

Operating and mounting manual Safety shut off valve gas - solenoid valve **EVF-R**

Contents

General Remarks

- 1.1 Valve data
- 1.2 Application

2.0 **Danger Notices**

- Safety terms 2.1
- Safety notice 2.2
- Qualified staff 2.3
- Unauthorized modification and spare part production 2.4
- 2.5 Unauthorized operation
- 2.6 Safety information for the use in explosion-prone areas guideline 2014/34/EU

3.0 Handling

- 3.1 Transport
- 3.2 Storage
- 3.3 Handling before mounting

4.0 **Product Description**

- 4.1 **Function**
- Technical data 4.2
- 4.3 Marking

Installation 5.0

- Warning of dangers during installation, operation and maintenance
- 5.2 Installation

6.0 Operation

- 6.1 Commissioning
- 6.2 Shutting down
- 6.3 Maintenance
- 6.4 Putting back into operating

7.0 **Troubleshooting**

- Detection of defects 7.1
- 7.2 Troubleshooting plan

8.0 Dismantling of the Valve

Replacement the spare parts

9.0 Warranty

10.0 **Explanations on Codes and Directives**

11.0 **Drawing**

- 11.1 Sectional drawing
- 11.2 List of parts

12.0 **Declaration of Conformity**



1.0 General Remarks

This operating manual includes instructions to assemble and operate the valve in the prescribed and safe way. Additionally, the adequate operating instructions of each special solenoid drive must be considered.

 Series MG...
 220.100.038

 Series MG...X
 220.100.040

 Series MG...Xme
 220.100.039

If any difficulties appear that can not be solved by means of the operating manual, further information may be demanded from the manufacturer.

This operating manual is in accordance with the relevant valid EN safety standards and the valid prescriptions and rules of the Federal Republic of Germany.

If the solenoids are used abroad of the FRG, the operator and/or the person who is responsible for the plant concept must take care that the valid national rules are met. The manufacturer reserves the right of any technical change and improvement.

The use of these operating instructions suppose the qualification of the user according to paragraph 2.3 "qualified staff".

The operating staff must be trained in accordance with the operating instructions. The operating manual must always be available at the location where used.

1.1 Valve data

Manufacturer:

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Designation

Directly functioning, currentless opened spring safety shut off valve with magnet drive.

Type test acc.: to 97/23/EC E DIN EN 16678 Cl. A; Gr. 2 DIN EN 13611, DIN 3394-1 Cl. A

Type:	Working pressure	Ambient temperature	Medium	Medium temperature	Test pressure (*) PT
40 EVE D		-10°C to + 60°C	amuda ail baayyefyal ail	-10°C to + 200°C	
10-EVF-R	10 bar	-10 0 10 + 60 0	crude oil, heavy fuel oil, Destillate Fuel Oil	-10 C to + 200 C	PT 16
40.51/5.5	40.1	20001 2000		2021	57.40
12-EVF-R	12 bar	-20°C to + 60°C	humid air	0°C to + 200°C	PT 16
12-EVF-R	12 bar	-20°C to + 60°C	air	-20°C to + 200°C	PT 16
35-EVF-R	35 bar	-20°C to + 60°C	nitrogen, Synthesis	-20°C to + 300°C	PT 60
40-EVF-R	40 bar	-20°C to + 60°C	natural gas	-20°C to + 210°C	PT 40
40-EVF-R	40 bar	-20°C to + 60°C	methane, syngas,	-20°C to + 250°C	PT 63
			steam		
50-EVF-R	50 bar	20°C to 1 C0°C	national man	-20°C to + 200°C	DT 62
55-EVF-R	55 bar	-20°C to + 60°C	natural gas	-20°C to + 230°C	PT 63
100-EVF-R	100bar	-10°C to + 60°C	crude oil, heavy fuel oil,	-10°C to + 200°C	PT 100
125-EVF-R	125bar	7-10 0 10 + 60 0	Destillate Fuel Oil	-10 C to + 200 C	PT 125

(*) Test pressure to perform leakage test "No FUNCTION TEST"

Fitting position: vertical drive

Switching cycles: see operating instructions solenoid drive



Threaded connection dimension at DIN ISO 228-1

Connection G	Report	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
	No.	(2)	(3)	(5)	(7)	(10)	(12)	(15)	(20)
12-EVF-R	-	•	-	0	0	-	-	-	-

X Type test acc. to 97/23/EC, O Acceptance test certificate 3.2 possible, - not available,

Flange connection measures acc. to DIN EN 1092-1

Flange DN	PN	Report No.	15 (5N)	20 (7N)	25 (10N)	32 (12N)	40 (15N)	50 (20N)	65 (25N)	80 (30N)
10-EVF-R	16	-	-	-	0*	-	-	-	-	-
35-EVF-R	63	-	-	-	0	-	-	-	-	-
40- EVF-R	40	V490_2015_B2	Х	-	-	-	-	-	-	-
40- EVF-R	63	-	0	-	-	-	-	-	-	-
100/125-EVF-R	100	-	-	-	O**	-	-	-	-	-

^{*} Valve seat inserted to DN15; ** passage 12mm

Flange connection measures acc. to DIN EN 1092-1 / ANSI 600lbs

Flange DN	PN	Report	15	20	25	32	40	50	65	80
		No.	(5N)	(7N)	(10N)	(12N)	(15N)	(20N)	(25N)	(30N)
50-EVF-R	63/ ANSI 600 lbs	V490_2015_B2	X	-	•	-	1	•	•	1
55-EVF-R	63	V490_2015_B2	Х	-	-	-	-	-	-	-

X Type test acc. to 97/23/EC, O Acceptance test certificate 3.2 possible, - not available,

Voltage: VDC 12 – 440 (-15% to +10%) VAC 24 – 500 (-15% to +10%)

VAC 24 - 500 (-15% to +10

 Protection type:
 IP54 or IP65

 Frequency
 40 - 60 Hz

 Power
 10 - 4000W

Details to the electrical data can be found on the type signand the adequate operating instructions of the solenoid valves.

