

MAGMA solenoid valve battery type ETV series 200

MAGMA the valve principle from AVS-Römer Medium separated



High quality valve series with coaxial flow, in 2/2-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 electromagnet 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:

- distribution connection left, right, both sides
- valves with varying nominal diameters in one battery
- NC and NO valves in one battery
- mixer version in preparation

CHARACTERISTICS
GENERAL

Constructional design	Lever actuated seat valve with separating membrane	
Product name	2/2-way solenoid valve, battery	
Actuation	electric, direct acting or by emergency manual override with position indicator	
Product type	ETV-2221/V-A.	ETV-2111/V.- B.
Function	"A" normally closed (NC) (closing with the flow)	Function "B" normally open (NO) (closing with the flow)
Nominal diameter	DN 1.0 to DN 2.5	DN 1.0 to DN 2.5
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 per single valve	
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 allowable operating pressure OP in accordance with the specification 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	

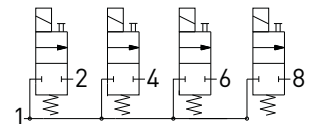
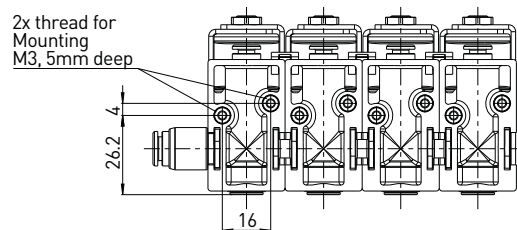
2/2-way solenoid valve battery type ETV series 200

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

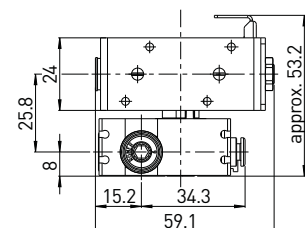
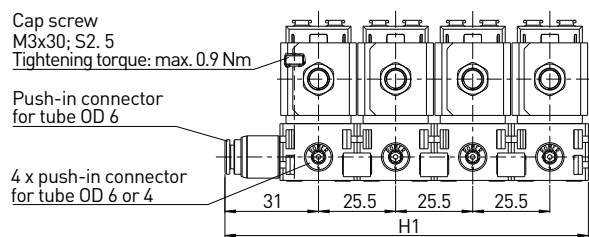
NSF Plastic FDA-compliant

