

DESCRIPTION

A screw-in, cartridge-style, direct-acting, differential area, poppet-type hydraulic relief valve for use as a pressure limiting device in more demanding hydraulic circuits, requiring low hysteresis and low internal leakage.

OPERATION

The INRV08-22 blocks flow from ② to ① until sufficient pressure is present at ② to force the poppet from its seat.

The cartridge offers smooth transition in response to load changes in common hydraulic circuits.

NOTE: INRV08-22 may be used in cross-over relief applications (back pressure on ①) with the use of the "C" double back-up ring seal option. See Ordering Table.

FEATURES

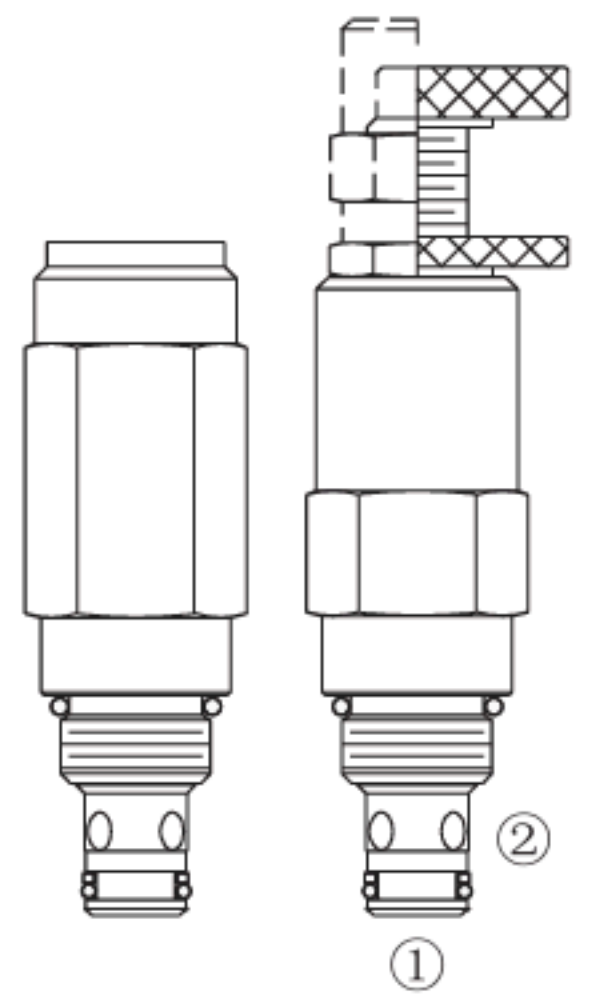
- Adjustments cannot be backed out of the valve.
- Adjustment options A, B, and C: positive stops prevent springs from going solid..
- Hardened spool and cage for long life.
- Optional spring ranges to 221 bar (3200 psi) .
- Smooth response to pressure surges.
- Industry common cavity.
- Compact size.

RATINGS

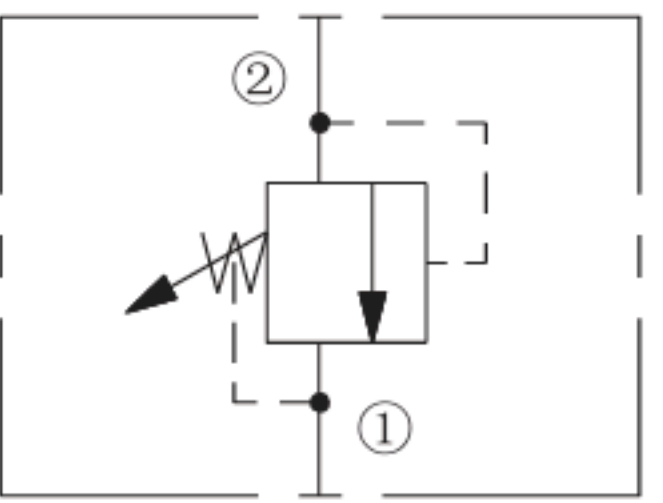
Operating Pressure: 221 bar (3200 psi)
Flow:The Performance Chart illustrates flow handling capacity at maximum setting for each spring range option. Pressure rise will vary with spring (range) and with setting within range due to flow forces. Consult factory for specific flow characteristic values.
Internal Leakage: 0.25 cc/minute (5 drops/minute) max. to 85% of nominal setting
Crack Pressure Defined: bar (psi) evident at 0.95 lpm (0.25 gpm) attained
Reseat Pressure: Nominal 90% of crack pressure
Standard Spring Ranges: Due to manufacturing tolerances, it may be possible to adjust the valve either lower or higher than the nominal ratings shown below.
Fluids:Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 ssu)

Temperature:-40°C ~ 120°C
Fluids:Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 ssu)
Cavity:T08-2E ; See bottom of this catalog.

