

FRI SERIES

**Fixed Inline
Flow Control
Valves**



**- Pressure
Compensated**

- Tamper proof settings
- 5000 psi (345 bar) working pressure
- Free reverse flow
- Flows to 30 gpm (115 l/min.)
- Five standard port sizes
- Rugged all-steel construction

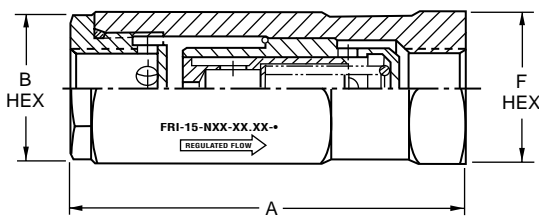


Features

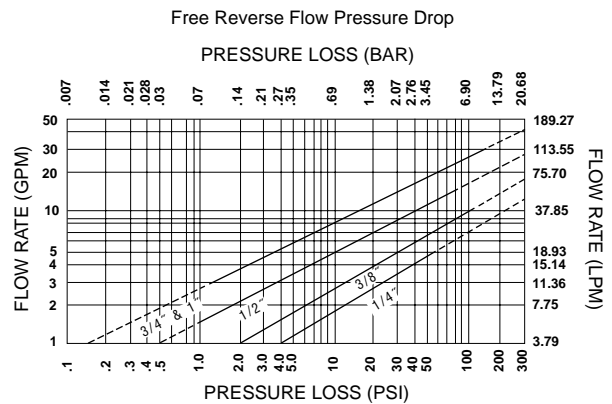
These heavy duty, preset FRI Series valves provide an economical means of assuring accurate flow regulation to an actuator at a predetermined flow rate. Snap-tite preset Flow Control Valves maintain a tolerance of $\pm 10\%$. A minimum regulating pressure of 150 psi (10 bar) is required.

Snap-tite's Fixed Inline Flow Control Valves automatically compensate for changes in system pressure.

The free reverse flow feature allows immediate evacuation or reversal of the previous work at maximum speed with minimum pressure drop.



FRIA with Adjustment Stem Fully Closed and Fri



Dimensions and Specifications

| Port Size (NPTF) | Flow Range (GPM) | | A | B | F |
|------------------|------------------|-----|-------|-------|-------|
| 1/4" | .75-5 | In. | 4.45 | 1.00 | 1.25 |
| | | mm | 113.0 | 25.4 | 28.6 |
| 3/8" | 1.0-10 | In. | 4.45 | 1.00 | 1.25 |
| | | mm | 113.0 | 25.4 | 28.6 |
| 1/2" | 1.5-15 | In. | 4.28 | 1.375 | 1.625 |
| | | mm | 108.7 | 34.9 | 41.3 |
| 3/4" | 3.0-30 | In. | 5.90 | 1.875 | 2.25 |
| | | mm | 149.9 | 47.6 | 57.15 |
| 1" | 3.0-30 | In. | 5.90 | 1.875 | 2.25 |
| | | mm | 149.9 | 47.6 | 57.15 |

Available GPM Flow Rates by Size*

| 1/4" | 3/8" | 1/2" | 3/4" - 1" |
|------|-------|-------|-----------|
| 0.75 | 1.00 | 1.50 | 3.00 |
| 0.90 | 1.20 | 3.00 | 4.00 |
| 1.00 | 1.50 | 3.50 | 6.00 |
| 1.25 | 2.00 | 3.75 | 8.00 |
| 1.30 | 2.25 | 4.00 | 10.00 |
| 1.50 | 2.50 | 4.50 | 12.00 |
| 1.75 | 3.00 | 5.00 | 14.00 |
| 2.00 | 3.25 | 5.50 | 16.00 |
| 2.50 | 3.50 | 6.00 | 18.00 |
| 2.80 | 4.00 | 7.00 | 20.00 |
| 3.00 | 5.00 | 7.50 | 22.00 |
| 3.50 | 6.00 | 8.50 | 24.00 |
| 4.00 | 6.25 | 9.00 | 26.00 |
| 5.00 | 7.00 | 10.00 | |
| | 8.00 | 11.00 | |
| | 9.00 | 12.00 | |
| | 10.00 | 13.00 | |
| | | 14.00 | |
| | | 15.00 | |

