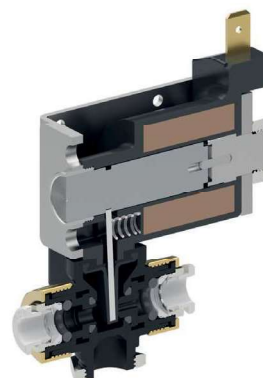


MAGMA Solenoid Valves Type ETV Series 100

MAGMA the special valve principle from AVS Römer

 MEDIUM
SEPARATED


 ELSA
Push-in Fittings


 NSF
COMPONENT


High quality valve series with coaxial flow or 90° flow, in 2/2- 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 without dirt pockets
- easily disassembled, e.g. for cleaning
- insensitive to contamination
- medium is barely heated by the solenoid
- emergency manual override with position indicator as standard
- materials and constructional design are particularly suited for food applications

Variations / options:

- other tube connector
- other material for seal
- other nominal diameter or other pressure range
- version for vacuum
- 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	3/2-way solenoid valve
Actuation	Electric, direct acting or via emergency manual override with position indicator		
Product type	ETV-12x -A .	ETV-117-C .	ETV-139-F .
Function	"A" in 0-position closed	"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 2 to DN 6		
Connection	ELSA push-in connectors for pipe/tube OD 6 OD 8 (others on request)		
Ambient temperature	0 °C to +60 °C (others on request)		
Medium temperature	0 °C to +130 °C (others on request)		
Medium viscosity	up to approx. 35 mm ² /s		
Valve body and insert material	PPA		
O-ring material	FKM, EPDM on request		
Membran material	FKM, EPDM on request		
Union nut material	Brass		
Solenoid housing material	Plastic-molded PBT, "H" (180 °C)		
Mounting method	with lock nut M14x1 or with self-tapping screws ISO 7049-ST3,5x6,5-C		
Mounting position	optional		
Approval	NSF/ANSI 169		

PNEUMATIC - HYDRAULIC

Nominal pressure [bar]	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
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: 15 to 25 ms

ELECTRIC

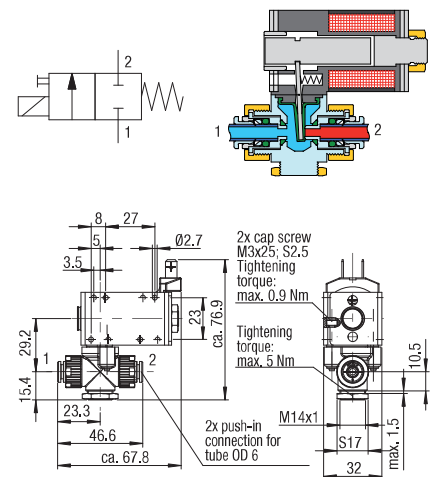
Nominal voltage	24 V DC (other DC upon request)
Voltage tolerance	±10 %
Nominal power P₂₀	8 W
Duty cycle	100 %
Electrical connection	Spade terminals for spade connectors 6.3 x 0.8 mm, DIN 46247
Protection class according to EN 60529	IP 00

2/2-Way Coaxial Solenoid Valve - Type ETV Series 100

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


Plastic PPA

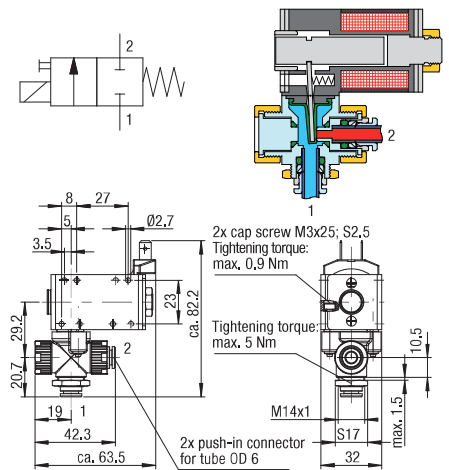
DN	Kv-value water [l/min]	for tube OD	PN	Allow. OP [bar]	Seal material	Voltage / current	Type	Order number	Price
2	1.8	6	16	0 - 16	FKM (FDA-compliant)	24 V DC	ETV-122-A20-6FF-024/=-R0	627003	o. r.
3	3.4	6	16	0 - 16	FKM (FDA-compliant)	24 V DC	ETV-122-A30-6FF-024/=-R0	627008	o. r.
4	5.4	6	8	0 - 8	FKM (FDA-compliant)	24 V DC	ETV-122-A40-6FF-024/=-R0	627010	o. r.
6	11	8	2.5	0 - 2.5	FKM (FDA-compliant)	24 V DC	ETV-122-A60-8FF-024/=-R0	629013	o. r.

