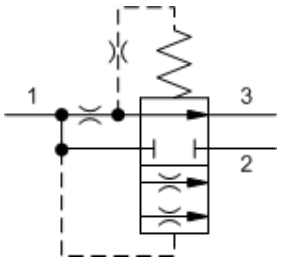
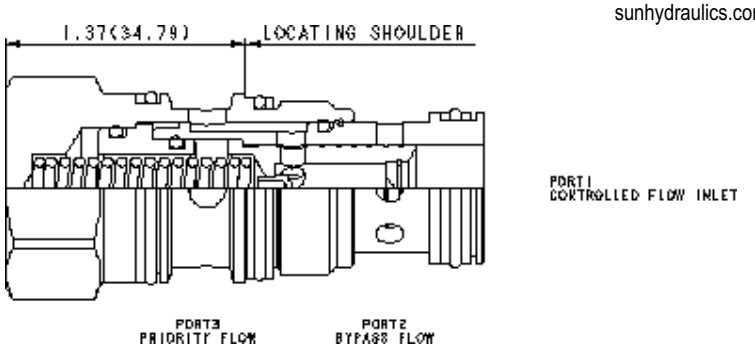
MODEL
FRDA

Fixed-orifice, bypass/restrictive, priority, flow control valve
SERIES 2 / CAPACITY: 12 gpm / CAVITY: T-2A

sunhydraulics.com/model/FRDA





CONFIGURATION

X	Control	Not Adjustable
A	Setting Range	Replaceable Orifice .1 - 12 gpm (0,4 - 45 L/min.)
N	Seal Material	Buna-N
(none)	Material/Coating	

Bypass/restrictive, fixed-orifice, priority flow controls take an input flow at port 1 and use it to satisfy the priority flow at port 3. If the input flow exceeds the priority flow requirement, the excess is bypassed out port 2. The bypass flow may be used in a secondary circuit.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Cavity	T-2A
Series	2
Capacity	12 gpm
Maximum Operating Pressure	5000 psi
Maximum Input Flow	30 gpm
Valve Hex Size	1 1/8 in.
Valve Installation Torque	45 - 50 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Seal kit - Cartridge	Buna: 990202007
Seal kit - Cartridge	EPDM: 990202014
Seal kit - Cartridge	Polyurethane: 990002002
Seal kit - Cartridge	Viton: 990202006
Model Weight	0.45 lb.

NOTES

For Series 1 cartridges configured with an O control (panel mount handknob), a .75 in. (19 mm) diameter hole is required in the panel.

CONFIGURATION OPTIONS

Model Code Example: FRDAXAN

CONTROL (X)	SETTING RANGE (A)	SEAL MATERIAL (N)	MATERIAL/COATING
X Not Adjustable	**A** Replaceable Orifice .1 - 12 gpm (0,4 - 45 L/min.)	**N** Buna-N	Standard Material/Coating
L Tuning Adjustment		**E** EPDM	**/AP** Stainless Steel, Passivated
K Handknob		**V** Viton	

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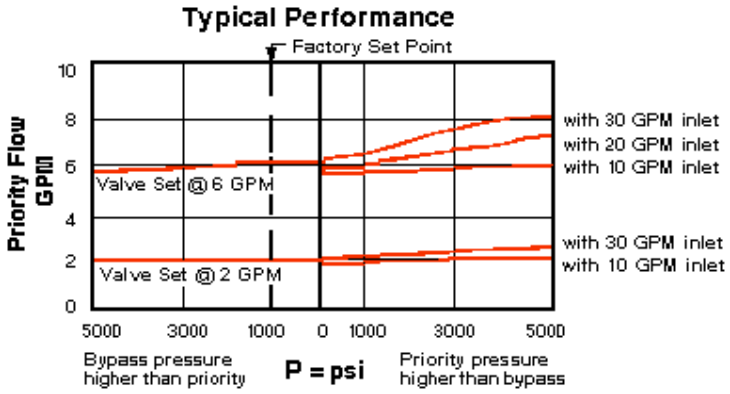
TECHNICAL FEATURES

- Customer must specify a flow rating. Factory set flow ratings are within +/- 10% of the requested setting.
- Maximum pressure at port 3 should be limited to 3000 psi (210 bar).
- Cartridges with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- Both priority and bypass flow are usable up to the system operating pressure.
- Priority remains relatively constant regardless of variation in input flow.
- Bypass flow is not available until priority flow requirements are satisfied.
- Pressure at the bypass port (port 2) may exceed pressure at the priority port (port 3).
- The sharp-edged orifice design minimizes flow variations due to viscosity changes.
- A tuneable adjustment control option provides up to +/- 25% variation from the nominal factory pre-set flow. Adjustment is done with +/- 3 turns of the adjust screw. Screw in (CW) to increase flow.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

PERFORMANCE CURVES



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