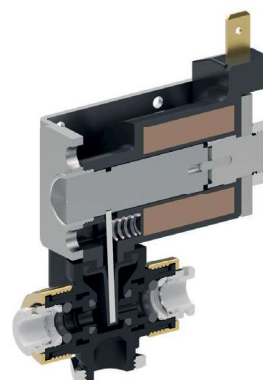


MAGMA Solenoid Valves Type ETV Series 100

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

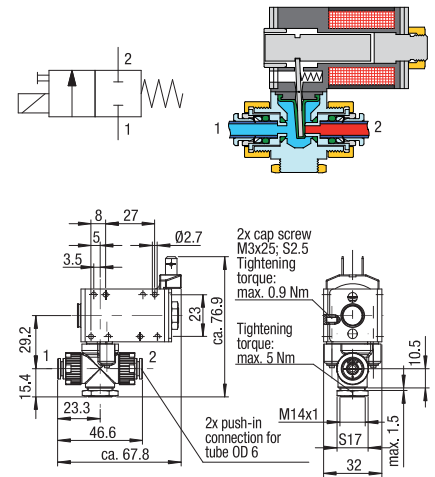
Constructional design	Lever actuated seat valve with separating membrane		
Product name	2/2-way solenoid valve	3/2-way solenoid valve	3/2-way solenoid valve
Actuation	Electric, direct acting or via emergency manual override with position indicator		
Product type	ETV-12x. -A .	ETV-117-C .	ETV-139-F .
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

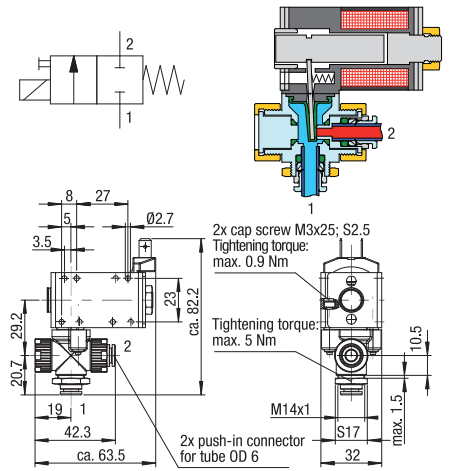
DN	Kv-value water [l/min]	for tube OD	PN	Allow. OP [bar]	Seal material	Voltage / current	Type	Order number	Price
2	1.8	6	16	0 - 16	FKM (FDA-compliant)	24 V DC	ETV-122-A20-6FF-024/=-R0	627003	o. r.
3	3.4	6	16	0 - 16	FKM (FDA-compliant)	24 V DC	ETV-122-A30-6FF-024/=-R0	627008	o. r.
4	5.4	6	8	0 - 8	FKM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

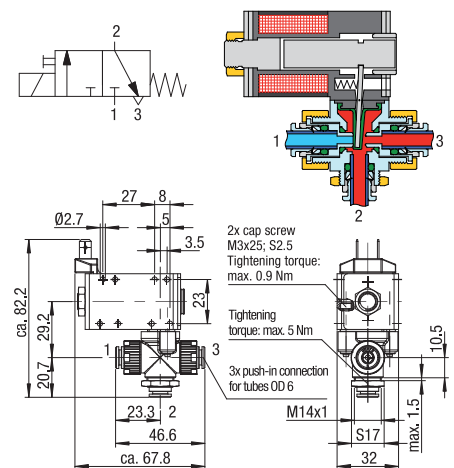
DN	Kv-value water [l/min]	for tube OD	PN	Allow. OP [bar]	Seal material	Voltage / current	Type	Order number	Price
2	1.8	6	16	0 - 16	FKM (FDA-compliant)	24 V DC	ETV-125-A20-6FF-024/=-R0	627033	o. r.
3	3.4	6	16	0 - 16	FKM (FDA-compliant)	24 V DC	ETV-125-A30-6FF-024/=-R0	627038	o. r.
4	5.4	6	8	0 - 8	FKM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


