



# SUS316 Female Threaded Needle Stop Valves

Compact General-use /  
Certified High-pressure Gas Product



**Needle Stop Valves**

- Compact & Lightweight
- Material: SUS316

**Fujikin Incorporated**

We welcome customer feedback for all of our products and services.



## Features

1. Designed to enhance safety, and manufactured under rigorous quality control standards.
2. Robust forged body and compact bonnet-less construction.
3. Needle design enhances ease of flow adjustment.
4. Packing and gland design reduce handle torque and enhance seal performance.

## Applications

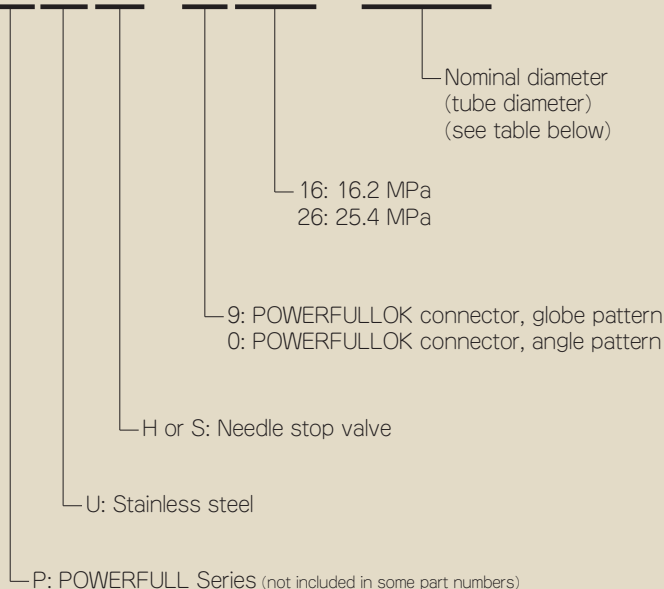
Gas lines in areas such as analysis equipment, gas systems, industrial machinery, steel plants, petroleum refineries, chemical plants, power plants, and shipyards.

## Special Requirements

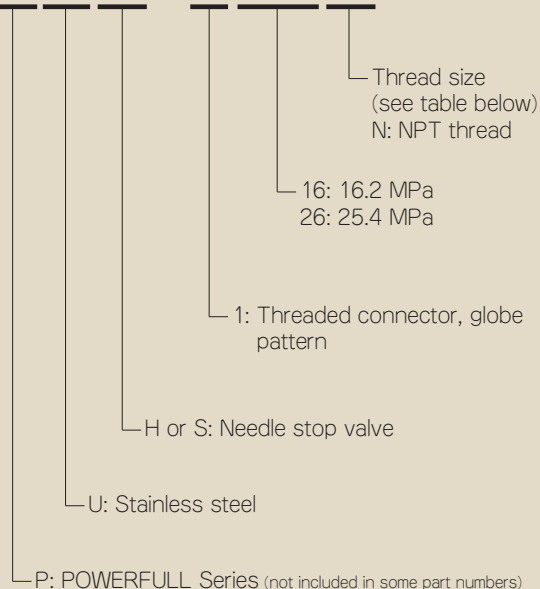
1. Product lines for ultra-pure processes are available. Contact Fujikin for more information.
2. Valves are available for completely oil-free lines, toxic gas lines, or vacuum conditions. Contact Fujikin for more information.
3. Avoid potential problems by notifying Fujikin before changing the conditions of use.

## Part Number Designation

### PUH-916-12.7-SH



### PUH-116B-SH



Nominal Diameter (tube diameter)

	Size in mm	Size in fractional inches
Nominal diameter (tube diameter)	3 = 3mm OD	
	4 = 4mm OD	3.2 = 3.2mm (1/8") OD
	6 = 6mm OD	6.35 = 6.35mm (1/4") OD
	8 = 8mm OD	9.52 = 9.52mm (3/8") OD
	10 = 10mm OD	12.7 = 12.7mm (1/2") OD
	12 = 12mm OD	

Thread size

Taper pipe thread	Designation	A	B	C	D
	JIS B02J3 (1981)	PT1/8	PT1/4	PT3/8	PT1/2
	JIS B0203 (1982)	Male thread	R1/8	R1/4	R3/8
	Female thread	Rc1/8	Rc1/4	Rc3/8	Rc1/2

Thread designation complies with JIS B0203 (1982) (ISO7/1).  
 Sizes as per JIS B0203 (1981) are shown for reference purpose.

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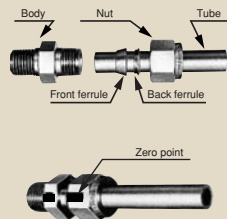
	Pressure	Connectors	Pattern	Part Number	Page
General-use Valves	16.2 MPa	POWERFULLOK × POWERFULLOK	Globe	PUH-916	4
		R thread × POWERFULLOK	Globe	PUH-916	5
		POWERFULLOK × POWERFULLOK	Angle	PUH-016	6
		R thread × POWERFULLOK	Angle	PUH-016	7
		Rc thread × Rc thread	Globe	PUH-116	8
General-use / Certified High-pressure Gas Valves	25.4 MPa	POWERFULLOK × POWERFULLOK	Globe	PUS-926	10
		Rc thread × Rc thread	Globe	US-126	11
General-use / Certified High-pressure Gas Valves	35.3 MPa	POWERFULLOK × POWERFULLOK	Globe	PUS-936	12
		Rc thread × Rc thread	Globe	US-136	13
Order Form for Valves with High-pressure Gas Certification Specifications					14

## Installation Guide

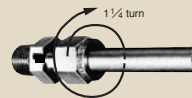
### 1. Before Installation

1. Use an austenitic stainless steel tube with a seamless bright anneal finish, a hardness of Hv200 or less, and a tolerance within  $\pm 0.1$  mm of the tube OD.
2. There should be no visible scratches 30mm from either end of the tube. Remove any foreign matter.
3. Avoid abrading the tube.
4. Before assembling the fittings, cut the tubes to the required length.
5. Use a tube cutter to cut the tube. If it is necessary to use a different method, be sure to cut the tube at a right angle, and then remove burrs carefully from the outer circumference by filing at a 45° angle to the centerline.

### 2. Assembly



1. Ensure that the parts are installed in the order shown in the picture (left).
2. Insert the tube completely until it makes contact with the body. Hand-tighten the nut until it cannot be tightened further. After manually tightening the nut, mark both the body and the nut. This point is the zero point.



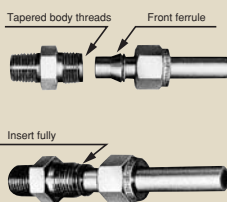
3. With a wrench, tighten the nut 1/4 turns from the zero point. Assembly is then complete.

**Smaller Fittings, Plugs, and Port Connectors**  
Fittings with nominal diameters of 4mm, 3.2mm (1/8" OD) or smaller: First tighten the nuts manually, and then use a wrench to tighten them a further 3/4 turn only. Assembly is then complete.

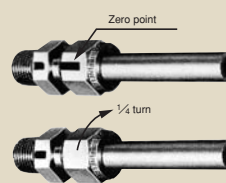
### 3. Precautions:

1. For tightening, use the appropriate wrench.
2. Before tightening the fitting, ensure that its body has been secured using a wrench. Never hold the nut in place while attempting to tighten the body.
3. Before adjusting the orientation (installation angle) of a fitting that has already been tightened into place, be sure to loosen the nut sufficiently.
4. Before tightening the fitting, ensure that the tube and the fitting are properly aligned.
5. If the fitting (or any of its components) are dropped accidentally, ensure that the parts have no scratches or foreign matter on them before use.
6. If tightening the fitting is difficult, first attach the front and back ferrules to the tube. Then, insert the front ferrule into the body until it reaches the body threads, and manually tighten the nut.

### 4. Reassembly



1. Before reassembling the parts, ensure that there is no foreign matter on the body threads or the front ferrules.
2. Insert the front ferrule until it reaches the body threads, and then manually tighten the nut.



This is the zero point.

3. With a wrench, tighten the nut approximately 1/4 turn. Assembly is then complete.

Note: After reassembly, the body and the nut should return to their original position, or be tightened slightly further.

