Proportional flow control valve FPV

The electromagnetic proportional valve FPV enables stepless regulation of liquid and gaseous volume flows, which is directly proportional to the input signal. Due to the fast response times and minimal friction losses, the valve guarantees the best results for

... perfect milk foam
... precise and consistent brewing quality
... optimum drinking temperature



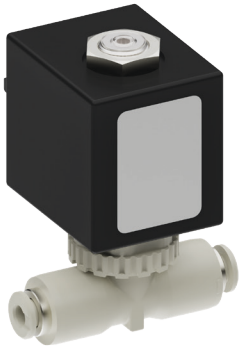
Precision and dynamics in flow control

Product features

- Fast response time and high sensitivity enhance efficiency.
- Seamless regulation enables precise adaptation to the input signal.
- Versatile applications for various media and temperature ranges.
- Long-lasting durability due to corrosion-resistant materials and wear-resistant centering rings.

AVS Römer FPV program overview

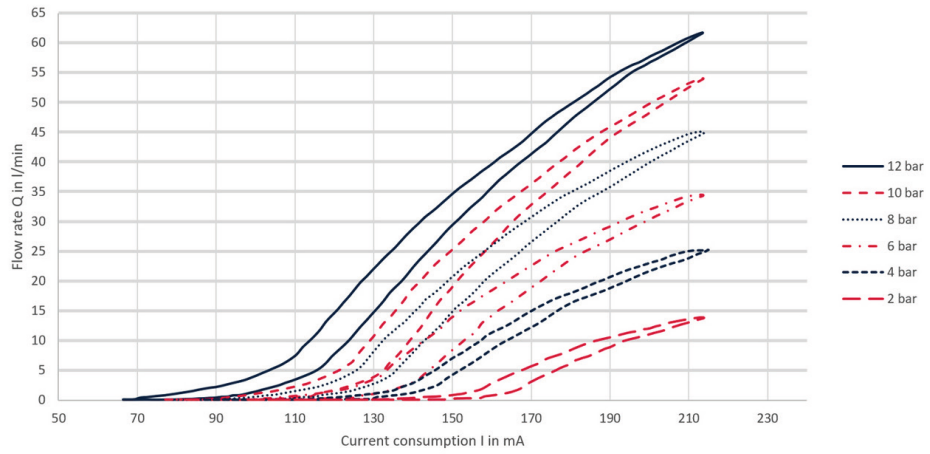




Type	FPV 700	FPV 800
Functions	2/2-way NC (A)	2/2-way NC (A)
Connection sizes metric	Push-in: 6	Push-in: 4 & 6
Nominal diameters	DN 1.2 – DN 2.7	DN 0.8 – DN 2.7
Pressure range	0.95–16 bar	-0.95 – 12 bar
Ambient temperature	0 °C – 60 °C	0 °C – 60 °C
Medium temperature	0 °C – 140 °C	0 °C – 130 °C
Body material	Stainless steel 1.4404	PPSU natural
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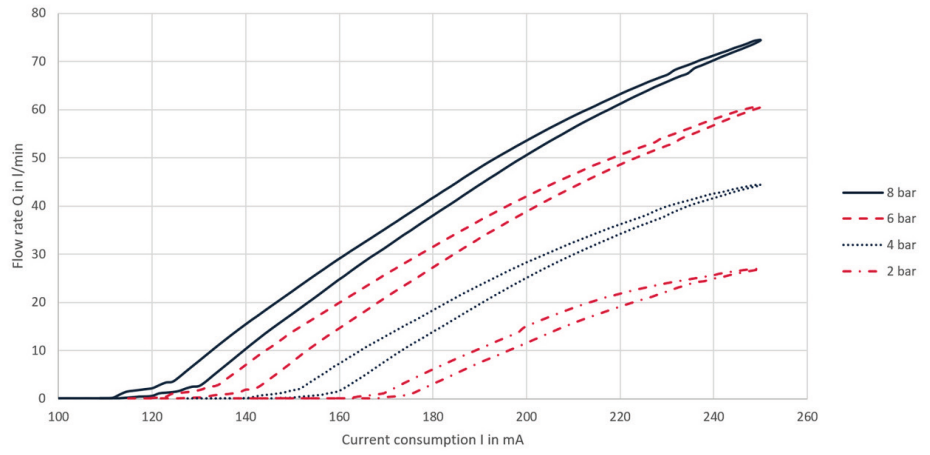
AVS Römer FPV program characteristic curves

Characteristic flow rate curve* DN 0.8 (Air)