Illustration

2/2-Way 90° Solenoid Valve - Type ETV Series 100

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


Plastic PPA

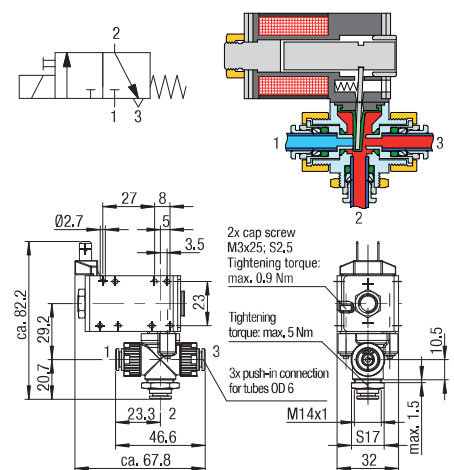
DN	Kv-value water [l/min]	for tube OD	PN	Allow. OP [bar]	Seal material	Voltage / current	Type	Order number	Price
2	1.8	6	16	0 - 16	FKM (FDA-compliant)	24 V DC	ETV-125-A20-6FF-024/=-R0	627033	o. r.
3	3.4	6	16	0 - 16	FKM (FDA-compliant)	24 V DC	ETV-125-A30-6FF-024/=-R0	627038	o. r.
4	5.4	6	8	0 - 8	FKM (FDA-compliant)	24 V DC	ETV-125-A40-6FF-024/=-R0	627040	o. r.
6	9.9	8	2.5	0 - 2.5	FKM (FDA-compliant)	24 V DC	ETV-125-A60-8FF-024/=-R0	629023	o. r.

Illustration

3/2-Way Solenoid Valve - Type ETV Series 100

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


Plastic PPA

DN	Kv-value water [l/min]	for tube OD	PN	Allow. OP [bar]	Seal material	Voltage / current	Type	Order number	Price
2	1.7	6	12.5	0 - 12.5	FKM (FDA-compliant)	24 V DC	ETV-117-C20-6FF-024/=-R0	627103	o. r.
3	3.3	6	6	0 - 6	FKM (FDA-compliant)	24 V DC	ETV-117-C30-6FF-024/=-R0	627108	o. r.
4	5.3	6	3	0 - 3	FKM (FDA-compliant)	24 V DC	ETV-117-C40-6FF-024/=-R0	627113	o. r.
6	8.3	8	1	0 - 1	FKM (FDA-compliant)	24 V DC	ETV-117-C60-8FF-024/=-R0	629033	o. r.

Illustration


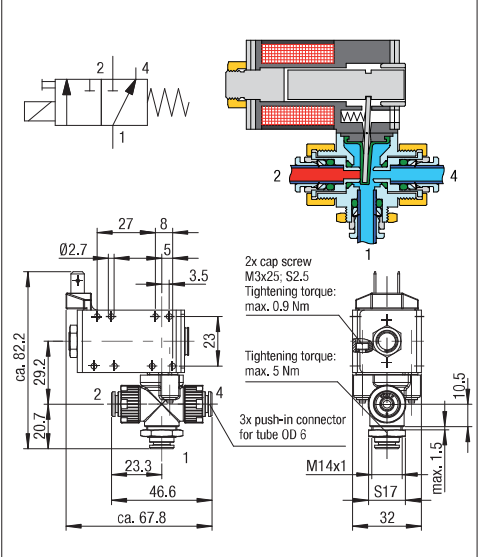
3/2-Way Solenoid Valve - Type ETV Series 100

