MAGMA Solenoid Valves Type ETV Series 200

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
- insensative 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:

- 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

CHARACTERISTICS

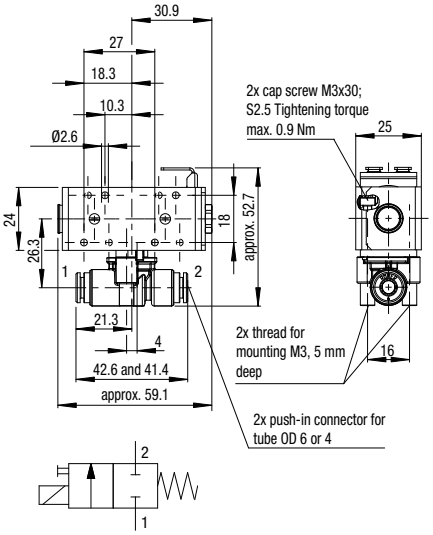
GENERAL				
Constructional design	Lever actuated seat valve with separating membrane			
Product name	2/2-way solenoid valve		3/2-way solenoid valve	
Actuation	Electric, direct acting or by emergency manual override with position indicator			
Product type	ETV-222-A .	ETV-211-B .	ETV-217-C .	ETV-219-F .
Function	“A“ in 0-position closed	“B“ in 0-position open	“C” in 0-position “1” closed, “2” to “3” discharged	“F“ in 0-position “1“ to “2“ closed, “1“ to “4“ 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, PPSU			
Membrane and O-ring material	FKM			
Solenoid housing material	PPS, EPDM (UL94-V0) plastic, insulation class “F” (155 °C)			
Mounting method	with 2 thread press-fit inserts M3, self-tapping screws ISO7049-ST3.5x6.5-C or with M14x1 locknut			
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 Coaxial Solenoid Valve - Type ETV Series 200

Price group **56** | "A" in 0-position closed (closing with the flow) | NSF | **Plastic PPA**

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
1.5	1.4	4	16	16	12.5	6	EPDM	24 V DC	ETV-222-A15-4PF-024/=-U0	627351	o. r.
1.5	1.4	6	16	16	12.5	6	EPDM	24 V DC	ETV-222-A15-6PF-024/=-U0	627352	o. r.
2	2.4	4	12.5	12.5	10	5	EPDM	24 V DC	ETV-222-A20-4PF-024/=-U0	627363	o. r.
2	2.4	6	12.5	12.5	10	5	EPDM	24 V DC	ETV-222-A20-6PF-024/=-U0	627364	o. r.
2.5	2.5	4	8	8	6	3	EPDM	24 V DC	ETV-222-A25-4PF-024/=-U0	627353	o. r.
2.5	3.4	6	8	8	6	3	EPDM	24 V DC	ETV-222-A25-6PF-024/=-U0	627354	o. r.
1.5	1.4	4	16	16	12.5	6	FKM	24 V DC	ETV-222-A15-4FF-024/=-U0	627355	o. r.
1.5	1.4	6	16	16	12.5	6	FKM	24 V DC	ETV-222-A15-6FF-024/=-U0	627356	o. r.
2	2.4	4	12.5	12.5	10	5	FKM	24 V DC	ETV-222-A20-4FF-024/=-U0	627365	o. r.
2	2.4	6	12.5	12.5	10	5	FKM	24 V DC	ETV-222-A20-6FF-024/=-U0	627366	o. r.
2.5	2.5	4	8	8	6	3	FKM	24 V DC	ETV-222-A25-4FF-024/=-U0	627357	o. r.
2.5	3.4	6	8	8	6	3	FKM	24 V DC	ETV-222-A25-6FF-024/=-U0	627358	o. r.

Illustration

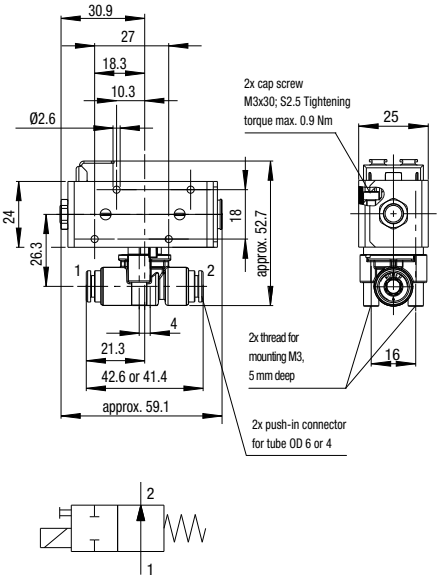


2/2-Way Coaxial Solenoid Valve - Type ETV Series 200

Price group **56** | "B" in 0-position open (closing with the flow) | NSF | **Plastic PPA**

