

MAGMA solenoid valve type ETV series 200


MAGMA the valve principle from AVS-Römer Medium separated



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:

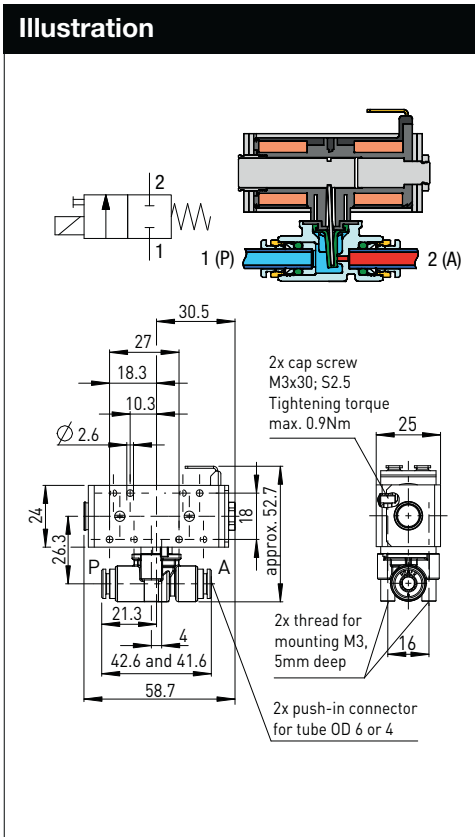
- minimal dead space
- easily disassembled, e.g. for cleaning
- insensitive to contamination (1 mm hub at seat)
- thermal insulation between the electro-magnet and the medium (no lime formation!)
- emergency manual override with position indicator as standard
- materials and constructional design especially optimised for food applications

Variations / options:

- other tube connections
- other materials for seal
- other nominal diameters or other pressure ranges
- versions for vacuum
- other nominal voltages

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-222 -A .	ETV-211 -B .	ETV-217 -C .	ETV-219 -F .
Function	"A" in 0-position closed	"B" in 0-position open	"C" in 0-position closed, Outlet "2" open	Function "F" normally closed (NC) Port 1(A) closed, Port 4(B) open
Nominal diameter	DN 1.5 to DN 2.5	DN 1.5 to DN 2.5	DN 1.5 to DN 3	DN 1.5 to DN 3
Connection	ELSA push-in connectors for pipe/tube OD 6 or OD 4			
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 and PPSU (KTW-approved, NSF-certified)			
Membrane Material	EPDM or FKM (both FDA-compliant)			
O-ring material	FKM (FDA-compliant) or EPDM (KTW-approved, NSF-certified)			
Solenoid housing material	PPS (UL94-V0) plastic, insulation class "F" (155°C)			
Mounting method	with 2 thread press-fit inserts M3 or self-tapping screws ISO7049-ST3.5x6.5-C			
Mounting position	optional			
Approval	NSF/ANSI 169			
PNEUMATIC - HYDRAULIC				
Nominal pressure	up to PN 16 in accordance with the specification table			
Pressure range	0 bar up to allow. operating pressure OP in accordance with the spec. table depending on duty, OP 50% duty is valid at max. SD 60 s			
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% ED (DB), depending on the duty cycle the power consumption decreases by up to 30%			
Electrical Connection	Spade terminals for spade connectors 6.3 x 0.8mm, DIN 46247			
Protection class according to EN 60529	IP 00			

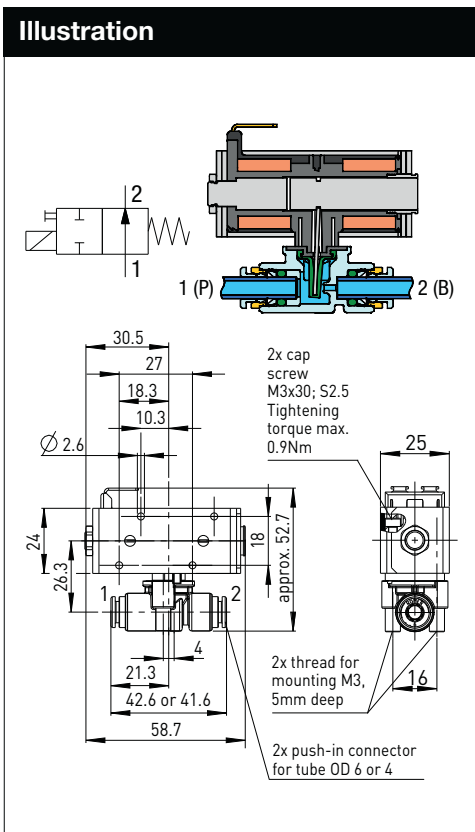


2/2-way coaxial solenoid valve, type ETV series 200

Product group **55** Function "A" normally closed (NC) (closing with the flow)