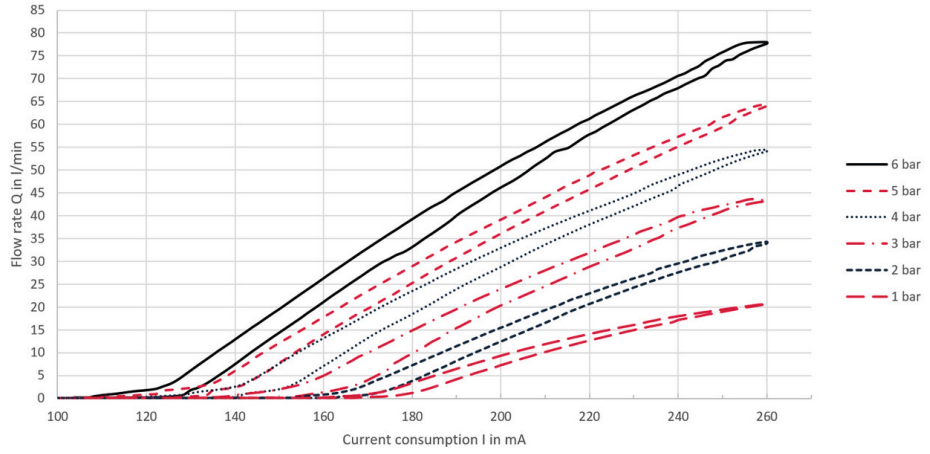
* Exemplary characteristic curve

Characteristic flow rate curve* DN 1.2 (Air)



* Exemplary characteristic curve

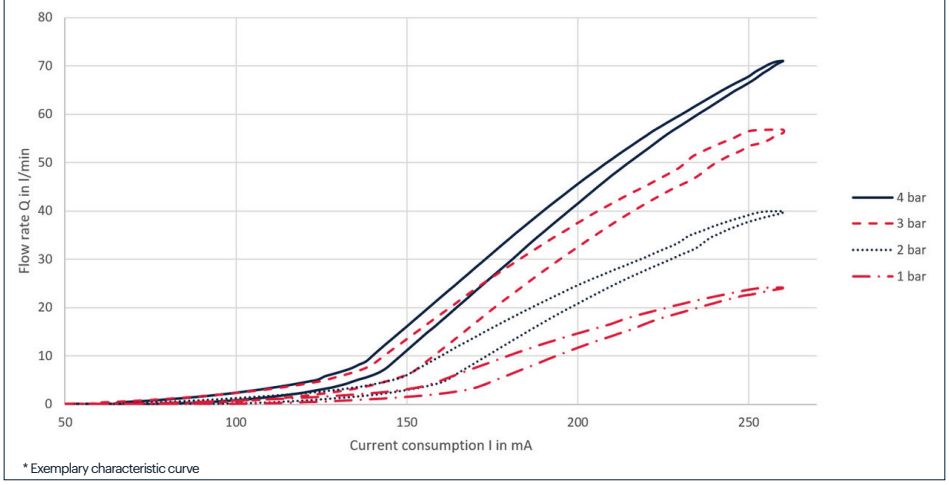
Characteristic flow rate curve* DN 1.5 (Air)



* Exemplary characteristic curve

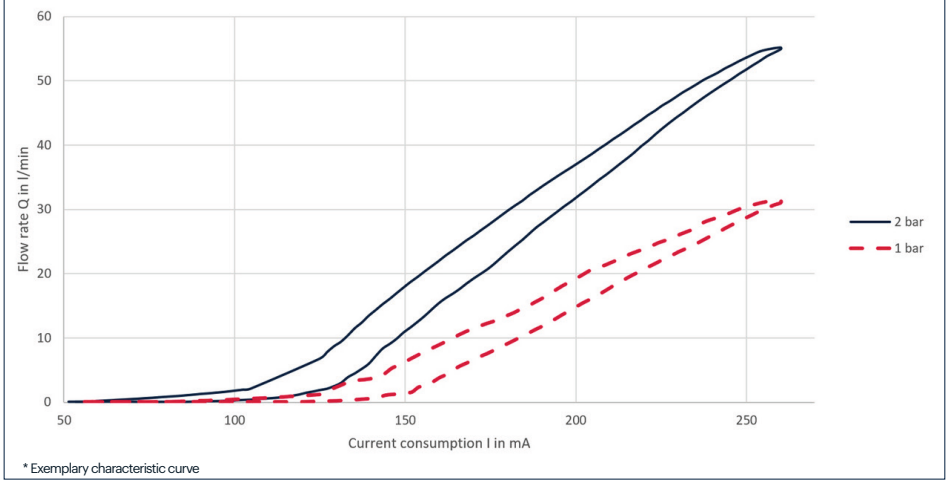
AVS Römer FPV program Characteristic curves

