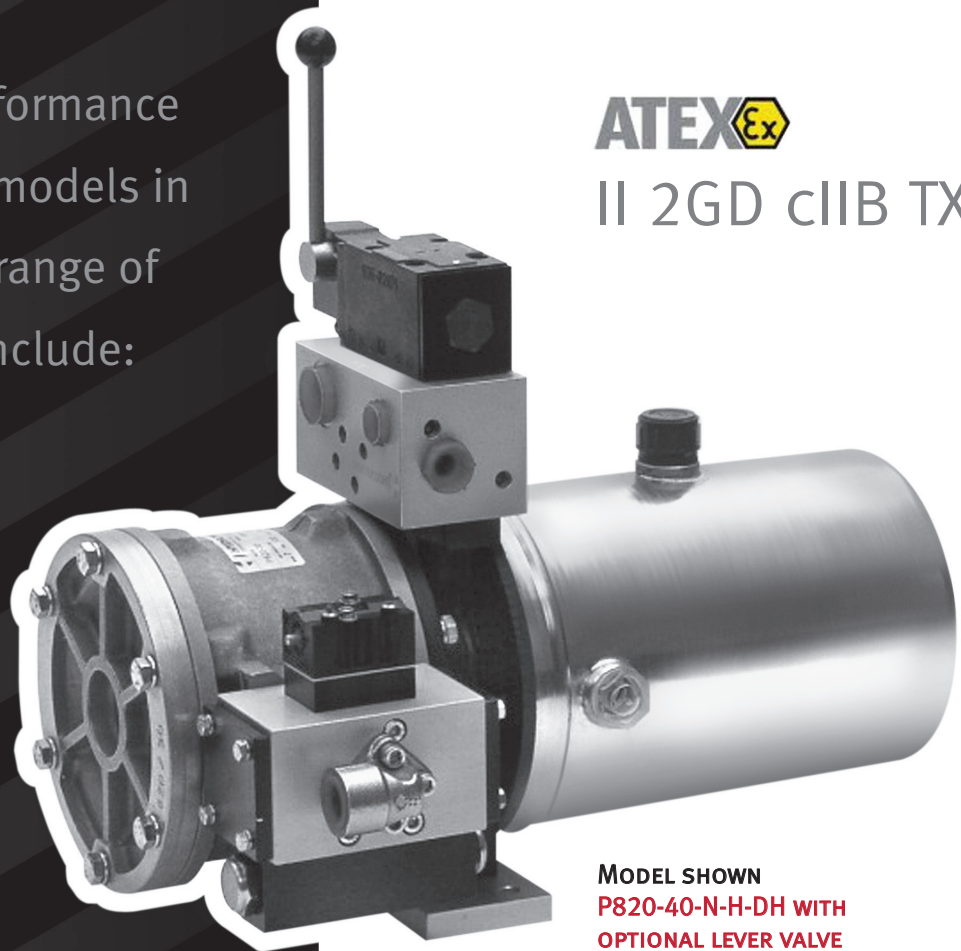


# P820

## SERIES P820 AIR-DRIVEN HYDRAULIC POWER UNITS

Hydraulic performance from the five models in this versatile range of power units include:



**ATEX** 

II 2GD cIIB TX

**MODEL SHOWN**  
P820-40-N-H-DH WITH  
OPTIONAL LEVER VALVE

**Models up to 6 gpm | Models up to 4,000 psi | Variable output**

**Pressure sustaining | Synthetic oils and brake fluid**

Marked for worldwide use wherever  
pressure sustaining is needed



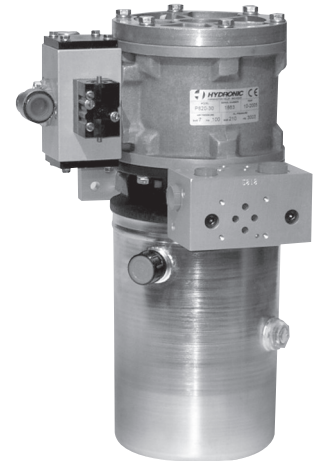
The P820 Series pump is double acting in all respects. These high performance, high flow, air driven pumps are typically used in place of electrically driven power units where the duty cycle is intermittent or pressure sustaining is important. Energy would normally be wasted in electrically driven power units. This energy is turned into heat when hydraulic flow cannot take place. The double acting air drive section maximizes efficiency. The double acting hydraulic section allows for high hydraulic flows with a relatively smooth output.

