RS ROTARY VALVES

SUPPLEMENTARY OPERATING & MAINTENANCE NOTES

AIR PURGED PACKING GLAND SHAFT SEALS

RS Rotary Valve shaft seals may be fitted with air purging where the material being handled by the valve is abrasive or very fine.

Air purging is designed to prevent material entering the shaft seal and causing abrasive damage to the rotor shaft and gland packing.

Pressurised air is passed into the endplate seal housing via a lantern ring at the inboard side of the gland packing to prevent material entering the gland area.

Valve endplates are modified for air purging during manufacture and the valve is supplied with push in pipe fittings in the seal housings.

Air purged shaft seals may be retro-fitted to an existing Rotary Valve but the endplate seal housings must be modified and lantern rings fitted to accomplish this.

PIPING FOR AIR PURGED SHAFT SEALS.

Insert 6mm OD nylon tubing into the seal housing pipe fittings and connect them via a tee piece and air control valve to a Filter Pressure Regulator as shown on Page 3 of these Supplementary Notes.

The purge air pressure must be greater then the internal valve pressure. Britton Procol Valves recommend the purge air pressure to be 205 – 345mbars (3-5psig) above the internal valve pressure. This may be increased in some applications but should not normally be greater than 700mbars (10 psig) above the valve internal pressure.

Air consumption is given in the graph on Page 2 of these Supplementary Notes.

OPERATION

Air pressure to the seal purge ports must be present whenever the Rotary Valve is operated. Failure to ensure this will result in the lantern ring air passages becoming blocked by product.

MAINTENANCE

The air purge components require no maintenance but the packing glands should be maintained as described in the main Operating and Maintenance Notes.

AIR PURGE KITS

Britton Procol Valves supply air purging kits comprising:-

Air Filter/Regulator
Pressure Gauge
Shut-off Valve
2/2 Solenoid/Spring Air Valve
6mm OD Nylon Piping and fittings.

mounted onto a baseplate for fitting to the Rotary Valve body.
Please contact our Sales Office for details.
Air Consumption Of Gland Seals
Free Air Per Minute
1/8" BSP Port In Seal
Housing Both Sides Valve

Cross Section Thru' Valve Showing
Air Purged Rotor Shaft Seal

Item No | Description
-------|------------------
1       | Air Filter/Pressure Regulator
2       | Pressure Gauge
3       | Shut Off Valve
4       | T-Coupling
5       | 2/2 Valve Solenoid/Spring

Assembly Of Air Purge System

Schematic Diagram For
Shaft Seal Air Purge System

Britton Procol
VALVES

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