

DESCRIPTION

A screw-in, cartridge-style, pilot-operated, spool-type, hydraulic pressure reducing/relieving valve with internal pilot and internal spring chamber drain, designed to act as a pressure-regulating device for secondary circuits.

OPERATION

In its steady state, the INPR10-36 allows flow to pass bidirectionally from ② to ①, with the spring chamber constantly drained at ③. On attainment of a pre-determined pressure at ①, the cartridge shifts to restrict input flow at ②, thereby regulating pressure at ①. In this mode, the valve will also relieve ① to ③. Deadband (from reducing to relieving) pressure rise over reduced pressure setting: Non-flow condition: approximately 0.55 bar (8 psi); with flow: approximately 2.1 bar(30 psi).

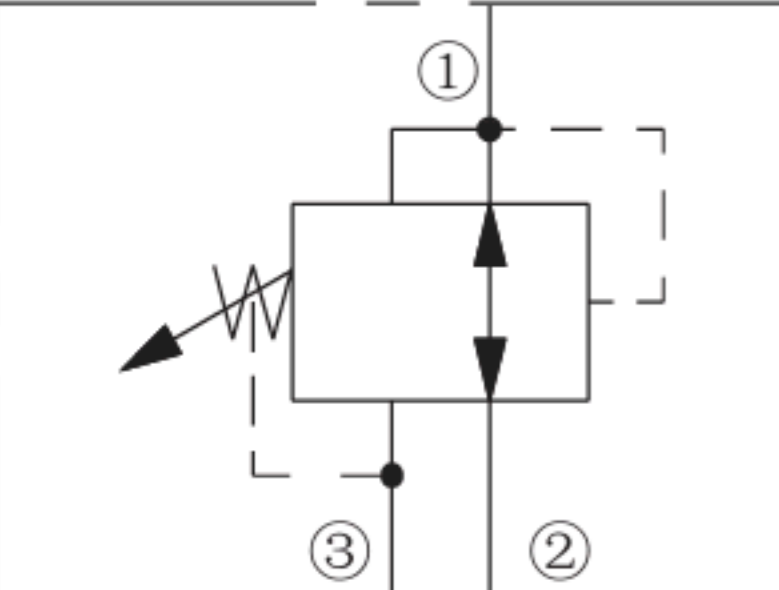
FEATURES

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Hardened spool and cage for long life.
- Optional spring ranges to 207 bar (3000 psi) .
- Industry common cavity.

