

In this month's Hydrafile:**Featured Product Range:**

EPE Hydro-pneumatic Accumulators...Hyspecs stocks a full line of EPE Hydro-pneumatic bladder and diaphragm accumulators. EPE's range of piston accumulators are available on indent order.

**Bladder Type****Diaphragm Type**

Accumulators are used in hydraulic circuits for the following reasons:

1. Fluid power storage - in the case where a large flow rate is required for a short period
2. Pulsation damper - to maintain smooth operation where needed
3. Volume compensator - protection for components against thermal shock
4. Pressure compensator - where constant static pressure is required for a long period an accumulator will compensate for pressure loss due to seepage through joints, seals etc
5. Counter balancing - balancing of a force or weight can be achieved by using hydraulic pistons driven by an accumulator
6. Hydraulic line shock damper - rapid valve closure can produce shock waves (i.e. water hammer) resulting in over-pressurisation of pipes, joints, valves etc. Accumulators can neutralise or significantly reduce this.
7. Shock absorber - used in suspension of mobile machinery like fork-lifts, cranes, agricultural equipment etc.
8. Hydraulic spring - can be used as an alternative to a mechanical spring
9. Fluid separator - can be used where pressure has to be transferred between two incompatible fluids.

All accumulators are serviceable with bladder and diaphragm kits. Charge kits are also available for many types of connections.

For detailed specification information including pricing download the brochure here:

http://www.hyspecs.co.nz/DataSheets/EPE_Accumulators.pdf (736 kB). Call our sales engineers today or <mailto:hydrafile@hyspecs.co.nz> for more information.

Technical Corner:

Congratulations to the winners of last months prize giveaway...Alex, Grant and Kevin. To those who didn't get a prize please try again this month as we have even more prizes to give away...

The correct answers to last month questions were: 1. Contamination 2. Relief valve 3. kW 4. Load 5. Piston

We had heaps of response from last months Technical Corner and gave away all three gifts on offer. Due to the high response, this month the first five people to return five correct answers will receive their gift of choice. The gift choices will be Hyspecs foldaway chairs, BBQ Tongs and Binoculars.

To answer the following questions click the following link: <mailto:competition@hyspecs.co.nz> to open a new message in your email program. Answer the questions and press send. Don't forget to include your contact details. Winners and answers will be announced in next months Hydrafile.

1. What component should be used to store hydraulic oil at pressure?
2. Which is generally considered the most quiet pump - gear, vane or piston?
3. What theoretical size (displacement in cc) motor is required to produce 380 Nm at 190 bar?
4. Which type relief valve generally has the least hysteresis - Direct, Differential or Pilot Operated?
5. What do you need to know to work out what theoretical force a cylinder can exert?

New Product:

Hydraforce releases some exciting new cartridge valving...



Hyspecs has taken delivery of four new cartridge valves from HydraForce. Some of these designs are a world first and HydraForce has a patent pending on the new designs. For specification information click on the green links:

1. SVR10-26 - 2-way solenoid with built in relief valve. Designed to fit into a standard 10-2 cavity the valve is a normally open solenoid valve, when energised closes and becomes a pre-set relief valve - 57 l/min, 275 bar. Ideal for parallel Cetop 3 manifolds where two valves (dump and relief) can be replaced by this single valve. Download the brochure here: <http://www.hyspecs.co.nz/DataSheets/Hydraforce/SVR10-26.pdf>
2. FRRV10-41FA - fixed compensated priority flow regulator with built in adjustable relief valve - 38 l/min, 207 bar - great for a power steering circuit. Download the brochure here: <http://www.hyspecs.co.nz/DataSheets/Hydraforce/FRRV10-41FA.pdf>
3. FD50-45 - heavy duty, multi function, spool type flow divider/combiner - 45 l/min, 345 bar - used to synchronise cylinders or motors. Download the brochure here: <http://www.hyspecs.co.nz/DataSheets/Hydraforce/FD50-45.pdf>
4. PV42-M30 - solenoid operated, two-stage, three-port, pressure-compensated, spool type, normally closed proportional control valve - 190 l/min, 240 bar. Download the brochure here: <http://www.hyspecs.co.nz/DataSheets/Hydraforce/PV42-M30.pdf>

HYDRAULIC SPECIALTIES LTD.

P.O. Box 58-655 Greenmount, Auckland
Tel: +64 9 274-9985
Fax: +64 9 274-4441
9-11 Lady Ruby Drive, East Tamaki
Auckland, New Zealand

P.O. Box 7493 Sydenham, Christchurch
Tel: +64 3 366-1872
Fax: +64 3 366-1431
40 Durham Street, Sydenham
Christchurch, New Zealand

Web Site: www.hyspecs.co.nz

E-mail: hyspecs@hyspecs.co.nz