Characteristic flow rate curve* DN 2.0 (Air)



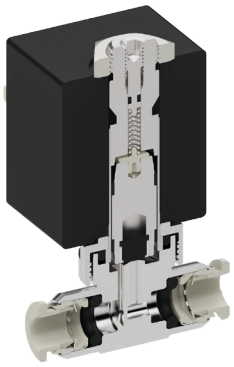
* Exemplary characteristic curve

Characteristic flow rate curve* DN 2.7 (Air)



* Exemplary characteristic curve

Proportional flow control valve type FPV 700



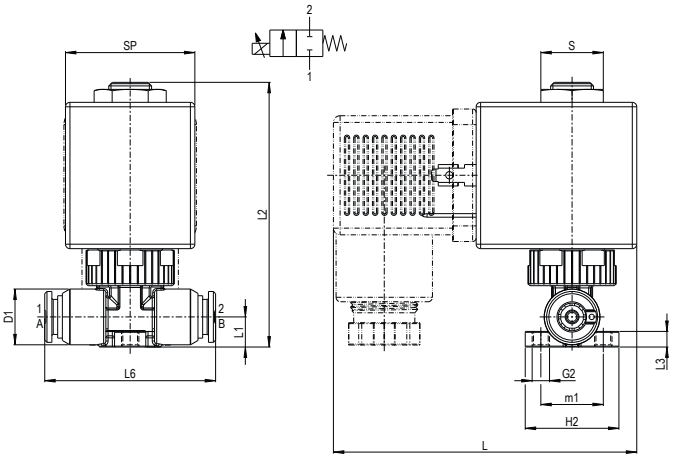
Parameters

Constructional design	Proportional valve, elastic seal
Actuation	Electric, direct-acting
Switching mode	2/2-way NC (A)
Nominal diameter	DN 1.2 – DN 2.7
Connection sizes metric	Push-in: 6
Materials	Body: Stainless steel 1.4404 | Sealing material: FPM | Release ring: PPSU natural | Retaining ring: Brass, galvanically nickel plated | Grip ring: Stainless steel 1.4310 | Other inner component material: Stainless steel and technical polymers | Union nut: Stainless steel 1.4305
Alternative materials	Sealing: EPDM
Medium	Gases or liquids which do not corrode the materials specified.
Medium temperature	0 °C – 140 °C
Ambient temperature	0 °C – 60 °C
Medium viscosity	Up to approx. 20 mm²/s
Pressure range	0.95–16 bar
Duty cycle	100%
Elektrische Leistung	ca. 5.5 W
Hysteresis	<5% F.S.
Reproducibility	<1% F.S.
Response sensitivity	<1% F.S.
Operational voltage	0 V – 24 V
Maximum current of coil	260 mA
PWM frequency	600–800 Hz
Price group	640
Special versions	Further variants on request

Proportional flow control valve type FPV 700

Function: „A" normally closed





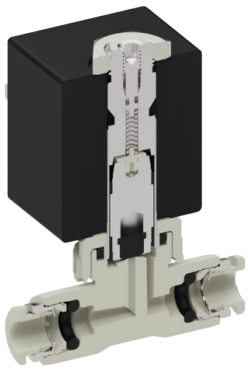
Metrics

A	B	D1 mm	L mm	L1 mm	L2 mm	L3 mm	L6 mm	m1 mm	Länge SP mm	H2 mm	S mm
6 mm	6 mm	12.5	64.4	6.8	59.3	3.5	38.3	14.0	30	21.0	14.0

Parameters

DN	A	B	Kv value water m3/h	QNn value air	PN	Operating pressure	Current type	Type	Order No.
1.2	6 mm	6 mm	0.04 m³/h	51 l/min	8	-0.95–8 bar	DC	FPV-713X4M-A12-6FF-024/=-PP0	660131
1.5	6 mm	6 mm	0.06 m³/h	74 l/min	6	-0.95–6 bar	DC	FPV-713X4M-A15-6FF-024/=-PP0	660133
2.0	6 mm	6 mm	0.1 m³/h	131 l/min	3	-0.95–3 bar	DC	FPV-713X4M-A20-6FF-024/=-PP0	660135
2.7	6 mm	6 mm	0.14 m³/h	174 l/min	2	-0.95–2 bar	DC	FPV-713X4M-A27-6FF-024/=-PP0	660144

