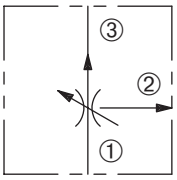
DFRA-100-3

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

Deltrol FLUID PRODUCTS

SERIES 10



DESCRIPTION

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

OPERATION

The DFRA-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. The cartridge's flow may be adjusted -40% of maximum setting. Reverse flow is not regulated.

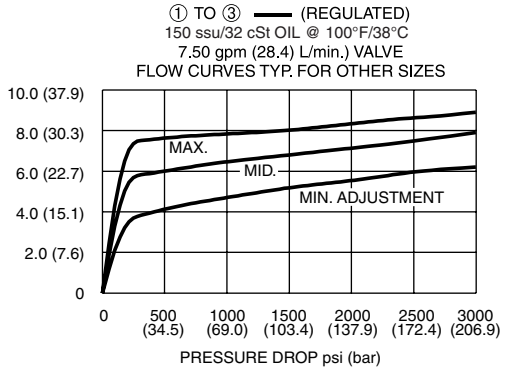
FEATURES and BENEFITS

- Pressure-compensated.
- Quiet response.
- Bypass port ② may be fully pressurized.
- Hidden adjustment (tamper resistant) option.
- Aluminum knob and disc nut option.
- Adjustment may be locked in place.
- Industry common cavity.

SPECIFICATIONS

Operating Pressure: 3000 PSI (207 Bar).
Flow: Ranges from 1 to 10 gpm (3.8 to 37.9 L/min.)
10 gpm (37.9 L/min.) max. input.
(See ordering table)
Flow may be adusted - 40% of maximum setting.
Flow Tolerances: Flows up to and including
1.5 gpm (5.7 L/min.) ±15%
Flows over 1.5 gpm (5.7 L/min.) ±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



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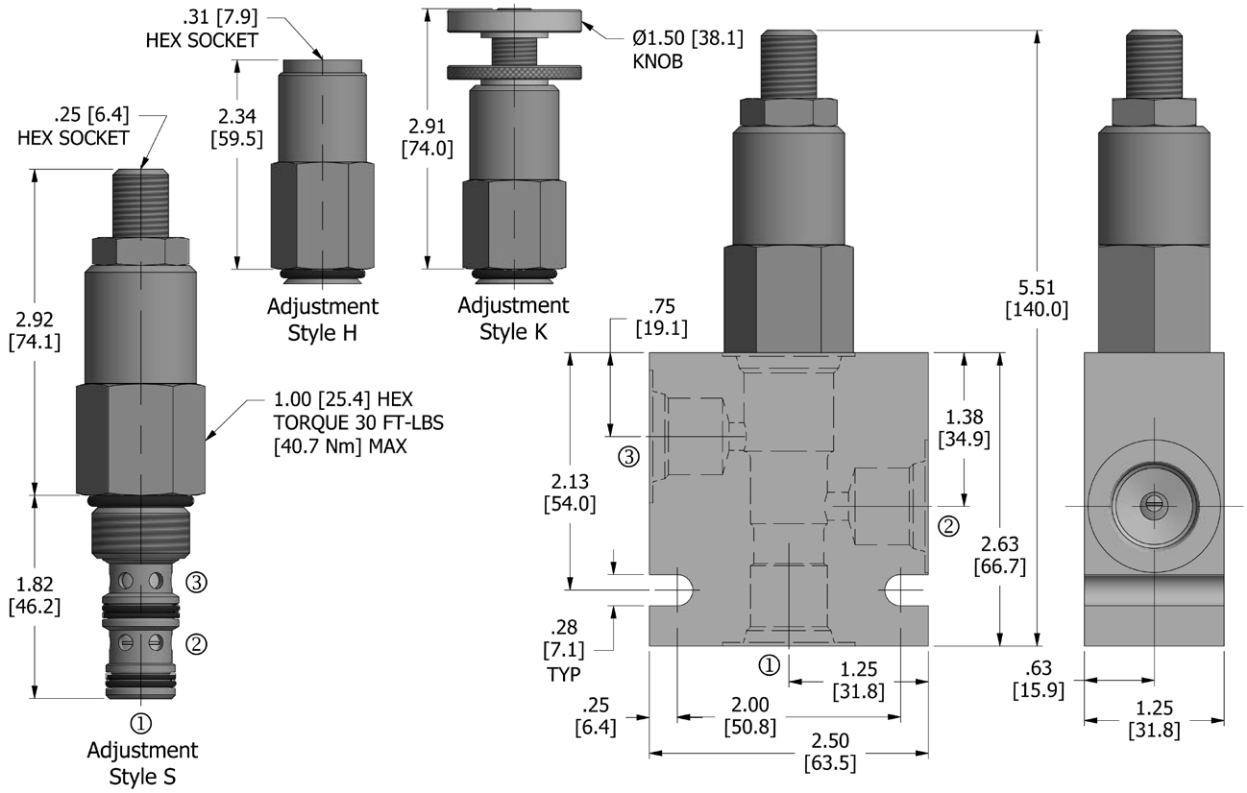
DIMENSIONS Inches [Millimeters]



HOW TO ORDER

DFRA	-	100	-	3	-	*	-	*	-	***	-	**
Flow Regulator Valve (Adjustable)		Cavity		Flow Path		Seals		Adjustment Style		Flow		Porting

Seals		Seal Kit
N	Buna N	DSK-100-3-N-C
V	Viton	

Adjustment Style	
H	Hidden
K	Knob
S	Screw

Flow - Maximum	
100	1.00 gpm (3.79 lpm)
150	1.50 gpm (5.68 lpm)
200	2.00 gpm (7.57 lpm)
300	3.00 gpm (11.36 lpm)
500	5.00 gpm (18.93 lpm)
750	7.50 gpm (28.39 lpm)
1000	10.00 gpm (37.85 lpm)

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

† *Other options available – consult factory*

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