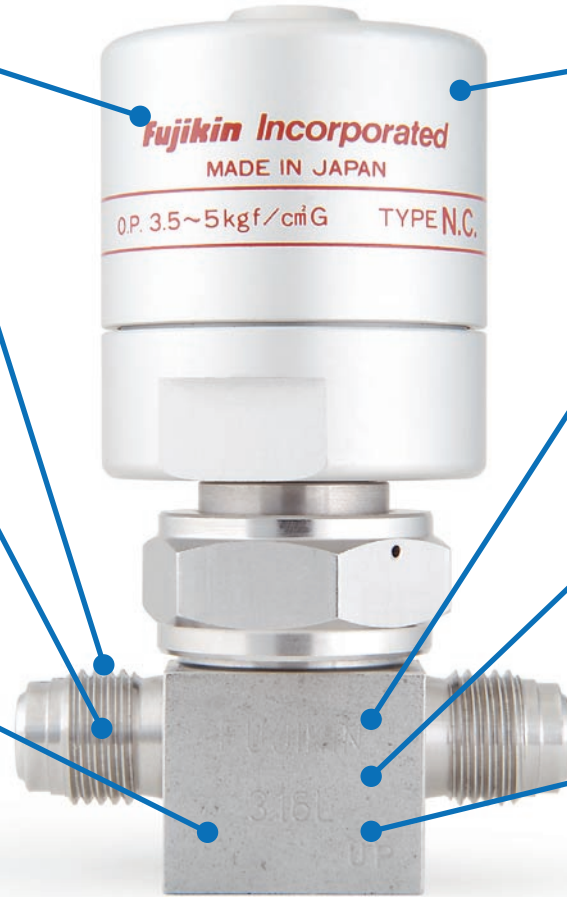


Mega-One LA

Low-Pressure, Pneumatically-Actuated Valves



Color Text Marking

Color text printing on the actuator allows for quick differentiation between normally-open (blue) or normally-closed (red) valves.

End-Connections

Available in tube-stub, UJR (VCR® compatible), UPG, F900 compression, and IGS surface-mount. This allows installation flexibility – both in new gas lines as well as in existing lines.

Various Internal Options

Internal surfaces undergo an EP-Treatment as standard. UP Treatment, chrome oxide passivation, and SS316 double-melt bodies are also optionally available

Minimal Internal Volume

1.48 cc total internal volume for the male UJR version ensures excellent gas displacement characteristics. This is less than half the internal volume of competitive valves.

Unique Rotating Actuator

The actuator features a unique rotating mechanism, allowing for actuation pressure to be supplied from any direction for both normally-open and normally-closed valves.

Alloy Diaphragm

Nickel-cobalt alloy diaphragm minimizes particle generation, and provides a durable shut-off surface against the seat.

PCTFE Seat

PCTFE is standard with polyimide and PFA as optional. The seat is fixed to ensure robust shut-off performance and minimize particle generation.

Stringent Leakage Standards

Seat and external leakage successfully test at 5×10^{-11} acc/sec – which is two orders of magnitude tighter than industry standards.

General Specifications

Available Sizes	1/4", 3/8", 1/2" (tube-stub)
Surface Finish	7 Ra average, 10 Ra maximum
Tested Durability	Over 4 million cycles

Operating Specifications

Max Operating Pressure	145 psi (1 MPa)
Min Operating Pressure	Vacuum
Temperature Range	14 °F ~ 176 °F (-10 °C ~ 80 °C)

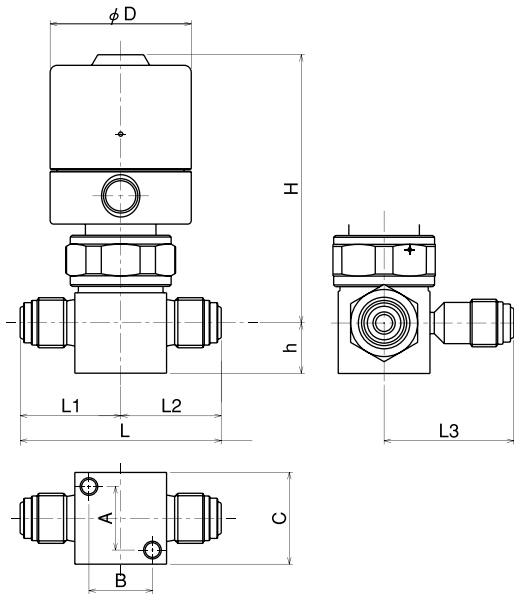
Materials of Construction

Body	SS 316L
Diaphragm	Nickel-cobalt alloy
Standard Seat	PCTFE
Optional Seat	Polyimide, PFA
Actuator	Aluminum alloy