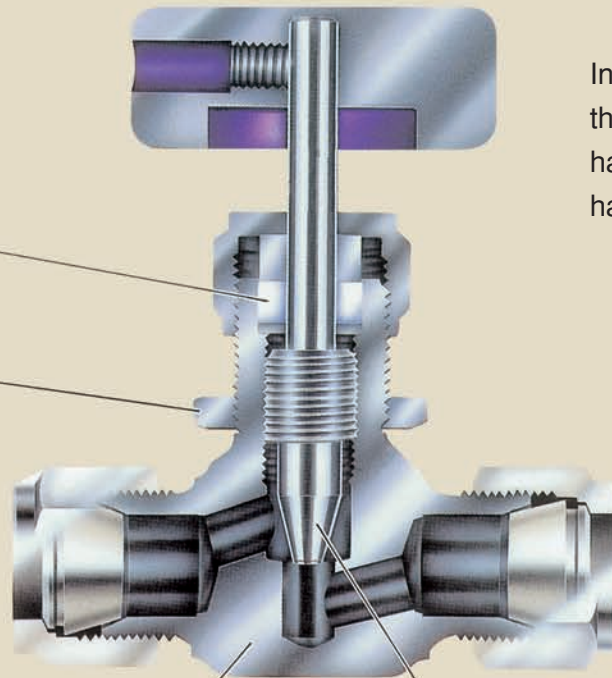
- For fittings with nominal diameters between 1.6mm (1/16" OD) and 4mm, tighten the nut 1/6 turn.
- For fittings with nominal diameters of 15.88 (5/8" OD) or larger, it may occasionally be necessary to tighten the nut 1/4 turn or more.

### 5. Ultra-pure, Oil-free Compression Fittings

If you require oil-free ultra-pure compression fittings, use Fujikin's FINELOK fittings. For more information on these fittings, please refer to the FINELOK brochure.

# 16.2 MPa SUS316 Needle Stop Valves

*Compact and Lightweight, with Color-coded Handles*

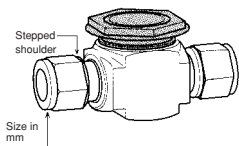


In the standard configuration, the valve comes with a black handle. Blue, red, and green handles are also available.

## Parts

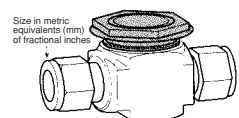
### Identification of Sizes

#### Metric (mm)

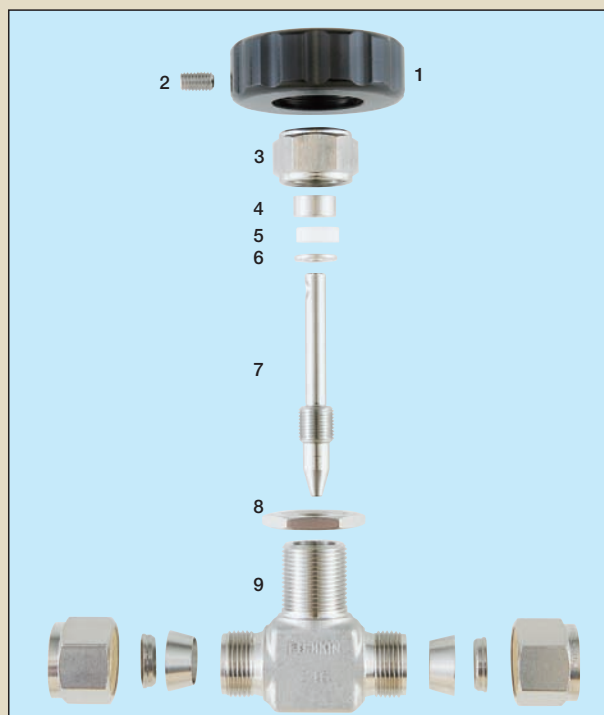


Size also labeled on the body

#### Fractional inch



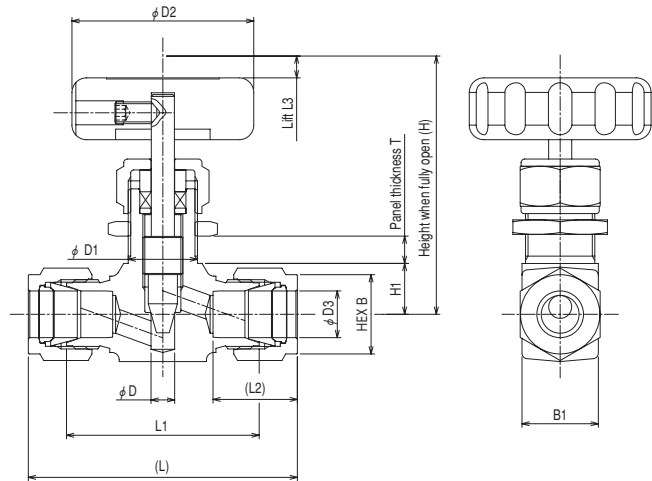
Size also labeled on the body



No.	Part	Material
1	Handwheel	A5056B
2	Hexagon socket head set screw	SUS 304
3	Gland nut	SUS 304
4	Gland	SUS 316
5	Gland packing	PTFE
6	Ring	SUS 316
7	Stem	SUS 316
8	Panel nut	SUS 304
9	Body	SUSF 316

The standard handle color is black.

## POWERFULLOK



### ●Dimensions

Individual drawings may be downloaded from the CAD Data Service section of the Fujikin website.

[https://www.fujikin.co.jp/cad\\_se/](https://www.fujikin.co.jp/cad_se/)

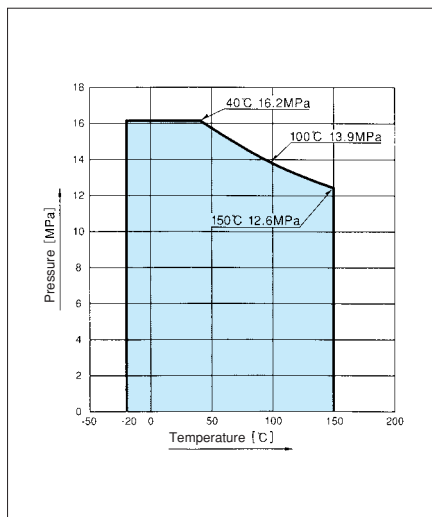
#### Dimensions (mm)

Part number	Nominal dia.		Orifice dia.		Face-to-face dimension		Connection port		Panel mounting		Height when fully open	Lift	Handle dia.	Body thick.	Panel thick. (T)		Cv value	Mass (approx.)
	D3	D	L	L1	L2	B	D1	H1	H	L3	D2	B1	MIN.	MAX.	(MAX.)	kg		
PUH-916-3-SH	3	5	51.2	38	12.9	10	13.2	10.5	54	4	40	17	2	6	0.08	0.2		
PUH-916-4-SH	4	5	56.2	43	13.7	12	13.2	10.5	54	4	40	17	2	6	0.10	0.2		
PUH-916-6-SH	6	5	57.8	43	15.2	14	13.2	10.5	54	4	40	17	2	6	0.20	0.2		
PUH-916-8-SH	8	5	58	43	16.2	16	13.2	10.5	54	4	40	17	2	6	0.38	0.2		
PUH-916-10-SH	10	6.5	68.2	53	17.2	19	19.5	14	71	6	50	21	2	8	0.70	0.4		
PUH-916-12-SH	12	6.5	73.2	53	22.8	22	19.5	14	71	6	50	21	2	8	0.78	0.4		

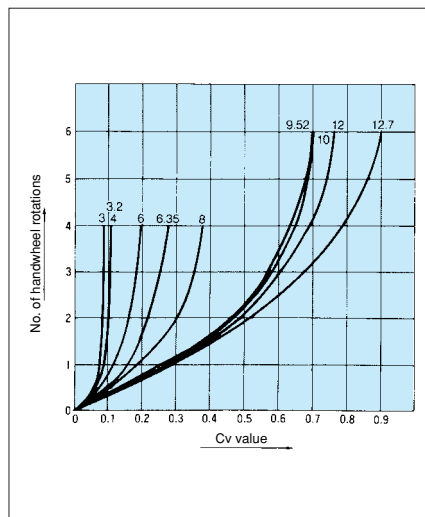
#### Dimensions (fractional inches expressed as mm)

	D3	D	L	L1	L2	B	D1	H1	H	L3	D2	B1	MIN.	MAX.	(MAX.)	kg
PUH-916-3.2-SH	3.2	5	51.2	38	12.7	10	13.2	10.5	54	4	40	17	2	6	0.10	0.2
PUH-916-6.35-SH	6.35	5	57.8	43	15.2	14	13.2	10.5	54	4	40	17	2	6	0.28	0.2
PUH-916-9.52-SH	9.52	6.5	66.8	52	16.8	17	19.5	14	71	6	50	21	2	8	0.70	0.4
PUH-916-12.7-SH	12.7	6.5	73.2	53	22.8	22	19.5	14	71	6	50	21	2	8	0.90	0.4

### ●Pressure-Temperature Curve



### ●Cv Curves



### ●Materials

Part	Material
Body	SUSF316
Stem	SUS 316
Gland packing	P T F E
Handle	A5056B

The standard handle color is black.

