

HYFR10-30 (Regulator Pressure Compensated Flow Control Valve)

Description

A cartridge-style adjustable pressure-compensated flow control valve.

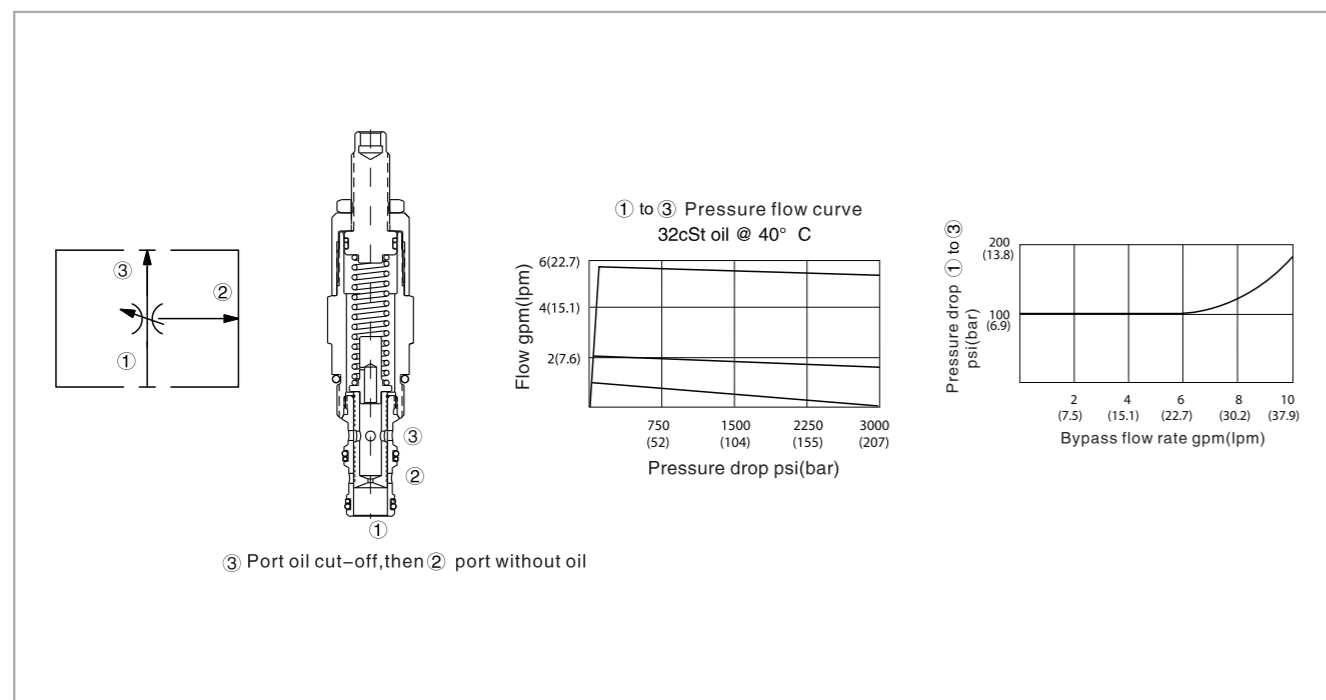
Operation

The valve maintains a constant flow rate from ③ regardless of load pressure changes in the system downstream of ③, or in the bypass leg at ②. The valve will pressure-compensate once a minimum pressure drop (determined by spring adjustment setting) is achieved from ① to ③. This value will range from approximately 4.8 to 13.8 bar (70 to 200 psi). Bypass port ③ may be fully pressurized. The cartridge may be adjusted to ± 25% of nominal setting. At nominal setting, pressure drop is approximately 9 bar (130 psi). Flow out of priority port ③ may vary based on input flow amount, particularly with lower temperatures and increased fluid viscosities.

