

# Over 40 New Products in this Catalogue

## Relief Cartridge Valves

*Page 9:* The **RP\*S** is a seated style pilot operated relief valve. This provides reduced leakage, faster response and a reduced pressure overshoot to give improved pressure control.

*Page 10:* The **RP\*GT** is a "soft start" relief valve available in series 2 only providing a pressure ramping over 300 milliseconds when it opens to provide excellent pressure protection and reduce shock.

*Page 13:* The **RBAP** is an electro-proportional, direct acting pilot relief valve that fits into the Sun T-8A cavity. It can be used as a pilot valve on it's own or together with many types of main stage pressure control valves that have the T-8A cavity in the end of the cartridge.

*Page 14:* The **RP\*C-8** is a normally closed spool type modulating valve, with a T-8A cavity in the end. This would enable any of the Sun pilot valves, such as the RBAP proportional valve, to be fitted into the end to make a high capacity proportional relief valve.

*Page 15:* The **RP\*S-8** is a seated style normally closed modulating valve, with a T-8A cavity in the end. This would enable any of the Sun pilot valves, such as the RBAP proportional valve, to be fitted into the end to make a proportional relief valve with low leakage on the main stage.

*Page 18:* The **RV\*S** is a ventable, seated style, pilot operated relief valve. This provides reduced leakage, faster response and a reduced pressure overshoot to give improved pressure control.

*Page 20:* The **RV\*D-8** is a normally closed, balanced piston, modulating element with a T-8A cavity in the end. The cartridge is ventable and also has an external drain connection. This would enable any Sun pilot valve, such as the RBAP proportional valve, to be fitted into the end to make a ventable proportional relief with separate drain port.

## Sequence Cartridge Valves

*Page 23:* The **RSDC-8** is a normally closed, balanced piston, modulating element with a T-8A cavity in the end and external drain. This would enable any Sun pilot valve such as the RBAP proportional valve to be fitted into the end to make a relief valve with separate pilot drain.

## Reducing/Relieving Cartridge Valves

*Page 37:* The **PB\*B-8** is a normally open modulating element with a T-8A cavity in the end. This would enable any Sun pilot valve such as the RBAP proportional valve to be fitted to make a proportional pressure reducing valve.

*Page 38:* The **PP\*B-8** is a normally open modulating element with a T-8A cavity in the end. This would enable any Sun pilot such as the RBAP proportional valve to be fitted into the end to make a proportional pressure reducing/relieving valve.

*Page 39:* The **PV\*A-8** is a normally open modulating element with a T-8A cavity in the end and an external drain. This would enable any Sun pilot valve, such as the RBAP proportional valve, to be fitted into the end to make a proportional pressure reducing/relieving valve with external drain.

*Page 40 and 41:* The **PRD\*** is an electro-proportional, direct acting, pressure reducing/relieving valve available in series 1 only. There are two versions available, one with low leakage and the other with higher leakage and improved response.

## Flow Control Cartridge Valves

*Page 73:* The **FPCC** is an electro-proportional, normally closed throttle valve available in series 1 only. It provides some pressure compensation but needs a separate compensator for more accurate control.

*Page 74:* The **FPCH** is an electro-proportional, normally open throttle valve available in series 1 only. It provides some pressure compensation but needs a separate compensator for more accurate control.

## Priority Flow Control Cartridge Valves

*Page 78:* The **FV\*A-8** is a ventable, fixed orifice, priority flow control valve with a T-8A cavity in the end of the cartridge. This enables a Sun pilot solenoid, pneumatic or manual valve to be fitted into the cartridge to select the priority flow condition or bypass all flow to tank.

## Logic Elements

*Page 89:* The **LO\*\* -8** is a poppet type, spring biased closed, pilot-to-close unbalanced logic valve with a T-8A cavity in the end of the cartridge. This enables a Sun pilot solenoid, pneumatic or manual valve to be fitted into the cartridge to select the valve in the open or closed condition.

*Page 95:* The **DO\*R-8** is a poppet type, pilot-to-close, normally open balanced logic valve with a T-8A cavity in the end of the cartridge. This enables a Sun pilot solenoid, pneumatic or manual valve to be fitted into the cartridge to select the valve in the open or closed condition.

*Page 100:* The **DK\*R-8** is a poppet type, pilot-to-open, normally closed balanced logic valve with a T-8A cavity in the end of the cartridge. This enables a Sun pilot solenoid, pneumatic or manual valve to be fitted into the cartridge to select the valve in the open or closed condition.

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## Directional Cartridge Valves

*Page 105:* The **DRBO** is direct acting, externally drained, normally closed, three-way directional valve in series 1 only. It is available with an adjustment on the pressure at which the valve will switch.

