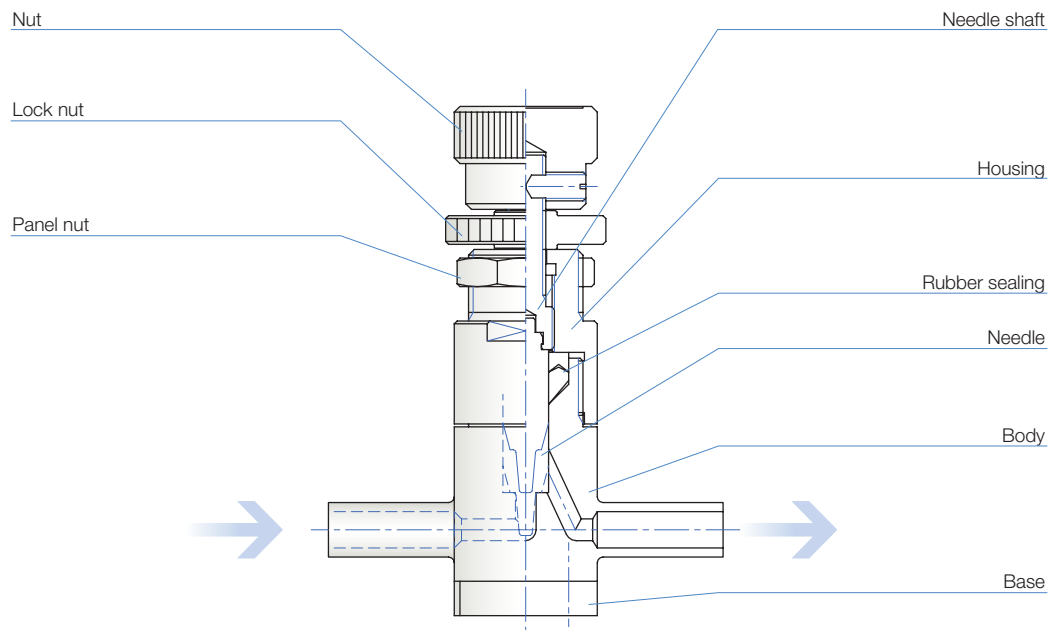


Needle Valve

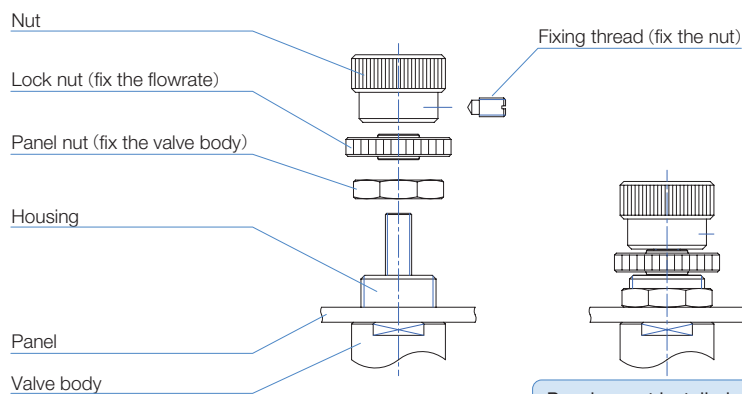
Features

- Adjusting the flowrate accurately and easily with Surpass unique 'Double Tapered' structure.
- All products can be available for panel mount.
- As for straight type, it's also mount with base.
- Easy to install to equipment because of small footprint.

Model HNV Straight Type Internal Structure



How to Mount to Panel



Panel mount can be done without coming off the housing that is affected to sealing performance.

Panel mount installed status

Needle Valves

Model HNV Needle Valve

RoHS2



Specifications

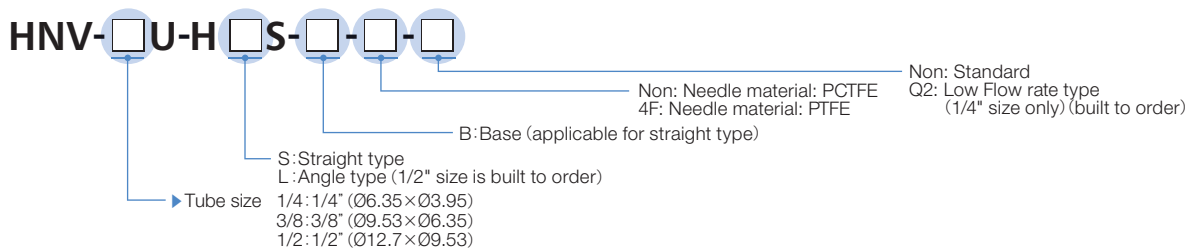
| | |
|-----------------------|------------------------------|
| Fluids | Fluids (DI water, Chemicals) |
| Wetted parts | PTFE, PCTFE* |
| Fluid pressure | 0~400kPa |
| Withstanding pressure | 500kPa |
| Fluid temperature | 5~80℃ |
| Ambient temperature | 5~60℃ |