Proportional flow control valve type FPV 800



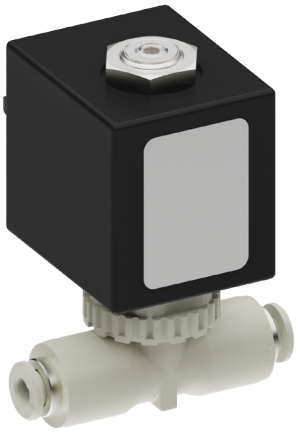
Parameters

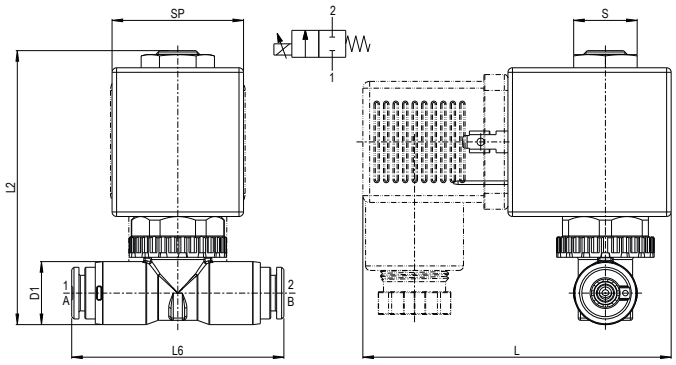
Constructional design	Proportional valve, elastic seal
Actuation	Electric, direct-acting
Switching mode	2/2-way NC (A)
Nominal diameter	DN 0.8 – DN 2.7
Connection sizes metric	Push-in: 4 & 6
Materials	Body: PPSU natural | Sealing material: FPM | Release ring: PPSU natural | Retaining ring: Brass, galvanically nickel plated | Grip ring: Stainless steel 1.4310 | Other inner component material: Stainless steel and technical polymers | Union nut: PPSU natural
Alternative materials	Sealing: EPDM
Medium	Gases or liquids which do not corrode the materials specified.
Medium temperature	0 °C – 130 °C
Ambient temperature	0 °C – 60 °C
Medium viscosity	Up to approx. 20 mm²/s
Pressure range	-0.95–12 bar
Duty cycle	100%
Elektrische Leistung	approx. 5.5 W
Hysteresis	<5% F.S.
Reproducibility	<1% F.S.
Response sensitivity	<1% F.S.
Operational voltage	0 V – 24 V
Maximum current of coil	260 mA
PWM frequency	600–800 Hz
Price group	640
Special versions	Further variants on request
Note PPSU	PPSU should not be used in contact with aromatic hydrocarbons, oxidising acids, acetone, chlorinated hydrocarbons, ethers or ketones. Also, PPSU should not be placed directly in contact with anaerobic adhesives.

RoHS COMPLIANT · REACH COMPLIANT · NSF COMPONENT

Proportional flow control valve type FPV 800

Function: „A" normally closed





Metrics

A	B	D1 mm	L mm	L2 mm	L6 mm	Länge SP mm	S mm
4 mm	4 mm	13.9	64.4	60.4	46.0	30	14.0
6 mm	6 mm	13.9	64.4	60.4	46.8	30	14.0

Parameters

DN	QNn-value air	A	B	PN	Operating pressure	Type of current	Type of current	Order No.
0.8	27 l/min	4 mm	4 mm	12	-0.95–12 bar	DC	FPV-813P3-A08-4FF-024/=-PP0	660076
0.8	27 l/min	6 mm	6 mm	12	-0.95–12 bar	DC	FPV-813P3-A08-6FF-024/=-PP0	660077
1.2	48 l/min	4 mm	4 mm	8	-0.95–8 bar	DC	FPV-813P3-A12-4FF-024/=-PP0	660060
1.2	48 l/min	6 mm	6 mm	8	-0.95–8 bar	DC	FPV-813P3-A12-6FF-024/=-PP0	660061
1.5	74 l/min	4 mm	4 mm	6	-0.95–6 bar	DC	FPV-813P3-A15-4FF-024/=-PP0	660062
1.5	74 l/min	6 mm	6 mm	6	-0.95–6 bar	DC	FPV-813P3-A15-6FF-024/=-PP0	660063
2	115 l/min	4 mm	4 mm	3	-0.95–3 bar	DC	FPV-813P3-A20-4FF-024/=-PP0	660064
2	115 l/min	6 mm	6 mm	3	-0.95–3 bar	DC	FPV-813P3-A20-6FF-024/=-PP0	660065
2.7	159 l/min	6 mm	6 mm	2	-0.95–2 bar	DC	FPV-813P3-A27-6FF-024/=-PP0	660074

Accessories

Product image	Product name	Type	Order No.
	Mounting clip	MTC-1-P-D14P3	258485