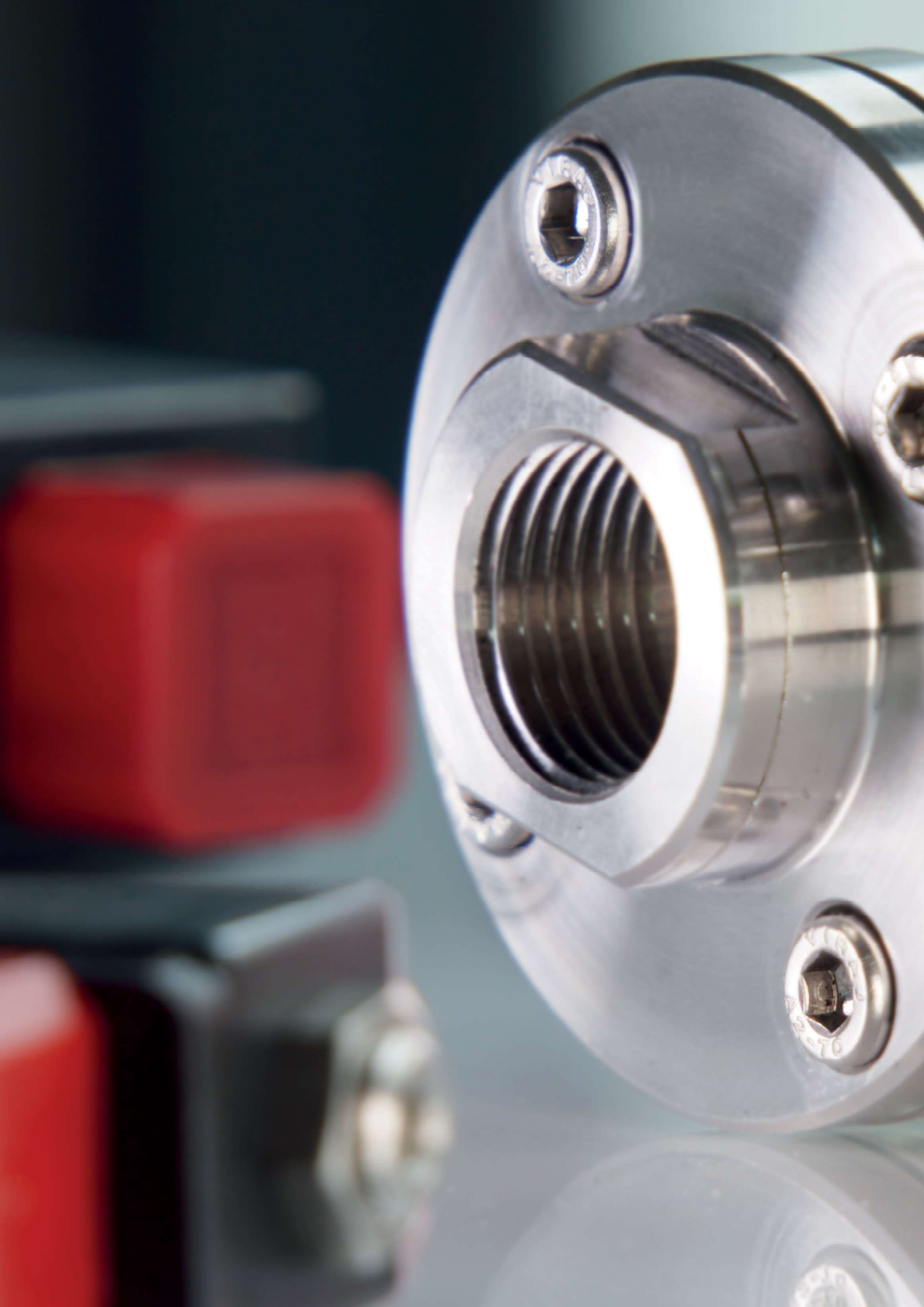
 Price group **56**

 "F" in 0-position "1" to "2" closed,
 "1" to "4" open

 Plastic
 PPA

DN	Kv-value water [l/min]	for tube OD	PN	Allow. OP [bar]	Seal material	Voltage / current	Type	Order number	Price
2	1.8	6	10	0 - 10	FKM (FDA-compliant)	24 V DC	ETV-139-F20-6FF-024/=-R0	627153	o. r.
3	3.3	6	8	0 - 8	FKM (FDA-compliant)	24 V DC	ETV-139-F30-6FF-024/=-R0	627157	o. r.
4	5.3	6	6	0 - 6	FKM (FDA-compliant)	24 V DC	ETV-139-F40-6FF-024/=-R0	627161	o. r.
6	9.9	8	2	0 - 2	FKM (FDA-compliant)	24 V DC	ETV-139-F60-8FF-024/=-R0	629043	o. r.

Illustration




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
- 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:

- 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, EPDM (UL94-V0) plastic			
Solenoid housing material	PPS, 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 P₂₀	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			

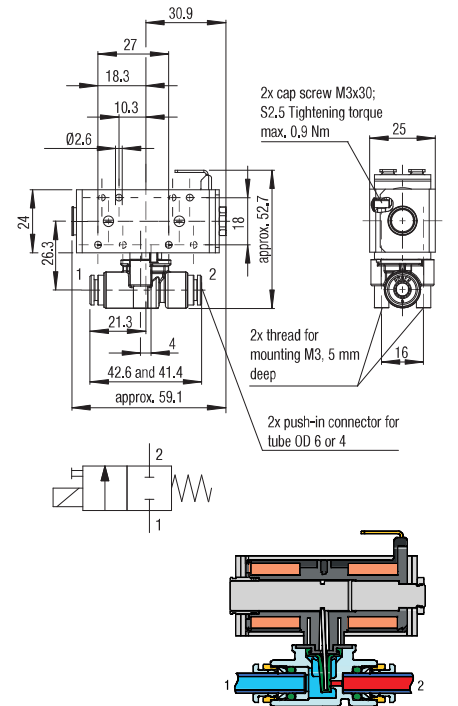
2/2-Way Coaxial Solenoid Valve - Type ETV Series 200

 Price group **56**

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

 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 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.

