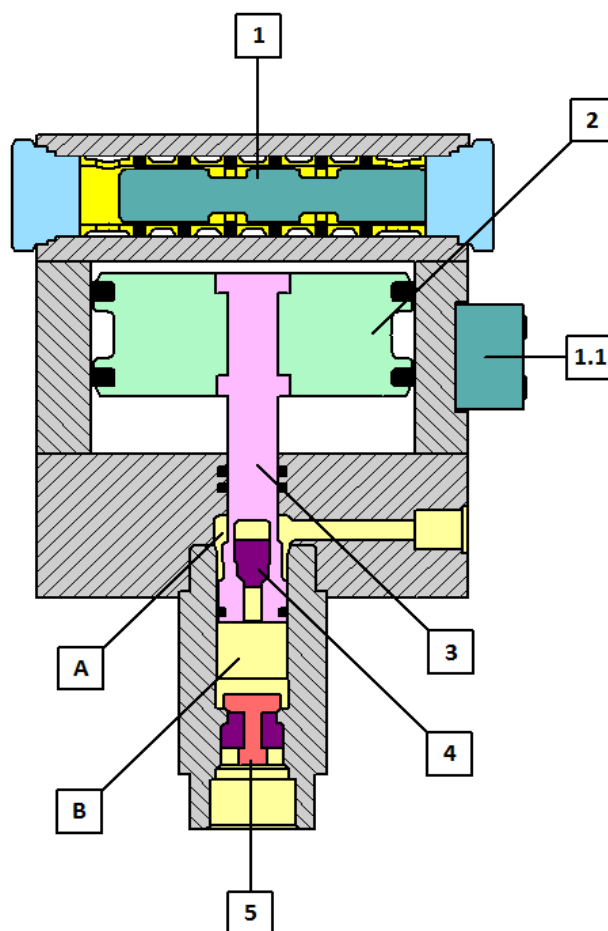




Air Driven Pumps and Power Packs

The HEYPAC EK2R02 is a double acting, free piston, compressed air driven hydraulic pump of infinitely variable delivery for general use wherever a compressed air supply is available. The pump will cycle automatically according to system demand and stall under zero flow conditions with minimal energy consumption. The output flow and pressure depend upon the intensification ratio relative to the air supply pressure and volume.

Datasheet **EK2R02**



1. Air Valve

A self-reciprocating valve that alternates the compressed air supply to the upper and lower sides of the drive piston assembly generating the pumping motion of the unit.

1.1. A unique system of pilot control produces positive spool reversal.

2. Air drive

A lightweight drive piston complete with self lubricating seals allows the pump to operate on an unlubricated air supply.

3. Piston Rod

Transmits the compressed air power to the fluid being pumped. The cross sectional area of the fluid piston in relation to the air drive piston provides the pump intensification ratio.

4. Transfer Valve

Is closed as the piston rises, drawing fluid into the lower pump chamber 'B' via the suction valve and at the same time the piston displaces fluid from the upper chamber 'A' to the system. When the pump reverses and the piston rod begins to fall the suction valve is closed by the increase in pressure in the lower chamber and the transfer valve is opened. Fluid is then displaced through the transfer valve to the upper chamber where the excess fluid is again forced into the system.

5. Suction Valve

Opens to allow fluid to enter the pump as the piston assembly rises.

Datasheet **EK2R02**

Technical Data

ATEX compliance Ex II 2 G Ex h IIC T6 Gb

Air consumption

For details on air consumption please contact Hyquip.

Maximum hydraulic power 0.37 kW (0.5 hp)

Maximum cycle speed 250 cycles/minute (intermittent).

For continuous duty maximum cycle speed should be reduced to approx. 50 - 60 cycles/minute. Applications involving continuous pumping should be referred to hyquip.

Maximum air pressure 8.5 bar (125 psi) **Minimum air pressure** 2 bar (29 psi)

Ambient temperature range Minus 20 deg C to plus 60 deg C

Fluid temperature range Minus 5 deg C to plus 70 deg C (for temperatures outside this range contact Hyquip)

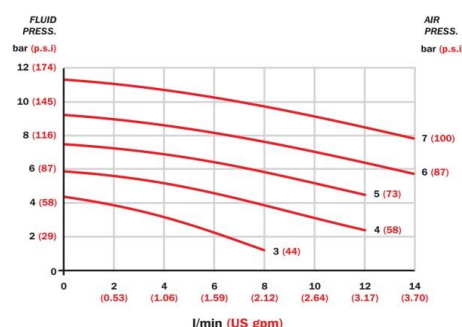
Performance Data

Pressure Ratio (fluid: air) 2:1
P max-fluid 13.5 bar (200 psi)
Q max fluid 15 L/min (4.0 US gpm)
Q max avge fluid 4 L/min (1.0 US gpm)

"Q max." Is defined as the maximum pump flow at 250 cycles/minute - intermittent duty only.

"Q max. avge" Is defined as the maximum average allowable flow over the complete system operating cycle including both periods of pressure holding (stall condition) and fluid delivery.

Performance Graph



Air Driven Pumps and Power Packs