

HYRV10-20 (Cartridge Direct Acting Relief Valve)

Description

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

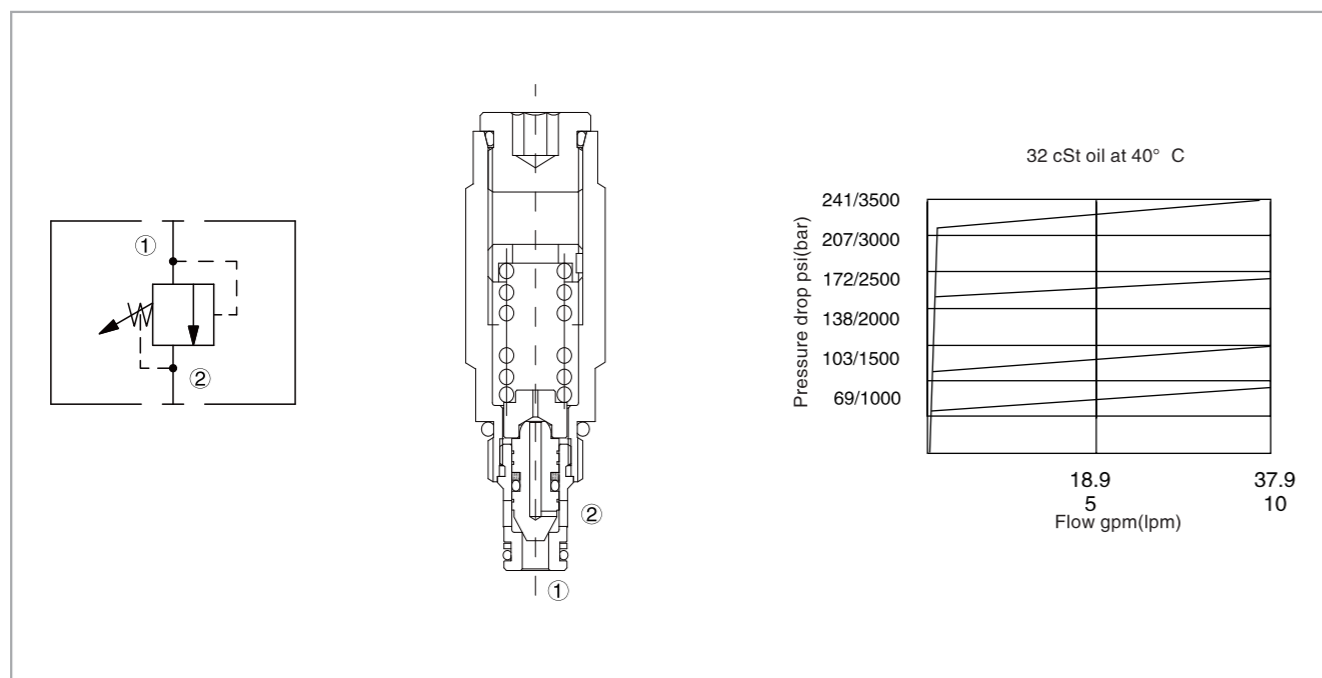
Operation

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

Specifications

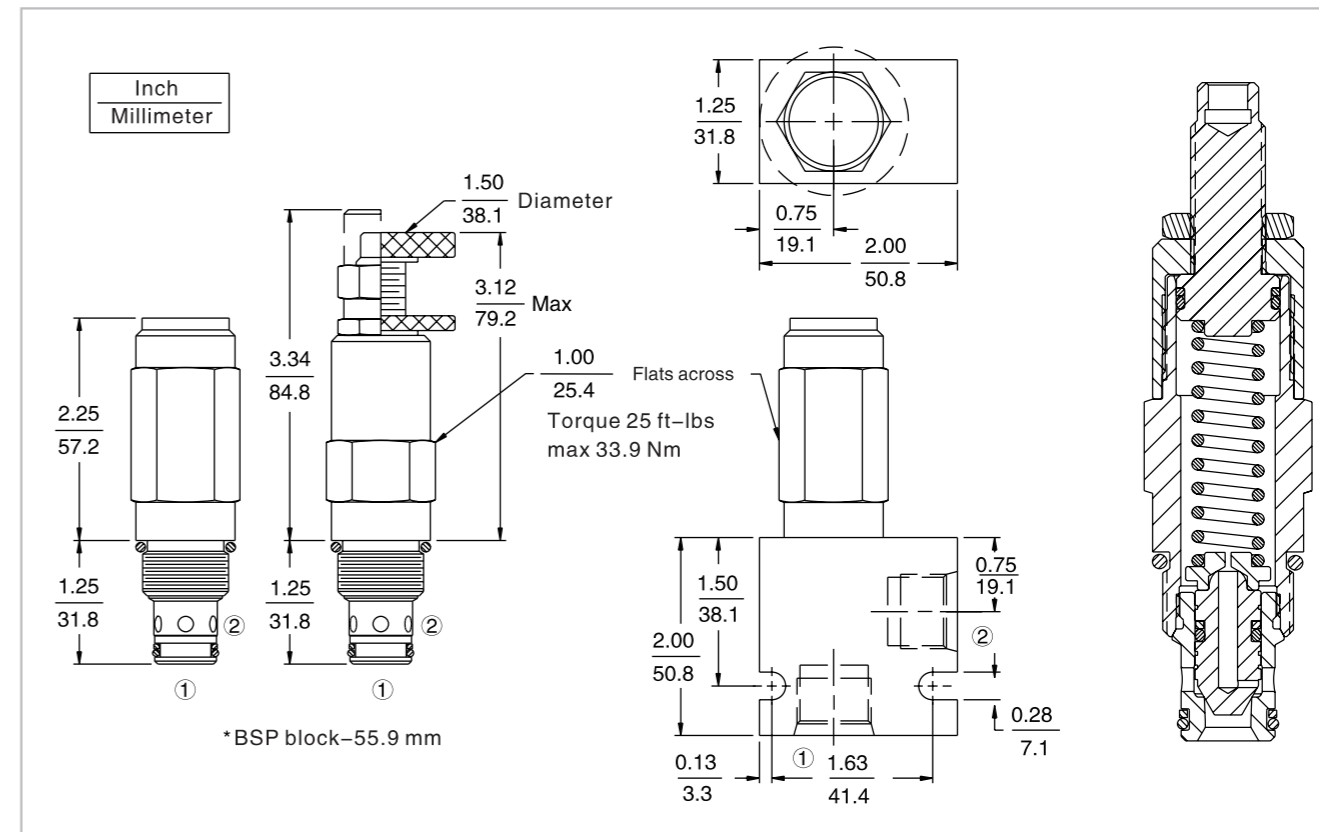
Operating pressure:	228 Bar
Standard spring ranges:	3.45 To 41.38 bar; preset : 21 bar
	10.34 To 82.76 bar; preset : 41 bar
	17.24 To 158.6 bar; preset : 80 bar
	17.2 To 248.2 bar; preset : 124 bar
Reseat pressure:	90% Of crack pressure (crack pressure at 0.95 lpm /0.25 gpm)
Flow:	See pressure drop vs.flow graph
Internal leakage:	5 Drops/min. max. to 80% 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 ls);
Steel, the working face is duratected
Surface zinc-plated;
NBR material sealing and
check ring (standard);
Aluminum knob with anodic
oxidation and cover cap.
Block:weight :0.16 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.

HYRV10-20		Setting in bar †	
Adjustment option		(Blank)	For adjustable, or specify, for example:
1/4 In. hex allen head	A	M25	25 bar
1-1/2 In. dia. alum. knob	B	M100	100 bar
Option A w/cover cap	C	(Blank)	Setting in psi
Factory preset non-adjustment	F	(Blank)	For adjustable, or specify, for example:
Factory preset hidden adjustment	H	9.0	900 Psi
Option C w/lockwire holes	L	23.5	2350 Psi
Porting			
Cartridge only	0		
SAE 6	6T		
SAE 8	8T		
1/4 Inch BSP*	2B		
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		
		Spring range	
		6	3.45 To 41.38 bar (50 To 600 psi)
		12	10.34 To 82.76 bar (150 To 1200 psi)
		23	17.24 To 158.6 bar (250 To 2300 psi)
		33	17.24 To 248.2 bar (250 To 3300 psi)

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