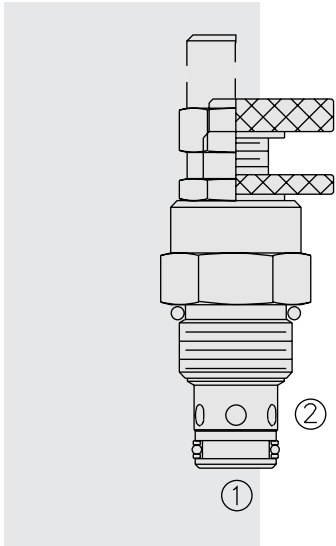


# NV10-20 Needle Valve



## DESCRIPTION

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

## OPERATION

The **NV10-20** increases its orifice value from fully closed to fully open with counterclockwise adjustment rotation.

## FEATURES

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

## RATINGS

**Operating Pressure:** 240 bar (3500 psi)

**Flow:** 45 lpm (12 gpm) nominal at 7 bar (100 psi) at full open 3.5 turns

**Internal Leakage:** 0.25 cc/minute (5 drop/minute) max. at shut-off

**Adjustment Torque Required:** 0.56 Nm (5 inch-pounds) at 7 bar (100 psi);  
5.41Nm (48 inch-pounds) at 207 bar (3000 psi)

**Temperature:** -40 to 120°C

**Filtration:** See page 9.010.1

**Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

**Installation:** No restrictions; See page 9.020.1

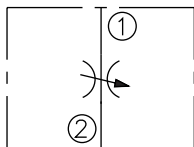
**Cavity:** VC10-2; See page 9.110.1

**Cavity Tool:** CT10-2XX; See page 8.600.1

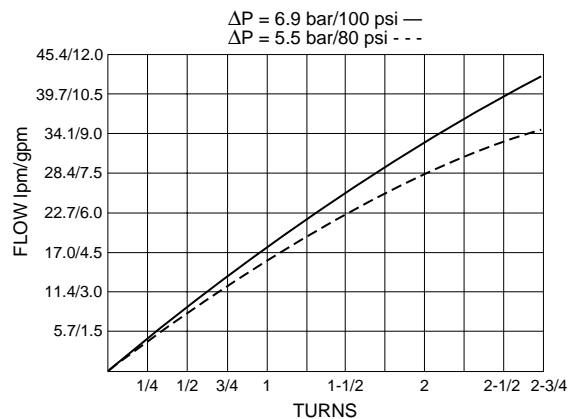
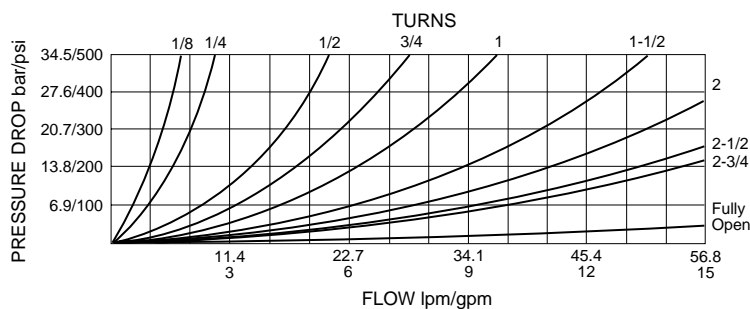
**Seal Kit:** SK10-2X-M; See page 8.650.1

## SYMBOLS

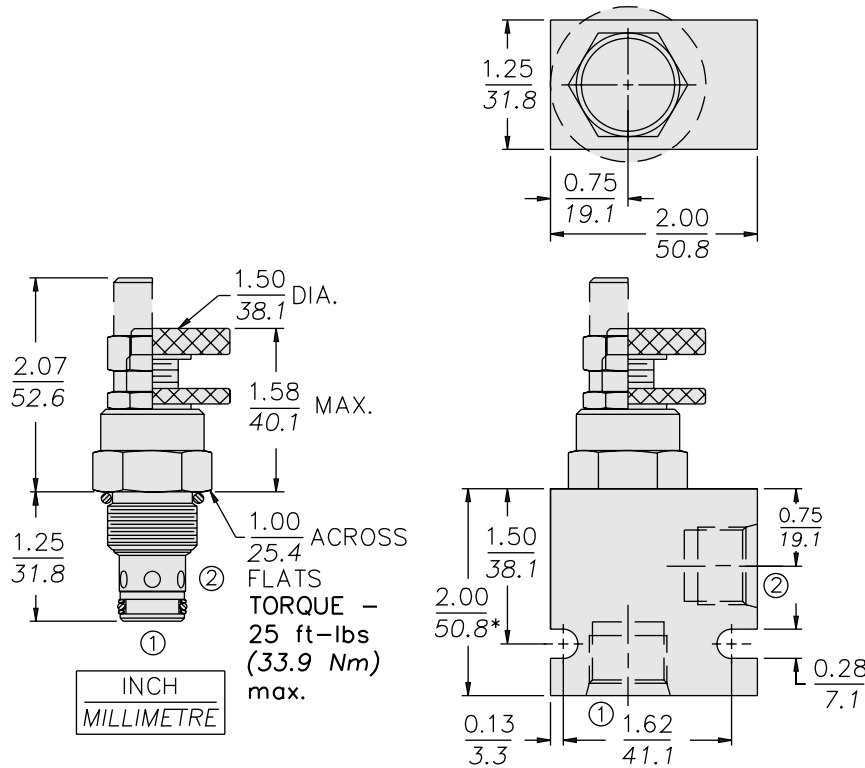
### USASI/ISO:



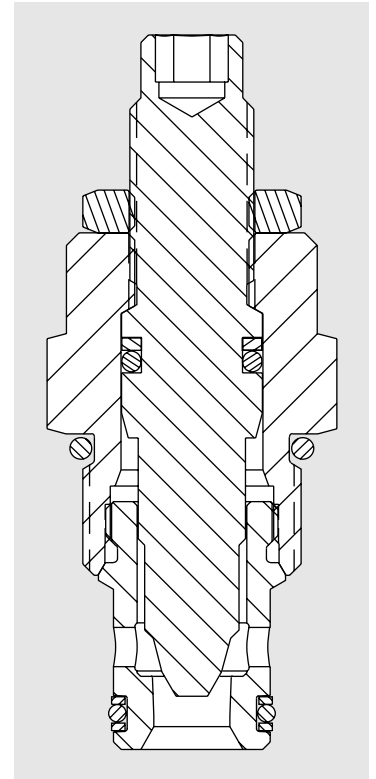
## PERFORMANCE (Cartridge Only)



**DIMENSIONS**



\* BSP BODY - 55.9



**MATERIALS**

**Cartridge:** Weight: 0.15 kg. (0.33 lbs.)  
 Steel with hardened work surfaces.  
 Zinc-plated exposed surfaces.  
 Buna N O-rings and polyester elastomer back-ups standard.  
 Anodized aluminum knobs.

**Standard Ported Body:** Weight:  
 0.16 kg. (0.35 lbs.) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.010.1

**TO ORDER**