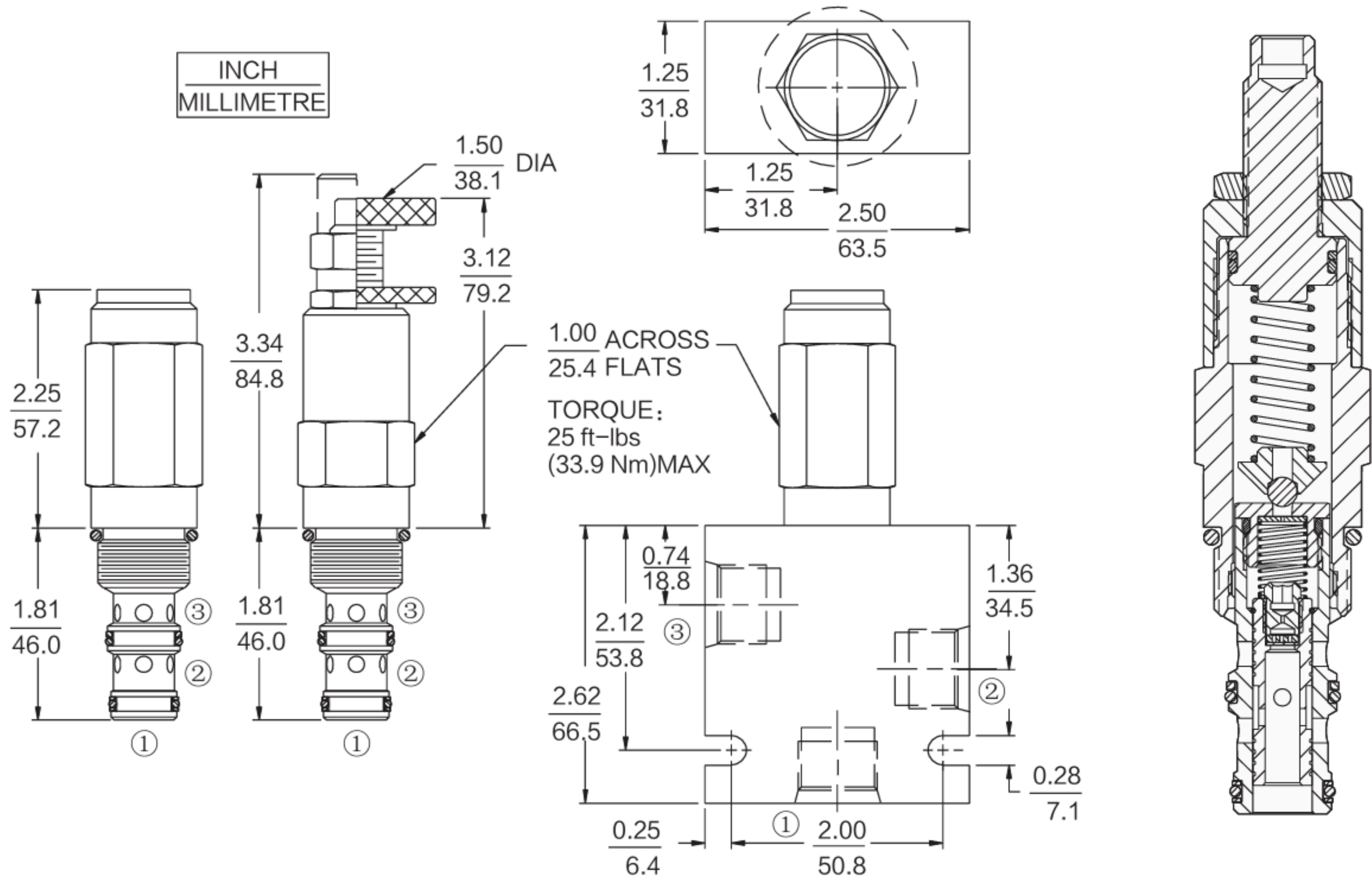
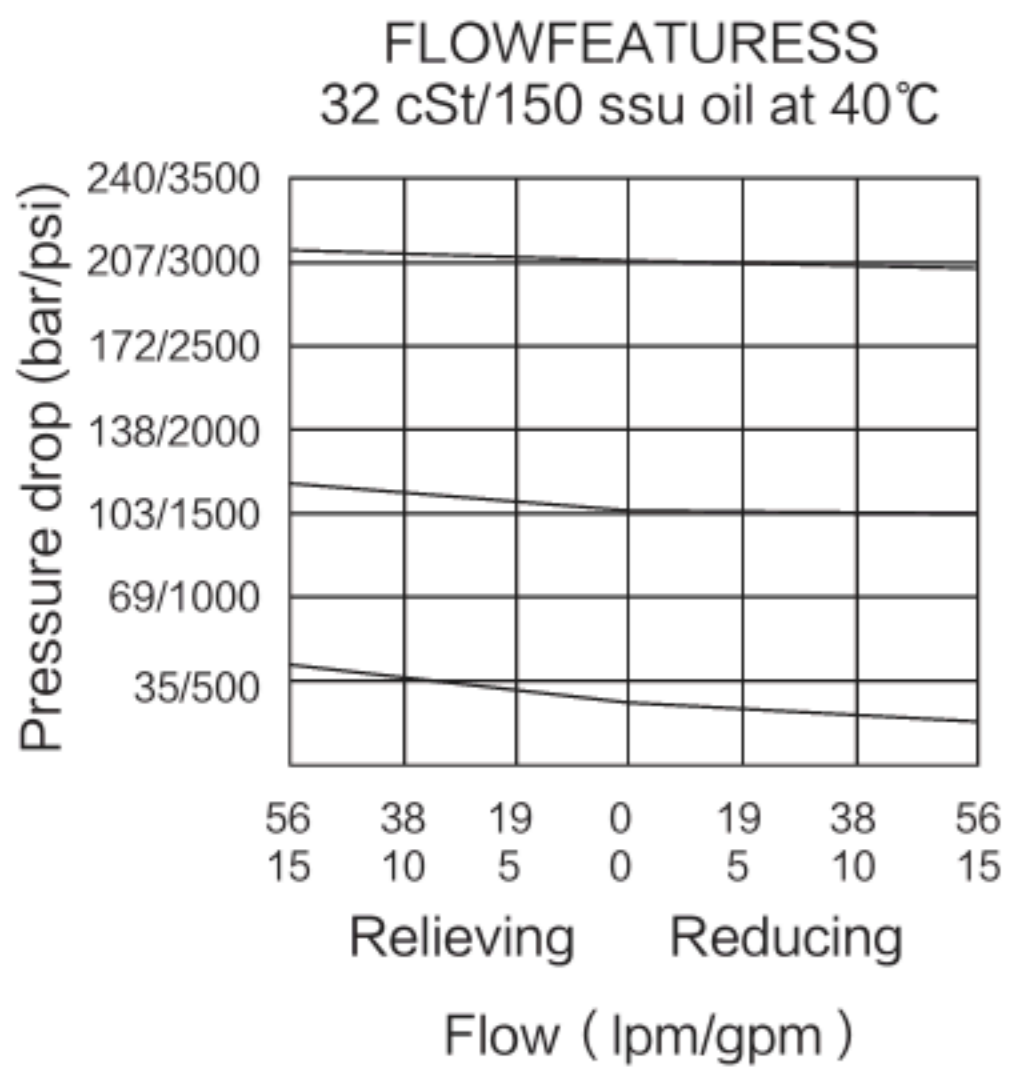
RATINGS

Operating Pressure:210 bar (3000 psi)
Proof Pressure: 390 bar 5700 psi)
Flow:See Performance Chart
Pilot Orifice: 0.51 mm (0.020 in)
Standard Spring Ranges (Reducing Function) :
 6.9 ~ 27.6 bar (100 ~ 400 psi)
 10.3 ~ 103 bar (150 ~ 1500 psi)
 27.6 ~ 207 bar (400 ~ 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.

ISO SYMBOL



PERFORMANCE (Cartridge Only)



MATERIALS

Cartridge: Weight:0.27kg (0.60 lbs) ;
 Steel with hardened work surfaces.
 Zinc-plated exposed surfaces.
 Buna N O-rings and polyester elastomer back-ups standard.
 Anodized aluminum knobs and caps.
BODY:Weight:0.36kg (0.80 lbs) ;
 Anodized high-strength 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	M25	25 bar
Option A with Cover Cap	C	M100	100 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	9.0	900 psi
		21.0	2100 psi
Porting		Spring Range	
Cartridge Only	0	4	6.9 to 27.6 bar (10 0 to 400 psi)
SAE 6	6T	15	10.3 to 103 bar (150 to 1500 psi)
SAE8	8T	30	27.6 to 207 bar (400 to 3000 psi)
1/4 in. BSP*	2B		
3/8 in. BSP*	3B		
Seals			
	Buna N		
	Fluorocarbon V		

†Adjustable valves will be