Version	DN	Kv-value 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	Order number	Price
	1.0	0.8	4	16	16	16	10	FKM	24 VDC	ETV-2221/V2-A10-4FF-024/=U0	627901	a. A.
								EPDM	24 VDC	ETV-2221/V2-A10-4PF-024/=U0	627902	a. A.
			6	FKM	24 VDC	ETV-2221/V2-A10-6FF-024/=U0	627903	a. A.				
				EPDM	24 VDC	ETV-2221/V2-A10-6PF-024/=U0	627904	a. A.				
	1.5	1.4	4	16	16	12.5	6	FKM	24 VDC	ETV-2221/V2-A15-4FF-024/=U0	627905	a. A.
								EPDM	24 VDC	ETV-2221/V2-A15-4PF-024/=U0	627906	a. A.
			6	FKM	24 VDC	ETV-2221/V2-A15-6FF-024/=U0	627907	a. A.				
				EPDM	24 VDC	ETV-2221/V2-A15-6PF-024/=U0	627908	a. A.				
	2.0	2.4	4	12.5	12.5	10	5	FKM	24 VDC	ETV-2221/V2-A20-4FF-024/=U0	627909	a. A.
								EPDM	24 VDC	ETV-2221/V2-A20-4PF-024/=U0	627910	a. A.
			6	FKM	24 VDC	ETV-2221/V2-A20-6FF-024/=U0	627911	a. A.				
				EPDM	24 VDC	ETV-2221/V2-A20-6PF-024/=U0	627912	a. A.				
2.5	3.4	4	8	8	6	3	FKM	24 VDC	ETV-2221/V2-A25-4FF-024/=U0	627913	a. A.	
							EPDM	24 VDC	ETV-2221/V2-A25-4PF-024/=U0	627914	a. A.	
		6	FKM	24 VDC	ETV-2221/V2-A25-6FF-024/=U0	627915	a. A.					
			EPDM	24 VDC	ETV-2221/V2-A25-6PF-024/=U0	627916	a. A.					
	1.0	0.8	4	16	16	16	10	FKM	24 VDC	ETV-2221/V3-A10-4FF-024/=U0	627917	a. A.
								EPDM	24 VDC	ETV-2221/V3-A10-4PF-024/=U0	627918	a. A.
			6	FKM	24 VDC	ETV-2221/V3-A10-6FF-024/=U0	627919	a. A.				
				EPDM	24 VDC	ETV-2221/V3-A10-6PF-024/=U0	627920	a. A.				
	1.5	1.4	4	16	16	12.5	6	FKM	24 VDC	ETV-2221/V3-A15-4FF-024/=U0	627921	a. A.
								EPDM	24 VDC	ETV-2221/V3-A15-4PF-024/=U0	627922	a. A.
			6	FKM	24 VDC	ETV-2221/V3-A15-6FF-024/=U0	627923	a. A.				
				EPDM	24 VDC	ETV-2221/V3-A15-6PF-024/=U0	627924	a. A.				
	2.0	2.4	4	12.5	12.5	10	5	FKM	24 VDC	ETV-2221/V3-A20-4FF-024/=U0	627925	a. A.
								EPDM	24 VDC	ETV-2221/V3-A20-4PF-024/=U0	627926	a. A.
			6	FKM	24 VDC	ETV-2221/V3-A20-6FF-024/=U0	627927	a. A.				
				EPDM	24 VDC	ETV-2221/V3-A20-6PF-024/=U0	627928	a. A.				
2.5	3.4	4	8	8	6	3	FKM	24 VDC	ETV-2221/V3-A25-4FF-024/=U0	627929	a. A.	
							EPDM	24 VDC	ETV-2221/V3-A25-4PF-024/=U0	627930	a. A.	
		6	FKM	24 VDC	ETV-2221/V3-A25-6FF-024/=U0	627931	a. A.					
			EPDM	24 VDC	ETV-2221/V3-A25-6PF-024/=U0	627932	a. A.					
	1.0	0.8	4	16	16	16	10	FKM	24 VDC	ETV-2221/V4-A10-4FF-024/=U0	627933	a. A.
								EPDM	24 VDC	ETV-2221/V4-A10-4PF-024/=U0	627934	a. A.
			6	FKM	24 VDC	ETV-2221/V4-A10-6FF-024/=U0	627935	a. A.				
				EPDM	24 VDC	ETV-2221/V4-A10-6PF-024/=U0	627936	a. A.				
	1.5	1.4	4	16	16	12.5	6	FKM	24 VDC	ETV-2221/V4-A15-4FF-024/=U0	627937	a. A.
								EPDM	24 VDC	ETV-2221/V4-A15-4PF-024/=U0	627938	a. A.
			6	FKM	24 VDC	ETV-2221/V4-A15-6FF-024/=U0	627939	a. A.				
				EPDM	24 VDC	ETV-2221/V4-A15-6PF-024/=U0	627940	a. A.				
	2.0	2.4	4	12.5	12.5	10	5	FKM	24 VDC	ETV-2221/V4-A20-4FF-024/=U0	627941	a. A.
								EPDM	24 VDC	ETV-2221/V4-A20-4PF-024/=U0	627942	a. A.
			6	FKM	24 VDC	ETV-2221/V4-A20-6FF-024/=U0	627943	a. A.				
				EPDM	24 VDC	ETV-2221/V4-A20-6PF-024/=U0	627944	a. A.				
2.5	3.4	4	8	8	6	3	FKM	24 VDC	ETV-2221/V4-A25-4FF-024/=U0	627945	a. A.	
							EPDM	24 VDC	ETV-2221/V4-A25-4PF-024/=U0	627946	a. A.	
		6	FKM	24 VDC	ETV-2221/V4-A25-6FF-024/=U0	627947	a. A.					
			EPDM	24 VDC	ETV-2221/V4-A25-6PF-024/=U0	627948	a. A.					

Illustration



Valve design	
Description	H1
2-valve battery	69.2
3-valve battery	94.7
4-valve battery	120.2



2/2-way solenoid valve battery type ETV series 200

 Product group **55** "B" open in 0-position (closing with the flow)

