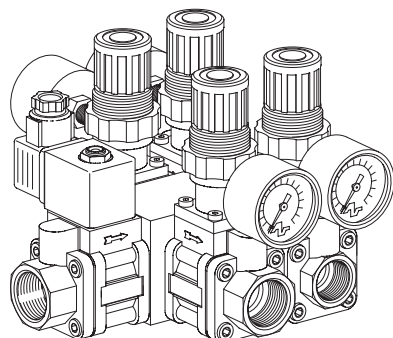


GAMMA Valves Series 100

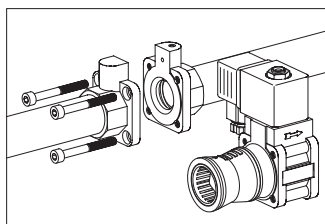


An especially universal and robust valve series from DN 15 to DN 50 (G1/2 to G2) for the most varied applications in mechanical and apparatus construction.

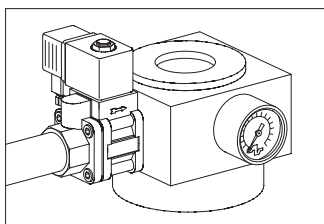
Dirt particles in the medium can lead to malfunction in the valves. It is therefore recommended to install a strainer, e.g. Type SMF-133..

The structural combination of various Types of valve, e.g. solenoid valves and pressure regulators, if required with sensors in multi function blocks, offers significant advantages:

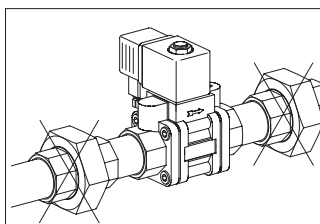
- saving of assembly time (pipework expenditure reduced by up to 85%)
- saving of fittings
- enormous saving of construction space



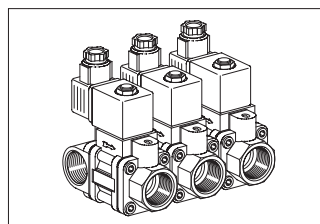
The main valve (intermediate flange valve) can be radially disassembled



Flange mount valves can be screwed onto pressure-bearing elements



Costly assembly of a detachable fitting is not required



Valve batteries up to DN 50 (G 2) with various operation Types and functional applications

