

MOOG Servo Valve Information

This is just a 'quick and dirty' data sheet primarily intended for UK blow moulding machine suppliers. It is also being sent to selected blow moulding companies. Its purpose is to fill in some of the 'knowledge gaps' and re-enforce our position as the number one supplier of servo and proportional valves to the plastics industry UK

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SEPTEMBER 2004**

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The Moog D631 series valves are probably the most popular valves used for parison wall thickness control.

The combination of the standard flow rates of 5, 10, 20, 40, 60 and 80 Lt/min, with 28 or 300 Ohm coils and the 'high response' and 'standard response' versions give a total of 36 basic models.

Because these valves look externally identical, apart from the information on the label, we occasionally find that the wrong flow rate of valve is fitted and here is a bit of information that might help:

1. Very small machines that produce containers up to 1 Lt., and PWDS (3DX) use 5 or 10 Lt/min valves
2. Machines producing 5 to 10 Lt containers use 20 or 40 Lt/min valves.
3. Accumulator head machines generally have bigger parison programming cylinders, and this coupled with the faster parison drop time requires the 40, 60 or 80 Lt/min valves.

Generally it is technically better to use the lowest flow Servovalve that gives adequate control as the effect of valve drift is lower with low flow valves.

Valve Conversion.

If you find that you have the wrong valve we can convert any Moog '631' valve you have to any other in the series. We don't charge for this procedure if it's done in conjunction with our standard valve service. If you find that you have a valve in stock that needs the flow altering, but does not need servicing, we charge £60 for the conversion. Turnaround time is typically 1 –2 days.



Moog 631 Series Servovalve

How do you identify the flow and other characteristics?

Most of the D631 series valves show the specification on the label.

Moog call this the 'boxcar' number. You can get full information from Moog's website www.servovalve.com Its actually quite simple: If the number starts with something like H020 then this is a high response 20 lt/min valve.

The Moog '631' series are fully interchangeable with the Rexroth 4WS series, and Rexroth also codes the valve flow on their label. The only thing to remember is that the wires to the valve need to be reversed as the Rexroth flow direction is opposite to Moog.

Should you buy your valves from Moog or us?

In addition to being able to ship any of the 36 models of valve variants from stock, we also sell new Moog valves at 10% less than Moog's list. This is to give customers a motive to buy their valves from us.

We can also offer refurbished valves that meet factory specification, and are sold at prices based on their external appearance.

Mould movement Valves

We also have a large stock of new and refurbished Moog valves that are used for mould speed control.

When these valves go faulty it is normally only the pilot stage that is blocked with dirt. We stock new and refurbished pilot valves so that you don't need to take the complete valve off the machine. We can ship any model of these 12 combinations from stock, both new and refurbished.

If you suspect the valve is faulty remember to check that the safety solenoid (if fitted) is energised and that the +15V and -15V supply to the valves electronics are present and correct.

If you find that the valve you are fitting (either new or repaired) doesn't work look to see that the pilot pressure and pilot return are correctly ported. This may involve moving grub screws from one port to another as these are not always factory set to the machines porting. Many machine have a separate filter in the pilot pressure line and if this is partially blocked the Moog valve will not work properly.

Service Exchange, and general help

Panic breakdown? We can ship a service exchange valve the same day of you call.

Need Moog catalogues or service manuals? You can download a lot of these from the Moog website, or give us a call.

Our valve repair service continues to offer a fast turnaround at very competitive prices and we are still the only UK Company that Moog supply all spare parts to.

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