*Wetted parts of 4F type is PTFE only. Nut space-saver type is PTFE and PFA.

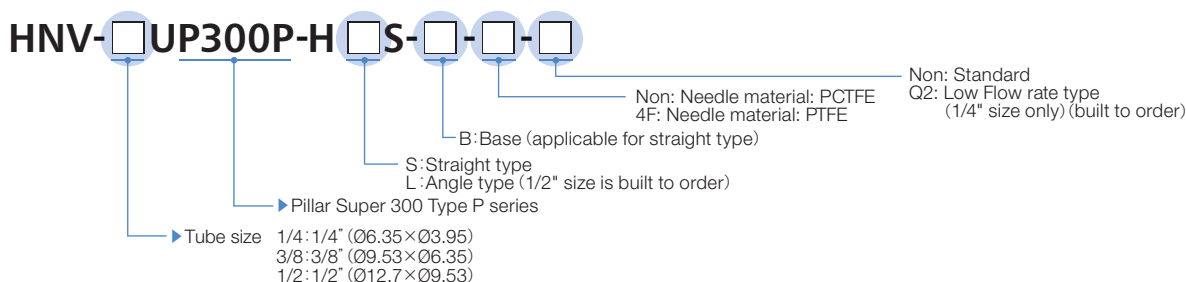
Caution Flow doesn't stop completely. Do not tighten the nut excessively.

Models

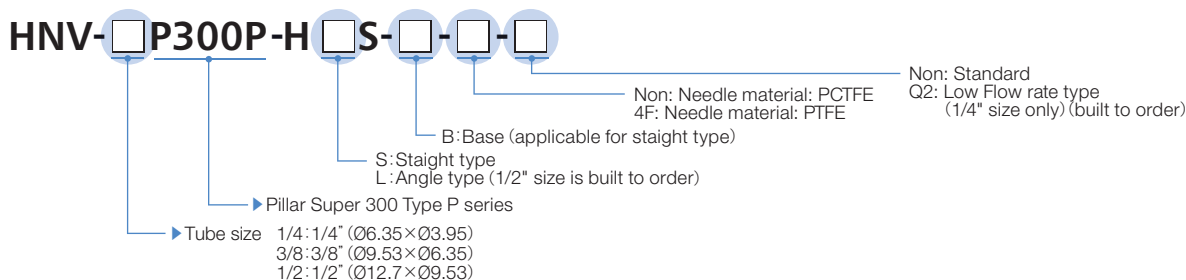
● Tube fitting



● Tube fitting nut space-saver type



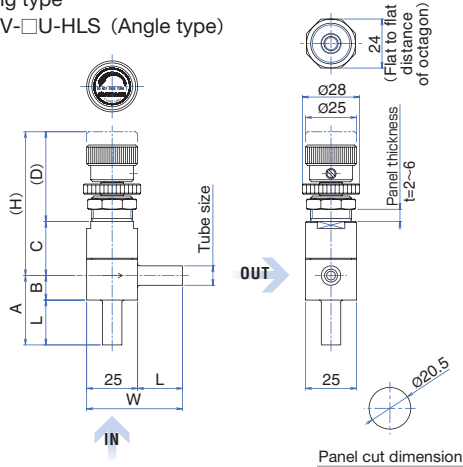
● Pillar fitting



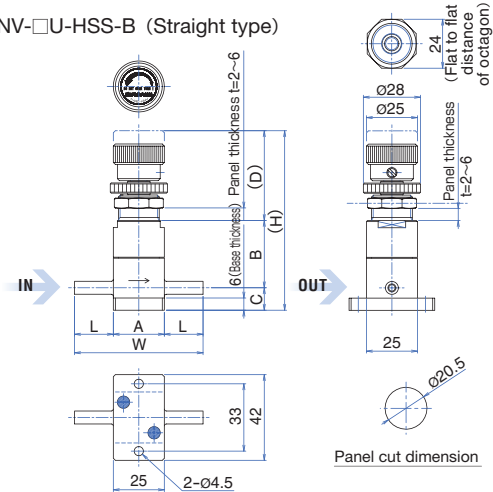
Dimensions

○Tubing type

●HNV-□U-HLS (Angle type)



