

DESCRIPTION

A screw-in, cartridge-style, remote sequence, pilot unloading valve, with optional fixed “unload/reload” pressure ratios for use in accumulator-type hydraulic systems.

OPERATION

In its steady state, the INUP10-30 blocks flow from ② to ③. On attainment of a pre-determined pressure at ①, the spool shifts to allow flow from ② to ③. Since the spring chamber is vented at ③, back pressure at ③ will directly (1:1) affect the valve’s setting. If pressure at ① drops to a level below the ratio-established reload value, the valve will close, blocking flow from ② to ③.

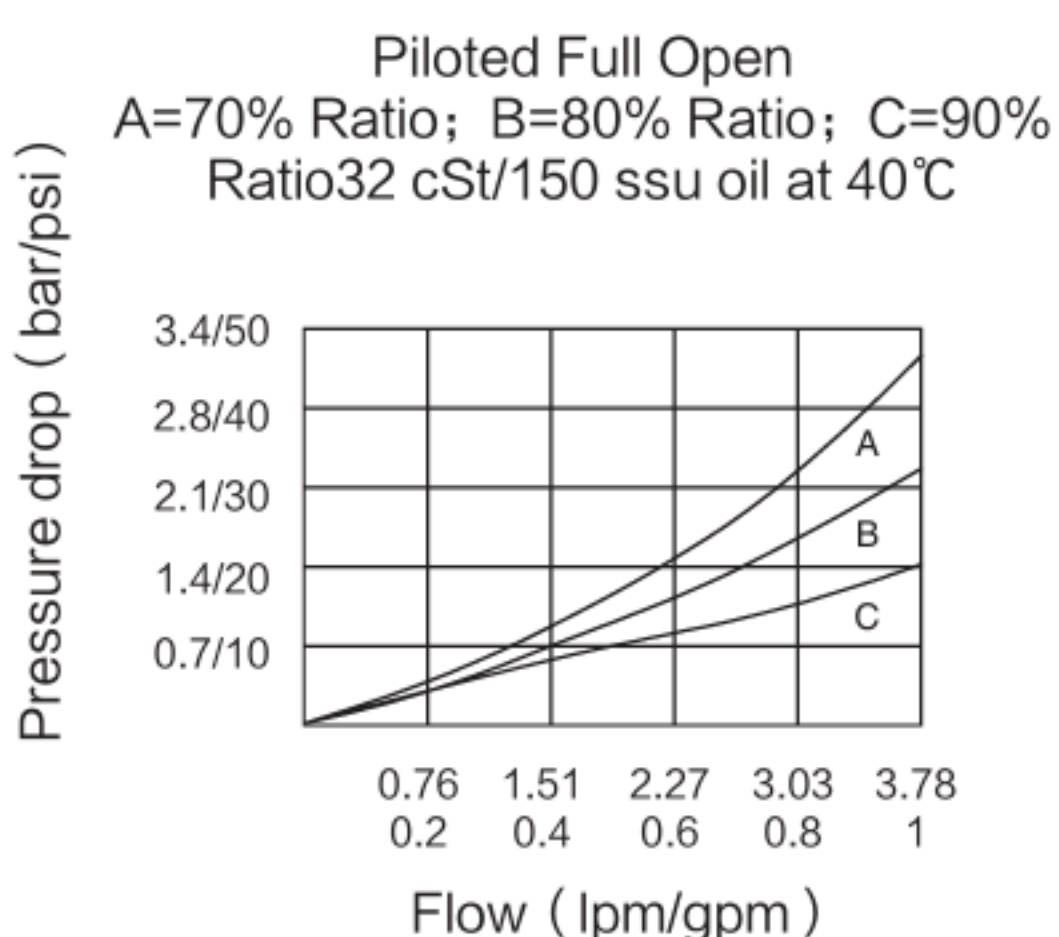
FEATURES

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Optional spring ranges to 240 bar (3500 psi).
- Hardened spool and cage for long life.
- Industry common cavity.

