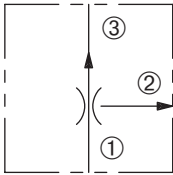


# DFR-100-3

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

## SERIES 10



### DESCRIPTION

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

### OPERATION

The DFR-100-3 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. Reserve flow is not regulated.



### FEATURES and BENEFITS

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

### SPECIFICATIONS

**Operating Pressure:** 3000 psi (207 bar). A minimum pressure differential of 100 psid is required to operate valve.

**Flow:** Ranges from 0.75 to 6 gpm (2.8 to 22.7 lpm)  
10 gpm (37.9 lpm) max. input.  
(See ordering table)

**Flow Tolerances:** Flows up to and including  
1.5 gpm (5.7 lpm)  $\pm 15\%$   
Flows over 1.5 gpm (5.7 lpm)  $\pm 10\%$

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

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

**Fluids:** Mineral-based fluids.

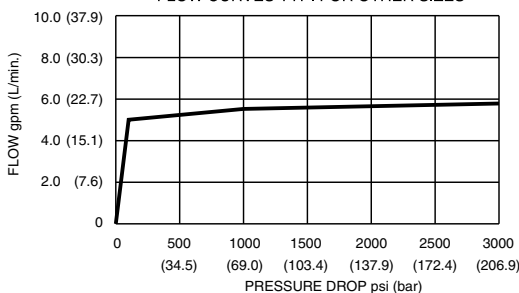
For other fluid compatibility consult factory.

**Cavity/Cavity Tool:** 100-3, see page 11.10.3

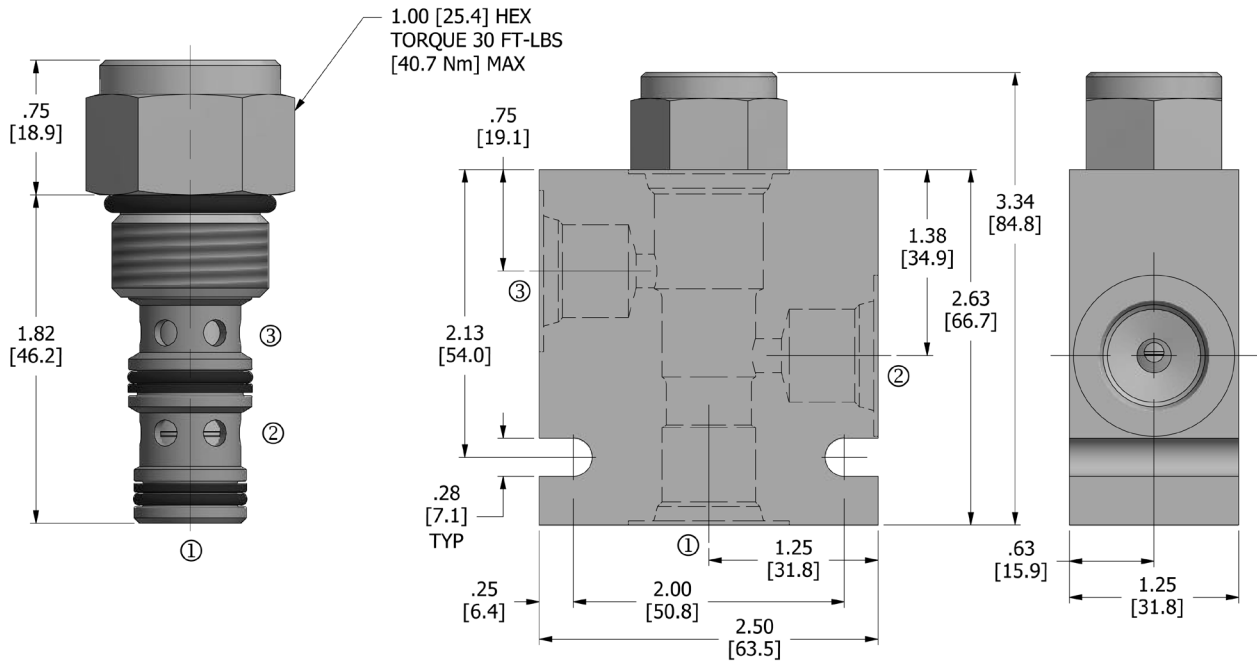
**In-Line Body Material:** Anodized 6061T6 aluminum  
alloy rated at 3000 psi (207 bar).

### PRESSURE DROP VS. FLOW

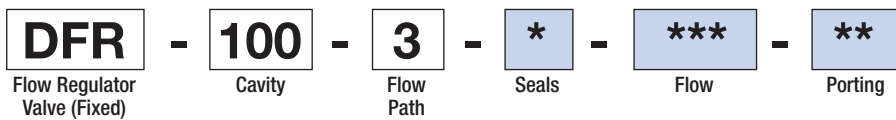
① to ③ (REGULATED)  
150 ssu/32 cSt OIL @ 100°F/38°C  
5.00 gpm (18.9 L/min.) VALVE  
FLOW CURVES TYP. FOR OTHER SIZES



## DIMENSIONS Inches [Millimeters]



## HOW TO ORDER



Seals		Seal Kit
<b>N</b>	Buna N	DSK-100-3-N-C
<b>V</b>	Viton	

Flow - Nominal <sup>†</sup>	
<b>075</b>	0.75 gpm (2.84 lpm)
<b>100</b>	1.00 gpm (3.79 lpm)
<b>150</b>	1.50 gpm (5.68 lpm)
<b>200</b>	2.00 gpm (7.57 lpm)
<b>250</b>	2.50 gpm (9.46 lpm)
<b>300</b>	3.00 gpm (11.36 lpm)
<b>350</b>	3.50 gpm (13.25 lpm)
<b>400</b>	4.00 gpm (15.14 lpm)
<b>450</b>	4.50 gpm (17.03 lpm)
<b>500</b>	5.00 gpm (18.93 lpm)
<b>600</b>	6.00 gpm (22.71 lpm)

Porting <sup>†</sup>		In-Line Body w/o Cartridge
omit	Cartridge only	
<b>2N</b>	1/4 PTF	B-100-3-2N
<b>3N</b>	3/8 PTF	B-100-3-3N
<b>6T</b>	SAE 6	B-100-3-6T
<b>8T</b>	SAE 8	B-100-3-8T

<sup>†</sup> Other options available – consult factory

Valve and In-Line Body are supplied individually and need to be assembled. For a completed assembly consult the factory.

All variations may not be configurable. Minimum order quantities may be required on other models. Contact Deltrol Fluid Products for complete details.