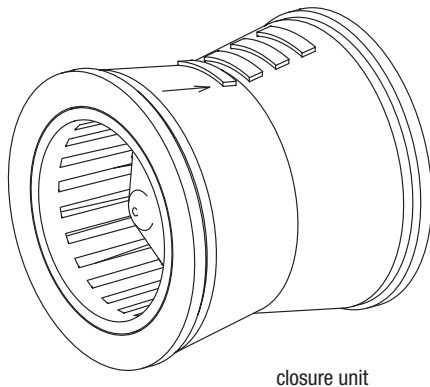
CHARACTERISTICS

GENERAL

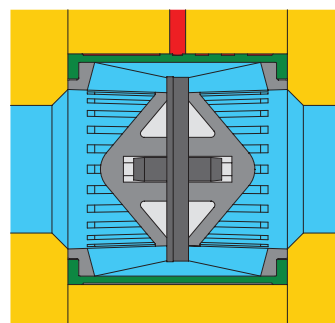
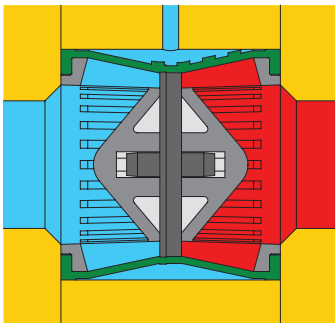
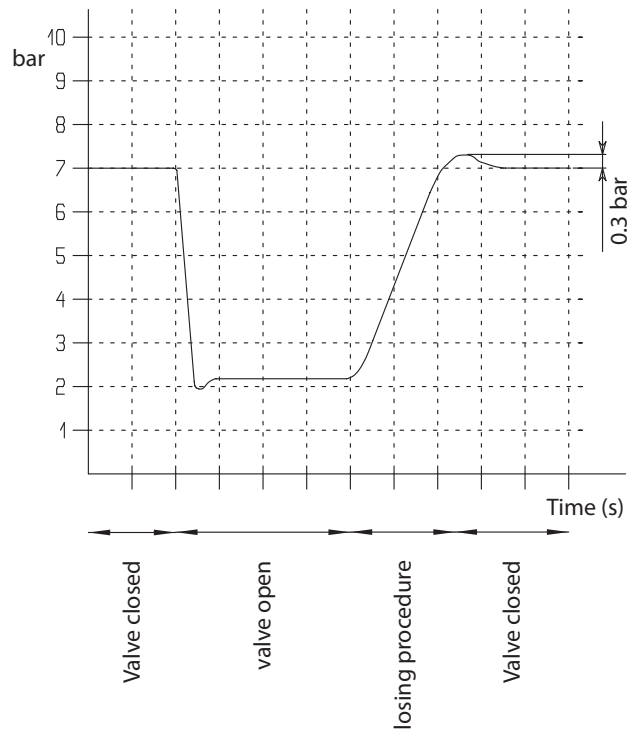
| | | | | | |
|-----------------------------------|---|---|---|---|--------------------------------|
| Constructional design | low noise membrane valve with coaxial flow | | | | |
| Product name | 2/2-way solenoid valve servo-controlled | 2/2-way solenoid valve with pressure regulator servo-controlled | 2/2-way valve pressure operated by external or own medium | Hand-adjustable pressure regulator valve servo controlled | Valve batteries (all variants) |
| Product Type | EGV | EGR | PGV | RGV | all previously named |
| Nominal diameter | DN 15 to DN 50 | | | | |
| Port size | G 1/2 to G 2 | | | | |
| Ambient temperature | -20°C to +60°C (others on request) | | | | |
| Medium temperature | for NBR: -10°C to + 90°C for FKM and EPDM: -10°C to +130°C (for exceptions see table) | | | | |
| Medium viscosity | up to ca. 20 mm²/s | | | | |
| Valve body material | Ms | | | | |
| Membrane support unit material | reinforced synthetic material (others on request) | | | | |
| Other internal component material | Stainless steel and non-ferrous metal | | | | |
| Material sealing material | NBR (nitrile rubber), EPDM (ethylene propylene) or FKM (fluoride rubber) (others on request) | | | | |
| Mounting method | Installation in rigid pipe system or using mounting bracket (see accessories) | | | | |
| Mounting position | optional, preferably upright | | | | |
| PNEUMATIC - HYDRAULIC | | | | | |
| Nominal pressure (bar) | according to Type table. The numerical value of the nominal pressure PN signifies the permitted operating pressure OP in bar at 60°C ambient temperature and 60°C medium temperature. Insofar as two values are given, the first value refers to solenoid coil with highest electrical power consumption, the second value to that with lowest power consumption. | | | | |
| Pressure range | 0.2 bar up to permitted operating pressure OP according to table. 0 to 16 bar version is also Possible for Type EGV function “Z” and Type PGV | | | | |
| Flow rate | Kv-value according to Type table (full flow with pressure difference of 0.3 bar or higher) | | | | |
| Medium | Neutral gaseous or fluids Sealing material NBR: e.g. compressed air, water, hydraulic fluids, neutral gases Sealing material EPDM: e.g. hot water Sealing material FKM: e.g. solvents, hot water, hot air above 90°C | | | | |
| Response time | Opening time: 20 ms to 2 s closing time: 25 ms to 5 s, according to flow medium and DN | | | | |
| Electric | see solenoid coils | | | | |

AVS GAMMA valves

Low noise automatic with membraneclosing
GAMMA the perfect valve concept from AVS-Römer



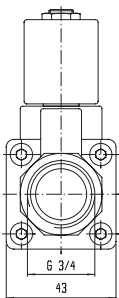
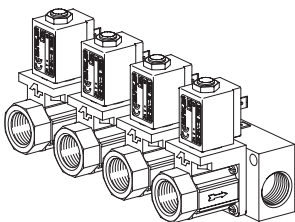
Closing response



The patented, coaxial constructional design enables advantageous membrane support, in both positions. The optimal heat emission of the open membrane resting on the coil reduces its thermal load. Both sets of circumstances are responsible for the extraordinarily high durability and also with pulsating compressed air. Furthermore the low masses moved enable extremely short response times, if desired.