Five ratios of this two horsepower pump are available with pressures from 500 to 4000 psi. Hydraulic flows are as high as 6 gpm. Input air pressures from 20 to 100 psi provide the user with the full range of versatility. Combinations of the high flow and high pressure pumps on a single tank offer even more performance up to 6 gpm and 4,000 psi.

As with most of the Hydronic product line, the P820 Series pump can be mounted horizontally or vertically using wall brackets or tank flanges. More commonly, the P820 Series pump can be integrated with a small reservoir of approximately .75 gallon capacity, and a choice of connection subplates including 'P' and 'T' ports and D03 configurations. For multiple valve stacks, the standard 'P' and 'T' block is normally used. The ports are connected by steel tubes to a conventional subplate fixed to the lid of the 2.5 gallon tank. A one gallon reservoir is also available. Larger tanks can be requested. Alternative seal compounds are available in all five P820 models to accommodate the pumping of difficult fluids, such as brake fluid and liquified gases.



**P820 Series, Model P820-10  
mounted to 2.5 gallon tank**



**P820 Series, Model 820-40  
with D03 subplate for  
directional valves**

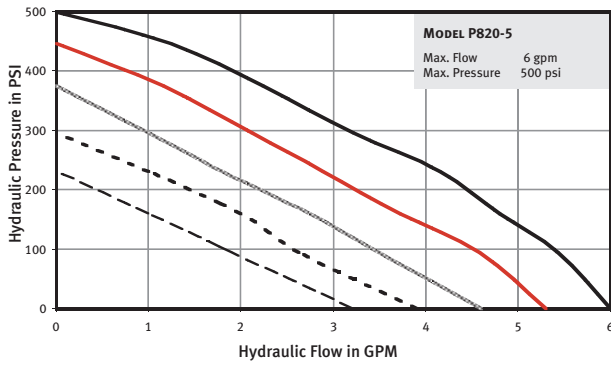
## Hydronic P820 Series Pumps

- High performance, double acting pneumatic drive section
- High flow rates at medium to low hydraulic pressure
- Mount vertically or horizontally
- Air operation means intrinsically safe use in hazardous areas and applications
- SAE ported manifold with pressure and return connection
- Installation of directional control valves with D03 pattern subplate
- Use pumps with or without reservoir (selection of capacities)
- Complete units with directional control valves, pressure switches, accumulators, pressure gauges, etc. are available

