

VAP-VMP-VHP Medium and high Pressure Needle Valves

Needle valves specially designed to endure the harshest pressure conditions. Metal to metal seal with hardened tip for extended lifespan.

Characteristics

- Non rotating stem tip of hardened 17-4 PH reduces operating torque and prevents stem/seat galling
- The tip is mounted on a hardened sphere to minimize sealing torque and wear.
- PTFE encapsulated packing located underneath the stem thread, adjustable from the outside and unscrew safe.
- NPT, MU and AU connections (includes collar and gland)
- Angled, straight or double input configuration.
- Panel mount ready.
- Working pressures up to 15,000, 22,500 or 30,000 PSI (1,034, 1,550 and 2,068 bar)

Technical Specifications

STANDARD MATERIALS

| Part | Specification |
|-----------------|----------------------------|
| Body | AISI 316 |
| Tip | 17-4 PH |
| Stem and bonnet | AISI 316 & Manganese Brass |
| Packing gland | Brass |
| Packing | Peek + PTFE |
| Handle | Anodized Al 6061 |

TEMPERATURE AND PRESSURE RATINGS

| Packing | Service Pressure @ 70°F | | | Maximum Temperature |
|-------------------|-------------------------|------------|------------|---------------------|
| | VAP | VMP | VAP | |
| PTFE (std) | | | | 500°F |
| Flexible Graphite | 15.000 psi | 22.500 psi | 30.000 psi | 930°F |
| Fluoroelastomer | | | | 400°F |



Ordering Information

VAP 50 - I - T

Model

VAP: 15000 psi
VMP: 22.500 psi
VHP: 30.000 psi

Connections

(see dimensions table)

Angled configuration option

A: Angle
D: Double input
S: Double output

Packing

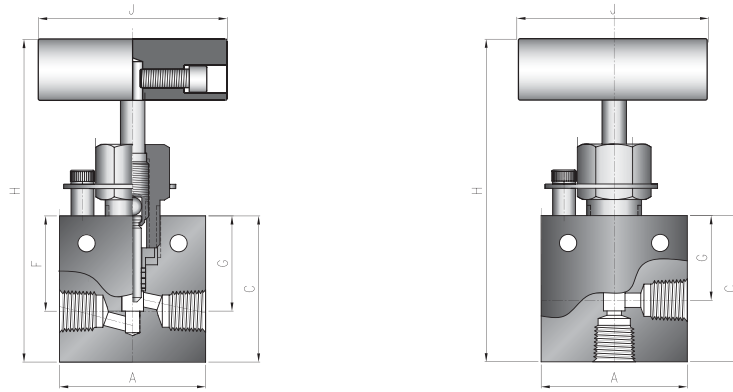
T: PTFE
G: Grafoil
V: Fluoroelastomer

Material

I: Stainless Steel

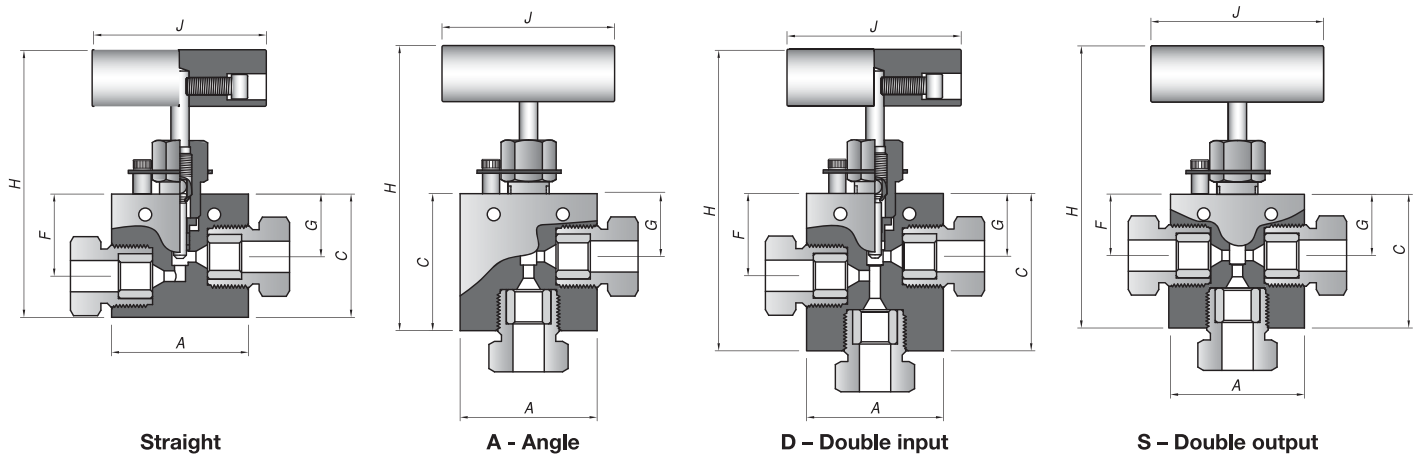
Dimensions and assembly characteristics

VAP Model
15,000 PSI (1,034 bar)



