

DESCRIPTION

A screw-in, cartridge-style, pilot-operated (two-stage), spool-type hydraulic relief valve, intended for use as a pressure limiting device in demanding hydraulic circuits which require fast response and low hysteresis.

OPERATION

The INRV12-26 blocks flow from ① to ② until sufficient pressure is present at ① to force the piloting relief off its seat, allowing the main (second stage) spool to shift, opening ① to ②. The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits.

NOTE:

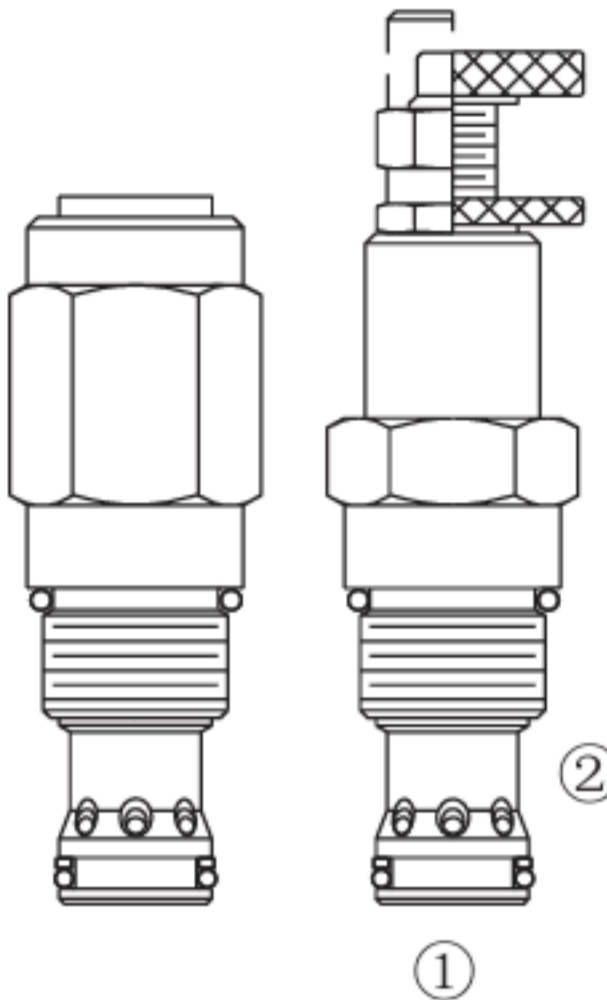
The INRV12-26 cannot be used in crossover relief applications.

FEATURES

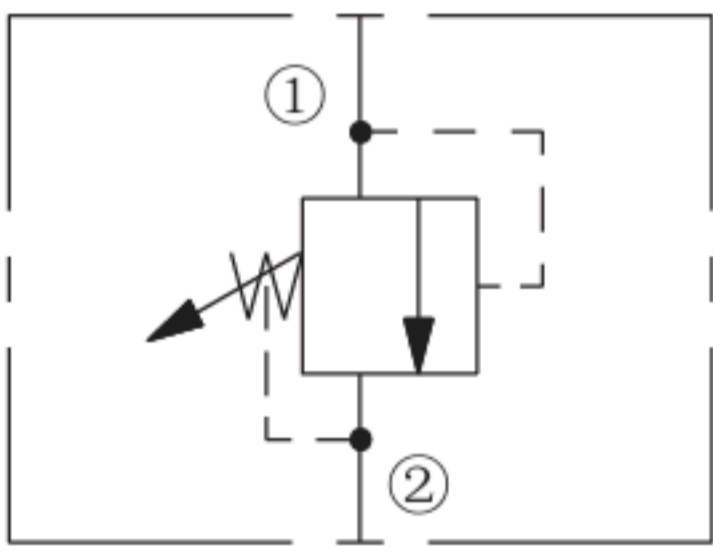
- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Hardened spool and cage for long life.
- Optional spring ranges to 241 bar (3500 psi) .
- Fast, smooth response to pressure surges.
- Ductile iron bodies available; dimensions may differ.