### ●Specifications

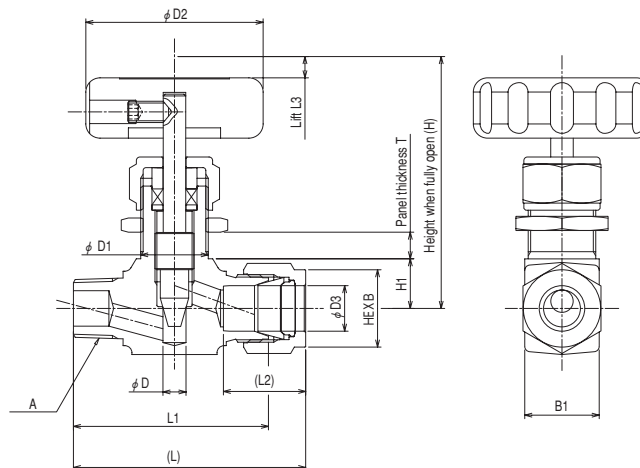
Max. Operating Pressure (MPa)	Fluid Temperature Range (°C)
16.2	-20~150

Notes:

- See the Pressure-Temperature Curve at the left.
- Consult with Fujikin before using hydrogen, helium, or toxic gases.

# Globe Pattern Needle Stop Valve

POWERFULLOK + Threaded



## ●Dimensions

Individual drawings may be downloaded from the CAD Data Service section of the Fujikin website.

### Dimensions (mm)

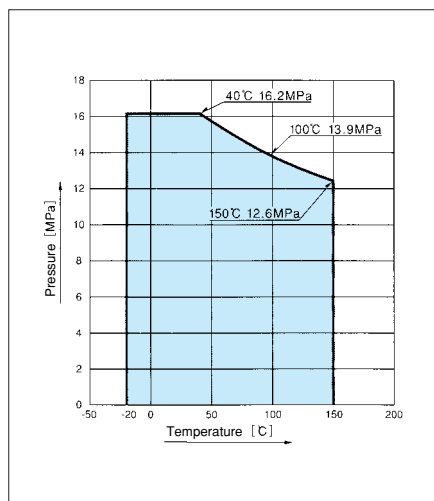
[https://www.fujikin.co.jp/cad\\_se/](https://www.fujikin.co.jp/cad_se/)

Part number	Nominal dia. D3	Nominal designation A	Orifice dia. D	Face-to-face dimension L	L1	L2	B	Connection port D1	Panel mounting H1	Height when fully open H	Lift L3	Handle dia. D2	Body thick. B1	Panel thick. (T) MIN. MAX.	Cv value (MAX.)	Mass (approx.) kg
PUH-916-3A-SH	3	R1/8	5	46.1	39.5	12.9	10	13.2	10.5	54	4	40	17	2 6	0.08	0.2
PUH-916-3B-SH	3	R1/4	5	51.1	44.5	12.9	10	13.2	10.5	54	4	40	17	2 6	0.08	0.2
PUH-916-4A-SH	4	R1/8	5	48.6	42	13.7	12	13.2	10.5	54	4	40	17	2 6	0.09	0.2
PUH-916-4B-SH	4	R1/4	5	53.6	47	13.7	12	13.2	10.5	54	4	40	17	2 6	0.10	0.2
PUH-916-6A-SH	6	R1/8	5	49.4	42	15.2	14	13.2	10.5	54	4	40	17	2 6	0.20	0.2
PUH-916-6B-SH	6	R1/4	5	54.4	47	15.2	14	13.2	10.5	54	4	40	17	2 6	0.25	0.2
PUH-916-8A-SH	8	R1/8	5	49.5	42	16.2	16	13.2	10.5	54	4	40	17	2 6	0.28	0.2
PUH-916-8B-SH	8	R1/4	5	54.5	47	16.2	16	13.2	10.5	54	4	40	17	2 6	0.38	0.2
PUH-916-10B-SH	10	R1/4	6.5	62.6	55	17.2	19	19.5	14	71	6	50	21	2 8	0.49	0.4
PUH-916-10C-SH	10	R3/8	6.5	62.6	55	17.2	19	19.5	14	71	6	50	21	2 8	0.70	0.4
PUH-916-12B-SH	12	R1/4	6.5	65.1	55	22.8	22	19.5	14	71	6	50	21	2 8	0.70	0.4
PUH-916-12C-SH	12	R3/8	6.5	65.1	55	22.8	22	19.5	14	71	6	50	21	2 8	0.90	0.4

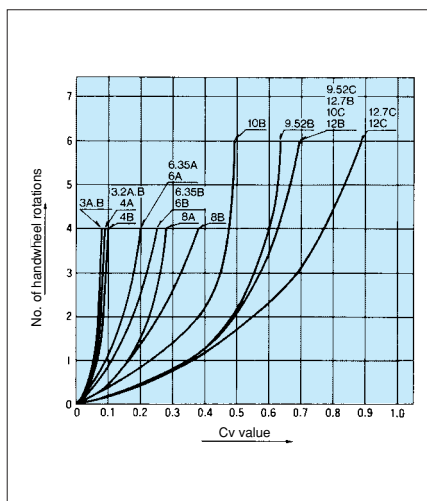
### Dimensions (fractional inches expressed as mm)

Part number	D3	A	D	L	L1	L2	B	D1	H1	H	L3	D2	B1	MIN.	MAX.	(MAX.)	kg
PUH-916-3.2A-SH	3.2	R1/8	5	46.1	39.5	12.7	10	13.2	10.5	54	4	40	17	2	6	0.09	0.2
PUH-916-3.2B-SH	3.2	R1/4	5	51.1	44.5	12.7	10	13.2	10.5	54	4	40	17	2	6	0.09	0.2
PUH-916-6.35A-SH	6.35	R1/8	5	49.4	42	15.2	14	13.2	10.5	54	4	40	17	2	6	0.20	0.2
PUH-916-6.35B-SH	6.35	R1/4	5	54.4	47	15.2	14	13.2	10.5	54	4	40	17	2	6	0.25	0.2
PUH-916-9.52B-SH	9.52	R1/4	6.5	61.9	54.5	16.8	17	19.5	14	71	6	50	21	2	8	0.64	0.3
PUH-916-9.52C-SH	9.52	R3/8	6.5	61.9	54.5	16.8	17	19.5	14	71	6	50	21	2	8	0.70	0.3
PUH-916-12.7B-SH	12.7	R1/4	6.5	65.1	55	22.9	22	19.5	14	71	6	50	21	2	8	0.70	0.4
PUH-916-12.7C-SH	12.7	R3/8	6.5	65.1	55	22.9	22	19.5	14	71	6	50	21	2	8	0.90	0.4

## ●Pressure-Temperature Curve



## ●Cv Curves



## ●Materials

Part	Material
Body	SUSF316
Stem	SUS 316
Gland packing	P T F E
Handle	A5056B

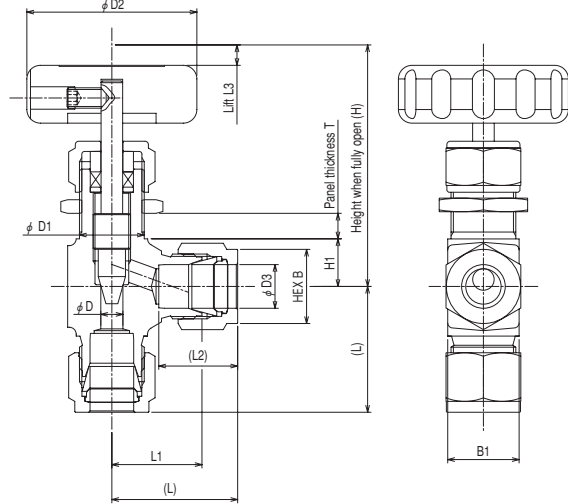
The standard handle color is black.

## ●Specifications

Max. Operating Pressure (MPa)	Fluid Temperature Range (°C)
16.2	-20~150

- Notes:
- See the Pressure-Temperature Curve at the left.
  - Consult with Fujikin before using hydrogen, helium, or toxic gases.

