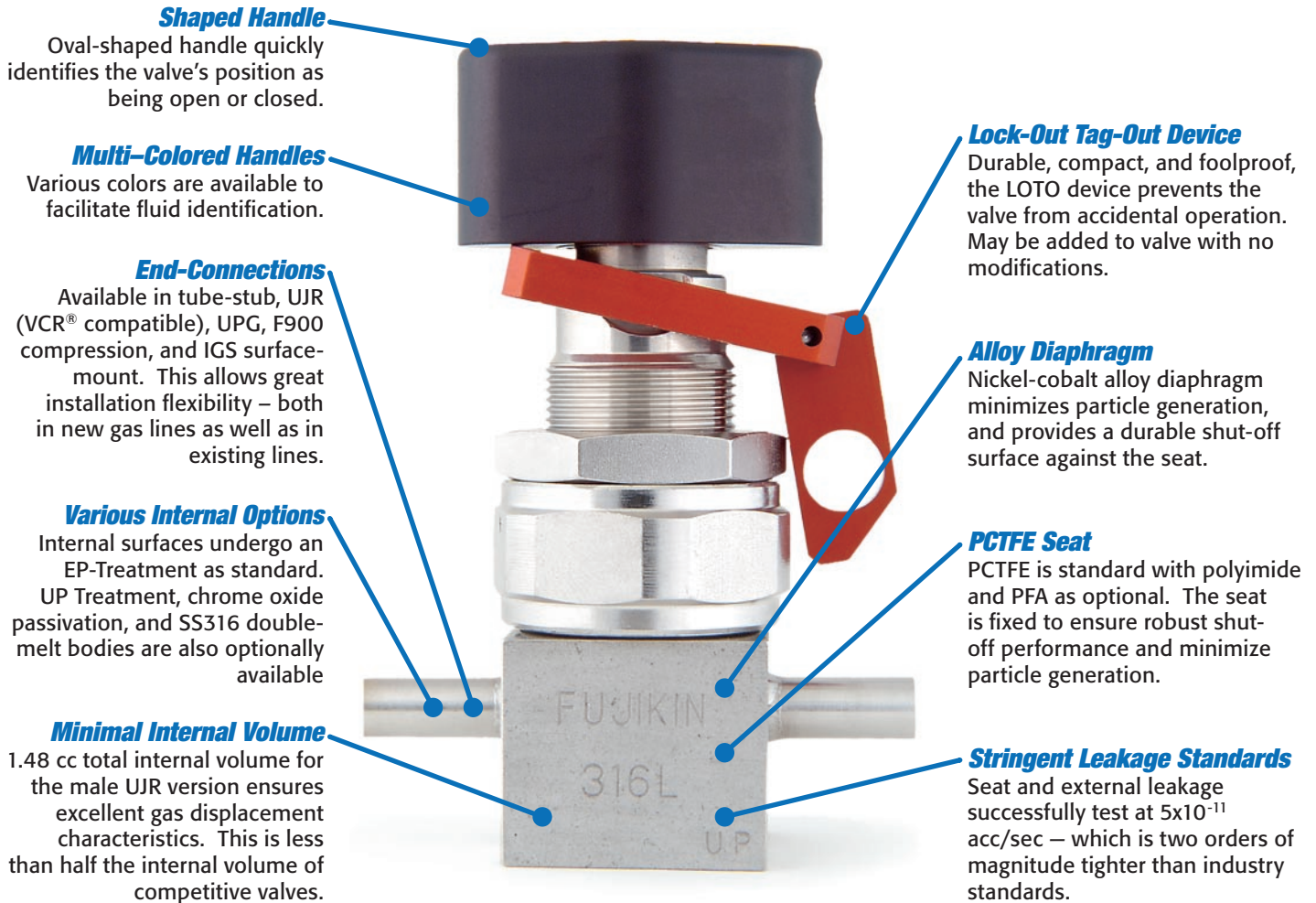


Mega-One LS

Low-Pressure, Snap-Acting Manual Valves



Shaped Handle

Oval-shaped handle quickly identifies the valve's position as being open or closed.

Multi-Colored Handles

Various colors are available to facilitate fluid identification.

End-Connections

Available in tube-stub, UJR (VCR® compatible), UPG, F900 compression, and IGS surface-mount. This allows great 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.

