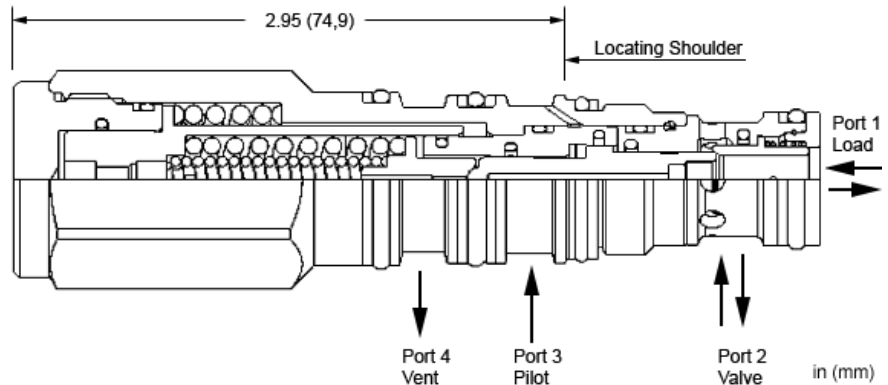
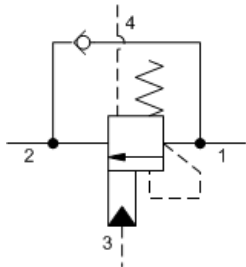


MODEL
MWDP

Vented LoadMatch™ counterbalance valve
CAPACITY: 60 L/min. | CAVITY: T-21A



CONFIGURATION

D	Control	LoadMatch™
H	Factory Set	4000 psi (280 bar)
N	Seal Material	Buna-N

NOTES

Patents are pending for this product.

These valves are self-setting counterbalance valves which combine multiple functions in one package; reverse free flow, load, and thermal relief. The check allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting pilot function self adjusts to approximately 1.3 times the load induced pressure up to the thermal relief setting. Backpressure at port 2 does not affect self setting performance because the spring chamber references the vent (port 4).

TECHNICAL DATA

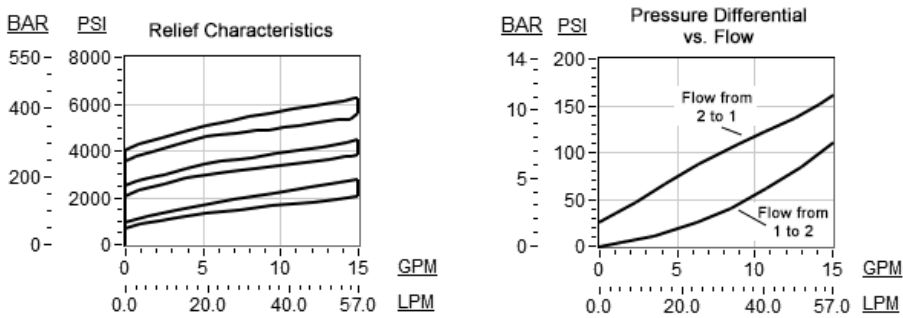
Cavity	T-21A
Series	1
Capacity	60 L/min.
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Reseat	>85% of setting
Valve Hex Size	25,4 mm
Valve Installation Torque	41 - 47 Nm
Seal kit - Cartridge	Buna: 990-021-007
Seal kit - Cartridge	Polyurethane: 990-021-002
Seal kit - Cartridge	Viton: 990-021-006
Model Weight	0.00 kg.

TECHNICAL FEATURES

- The LoadMatch™ control allows the setting of the valve to dynamically adjust in response to load pressure, while still providing a fixed thermal relief setting. The control creates a dynamic setting that is lower than the thermal relief setting, but is never more than necessary to provide safe, reliable load control. Also, since the dynamic setting is lower than the thermal relief setting, the pilot pressure required to open the valve is typically lower than other load control valves with similar thermal relief settings.
- LoadMatch™ control allows for lower pilot pressures under most loading conditions than other counterbalance valves with similar thermal relief settings.
- Pilot pressures for LoadMatch™ control are nearly identical for any load pressure in the operational range.
- All 4-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).
- The maximum recommended load holding pressure for the H range is 3075 psi (212 bar). The highest cracking pressure for the H range will be 3850-4250 psi (265-293 bar).
- The maximum recommended load holding pressure for the J range is 3850 psi (265 bar). The highest cracking pressure for the J range will be 4800-5300 psi (331-365 bar).
- The percentage difference between the cracking and the reseal values for the LoadMatch™ versions are identical. The setting tolerance is as noted.
- 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		
Preferred Options	D	LoadMatch™
FACTORY SET		
Preferred Options	H	4000 psi (280 bar)
Standard Options	J	5000 psi (350 bar)
SEAL MATERIAL		
Standard Options	N	Buna-N
	V	Viton

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