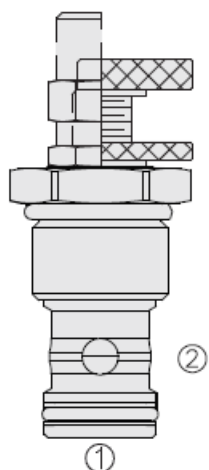




## Overview



### Description

HN12-20 is a screw-in, cartridge style, variable orifice, hydraulic flow restrictor valve.

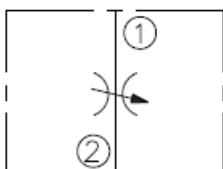
### Operation

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

### Features

- Rated for high pressure operation.
- Compact size.
- Can be used with HyPerformance<sup>®</sup> ductile iron body or standard ductile iron body.
- Adjustments cannot be backed out of the valve.
- Desired settings may be locked down.
- Hardened parts for long life.
- Variety of adjustment options available.
- Positive shut-off.
- Linear adjustment.

### Symbol



## Ratings

### Pressure Ratings

Pressure rating	350 bar (5075 psi)
Proof pressure	689 bar (10000 psi)
Burst pressure	1379 bar (20000 psi)

### Flow Ratings

Flow rating	See pressure drop vs. Flow chart
Maximum internal leakage	0.15 ml/min (3 drops/min) - <b>Note:</b> Max at shut-off

### Temperature Ratings

Operating fluid temperature	40 to 100 °C (40 to 212 °F)	- <b>Note:</b> With buna N seals
	26 to 204 °C (15 to 400 °F)	- <b>Note:</b> With fluorocarbon seals
	54 to 107 °C (65 to 225 °F)	- <b>Note:</b> 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
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## Operating Parameters

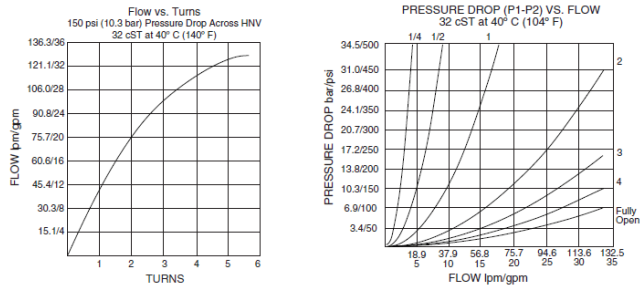
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per iso4406



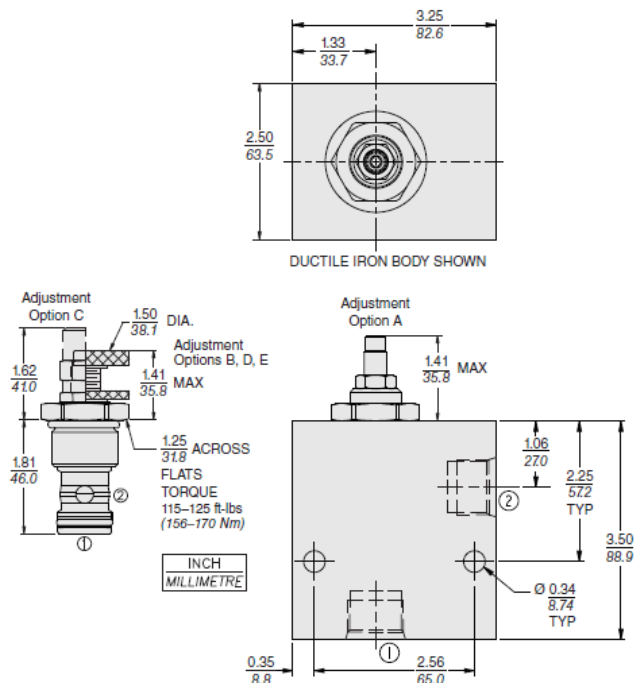
## Properties

Adjustment torque	0.3 to 0.6 N-m (3 to 5 in-lb)	- <b>Note:</b> At 345 bar (5000 psi)
Unit weight	0.32 kg (0.50 lb)	- <b>Note:</b> Option A
Internal wetted surface area	94.2 cm <sup>2</sup> (14.6 in <sup>2</sup> )	

## Performance



## Dimensions



## Installation Specifications

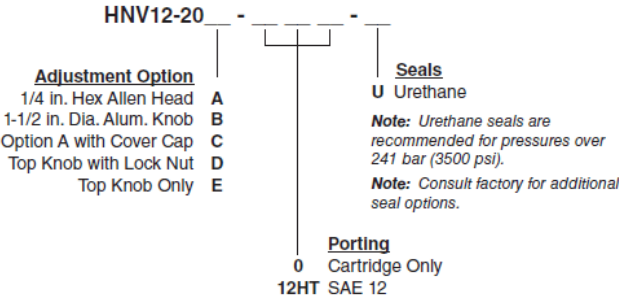
Cavity	VC12-2 HVC12-2
Cartridge installation torque	156 to 170 N-m (115 to 125 ft-lb)
Orientation restriction	None

## Accessories

Seal kit	SK12-2N-M-115 - <b>Note:</b> Buna N SK12-2V-M-115 - <b>Note:</b> Fluorocarbon SK12-2U-0 - <b>Note:</b> Urethane
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Order Code



Model Options

HN12-20F-H-J

F Adjustment Option

CODE	DESCRIPTION
A	5/32" Hex Allen Head
B	1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob
C	5/32" Hex Allen Head with Cover Cap
D	1-1/2" Diameter Aluminum Knob with Lock Nut
E	1-1/2" Diameter Aluminum Knob Only

H Line Body

CODE	DESCRIPTION
0	No Body
12HT	Ductile Iron SAE 12

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
U	PPDI Urethane