

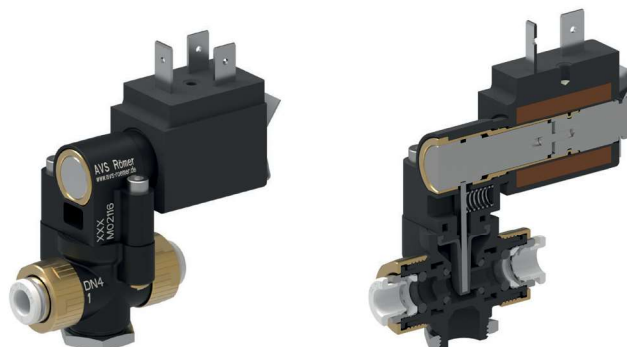
MAGMA Solenoid Valves Type ETV Series 400

MAGMA the valve principle from AVS Römer

MEDIUM
SEPARATED

ELSA
Push-in Fittings

NSF
COMPONENT



High quality valve series with coaxial flow or 90° flow, in 2/2-way and 3/2-way version, especially for use in the food industries and medical technology.

The solenoid operates against spring force a pivot mounted lever to which a membrane is attached. The interior of the valve is spatially and thermally separated from the solenoid system.

A particularly effective ratio of electric power to flow rate and allowable operating pressure is obtained by the optimisation of lever and spring in conjunction with the low friction transmission.

Other features:

- minimal dead space
- easily disassembled, e.g. for cleaning
- insensitive to contamination
- thermal insulation between the electro-magnet and the medium
- emergency manual override with position indicator as standard
- materials and constructional design especially optimised for food applications
- IP class 65 possible

Variations / options:

- other tube connector
- other material for seal
- other nominal diameter or other pressure range
- version for vacuum
- other function (e.g. 3/2-way distribution valve)
- other nominal voltage
- 230 V AC using a bridge rectifier (see under cable sockets)

CHARACTERISTICS
GENERAL

Constructional design	Lever actuated seat valve with separating membrane	
Product name	2/2-way solenoid valve	3/2-way solenoid valve
Actuation	Electric, direct acting or by emergency manual override with position indicator	
Product type	ETV-422-A .	ETV-419-F .
Function	"A" in 0-position closed	"F" in 0-position "1" to "2" closed, "1" to "4" open
Nominal diameter	DN 4 (DN 1,5 - 6 on demand)	
Connection	ELSA push-in connectors for pipe/tube OD 6 (OD 4 OD 8 on request)	
Ambient temperature	0 °C to +60 °C	
Medium temperature	0 °C to +130 °C	
Medium viscosity	up to approx. 35 mm ² /s	
Valve body and insert material	PPA, PPSU	
Membrane and O-ring material	FKM and EPDM	
Solenoid housing material	PPS, EPDM (UL94-V0) plastic, insulation class "F"	
Mounting method	with M14x1 locknut	
Mounting position	optional	
Approval	NSF/ANSI 169	
PNEUMATIC - HYDRAULIC		
Nominal pressure	in accordance with the specification table	
Pressure range	0 bar up to allowable operating pressure OP in accordance with the specification table	
Flow rate	Kv-value in accordance with the specification table	
Medium	Gases or liquids which do not corrode the materials specified	
Response time	Opening time 10 to 25 ms; Closing time: 10 to 25 ms	
ELECTRIC		
Nominal voltage	24 V DC	
Voltage tolerance	±10 %	
Nominal power P₂₀	6 W	
Duty cycle	100 %, depending on the duty cycle the power consumption decreases by up to 20 %	
Electrical connection	11 mm - industry standard form B (DIN EN 175301 - 803)	
Protection class according to EN 60529	IP 00	

2/2-Way Coaxial Solenoid Valve - Type ETV Series 200

 Price group **56**

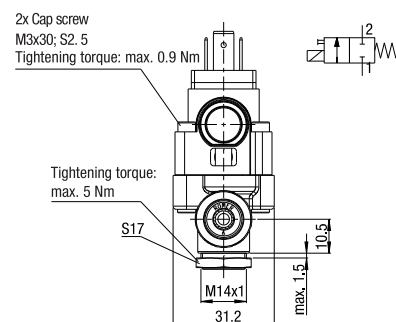
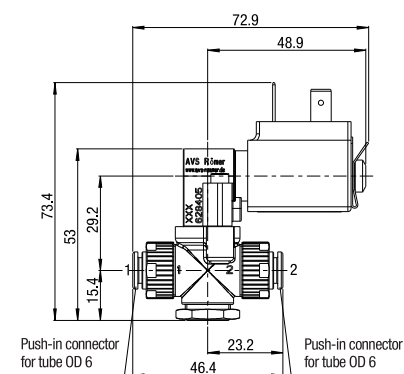
"A" in 0-position closed (closing with the flow)



Plastic PPA

Irrespective of the information in the solenoid valve tables a housing temperature of +155 °C may not be exceeded. The value is limited to +120 °C with use of a cable socket. In case of doubt we are pleased to advise you.