1.2 Application

The UNI Geräte gas – solenoid valves EVF-R.. are used as automatic ventilating valve to vent a space between two lock-up units with flange valve housings e.g. in systems according to DIN EN 746-2 or DIN EN 12952-8

The valves are suitable for gases of the 1st, 2nd and 3rd gas families to G260 and for neutral gases and as a variant with material design for aggressive gases such as e.g. biogas, sewage plant gas or dump gas to G262.

If used in other cases, the operator must carefully check if construction/design of valve, accessories and materials are suitable for the new application. The range of application is subject to the responsibility of the plant planner. The service life of the valve is 20 years (10-EVF-R.../ 35-EVF-R.../ 100-EVF-R...... 10.000 cycle).

2.0 Danger Notices

2.1 Safety terms

The signal terms DANGER, CAUTION und NOTICE are used in this operating manual in case of notices concerning special dangers, or for unusal information requiring a special marking.



DANGER! means that in case of non-observance there is danger to life and/or considerable damage.

X Type test acc. to 97/23/EC, O Acceptance test certificate 3.2 possible, - not available,





CAUTION! means that in case of non-observance there is danger of injury and/or damage.



NOTICE! means that attention is drawn to technical correlations/connections.

Observance of other, not especially marked notices concerning transport, assembly, operation and maintenance and other data (in the operating manual, product documentation and at the unit itself) is also essential, in order to avoid disturbances that might affect direct or indirect damage to property or injury to persons.

2.2 Safety notice

Non observance of safety instructions can lead to loss of any claim for damages.

Non observance can lead to the following mentioned dangers:

- Failure of important functions of the valve/plant
- Endangering of persons by electrical or mechanical influences.
- Protection against accidental contact for moving parts may not be removed as long as the valve is in operation.
- Leakage of dangerous media (e.g. explosive, toxic, hot) must be removed in the way that there is no danger for persons or environment. Laws and regulations must be observed.

2.3 Qualified staff

These are persons who are familiar with erection, assembly, starting, operation and maintenance of the product and who have special qualifications acc. to their activities and functions, e.g.:

- Instruction and obligation to carry out and meet all regional and in-house orders and requirements.
- Education or instruction according to the safety engineering standards in use and maintenance of adequate safety and working protection equipment.
- Training in first aid etc.

2.4 Unauthorized modification and spare part production

Modification or changes of the valve are only allowed after agreement of the manufacturer. Original drawings and accessories authorized by the manufacturer are for safety purposes. The use of other parts or unauthorized changes at the valve by third persons may cancel and abolish the manufacture's liability for resulting consequences.

2.5 Unauthorized operation

Operational reliability of the delivered valve is only guaranteed in case of determined use in accordance to paragraph 1 of the operating manual. The application limits mentioned on the type sign may on no account be exceeded.

2.6 Safety information for the use in explosion-prone areas guideline 2014/34/EU

- The temperature of the medium must not exceed the respective temperature class, and respectively, the respective maximum permitted medium temperature as per operation guideline.
- If the valve is heated (e.g. heating jacket), care must be taken, that the specified temperature class is kept in the time.
- The valve must be connected to the ground.
 In the case most simple this can be realized via pipe screws by means of tooth disc.
 Otherwise the connection to the ground must be implemented by other measures e.g. cable links.
- Control valves, electrical and electrical/mechanical drives as well as sensors must undergo a separate conformity check as per ATEX. In doing so the respective safety and explosion protection information in the operation instructions are to taken into special consideration.
- Any modifications whatsoever to the valve are not allowed. The ATEX approval is void with immediate effect if the valve is modified without prior authorisation (even including painting).



UNI-Geräte GmbH must be consulted before any modifications are made.

Furthermore we point out the guideline ATEX 118a, which include the minimum regulations for the improvement of the health-related situation and the safety of the employees, who might be jeopardized by an explosive atmosphere.

3.0 Handling

3.1 Transport

For any transport works, the generally recognised technical rules and standards as well as rules for prevention of accidents must be observed.

In case of transport, storage and stopping, the flange protection caps must be mounted at both valve flanges.

The goods to be transported must be carefully treated. During transport, the valve must be protected against strokes, impacts or vibration. The coat of lacquer may not be damaged. Transport temperature is -20° C up to $+60^{\circ}$ C.

Never transport the valve at screwed cable glands, appliance plugs or add-on units. The valve can be transported at ring nuts, flange borings or by means of a belt under the solenoid drive. Transport the valve in a case or on a pallet with smooth base and put it softly on plain floor. Never put the valve on limit switch box.

