
New Product
FINE series PURE[®]

P Mega-1 series

O. P Mega-1 series

This series of valves have been strategically developed to capture the market share in highly competitive semiconductor industry under fierce pressure for cost reduction.



Manual valve



Air operation valve

1. Specifications

1.1. Pneumatic Valves

Item	P Mega-1
Representative Part Number	FVPDF-R144LC-EC1
Maximum Pressure	1.4MPa
Operational temperature range	Fluid temperature : -10°C~80°C Ambient temperature : -10°C~80°C
Body material	F316L SS (Forging)
Actuator material	Aluminum alloy
Diaphragm material	Nickel – Cobalt alloy
Cycling durability	Φ6.35 Guaranteed : 1 million cycle (Actual test result : 4 million cycle) Φ9.52 Guaranteed : 500 k cycle (Actual test result : 2 million cycle)
Cv value	Φ6.35 : 0.3、φ9.52 : 0.65
Leak rate, guaranteed (External leak, seat leak)	Guaranteed : $\leq 5 \times 10^{-10} \text{Pa} \cdot \text{m}^3/\text{sec}$ Actual test result : $\leq 5 \times 10^{-12} \text{Pa} \cdot \text{m}^3/\text{sec}$
Surface roughness / surface treatment	$\leq \text{Ra}0.2\mu\text{m}$ (Ry0.8 μm) / Electro polished
Actuator operation pressure	0.4~0.6 MPa
Fixing	Bottom mount