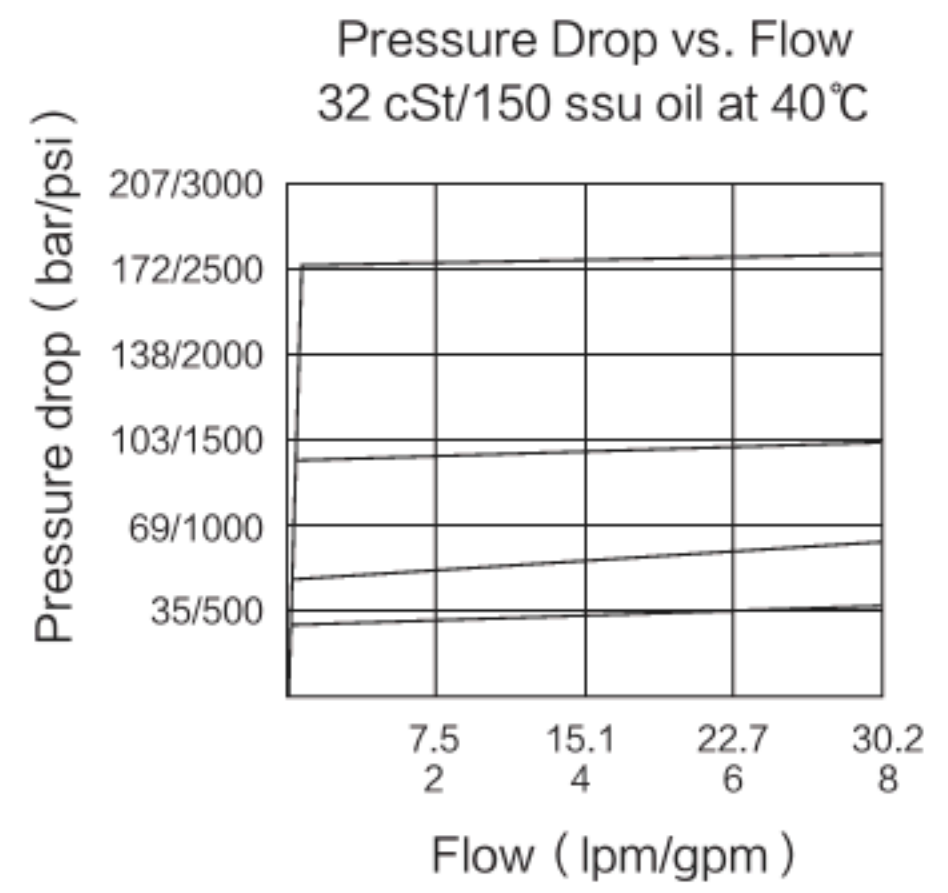
Spring Model Code	Nominal Factory Rating	Max Solid Adjustment
4	3.45-27.59 bar (50-400 psi)	41.38 bar (600 psi)
7	6.90-48.3 bar (100-700 psi)	89.66 bar (1300 psi)
13	10.3-89.6 bar (150-1300 psi)	158.62 bar (2300 psi)
26	17.24-248.2 bar (250-3600 psi)	275.86 bar (4000 psi)