The goods must be checked on completeness and transport damage. See also section 9.0

3.2 Storage

If the valve is not installed immediately after delivery, it must be stored properly.

- Storage temperature -20°C up to +60°C, dry and clean.
- The lacquering protects against corrosion in neutral dry atmosphere. Do not damage colour.
- In humid rooms, a drying agent or a heating resp. is necessary because of condensation of water.

Requirements according to DIN 7716 (products made of caoutchouc and rubber) must be met.

3.3 Handling before mounting

- In case of valve with protection caps, they must be removed before being mounted!
- Protect against atmospheric influences such as humidity.
- Appropriate treatment protects against damage.

4.0 Product Description

The UNI-Geräte gas – solenoid valve EVF-R.. is a directly functioning, currentless opened automatic venting valve as per DIN EN 13611, DIN 3394-1, DIN 16678 and AD2000 with magnet drive.

Sectional drawing 11.1 Fig.1, 2, 3, 4, 5, 6 and 7 shows the valve construction.

4.1 Function

By switching on the solenoid drive, the solenoid core (207) is drawn against the upper part (106). The pressure spring (503) is pressed and the valve disc (200) releases the valve cross section. The valve is closes.

The valve opened by switching off, interruption or failure of power energy to solenoid drive. Due to press of the pressure spring (503) the valve disc (200). The valve is open



4.2 **Technical data**

Closing times: 0.3 - 0.7sOpening times: < 1s

Solenoid -drive types MG...

Connection G	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
	(2)	(3)	(5)	(7)	(10)	(12)	(15)	(20)
12-EVF-R	-	-	016	018	-	-	-	-

Flange DN	15 (5N)	20 (7N)	25 (10N)	32 (12N)	40 (15N)	50 (20N)	65 (25N)	80 (30N)	100	125	150
10-EVF-R	016	-	018	-	-	-	-	-	-	-	-
35- EVF-R	-	-	019	-	-	-	-	-	-	-	-
40- EVF-R	019	-	-	-	-	-	-	-	-	-	-
50- EVF-R	019	-	-	-	-	-	-	-	-	-	-
55-EVF-R	019	-	-	-	-	-	-	-	-	-	-
100-EVF-R	-	-	019	-	-	-	-	-	-	-	-
125-EVF-R	-	-	019	-	-	-	-	-	-	-	-

Drive types with "A" consist of pickup and holding winding

Max. valve loading by pipe power according to DIN EN 13611

The indicated moments may not work longer than 10s.

DN		8	10	15	20	25	32	40	50	65	80	100	125	150
Torsion	Nm	20	35	50	86	125	160	200	250 ¹⁾	325 ¹⁾	400 ¹⁾	-	-	-
Bending	Nm	35	70	105	225	340	475	610	1100	1600	2400	5000	6000	7600

¹⁾ Not valid in case of valves with flanges

Starting torque, pipe screws greased

	,			3										
DN		8	10	15	20	25	32	40	50	65	80	100	125	150
Torque	Nm	20	30	30	30	30	50	50	50	50	50	80	160	160

Starting torque, product screws and nuts greased

	Screw		M6	M8	M10	M12	M16	M20	M24
Γ	Torque	Nm	5	11	22	39	70	110	150

Marking

The type sign on the solenoid drive has the following information:

- Valve type, nominal width, pressure and temperature indication, fitting position
- Year of construction/ production no.
- Product ID No.

Valve class and valve group acc. to DIN EN 16678, DIN 3394-1

CE-sign and no. of relevant location to 2014/68/EU No. of relevant location to 2014/68/EU to 2014/68/EU

- Fluid group and test pressure PT
- Solenoid drive type Electr. performance
- Voltage
- Frequency
- Protection type

When using solenoid drives for ex-protection zone 1 refer to information in the valid operating instructions.

Refer also to section 10.0.



5.0 Installation

5.1 Warning of dangers during installation, operation and maintenance



DANGER!

Safe operation of the valve can only be guaranteed if it is installed, commissioned and maintained by qualified personnel (see point 2.3 "Qualified staff") correctly and in observance of the warnings in this operating manual. Apart from that, the operation safety order and the qualified use of tools and protection equipment must be guaranteed. The operating instructions for the valve must be observed during all work on or with the valve. Failure to observe these instructions may result in injury or in damage to the valve or other installations.

When the valve is used as a final sealing element, a safety precaution e.g. blanking disc, blind flange, etc., in accordance with the code of practice of the German Technical and Scientific Association for Gas and Water (DVGW) is recommended during all repair work

5.2 Installation

Apart from the general installation guidelines, the following points should be observed:



NOTICE!

- Remove the flange covers.
- The inside of the valve and the pipeline must be free from foreign particles.
- Observe the installation position in relation to the flow direction, see markings on the valve.
- Centre gaskets between the flanges.
- The connecting flanges must be aligned.
- Ensure that none of the components is strained during installation.
- The valve must not be used as a fixed point; it is supported by the pipework system.
- Protect valves from soiling, particularly during construction work.
- Thermal expansion of the pipework must be equalised using compensators.

In accordance with DIN EN 16678, a dirt trap must be installed upline of any safety shut-off device. The UNI-Geräte dirt traps of the SFR Series are approved for use together with the gas solenoid valves in accordance with EU/2016/426.