●HNV-□U-HSS-B (Straight type)

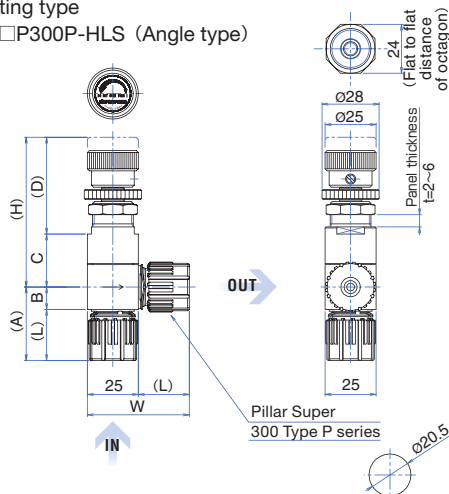


| Type | A | B | C | (D) | (H) | L | W |
|--------------|----|----|------|---------|---------|----|----|
| HNV-1/4U-HLS | 31 | 12 | 23 | 37.5~44 | 60.5~67 | 19 | 44 |
| HNV-3/8U-HLS | 34 | 12 | 26.5 | 38.5~45 | 65~71.5 | 22 | 47 |
| HNV-1/2U-HLS | 41 | 13 | 31.5 | 38.5~45 | 70~76.5 | 28 | 53 |

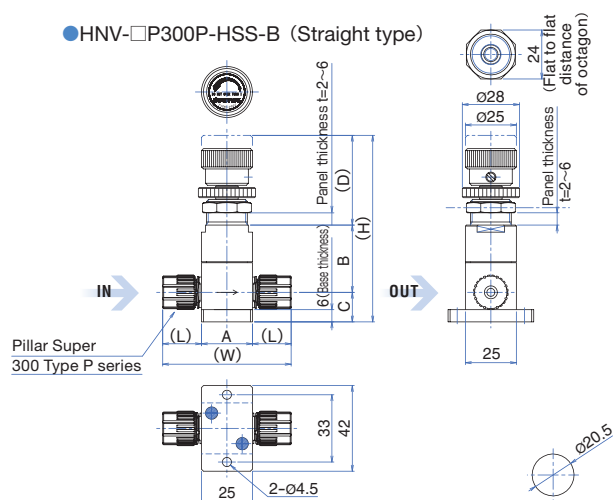
| Type | A | B | C | (D) | (H) | L | W |
|----------------|----|------|----|---------|---------|----|----|
| HNV-1/4U-HSS-B | 25 | 33 | 11 | 38.5~45 | 82.5~89 | 19 | 63 |
| HNV-3/8U-HSS-B | 25 | 36.5 | 15 | 38.5~45 | 90~96.5 | 22 | 69 |
| HNV-1/2U-HSS-B | 30 | 33.5 | 20 | 38.5~45 | 92~98.5 | 28 | 86 |

○Pillar fitting type

●HNV-□P300P-HLS (Angle type)



●HNV-□P300P-HSS-B (Straight type)



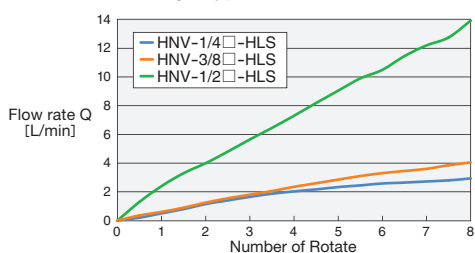
| Type | (A) | B | C | (D) | (H) | (L) | (W) |
|------------------|------|-----|------|---------|---------|-----|-----|
| HNV-1/4P300P-HLS | 27.5 | 8.5 | 27 | 37.5~44 | 64.5~71 | 19 | 44 |
| HNV-3/8P300P-HLS | 36 | 11 | 29.5 | 38.5~45 | 68~74.5 | 25 | 50 |
| HNV-1/2P300P-HLS | 42 | 13 | 31.5 | 38.5~45 | 70~76.5 | 29 | 54 |

| Type | A | B | C | (D) | (H) | (L) | (W) |
|--------------------|----|------|------|---------|---------|-----|-----|
| HNV-1/4P300P-HSS-B | 25 | 33 | 14.5 | 38.5~45 | 86~92.5 | 19 | 63 |
| HNV-3/8P300P-HSS-B | 25 | 36.5 | 18 | 38.5~45 | 93~99.5 | 25 | 75 |
| HNV-1/2P300P-HSS-B | 30 | 33.5 | 20 | 38.5~45 | 92~98.5 | 29 | 88 |