**VISIT US ONLINE AT [HYDRONICCORP.COM](http://HYDRONICCORP.COM)  
TO SEE OUR WHOLE LINE OF AVAILABLE PRODUCTS**

## Flow and Pressure Performance Guides

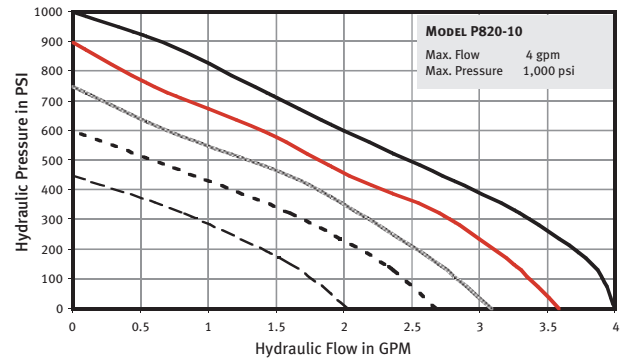
**P820-5 FLUID FLOW AGAINST PRESSURE**



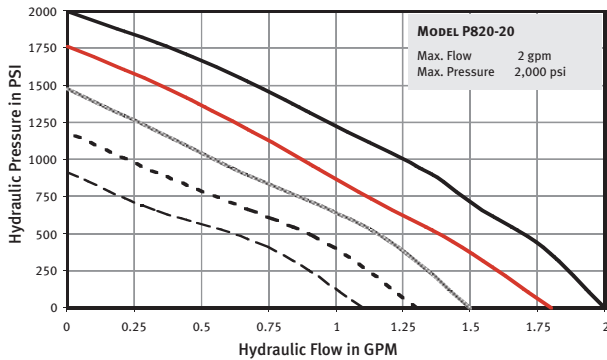
**AIR PRESSURES AT:**

- 100 PSI ———
- 90 PSI ———
- 75 PSI ———
- 60 PSI ·····
- 45 PSI - - - -

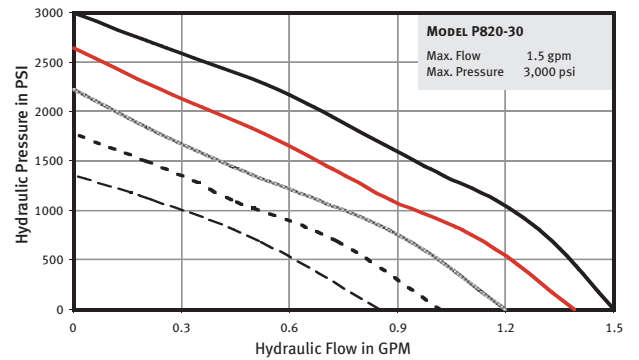
**P820-10 FLUID FLOW AGAINST PRESSURE**



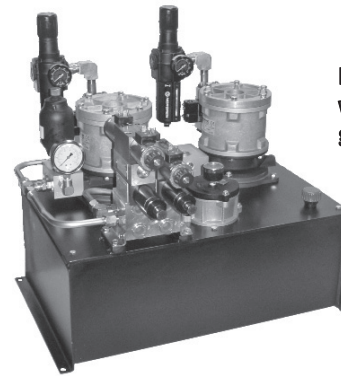
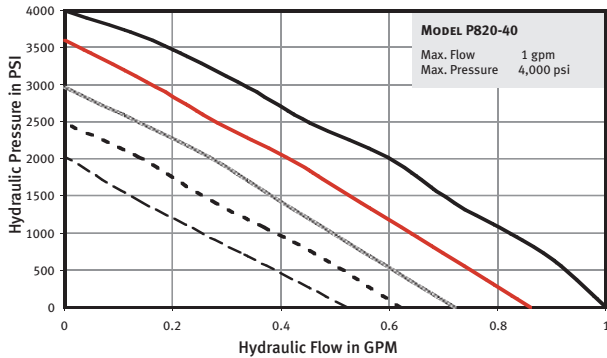
**P820-20 FLUID FLOW AGAINST PRESSURE**



**P820-30 FLUID FLOW AGAINST PRESSURE**



**P820-40 FLUID FLOW AGAINST PRESSURE**

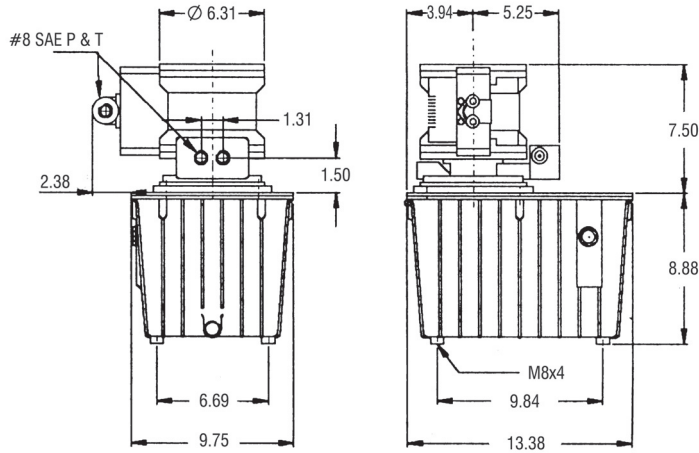


**Dual P820 pumps with valves on 10 gallon tank**

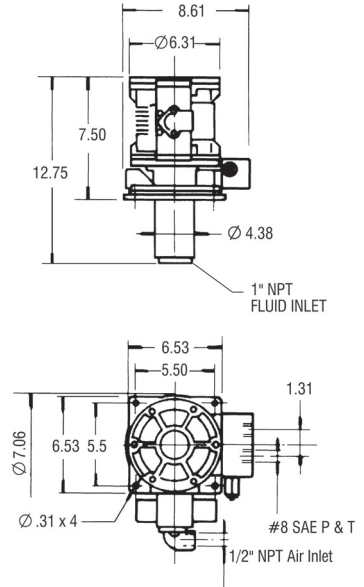
P820 Pump Model	P820-5	P820-10	P820-20	P820-30	P820-40
Air Pressure psi (bar)	20-100 (1.4 – 7)				
Pressure Ratio	1 : 5	1 : 10	1 : 20	1 : 30	1 : 40
Max. Oil Pressure psi (bar)	500 (35)	1,000 (69)	2,000 (138)	3,000 (207)	4,000 (275)
Noise Level	78-80 dB @ 1 meter				
Weight – Pump Only lbs. (kg)	-5 & -10 = 44 (20)		-20,-30 & -40 = 33 (15)		