Plastic FDA-compliant

DN	Kv-value 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	Order number	Price	Version
1.0	0.8	4	16	16	16	16	FKM	24 VDC	ETV-2111/V2-B10-4FF-024/=-U0	627951	a. A.	
							EPDM	24 VDC	ETV-2111/V2-B10-4PF-024/=-U0	627952	a. A.	
		FKM					24 VDC	ETV-2111/V2-B10-6FF-024/=-U0	627953	a. A.		
		EPDM					24 VDC	ETV-2111/V2-B10-6PF-024/=-U0	627954	a. A.		
1.5	1.4	4	12.5	12.5	12.5	12.5	FKM	24 VDC	ETV-2111/V2-B15-4FF-024/=-U0	627955	a. A.	
							EPDM	24 VDC	ETV-2111/V2-B15-4PF-024/=-U0	627956	a. A.	
		FKM					24 VDC	ETV-2111/V2-B15-6FF-024/=-U0	627957	a. A.		
		EPDM					24 VDC	ETV-2111/V2-B15-6PF-024/=-U0	627958	a. A.		
2.0	2.4	4	8	8	8	8	FKM	24 VDC	ETV-2111/V2-B20-4FF-024/=-U0	627959	a. A.	
							EPDM	24 VDC	ETV-2111/V2-B20-4PF-024/=-U0	627960	a. A.	
		FKM					24 VDC	ETV-2111/V2-B20-6FF-024/=-U0	627961	a. A.		
		EPDM					24 VDC	ETV-2111/V2-B20-6PF-024/=-U0	627962	a. A.		
2.5	3.4	4	4	4	4	4	FKM	24 VDC	ETV-2111/V2-B25-4FF-024/=-U0	627963	a. A.	
							EPDM	24 VDC	ETV-2111/V2-B25-4PF-024/=-U0	627964	a. A.	
		FKM					24 VDC	ETV-2111/V2-B25-6FF-024/=-U0	627965	a. A.		
		EPDM					24 VDC	ETV-2111/V2-B25-6PF-024/=-U0	627966	a. A.		
1.0	0.8	4	16	16	16	16	FKM	24 VDC	ETV-2111/V3-B10-4FF-024/=-U0	627967	a. A.	
							EPDM	24 VDC	ETV-2111/V3-B10-4PF-024/=-U0	627968	a. A.	
		FKM					24 VDC	ETV-2111/V3-B10-6FF-024/=-U0	627969	a. A.		
		EPDM					24 VDC	ETV-2111/V3-B10-6PF-024/=-U0	627970	a. A.		
1.5	1.4	4	12.5	12.5	12.5	12.5	FKM	24 VDC	ETV-2111/V3-B15-4FF-024/=-U0	627971	a. A.	
							EPDM	24 VDC	ETV-2111/V3-B15-4PF-024/=-U0	627972	a. A.	
		FKM					24 VDC	ETV-2111/V3-B15-6FF-024/=-U0	627973	a. A.		
		EPDM					24 VDC	ETV-2111/V3-B15-6PF-024/=-U0	627974	a. A.		
2.0	2.4	4	8	8	8	8	FKM	24 VDC	ETV-2111/V3-B20-4FF-024/=-U0	627975	a. A.	
							EPDM	24 VDC	ETV-2111/V3-B20-4PF-024/=-U0	627976	a. A.	
		FKM					24 VDC	ETV-2111/V3-B20-6FF-024/=-U0	627977	a. A.		
		EPDM					24 VDC	ETV-2111/V3-B20-6PF-024/=-U0	627978	a. A.		
2.5	3.4	4	4	4	4	4	FKM	24 VDC	ETV-2111/V3-B25-4FF-024/=-U0	627979	a. A.	
							EPDM	24 VDC	ETV-2111/V3-B25-4PF-024/=-U0	627980	a. A.	
		FKM					24 VDC	ETV-2111/V3-B25-6FF-024/=-U0	627981	a. A.		
		EPDM					24 VDC	ETV-2111/V3-B25-6PF-024/=-U0	627982	a. A.		
1.0	0.8	4	16	16	16	16	FKM	24 VDC	ETV-2111/V4-B10-4FF-024/=-U0	627983	a. A.	
							EPDM	24 VDC	ETV-2111/V4-B10-4PF-024/=-U0	627984	a. A.	
		FKM					24 VDC	ETV-2111/V4-B10-6FF-024/=-U0	627985	a. A.		
		EPDM					24 VDC	ETV-2111/V4-B10-6PF-024/=-U0	627986	a. A.		
1.5	1.4	4	12.5	12.5	12.5	12.5	FKM	24 VDC	ETV-2111/V4-B15-4FF-024/=-U0	627987	a. A.	
							EPDM	24 VDC	ETV-2111/V4-B15-4PF-024/=-U0	627988	a. A.	
		FKM					24 VDC	ETV-2111/V4-B15-6FF-024/=-U0	627989	a. A.		
		EPDM					24 VDC	ETV-2111/V4-B15-6PF-024/=-U0	627990	a. A.		
2.0	2.4	4	8	8	8	8	FKM	24 VDC	ETV-2111/V4-B20-4FF-024/=-U0	627991	a. A.	
							EPDM	24 VDC	ETV-2111/V4-B20-4PF-024/=-U0	627992	a. A.	
		FKM					24 VDC	ETV-2111/V4-B20-6FF-024/=-U0	627993	a. A.		
		EPDM					24 VDC	ETV-2111/V4-B20-6PF-024/=-U0	627994	a. A.		
2.5	3.4	4	4	4	4	4	FKM	24 VDC	ETV-2111/V4-B25-4FF-024/=-U0	627995	a. A.	
							EPDM	24 VDC	ETV-2111/V4-B25-4PF-024/=-U0	627996	a. A.	
		FKM					24 VDC	ETV-2111/V4-B25-6FF-024/=-U0	627997	a. A.		
		EPDM					24 VDC	ETV-2111/V4-B25-6PF-024/=-U0	627998	a. A.		

Illustration
Valve design

Description	H1
2-valve battery	69.2
3-valve battery	94.7
4-valve battery	120.2

