

HYRV10-22 (Cartridge Direct Acting Differential Area Relief Valve)

Description

A cartridge-style direct-acting differential area poppet-type relief valve.

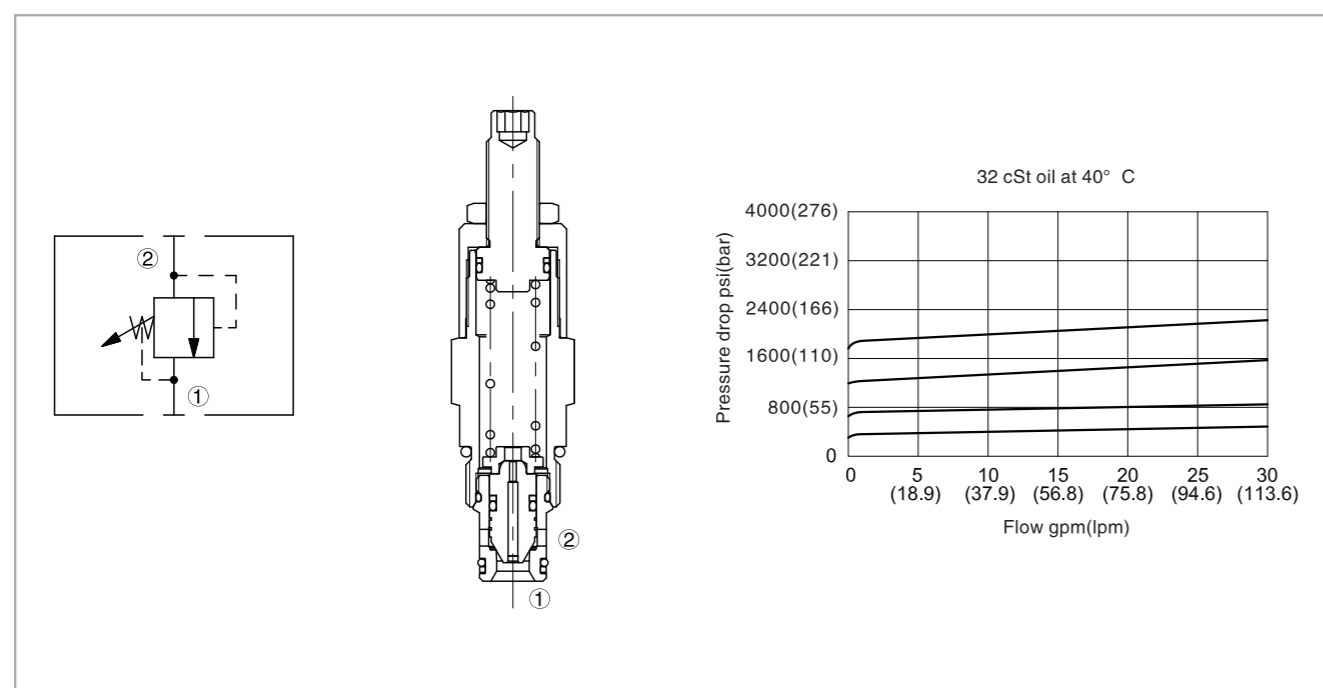
Operation

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

Specifications

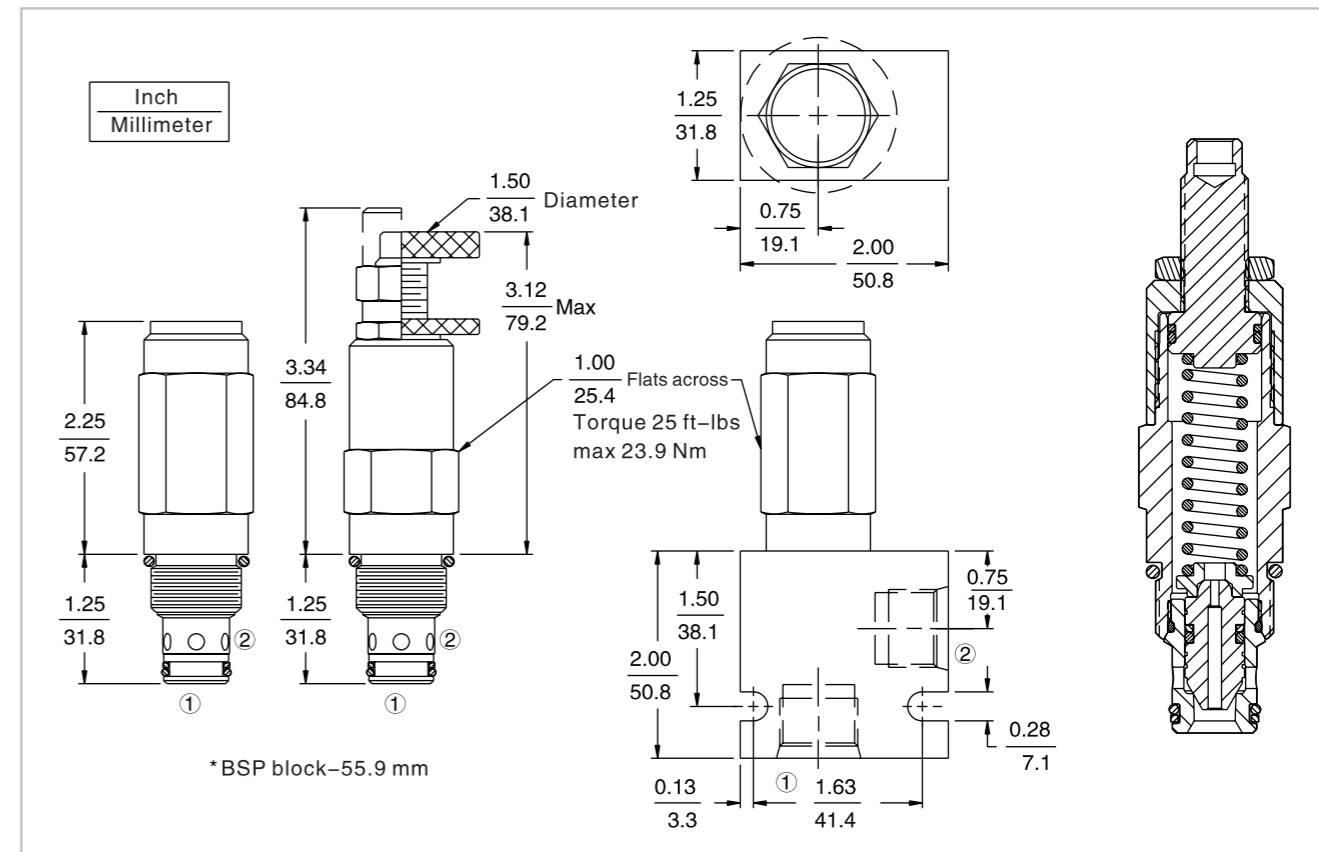
Operating pressure:	240 Bar
Standard spring ranges:	10.34 To 41.38 bar; preset : 21 bar
	10.34 To 89.66 bar; preset : 45 bar
	17.24 To 165.52 bar; preset : 83 bar
	17.24 To 241.38 bar; preset : 121 bar
Reseat pressure:	80% Of crack pressure (crack pressure at 0.95 lpm /0.25 gpm)
Flow:	See pressure drop vs. flow graph
Internal leakage:	5 Drops/min. max. to 85% of nominal setting
Temperature:	(-40°C To +120°C) with NBR material seals
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	HY10-2, see page H.1.3
Body material:	6061-T6 Aluminum alloy rated to 207 bar, steel & ductile iron rated to 350 bar

Code symbol , profile and pressure drop vs. flow



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External dimensions



Material science and order model

Cartridge: weight: 0.23 kg (0.50 lb);
 Steel, the working face is duratected
 Surface zinc-plated;
 NBR material sealing and