The valve can be installed with upright but not suspended solenoid drive.



NOTICE!

Please observe the solenoid drive operating instructions (BTA).

6.0 Operation



DANGER!

Before commissioning a new installation or before starting up an installation again after repairs or modifications, ensure:

- The proper completion of all installation and assembly work!
- Commissioning only by "qualified staff" (see point 2.3).
- Installation or repair of existing guards and protection equipment.

6.1 Commissioning

- Before commissioning, check the data on material, pressure, temperature and flow direction with the layout plan of the pipework system.
- Depending on the field of application, the local regulations have to be observed, e.g. the operation safety order.
- Residues in the pipework and the valve (dirt, weld beads, etc.) will inevitably result in leaks.
- Leakage inspection of the installed valve.



6.2 Shutting down

 Depending on the field of application, the local regulations have to be observed, e.g. the operation safety order.

6.3 Maintenance

Solenoid valves have to be checked at regular intervals for proper function and internal leak tightness. The intervals for regular inspections have to be defined by the operator according to the operating conditions. UNI-Geräte recommends an internal visual inspection once a year and an overhaul of the valve after 2 years or after the following number of switching cycles at the latest:

Application temperature	DN ≤ 25	≤ DN 80	≤ DN 150	> DN 150
≤ 25°C	150 000	75 000	25 000	20 000
> 25°C	50 000	25 000	25 000	5 000

Repair or maintenance works at the manufacturing company (UNI- Geräte)

 Valves and fittings must be delivered clean and free from substances which are harmful to health or to the environment.

UNI-Geräte prescribes the following maintenance intervals for valves with SIL requirements:

The safety requirements with regard to the maintenance intervals to be adhered are described in the **SIL manual** of the type series and must be complied with.

6.4 Putting Back into Operation

When putting a valve back into operation, ensure that all the necessary steps described in section 5.2 (Installation) and section 6.1 (Commissioning) are repeated.

7.0 Troubleshooting

7.1 Detection of defects



DANGER!

Be sure to observe the safety instructions during troubleshooting.

If the malfunctions cannot be remedied using the following "Troubleshooting plan (7.2)" please contact the manufacturer.

In the event of faults in the function or operating behaviour of the valve, check whether the installation work was carried out and completed as described in this operating manual.

Depending on the field of application, the operation safety order must be observed.

Check the data on material, pressure, temperature, voltage and flow direction with the layout plan of the pipework system. In addition, check whether the operating conditions correspond to the technical data in the data sheet or on the rating plate.

7.2 Troubleshooting plan

Malfunction	Possible causes	Remedy
No flow	Valve does not open	Switch off solenoid drive (800)
	Flange covers were not removed	Remove flange covers
Low flow rate	Clogging in the pipework system	Check pipework system
Valve leaking at seat, no internal tightness	Valve seat gasket (400) or valve seat (100) damaged by external particles	See section 8 replace valve
No external tightness	Gaskets damaged	See section 8 replace valve
Valve does not close	Working pressure too high	Compare working pressure with the data on the rating plate
	Solenoid drive no voltage	Switch on solenoid drive (800) Check whether there is residual voltage, see section 4.1



Flange fracture (valve/	Screws not tightened uniformly, mating	Align pipework.
pipework)	flanges not aligned	Install new valve



NOTICE!

Observe section 9.0 before all installation and repair work!

Observe section 6.4 when putting the valve back into operation!

8.0 Dismantling of the Valve

In addition to the general installation guidelines and the operation safety order, the following points must also be observed:



DANGER!

- Depressurised pipework system
- Cooled medium
- Emptied installation
- Vent pipework systems containing corrosive, inflammable, aggressive or toxic media
- Have dismantling work carried out only by qualified staff (see point 2.3)

8.1 Replacement the spare parts

Shut down the valve as described in section 6.2.

Flange version

Fig. 2 10-EVF-R... (DN15 / DN25)

Fig. 3 40-EVF-R... (PN40)

Fig. 4 35-EVF-R..

Fig. 5 100/125-EVF-R..

De-installation of the limit switch mounting

Switch limit switch (803) to zero-potential. Open limit switch housing (120). Loosen hexagon nut (901/2) and screw it off and remove it together with switch actuator (513) from the limit switch spindle (243). Loosen hexagon nut (901/3) and remove it. Take off the limit switch housing (120) with terminal box (716) from the limit switch connection piece (246). Remove connecting piece limit switch (246) from solenoid housing (800).

Switch off and dismantle the solenoid drive (800) as described in the operating manual of the solenoid drive.



DANGER!

After continuous operation, the solenoid drive may be hot! Danger of burns!

Replace the solenoid valve

Threaded version

Fig. 1 12-EVF-R... (G1/2, G3/4)

Flange version

Fig. 6 40/50/55-EVF-R.. (PN63)

Fig. 7 50/55-EVF-R...

De-installation of the solenoid drive (800)

see operating instructions (BTA) solenoid drive

Replace the solenoid valve



9.0 Warranty

Scope and period of the warranty is specified in the edition of the "General Terms of Business of the UNI-Geräte E. Mangelmann Elektrotechnische Fabrik GmbH" valid at the time of delivery or else in the purchase agreement.

We warranty that the valve is free from faults in line with the state of the art and for the confirmed field of application.

