



Auto Valve VF-11-1002A

High Pressure Valve

AUTO VALVE VF-11 series

Developed for high pressure, high speed switching and long seal life, this automatic valve model VF-11 offers reliability and performance with minimum maintenance.

FEATURES

- Maximum pressure of 40MPa to 83MPa
- Fast switching
- Average PEEK seal life of 30000 cycles
- Average ceramic seal life of 100000 cycles
- Detachable valvehead for easy maintenance

Model No.	VF-11
Actuation	Direct Drive by Stepmotor
Manual Control	Front panel keys
Remote Input	Level Logic: Position change (swing only) / Pulse Logic: Position change (swing and rotary), Direct position change, Home position reset, CPU reset
Remote Output	Position output, Error signal
Voltage	AC100~240V 50•60Hz
Dimensions (mm)	100(H) x 66(W) x 285(D) (Case dimensions only)
Weight	Appr. 2.2kg

* The specifications of the product may be altered without prior notice.

* The photos and illustrations in the catalog may be different from the product shown in catalog due to upgrading.

*1 The data is based on FLOM valve testing standard. The data is available upon request.

* For OEM and custom-designed products, contact FLOM at the address shown at the back cover of this catalog.

■ Ceramic Valvehead

Path Position	Part Number	Maximum Pressure	Wetted Material	Path Diameter	Thread Size	Tube OD
	VF-11-1006	83MPa (12000psi)	S.Steel, PEEK, Ceramic	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1001	60MPa (8700psi)	PEEK, Ceramic	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1019	83MPa (12000psi)	S.Steel, PEEK, Ceramic	0.25mm (0.01")	No.10-32UNF	1/16"
	VF-11-1020	60MPa (8700psi)	PEEK, Ceramic	0.25mm (0.01")	No.10-32UNF	1/16"

■ Stainless Steel / PEEK Valvehead

Path Position	Part Number	Maximum Pressure	Wetted Material	Path Diameter	Thread Size	Tube OD
	VF-11-1002	40MPa (5800psi)	S.Steel, PEEK	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1005	40MPa (5800psi)	PEEK (Complete PEEK Stator)	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1003	40MPa (5800psi)	PEEK (PEEK Stator w/S.Steel Exterior)	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1036	40MPa (5800psi)	S.Steel, PEEK	0.25mm (0.01")	No.10-32UNF	1/16"
	VF-11-1037	40MPa (5800psi)	PEEK (PEEK Stator w/S.Steel Exterior)	0.25mm (0.01")	No.10-32UNF	1/16"
	VF-11-1013	40MPa (5800psi)	S.Steel, PEEK	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1015	40MPa (5800psi)	PEEK (Complete PEEK Stator)	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1014	40MPa (5800psi)	PEEK (PEEK Stator w/S.Steel Exterior)	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1038	40MPa (5800psi)	S.Steel, PEEK	0.25mm (0.01")	No.10-32UNF	1/16"
	VF-11-1039	40MPa (5800psi)	PEEK (PEEK Stator w/S.Steel Exterior)	0.25mm (0.01")	No.10-32UNF	1/16"
	VF-11-1010	40MPa (5800psi)	S.Steel, PEEK	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1012	40MPa (5800psi)	PEEK (Complete PEEK Stator)	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1011	40MPa (5800psi)	PEEK (PEEK Stator w/S.Steel Exterior)	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1007	40MPa (5800psi)	S.Steel, PEEK	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1009	40MPa (5800psi)	PEEK (Complete PEEK Stator)	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1008	40MPa (5800psi)	PEEK (PEEK Stator w/S.Steel Exterior)	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1044	40MPa (5800psi)	S.Steel, PEEK	0.25mm (0.01")	No.10-32UNF	1/16"
	VF-11-1045	40MPa (5800psi)	PEEK (PEEK Stator w/S.Steel Exterior)	0.25mm (0.01")	No.10-32UNF	1/16"
	VF-11-1016	40MPa (5800psi)	S.Steel, PEEK	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1018	40MPa (5800psi)	PEEK (Complete PEEK Stator)	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1017	40MPa (5800psi)	PEEK (PEEK Stator w/S.Steel Exterior)	0.4mm (0.016")	No.10-32UNF	1/16"
	VF-11-1046	40MPa (5800psi)	S.Steel, PEEK	0.25mm (0.01")	No.10-32UNF	1/16"
	VF-11-1047	40MPa (5800psi)	PEEK (PEEK Stator w/S.Steel Exterior)	0.25mm (0.01")	No.10-32UNF	1/16"



Valve Unit 401-108; 401-03

High Pressure Valve

VALVE UNIT 400 series

The standard FLOM automatic valves for all HPLC applications. Designed for simple key operations. Remote control terminal available.

