



5.4

35F12-30F TYPE

Regulator, Pressure-Compensated

Rated pressure (bar / psi) 240 / 3500
 Rated flow (L/min / gpm) 49.2 / 13 (max. regulated)
 94.6 / 25 (max. input)

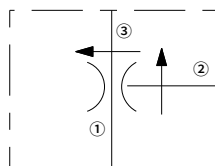
Features

- Hardened steel parts for long life
- Quiet, modulated response
- Industry common cavity

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Symbol



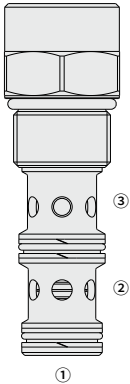
Description

A screw-in, cartridge-style, pressure-compensated, non-adjustable flow regulator, intended for use in fixed displacement hydraulic circuits requiring partial pump flow diversion on a priority basis.

Operation

The 35F12-30F 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's spool maintains a constant differential pressure of 6.5 bar (95 psi) across a fixed internal orifice, thereby regulating the hydraulic flow rate from ② to ③.

The 35F12-30F is a priority type regulator, delivering the pump flow to ③ first, then bypassing excess to ②. All ports may be fully pressurized. Flow out of priority port ③ may vary based on input flow amount, particularly with lower temperatures and increased fluid viscosities. Settings may need to be established through correlation study. Consult factory.



Ordering Code

35F12-30F - - /

Cartridge only

0

Seals:

Polyurethane (Std.)

Buna N

Fluorocarbon

P

N

V

Priority Flow Setting in L/min

Range: 4 to 50 L/min

Specify, for example:

4.0 L/min

8.0 L/min

M4.0

M8.0

etc.

Setting in gpm

Range: 1 to 13 L/min

Specify, for example:

1.5 gpm

5.0 gpm

1.5

5.0

etc.

Materials

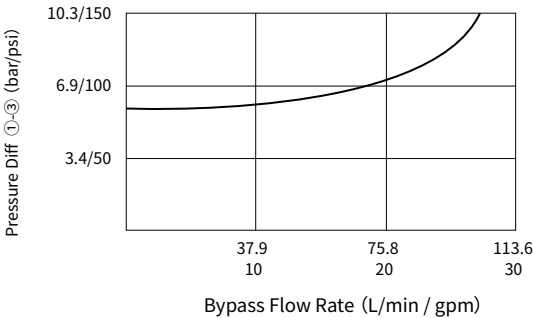
Cartridge:
Weight: 0.3 kg; Steel with hardened work surfaces. Zinc-plated exposed surfaces; Polyurethane (Std.) seal.

Standard Ported Body:
Anodized high-strength aluminum alloy, rated to 240 bar; Ductile iron and steel bodies available; Dimensions may differ, consult factory.

Technical Data

Rated pressure	240 bar (3500 psi)
Rated flow	Max. regulated: 49.2 L/min (13 gpm)
	Max. input: 94.6 L/min (25 gpm)
Standard compensator bias spring	6.5bar (95psi)
Flow maintenance setting range	3.8~11.4 L/min: ±15%
	11.4~45.4 L/min: ±10%
Torque	44.7~50.2 Nm
Cavity	VC12-3 (See technical reference)
Fluid	Mineral-based or synthetics with lubricating properties
Viscosity range	7.4 to 420 mm ² /s
Temperature range	-54 to 107 °C (Polyurethane seals)
	-40 to 100 °C (Buna N seals)
	-26 to 204 °C (Fluorocarbon seals)
Degree of fluid contamination	The minimum pollution level is ISO4406 level 18/16/13, and level 15/13/11 is recommended to prolong the service life

Performance (Cartridge Only)



Dimensions

