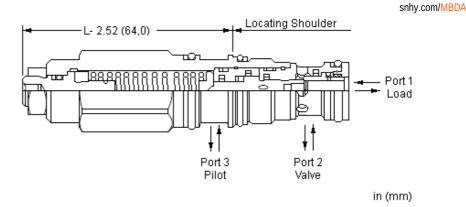


3-Port Non-vented



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**

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

Cavity	T-11A	
Series	1	
Capacity	60 L/min.	
Pilot Ratio	3:1	
Maximum Recommended Load Pressure at Maximum Setting 260 bar		
Maximum Setting 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 - No. of CCW Turns from Min. to Max. 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	
Locknut Hex Size	15 mm	
Locknut Torque	9 - 10 Nm	
Seal kit - Cartridge	Buna: 990011007	
Seal kit - Cartridge Polyurethane: 990011002		
Seal kit - Cartridge	Viton: 990011006	
Model Weight	0.20 kg.	

## **CONFIGURATION OPTIONS**

# Model Code Example: MBDALHN

CONTROL

L Standard Screw Adjustment

	1000 - 4000 psi (70 - 280 bar), 3000 psi
	1000 - 4000 psi (10 - 200 bai), 3000 psi
	(010 her) Chandend Catting
	(210 bar) Standard Setting
	( ) 3

000 psi N Buna-N V Viton

(H) SEAL MATERIAL

(N) MATERIAL/COATING

Standard Material/Coating

IAP Stainless Steel, Passivated

C Tamper Resistant - Factory Set

J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

(L) FUNCTIONAL SETTING RANGE

# **TECHNICAL FEATURES**

- Set at least 1.3 times the maximum load induced pressure (1.5 times when the setting is less than 2000 psi or 140 bar).
- Turn adjustment clockwise to decrease setting and release load.
- 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).
- Full clockwise adjustment is less than 200 psi (14 bar).
- 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