FEATURES





- Selectable from over 200 valve types
- Custom-designed valves possible for small purchase quantity
- Selector valves for column switching
- Different path diameters available for micro and preparative applications (Minimum diameter of 0.1mm)
- Wetted parts of special materials available upon request

Model No.	401
Actuation	Direct Drive by Stepmotor
Manual Input	Front panel keys
Remote Input	Level Logic: Position change (swing only) / Pulse Logic: Position change (swing and rotary), Direct position change, Home position reset, CPU reset
Remote Output	Position output, Error signal
Power Consumption	AC100~240V 50•60Hz
Dimensions (mm)	144(H) x 79(W) x 285(D)
Weight	2.3kg

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Path Position	Part Number	Maximum Pressure	Wetted Material	Path Diameter	Thread Size	Tube OD
	401-65	35MPa (5000psi)	SUS, PEEK	0.6mm (0.023")	No.10-32UNF	1/16"
	401-66	20MPa (2900psi)	PEEK, Ceramic	0.6mm (0.023")	No.10-32UNF	1/16"
	401-68	10MPa (2900psi)	SUS, PEEK	2.0mm (0.08")	M8	1/8", 3.0mm
	401-76	5MPa (1450psi)	PEEK	2.0mm (0.08")	M8	1/8", 3.0mm
	401-213	35MPa (5000psi)	SUS, PEEK	0.6mm (0.023")	No.10-32UNF	1/16"
	401-140	20MPa (2900psi)	PEEK	0.6mm (0.023")	No.10-32UNF	1/16"
	401-120	20MPa (2900psi)	SUS, PEEK	0.6mm (0.023")	No.10-32UNF	1/16"
	401-104	20MPa (2900psi)	PEEK	0.6mm (0.023")	No.10-32UNF	1/16"
	401-80	5MPa (725psi)	SUS, PEEK	0.8mm (0.03")	No.10-32UNF	1/16"
	401-137	5MPa (725psi)	SUS, PEEK	1.4mm (0.055")	M8	1/8", 3.0mm
	401-138	5MPa (725psi)	PEEK	1.4mm (0.055")	M8	1/8", 3.0mm
	401-121	10MPa (725psi)	SUS, PEEK	0.6mm (0.023")	No.10-32UNF	1/16"
	401-100	10MPa (725psi)	PEEK	0.6mm (0.023")	No.10-32UNF	1/16"
	401-67	35MPa (5000psi)	SUS, PEEK	0.8mm (0.03")	No.10-32UNF	1/16"
	401-74	15MPa (1450psi)	PEEK	0.8mm (0.03")	No.10-32UNF	1/16"
	401-69	5MPa (2175psi)	SUS, PEEK	2.0mm (0.08")	M8	1/8", 3.0mm
	401-77	5MPa (725psi)	PEEK	2.0mm (0.08")	M8	1/8", 3.0mm
	401-249	20MPa (2900psi)	SUS, PEEK	0.6mm (0.023")	No.10-32UNF	1/16"
	401-141	20MPa (2900psi)	PEEK	0.8mm (0.03")	No.10-32UNF	1/16"
	401-108	15MPa (2175psi)	SUS, PEEK	0.6mm (0.023")	No.10-32UNF	1/16"
	401-117	8MPa (1200psi)	PEEK	0.6mm (0.023")	No.10-32UNF	1/16"
	401-238	10MPa (1450psi)	PEEK	0.5mm (0.02")	No.10-32UNF	1/16"

● Contact FLOM for valve types shown below.

			
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Manual Injector VI-11

Manual Injector VI series

Designed for improved durability and performance, FLOM manual injector offers long seal life and precise sample injection. All models equipped with built-in injection marker. PEEK injector available.

FEATURES

- Maximum pressure of 35MPa
- FLOM original handle for easy OEM customization
- Non-metal PEEK injector with re-reinforced exterior
- Built-in injection marker with PTFE-coated cable
- Replacement parts available

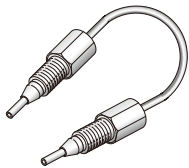
Model No.	VI-11	VI-12
Max. Pressure	35MPa	35MPa
Wetted Materials	SS316, PEEK, Ceramic	Ceramic, PEEK
Tube OD	1/16"	1/16"
Path Diameter	0.5mm (0.02")	0.5mm (0.02")
Port Thread Size	No.10-32UNF	No.10-32UNF
Sample Loop	20 μ L (SS316, OD1/16")	20 μ L (PEEK, 1/16")
Injection Marker	Built-in injection marker w/1.5m cable (coated w/PTFE)	Built-in injection marker w/1.5m cable (coated w/PTFE)

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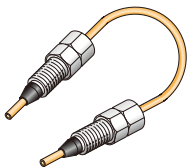
● 20 μ L Sample Loop



● Sample Loop (1/16" SS316)

P/N	Sample Volume
7101	10 μ L
7102	20 μ L
7103	50 μ L
7104	100 μ L
7105	200 μ L
7106	500 μ L
7107	1mL