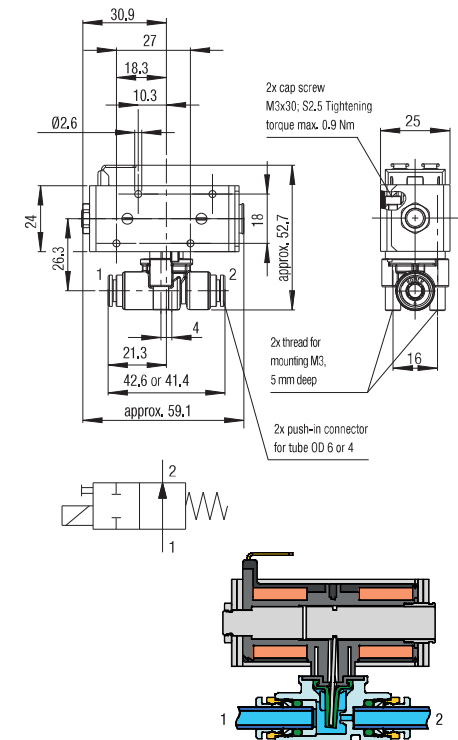
Illustration

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

 Price group **56**

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

 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 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

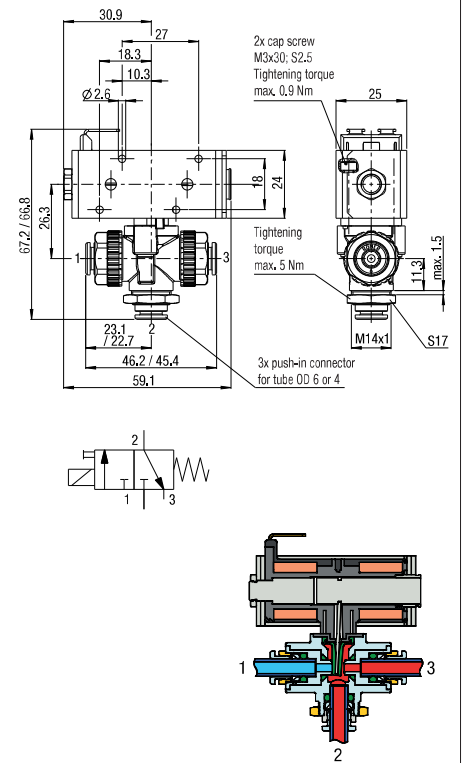
 Price group **56**

"C" in 0-position "1" closed, "2" to "3" discharged



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 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