Flow Adjustment Characteristics

●HNV-HLS(Angle type)

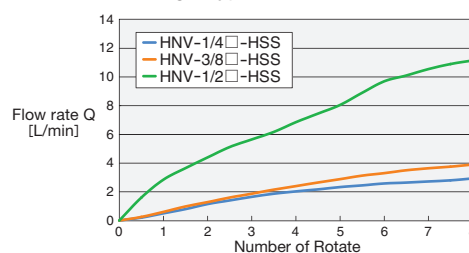
※ $\Delta P=150\text{kPa}$



Fluid:DI water Fluid/Ambient temperature:Room temp.

●HNV-HSS(Straight type)

※ $\Delta P=150\text{kPa}$



Fluid:DI water Fluid/Ambient temperature:Room temp.

※Please inquire the graph of Q2 model. ※The data is reference value, not a guarantee value.

Needle Valves

Model HNV-SHT Needle Valve



HNV-3/8P300P-S-SHT-Z

Features

- Wetted parts are fluoro-resin material that has high resistance for chemicals.
- Compatible with fluid temperatures of 180°C
- Fix the knob status by one-touch lock.

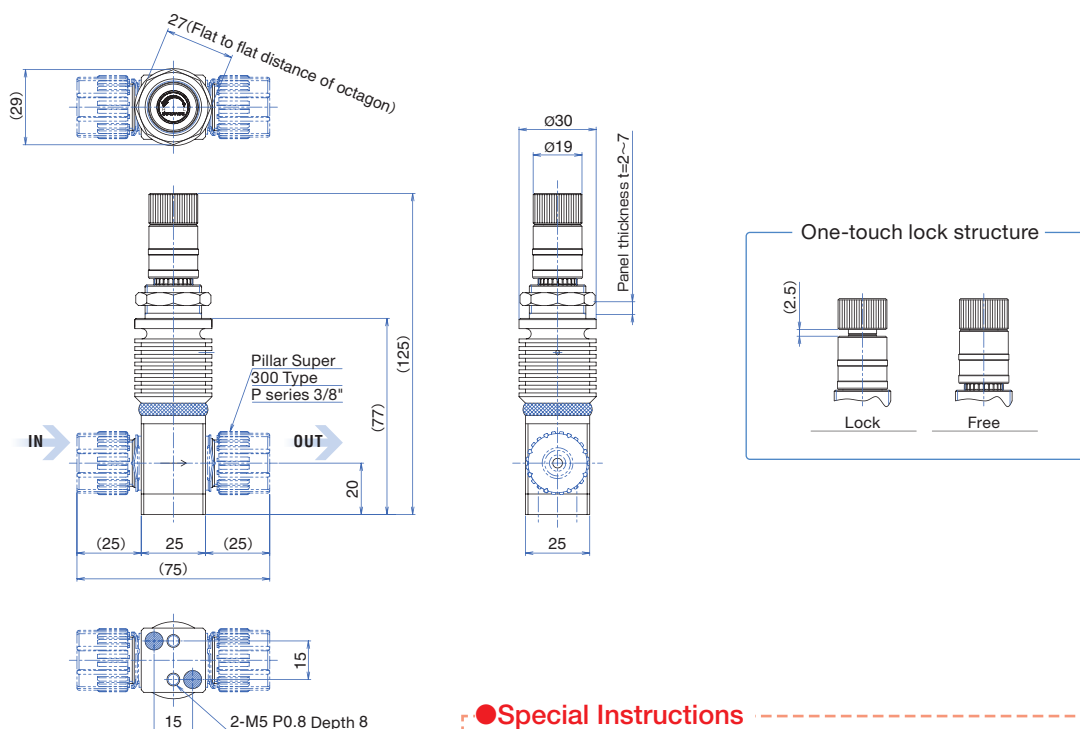
Models / Specifications

| Type | HNV-3/8P300P-S-SHT-Z |
|--------------------------|------------------------------|
| Fluids | Fluids (DI water, chemicals) |
| Connection | Pillar fitting |
| Wetted parts | PTFE |
| Operating pressure range | 0~400kPa |
| Withstanding pressure | 500kPa |
| Fluid temperature | 15~180°C |
| Ambient temperature | 15~60°C |
| Orifice | Ø2.7 |
| Tube size | 3/8" (Ø9.53×Ø6.35) |

※The above specifications exclude fittings, and the heat and pressure resistance of fittings are depending on the manufacturer.

