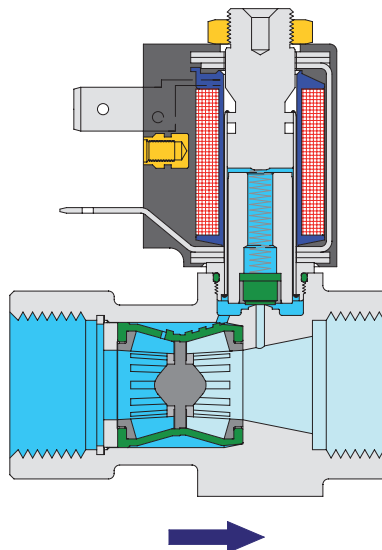


GAMMA Valves Series 800 Stainless Steel AISI 303 (1.4305)

Especially economical valve series DN 12 (G 1/2) with reduced flow for aggressive flow media



The minimal space requirement of this socket valve series is especially of advantage in small apparatus construction (representation in scale 1:1!)
Valve body manufactured as turned component made of bar material.

Dirt particles in the flow medium can lead to malfunction in the solenoid valves. The installation of a strainer with mesh width 0.25 mm is thus to be recommended.

CHARACTERISTICS
GENERAL

Constructional design	low noise membrane valve with coaxial flow		
Product name	2/2-way solenoid valve servo-operated	2/2-way solenoid valve pressure operated	2/2-way valve pressure operated by external or own medium
Product type	EGV	EGV	PGV
Function	"A" normally closed	"Z" normally closed	"B" normally open
Nominal diameter	DN 12	DN 12	DN 12
Port size	Pipe thread (ISO 228) G 1/2 (other connectors on request)		
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	Stainless steel AISI 303 (1.4305) (others on request)		
Membrane support unit material	reinforced plastic		
Other internal component	stainless steel		
Seal material	NBR (nitrile rubber), EPDM (ethylene propylene) or FKM (fluoride rubber) (others on request)		
Mounting method	Installation in rigid pipe system		
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 excess operating pressure PB 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	0.3 bar up to permitted operating pressure PB 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 0.5 bar or higher)		
Medium	gaseous or liquid media which do not corrode the materials specified		
Response time	Opening time: 20 ms to 1 s; closing time: 25 ms to 3 s, according to flow medium		
Electric	see under solenoid coils		

2/2-Way Solenoid Valve - Type EGV Series 800

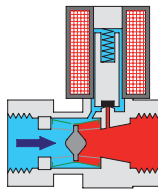
 Price group **53**

Function "A" normally closed

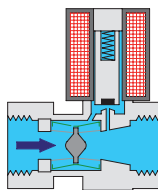
Low noise and impact-free closing, for neutral, gaseous or medium

Stainless steel 1.4305

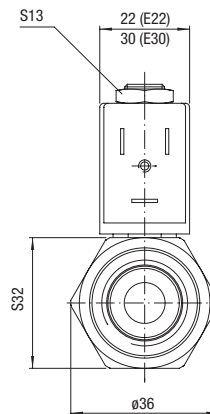
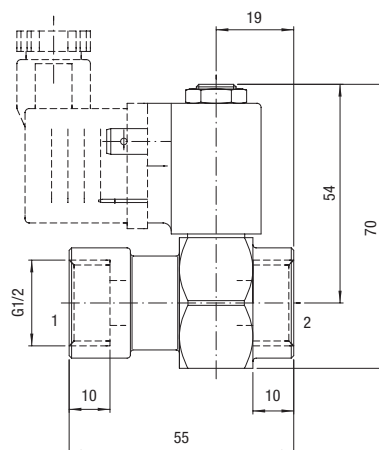
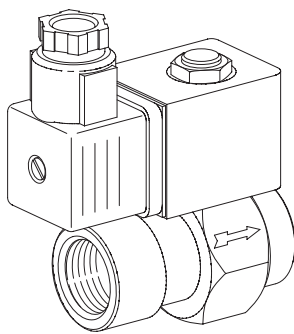
Version	DN	Kv-value water [m³/h]	G	PN	Possible type of current	Sealing material	Type (Valve without solenoid coil)	Order number	Price
	12	2.2	G 1/2	16/8	DC	NBR	EGV-813-A79-1/2BN-00	623052	o. r.
	12	2.2	G 1/2	16/8	DC	EPDM	EGV-813-A79-1/2PN-00	623054	o. r.
	12	2.2	G 1/2	16/8	DC	FKM	EGV-813-A79-1/2FN-00	623056	o. r.

