

Servo And Proportional Valve Tester

- Tests most popular makes of Servo valves, and many Moog Proportional valves used on Plastic moulding machinery.
- Minimise machine downtime -
-Quickly diagnose problems.
- Rugged metal case for typical workshop use.
- Automatic powers on when plugged in - no more flat batteries



Our valve testers are designed to enable maintenance engineers to rapidly fix problems with parison programming and mould movement systems. Being able to manually drive the valve it helps you to easily decide if the fault is hydraulic or electronic. This simple procedure can save hours of expensive machine down time.

We produce two testers, one for the servo valves that are typically used with parison programmers, and another model designed specially to check the Moog proportional valves used on mould speed control.

Using these testers is easy—plug them in, turn the control knob and observe the cylinder movement. If the valve is performing normally you should get smooth, fine control of the cylinder's position and speed.

If the cylinder moves normally then it is most likely that the electronic unit that drives the valve is the problem.

This immediately eliminates the many hours wasted by engineers trying to decide if the problem is “electronic” or “hydraulic”

The proportional valve tester also has a meter to show the actual position of the main spool.

Moog servo valves — for precise repeatable control. Once upon a time servo valves were very expensive and very dirt sensitive. This all changed when Moog introduced the “631” series. Using new production techniques Moog were able to reduce the cost, and larger nozzles and orifices reduced dirt sensitivity. Moog are still at the forefront of machine control by being the largest supplier of high performance electrical servo drives for the new “all electric” blow moulding machines.



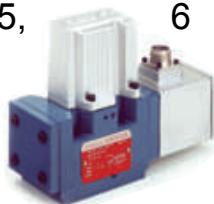
The Moog “631” series are available in 6 flow rates from 5lt/min up to 80lt/min. This makes it ideal for the smallest to the largest blow moulding machines. BMC always have a good stock of new and refurbished valve available for same day dispatch.

WHY DO SERVO VALVES GO WRONG?

In blow moulding, the commonest cause of servo valve failure is HEAT. Either the hydraulic cooling water was shut off, or the valve sat “cooking” on the head with the “heats” on, and the hydraulic supply turned off. The oil inside the valve turns to a thick gummy mess, and the valve cannot operate. Additionally the heat turns the “O” rings brittle and the valve will then leak. Hydraulic filtration is also important and we recommend that the pressure line filter element is changed at least once a year. Always ‘cap off’ hose ends and open ports when performing head changes.

MOOG PROPORTIONAL VALVES

Many new machines have Moog proportional valves for controlling mould, carriage, push-out, and blow pin movements. Our BM-xxx tester is presently suitable for most Moog valves that are fitted with 5, 6 and 12 pin connectors. Please give us the model numbers of your valves you have to enable us to check the suitability of our tester.



WHY DO PROPORTIONAL VALVES GO WRONG?

Most machines have a separate filter in the pressure supply to the pilot stage of the proportional valve. It is very important that the filter element is changed whenever the dirt indicator switch is energised. This is particularly true with older valves that were of a more dirt sensitive design. Unlike servo valves which are virtually always have a ‘closed centre’ ‘zero dead-band’ characteristic, there are numerous different types of proportional valves.