**Note: Always fit an air filter/regulator with 40 micron rating and 50 scfm capacity.**

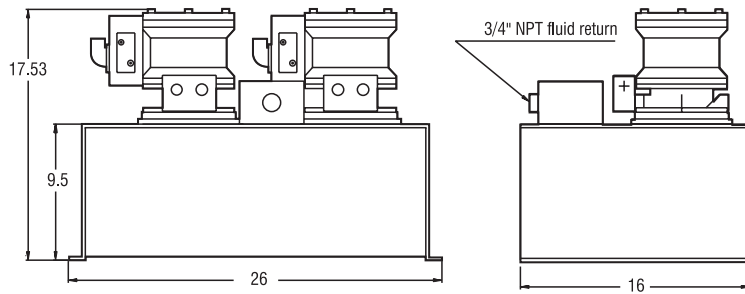
### Pump dimensions with reservoir - 2.5 gallon (R25 option)



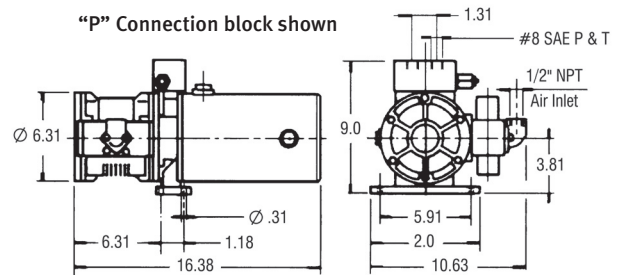
### Pump dimensions for tank top mounting (T option)



### Reservoir dimensions with reservoir - 10 gallon (R100 option)



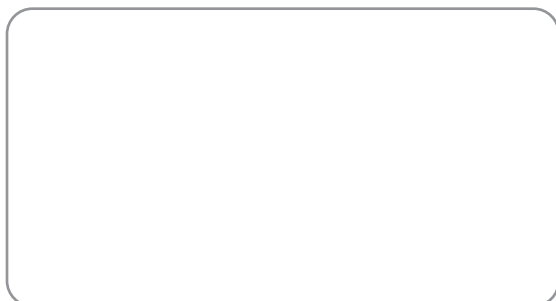
### Pump dimensions with standard reservoir (H or N option)



### Hydronic P820 Series Ordering Code

Select specifications from the table and build an ordering code number, as shown in the sample.

MODEL	RATIO	SEAL	MOUNTING	FLUID CONNECTIONS
<b>P820-5</b>		<b>N</b>	<b>O</b>	<b>P</b>
P820-5 = 1:5		<b>N</b> = Buna	<b>O</b> = Basic Pump Only	<b>O</b> = Basic Pump Only
P820-10 = 1:10		<b>V</b> = Viton	<b>W</b> = Wall Bracket Mounting kit	<b>P</b> = Port Block, front entry, #8 SAE
P820-20 = 1:20		<b>E</b> = EPR	<b>T</b> = Tank Top Mounting kit	<b>SP</b> = Port Block, side entry, #8 SAE
P820-30 = 1:30			<b>N</b> = Vertical Reservoir, .5 gal.	<b>M</b> = Smoothing Kit Block #8 SAE
P820-40 = 1:40			<b>H</b> = Horizontal Reservoir, .5 gal.	<b>DH</b> = D03 single station, #6 SAE
			<b>NL</b> = Vertical Reservoir, 1 gal.	<b>DH2</b> = D03 two station, #6 SAE
			<b>HL</b> = Horizontal Reservoir, 1 gal.	
			<b>R25</b> = Reservoir 2.5 gal. (1 pump)	
			<b>R30</b> = Reservoir 3 gal. (1 pump)	
			<b>R50</b> = Reservoir 5 gal. (1 pump)	
			<b>R80</b> = Reservoir 8 gal. (1 pump)	
			<b>R100</b> = Reservoir 10 gal. (1 or 2 pumps)	
			<b>R200</b> = Reservoir 20 gal. (1 or 2 pumps)	



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