## POWERFULLOK



### ●Dimensions

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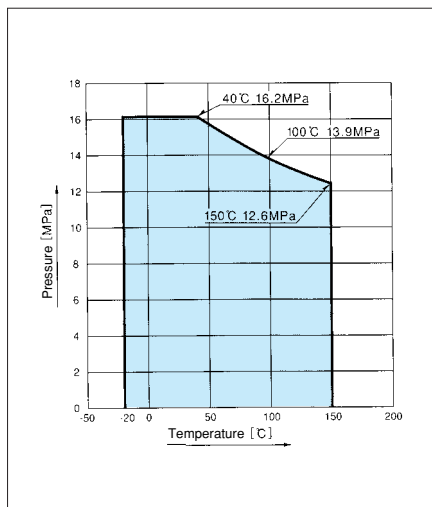
#### Dimensions (mm)

Part number	Nominal dia. D3	Orifice dia. D	Face-to-face dimension L	L1	Connection port L2	B	Panel mounting D1	H1	Height when fully open H	Lift L3	Handle dia. D2	Body thick. B1	Panel thick. (T) MIN.	MAX.	Cv value (MAX.)	Mass (approx.) kg
PUH-016-3-SH	3	2.4	25.6	19	12.9	10	13.2	10.5	54	4	40	17	2	6	0.11	0.2
PUH-016-4-SH	4	3.5	26.6	20	13.7	12	13.2	10.5	54	4	40	17	2	6	0.14	0.2
PUH-016-6-SH	6	5	28.9	21.5	15.2	14	13.2	10.5	54	4	40	17	2	6	0.21	0.2
PUH-016-8-SH	8	5	29	21.5	16.2	16	13.2	10.5	54	4	40	17	2	6	0.32	0.2
PUH-016-10-SH	10	6.5	34.1	26.5	17.2	19	19.5	14	71	6	50	21	2	8	0.96	0.4
PUH-016-12-SH	12	6.5	36.6	26.5	22.8	22	19.5	14	71	6	50	21	2	8	1.17	0.4

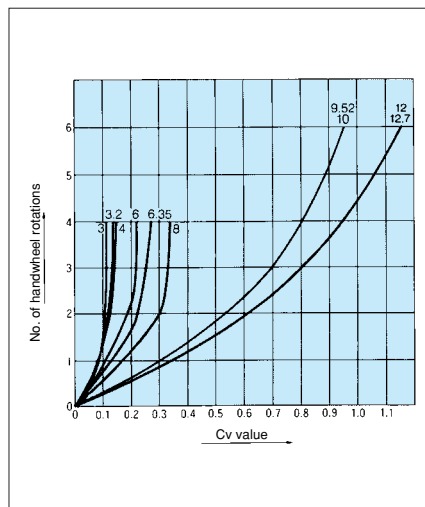
#### Dimensions (fractional inches expressed as mm)

	D3	D	L	L1	L2	B	D1	H1	H	L3	D2	B1	MIN.	MAX.	(MAX.)	kg
PUH-016-3.2-SH	3.2	2.8	25.6	19	12.7	10	13.2	10.5	54	4	40	17	2	6	0.13	0.2
PUH-016-6.35-SH	6.35	5	28.9	21.5	15.2	14	13.2	10.5	54	4	40	17	2	6	0.28	0.2
PUH-016-9.52-SH	9.52	6.5	33.4	26	16.8	17	19.5	14	71	6	50	21	2	8	0.96	0.3
PUH-016-12.7-SH	12.7	6.5	36.6	26.5	22.8	22	19.5	14	71	6	50	21	2	8	1.17	0.4

### ●Pressure-Temperature Curve



### ●Cv Curves



### ●Materials

Part	Material
Body	SUSF316
Stem	SUS 316
Gland packing	P T F E
Handle	A5056B

The standard handle color is black.

### ●Specifications

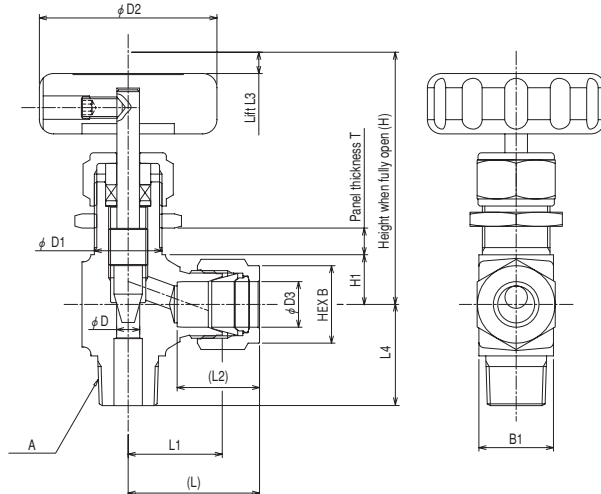
Max. Operating Pressure (MPa)	Fluid Temperature Range (°C)
16.2	-20~150

Notes:

- See the Pressure-Temperature Curve at the left.
- Consult with Fujikin before using hydrogen, helium, or toxic gases.

# Angle Pattern Needle Stop Valve

POWERFULLOK + Threaded



## ●Dimensions

Individual drawings may be downloaded from the CAD Data Service section of the Fujikin website.

### Dimensions (mm)

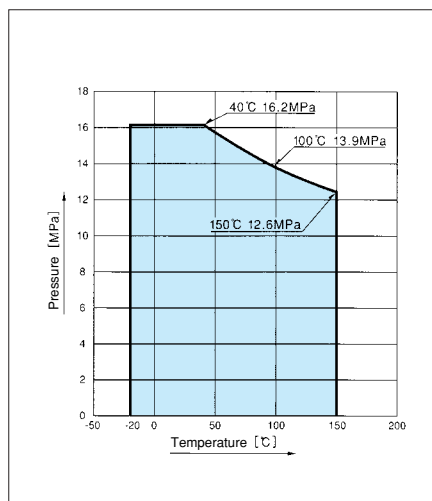
[https://www.fujikin.co.jp/cad\\_se/](https://www.fujikin.co.jp/cad_se/)

Part number	Nominal dia. D3	Nominal designation A	Orifice dia. D	Face-to-face dimension			Connection port		Panel mounting		Height when fully open H	Lift L3	Handle dia. D2	Body thick. B1	Panel thick. (T)		Cv value (MAX.)	Mass (approx.) kg
				L	L1	L4	L2	B	D1	H1					MIN.	MAX.		
PUH-016-3A-SH	3	R1/8	5	25.6	19	20.5	12.9	10	13.2	10.5	54	4	40	17	2	6	0.12	0.2
PUH-016-3B-SH	3	R1/4	5	25.6	19	25.5	12.9	10	13.2	10.5	54	4	40	17	2	6	0.12	0.2
PUH-016-4A-SH	4	R1/8	5	26.6	20	20.5	13.7	12	13.2	10.5	54	4	40	17	2	6	0.15	0.2
PUH-016-4B-SH	4	R1/4	5	26.6	20	25.5	13.7	12	13.2	10.5	54	4	40	17	2	6	0.15	0.2
PUH-016-6A-SH	6	R1/8	5	28.9	21.5	20.5	15.2	14	13.2	10.5	54	4	40	17	2	6	0.21	0.2
PUH-016-6B-SH	6	R1/4	5	28.9	21.5	25.5	15.2	14	13.2	10.5	54	4	40	17	2	6	0.21	0.2
PUH-016-8A-SH	8	R1/8	5	29	21.5	20.5	16.2	16	13.2	10.5	54	4	40	17	2	6	0.32	0.2
PUH-016-8B-SH	8	R1/4	5	29	21.5	25.5	16.2	16	13.2	10.5	54	4	40	17	2	6	0.32	0.2
PUH-016-10B-SH	10	R1/4	6.5	34.1	26.5	28.5	17.2	19	19.5	14	71	6	50	21	2	8	0.96	0.3
PUH-016-10C-SH	10	R3/8	6.5	34.1	26.5	28.5	17.2	19	19.5	14	71	6	50	21	2	8	0.96	0.4
PUH-016-12B-SH	12	R1/4	6.5	36.6	26.5	28.5	22.8	22	19.5	14	71	6	50	21	2	8	1.17	0.4
PUH-016-12C-SH	12	R3/8	6.5	36.6	26.5	28.5	22.8	22	19.5	14	71	6	50	21	2	8	1.17	0.4

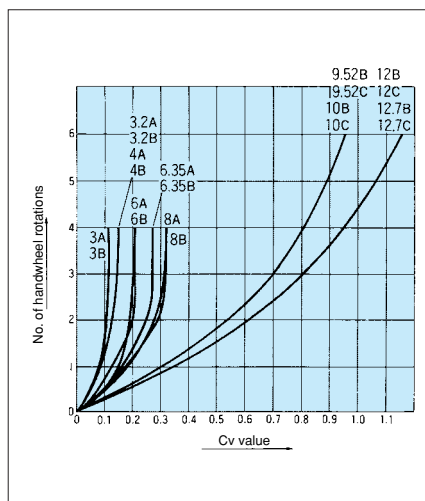
### Dimensions (fractional inches expressed as mm)

Part number	D3	A	D	L	L1	L4	L2	B	D1	H1	H	L3	D2	B1	MIN.	MAX.	(MAX.)	kg
PUH-016-3.2B-SH	3.2	R1/4	5	25.6	19	25.5	12.7	10	13.2	10.5	54	4	40	17	2	6	0.15	0.2
PUH-016-6.35A-SH	6.35	R1/8	5	28.9	21.5	20.5	15.2	14	13.2	10.5	54	4	40	17	2	6	0.28	0.2
PUH-016-6.35B-SH	6.35	R1/4	5	28.9	21.5	25.5	15.2	14	13.2	10.5	54	4	40	17	2	6	0.28	0.2
PUH-016-9.52B-SH	9.52	R1/4	6.5	33.4	26	28.5	16.8	17	19.5	14	71	6	50	21	2	8	0.96	0.3
PUH-016-9.52C-SH	9.52	R3/8	6.5	33.4	26	28.5	16.8	17	19.5	14	71	6	50	21	2	8	0.96	0.3
PUH-016-12.7B-SH	12.7	R1/4	6.5	36.6	26.5	28.5	22.8	22	19.5	14	71	6	50	21	2	8	1.17	0.4
PUH-016-12.7C-SH	12.7	R3/8	6.5	36.6	26.5	28.5	22.8	22	19.5	14	71	6	50	21	2	8	1.17	0.4

## ●Pressure-Temperature Curve



## ●Cv Curves



## ●Materials

Part	Material
Body	SUSF316
Stem	SUS 316
Gland packing	P T F E
Handle	A5056B

The standard handle color is black.

