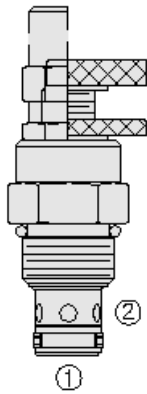




Overview



Description

A screw-in, cartridge style, variable orifice, hydraulic flow restrictor valve.

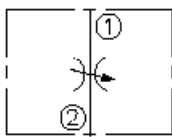
Operation

The NV10-20 valve increases its orifice value from fully closed to fully open with counter-clockwise adjustment rotation.

Features

- Adjustments cannot be backed out of the valve.
- Desired settings may be locked down.
- Hardened parts for long life.
- Aluminum knob option.
- Positive shut-off.
- Linear adjustment.
- Industry-common cavity.

Symbol



Ratings

Pressure Ratings

| | |
|-----------------|---------------------|
| Pressure rating | 241 bar (3500 psi) |
| Proof pressure | 345 bar (5000 psi) |
| Burst pressure | 896 bar (13000 psi) |

Flow Ratings

| | |
|--------------------------|--|
| Flow rating | See pressure drop vs. Flow chart |
| Maximum internal leakage | 0.05 ml/min (1 drops/min) - Note: At shut-off |

Temperature Ratings

| | | |
|-----------------------------|-------------------------------|--|
| Operating fluid temperature | -40 to 100 °C (-40 to 212 °F) | - Note: With buna N seals |
| | -26 to 204 °C (-15 to 400 °F) | - Note: With fluorocarbon seals |
| | -54 to 107 °C (-65 to 225 °F) | - Note: With polyurethane seals |
| | -54 to 107 °C (-65 to 225 °F) | - Note: With urethane seals |
| Storage temperature | -40 to 70 °C (-40 to 160 °F) | |
| Ambient temperature | -40 to 70 °C (-40 to 160 °F) | |

Other Ratings

| | |
|----------------------|---|
| Corrosion protection | 960 hr salt spray per ASTM B117 (model number: GNV10-20x) |
|----------------------|---|

Operating Parameters

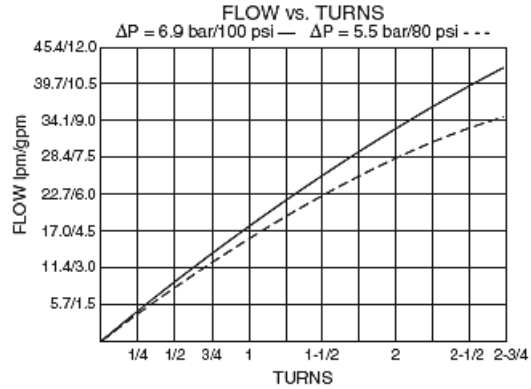
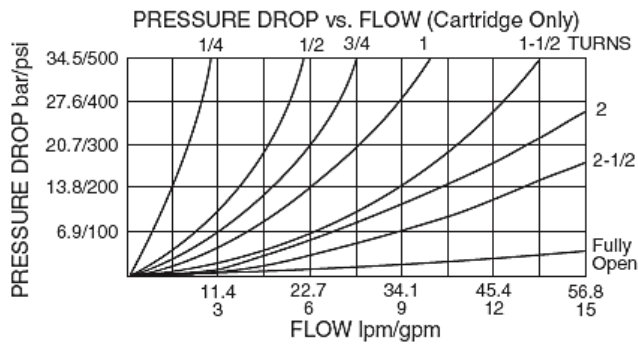
| | |
|---------------------------------------|--|
| Fluids | Mineral based or synthetic hydraulic fluid with lubricating properties |
| Fluid viscosity range | 7.4 to 420 cSt |
| Maximum operating contamination level | 18/16/13 per iso4406 |