*Page 105:* The **DRBP** is direct acting, externally drained, normally open, three-way directional valve in series 1 only. The valve is available with an adjustment on the pressure at which the valve will switch.

*Page 105:* The **DRBR** is a direct acting, internally drained, externally piloted, three-way directional valve in series 1 only. The valve is available with an adjustment on the pressure at which the valve will switch.

*Page 106:* The **DV\*A-8** is a direct acting, normally open, two-way directional valve with a T-8A cavity in the end. This enables a Sun pilot solenoid, pneumatic or manual valve to be fitted into the cartridge to select the valve in the open or closed condition.

*Page 106:* The **DV\*B-8** is a direct acting, normally closed, two-way directional valve with a T-8A cavity in the end. This enables a Sun pilot solenoid, pneumatic or manual valve to be fitted into the cartridge to select the valve in the open or closed condition.

*Page 106:* The **DV\*C-8** is a direct acting, three-way directional valve with Port 1 blocked and a T-8A cavity in the end. This enables a Sun pilot solenoid, pneumatic or manual valve to be fitted into the cartridge to select the valve in the open or closed condition.

*Page 106:* The **DV\*D-8** is a direct acting, three-way directional valve with Port 1 open and a T-8A cavity in the end. This enables a Sun pilot solenoid, pneumatic or manual valve to be fitted into the cartridge to select the valve in the open or closed condition.

*Page 107:* The **DV\*M-8** is a vent-to-operate two-position two-way, normally open directional valve with a T-8A cavity in the end and external drain. This enables a Sun pilot solenoid, pneumatic or manual valve to be fitted into the cartridge to select the valve in the open or closed condition.

*Page 107:* The **DV\*N-8** is a vent-to-operate two-position two-way, normally closed directional valve with a T-8A cavity in the end and external drain. This enables a Sun pilot solenoid, pneumatic or manual valve to be fitted into the cartridge to select the valve in the open or closed condition.

*Page 107:* The **DV\*O-8** is a vent-to-operate two-position three-way directional valve with a T-8A cavity in the end and external drain. This enables a Sun pilot solenoid, pneumatic or manual valve to be fitted into the cartridge to select the valve in the open or closed condition.

*Page 107:* The **DV\*P-8** is a vent-to-operate two-position three-way directional valve with a T-8A cavity in the end and external drain. This enables a Sun pilot solenoid,

pneumatic or manual valve to be fitted into the cartridge to select the valve in the open or closed condition.

*Page 108:* The **DF\*A-8** two-position, two-way normally closed port 1 to 2, directional valve with a T-8A cavity in the end of the cartridge. This enables a Sun pilot solenoid, pneumatic or manual valve to be fitted into the cartridge to select the valve in the open or closed condition.

*Page 109:* The **DF\*B-8** two-position, two-way normally closed port 2 to 1, directional valve with a T-8A cavity in the end of the cartridge. This enables a Sun pilot solenoid, pneumatic or manual valve to be fitted into the cartridge to select the valve in the open or closed condition.

## Pilot Control Cartridge Valves

*Page 125:* The **DAAM** is a manually operated, two-position, two-way pilot valve. This valve could be fitted into any cartridge with a T-8A cavity in the end to provide manual switching. Available with momentary, detented, or dual operator.

*Page 129:* The **DBAM** is a manually operated, two-position, three-way valve.

## Circuit Savers

*Page 146:* The **COFO** is a 120:1 ratio, pilot to close check valve in series 2 only. This valve is specifically designed for accumulator unloading and dump circuits when the pump is not operating.

*Page 152:* The **DS\*X** is a two-position, three-way, vent-to-shift, normally closed diverter valve. This valve could be used in parallel with flow divider valves to enable the function to be bypassed in traction drive circuits.

*Page 153:* The **DS\*Y** is a two-position, three-way, vent-to-shift diverter valve. This valve works as a simple flow diverter valve.

*Page 154:* The **LHDT** is a bi-directional, normally open modulating valve in series 1 only. This valve can be used with an external orifice to provide pressure compensated flow control in both directions.

## Hybrid Relief Cartridge Valves

*Page 156:* The **HRDA** is a dual function cartridge providing both a direct acting relief valve and check valve. The relief function is before the check valve.

*Page 157:* The **HRDB** is a dual function cartridge providing both a direct acting relief valve and check valve. The relief function is after the check valve.

*Page 158:* The **HVCA** is a dual function cartridge providing both a ventable pilot operated relief and check valve. The ventable relief function is before the check valve.

*Page 159:* The **HVCA-8** is a dual function cartridge providing both a normally closed modulating function and a check valve and a T-8A cavity in the end of the cartridge. This would enable a Sun pilot valve such as a pilot proportional valve to provide a proportional pressure control and check function in one cartridge.