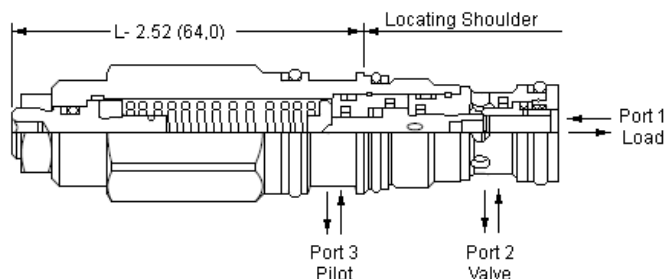
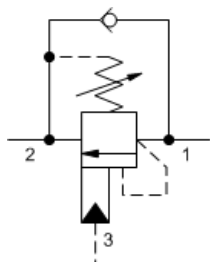




MODEL
MBDA-L*N

3:1 pilot ratio, load reactive load control valve
CAPACITY: 60 L/min. | **CAVITY:** T-11A



in (mm)

Load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

Cavity	T-11A
Series	1
Capacity	60 L/min.
Pilot Ratio	3:1
Maximum Recommended Load Pressure at Maximum Setting	210 / 260 bar
Maximum Setting	280 / 350 bar
Factory Pressure Settings Established at	30 cc/min.
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - Number of Counterclockwise Turns to Increase Setting	6.5
Reseat	>85% of setting
Valve Hex Size	22,2 mm
Valve Installation Torque	41 - 47 Nm
Adjustment Screw Internal Hex Size	4 mm
Adjustment Locknut/Cap Hex Size	15 mm
Adjustment Nut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990-011-007
Seal kit - Cartridge	Polyurethane: 990-011-002
Seal kit - Cartridge	Viton: 990-011-006

TECHNICAL FEATURES

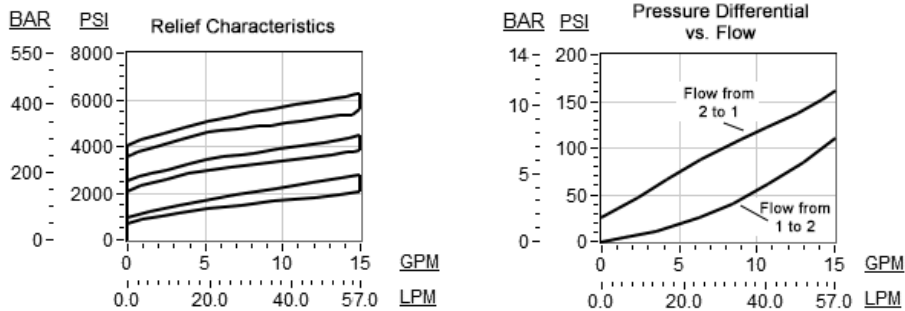
- Load reactive load control valves should be set at least 1.3 times the maximum load induced pressure.
- Turn adjustment clockwise to decrease setting and release load.
- Full clockwise setting is 1000 psi (70 bar) for the H range and 2000 psi (140 bar) for the J range.
- Backpressure at port 2 adds to the effective relief setting at a ratio of 1 plus the pilot ratio times the backpressure.
- This valve is functionally a 3 port counterbalance valve. It seats as a poppet valve and modulates as a spool valve offering the best of both worlds.
- These valves are capable of modulating over a broader range of flows than the pure poppet designs. The longer stroke allows us to incorporate a uni-directional damping device that smooths the opening and lets the valve close quickly.
- All 3-port counterbalance, load control, and pilot-to-open check cartridges are physically interchangeable (i.e. same flow path, same cavity for a given

frame size).

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- Sun load control and counterbalance cartridges can be installed directly into a cavity machined in an actuator housing for added protection and improved stiffness in the circuit.
- This valve has positive seals between all ports.
- This valve has full relief capacity.
- 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



CONFIGURATION OPTIONS

CONTROL

Standard Options	C	Tamper Resistant - Factory Set
	L	Standard Screw Adjustment

FUNCTIONAL SETTING RANGE

Standard Options	H	1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting
	J	2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

SEAL MATERIAL

Standard Options	N	Buna-N
	V	Viton

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