## ●Specifications

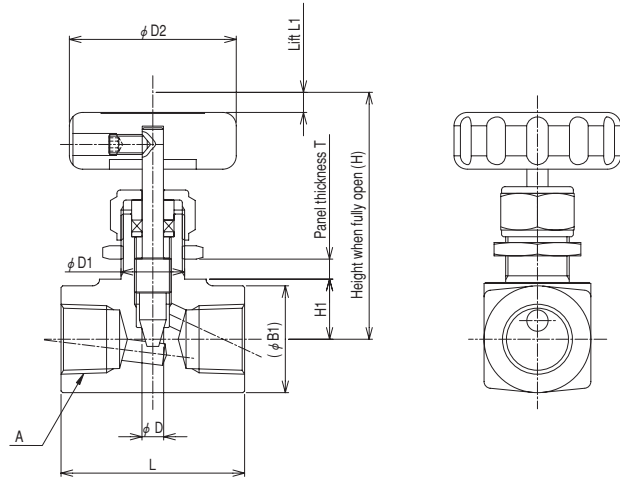
Max. Operating Pressure (MPa)	Fluid Temperature Range (°C)
16.2	-20~150

Notes:

- See the Pressure-Temperature Curve at the left.
- Consult with Fujikin before using hydrogen, helium, or toxic gases.



## Threaded



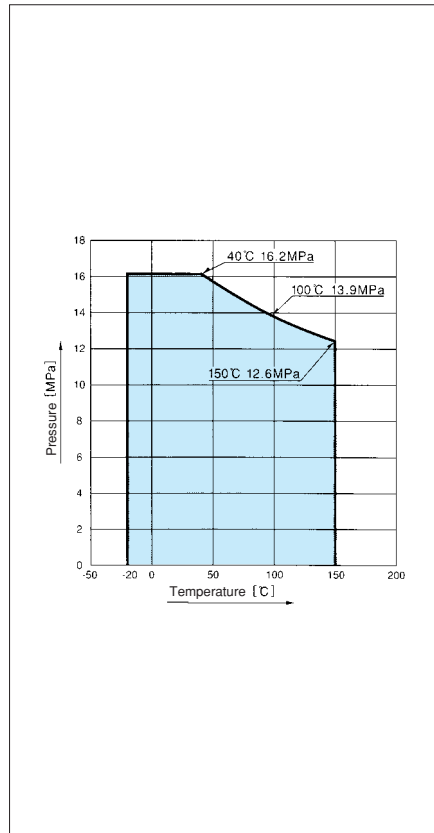
### ●Dimensions

Individual drawings may be downloaded from the CAD Data Service section of the Fujikin website.

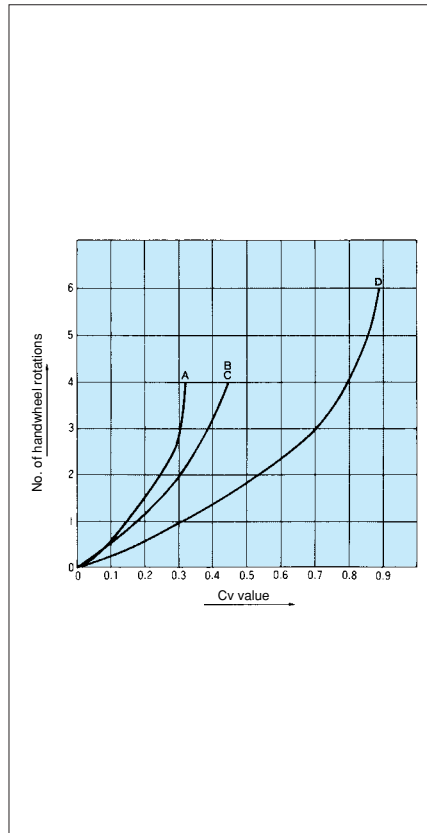
[https://www.fujikin.co.jp/cad\\_se/](https://www.fujikin.co.jp/cad_se/)

Part number	Nominal designation	Orifice dia. D	Face-to-face dimension L	Panel mounting		Height when fully open H	Lift L	Handle dia. D2	Body thick. B1	Panel thick. (T)		Cv value (MAX.)	Mass (approx.) kg
	A			D1	H1					MIN.	MAX.		
PUH-116A-SH	Rc1/8	5	40	13.2	11	55.5	4	40	17	2	6	0.30	0.2
PUH-116B-SH	Rc1/4	5	40	13.2	14	58.5	4	40	21	2	6	0.45	0.2
PUH-116C-SH	Rc3/8	5	50	13.2	16	60.5	4	40	25	2	6	0.45	0.3
PUH-116D-SH	Rc1/2	6.5	55	19.5	16	73	6	50	28	2	8	0.90	0.4

### ●Pressure-Temperature Curve



### ●Cv Curves



### ●Materials

Part	Material
Body	SUSF316
Stem	SUS 316
Gland packing	P T F E
Handle	A5056B

The standard handle color is black.

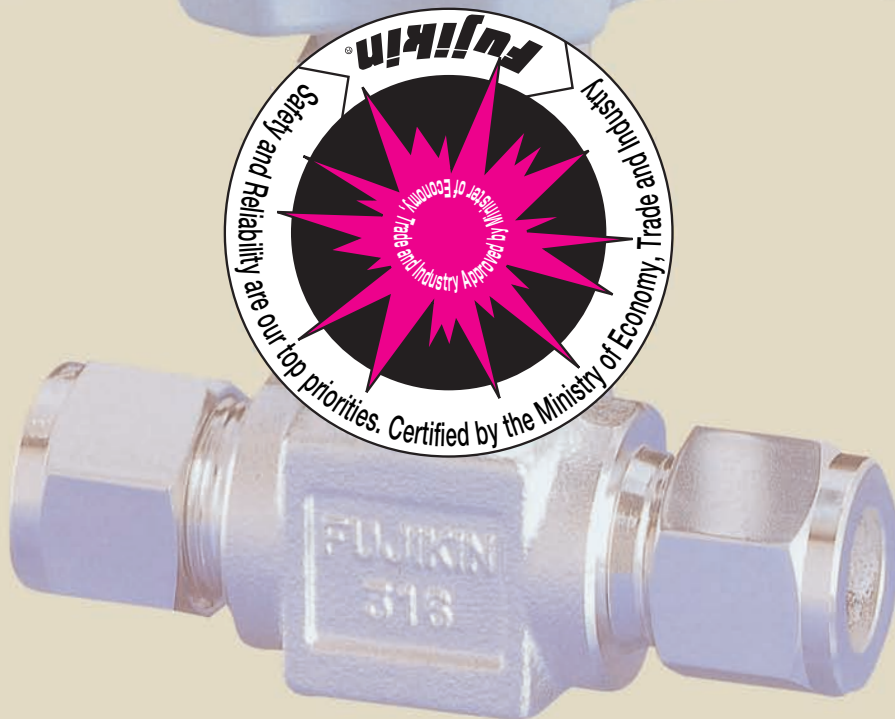
### ●Specifications

Max. Operating Pressure (MPa)	Fluid Temperature Range (°C)
16.2	-20~150

Notes:

- See the Pressure-Temperature Curve at the left.
- Consult with Fujikin before using hydrogen, helium, or toxic gases.

# Certified High-pressure Gas Products



1. When ordering certified high-pressure gas products, fill out a copy of the Valves with High-pressure Gas Certification Specifications form on page 14, and send it to Fujikin. This is not required if you are not ordering products with this certification.
2. Notify Fujikin in advance if you are planning to use this product with toxic gases or at vacuum conditions.
3. The gland packing in these valves was adjusted prior to shipment. To prevent water from permeating the packing, ensure that the gland nut is tight before performing pressure tests on this valve.