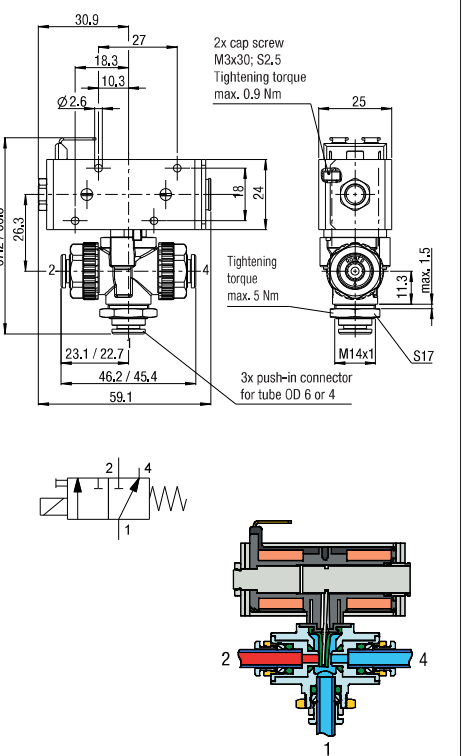
 Price group **56**

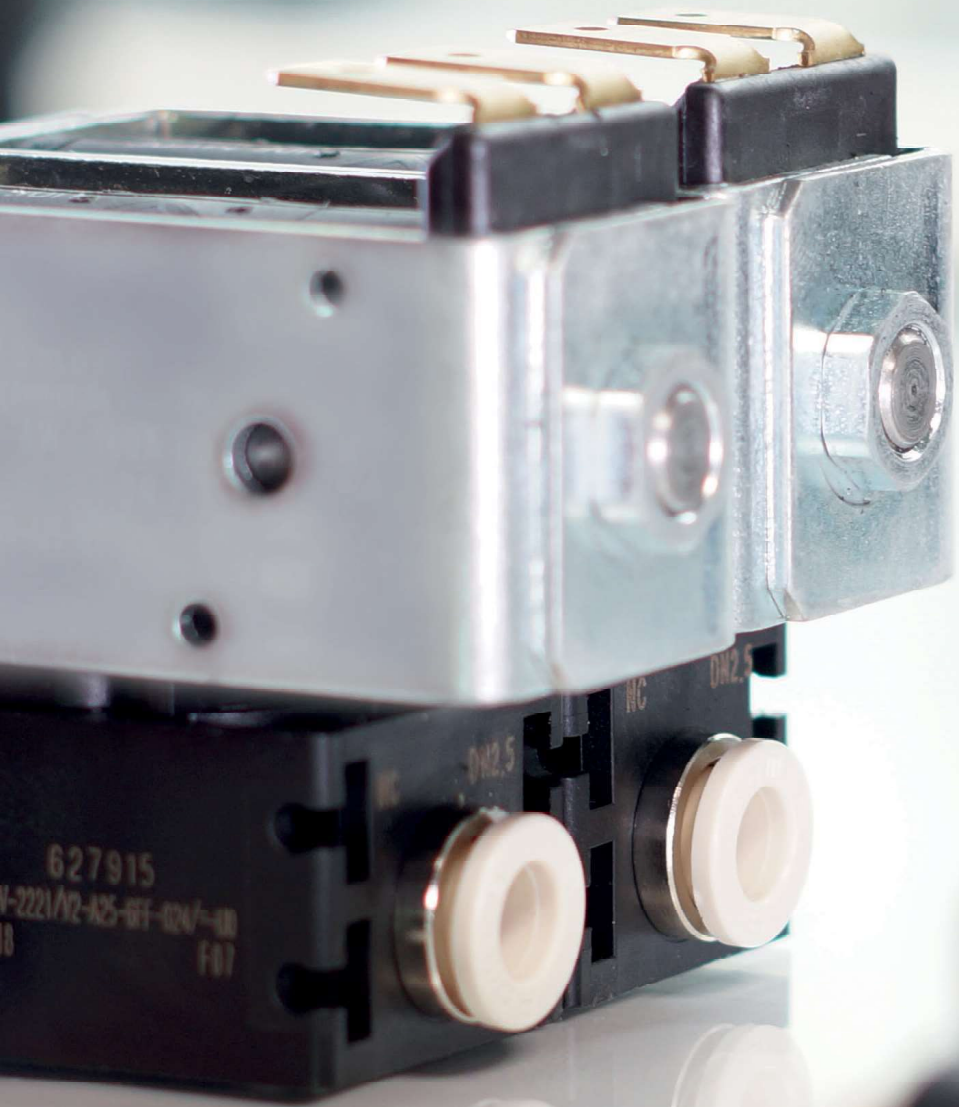
"F" in 0-position "1" to "2" closed, "1" to "4" open



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 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




627915
V-2221/V2-425-47F-12V-40
F01

DN 5
EM 100X ED
LOGWEL'06
101

MAGMA Solenoid Valve Batteries Type ETV Series 200

MAGMA the valve principle from AVS Römer



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 electromagnet 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

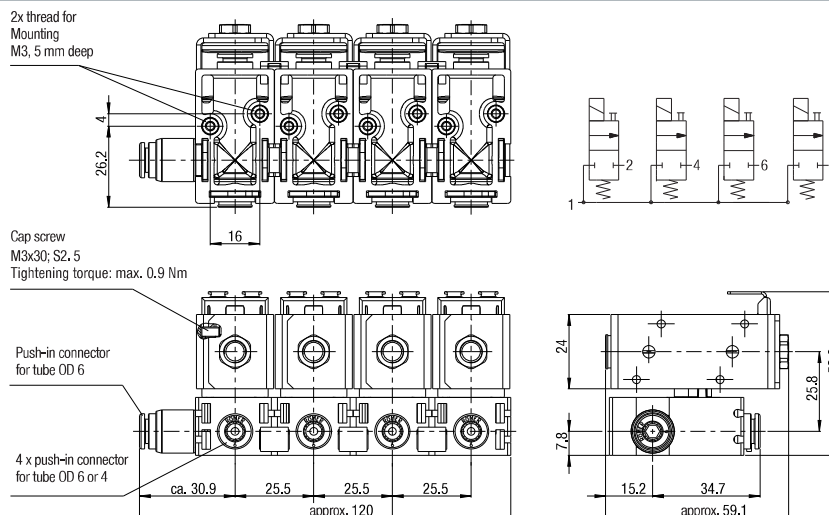
Nominal voltage	24 V DC
Voltage tolerance	±10 %
Nominal power P₂₀	6 W
Duty cycle	100 %, depending on the duty cycle the power consumption decreases by up to 30 %
Electrical connection	Spade terminals for spade connectors 6.3 x 0.8 mm, DIN 46247
Protection class according to EN 60529	IP 00

