



**Purge Valve Flow Characteristics
For BMV/R Motors
In Gallons per Minute**

**Bulletin No.
BMV/R 000
05.89/001/02**

MODEL	CLOSED LOOP *			OPEN LOOP
	STD. 10 BAR PURGE VALVE			STD. 5 BAR PURGE
		Orifice size		FLOW CONTROL VALVE
	<u>None</u>	<u>2.5mm</u>	<u>1.8mm</u>	
50	1.7-2.0	---	0.8-1.2	0.9 - 1.2
75	2.0-2.7	---	0.8-1.2	0.9 - 1.2
105	2.0-2.7	---	0.8-1.2	0.9 - 1.2
140	4.2-5.8	2.1-2.6	1.0-1.3	2.0 - 2.3
186	4.2-5.8	2.1-2.6	1.0-1.3	2.0 - 2.3
260	4.2-5.8	2.1-2.6	1.0-1.3	2.0 - 2.3

- **Flows based on 16 bar charge pressure.**

At a pressure differential of approximately 25 bar (350 psi) across the hydraulic motor, the shuttle valve shifts and allows the above purge flows to escape from the low pressure side of the high pressure circuit and drain into the motor housing. With the motor housing properly vented, this flow helps to rid the system of entrapped air, but more, this flow flushes the motor and internal parts with fresh cool oil to dissipate heat.

In a closed loop circuit this is of particular benefit, not only to help dissipate heat generated by the motor, but the charge pump must replenish the deficiency in oil in the return side of the closed loop. Oil in a closed loop circuit, if not properly exchanged, can shear down quickly, detracting from the fluids ability to lubricate. The purge flow and it's subsequent replenishment, permits an exchange of oil within the closed loop circuit affording optimum serviceability of fluid and componentry.

For more information on the function of the Linde purge system consult the BMV Description of Design and Function Catalog. No. H-97, page 6.