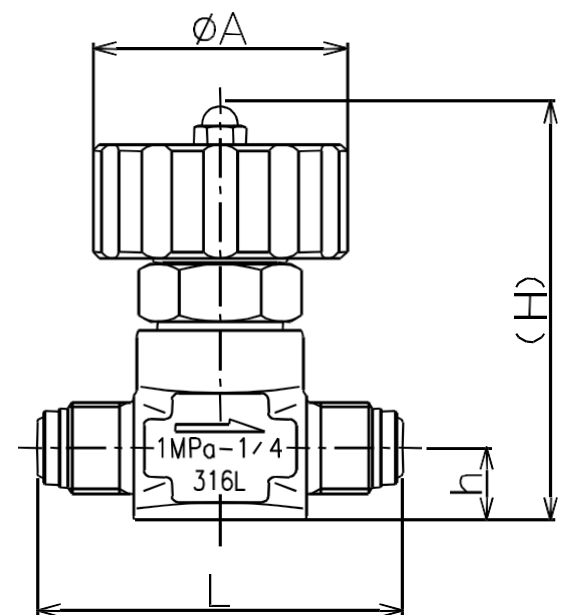
1. Specifications

1.2. Manual Valves

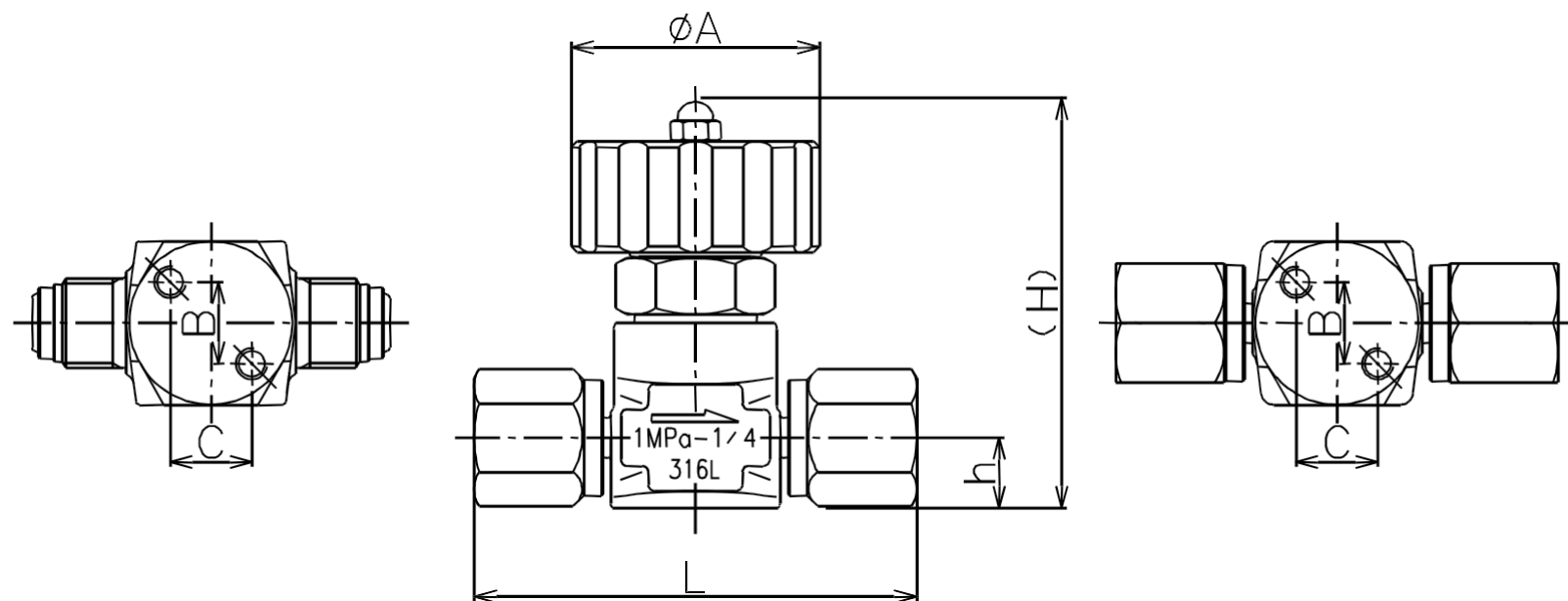
Item	P Mega-1
Representative part number	FVPDF-R144LC-EM1G
Maximum pressure	1.4MPa
Operational temperature range	Fluid temperature : -10°C~80°C Ambient temperature : -10°C~80°C
Body material	F316LSS(Forging)
Handle material	ABS + 304SS
Diaphragm material	Nickel – Cobalt alloy
Cycling durability	Guaranteed : 5000 cycle (Actual test result: 20,000 cycle)
Cvvalue	Φ6.35 : 0.3、φ9.52 : 0.65
Leak rate, guaranteed (External leak, seat leak)	Guaranteed : $\leq 5 \times 10^{-10}$ Pa · m ³ /sec Actual test result : $\leq 5 \times 10^{-12}$ Pa · m ³ /sec
Surface roughness / surface treatment	$\leq Ra0.2\mu\text{m}$ (Ry0.8 μm) / Electro polished
Fixing	Bottom mount