RATINGS

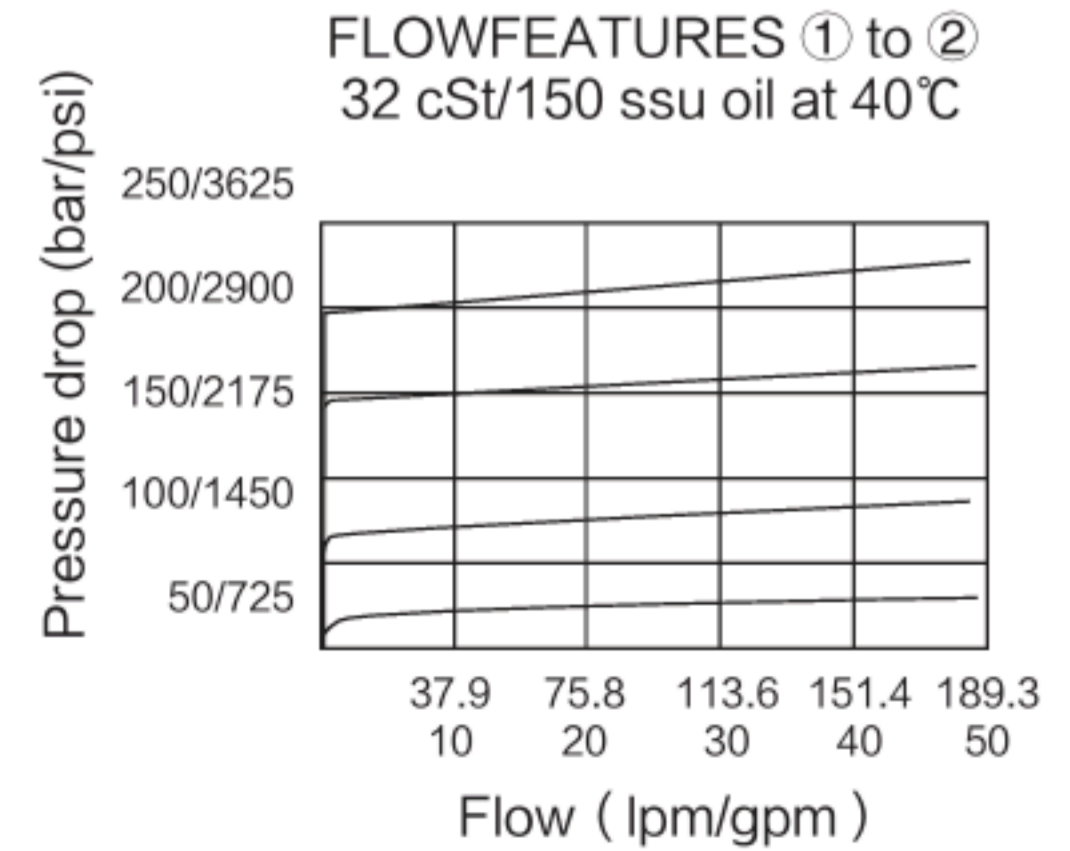
- Operating Pressure:** 241 bar (3500 psi)
- Proof Pressure:** 420 bar (6090 psi)
- Flow:** See Performance Chart
- Internal Leakage:** 115 cc/minute (7 cu. in./minute) max. to 85% of nominal setting
- Crack Pressure Defined:** Setting Pressure Defined: bar (psi) evident at 7.6 lpm (2.0 gpm) attained
- Reseat Pressure:** Nominal 90% of crack pressure
- Standard Spring Ranges:** 6.9 ~ 27.6 bar (100 ~ 400 psi) 10.3 ~ 103.4 bar (150 ~ 1500 psi) 20.7 ~ 241 bar (300 ~ 3500 psi)
- 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:** T12-2A ; See bottom of this catalog.