DN	Kv-value water [l/min]	for tube OD	PN	Allow. OP [bar]	Seal material	Voltage / current	Type	Order number	Price
4	5	6	2	0-2	FKM	24 V DC	ETV-422-A40-6FF-024/=-H0	628407	o. r.
4	5	6	2	0-2	EPDM	24 V DC	ETV-422-A40-6PF-024/=-H0	628417	o. r.

Illustration

3/2-Way Coaxial Solenoid Valve - Type ETV Series 200

 Price group **56**

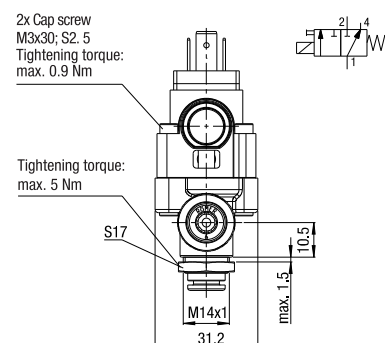
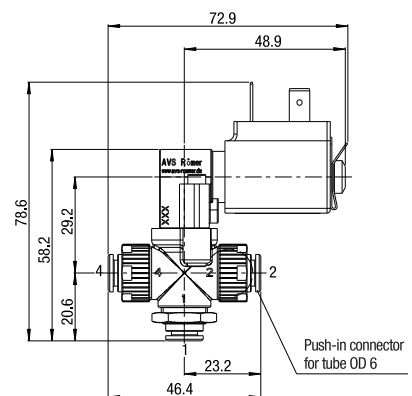
"F" in 0-position "1" to "2" closed, "1" to "4" open

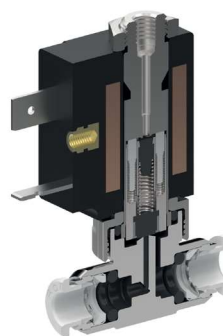


Plastic PPA

Irrespective of the information in the solenoid valve tables a housing temperature of +155 °C may not be exceeded. The value is limited to +120 °C with use of a cable socket. In case of doubt we are pleased to advise you.

DN	Kv-value water [l/min]	for tube OD	PN	Allow. OP [bar]	Seal material	Voltage / current	Type	Order number	Price
4	5	6	1.5	0-1.5	FKM	24 V DC	ETV-429-F40-6FF-024/=-H0	628537	o. r.
4	5	6	1.5	0-1.5	EPDM	24 V DC	ETV-429-F40-6PF-024/=-H0	628547	o. r.

Illustration


DIGMA Solenoid Valves Type EAV Series 700


Further development based on the EAV series 200.

This stainless steel valve series is suitable for many aggressive medium and thanks to the use of high-quality magnetic steels, offers a reliable solution for applications with the highest demands on corrosion resistance.

Another characteristic of this type of construction is the welded stainless steel plunger guide which ensures increased pressure and leakage assurance.

Solenoid coils with different performance classes enable a favourable adaptation to the diverse requirements with regard to nominal size, operating pressure, power consumption, type of voltage or permissible self-heating.

Features

- Unbeatable price-performance ratio
- Individual product developments
- Inexpensive MIM valve body
- Extremely high material strength
- NSF certified
- Flexibility in design
- Lightweight
- Smallest dimensions
- Highest product quality
- Fail-safe and durable

CHARACTERISTICS
GENERAL

Constructional design	Seat valve, rubber seals			
Product name	2/2-way solenoid valve		3/2-way solenoid valve	
Actuation	electric, direct-acting			
Product type	EAV-7..-A..	EAV-7..-B..	EAV-7..-C..	EAV-7..-D..
Function	"A" normally closed (closing with flow)	"B" normally open (closing against current)	"C" normally closed with "1", "2" to "3" discharged (closing against current)	"D" in 0 position "1" to "2" open, "3" closed (closing against current)
Nominal diameter	DN 1.2 to DN 3	DN 1.2 to DN 1.8	DN 1.2 to DN 3	DN 1.2 to DN 1.8
Connection	ELSA push-in connection for tube/pipe 6			
Ambient temperature	0 °C to +60 °C			
Medium temperature	0 °C to +120 °C (Special designs for higher temperatures on request)			
Medium viscosity	up to approx. 20 mm ² /s			
Valve body material	1.4404 (AISI 316L)			
Other inner component material	Stainless steel			
Seal material	FKM (Flour-Rubber) (others on request)			
Mounting method	2 M4 tapped holes in valve body or using rigid pipework			
Mounting position	optional, preferably upright			
Approval	NSF/ANSI 169			
PNEUMATIC - HYDRAULIC				
Nominal pressure	up to PN 20 According to Type table. The numerical value of the nominal pressure PN signifies the permitted excess 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 coils with highest electrical power consumption, the second value to that with lowest power consumption.			
Pressure range	Technical vacuum up to permitted operating pressure OP. For exceptions which refer to minimum permitted operating pressure see table.			
Flow rate	Kv-value and QNn-value according to Type table			
Medium	gaseous or liquid			
Response time	opening time: 7 - 20 ms closing time: 12 - 20 ms			
Electrical	see solenoid coils			