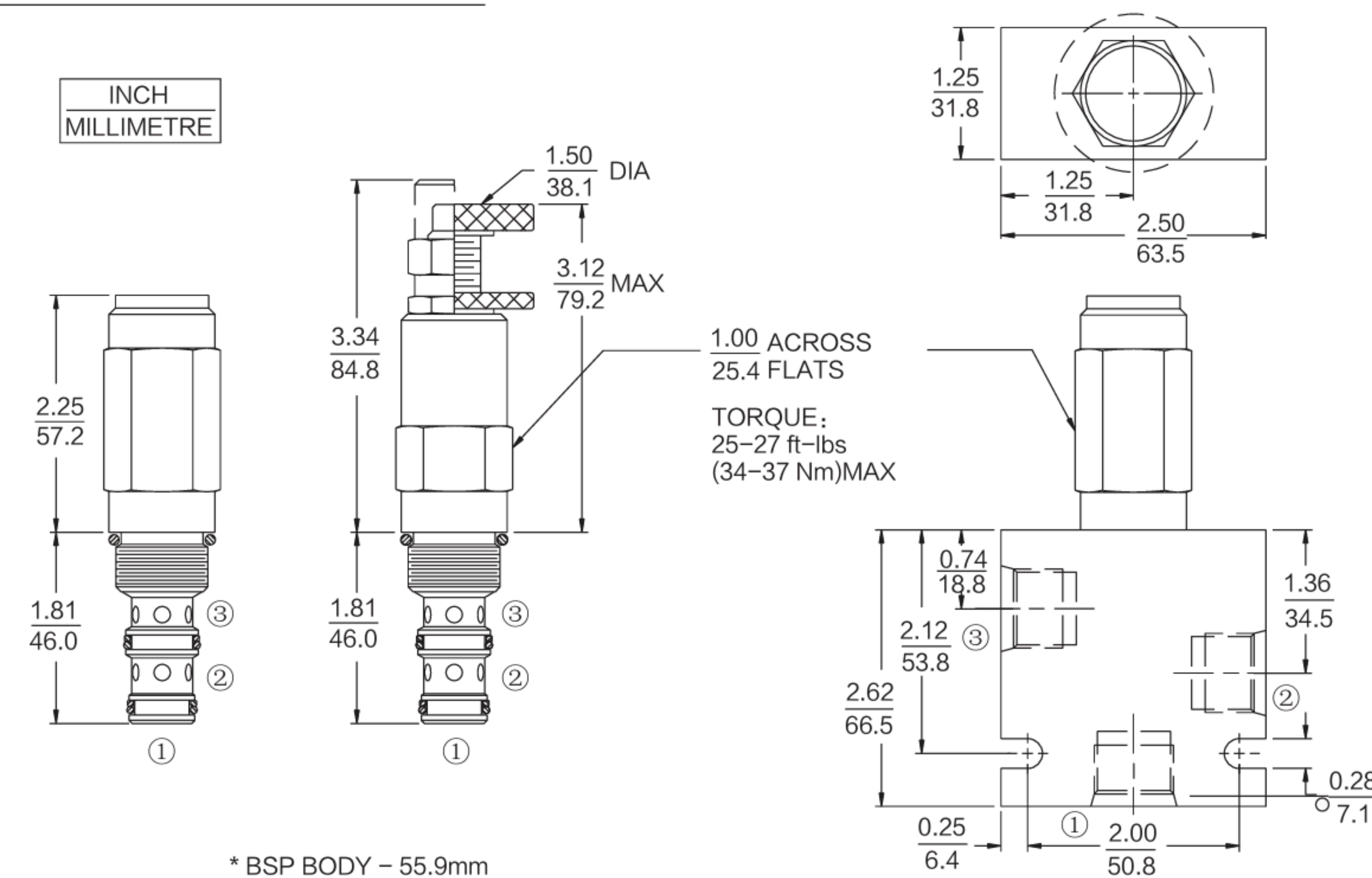
RATINGS

Operating Pressure: 207 bar (3000 psi)
Flow: 4 lpm (1 gpm)
Ratio Between Unloading & Reloading Pressure: 70% ± 4%; 80% ± 4%; 90% ± 4%
Standard Spring Ranges: 69 ~ 207 bar (1000 ~ 3000 psi)
Temperature: -40°C ~ 120°C (with Buna N seals)
Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 ssu)
Cavity: T10-3A; See bottom of this catalog.

PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.27kg (0.60 lbs) ; INUP10-30
 Steel with hardened work surfaces.
 Zinc-plated exposed surfaces.
 Buna N O-rings and polyester elastomer back-ups standard.
 Anodized aluminum knobs.
 Optional polyurethane seals with Fluorocarbon back-up recommended for pressures over 240 bar (3500 psi).
BODY: Weight: 0.36 kg (0.80lbs) ;
 Anodized highstrength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi) ;
 Ductile iron bodies available; dimensions may differ.

TO ORDER

Adjustment Option		Setting in bar†	
1/4 in. Hex Allen Head	A	(Blank)	for Adjustable, or Specify, for example:
1-1/2 in. Dia. Alum. Knobs	B	M69	69 bar
Option A with Cover Cap	C	M207	207 bar
Factory Preset Non-Adj.	F	Setting in psi†	
Factory Preset Hidden Adj.	H	(Blank)	for Adjustable, or Specify, for example:
Option C w/ Lockwire Holes	L	10.0	1000 psi
		23.5	2350 psi
Porting		Spring Ratio	
Cartridge Only	0	60	60% Ratio
SAE 6	6T	70	70% Ratio
SAE 8	8T	80	80% Ratio
1/4 in. BSP*	2B		
3/8 in. BSP*	3B		
Seals			
Buna	N		
Fluorocarbon	V		

†Adjustable valves will be preset to approx. 50%