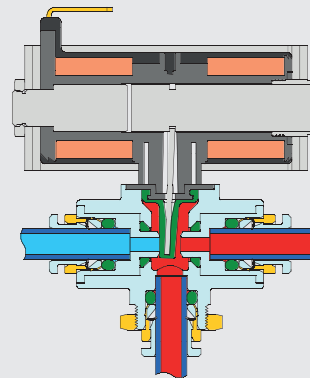
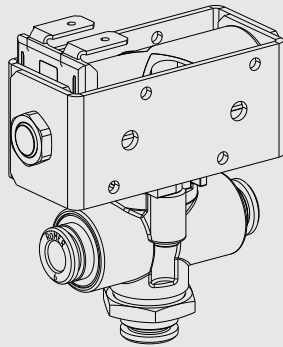


MAGMA Solenoid Valve Type ETV Series 200

MAGMA the special valve principle by AVS-Römer



An innovative high quality valve series with a coaxial flow or a 90° flow, in 2/2 and 3/2-way version, particularly for the use in the food and medical technology.

The electromagnet actuates a pivot mounted lever on which a diaphragm is fitted against a spring force. The valve interior is therefore spatially and thermally separated from the magnet 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.

Further features:

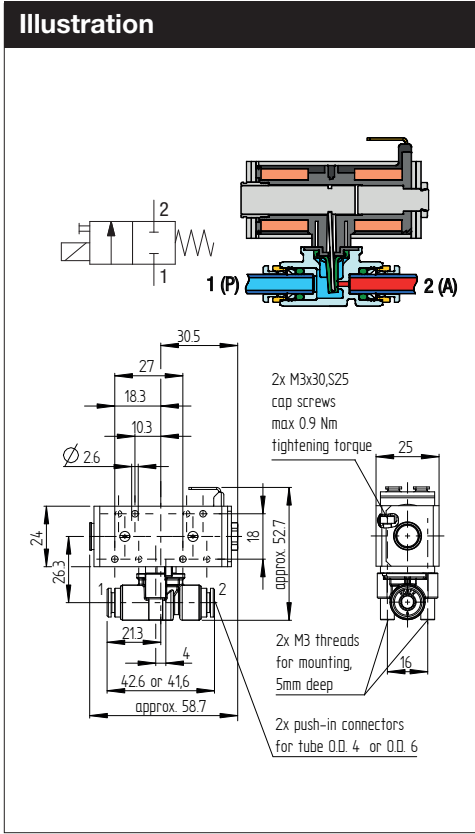
- minimal dead space
- easily disassembled, e.g., for cleaning
- insensitive to contamination (1 mm hub at seat)
- thermal insulation between the electro-magnet and the medium (no calcification!)
- emergency manual override and position indication as standard
- materials and design are particularly suited for food applications

Versions/Options:

- Different tube connections
- other materials for the seals
- other nominal diameters and pressure ranges
- Versions for vacuum applications
- other nominal voltages

CHARACTERISTICS
GENERAL

Constructional design	Lever actuated seat valve with separating membrane			
Product name	2/2-way solenoid valve		3/2 way magnetic valve	
Actuation	Electric, direct acting or by emergency manual override with position indicator			
Types	ETV-222 -A.	ETV-211 -B.	ETV-217 -C.	ETV-219 -F.
Functions	„A“ normally closed (NC)	„B“ normally open (NO)	„C“ normally closed with port „2“ discharged	„F“ normally closed with port „2“ closed and port „4“ open
Nominal diameters	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
Connections	ELSA push-in connectors for pipe/tube OD 4 mm or OD 6 mm			
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 inserts material	PPA and PPSU (KTW approved and NSF certified)			
Membrane material	EPDM or FKM (each FDA compliant)			
O-ring material	EPDM (FDA, KTW approved) or FKM (FDA compliant)			
Solenoid housing material	PPS plastic (UL94-V0)			
Mounting method	via two M3 threaded inserts or using self-tapping screws ISO7049-ST3.5x6.5-C			
Mounting position	optional			
Approvals	NSF/ANSI 169			
PNEUMATIC - HYDRAULIC				
Nominal pressure	up to PN 16 in accordance with the specification table			
Pressure range	0 bar up to the allowable operating pressure OP in accordance with the table dependent on duty cycle, OP 50% applies for a max. switching time of 60 s			
Flow rate	Kv value in accordance with the table			
Medium	Gaseous or liquid media which do not corrode the materials specified			
Response time	Opening time: 10 to 25 ms Closing time: 10 to 25 ms			
ELECTRICAL				
Nominal voltage	24 V DC			
Voltage tolerance	± 10 %			
Power consumption P_{nom}	6 W			
Duty cycle	100% ED (DB) , according to the duty cycle in each case, the power consumption can be decreased by up to 30 %			
Electrical connections	Spade terminals for spade connectors 6.3 x 0.8 DIN 46247			

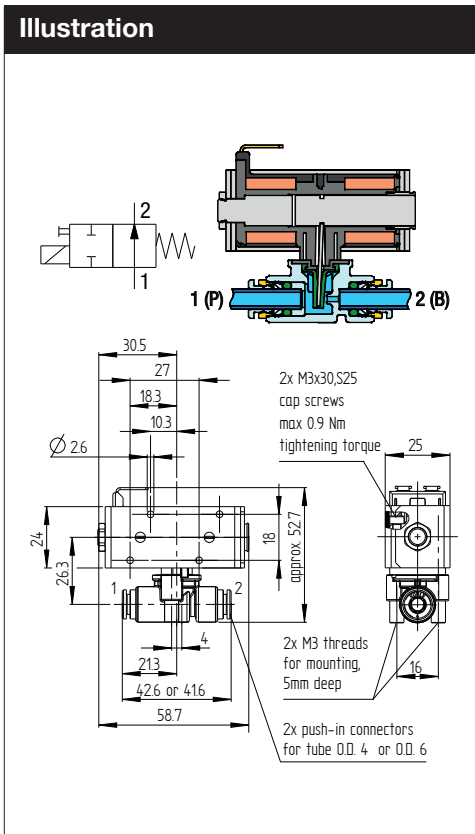


2/2-Way Coaxial Solenoid Valve Type ETV Series 200

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

NSF COMPONENT FDA compliant plastic

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



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

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

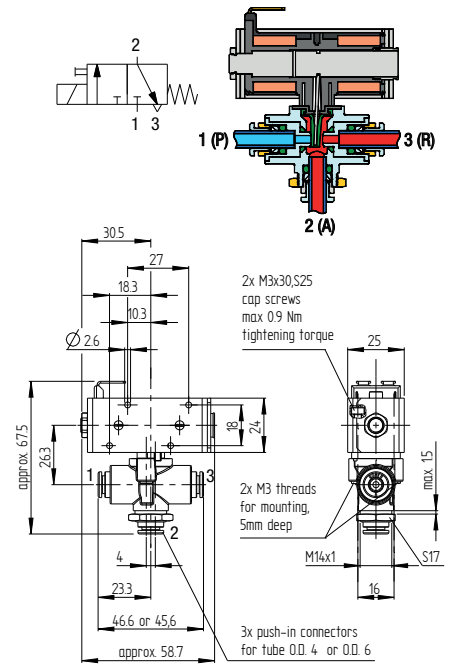
NSF COMPONENT FDA compliant plastic

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

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

FDA compliant plastic
Product group 55 Function „C“ normally closed (NC)
Port 1(P) closed, Port 2(A) discharged

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

Illustration

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

FDA compliant plastic
Product group 55 Function „F“ normally closed (NC)
Port 1(A) closed, Port 4(B) open

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

Illustration