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

 Price group **56** "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 material	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.
				16	16	16	10	EPDM	24 V DC	ETV-2221/V2-A10-4PF-024/=-U0	627902	o. r.
			6	16	16	16	10	FKM	24 V DC	ETV-2221/V2-A10-6FF-024/=-U0	627903	o. r.
				16	16	16	10	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.
				16	16	12.5	6	EPDM	24 V DC	ETV-2221/V2-A15-4PF-024/=-U0	627906	o. r.
			6	16	16	12.5	6	FKM	24 V DC	ETV-2221/V2-A15-6FF-024/=-U0	627907	o. r.
				16	16	12.5	6	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.
				12.5	12.5	10	5	EPDM	24 V DC	ETV-2221/V2-A20-4PF-024/=-U0	627910	o. r.
			6	12.5	12.5	10	5	FKM	24 V DC	ETV-2221/V2-A20-6FF-024/=-U0	627911	o. r.
				12.5	12.5	10	5	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.	
			8	8	6	3	EPDM	24 V DC	ETV-2221/V2-A25-4PF-024/=-U0	627914	o. r.	
		6	8	8	6	3	FKM	24 V DC	ETV-2221/V2-A25-6FF-024/=-U0	627915	o. r.	
			8	8	6	3	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.
				16	16	16	10	EPDM	24 V DC	ETV-2221/V3-A10-4PF-024/=-U0	627918	o. r.
			6	16	16	16	10	FKM	24 V DC	ETV-2221/V3-A10-6FF-024/=-U0	627919	o. r.
				16	16	16	10	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.
				16	16	12.5	6	EPDM	24 V DC	ETV-2221/V3-A15-4PF-024/=-U0	627922	o. r.
			6	16	16	12.5	6	FKM	24 V DC	ETV-2221/V3-A15-6FF-024/=-U0	627923	o. r.
				16	16	12.5	6	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.
				12.5	12.5	10	5	EPDM	24 V DC	ETV-2221/V3-A20-4PF-024/=-U0	627926	o. r.
			6	12.5	12.5	10	5	FKM	24 V DC	ETV-2221/V3-A20-6FF-024/=-U0	627927	o. r.
				12.5	12.5	10	5	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.	
			8	8	6	3	EPDM	24 V DC	ETV-2221/V3-A25-4PF-024/=-U0	627930	o. r.	
		6	8	8	6	3	FKM	24 V DC	ETV-2221/V3-A25-6FF-024/=-U0	627931	o. r.	
			8	8	6	3	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.
				16	16	16	10	EPDM	24 V DC	ETV-2221/V4-A10-4PF-024/=-U0	627934	o. r.
			6	16	16	16	10	FKM	24 V DC	ETV-2221/V4-A10-6FF-024/=-U0	627935	o. r.
				16	16	16	10	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.
				16	16	12.5	6	EPDM	24 V DC	ETV-2221/V4-A15-4PF-024/=-U0	627938	o. r.
			6	16	16	12.5	6	FKM	24 V DC	ETV-2221/V4-A15-6FF-024/=-U0	627939	o. r.
				16	16	12.5	6	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.
				12.5	12.5	10	5	EPDM	24 V DC	ETV-2221/V4-A20-4PF-024/=-U0	627942	o. r.
			6	12.5	12.5	10	5	FKM	24 V DC	ETV-2221/V4-A20-6FF-024/=-U0	627943	o. r.
				12.5	12.5	10	5	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.	
			8	8	6	3	EPDM	24 V DC	ETV-2221/V4-A25-4PF-024/=-U0	627946	o. r.	
		6	8	8	6	3	FKM	24 V DC	ETV-2221/V4-A25-6FF-024/=-U0	627947	o. r.	
			8	8	6	3	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)

