

Other Products

Angle Seat Valves

Another product that Metal Work Australasia sell is angle seat valves from Pro-Com in Italy.

We carry a range of bronze and stainless steel bodied valves with either polymer or stainless steel actuators. Stocked sizes range from 1/2" BSP to 1 1/2" BSP with other sizes available on request.

PTFE seals are utilised giving a maximum operating temperature of 180°C.

Angles seat valves are suited to applications requiring high flow and high operating temperatures and can handle liquids or steam.

The valve is angled so that when it lifts it pro-



vides almost interrupted flow of the medium through the valve.

The valve can be mounted either way round (the actuator may have to be changed depending on the pressure). Typically they are mounted so that the flow helps close the valve although with liquids this can cause 'water ham-

mer' when the valve is closed. Turning the valve around so that it closes against the flow can eliminate 'water hammer'. Depending on the pressure in the liquid a larger spring may then be needed to close the valve which in turn necessitates a larger actuator to overcome the spring force.

Angle seat valves are



available in Normally Open and Normally Closed versions and all have a large red indicator on top of the actuator to show when they are actuated.

If you need any further information then please contact your local office for more details.



Next Issue

Pneumatics in the food industry.

'Line-on-Line' - A range of in-line regulators, flow controls, non-return valves, gauges, pop-up indicators etc. that are quick & easy to install.

Tales from the Workbench

A customer recently asked us to have a look at an application where a part of a machine was getting damaged when it was switched on first thing in the morning. The problem was with a vertically mounted cylinder which stopped with the cylinder extended, when the air was turned off the cylinder retracted overnight.

The problem was caused by the cylinder being 'pre-exhausted' I'll explain.....

Usually a double acting cylinder always has high pressure air acting on one side of the piston so when the valve controlling it is switched the side of the piston with high pressure air is connected to exhaust and the other side is supplied with high pressure air. When the high pressure is exhausted it takes a finite amount of time for the pressure to drop, by then the piston is moving because of the high pressure supplied to the other side of the piston. This means that the piston is always pushing against an air cushion (varying the flow of the exhausting air is used to control the speed of a cylinder).

In the problem situation the cylinder had no air pressure acting on it until the air supply was turned on first thing in the morning. But because the cylinder had fallen overnight the high pressure air extending the cylinder back into position had no pressure to work against so it moved much faster than normal. This high speed was causing the damage.

This is a common problem where cylinders can fall due to gravity overnight or where the air to a machine is turned off and a cylinder is manually moved and not returned to its start position.

The solution is to let the air into the system slowly when it is first turned on this can be done manually, but requires some judgement to get it right, or it can be done automatically using a progressive start valve (as shown on page 2 of this issue).

Contact us

For further information on any of the products in the newsletter or Metal Work products in general then please do not hesitate to contact us.

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