No warranty claims will be accepted for damage resulting from improper use or failure to observe these operating and installation instructions, the statutory accident prevention regulations, the EN, DIN and VDE standards and other codes and regulations.

Warranty claims will also not be accepted for damage occurring during operation due to operating conditions deviating from those specified in the data sheet or in other agreements.

Justified complaints will be remedied by reworking by us or specialist companies authorized by us.

Claims going beyond the scope of the warranty will not be accepted. The customer shall have no right to the supply of a replacement valve.

Maintenance work, installation of parts from other manufacturers, any modifications to the design and natural wear are not covered by the warranty.

Transport damage must be reported not to us but *without delay* to your responsible goods handling company, the railway company or the shipping agent as otherwise all claims for damages against these companies will be voided.

10.0 Explanations on Codes and Directives

The Commission of the European Union has laid down common directives for the free trading of goods within the Union specifying minimum requirements for safety and health protection. The CE symbol confirms that products comply with the EU directives, i.e. in conformity with the relevant, in particular harmonised standards. For the gas solenoid valve (mechanical part), Directive 2014/68/EU can be considered.

Notes on Directive 2014/68/EU (Pressure Equipment Directive, DGRL):

It has been conformed that the quality assurance in design control, manufacture and final acceptance of the manufacturer, UNI-Geräte E. Mangelmann Elektrotechnische Fabrik GmbH, satisfy the requirements of 2014/68/EU Article 14 Module H. The gas solenoid valves comply with the fundamental requirements of Directive 2014/68/EU. Valves in according to Article 1 Paragraph 2,f,v or Article 4 paragraph 3 are not allowed to have the CE Mark in according to Article 18.

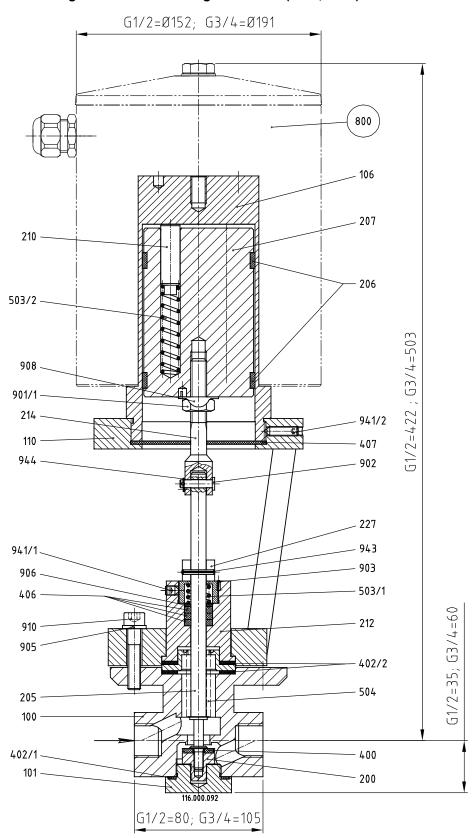
Note concerning ex-guideline 2014/34/EU (explosion guideline ATEX):

The product is not subject to guideline 2014/34/EU, since due to the loads occurring during practical operation, there is no effective source of ignition even in case of an error case to be assumed. This also applies to spring loaded components in gas-filled rooms. In case of electric drives, sensors or other electric components the application as per 2014/34/EU is to be checked separately.



11.0 Drawing

11.1 Fig.1 sectional drawing 12-EVF-R.. (G1/2; G3/4)



O = Spare parts



Fig.2 sectional drawing 10-EVF-R..

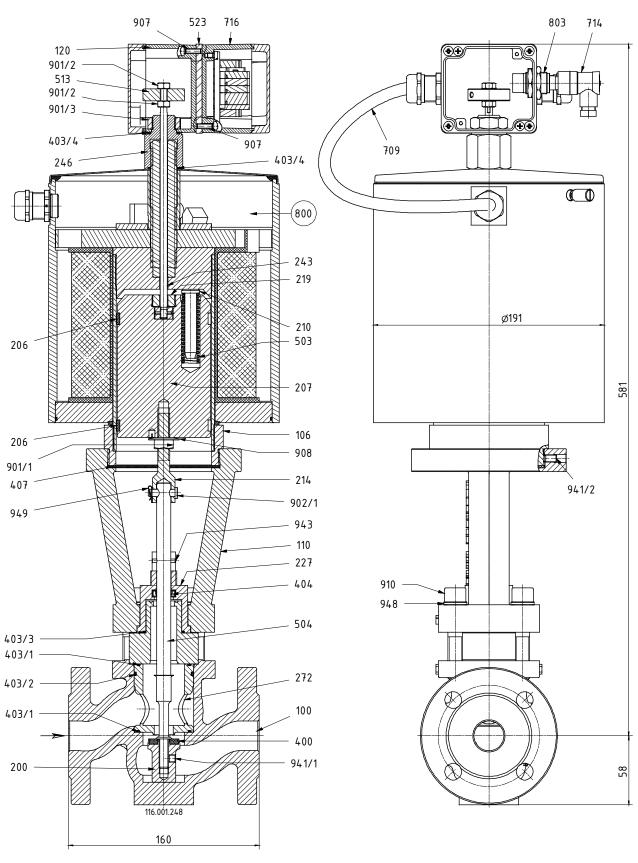




Fig.3 sectional drawing 40-EVF-R.. (PN 40)