## Panel Mounting Procedures

If you are panel-mounting the valve, follow these instructions:

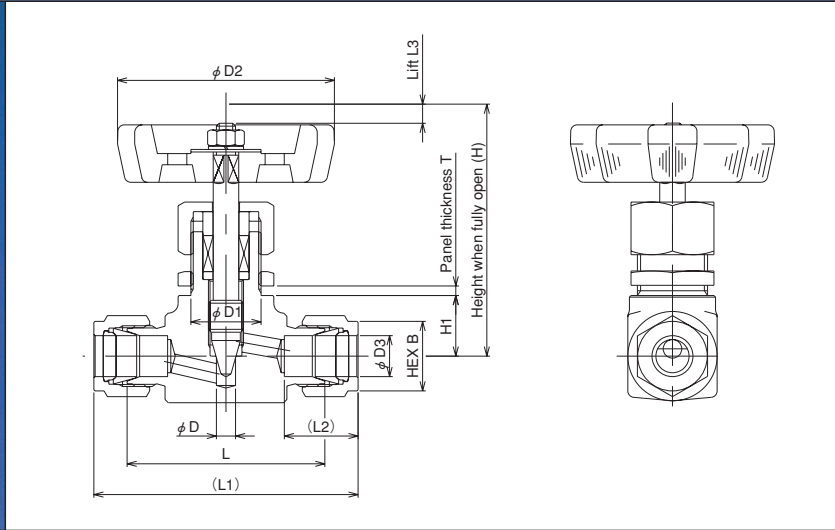
1. Ensure that the bracket hole on the panel is  $\leq 0.5\text{mm}$  wider than the valve's panel-mounting diameter  $\phi D1$  (refer to the CAD drawing).
2. Use an adjustable wrench to loosen the hex nut securing the handle. Remove the handle.
3. Remove the gland nut and the panel nut.
4. Mount the valve on the panel and secure it with the panel nut. Reattach the gland nut and the handle.
5. Tighten the gland nut with an adjustable wrench to the torque shown in the table to the right.

Tightening Torque

Fractional inches	Size		Torque (N · m)
	Fractional inches	Metric (mm)	
1/8", 1/4"	6, 8	1.0	
3/8", 1/2"	10, 15	1.0	
3/4"	20	1.2	
1"	25	1.5	

Exceptions:

1.  $\phi 6.35\text{-}12.7\text{mm}$  (1/4" - 1/2") socket weld valves require 1.0 N · m of torque.
2. Valves with SUW (Super Double Bite) and POWERFULLOK end connections require 1.0 N · m of torque if they are the following sizes:  $\phi 6\text{mm}$ ,  $\phi 6.35\text{mm}$  (1/4"),  $\phi 8\text{mm}$ ,  $\phi 9.52\text{mm}$  (3/8"),  $\phi 10\text{mm}$ ,  $\phi 12\text{mm}$ , and 12.7mm (1/2").
3. All fittings with the part numbers PUS-936 and PUS-136 require 1.5 N · m of torque, regardless of size.



Individual drawings may be downloaded from the CAD Data Service section of the Fujikin website.

●Dimensions (mm)

[https://www.fujikin.co.jp/cad\\_se/](https://www.fujikin.co.jp/cad_se/)

Part number	Nominal dia.	Orifice dia.	Face-to-face dimension		Connection port		Panel mounting		Height when fully open	Lift	Handle dia.	Panel thck. (T)		Cv value	Mass (approx.)
	D3	D	L	L1	L2	B	D1	H1	H	L3	D2	MIN.	MAX.	(MAX.)	kg
PUS-926P-6.35	6.35	5	54	68.8	15.2	14	18.5	16	67	5	58	2	4.5	0.34	0.27
PUS-926P-9.52	9.52	6	60	74.8	16.8	17	22.5	19	79	6	68	3	5	0.59	0.45
PUS-926P-12.7	12.7	6	62	82.2	22.8	22	22.5	19	79	6	68	3	5	0.66	0.47

●Materials

Part	Material
Body	SUSF316
Stem	SUS 316 (Stellited)
Gland packing	PTFE + PFA
Handle	ADC 12

The standard handle color is black.

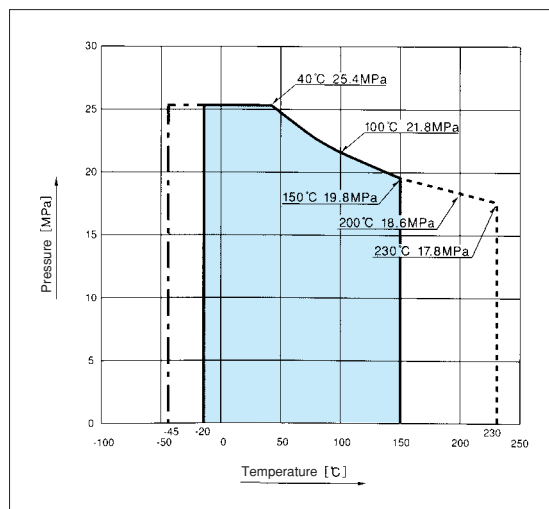
●Specifications

Max. Operating Pressure (MPa)	Fluid Temperature Range (°C)
25.4	-20~150 *3, *4

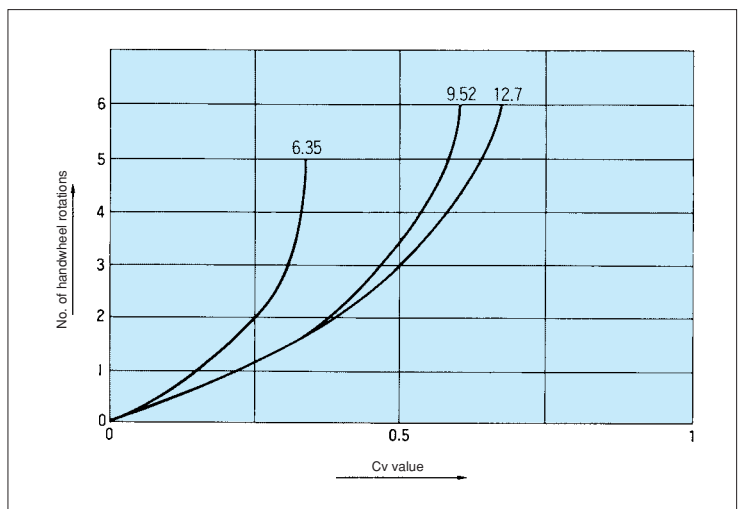
Notes:

- See the Pressure-Temperature Curve at the left.
- Consult with Fujikin before using hydrogen, helium, or toxic gases.
- A different kind of lubricant must be used if the operating temperature is < 20°C. The dot-dash line (— · —) on the Pressure-Temperature Curve indicates the pressure at these temperatures.
- A different kind of lubricant and gland packing must be used if the operating temperature is > 150°C. The dotted line (·····) on the Pressure-Temperature Curve indicates the pressure at these temperatures.

●Pressure-Temperature Curve



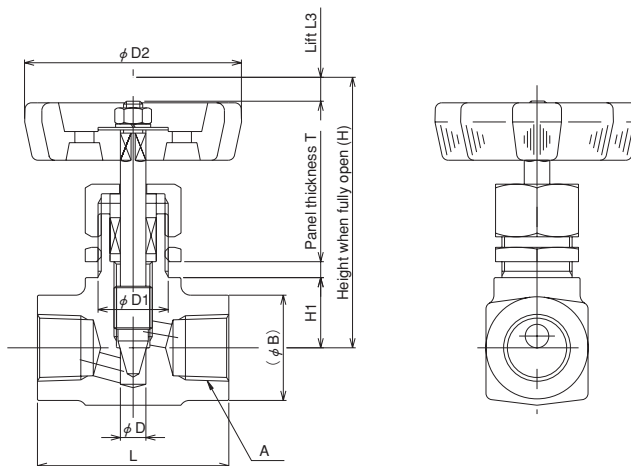
●Cv Curves



# Globe Pattern Needle Stop Valve

Threaded

Certified High-pressure Gas Product



## Dimensions (mm)

Individual drawings may be downloaded from the CAD Data Service section of the Fujikin website.  
[https://www.fujikin.co.jp/cad\\_se/](https://www.fujikin.co.jp/cad_se/)

Part number	Nominal designation	Orifice dia. A	Face-to-face dimension D	Panel mounting L	Panel mounting D1	Height when fully open H1	Lift H	Handle dia. L3	Body thick. D2	Body thick. B	Panel thick. (T)		Cv value (MAX.)	Mass (approx.) kg
											MIN.	MAX.		
US-126PA	Rc1/8	5	48	18.5	16	67	5	58	22	2	4.5	0.34	0.29	
US-126PB	Rc1/4	5	48	18.5	16	67	5	58	22	2	4.5	0.46	0.26	
US-126PC	Rc3/8	6	55	22.5	19	79	6	68	26	3	5	0.66	0.44	
US-126PD	Rc1/2	8	60	22.5	22	85	7.5	68	32	3	5	1.08	0.56	
US-126PE	Rc3/4	10	70	25.5	30	107	10	78	38	3	7	1.83	0.90	
US-126PF	Rc 1	12	85	33.5	36	130	12	88	46	4	10	2.64	1.64	

Note: Socket weld valves (US-526P) are also available.