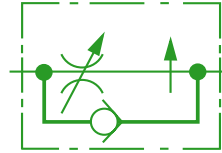
FRIA SERIES

**Adjustable
Inline Flow
Control
Valves**



**- Pressure
Compensated**

- 5000 psi (345 bar) working pressure
- Flows to 30 gpm (115 l/min)
- Free reverse flow
- Five standard port sizes
- Fingertip adjustment & locking
- Rugged all steel construction
- Stainless steel adjustment assembly available



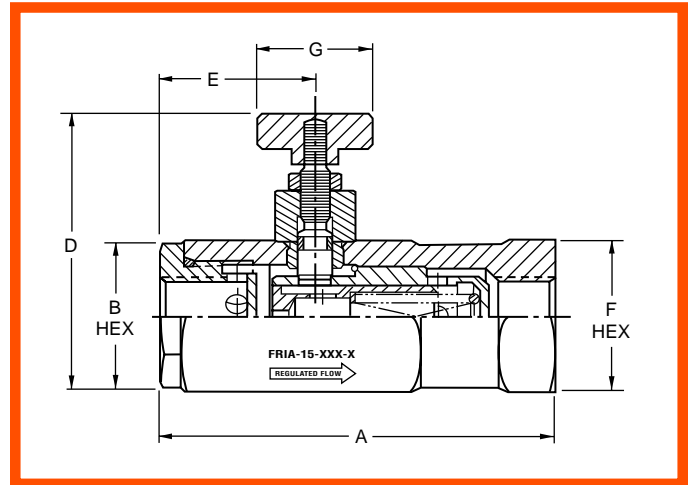
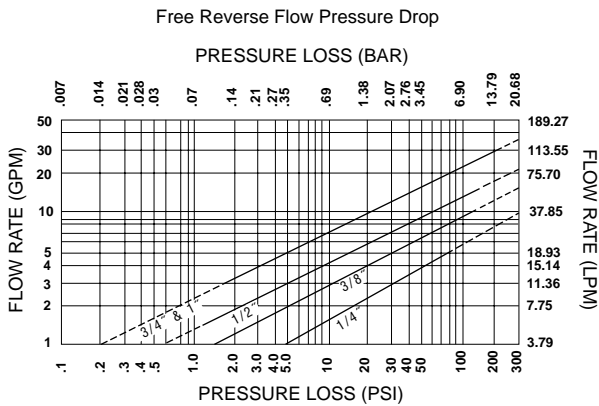
Regulated Flow

Features

Snap-tite's FRIA Series valves provide accurate, consistent control of hydraulic motor and cylinder actuation speeds and automatically compensate for changes in system pressure. Flow rate selection is infinitely variable within the extremes of the flow range for each size and can be adjusted under pressure. Snap-tite's Adjustable Flow Control Valves maintain a tolerance of $\pm 10\%$. A minimum regulating pressure of 150 psi (10 bar) is required.

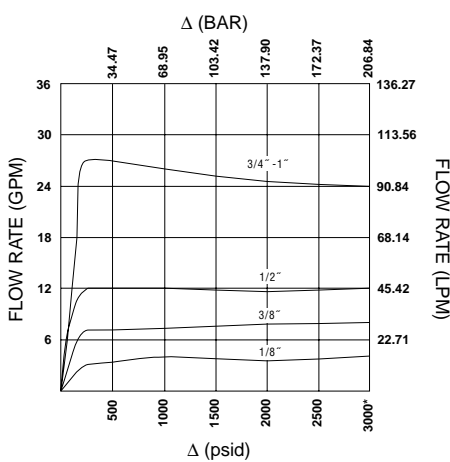
The free reverse flow feature allows maximum return flow with minimum pressure loss. A locking nut assures positive setting against high vibration conditions.