NSF Plastic FDA-compliant

DN	Kv-value water [l/min]	for tube OD	PN	Al-low. OP [bar]	Allow. OP by 50% duty [bar]	Allow. OP by 100% duty [bar]	Seal material	Voltage / current	Type	Order number	Price
1.5	1.4	4	16	16	12.5	6	EPDM	24 VDC	ETV-222-A15-4PF-024/= -U0	627351	a. A.
1.5	1.4	6	16	16	12.5	6	EPDM	24 VDC	ETV-222-A15-6PF-024/= -U0	627352	a. A.
2	2.4	4	12.5	12.5	10	5	EPDM	24 VDC	ETV-222-A20-4PF-024/= -U0	627363	a. A.
2	2.4	6	12.5	12.5	10	5	EPDM	24 VDC	ETV-222-A20-6PF-024/= -U0	627364	a. A.
2.5	2.5	4	8	8	6	3	EPDM	24 VDC	ETV-222-A25-4PF-024/= -U0	627353	a. A.
2.5	3.4	6	8	8	6	3	EPDM	24 VDC	ETV-222-A25-6PF-024/= -U0	627354	a. A.
1.5	1.4	4	16	16	12.5	6	FKM	24 VDC	ETV-222-A15-4FF-024/= -U0	627355	a. A.
1.5	1.4	6	16	16	12.5	6	FKM	24 VDC	ETV-222-A15-6FF-024/= -U0	627356	a. A.
2	2.4	4	12.5	12.5	10	5	FKM	24 VDC	ETV-222-A20-4FF-024/= -U0	627365	a. A.
2	2.4	6	12.5	12.5	10	5	FKM	24 VDC	ETV-222-A20-6FF-024/= -U0	627366	a. A.
2.5	2.5	4	8	8	6	3	FKM	24 VDC	ETV-222-A25-4FF-024/= -U0	627357	a. A.
2.5	3.4	6	8	8	6	3	FKM	24 VDC	ETV-222-A25-6FF-024/= -U0	627358	a. A.



2/2-way coaxial solenoid valve, type ETV series 200

Product group **55** Function "B" normally open (NO) (closing with the flow)

NSF Plastic FDA-compliant

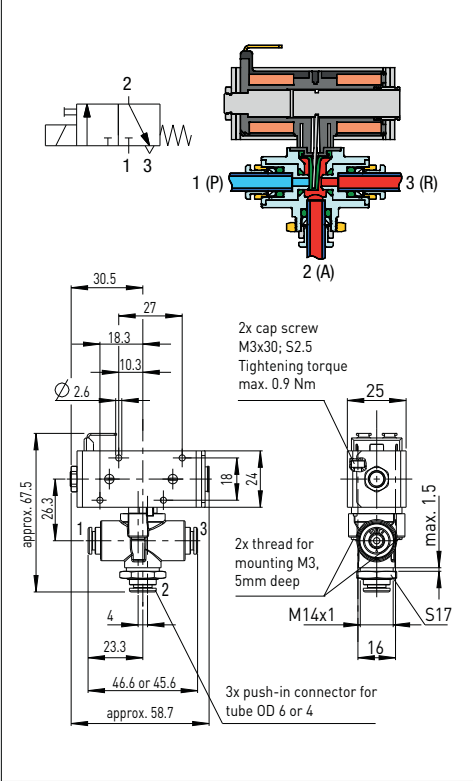
DN	Kv-value water [l/min]	for tube OD	PN	Al-low. OP [bar]	Allow. OP by 50% duty [bar]	Allow. OP by 100% duty [bar]	Seal material	Voltage / current	Type	Order number	Price
1.5	1.4	4	12.5	12.5	12.5	12.5	EPDM	24 VDC	ETV-211-B15-4PF-024/= -U0	627401	a. A.
1.5	1.4	6	12.5	12.5	12.5	12.5	EPDM	24 VDC	ETV-211-B15-6PF-024/= -U0	627402	a. A.
2	2.4	4	8	8	8	8	EPDM	24 VDC	ETV-211-B20-4PF-024/= -U0	627409	a. A.
2	2.4	6	8	8	8	8	EPDM	24 VDC	ETV-211-B20-6PF-024/= -U0	627410	a. A.
2.5	2.5	4	4	4	4	4	EPDM	24 VDC	ETV-211-B25-4PF-024/= -U0	627403	a. A.
2.5	3.4	6	4	4	4	4	EPDM	24 VDC	ETV-211-B25-6PF-024/= -U0	627404	a. A.
1.5	1.4	4	12.5	12.5	12.5	12.5	FKM	24 VDC	ETV-211-B15-4FF-024/= -U0	627405	a. A.
1.5	1.4	6	12.5	12.5	12.5	12.5	FKM	24 VDC	ETV-211-B15-6FF-024/= -U0	627406	a. A.
2	2.4	4	8	8	8	8	FKM	24 VDC	ETV-211-B20-4FF-024/= -U0	627411	a. A.
2	2.4	6	8	8	8	8	FKM	24 VDC	ETV-211-B20-6FF-024/= -U0	627412	a. A.
2.5	2.5	4	4	4	4	4	FKM	24 VDC	ETV-211-B25-4FF-024/= -U0	627407	a. A.
2.5	3.4	6	4	4	4	4	FKM	24 VDC	ETV-211-B25-6FF-024/= -U0	627408	a. A.