## Materials

Part	Material
Body	SUS316
Stem	SUS 316 (Stellited)
Gland packing	PTFE + PFA
Handle	ADC 12

The standard handle color is black.

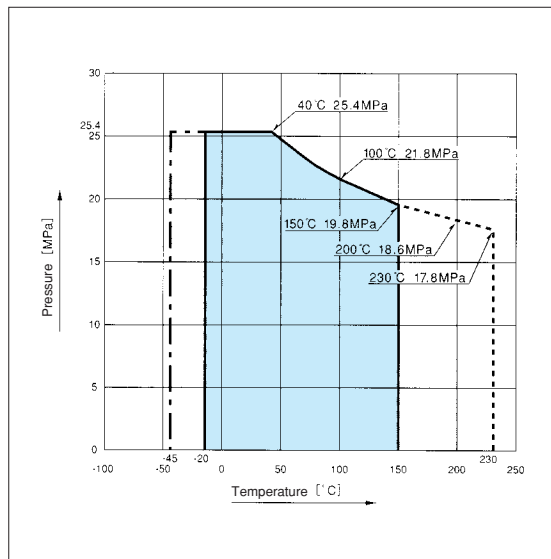
## Specifications

Max. Operating Pressure (MPa)	Fluid Temperature Range (°C)
25.4	-20~150 *3,*4

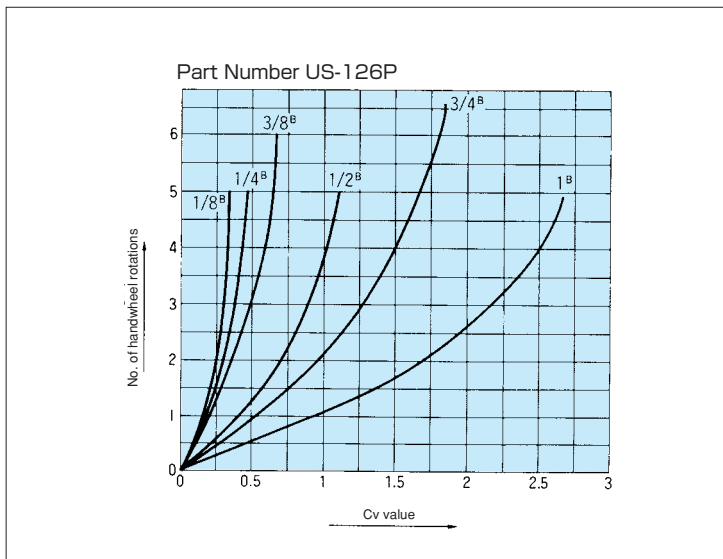
### Notes:

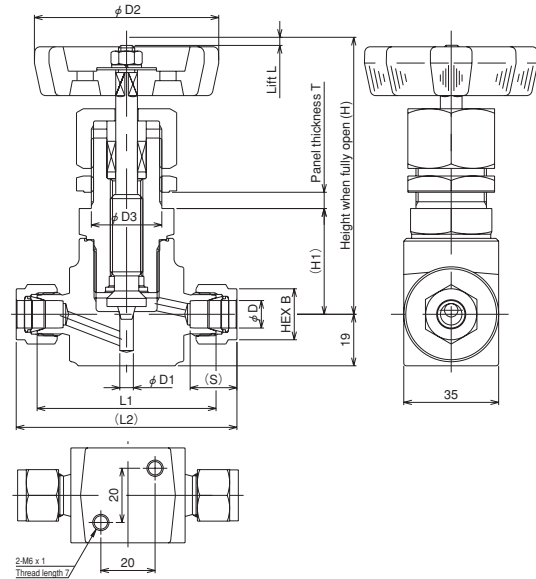
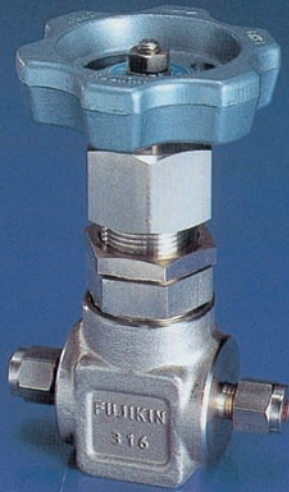
- See the Pressure-Temperature Curve at the left.
- Consult with Fujikin before using hydrogen, helium, or toxic gases.
- A different kind of lubricant must be used if the operating temperature is < 20°C. The dot-dash line (— · —) on the Pressure-Temperature Curve indicates the pressure at these temperatures.
- A different kind of lubricant and gland packing must be used if the operating temperature is > 150°C. The dotted line (·····) on the Pressure-Temperature Curve indicates the pressure at these temperatures.

## Pressure-Temperature Curve



## Cv Curves





● Dimensions (mm)

Individual drawings may be downloaded from the CAD Data Service section of the Fujikin website.

[https://www.fujikin.co.jp/cad\\_se/](https://www.fujikin.co.jp/cad_se/)

Part number	Nominal dia.	Orifice dia.	Connection port		Face-to-face dimension		Panel mounting		Height when fully open	Lift	Handle dia.	Panel thck. (T)		Cv value	Mass (approx.)
	D	D1	B	S	L1	L2	D3	H1	H	L	D2	MIN.	MAX.	(MAX.)	kg
PUS-936P-6.35	6.35	5	14	15.2	62	76.8	26.5	39	103	3	68	3	5	0.21	0.95
PUS-936P-9.52	9.52	5	17	16.8	66	80.8	26.5	39	103	3	68	3	5	0.45	0.95
PUS-936P-12.7	12.7	5	22	22.9	69	89.2	26.5	39	103	3	68	3	5	0.45	1.0

● Materials

Part	Material
Body	SUSF316
Stem	SUS 316 (Stellited)
Gland packing	PTFE + PFA
Handle	ADC 12
Bonnet	SUS 316

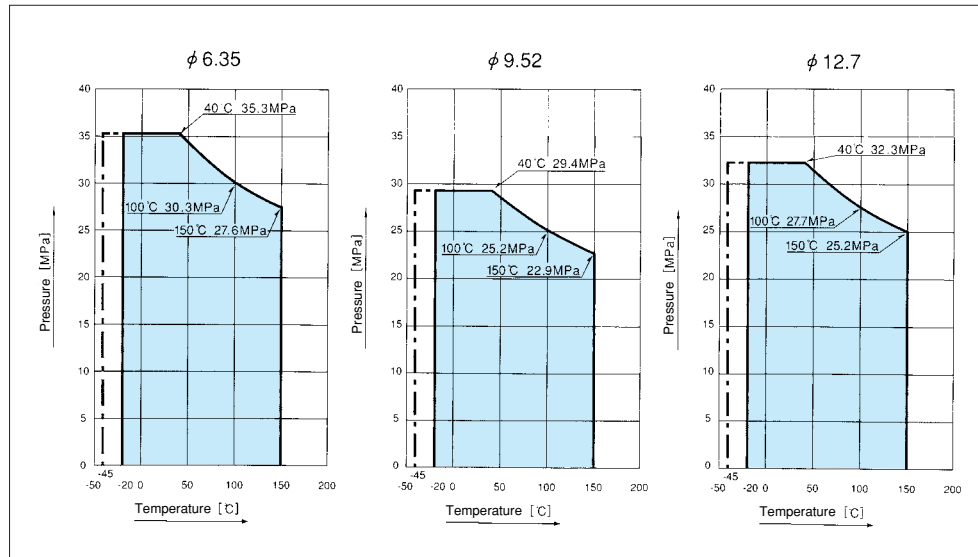
Note: The maximum operating pressure is based on the fittings' wall thickness and strength.

Nominal dia.	Max. Operating Pressure (MPa)	Fluid Temperature Range (°C)
φ 6.35	35.3	-20~150*2
φ 9.52	29.4	
φ 12.7	32.3	

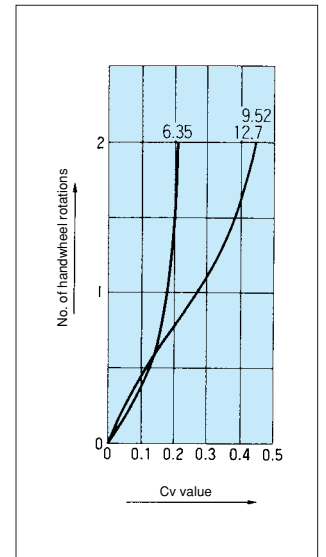
Notes:

- Notify Fujikin of your conditions of use before using valves ≥ φ9.52mm (3/8").
- A different kind of lubricant must be used if the operating temperature is < 20°C. The dot-dash line (· - ·) on the Pressure-Temperature Curve indicates the pressure at these temperatures.

