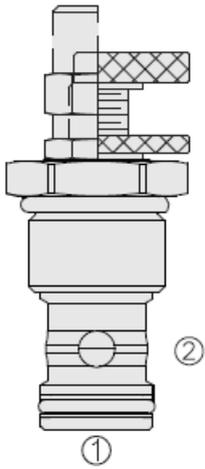




Overview



Description

HNV12-20 is a screw-in, cartridge style, variable orifice, hydraulic flow restrictor valve.

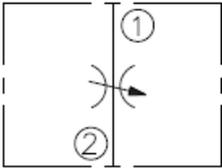
Operation

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[®] 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)	- Note: Max 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 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

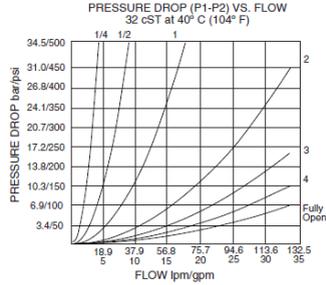
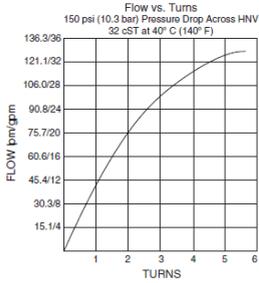
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per iso4406



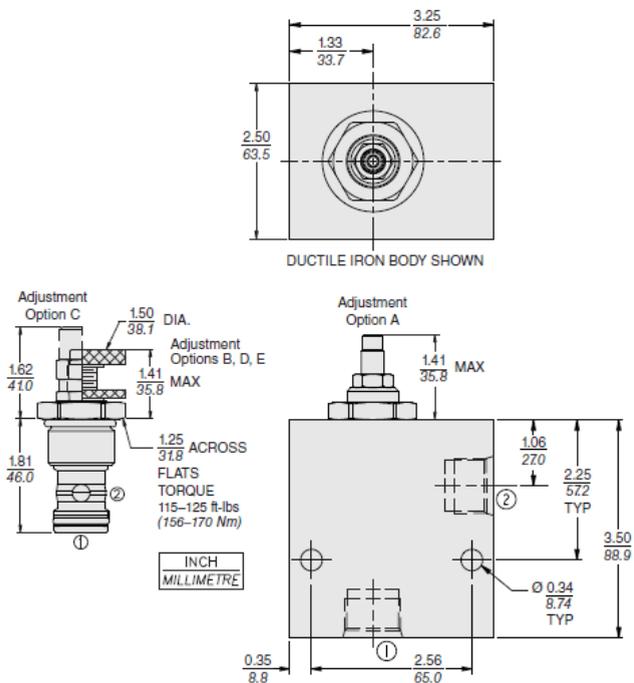
Properties

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

Performance



Dimensions



Installation Specifications

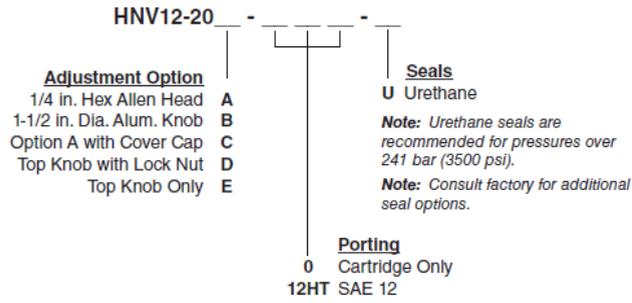
Cavity	VC12-2 HVC12-2
Cartridge installation torque	156 to 170 N-m (115 to 125 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK12-2N-M-115 - Note: Buna N
	SK12-2V-M-115 - Note: Fluorocarbon
	SK12-2U-0 - Note: Urethane



Order Code



Model Options

HNV12-20F-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