| Connections | Model | Orifice mm. | Measures [mm] | | | | | | |
|-------------|------------|-------------|---------------|------|------|------|-----------|-----|-------|
| | | | A | C | F | G | H Open | J | Width |
| 1/4" NPT H | VAP25 IT | 5 | 50.8 | 50.8 | 33,1 | 33.1 | 108.0 | 80 | 31,7 |
| 1/2" NPT H | VAP50 IT | 8 | 76.2 | 63.5 | 44,4 | 44.4 | 128.0 | 100 | 38,1 |
| 1/4" NPT H | VAP25 A IT | 5 | 50.8 | 50.8 | - | 29.4 | 108.0 | 80 | 31,7 |
| 1/2" NPT H | VAP50 A IT | 8 | 63.5 | 76.2 | - | 37.4 | 134.0 | 100 | 38,1 |

MODELOS VMP-VHP
1.550 bar (22.500 PSI) y 2.068 bar (30.000 PSI)



| Tube exterior diameter | Model | Orifice mm. | Connection | máx. pressure (psi) | Measures [mm] | | | | | | | |
|------------------------|-------------|-------------|-------------|---------------------|---------------|------|------|------|------|-----------|-----|-------|
| | | | | | UN Thread | A | C | F | G | H Open | J | Width |
| 1/4" | VHP 4H IT | 2.5 | 1/4"AU (1) | 30.000 | 9/16"x18 (1) | 50.8 | 50.8 | 38.1 | 28.5 | 100 | 80 | 31.7 |
| 9/16" | VMP 9M IT | 8 | 9/16"MU (3) | 22.500 | 13/16"x16 (3) | 63.5 | 73.2 | 50.0 | 38.0 | 144 | 100 | 32.0 |
| 9/16" | VHP 9H IT | 5 | 9/16"AU (2) | 30.000 | 1 1/8"x12 (2) | 63.5 | 57.0 | 38.1 | 29.1 | 114 | 80 | 38.1 |
| 1/4" | VHP 4H A IT | 2.5 | 1/4"AU (1) | 30.000 | 9/16"x18 (1) | 50.8 | 50.8 | - | 28.5 | 100 | 80 | 31.7 |
| 9/16" | VMP 9M A IT | 8 | 9/16"MU (3) | 22.500 | 13/16"x16 (3) | 63.5 | 87.0 | - | 38.0 | 158 | 100 | 32.0 |
| 9/16" | VHP 9H A IT | 5 | 9/16"AU (2) | 30.000 | 1 1/8"x12 (2) | 63.5 | 63.5 | - | 29.1 | 120 | 80 | 38.1 |
| 1/4" | VHP 4H D IT | 2.5 | 1/4"AU (1) | 30.000 | 9/16"x18 (1) | 50.8 | 63.5 | 38.1 | 28.5 | 117 | 80 | 32.0 |
| 9/16" | VMP 9M D IT | 8 | 9/16"MU (3) | 22.500 | 13/16"x16 (3) | 63.5 | 87.0 | 50.0 | 38.0 | 158 | 100 | 32.0 |
| 9/16" | VHP 9H D IT | 5 | 9/16"AU (2) | 30.000 | 1 1/8"x12 (2) | 63.5 | 72.9 | 38.1 | 29.1 | 130 | 80 | 38.1 |
| 1/4" | VHP 4H S IT | 2.5 | 1/4"AU (1) | 30.000 | 9/16"x18 (1) | 50.8 | 50.8 | 28.5 | 28.5 | 100 | 80 | 31.7 |
| 9/16" | VMP 9M S IT | 8 | 9/16"MU (3) | 22.500 | 13/16"x16 (3) | 63.5 | 87.0 | 38.0 | 38.0 | 158 | 100 | 32.0 |
| 9/16" | VHP 9H S IT | 5 | 9/16"AU (2) | 30.000 | 1 1/8"x12 (2) | 63.5 | 63.5 | 29.1 | 29.1 | 120 | 80 | 38.1 |

(1) Compatible with AUTOCLAVE type F250C connection
 (2) Compatible with AUTOCLAVE type F562C connection
 (3) Compatible with AUTOCLAVE SF682CX