Lock-Out Tag-Out Device

Durable, compact, and foolproof, the LOTO device prevents the valve from accidental operation. May be added to valve with no modifications.

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 20,000 cycles

Operating Specifications

Max Operating Pressure	145 psi (1 MPa) or 2,350 psi (16.2 MPa)
Min Operating Pressure	Vacuum
Temperature Range	14 °F ~ 176 °F (-10 °C ~ 80 °C)

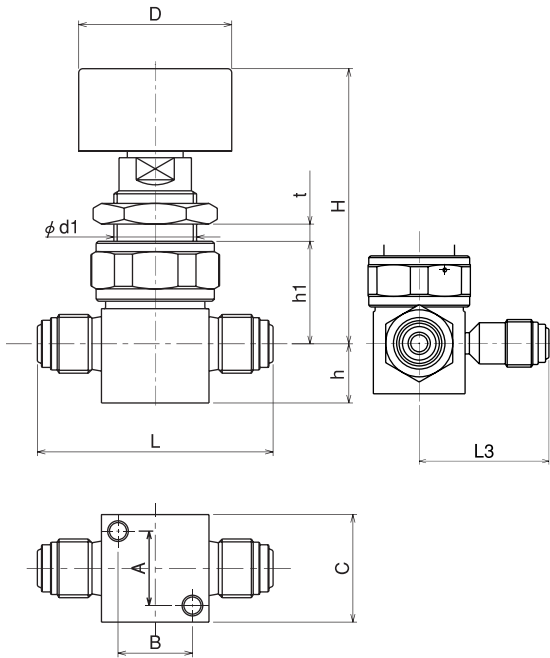
Materials of Construction

Body	SS 316L
Diaphragm	Nickel-cobalt alloy
Standard Seat	PCTFE
Optional Seat	Polyimide, PFA
Handle	Nylon 6

Functional Performance

Maximum Cv	0.25 (1/4") / 0.6 (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	h1	Ød1	t	D	A	B	C
FUDDFL-71-6.35-NL	57.0				14.3	67.5	23.5	20.5	7	37	18.0	18.0	26
FUDDFL-71-9.52-NL	76.2				11.1	88.8	31.5	24.5	10	50	20.2	20.2	35
FUDDFL-71-6.35-UG	46.0				14.3	67.5	23.5	20.5	7	37	18.0	18.0	26
FUDDFL-71-9.52-UG	57.0				11.1	87.8	31.5	24.5	10	50	20.2	20.2	35
FUDDFL-71-6.35-UG-2	71.0				14.3	67.5	23.5	20.5	7	37	18.0	18.8	26
FUDDFL-71-9.52-UG-2	86.0				12.7	87.8	31.5	24.5	10	50	20.2	20.2	35
FUDDFL-91-6.35-NL	63.5				14.3	67.5	23.5	20.5	7	37	18.0	18.0	26
FUDDFL-91-9.52-NL	80.0				12.7	88.8	31.5	24.5	10	50	20.2	20.2	35
FUDDFL-91-12.7-NL	85.0				12.7	88.8	31.5	24.5	10	50	20.2	20.2	35
FUDDFL-71-6.35-2-NL	70.6				14.3	67.5	23.5	20.5	7	37	18.0	18.0	26
FUDDFL-71-9.52-2-NL	83.0				12.7	88.8	31.5	24.5	10	50	20.2	20.2	35
FUDDFLTB-71-6.35-NL	65.7	31.0	34.7	38.1	14.3	68.5	24.5	20.5	7	37	18.0	18.0	26
FUDDFLTB-71-9.52-NL	79.2	37.7	41.5	43.1	12.7	88.8	31.5	24.5	10	50	20.2	20.2	35
FUDDFLTB-71-9.52x6.35-NL	69.9	31.8	38.1	38.1	12.7	72.0	28.0	20.5	7	37	18.0	18.0	26

All dimensions in millimeters.

Part Number Designation

FUDDFL TB - 51 - 6.35 BW - NL - PI - UP

Series

FUDDFL Quarter-Turn 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)
16 16.2 MPa (2,350 psi)

End-Connection Size

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

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
Male UJR Inlet
-3 Female UJR Outlet
UG UPG Both Ends
BW Butt Weld Both Ends

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