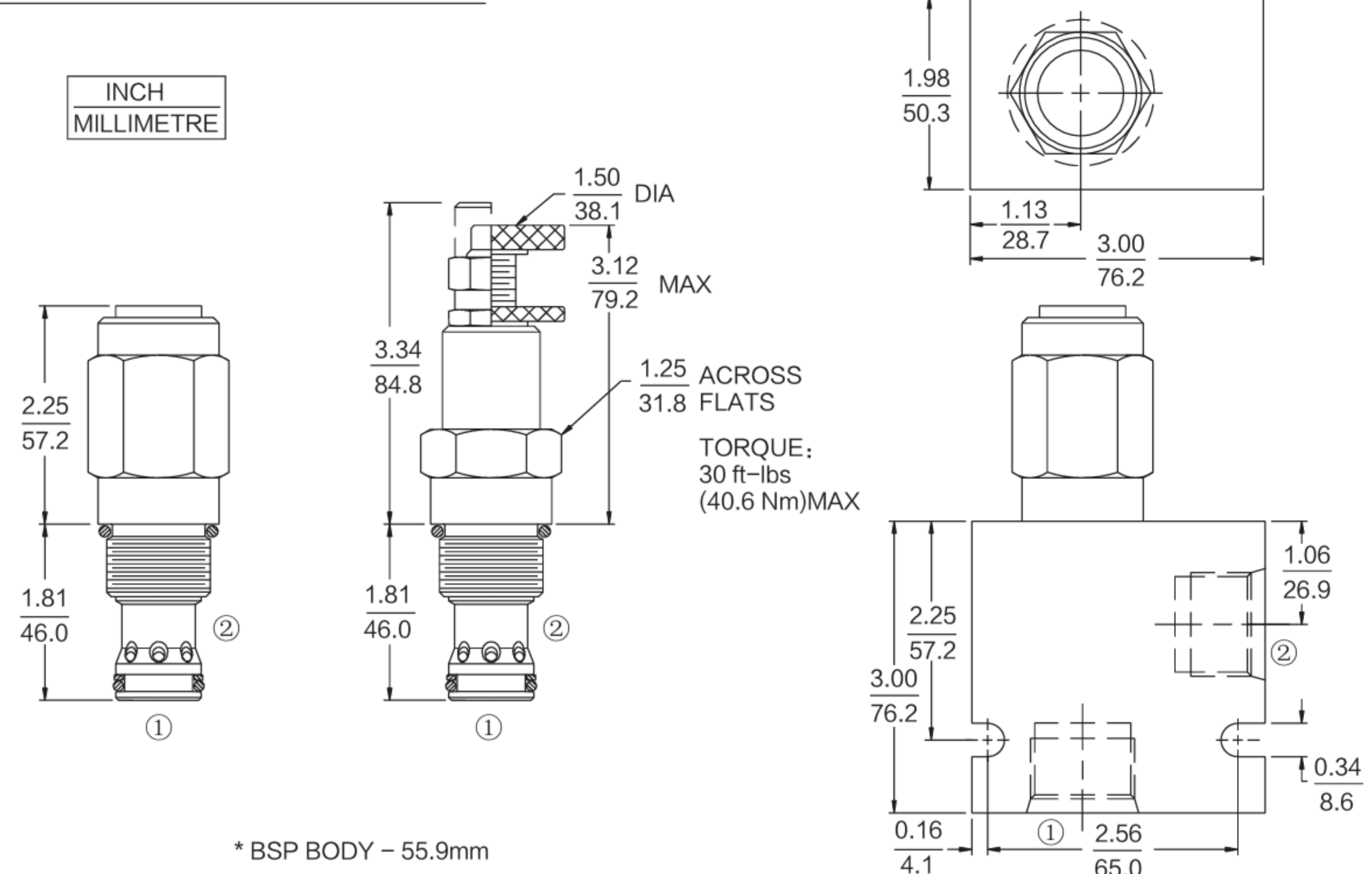
ISO SYMBOL



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.34kg (0.75 lbs) ; INRV12-26
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: 0.57 kg (1.25lbs) ;
Anodized highstrength 6061 T6 aluminum alloy, rated to 240 bar (3500 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
		23.5	2350 psi
Porting		Spring Range	
Cartridge Only	0	4	6.9 to 27.6 bar (100 to 400 psi)
SAE 10	10T	15	10.3 to 103.4 bar (150 to 1500 psi)
SAE 12	12T	35	20.7 to 241 bar (300 to 3500 psi)
SAE 16	16T		
1/2 in. BSP*	4B		
3/4 in. BSP*	6B		
1 in. BSP*	8B		
Seals			
Pressure on Port Only:			
	Buna N		
	Fluorocarbon V		

†Adjustable valves will be preset to approx. 50%