

Part number:

HYDROMA

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SISTEMS**

UKŁADY HYDRAULICZNE

HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

FLOW CONTROLS

Blue rectangles are links to other catalog pages.

NV12-20 Needle Valve

DESCRIPTION

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

OPERATION

The **NV12-20** 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.
- Cost effective cavity.
- Aluminum knob option.
- Positive shut-off.
- Linear adjustment.

RATINGS

Operating Pressure: 240 bar (3500 psi)

Flow: 113.6 lpm (30 gpm) nominal at 7 bar (100 psi) at full open 4.5 turns

Internal Leakage: 0.15 cc/minute (3 drops/minute) max. at shut-off

Adjustment Torque Required: 0.17 Nm (1.5 lb.-in.) at 7 bar (100 psi);
16.9 Nm (150 lb.-in.) at 207 bar (3000 psi)

Temperature: -40 to 120°C

Filtration: See page 9.010.1

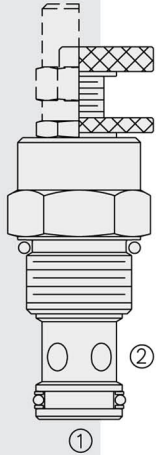
Fluids: Mineral-based or synthetics with lubricating properties at viscosities of
7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

Installation: No restrictions; See page 9.020.1

Cavity: VC12-2; See page 9.112.1

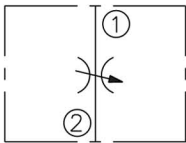
Cavity Tool: CT12-2XX; See page 8.600.1

Seal Kit: SK12-2X-M; See page 8.650.1

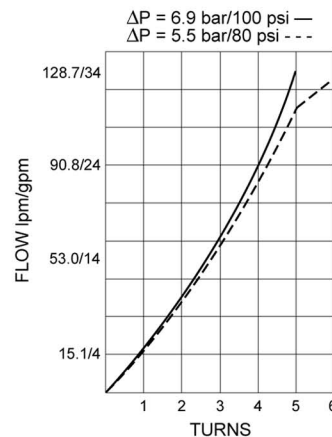
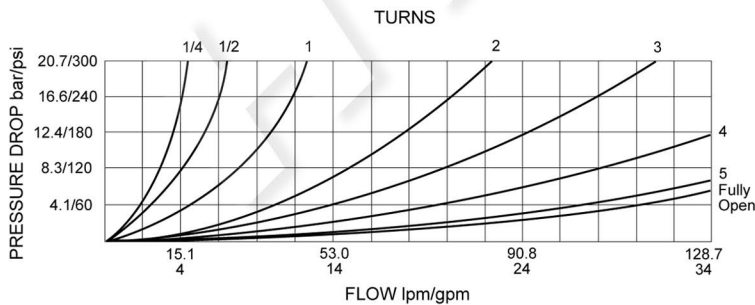


SYMBOLS

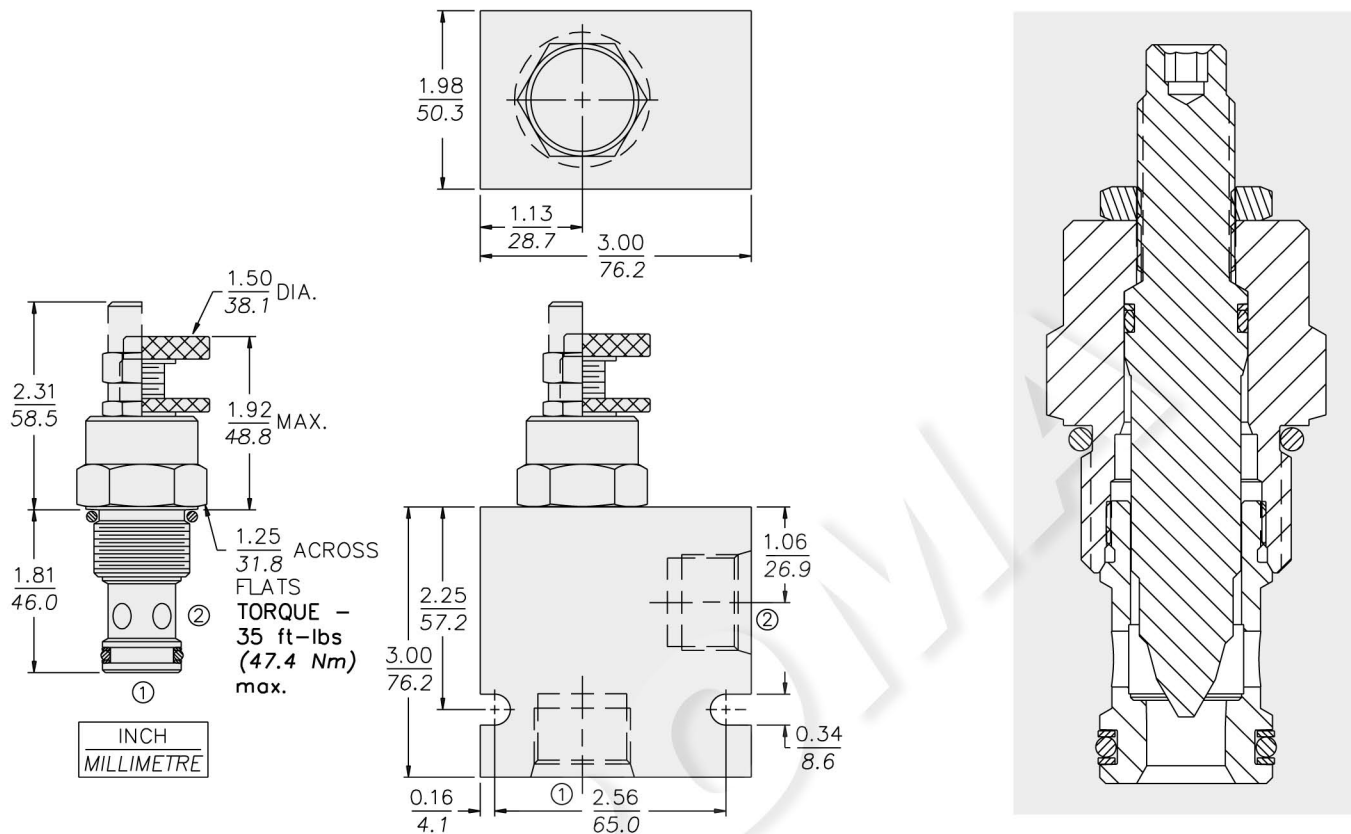
USASI/ISO:



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.32 kg. (0.70 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:
0.57 kg. (1.25 lbs.) Anodized high-
strength 6061 T6 aluminum alloy,
rated to 207 bar (3000 psi). Ductile
iron bodies available; dimensions
may differ. See page 8.012.1

TO ORDER

NV12-20

Adjustment Option
1/4 in. Hex Allen Head **A**
1-1/2 in. Dia. Alum. Knob **B**
Option A with Cover Cap **C**
Top Knob with Lock Nut **D**
Top Knob Only **E**

Seals
N Buna N (Std.)
V Fluorocarbon

Porting
0 Cartridge Only
10T SAE 10
12T SAE 12
16T SAE 16
4B 1/2 in. BSP*
6B 3/4 in. BSP*
8B 1 in. BSP*

*BSP Body;
U.K. Mfr. Only