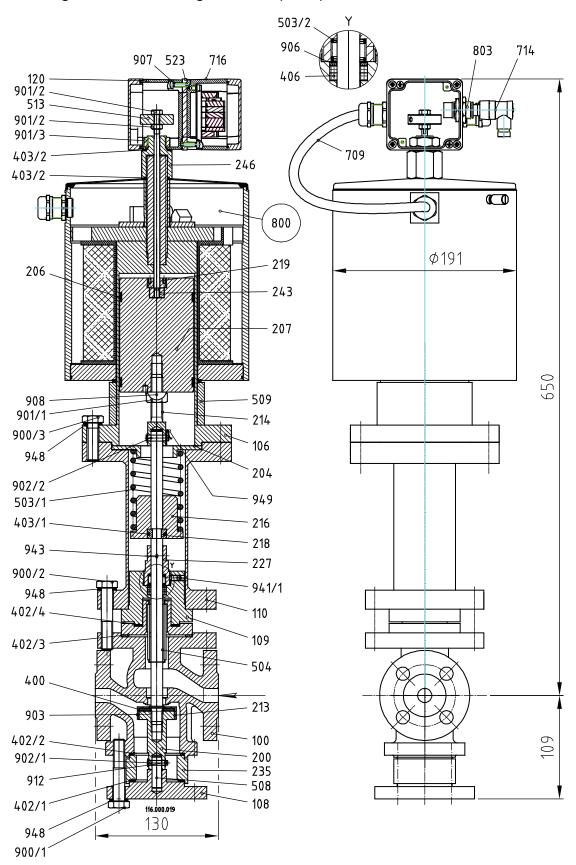




Fig.4 sectional drawing 35-EVF-R..

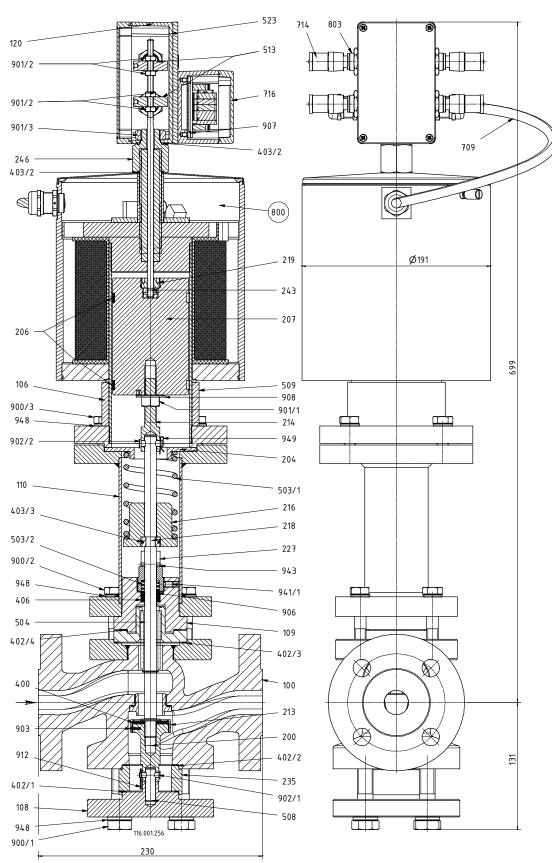




Fig.5 sectional drawing 100/125-EVF-R..

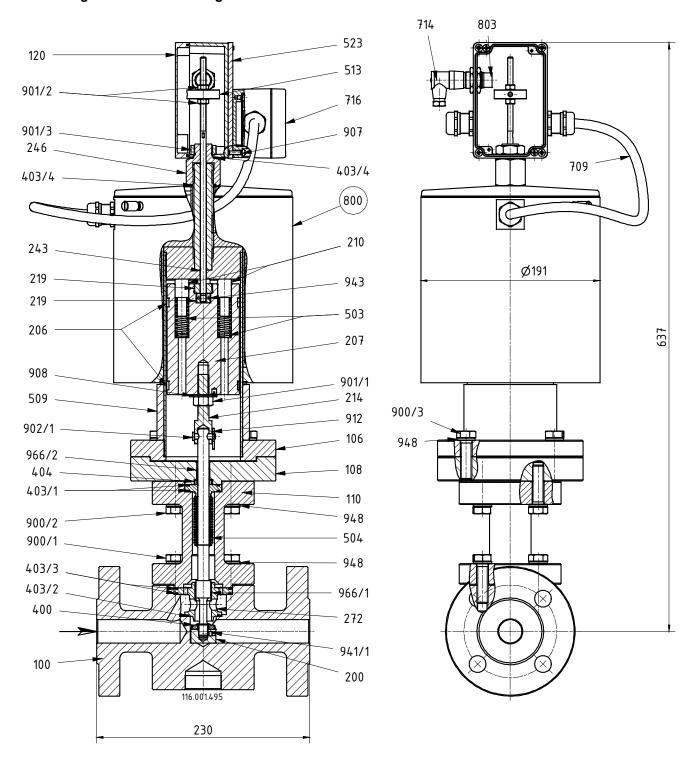




Fig.6 sectional drawing 40/50/55-EVF-R.. (PN 63) (2 limit switch)