Properties

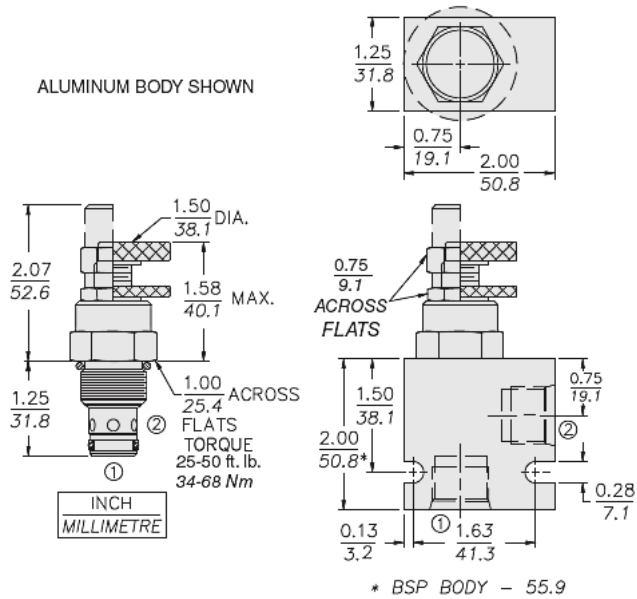
| | | |
|------------------------------|--|--------------------------------------|
| Adjustment torque | 0.56 N-m (5 in-lb) | - Note: At 7 bar (100 psi) |
| | 5.41 N-m (48 in-lb) | - Note: At 207 bar (3000 psi) |
| Unit weight | 0.14 kg (0.30 lb) | - Note: Option A |
| Internal wetted surface area | 91 cm ² (14.1 in ²) | |



Performance



Dimensions



Installation Specifications

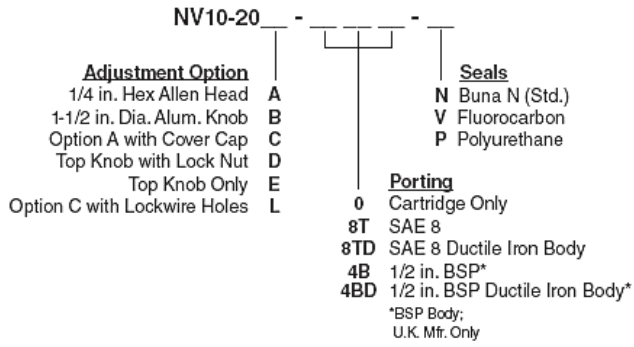
| | |
|-------------------------------|-------------------------------|
| Cavity | VC10-2 |
| Cartridge installation torque | 34 to 37 N-m (25 to 27 ft-lb) |
| Maximum allowable torque | 67.8 N-m (50 ft-lb) |
| Orientation restriction | None |

Accessories

| | | |
|----------|-----------|-------------------------|
| Seal kit | SK10-2X-M | - Note: X = seal option |
| Housings | | |



Order Code



| POSITION | CODE | DESCRIPTION |
|----------|------|---|
| | | NV10-20F-H-J |
| F | | Adjustment Option |
| F | A | 1/4" Hex Allen Head |
| F | B | 1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob |
| F | C | 1/4" Hex Allen Head with Cover Cap |
| F | D | 1-1/2" Diameter Aluminum Knob with Lock Nut |
| F | E | 1-1/2" Diameter Aluminum Knob Only |
| F | L | 1/4" Hex Allen Head with Cover Cap and Lockwire Holes |
| H | | Line Body |
| H | 0 | No Body |
| H | 6T | Aluminum SAE 6 |
| H | 8T | Aluminum SAE 8 |
| H | 6TD | Ductile Iron SAE 6 |
| H | 8TD | Ductile Iron SAE 8 |
| H | 2B | Aluminum BSPP 1/4" (2) |
| H | 3B | Aluminum BSPP 3/8" (3) |
| H | 4B | Aluminum BSPP 1/2" (4) |
| H | 4BD | Ductile Iron BSPP 1/2" (4) |
| J | | Seal |
| J | N | Buna-N |
| J | V | Fluorocarbon |
| J | P | Polyurethane |
| J | U | PPDI Urethane |