 check ring (standard);
 Aluminum knob with anodic
 oxidation and cover cap;
 Pressure over 240 bar (3500 psi),
 recommended use polyurethane
 material sealing and
 fluorocarbon material check ring,
 aluminum knob with anodic oxidation.

Block: weight :0.15 kg (0.35 lb);
 High-strength performance
 aluminum alloy with anodic
 oxidation; #6061 T6;
 Rated pressure up to 240 bar (3500 psi);
 Also available with ductile cast iron and
 steel material;
 Size might be different, please consult factory.

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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. knob B	M25 25 bar
Option A w/cover cap C	M100 100 bar
Factory preset non-adjustment F	Setting in psi
Factory preset hidden adjustment 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	6 10.34 To 41.38 bar (150 To 600 psi)
SAE 6 6T	13 10.34 To 89.66 bar (150 To 1300 psi)
SAE 8 8T	25 17.24 To 165.52 bar (250 To 2400 psi)
1/4 Inch BSP* 2B	35 17.24 To 241.38 bar (250 To 3500 psi)
3/8 Inch BSP* 3B	
1/2 Inch BSP* 4B	
Seals	
Pressure on P only	
Buna N (std.) N	
Fluorocarbon V	
Bidirectional pressure	
Buna N (std.) NC	
Fluorocarbon VC	

† Adjustable valves will be preset to approx. 50% of spring max. potential.