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
1.5	1.4	4	12.5	12.5	12.5	12.5	EPDM	24 V DC	ETV-211-B15-4PF-024/=-U0	627401	o. r.
1.5	1.4	6	12.5	12.5	12.5	12.5	EPDM	24 V DC	ETV-211-B15-6PF-024/=-U0	627402	o. r.
2	2.4	4	8	8	8	8	EPDM	24 V DC	ETV-211-B20-4PF-024/=-U0	627409	o. r.
2	2.4	6	8	8	8	8	EPDM	24 V DC	ETV-211-B20-6PF-024/=-U0	627410	o. r.
2.5	2.5	4	4	4	4	4	EPDM	24 V DC	ETV-211-B25-4PF-024/=-U0	627403	o. r.
2.5	3.4	6	4	4	4	4	EPDM	24 V DC	ETV-211-B25-6PF-024/=-U0	627404	o. r.
1.5	1.4	4	12.5	12.5	12.5	12.5	FKM	24 V DC	ETV-211-B15-4FF-024/=-U0	627405	o. r.
1.5	1.4	6	12.5	12.5	12.5	12.5	FKM	24 V DC	ETV-211-B15-6FF-024/=-U0	627406	o. r.
2	2.4	4	8	8	8	8	FKM	24 V DC	ETV-211-B20-4FF-024/=-U0	627411	o. r.
2	2.4	6	8	8	8	8	FKM	24 V DC	ETV-211-B20-6FF-024/=-U0	627412	o. r.
2.5	2.5	4	4	4	4	4	FKM	24 V DC	ETV-211-B25-4FF-024/=-U0	627407	o. r.
2.5	3.4	6	4	4	4	4	FKM	24 V DC	ETV-211-B25-6FF-024/=-U0	627408	o. r.

Illustration

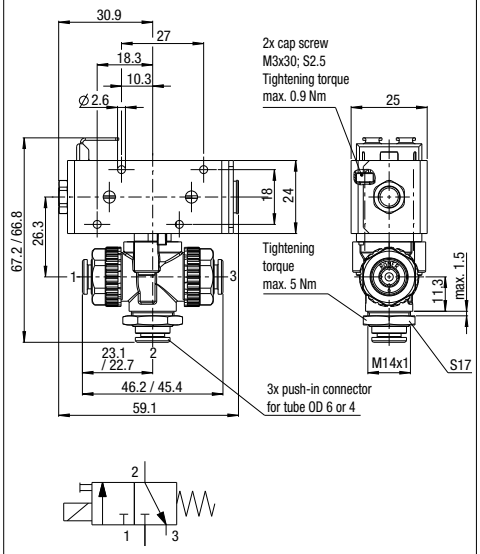


3/2-Way Coaxial Solenoid Valve - Type ETV Series 200

Price group **56** | "C" in 0-position "1" closed, "2" to "3" discharged | NSF | **Plastic PPA**

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
1.5	1.4	4	6	6	6	6	EPDM	24 V DC	ETV-217-C15-4PF-024/=-U0	627421	o. r.
1.5	1.5	6	6	6	6	6	EPDM	24 V DC	ETV-217-C15-6PF-024/=-U0	627424	o. r.
2	1.5	4	5	5	5	5	EPDM	24 V DC	ETV-217-C20-4PF-024/=-U0	627427	o. r.
2	1.8	6	5	5	5	5	EPDM	24 V DC	ETV-217-C20-6PF-024/=-U0	627430	o. r.
3	1.7	4	2	2	2	2	EPDM	24 V DC	ETV-217-C30-4PF-024/=-U0	627433	o. r.
3	2.5	6	2	2	2	2	EPDM	24 V DC	ETV-217-C30-6PF-024/=-U0	627436	o. r.
1.5	1.4	4	6	6	6	6	FKM	24 V DC	ETV-217-C15-4FF-024/=-U0	627422	o. r.
1.5	1.5	6	6	6	6	6	FKM	24 V DC	ETV-217-C15-6FF-024/=-U0	627425	o. r.
2	1.5	4	5	5	5	5	FKM	24 V DC	ETV-217-C20-4FF-024/=-U0	627428	o. r.
2	1.8	6	5	5	5	5	FKM	24 V DC	ETV-217-C20-6FF-024/=-U0	627431	o. r.
3	1.7	4	2	2	2	2	FKM	24 V DC	ETV-217-C30-4FF-024/=-U0	627434	o. r.
3	2.5	6	2	2	2	2	FKM	24 V DC	ETV-217-C30-6FF-024/=-U0	627437	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 | NSF | **Plastic PPA**

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
1.5	1.4	4	12.5	12.5	12.5	6	EPDM	24 V DC	ETV-219-F15-4PF-024/=-U0	627451	o. r.
1.5	1.5	6	12.5	12.5	12.5	6	EPDM	24 V DC	ETV-219-F15-6PF-024/=-U0	627454	o. r.
2	1.6	4	10	10	10	6	EPDM	24 V DC	ETV-219-F20-4PF-024/=-U0	627457	o. r.
2	1.8	6	10	10	10	6	EPDM	24 V DC	ETV-219-F20-6PF-024/=-U0	627460	o. r.
3	1.8	4	4	4	4	3	EPDM	24 V DC	ETV-219-F30-4PF-024/=-U0	627463	o. r.
3	2.8	6	4	4	4	3	EPDM	24 V DC	ETV-219-F30-6PF-024/=-U0	627466	o. r.
1.5	1.4	4	12.5	12.5	12.5	6	FKM	24 V DC	ETV-219-F15-4FF-024/=-U0	627452	o. r.
1.5	1.5	6	12.5	12.5	12.5	6	FKM	24 V DC	ETV-219-F15-6FF-024/=-U0	627455	o. r.
2	1.6	4	10	10	10	6	FKM	24 V DC	ETV-219-F20-4FF-024/=-U0	627458	o. r.
2	1.8	6	10	10	10	6	FKM	24 V DC	ETV-219-F20-6FF-024/=-U0	627461	o. r.
3	1.8	4	4	4	4	3	FKM	24 V DC	ETV-219-F30-4FF-024/=-U0	627464	o. r.
3	2.8	6	4	4	4	3	FKM	24 V DC	ETV-219-F30-6FF-024/=-U0	627467	o. r.

Illustration