Functional Performance

Maximum Cv	0.25 (1/4") / 0.60 (3/8" & 1/2")
Leakage Across Seat (Design)	1×10^{-10} scc/sec He
Leakage Across Seat (Tested)	$< 5 \times 10^{-11}$ scc/sec He
Inboard Leakage (Design)	2×10^{-10} scc/sec He
Inboard Leakage (Tested)	$< 5 \times 10^{-11}$ scc/sec He

Dimensions



Part Number	L	L1	L2	L3	h	H	ϕD	A	B	C
FPR-UDDF-71-6.35-NL	57.0				14.3	75.0	40	18.0	18.0	26
FPR-UDDF-71-9.52-NL	76.2				11.1	87.5 (82.0)	50	20.2	20.2	35
FPR-UDDF-71-6.35-UG	46.0				14.3	75.0	40	18.0	18.0	26
FPR-UDDF-71-9.52-UG	57.0				11.1	87.5 (82.0)	50	20.2	20.2	35
FPR-UDDF-71-6.35-UG-2	71.0				14.3	70.0	40	18.0	18.0	26
FPR-UDDF-71-9.52-UG-2	57.0				11.1	87.5 (82.0)	50	20.2	20.2	35
FPR-UDDF-91-6.35-NL	63.5				14.3	70.0	40	18.0	18.0	26
FPR-UDDF-91-9.52-NL	80.0				12.7	87.5 (82.0)	50	20.2	20.2	35
FPR-UDDF-91-12.7-NL	85.0				12.7	87.5 (82.0)	50	20.2	20.2	35
FPR-UDDF-71-6.35-2-NL	70.6				14.3	75.0	40	18.0	18.0	26
FPR-UDDF-71-9.52-2-NL	83.0				12.7	87.5 (82.0)	50	20.2	20.2	35
FPR-UDDFTB-71-6.35-NL	65.7	31.0	34.7	38.1	14.3	76.0	40	18.0	18.0	26
FPR-UDDFTB-71-9.52-NL	79.2	37.7	41.5	43.1	12.7	87.5 (82.0)	50	20.2	20.2	35
FPR-UDDFTB-71-9.52x6.35-NL	69.9	31.8	38.1	38.1	12.7	80.5	40	18.0	18.0	26

All dimensions in millimeters.
Numbers in (brackets) indicate dimensions for normally-closed valves.

Part Number Designation

FPR - UDDF TB - 51 LS - 6.35 BW - NL - PI - UP

Operation

- FP** Normally Open
- FPR** Normally Closed

Series

- UDDF** Stainless Steel Direct Diaphragm Valve

Valve Configuration

- (Blank)** 2-Way
- TB** 3-Port
- CL** 2-Way, Corner Left

End-Connections

- 2** IGS Surface-Mount
- 5** Tube-Stub
- 7** UJR / UPG
- 9** F900 Compression

Max Operating Pressure

- 1** 1 MPa (145 psi)

Options

- (Blank)** None
- RS2** Proximity Sensor
- LS** Limit Switch

Body & Internal Finish Options

- (Blank)** EP Treatment
- UP** UP Treatment
- PS** Cr₂O₃ Treatment
- FD** Fluorine Passivation
- 316LP** SS Double-Melt Body Material

Seat Material

- (Blank)** PCTFE
- PI** Polyimide
- PA** PFA

Diaphragm Material

- NL** Nickel-Cobalt Alloy

End-Connection Pattern

- (Blank)** Male UJR Both Ends
- 2** Female UJR Both Ends
- 3** Male UJR Inlet
Female UJR Outlet
- UG** UPG Both Ends
- BW** Butt Weld Both Ends

End-Connection Size

- 6.35** 1/4"
- 9.52** 3/8"
- 12.7** 1/2"

Fujikin

Fujikin Headquarters
Kita-Hankyu Building
1-4-8 Shibata, Kita-ku
Osaka, 530
Japan
Tel 066-372-7141
Fax 066-375-0697

Fujikin Deutschland
Leopold Straße 9
D-40211 Düsseldorf
Germany
Tel 49-211-350-458
Fax 49-211-363-990

Fujikin of America, Inc.
4677 Old Ironsides Dr
Suite 100
Santa Clara, CA 95054
Tel 408-980-8269
Fax 408-980-0572

Fujikin of America, Inc.
2028 E Ben White Blvd
Suite 320
Austin, TX 78741
Tel 512-912-9095
Fax 512-912-8095

Fujikin of America, Inc.
4 Alsan Way
Little Ferry, NJ 07643
Tel 201-641-1119
Fax 201-641-1137

Fujikin of America, Inc.
121 SW Salmon Street
Suite 1100
Portland, OR 97204
Tel 503-471-1340
Fax 503-471-1341