2. Dimensions

2.1. Manual Valve



UJR Male type

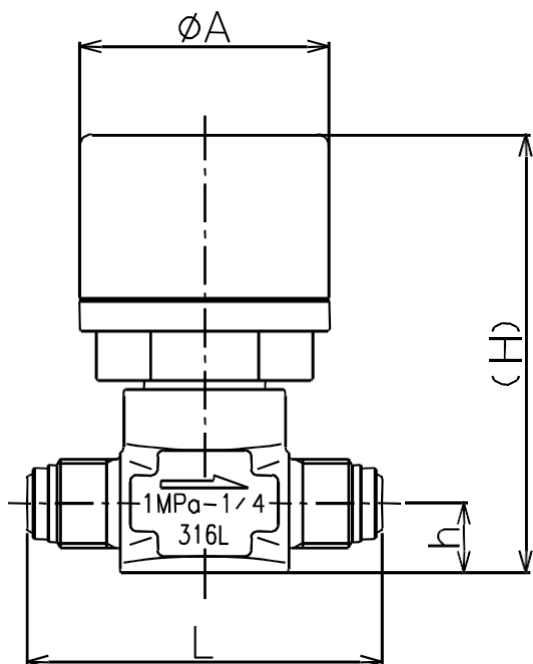


UJR Female type

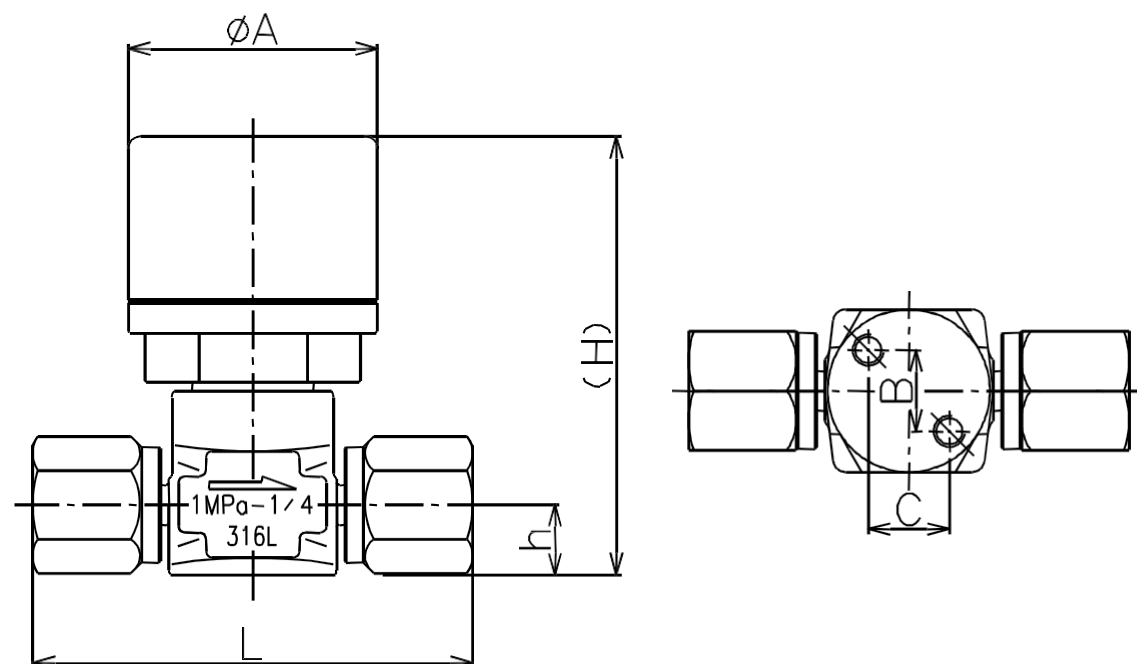
Nominal Size	Fittings	L (mm)	H (mm)	h (mm)	A (mm)	B (mm)	C (mm)	Part Number
Φ6.35	Male-Male	57	65.4	11.2	40	13	13	FVPDF-R144LC-EM1G
	Female-Female	70.6	65.4	11.2	40	13	13	FVPDF-R144LC-EM2G
Φ9.52	Male-Male	76.2	75.9	11.2	40	20.2	20.2	FVPDF-R166LC-EM1G
	Female-Female	83	75.9	11.2	40	20.2	20.2	FVPDF-R166LC-EM2G

2. Dimensions

2.2. Pneumatic Valve (Normally Closed)



UJR Male type



UJR Female type

Nominal size	Fittings	L (mm)	H (mm)	h (mm)	A (mm)	B (mm)	C (mm)	Part number
Φ6.35	Male – Male	57	70.4	11.2	40	13	13	FVPDF-R144LC-EC1
	Female – Female	70.6	70.4	11.2	40	13	13	FVPDF-R144LC-EC2
Φ9.52	Male – Male	76.2	81.8	11.2	55	20.2	20.2	FVPDF-R166LC-EC1
	Female - Female	83	81.8	11.2	55	20.2	20.2	FVPDF-R166LC-EC2

3. Part Number System