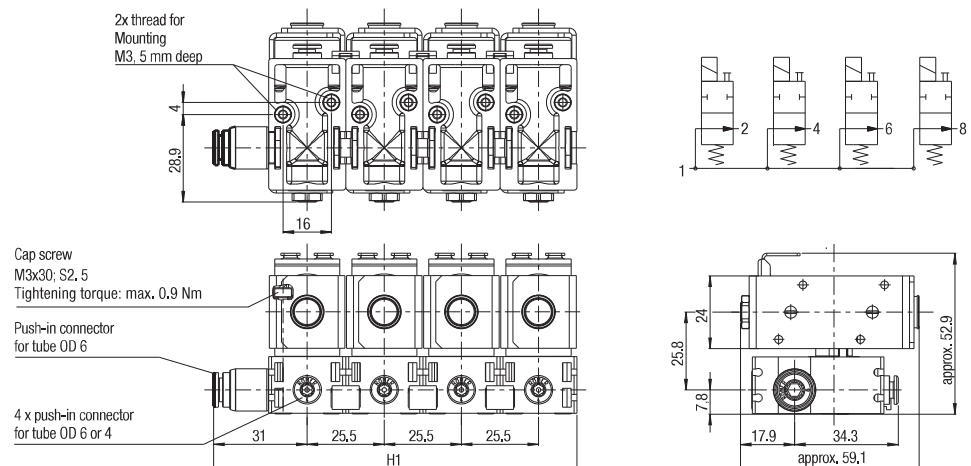


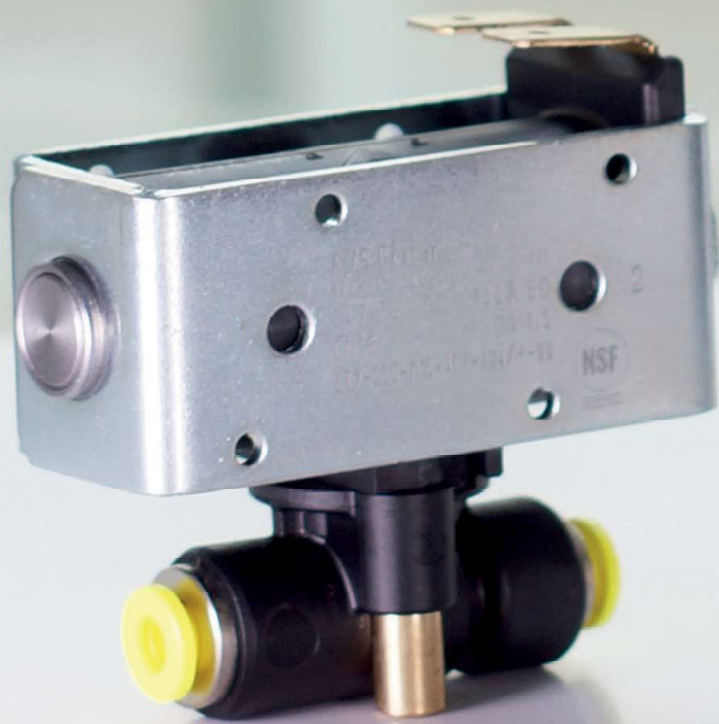
Plastic PPA

DN	Kv-value water [l/min]	for tube OD	PN	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 V DC	ETV-2111/V2-B10-4FF-024/=-U0	627951	o. r.	
							EPDM	24 V DC	ETV-2111/V2-B10-4PF-024/=-U0	627952	o. r.	
		FKM	24 V DC	ETV-2111/V2-B10-6FF-024/=-U0	627953	o. r.						
		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.	
							EPDM	24 V DC	ETV-2111/V2-B15-4PF-024/=-U0	627956	o. r.	
		FKM	24 V DC	ETV-2111/V2-B15-6FF-024/=-U0	627957	o. r.						
		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.	
							EPDM	24 V DC	ETV-2111/V2-B20-4PF-024/=-U0	627960	o. r.	
		FKM	24 V DC	ETV-2111/V2-B20-6FF-024/=-U0	627961	o. r.						
		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.	
							EPDM	24 V DC	ETV-2111/V2-B25-4PF-024/=-U0	627964	o. r.	
		FKM	24 V DC	ETV-2111/V2-B25-6FF-024/=-U0	627965	o. r.						
		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.	
							EPDM	24 V DC	ETV-2111/V3-B10-4PF-024/=-U0	627968	o. r.	
		FKM	24 V DC	ETV-2111/V3-B10-6FF-024/=-U0	627969	o. r.						
		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.	
							EPDM	24 V DC	ETV-2111/V3-B15-4PF-024/=-U0	627972	o. r.	
		FKM	24 V DC	ETV-2111/V3-B15-6FF-024/=-U0	627973	o. r.						
		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.	
							EPDM	24 V DC	ETV-2111/V3-B20-4PF-024/=-U0	627976	o. r.	
		FKM	24 V DC	ETV-2111/V3-B20-6FF-024/=-U0	627977	o. r.						
		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.	
							EPDM	24 V DC	ETV-2111/V3-B25-4PF-024/=-U0	627980	o. r.	
		FKM	24 V DC	ETV-2111/V3-B25-6FF-024/=-U0	627981	o. r.						
		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.	
							EPDM	24 V DC	ETV-2111/V4-B10-4PF-024/=-U0	627984	o. r.	
		FKM	24 V DC	ETV-2111/V4-B10-6FF-024/=-U0	627985	o. r.						
		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.	
							EPDM	24 V DC	ETV-2111/V4-B15-4PF-024/=-U0	627988	o. r.	
		FKM	24 V DC	ETV-2111/V4-B15-6FF-024/=-U0	627989	o. r.						
		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.	
							EPDM	24 V DC	ETV-2111/V4-B20-4PF-024/=-U0	627992	o. r.	
		FKM	24 V DC	ETV-2111/V4-B20-6FF-024/=-U0	627993	o. r.						
		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.	
							EPDM	24 V DC	ETV-2111/V4-B25-4PF-024/=-U0	627996	o. r.	
		FKM	24 V DC	ETV-2111/V4-B25-6FF-024/=-U0	627997	o. r.						
		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