● 20 μ L Sample Loop



● Sample Loop (1/16" PEEK)

P/N	Sample Volume
7201	10 μ L
7202	20 μ L
7203	50 μ L
7204	100 μ L
7205	200 μ L
7206	500 μ L
7207	1mL

4207

4517

● Syringe Needle

P/N	Description
4207	SUS 22G (0.78mm) ID 0.5mm
4517	PEEK 22G (0.7mm) ID 0.3mm

● Injector Panel

P/N	Description
4501	Attachable to Intelligent Pump 301

9502

9501

9601

● VI-11 Fittings (10 pieces)

P/N	Fittings
9502	1/16 Fitting L
9501	1/16 Fitting S
9601	1/16 Ferrule

9302

9301

9401

● VI-12 Fittings (10 pieces)

P/N	Fittings
9302	1/16 Double Lock Fitting L
9301	1/16 Double Lock Fitting S
9401	1/16 Double Lock Ferrule

4401

4402

4403

4402

● VI-11 Replacement Seals

P/N	Fittings
4401	Stator (SS316)
4402	Stator Face Packing (PEEK)
4403	Stator Face (Ceramic)
4022	Rotor Seal (PEEK)

4102

4103

4022

● VI-12 Replacement Seals

P/N	Fittings
4102	Stator (PEEK)
4103	Stator Face (Ceramic)
4022	Rotor Seal (PEEK)



Manual Valve V05; V17

Manual Switching Valve V series

Simple HPLC manual switching valves for HPLC applications.

FEATURES

- Maximum pressure of 35MPa
- FLOM original handle for easy OEM customization
- Non-metal PEEK valve with re-enforced exterior
- Replacement parts available

Model No.	V04	V122	V05	V17
Switching Pattern	4 Port 2 Position		6 Port 2 Position	
Max. Pressure	35MPa	5MPa	35MPa	20MPa
Wetted Materials	SS316	SS316, PEEK	SS316	SS316, PEEK
Tube OD	1/16"	1/16", 2.0mm, 3.0mm, 1/8"	1/16"	1/16"
Path Diameter	0.5mm (0.02")	1.0mm (0.04")	0.5mm (0.02")	0.5mm (0.02")

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Manual Valve V200; V239

Mini Valve

The smallest manual valves with the maximum pressure rating of 20MPa.

FEATURES

- Maximum pressure of 20MPa (1MPa for V239)
- Attachable to panels
- Replacement parts available

Model No.	V200	V201	V204	V239
Switching Pattern	6 Port 2 Position	Dual 3 Port 2 Position	3 Port 2 Position	
Max. Pressure	20MPa	20MPa	20MPa	1MPa
Wetted Materials	SS316, PEEK	SS316, PEEK	SS316, PEEK	SS316, PEEK
Tube OD	1/16"	1/16"	1/16"	1/16", 2.0mm, 3.0mm, 1/8"
Path Diameter	0.6mm (0.024")	0.6mm (0.024")	0.8mm (0.03")	1.0mm (0.04")

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Auto Valve VF-11A-1006

AUTO VALVE VF-11A series

FEATURES

- Maximum pressure of 40–80MPa
- Fast switching speed for minimizing pressure shock
- Long-lasting rotor seal
- Detachable valvehead for easy maintenance
- Control PCB available upon request

Model No.	VF-11A OEM module
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Refer to page 7 for specifications



Auto Valve 411-10

AUTO VALVE 411 series

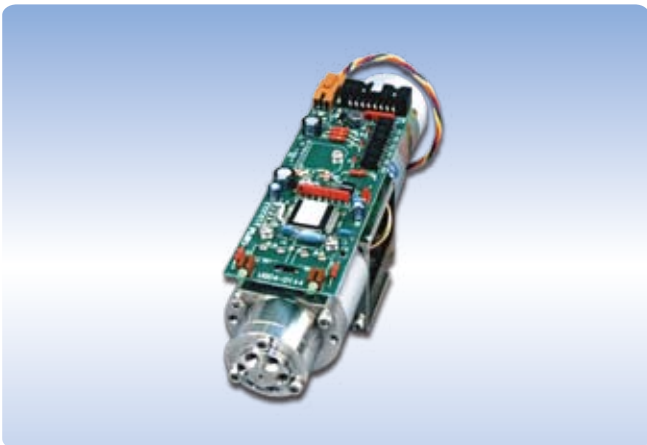
FEATURES

- Large flow path valves available for preparative applications
- Over 200 valveheads available

Model No.	Auto Valve 411 OEM module
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Refer to page 8 for specifications



Clutch Valve 412-90

CLUTCH VALVE 412 series

FEATURES

- Controllable by pulse or level logic signal
- Compact design for a limited space

Model No.	Clutch Valve 412 OEM module
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For specifications, contact FLOM Customer Service