

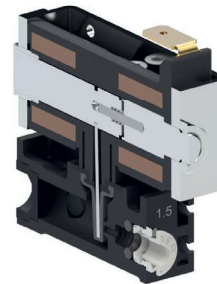
MAGMA Solenoid Valve Batteries Type ETV Series 200

MAGMA the valve principle from AVS Römer

MEDIUM
SEPARATED

ELSA
Push-in Fittings

NSF
COMPONENT



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
- 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

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

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" in 0-position closed	"B" in 0-position open
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	
Membrane material	EPDM or FKM	
O-ring material	FKM or EPDM	
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 P ₂₀	6 W
Duty cycle	100 %, depending on the duty cycle the power consumption decreases by up to 30 %
Electrical connection	Spade terminals for spade connectors 6.3 x 0.8 mm, DIN 46247
Protection class according to EN 60529	IP 00

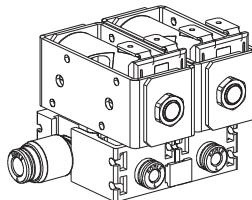
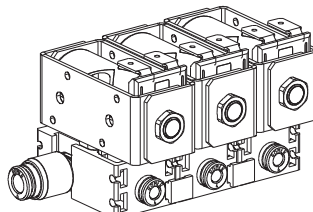
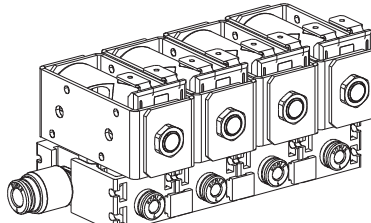
2/2-Way Solenoid Valve Battery - Type ETV Series 200

Price group

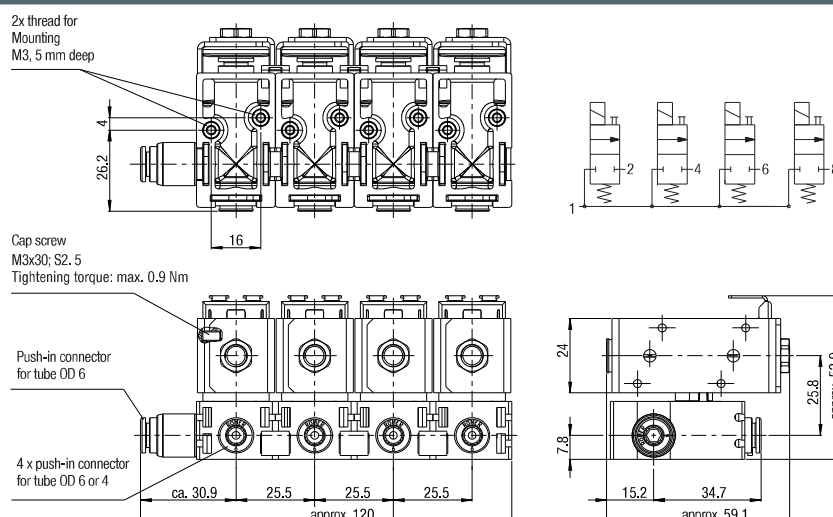
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"A" in 0-position closed
(closing with the flow)

Plastic
PPA

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

Illustration



Valve Design

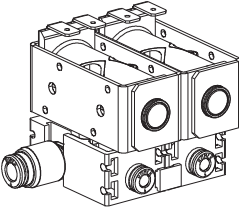
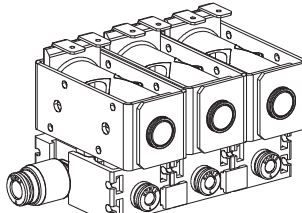
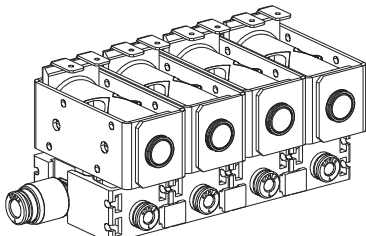
Description	H1
2-valve battery	69.2
3-valve battery	94.7
4-valve battery	120.2

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

Price group **56**

"B" in 0-position open
(closing with the flow)

Plastic
PPA

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

Illustration

Valve Design

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