Further advantages:

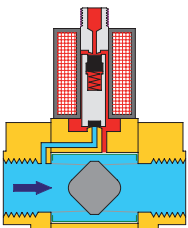
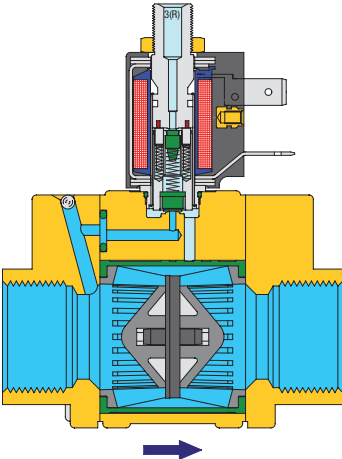
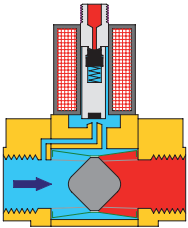
- no pressure surges of fluids, minimised flow noises
- also very suitable for compressed air and other gases
- large pressure range (application from 0 bar also Possible)
- large variety of materials (plastic and elastomer components are manufactured in-house)
- the very compact closure unit with rotational symmetry enables very easy structuring of valve coil or special valve batteries

| Description | |
|---|---|
| <p>Structural width</p>  | <p>The low structural width permits small pipe spacing for single valves and high installation density for valve batteries.</p> |
| <p>Valve batteries</p>  | <p>DN 12 to DN 50 (G 1/2 to G 2) single valve to 1 normal fold battery.</p> |

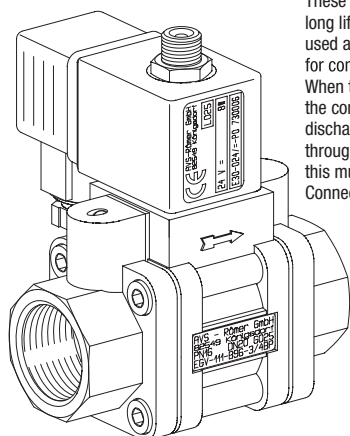
Function

| | | | |
|---------------|-----------|----------------------------|---|
| Product group | 53 | Function "B" normally open | low noise and impact-free closing, for neutral, gaseous or fluids |
|---------------|-----------|----------------------------|---|

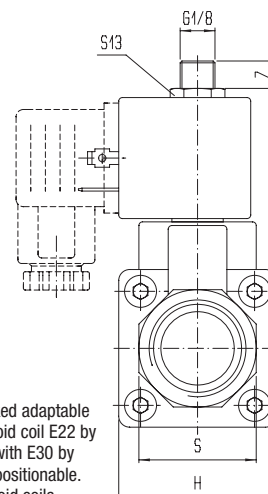
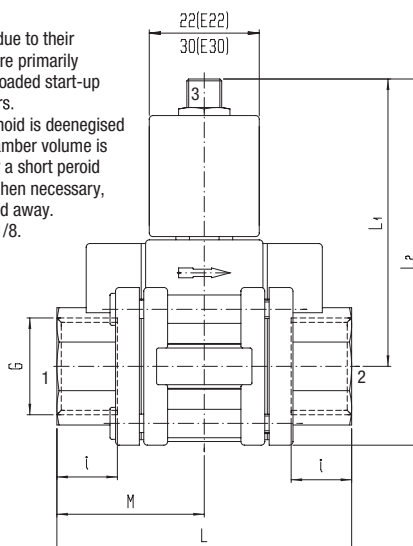
Brass

| Operating position | Description | Function |
|---|---|---|
|  | <p>In normal position - magnetic system without power - its resting seat is closed and its operational seat open. Thereby the control chamber is discharged over "3" and the membrane held in the "open" position by the flow medium. A minimum pressure difference is required for this operation.</p> |  |
|  | <p>In operational position - magnetic system under power - its seat is open and its operational seat closed. Pressure builds up in the control chamber, which due to the larger effective membrane surface holds the membrane in "closed" position.</p> | |

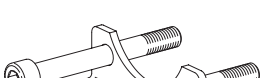
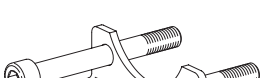
Illustration



These valves, due to their long lifetime, are primarily used as an unloaded start-up for compressors. When the solenoid is deenergised the control chamber volume is discharged for a short period through "3". When necessary, this must be let away. Connection G 1/8.



