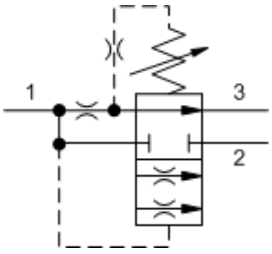
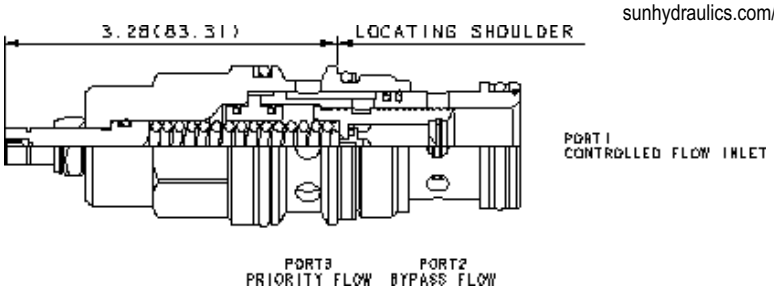
MODEL
FREA

Fixed orifice, bypass/restrictive, priority, flow control valve
SERIES 3 / CAPACITY: 95 L/min. / CAVITY: T-17A

sunhydraulics.com/model/FREA





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.

CONFIGURATION

L	Control	Tuning Adjustment
A	Setting Range	Replaceable Orifice .2 - 25 gpm (0,8 - 95 L/min.)
N	Seal Material	Buna-N
(none)	Material/Coating	Standard Material/Coating

TECHNICAL DATA

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

Cavity	T-17A
Series	3
Capacity	95 L/min.
Maximum Operating Pressure	350 bar
Maximum Input Flow	240 L/min.
Valve Hex Size	31,8 mm
Valve Installation Torque	203 - 217 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006
Model Weight	0.57 kg.

CONFIGURATION OPTIONS

Model Code Example: FREALAN

CONTROL (L)	SETTING RANGE (A)	SEAL MATERIAL (N)	MATERIAL/COATING
L Tuning Adjustment	**A** Replaceable Orifice .2 - 25 gpm (0,8 - 95 L/min.)	**N** Buna-N	Standard Material/Coating
K Handknob		**V** Viton	**/AP** Stainless Steel, Passivated
X Not Adjustable			**/LH** Mild Steel, Zinc-Nickel

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).
- A tuneable adjustment control option provides up to +/- 22% variation from the nominal factory pre-set flow. Adjustment is done with +/- 3 turns of the adjust screw. Screw in (CW) to increase flow.
- 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.
- 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