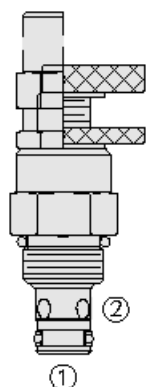




Overview



Description

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

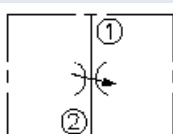
Operation

The NV08-20 valve increases its orifice size 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.
- Compact size.

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 | 0.32 ml/min (5 drops/min) - Note: At shut-off |

Temperature Ratings

| | | |
|-----------------------------|-------------------------------|--|
| Operating fluid temperature | -40 to 120 °C (-40 to 250 °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 |
| 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 gnv08-20xx) |
|----------------------|---|

Operating Parameters

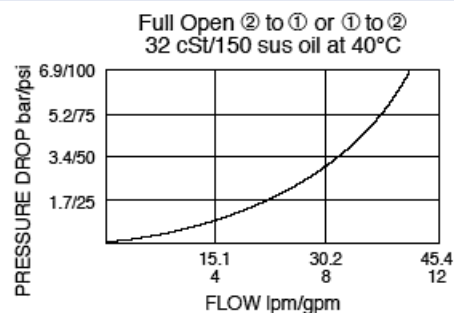
| | |
|---------------------------------------|--|
| Fluids | Mineral based or synthetic hydraulic fluid with lubricating properties |
| Fluid viscosity range | 7.4 to 420 cSt |
| Maximum operating contamination level | 18/16/13 per iso4406 |

Properties

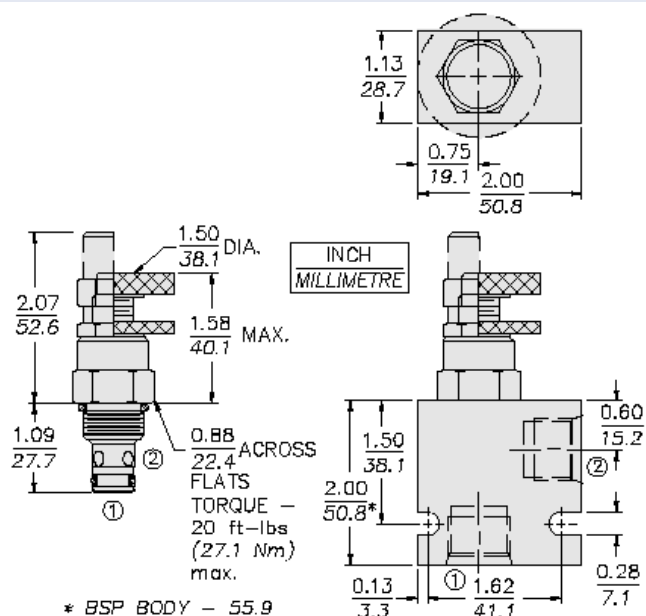
| | | |
|------------------------------|--|--------------------------------------|
| Adjustment torque | 0.6 N-m (5 in-lb) | - Note: At 7 bar (100 psi) |
| | 5.4 N-m (48 in-lb) | - Note: At 207 bar (3000 psi) |
| Unit weight | 0.12 kg (0.26 lb) | - Note: Option A |
| Internal wetted surface area | 60.4 cm ² (9.36 in ²) | |



Performance



Dimensions



Installation Specifications

| | |
|-------------------------------|---------------------|
| Cavity | VC08-2 |
| Cartridge installation torque | 27 N-m (20 ft-lb) |
| Maximum allowable torque | 47.5 N-m (35 ft-lb) |
| Orientation restriction | None |

Accessories

| | | |
|----------|-----------|--------------------------------|
| Seal kit | SK08-2X-M | - Note: X = seal option |
|----------|-----------|--------------------------------|

Order Code

| NV08-20 | | - | - | - |
|--------------------------------|---|----|------------------------------|-----------------|
| Adjustment Option | | | | Seals |
| 1/4 in. Hex Allen Head | A | | | N Buna N (Std.) |
| 1-1/2 in. Dia. Alum. Knobs | B | | | V Fluorocarbon |
| Option A with Cover Cap | C | | | |
| Top Knob with Lock Nut | D | | | |
| Top Knob Only | E | | | |
| Lockwire Holes (with Option C) | L | | | |
| | | | Porting | |
| | | 0 | Cartridge Only | |
| | | 4T | SAE 4 | |
| | | 6T | SAE 6 | |
| | | 2B | 1/4 in. BSP* | |
| | | 3B | 3/8 in. BSP* | |
| | | 4B | 1/2 in. BSP* | |
| | | | *BSP Body; U.K. Mfr. Only | |

Model Options



NV08-20FG-H-J

F Adjustment Option

| CODE | DESCRIPTION |
|------|---|
| A | 1/4" Hex Allen Head |
| B | 1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob |
| C | 1/4" Hex Allen Head with Cover Cap |
| D | 1-1/2" Diameter Aluminum Knob with Lock Nut |
| E | 1-1/2" Diameter Aluminum Knob Only |
| L | 1/4" Hex Allen Head with Cover Cap and Lockwire Holes |

G Screen

| CODE | DESCRIPTION |
|-------|-----------------|
| BLANK | NONE |
| S | 100 Mesh Screen |

H Line Body

| CODE | DESCRIPTION |
|------|----------------------------|
| 0 | No Body |
| 4T | Aluminum SAE 4 |
| 6T | Aluminum SAE 6 |
| 8T | Aluminum SAE 8 |
| 6TD | Ductile Iron SAE 6 |
| 8TD | Ductile Iron SAE 8 |
| 2B | Aluminum BSPP 1/4" (2) |
| 3B | Aluminum BSPP 3/8" (3) |
| 3BD | Ductile Iron BSPP 3/8" (3) |

J Seal

| CODE | DESCRIPTION |
|------|---------------|
| N | Buna-N |
| V | Fluorocarbon |
| P | Polyurethane |
| U | PPDI Urethane |