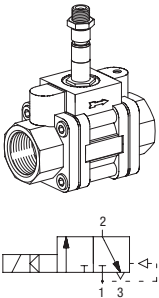
Cable socked adaptable with solenoid coil E22 by 2 x 180°, with E30 by 4 x 90° repositionable. Both solenoid coils 360° turnable.

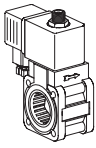

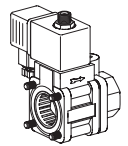
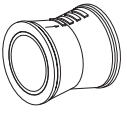
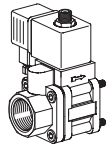

| Dimensions | | | | | | | | | Mounting Accessories | | | | | |
|------------|---------|------|------|----|------|-------|----|----|---|---|----------------------------------|---------------------|--------|--|
| DN | G | L | I | M | L1 | L2 | H | S | Illustration | Suitable for valves | Type | Order number | | |
| 15 | G 1/2 | 68.5 | 13.5 | 34 | 78 | 99.5 | 43 | 27 |  | G 1/2 + G 3/4 DN 15 and DN 20 | ZGV-10normal D2normal 52 | 616252 | | |
| 20 | G 3/4 | 80.5 | 15.5 | 40 | 78 | 99.5 | 43 | 32 | |  | G 1 + G 1 1/4 DN 25 and DN 32 | ZGV-10normal D32-62 | 616262 | |
| 25 | G 1 | 94 | 17 | 47 | 86 | 115.5 | 59 | 41 | | | | | | |
| 32 | G 1 1/4 | 112 | 19 | 56 | 86 | 115.5 | 59 | 50 | | | | | | |
| 40 | G 1 1/2 | 132 | 21 | 66 | 99.5 | 143 | 87 | 55 | | | | | | |
| 50 | G 2 | 160 | 24.5 | 80 | 99.5 | 143 | 87 | 70 | | | | | | |

2/2-Way Solenoid Valve - Type EGV Series 100






| | | | |
|---------------|-----------|---------------------------------------|---|
| Product group | 53 | "C" normally closed with A discharged | low noise and impact-free closing, for neutral, gaseous or fluids |
|---------------|-----------|---------------------------------------|---|

