance, repair, restart and operation applicable in the country/state in which the equipment is located must be observed.

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