3/2-way coaxial solenoid valve, type ETV series 200

Product group **55** Function "C" normally closed (NC) Port 1(P) closed, Port 2(A) discharged



DN	Kv-value water [l/min]	for tube OD	PN	Al-low. OP [bar]	Allow. OP by 50% duty [bar]	Allow. OP by 100% duty [bar]	Seal material	Voltage / current	Type	Order number	Price
1.5	1.4	4	6	6	6	6	EPDM	24 VDC	ETV-217-C15-4PF-024/= -U0	627421	a. A.
1.5	1.5	6	6	6	6	6	EPDM	24 VDC	ETV-217-C15-6PF-024/= -U0	627424	a. A.
2	1.5	4	5	5	5	5	EPDM	24 VDC	ETV-217-C20-4PF-024/= -U0	627427	a. A.
2	1.8	6	5	5	5	5	EPDM	24 VDC	ETV-217-C20-6PF-024/= -U0	627430	a. A.
3	1.7	4	2	2	2	2	EPDM	24 VDC	ETV-217-C30-4PF-024/= -U0	627433	a. A.
3	2.5	6	2	2	2	2	EPDM	24 VDC	ETV-217-C30-6PF-024/= -U0	627436	a. A.
1.5	1.4	4	6	6	6	6	FKM	24 VDC	ETV-217-C15-4FF-024/= -U0	627422	a. A.
1.5	1.5	6	6	6	6	6	FKM	24 VDC	ETV-217-C15-6FF-024/= -U0	627425	a. A.
2	1.5	4	5	5	5	5	FKM	24 VDC	ETV-217-C20-4FF-024/= -U0	627428	a. A.
2	1.8	6	5	5	5	5	FKM	24 VDC	ETV-217-C20-6FF-024/= -U0	627431	a. A.
3	1.7	4	2	2	2	2	FKM	24 VDC	ETV-217-C30-4FF-024/= -U0	627434	a. A.
3	2.5	6	2	2	2	2	FKM	24 VDC	ETV-217-C30-6FF-024/= -U0	627437	a. A.

Illustration

3/2-way coaxial solenoid valve, type ETV series 200

Product group **55** Function "F" normally closed (NC) Port 1(A) closed, Port 4(B) open



DN	Kv-value water [l/min]	for tube OD	PN	Al-low. OP [bar]	Allow. OP by 50% duty [bar]	Allow. OP by 100% duty [bar]	Seal material	Voltage / current	Type	Order number	Price
1.5	1.4	4	12.5	12.5	12.5	6	EPDM	24 VDC	ETV-219-F15-4PF-024/= -U0	627451	a. A.
1.5	1.5	6	12.5	12.5	12.5	6	EPDM	24 VDC	ETV-219-F15-6PF-024/= -U0	627454	a. A.
2	1.6	4	10	10	10	6	EPDM	24 VDC	ETV-219-F20-4PF-024/= -U0	627457	a. A.
2	1.8	6	10	10	10	6	EPDM	24 VDC	ETV-219-F20-6PF-024/= -U0	627460	a. A.
3	1.8	4	4	4	4	3	EPDM	24 VDC	ETV-219-F30-4PF-024/= -U0	627463	a. A.
3	2.8	6	4	4	4	3	EPDM	24 VDC	ETV-219-F30-6PF-024/= -U0	627466	a. A.
1.5	1.4	4	12.5	12.5	12.5	6	FKM	24 VDC	ETV-219-F15-4FF-024/= -U0	627452	a. A.
1.5	1.5	6	12.5	12.5	12.5	6	FKM	24 VDC	ETV-219-F15-6FF-024/= -U0	627455	a. A.
2	1.6	4	10	10	10	6	FKM	24 VDC	ETV-219-F20-4FF-024/= -U0	627458	a. A.
2	1.8	6	10	10	10	6	FKM	24 VDC	ETV-219-F20-6FF-024/= -U0	627461	a. A.
3	1.8	4	4	4	4	3	FKM	24 VDC	ETV-219-F30-4FF-024/= -U0	627464	a. A.
3	2.8	6	4	4	4	3	FKM	24 VDC	ETV-219-F30-6FF-024/= -U0	627467	a. A.

Illustration