Brass

| Version | DN | Kv-value water [m³/h] | G | PN | Possible Type of power | Sealing material | Type (Partial solenoid valve without solenoid coil) | Order number | |
|--|----|-----------------------|---------|------|------------------------|------------------|---|--------------|--|
| Valve discharge seat ND 1.8 without solenoid coil Permitted operating pressure 0.2 bar up to value according to table below.  | 15 | 5.6 | G 1/2 | 12.5 | AC / DC | NBR | EGV-121-C78-1/2BN-00 | 618801 | |
| | 15 | 5.6 | G 1/2 | 12.5 | AC / DC | EPDM | EGV-121-C78-1/2PN-00 | 618803 | |
| | 15 | 5.6 | G 1/2 | 12.5 | AC / DC | FKM | EGV-121-C78-1/2FN-00 | 618805 | |
| | 20 | 7.6 | G 3/4 | 12.5 | AC / DC | NBR | EGV-121-C78-3/4BN-00 | 618821 | |
| | 20 | 7.6 | G 3/4 | 12.5 | AC / DC | EPDM | EGV-121-C78-3/4PN-00 | 618823 | |
| | 20 | 7.6 | G 3/4 | 12.5 | AC / DC | FKM | EGV-121-C78-3/4FN-00 | 618825 | |
| | 25 | 16.8 | G 1 | 12.5 | AC / DC | NBR | EGV-121-C78-1BN-00 | 618851 | |
| | 25 | 16.8 | G 1 | 12.5 | AC / DC | EPDM | EGV-121-C78-1PN-00 | 618853 | |
| | 25 | 16.8 | G 1 | 12.5 | AC / DC | FKM | EGV-121-C78-1FN-00 | 618855 | |
| | 32 | 21 | G 1 1/4 | 10 | AC / DC | NBR | EGV-121-C78-5/4BN-00 | 618871 | |
| | 32 | 21 | G 1 1/4 | 10 | AC / DC | EPDM | EGV-121-C78-5/4PN-00 | 618873 | |
| | 32 | 21 | G 1 1/4 | 10 | AC / DC | FKM | EGV-121-C78-5/4FN-00 | 618875 | |
| | 40 | 29.5 | G 1 1/2 | 10 | AC / DC | NBR | EGV-121-C78-6/4BN-00 | 618901 | |
| | 40 | 29.5 | G 1 1/2 | 10 | AC / DC | EPDM | EGV-121-C78-6/4PN-00 | 618903 | |
| | 40 | 29.5 | G 1 1/2 | 10 | AC / DC | FKM | EGV-121-C78-6/4FN-00 | 618905 | |
| | 50 | 35 | G 2 | 10 | AC / DC | NBR | EGV-121-C78-2BN-00 | 618921 | |
| | 50 | 35 | G 2 | 10 | AC / DC | EPDM | EGV-121-C78-2PN-00 | 618923 | |
| | 50 | 35 | G 2 | 10 | AC / DC | FKM | EGV-121-C78-2FN-00 | 618925 | |

| Variations | | Options | |
|---|---|---|--|
|  | 2/2-way intermediate flange Solenoid valve Flange-side 4 thread bores: Type EGV-121-CGK-... Flange-side 4 through bores: Type EGV-121-CHL-... |  | Manual override Type EGV-122-... This limits: permitted operating pressure: 12.5 bar permitted Medium temperature: max. 60°C |
|  | 2/2-way flange mount Solenoid valve Flange-side pressure inlet Type EGV-121-CH9-... |  | Membrane made of other material: CR (chloroprene) optimal for compressed air HNBR (NBR with higher nitrile content) specially for certain synthetic oils |
|  | 2/2-way flange mount Solenoid valve Thread-side pressure inlet Type EGV-121-C7L-... |  | increases resistance to corrosion, and replaces stainless steel valves cost-effectively for many flow media Type EGV-121Q-... |

Permitted Operating Pressure OP

| DN | Type | PN | Combinable solenoid coil | | | | Permitted operating pressure OP [bar] at ambient temperature +60°C | | | | | | | | | | | | | | |
|-----------------|-------------|------|--------------------------|-------------------------------|---------------------|-----------|--|---------|---------|--|---------|---------|--|---------|---------|--|---------|---------|--|---------|-------|
| | | | Type | Nominal power P ₂₀ | | | AC 50 Hz  | | | AC 60 Hz  | | | DC  | | | DC  | | | DC  | | |
| | | | | AC 50 Hz [VA] | AC 60 Hz [VA] | DC [W] | 90%U _N Medium temperature | | | 90%U _N Medium temperature | | | 90%U _N Medium temperature | | | 90%U _N Medium temperature | | | 100%U _N Medium temperature | | |
| | | | | | | | 60°C | 90°C | 130°C | 60°C | 90°C | 130°C | 60°C | 90°C | 130°C | 60°C | 90°C | 130°C | 60°C | 90°C | 130°C |
| 15 to 32 | EGV-121-C.. | 12.5 | E22...L. | 3.5 | on req. | 2.5 | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | |
| | | | E22...M. | 5.5 | 5 | 5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | |
| | | | E22...H. | - | - | 8 | - | - | - | - | - | - | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | |
| | | | E30...P. | 12 | 10.5 | 8 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | |
| 40 and 50 | EGV-121-C.. | 10 | E22...L. | 3.5 | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | on req. | | |
| | | | E22...M. | 5.5 | 5 | 5 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | |
| | | | E22...H. | - | - | 8 | - | - | - | - | - | - | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | |
| | | | E30...P. | 12 | 10.5 | 8 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | |