

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 mm ² /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	gaseous or fluidsSealing material NBR:e.g. compressed air, water, hydraulic fluids, neutral gasesSealing material EPDM:e.g. hot watersealing 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				



Low noise automatic with membraneclosing

GAMMA the perfect valve concept from AVS Römer







Closed



Open

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