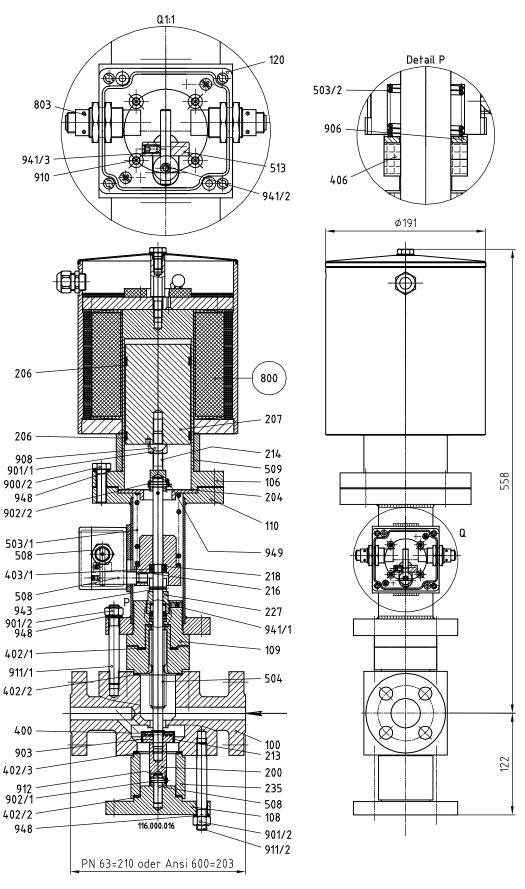
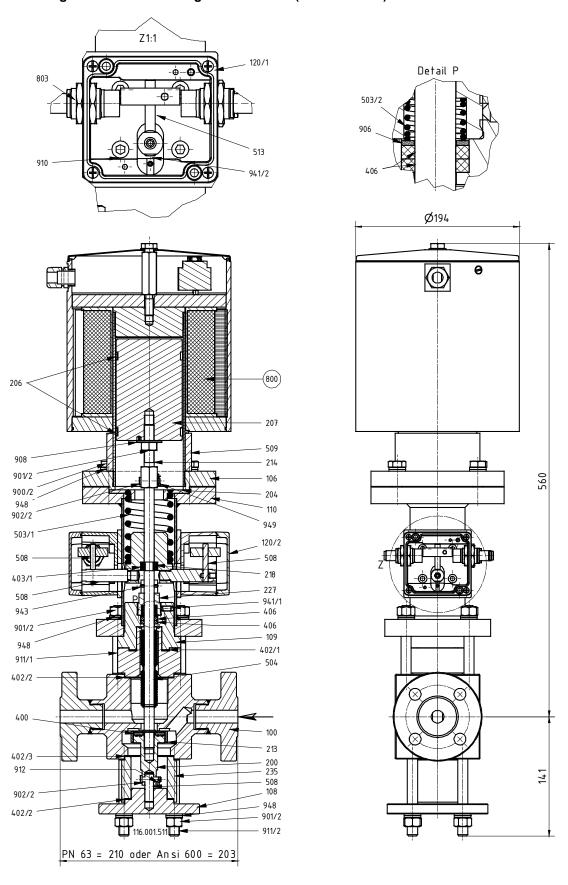




Fig.7 sectional drawing 50/55-EVF-R.. (3 limit switch)



O = Spare parts



11.2 List of p	1.2 List of parts					
Pos./ Item	Stück/ Qty.	Benennung	Description			
100	1	Ventilgehäuse	Valve chamber			
101	1	Gehäusemutter	Housing nut			
106	1	Oberteil	Upper part			
108	1	Gehäuseflansch	Housing flange			
109	1	Gehäusezylinder	Housing cylinder			
110	1	Distanzstück	Distance piece			
120	1	Endschaltergehäuse	Limit switch housing			
200	1	Ventilteller	Valve disc			
204	1	Federführung	Spring guide			
205	1	Ventilspindel	Valve spindle			
206	2	Führungsring	Guide ring			
207	1	Magnetkern	Magnet core			
210	2	Federbolzen	Spring bolt			
212	1	Spindelführung	Spindle guide			
213	1	Gewindering	Threaded ring			
214	1	Ventilstift	Valve pin			
216	1	Federteller	Spring plate			
218	1	Zweiteiliger Ring	Two-piece ring			
219	1/2	Spindelmutter	Spindle nut			
227	1	Verdrehschutz	Distort protection			
235	1	Distanzrohr	Distance pipe			
243	1	Endschalterspindel	Limit switch spindle			
246	1	Verbindungsstück Endschalter	Limit switch connection piece			
272	1	Ventilsitz R-Ausführung	Valve seat R-design			
400	1	Ventilitellerdichtung	Valve disc seal			
402/1	1	Flachdichtung	Flat gasket			
402/1	1/2	Flachdichtung	Flat gasket			
402/2						
402/3	1	Flachdichtung	Flat gasket			
403/1	1/2	Flachdichtung	Flat gasket			
403/1	1/2	O-Ring O-Ring	O-ring			
403/2	1/2		O-ring O-ring			
403/3	2	O-Ring O-Ring	O-ring O-ring			
403/4	1		O .			
	· ·	Lippenring	Lip-ring			
406	2/3	Dichtungspackung	Packing			
407	1	Staubschutzmembrane	Dust guard membrane			
503/1	1/2	Druckfeder	Compression spring			
503/2	1/3	Druckfeder	Compresssion spring			
504	1 1/0	Faltenbalg komplett	Expansion bellows complete			
508	1/3	Bolzen	Bolt			
509	1 1/0	Distanzring	Distance ring			
513	1/2	Endschalterbetätigung	Adjusting ring			
523	1	Montagehalter	Assembly bracket			
709	1	Anschlusskabel	Conneting cable			
714	1/2/4	Leitungsdose	Line socket			
716	1	Klemmkasten	Terminal box			
800	1	Magnet-Antrieb	Solenoid drive			
803	1/2/4	Endschalter	Limit switch			
900/1	4	Sechskantschraube	Hex. head screw			
900/2	4	Sechskantschraube	Hex. head screw			
900/3	4	Sechskantschraube	Hex. head screw			
901/1	1	Sechskantmutter	Hex. nut			
901/2	2/4/8	Sechskantmutter	Hex. nut			
901/3	1	Sechskantmutter	Hex. nut			
902/1	1	Bolzen	Bolt			
902/2	1	Bolzen	Bolt			



Pos./ Item	Stück/ Qty.	Benennung	Description
903	1	Kerbstift	Cotter pin
905	4	Federring	Lock washer
906	1	Scheibe	Washer
907	4	Senkschraube	Countersunk bolt
908	1	Sicherungsblech	Safety plate
910	4	Innensechskantschraube	Cylinder head screw
911/1	4	Stiftschraube	Healess screw
911/2	4	Stiftschraube	Healess screw
912	1	Splint	Split pin
941/1	1	Gewindestift	Threaded pin
941/2	1	Gewindestift	Threaded pin
941/3	1	Gewindestift	Threaded pin
943	1	Schwerspannstift	Spring dowel sleeve-solid
944	1	Sicherungsring	Safe ring
948	4/12	Nordlockscheibe	Nordlock washer
949	1	SI-Sicherung	SI-fuse
966/1	1	DU-Buchse	DN-liner
966/2	1	DU-Buchse	DN-liner

Spare parts

Version	Fig.	Туре	Spare parts
Threaded version	Fig. 1	12-EVF 5R/7R	Solenoid drive (800)
Flange version	Fig. 2	10- EVF 5NH / 10NH.R	Solenoid drive (800)
	Fig. 3	40 -EVF 5NH.R(PN40)	Solenoid drive (800)
	Fig. 4	35- EVF 10NH.R	Solenoid drive (800)
	Fig. 5	100/125- EVF 10N12.R	Solenoid drive (800)
	Fig. 6	40/50/55- EVF 5N.R	Solenoid drive (800)
	Fig. 7	50/55- EVF 5N.R	Solenoid drive (800)



12.0 Declaration of Conformity

UNI-Geräte E. Mangelmann Elektrotechnische Fabrik GmbH Holtumsweg 13 D - 47652 Weeze



Konformitätserklärung

Declaration of Conformity

Produkt Product

Sicherheitsabsperrventil Safety shut-off valve

Handelsbezeichnung Trade Mark

Magnetventil Solenoid Valve

Baureihe / Series

...EVF...

Nennweiten / Size

DN 15 - DN 80, G1/4 - G2

Fluidgruppe Fluid group

Brennbare Gase, FL. Gr.1 Flammable gases, FL. Gr.1

EU - Richtlinien EU - Directives

2014/68/EU

Druckgeräterichtlinie / Pressure Equipment Directive

2014/68/EU

Modul H

Konformitätsbewertungsverfahren Conformity Assessment Procedure

Modul H 2014/68/EU

Angewandte technische Spezifikation

Applied Technical Specification

DIN EN 13611, DIN EN 16678 AD 2000, EN 12516, EN 12266

EG-Baumusterprüfung

97/23/EG 2)

EC-Type Examination TÜV Rheinland Industrie Service GmbH

Notified Body 0035

Am Grauen Stein, D-51105 Köln

Überwachungsverfahren

Surveillance Procedure

C€-0062-PED-H-UGM 001-20-DEU

Bureau Veritas Services SAS

8 Cours du Triangle

92800 PUTEAUX - LA DEFENSE Zertifizierungsstelle / Notified Body 0062

Kennzeichnung

Marking

C€-0062 1)

Das Unternehmen UNI Geräte E. Mangelmann Elektrotechnische Fabrik GmbH erklärt in alleiniger Verantwortung, dass die o.a. Baureihe die grundsätzlichen Anforderungen der aufgeführten Richtlinien und Normen erfüllt.

UNI Geräte E. Mangelmann Elektrotechnische Fabrik GmbH confirms under the sole responsibility of the manufacturer, that the basic requirements of the above specified directives and standards are fulfilled.

Weeze, 14.05.2020

Geschäftsführer Norbert Schneider Managing Director

250.000.530-03

^{1) ≥} DN32 + ≥ 0,6bar, siehe Diagramm 6, fallen in den Anwendungsbereich der 2014/68/EU ≥ DN32 + ≥ 0,6bar, see Diagramm 6, are included in the EC-Directive 2014/68/EU

²⁾ Gilt nur für mit x gekennzeichnete Ventile siehe Betriebsanleitung Only for valves marked with x, refer to the operating instructions