Function


In 0-position - magnetic system not under current - its resting seat is closed. Pressure thus builds up in the control chamber, which due to the larger effective membrane surface holds the membrane in "closed" position.



In operational position - magnetic system under current - its resting seat is open, the control chamber released and the membrane is held by the flow medium in "open" position. A minimum pressure difference is required for this.

Illustration


Alternating current (AC) operation is possible with use of cable socket type ESG with integrated bridge rectifier.

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

Permitted Excess Operating Pressure PB

DN	type	PN	Combinable solenoid coil			Permitted excess operating pressure PB [bar] at ambient temperature +60 °C																	
			type	Nominal power P ₂₀			AC 50 Hz 90 %U _N			AC 60 Hz 90 %U _N			DC 90 %U _N			DC 90 %U _N			DC 100 %U _N				
				AC 50 Hz [VA]	AC 60 Hz [VA]	DC [W]	Medium temperature			Medium temperature			Medium temperature			Medium temperature			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	60 °C	90 °C	130 °C		
12	EGV-813-A..	16/8	E22...L.	-	-	2.5	-	-	-	-	-	-	-	-	-	-	8	6	4	9	8	7	
			E22...M.	-	-	5	-	-	-	-	-	-	-	-	-	-	-	16	16	16	16	16	16
			E22...H.	-	-	8	-	-	-	-	-	-	-	-	-	-	-	16	16	16	16	16	16
			E30...P.	-	-	8	-	-	-	-	-	-	-	-	-	-	-	16	16	16	16	16	16

2/2-Way Solenoid Valve - Type EGV Series 800

Price group	53	Function "Z" closed in 0-position with existing auxiliary pressure at "10"	Low noise and impact-free closing, for neutral, gaseous or medium	Stainless steel 1.4305
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Version		DN	Kv-value water [m³/h]	G	PN	Possible type of current	Sealing material	Type (Valve without solenoid coil)	Order number	Price
	Valve without solenoid coil Permitted operating pressure 0.3 bar up to valve according to table below, double-sided blocking. Permitted control pressure at "X": ≥ Operating pressure, max. 16 bar	12	2.2	G 1/2	16	AC/DC	NBR	EGV-811-Z77-1/2BP-00	623351	o. r.
		12	2.2	G 1/2	16	AC/DC	EPDM	EGV-811-Z77-1/2PP-00	623353	o. r.
		12	2.2	G 1/2	16	AC/DC	FKM	EGV-811-Z77-1/2FP-00	623355	o. r.

Function

10(x)

In 0-position - magnetic system not under current - its resting seat is closed. The auxiliary pressure accumulated at "10" thus builds up in the control chamber and holds the membrane in "closed" position.

10(x)

In operational position - magnetic system under current - its operational seat is closed. The control chamber is released by the open resting seat and the membrane held in "open" position by the flow medium. A minimum pressure difference is required for this (except 0-pressure membrane as listed under Options)

Illustration

These valves can also be used for dirty media by the application, depending on constructional design, of an external medium, e.g. compressed air, for controlling the membrane. A typical application is the drainage of condensation from compressed air networks.

