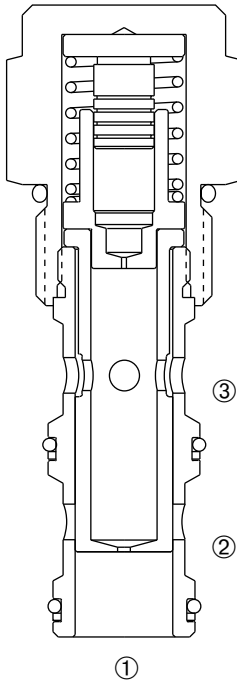
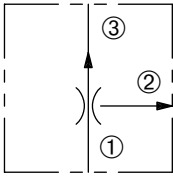


# DFR-120-3

Fixed, Bypass-Type, Pressure-Compensated  
Flow Regulator Valve

## SERIES 12



### DESCRIPTION

A fixed bypass-type cartridge valve designed to regulate priority flow while bypassing excess flow regardless of load pressure.

### OPERATION

The DFR-120-3 maintains a constant flow within specified accuracies from ① to ③ regardless of downstream load pressure at ③ or bypass leg ②. When flow produces a minimum predetermined pressure differential across the compensator spool control orifice, the spool shifts against the spring force to throttle the flow and maintain the priority flow setting. Reverse flow is not regulated.

### FEATURES and BENEFITS

- Pressure-compensated.
- Quiet response.
- Bypass port ② may be fully pressurized.
- Industry common cavity.
- Compact size.

### SPECIFICATIONS

**Operating Pressure:** 3000 PSI (207 Bar)

**Flow:** Ranges from 2 to 13 gpm (7.6 to 49.2 L/min.)  
25 gpm (94.6 L/min.) max. input.  
(See ordering table)

**Flow Tolerances:** Flows up to and including  
3.0 gpm (11.4 L/min.)  $\pm 15\%$   
Flows over 3.0 gpm (11.4 L/min.)  $\pm 10\%$

**Temperature:** -30° F to +250° F (-35°C to +120° C)

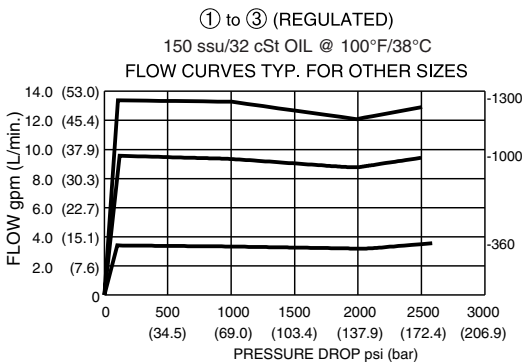
**Recommended Filtration:** ISO 17/15/13

**Fluids:** Mineral-based fluids.

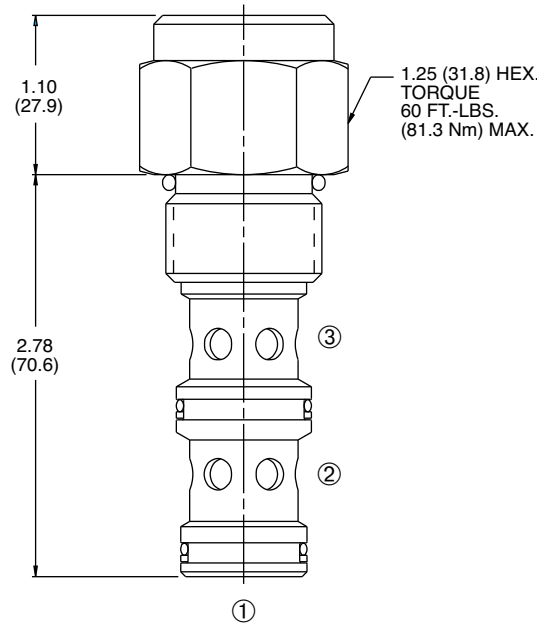
For other fluid compatibility consult factory.

[Cavity/Cavity Tool: 120-3, see page 11.12.3](#)

### PRESSURE DROP VS. FLOW



## INSTALLATION DIMENSIONS



( ) Parentheses = Millimeters

## HOW TO ORDER

**DFR - 120 - 3 - \* - \*\*\*\***

FLOW REGULATOR VALVE (FIXED)

CAVITY/SEAL

FLOW PATH

SEALS  
N = Buna N  
V = Viton

MAXIMUM FLOW SETTING

200	=	2.00 GPM	(7.57 L/min.)
225	=	2.25 GPM	(8.52 L/min.)
250	=	2.50 GPM	(9.46 L/min.)
300	=	3.00 GPM	(11.36 L/min.)
360	=	3.60 GPM	(13.63 L/min.)
400	=	4.00 GPM	(15.14 L/min.)
500	=	5.00 GPM	(18.93 L/min.)
1000	=	10.00 GPM	(37.85 L/min.)
1300	=	13.00 GPM	(49.21 L/min.)