Dimensions

●HNV-3/8P300P-S-SHT-Z



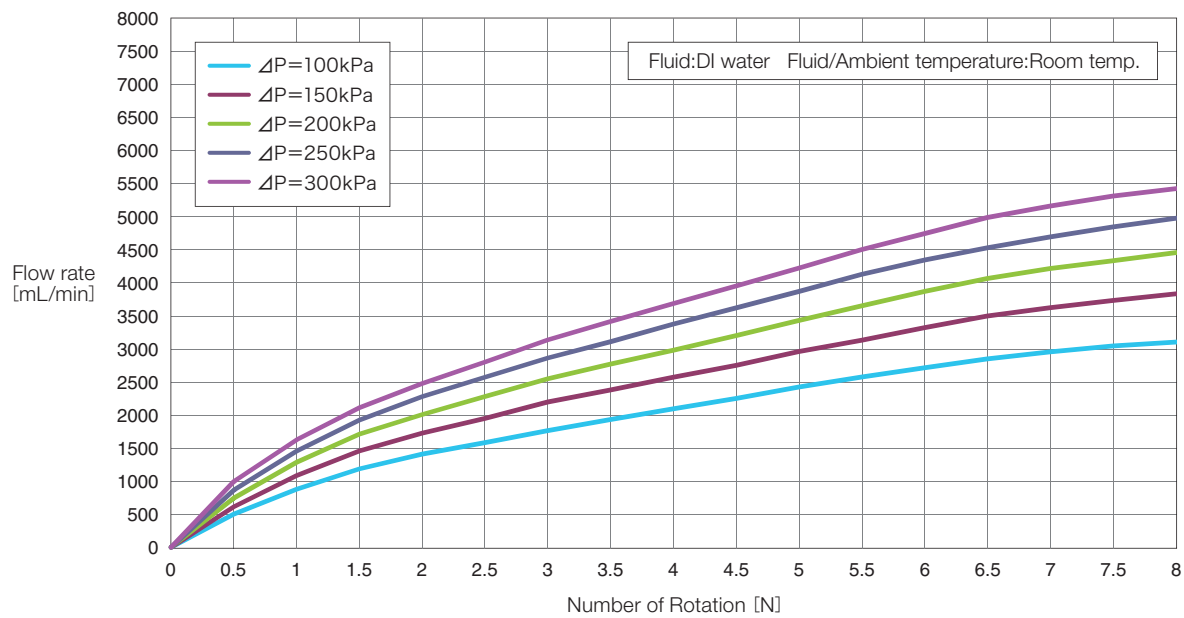
●Special Instructions



Be sure to use within the ambient temperature range.

Flow Characteristics

● HNV-3/8P300P-S-SHT-Z



※The data is reference value, not a guaranteed value.

Needle Valves

● Safety Instructions



- Before using the product, read the instruction manual carefully and use it correctly.
We are not liable for accidents that occurred during use other than those described in the instruction manual.
- Use this product within the specified range.
- Confirm the compatibility of the product material with the type of fluid and ambient atmosphere before use.
- When you use male connector, please use PTFE, PCTFE, PFA, PE, PP material, not iron.
Excessive tightening will lead to leak and break down of the product.
- Do not use fluids that contain refuse or foreign matter, as this may interfere with normal function.
- Abrasive or coagulate fluids may interfere with normal function, and take measures to prevent stacking residue on the wetted parts.
- When tubing, allow the fluid to flow in the direction mark (→) imprinted on the main unit.
- Connect this product not to apply any bending, tensile or compression, and other forces on the valve.
- Do not use the product with excessive vibration or shock.
- Needle valve does not design to stop the flow completely. Do not tighten the knob excessively.
- Do not disassemble the product.
- If static electricity is generated, the equipment may seriously damage.
Please use after applying antistatic measures.
- Be sure to use this product within the ambient temperature range.
- Do not warm up the product directly from the outside.
It may cause external or internal leakage failure.

- Pillar Super 300 Type P series is a trademark of Nippon Pillar Co., Ltd.