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

Permitted Excess Operating Pressure PB

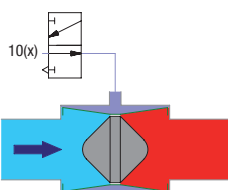
DN	type	PN	Combinable solenoid coil			Permitted excess operating pressure PB [bar] at ambient temperature +60 °C																																													
			type	Nominal power P ₂₀			AC 50 Hz 90 %U _N Medium temperature			AC 60 Hz 90 %U _N Medium temperature			DC 90 %U _N Medium temperature			DC 90 %U _N Medium temperature			DC 100 %U _N Medium temperature																																
				AC 50 Hz [VA]	AC 60 Hz [VA]	DC [W]	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																														
			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.	on req.	on req.	on req.	on req.																														
12	EGV-811-Z..	16	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.	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.	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	-	-	-	-	-	-	-	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	
			E22...H.	-	-	8	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
			E30...P.	12	10.5	8	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16

2/2-Way Valve - Type PGV Series 800 - Pressure Operated by External Medium

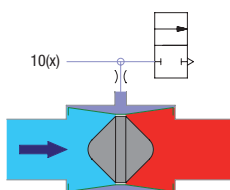
Price group 53	Function "B" open in 0-position (without control pressure)	low noise and impact-free closing, for neutral, gaseous and liquid media	Stainless steel 1.4305							
Version	Control pressure [bar]	DN	Kv-value water [m³/h]	G	PN	Sealing material	Type (Valve without solenoid coil)	Order number	Price	
<p>2/2-way valve pressure operated, blocking double-sided by external medium Permitted operating pressure 0.3 to 16 bar</p>	\geq excess operating pressure max. 16	12	2.2	G 1/2	16	NBR	PGV-831-B77-1/2BP	624451	o. r.	
		12	2.2	G 1/2	16	EPDM	PGV-831-B77-1/2PP	624452	o. r.	
		12	2.2	G 1/2	16	FKM	PGV-831-B77-1/2FP	624453	o. r.	

Illustration

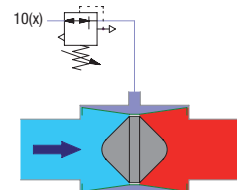
Remotely operated 2/2-way valve regulated by external medium with 3/2-way valve (positive control)



Remotely operated 2/2-way valve regulated by external medium with 2/2-way valve



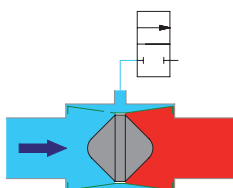
Remotely operated excess pressure valve regulated by external medium with pressure regulator


2/2-Way Valve - Type PGV Series 800 - Pressure Operated by own Medium

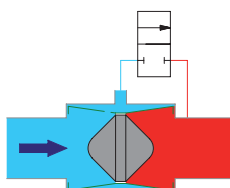
Price group 53	Function "B" open in 0-position (without control pressure)	low noise and impact-free closing, for neutral, gaseous and liquid media	Stainless steel 1.4305							
Version	Control pressure [bar]	DN	Kv-value water [m³/h]	G	PN	Sealing material	Type (Valve without solenoid coil)	Order number	Price	
<p>2/2-way valve pressure operated, by own medium Permitted operating pressure 0.3 to 16 bar</p>	\geq excess operating pressure max. 16	12	2.2	G 1/2	16	NBR	PGV-831-B77-1/2BN	624471	o. r.	
		12	2.2	G 1/2	16	EPDM	PGV-831-B77-1/2PN	624472	o. r.	
		12	2.2	G 1/2	16	FKM	PGV-831-B77-1/2FN	624473	o. r.	

Illustration

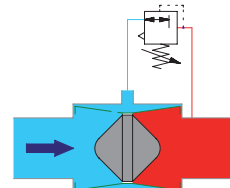
Remotely operated 2/2-way valve regulated by own medium with 2/2-way valve (negative control)



Remotely operated 2/2-way valve regulated by own medium with 2/2-way valve (control medium recycled)



Remotely operated pressure regulator valve regulated by own medium with pressure regulator (control medium recycled)


Illustration