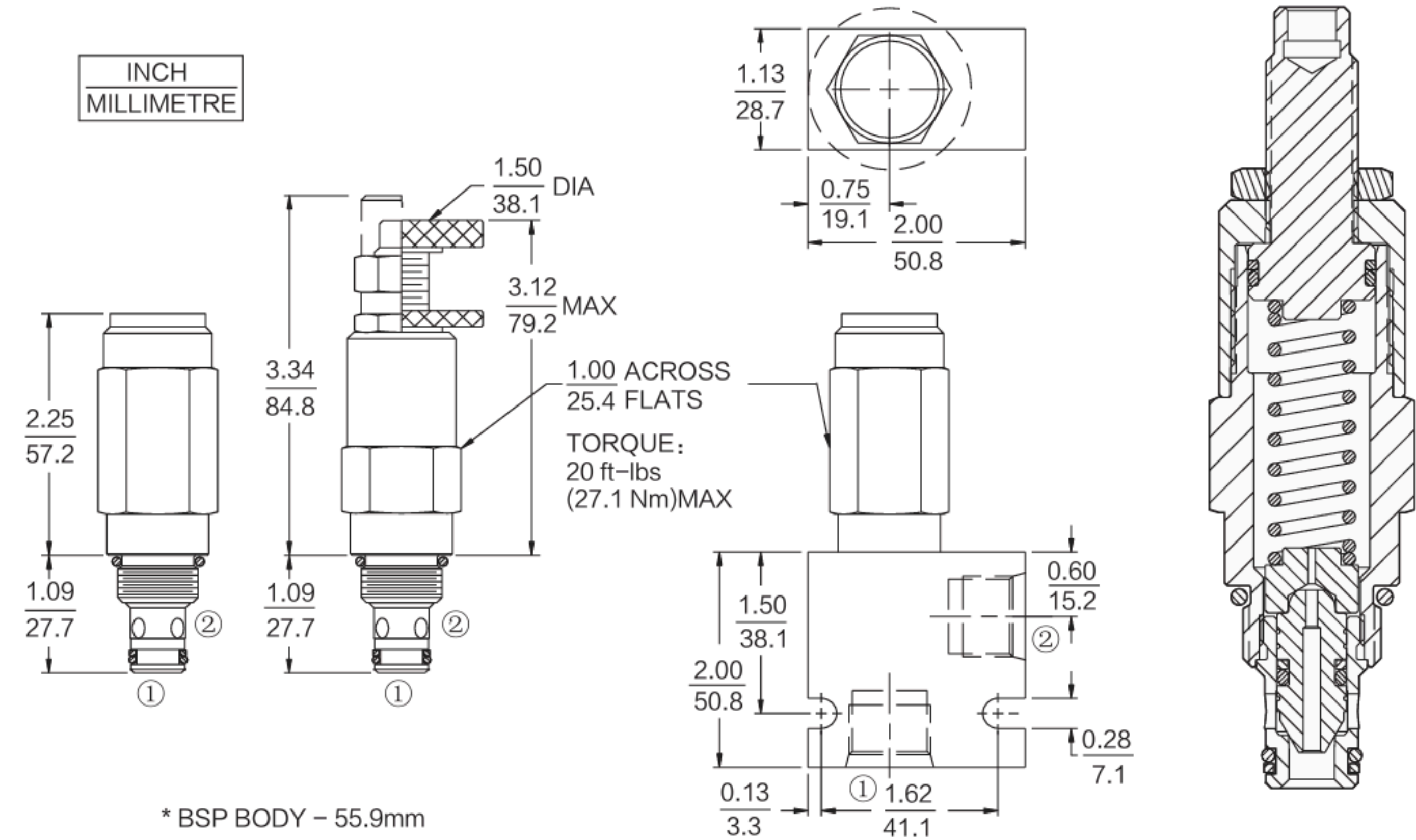
ISO SYMBOL



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight:0.23kg (0.50 lbs) ; INRV08-22
 Steel with hardened work surfaces.
 Zinc-plated exposed surfaces.
 Buna N O-rings and polyester standard. Anodized aluminum knobs and caps.
BODY:Weight:0.16 kg (0.35lbs) ;
 Anodized highstrength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi) ;
 Ductile iron bodies available; dimensions may differ.

TO ORDER

Adjustment Option	Porting	Seals	Pressure on Port Only:	Bidirectional Pressure	Setting in bar†	Setting in psi†	Spring Range
1/4 in. Hex Allen Head A	Cartridge Only 0	Buna N		Buna NC	(Blank) for Adjustable, or Specify, for example:	(Blank) for Adjustable, or Specify, for example:	4 3.45 to 27.59 bar (50 to 400 psi)
1-1/2 in. Dia. Alum. Knobs B	SAE 4 4T	Fluorocarbon V			M25 25 bar	9.0 900 psi	7 6.9 to 48.3 bar (100 to 700 psi)
Option A with Cover Cap C	SAE 6 6T				M100 100 bar	23.5 2350 psi	13 10.3 to 89.6 bar (150 to 1300 psi)
Factory Preset Non-Adj. F	SAE 8 8T						26 17.24 to 248.2 bar (250 to 3600 psi)
Factory Preset Hidden Adj. H	1/4 in. BSP* 2B						
Option C w/ Lockwire Holes L	3/8 in. BSP* 3B						
	1/2 in. BSP* 4B						

†Adjustable valves will be preset to approx. 50%