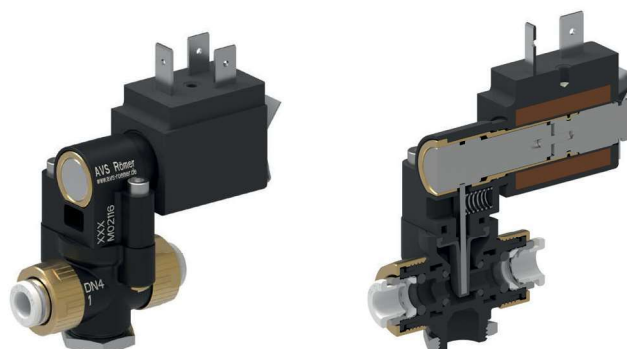


MAGMA Solenoid Valves Type ETV Series 400

MAGMA the valve principle from AVS Römer

 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
- 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
- IP class 65 possible

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
- 230 V AC using a bridge rectifier (see under cable sockets)

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-422-A .	ETV-419-F .
Function	"A" in 0-position closed	"F" in 0-position "1" to "2" closed, "1" to "4" open
Nominal diameter	DN 4 (DN 1,5 - 6 on demand)	
Connection	ELSA push-in connectors for pipe/tube OD 6 (OD 4 OD 8 on request)	
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 and EPDM	
Solenoid housing material	PPS, EPDM (UL94-V0) plastic, insulation class "F"	
Mounting method	with M14x1 locknut	
Mounting position	optional	
Approval	NSF/ANSI 169	
PNEUMATIC - HYDRAULIC		
Nominal pressure	in accordance with the specification table	
Pressure range	0 bar up to allowable operating pressure OP in accordance with the specification table	
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 20 %	
Electrical connection	11 mm - industry standard form B (DIN EN 175301 - 803)	
Protection class according to EN 60529	IP 00	

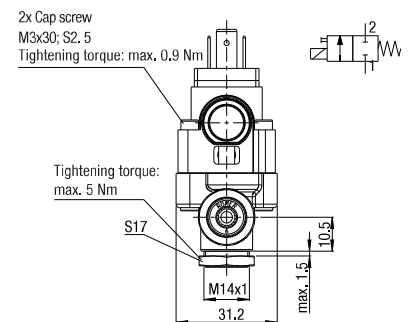
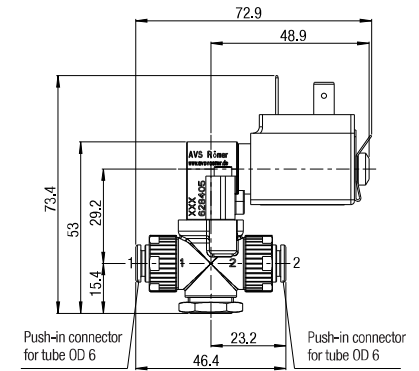
2/2-Way Coaxial Solenoid Valve - Type ETV Series 200

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


Plastic PPA

Irrespective of the information in the solenoid valve tables a housing temperature of +155 °C may not be exceeded. The value is limited to +120 °C with use of a cable socket. In case of doubt we are pleased to advise you.

DN	Kv-value water [l/min]	for tube OD	PN	Allow. OP [bar]	Seal material	Voltage / current	Type	Order number	Price
4	5	6	2	0-2	FKM	24 V DC	ETV-422-A40-6FF-024/=-H0	628407	o. r.
4	5	6	2	0-2	EPDM	24 V DC	ETV-422-A40-6PF-024/=-H0	628417	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


Plastic PPA

Irrespective of the information in the solenoid valve tables a housing temperature of +155 °C may not be exceeded. The value is limited to +120 °C with use of a cable socket. In case of doubt we are pleased to advise you.

DN	Kv-value water [l/min]	for tube OD	PN	Allow. OP [bar]	Seal material	Voltage / current	Type	Order number	Price
4	5	6	1.5	0-1.5	FKM	24 V DC	ETV-429-F40-6FF-024/=-H0	628537	o. r.
4	5	6	1.5	0-1.5	EPDM	24 V DC	ETV-429-F40-6PF-024/=-H0	628547	o. r.

Illustration
