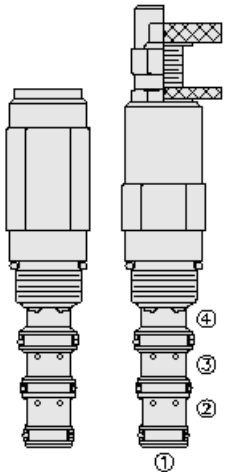




Overview



Description

The UP10-40X is a screw in, cartridge style, remote sequence, pilot unloading valve, with optional fixed unload/reload pressure ratios of 60%, 70%, or 80% for use in accumulator type hydraulic systems.

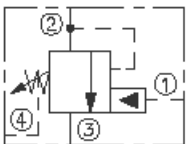
Operation

In its steady state, the UP10-40X blocks flow from port 2 to port 3. On attainment of a predetermined pressure at port 1, the spool shifts to allow flow from port 2 to port 3. The spring chamber is vented to port 4. If pressure at port 1 drops to a level below the ratio established reload value, the valve will close, blocking flow from port 2 to port 3.

Features

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Hardened precision spool and cage for long life.
- Industry-common size.

Symbol



Ratings

Pressure Ratings

Pressure rating	206.8 bar (3000 psi)	- Note: Port 1, port 2, port 3
	68.9 bar (1000 psi)	- Note: Port 4
Proof pressure	482.6 bar (7000 psi)	
Burst pressure	965.3 bar (14000 psi)	
Pressure setting	68.9 to 206.8 bar (1000 to 3000 psi)	
Loading and unloading pressure ratio	At 3.8 lpm (1 gpm) 206.8 bar (3000 psi)	

Flow Ratings

Flow rating	3.8 lpm (1 gpm)	
Maximum internal leakage	0.1 ml/min (2 drops/min)	- Note: From port 1 to 2 at max pressure

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
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

Other Ratings

Corrosion protection	UP10-40X gup10-40x type iii clear zinc plating 960 hr salt spray per ASTM b633 per ASTM b117
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Operating Parameters

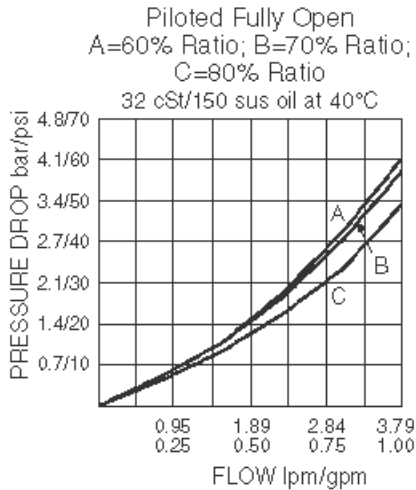
Fluids	Mineral based or synthetic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406



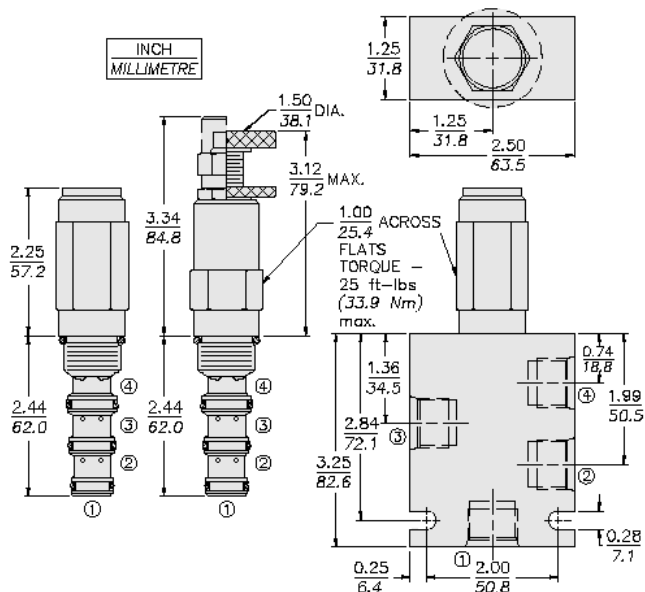
Properties

Unit weight	0.27 kg (0.64 lb)	- Note: A
	0.29 kg (0.69 lb)	- Note: B
	0.31 kg (0.74 lb)	- Note: C I
	0.26 kg (0.62 lb)	- Note: F h
Internal wetted surface area	207 cm ² (32.1 in ²)	- Note: A b c I
	216 cm ² (33.5 in ²)	- Note: F h

Performance



Dimensions



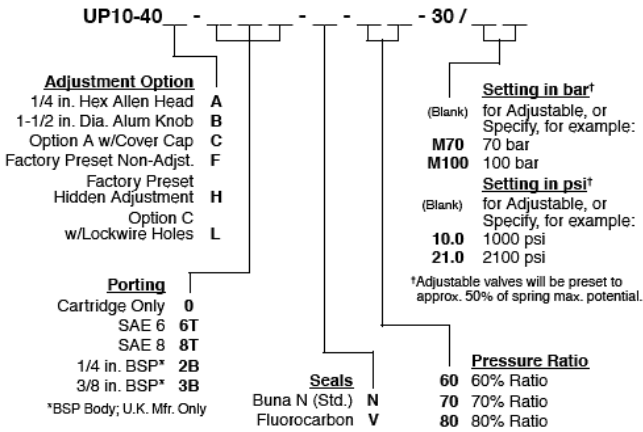
Installation Specifications

Cavity	VC10-4
Cartridge installation torque	32.5 to 35.3 N-m (24 to 26 ft-lb)
H style plug torque	33.9 N-m (25 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK10-4X-BBM	- Note: X=seal option
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Order Code



Model Options

UP10-40F-H-J-NR/S

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
F	Factory Preset Non-Adjustable
H	Factory Preset Hidden Adjustment
L	1/4" Hex Allen Head with Cover Cap and Lockwire Holes

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6

J Seal

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

N Ratio

CODE	DESCRIPTION
60	60% Ratio
70	70% Ratio
80	80% Ratio

R Spring

CODE	DESCRIPTION
30	68.9 to 206.8 bar (1000 to 3000 psi) Spring Range

S Setting



CODE	DESCRIPTION
MXXX	Spring Setting in XXX bar
XX	Spring Setting in XX psi (x 100)