FRIA with Adjustment Stem Fully Open



Flow curves are nominal and recorded with 100 ssu fluid.

Flow Regulation (80% Rated Flow)



*3000 psi inlet pressure

Dimensions and Specifications

| Port Size (NPTF) | Adjust. Range (GPM) | | A | B | D | E | F | G |
|------------------|---------------------|-----|-------|-------|-------|------|-------|------|
| 1/4" | .75-5 | In. | 4.45 | 1.000 | 2.56 | 1.94 | 1.125 | 1.00 |
| | | mm | 113.0 | 25.4 | 65.0 | 49.3 | 28.6 | 25.4 |
| 3/8" | 1.0-10 | In. | 4.45 | 1.000 | 2.56 | 1.94 | 1.125 | 1.00 |
| | | mm | 113.0 | 25.4 | 65.0 | 49.3 | 28.6 | 25.4 |
| 1/2" | 1.5-15 | In. | 4.28 | 1.375 | 3.25 | 1.65 | 1.625 | 1.25 |
| | | mm | 108.7 | 34.9 | 133.5 | 41.9 | 41.3 | 31.8 |
| 3/4" | 3.0-30 | In. | 5.90 | 1.875 | 3.75 | 2.22 | 2.25 | 1.25 |
| | | mm | 149.9 | 47.6 | 95.3 | 56.4 | 57.15 | 31.8 |
| 1" | 3.0-30 | In. | 5.90 | 1.875 | 3.75 | 2.22 | 2.25 | 1.25 |
| | | mm | 149.9 | 47.6 | 95.3 | 56.4 | 57.15 | 31.8 |

ORDERING INFORMATION

Fixed Inline Flow Control Valves

FRI 05 - 2 P - 2.5 A

| Series | Max. Flow Rating | Port Size | | Port Thread Type | Required Flow <i>(info on pg. 2)</i> GPM | Seal |
|------------|---------------------------------|-------------------|------------------|--|--|----------------------------|
| | | <i>NPTF or RP</i> | <i>SAE</i> | | | |
| Fixed Flow | 05 - 5 gpm (20 l/min.) | 2 - 1/4" | 4 - 1/4" | P - NPTF | | No-Letter- Viton (std.) |
| Regulator | 10 - 10 gpm (40 l/min.) | 3 - 3/8" | 6 - 3/8" | S - SAE | | A - Buna |
| Inline | 15 - 15 gpm (55 l/min.) | 4 - 1/2" | 8 - 1/2" | RP - Female British Parallel BS2779 | | |
| | 30 - 30 gpm (115 l/min.) | 6 - 3/4" | 12 - 3/4" | | | |
| | | 8 - 1" | 16 - 1" | | | |

Adjustable Inline Flow Control Valves

FRIA 05 - 2 P A

| Series | Max. Flow Rating | Port Size | | Port Thread Type | Seal |
|------------|---------------------------------|-------------------|------------------|--|----------------------------|
| | | <i>NPTF or RP</i> | <i>SAE</i> | | |
| Flow | 05 - 5 gpm (20 l/min.) | 2 - 1/4" | 4 - 1/4" | P - NPTF | No-Letter- Viton (std.) |
| Regulator | 10 - 10 gpm (40 l/min.) | 3 - 3/8" | 6 - 3/8" | S - SAE | A - Buna |
| Inline | 15 - 15 gpm (55 l/min.) | 4 - 1/2" | 8 - 1/2" | RP - Female British Parallel BS2779 | |
| Adjustable | 30 - 30 gpm (115 l/min.) | 6 - 3/4" | 12 - 3/4" | | |
| | | 8 - 1" | 16 - 1" | | |

! WARNING !

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

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