

Pneumatically-Actuated High Pressure Bellows Valve

Stainless Steel 16.2 MPa

The Fujikin pneumatically-actuated high-pressure bellows valve is a compact valve designed for ultra-pure, flammable, or toxic fluid lines for all types of semiconductor equipment and facilities. The Fujikin bellows valve is the most successful valve in the semiconductor industry due to its superior sealing performance, remarkable durability, compactness, ease of cleaning, and excellent purge characteristics.

Colored caps differentiate between normally-open (blue) and normally-closed (red) valves, thereby simplifying recognition.

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

No external leakage due to rugged metal gasket seal.

Uniform bellows shape promotes highly effective purging and cleaning.

Standard disk packing material is PCTFE. Polyimide disk packing material is also available.

UP treatment for wetted surfaces is optionally available.

A wide variety of end-connections are available.



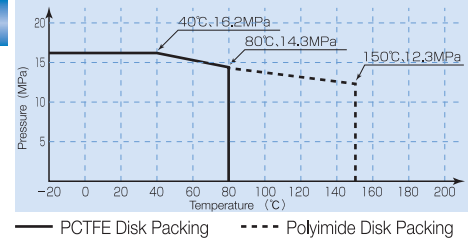
SPECIFICATIONS

Specification	Nominal Diameter	Maximum Operating Pressure	Fluid Temperature Range	Maximum Cv	Actuation Pressure	Actuator Port	End-Connections	Actuation Type
	6.35 (1/4")	16.2MPa	-10~+80°C	0.3	0.39~0.59MPa	Rc 1/8"	F900 UJR Tube Stub	Normally Closed (NC) Normally Open (NO)
	9.52 (3/8")	2,350 psi	14~176 °F		56~85 psi			

● All valves are helium leak tested. Vacuum method/results: External leakage: $< 5 \times 10^{-12}$ Pa · m³/sec. Seat leakage: $< 5 \times 10^{-12}$ Pa · m³/sec
 ● Demonstrated superior durability - over 100,000 cycles (actual test results).

Materials	Part	Material
	Body	SUS316L
	Bellows	Inconel 718
	Disk Packing	PCTFE
	Gasket	NW2201(Nickel)
	Actuator	A5056

Temperature/Pressure Rating



PART NUMBER DESIGNATION

Please use the part number designations below when placing an order.

FPR-UBF[]-716[]-6.35[]-[]-[]-[]

A	B	C	D	E	F	G	H	I	J	K
F P : Normally open F P R : Normally closed	U B F : Stainless steel bellows valve	T B : Added only for 3-port valves	7 : UJR end-connection 9 : F900 end-connection 5 : Tube Stub end-connection*	1 6 : 16.2 MPa maximum operating pressure	L S : With limit switch*	End-Connection Sizes 6.35 : 1/4" ^{OD} 9.52 : 3/8" ^{OD}	BW : Butt weld*	Blank : Male UJR on both ends 2 : Female UJR on both ends	P I : Polyimide disk packing* B R : Female UJR with Purging*	U P : UP treatment*

* Optional or made to order.

Actual shipped products may have additional designations (such as #A, #B) in the part number. These indicate production history and do not indicate a change in function or dimensions.

DIMENSIONS

Figure 1

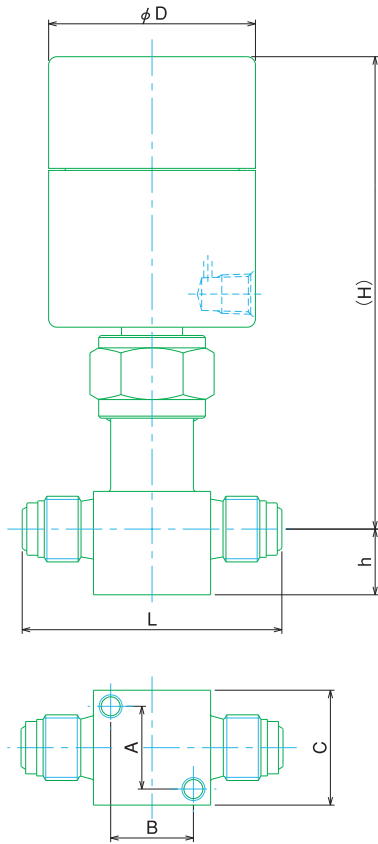


Figure 2

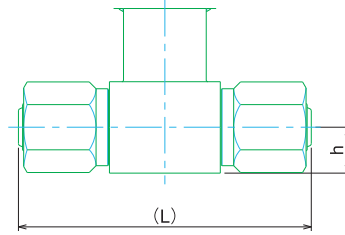


Figure 3

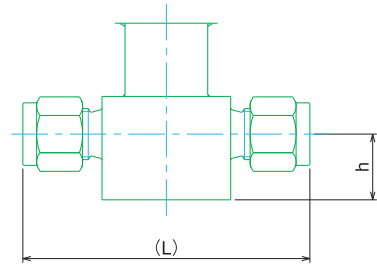


Figure 4

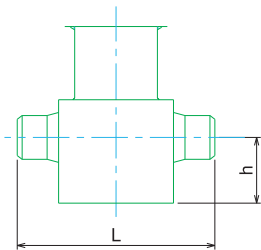
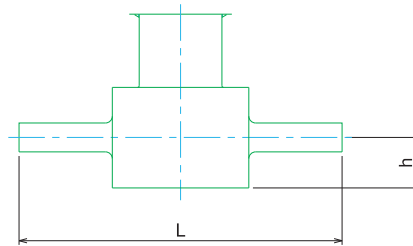


Figure 5



(Unit : mm)

Part Number	Figure	D	L	H	h	A	B	C
FP(R)-UBF-716-6.35	1	50	58.7	115 (122)	11.1	18	18	25
FP(R)-UBF-716-9.52	1	50	76.2	115 (122)	11.1	18	18	25
FP(R)-UBF-716-6.35-2	2	50	70.6	115 (122)	11.1	18	18	25
FP(R)-UBF-716-9.52-2	2	50	83	115 (122)	11.1	18	18	25
FP(R)-UBF-516-6.35	4	50	44.5	115 (122)	11.1	18	18	25
FP(R)-UBF-516-6.35BW	5	50	71	118.5(125.5)	11.1	18	18	25
FP(R)-UBF-916-6.35	3	50	62	115 (122)	11.1	18	18	25
FP(R)-UBF-916-9.52	3	50	66.5	115 (122)	11.1	18	18	25

() Brackets indicate dimensions for normally-closed valves. See Figure 1 for dimension keys not shown in other Figures.