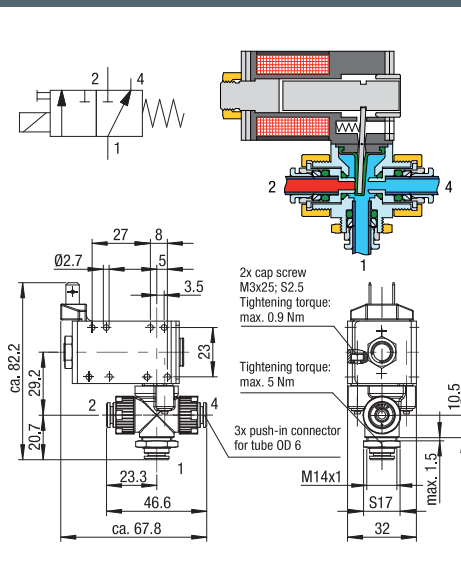
3/2-Way Solenoid Valve - Type ETV Series 100

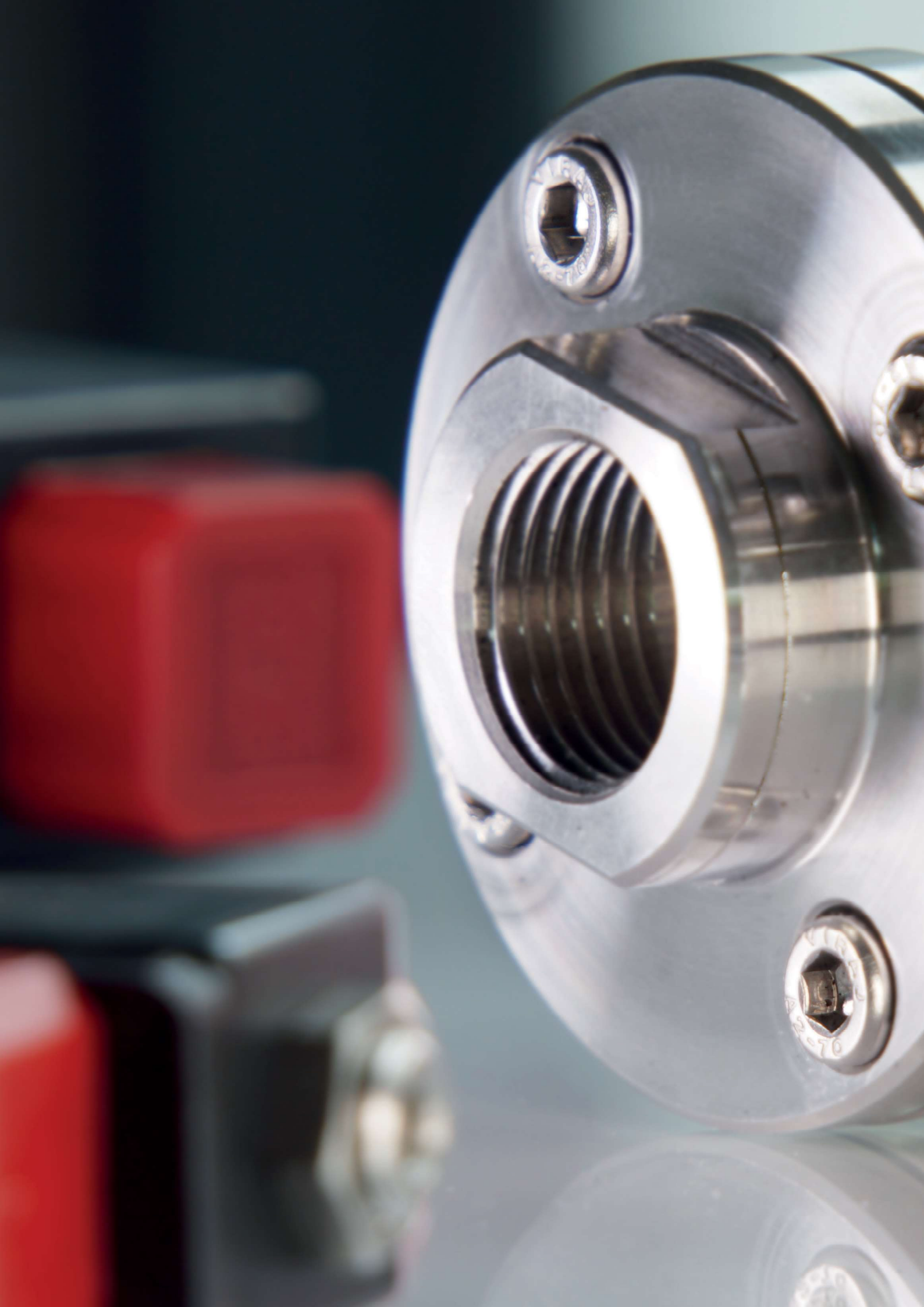
 Price group **56**

 "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			