● Pressure-Temperature Curve



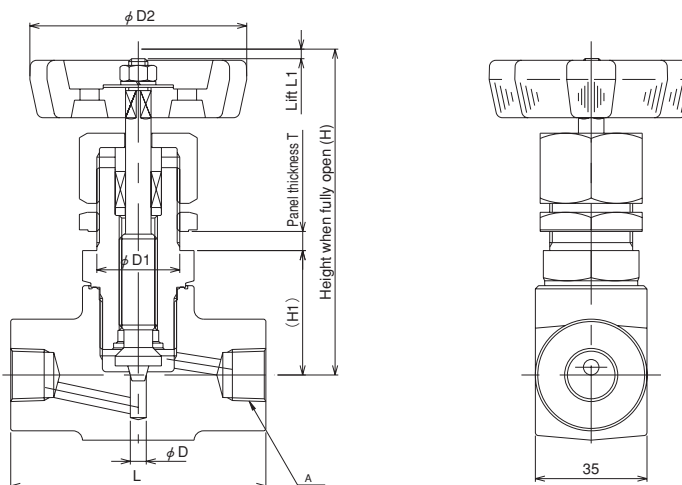
● Cv Curves



# Globe Pattern Needle Stop Valve

Threaded

Certified High-pressure Gas Product



## ●Dimensions (mm)

Individual drawings may be downloaded from the CAD Data Service section of the Fujikin website.  
[https://www.fujikin.co.jp/cad\\_se/](https://www.fujikin.co.jp/cad_se/)

Part number	Nominal designation	Orifice dia. D	Face-to-face dimension L	Panel mounting		Height when fully open		Lift L1	Handle dia. D2	Panel thick. (T)		Cv value (MAX.)	Mass (approx.) kg
	A			$\phi D1$	H	H1	MIN.			MAX.			
US-136PA	Rc1/8	5	80	26.5	39	103	3	68	3	5	0.45	1.15	
US-136PB	Rc1/4	5	80	26.5	39	103	3	68	3	5	0.45	1.10	
US-136PC	Rc3/8	5	80	26.5	39	103	3	68	3	5	0.45	1.10	
US-136PD	Rc1/2	5	80	26.5	39	103	3	68	3	5	0.45	1.05	

The standard handle color is black.

## ●Materials

Part	Material
Body	SUSF316
Stem	SUS 316 (Stellited)
Gland packing	PTFE + PFA
Handle	ADC 12
Bonnet	SUS 316

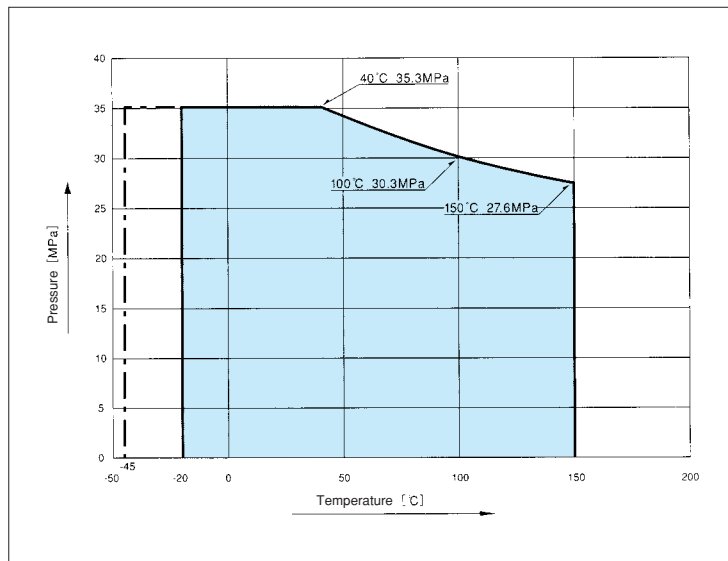
## ●Specifications

Max. Operating Pressure (MPa)	Fluid Temperature Range (°C)
35.3	-20~150*4

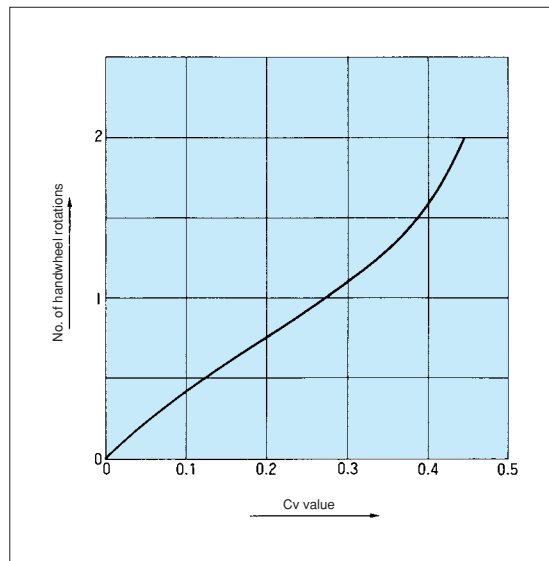
## ●Remarks

- Notes:
- An NPT threaded version of this valve is available.
  - A socket weld version of this valve is available. We also offer valves with other types of connections. For more information, speak with a Fujikin representative.
  - The standard configuration of this valve is designed to be panel-mounted. The shape of the body facilitates the use of U-bolts.
  - A different kind of lubricant must be used if the operating temperature is <math>< 20^{\circ}\text{C}</math>. The dot-dash line (— · —) on the Pressure-Temperature Curve indicates the pressure at these temperatures.

## ●Pressure-Temperature Curve



## ●Cv Curves



# Valves with High-pressure Gas Certification Specifications

Please confirm the latest version of the quality control execution plan (for high-pressure gas certification).

Type of Product	Globe Valve, Ball Valve, Check Valve, Control Valve, Double-Ferrule Fitting, Metal Gasket Fitting, Strainer, Other	Appended Document	
Welding	Welded      Not Welded		

Customer		Code No.	
End User *1		Code No.	
Target System Name *2		Type of Test Performed *3	High-pressure Certification Test High-pressure Re-certification Test
Equipment Category *3 *4	N: Valves, N-II: Fittings, O: Other, F: Reciprocating compressor, Z: Combined equipment, M: Tubing, E: Other pressure vessel	Delivery Date	
Part Number		Quantity	

Additions to Part Number		Drawing No.		End Connection Size		
Specifications	Normal Pressure (Max. Operating Pressure)	Mpa	Design Pressure	Mpa	Will this be used in vacuum conditions? *3 No      Yes (      Pa)	
	Design Temperature	Min.      °C      to      Max.      °C	Normal      °C	State of High-pressure Gas	Gaseous, Liquefied, Dissolved	
	Type of Gas *3	Toxic, Flammable, Toxic and Flammable, Special High-pressure, Other				
	Name of Gas *3	Non-toxic	Air, Nitrogen, Helium, Oxygen, Hydrogen, Carbon dioxide, Argon			
		Special	Monosilane, Phosphine, Arsine, Diborane, Hydrogen selenide, Monogermane, Other			
		Toxic/Flammable	Ammonia, Carbon monoxide, Other			
	Toxic	Hydrogen Chloride, Chlorine, Hydrogen Bromide, Other				
Material *3	SUS316 or SUSF316	SUS304 or SUSF304	SUS316L or SUSF316L	SC314 Other (	C3604B      C3771B )	

Other special specifications:	Valve used for toxic gas (special high-pressure gas) has a leak port? *3	Yes/No
Notes: 1. Enter the name of the product's end user. If the product will be delivered via a set/apparatus maker, please include their names also. 2. Enter the name of the high-pressure gas system, processing equipment, etc. 3. Circle the answer that applies. 4. Valves with threaded fittings to be used in high-pressure gas equipment for toxic gases (as per the General Provision, Article 2-2 of Japan's High-pressure Gas Safety law) are subject to identification as one of the following: N (valves) or N-II (fittings). If applicable, circle both N and N-II. Circle only Z if it falls under the category of combined equipment. 5. The "design pressure and temperature" listed in the test report by the authorized inspector is the maximum temperature and pressure at which the equipment may be used. These values are based on the wall thickness and strength shown in the design specifications. Please refer to these specifications when filling out these boxes.		
Order No.		
Project No.		
Spec. No.		

Documents Submitted	Destination (Products and Documents)	Factory Comments:
(1) Test Report (authorized inspector) 1 copy (2) Test Certificate (N-II excluded)      copies (3) Operation Manual (N-II only)      copies (4) Other • Delivery Specifications      copies • Mill Certificate      copies • Calculations of Wall Thickness Strength      copies • Fujikin Design Specifications (standard)      copies • Design Specifications      copies • Inspection Procedures      copies	Sales Office Send directly to:	

Seal of Approval	Sales Representative	C T D	T D C	M F D			

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The Year 2005  
The 1st Monozukuri (manufacturing)  
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