Specifications

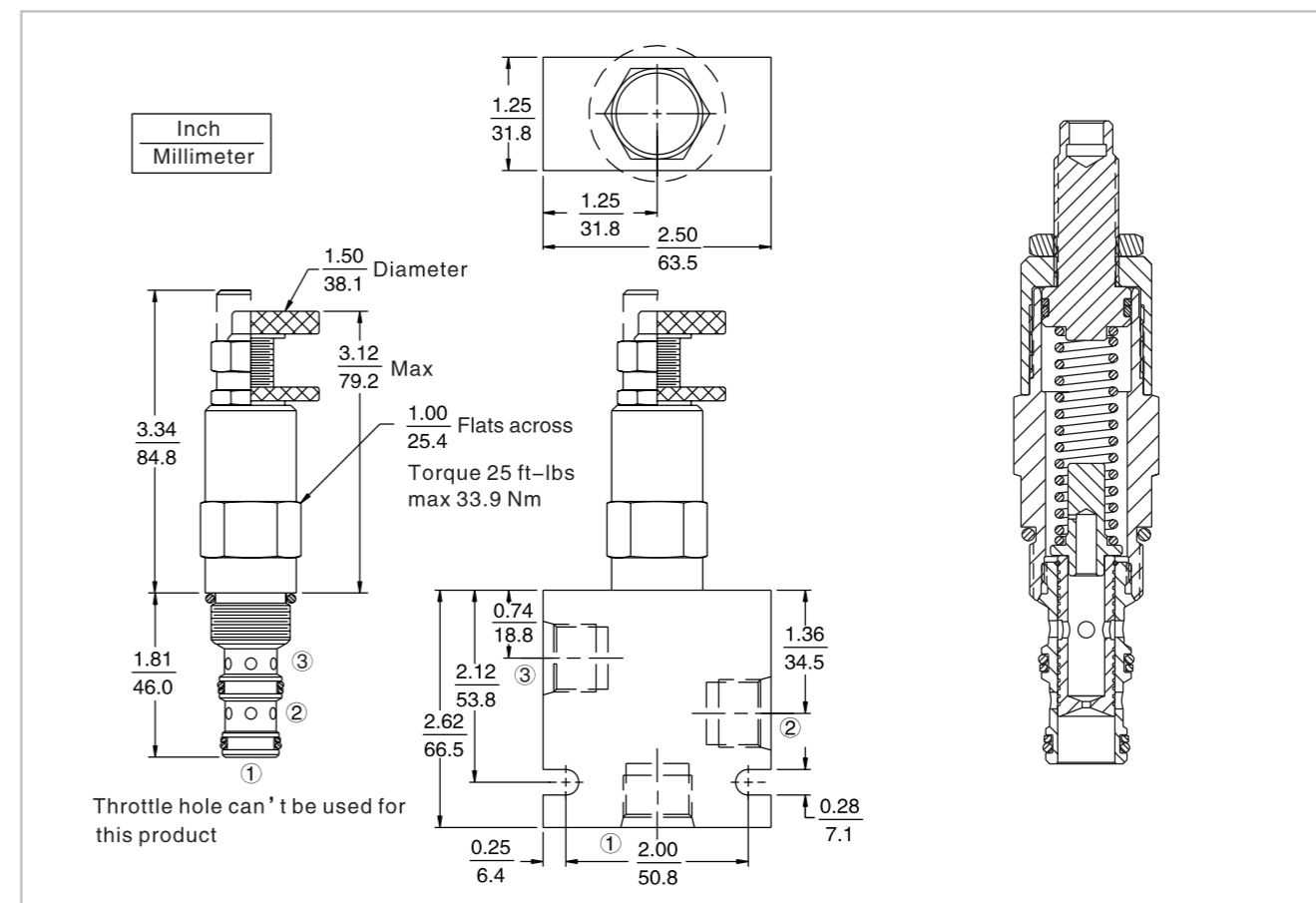
Operating pressure:	207 Bar
Flow setting:	Low range: 1.9 to 9.5 lpm (0.5 to 2.5 gpm)
	Specify in 1.9 lpm (0.5 gpm) increments
	High range: 11.4 to 22.7 lpm (3.0 to 6.0 gpm)
	Specify in 3.8 lpm(1gpm) increments
Temperature:	(-40°C To +120°C) with NBR material seals
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	HY10-3, see page H.1.4
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: 0.27 kg (0.60 lb);
Steel, the working face is duratected
Surface zinc-plated;
NBR material sealing and check ring (standard);
Aluminum knob with anodicoxidation.
Block: weight :0.36 kg (0.80 lb);
High-strength performance aluminum alloy with anodic oxidation; #6061 T6;
Rated pressure up to 240 bar (3500 psi);
See 8.010.1;
Also available with ductile cast iron and steel material;
Size might be different, please consult factory.

HYFR10-30		Standard settings
Adjustment option		
1/4 In. hex allen head	A	0.5 1.42 To 2.37 lpm (0.37 To 0.63 gpm)
1-1/2 In. dia. alum. knob	B	1.0 2.84 To 4.73 lpm (0.75 To 1.25 gpm)
Option A w/cover cap	C	2.0 5.68 To 9.46 lpm (1.5 To 2.5 gpm)
Top handle with locking nut	D	2.5 7.08 To 11.81 lpm (1.87 To 3.12 gpm)
Factory preset		3.0 8.52 To 14.19 lpm (2.25 To 3.75 gpm)
Hide adjustment	H	4.0 11.35 To 18.93 lpm (3.0 To 5.0 gpm)
Porting		5.0 14.19 To 23.66 lpm (3.75 To 6.25 gpm)
Cartridge only	0	6.0 17.03 To 28.93 lpm (4.5 To 7.5 gpm)
SAE 6	6T	
SAE 8	8T	
1/4 Inch BSP*	2B	
3/8 Inch BSP*	3B	
BSP body: U.K. Mfr. only		
Seals		
Buna N (std.)	N	
Fluorocarbon	V	

Note: pressure-compensating value is subject to change when offering pressure change, flow output relationship for OEM applications, please consult with us.

OEM can provide additional settings, please consult.