Ultrahigh-Pressure Pump Tube

Wire Line Protection for Oil and Gas Exploration

Our new ultrahigh-pressure pump tubes, models 85304 and 85305, are the solution to one of our customer's problems. Our customer's current equipment couldn't stand up to the increased pressures of tapping deeper reserves.

Oil and gas producers are drilling deeper, miles below the surface of the earth or ocean floor, to meet today's energy demands. Instruments deep in the well send data via pencil-sized cables to the surface. The cables pass through wire line flow tubes at the well head. The seal in the clearance between the cable and flow tube must hold against immense pressures, sometimes as much as 20,000 psig.

Our new wire line protection system pump makes the deep drilling and exploration possible. The pump, designed to withstand the intense pressure, maintains a "liquid o-ring" seal in the clearance between the cable and the wire line flow tube.

Longer, 6" stroke vields 40% increase in output per cycle **Autoclave** engineers outlet and gauge port threads for secure seal at connections against high system pressures **Pump tube** is constructed of stronger materials to withstand the

PowerMaster III Air Motor makes higher ratios, higher pressures possible

Specifications										
Pump Model	Ratio	Pump Tube	Air Motor	Max. Delivery Pressure psig (bar)	Max. Air Pressure	Pump Tube Length				
2390	250:1	85304	84808	20,000 (1380)	80 (5.5)	00011				
2392	140:1		84806	14,000 (965)	100 (6.9)	333/4"				
2394	70:1		85804	14,000 (965)	200 (13.8)	85.70cm				
2391	250:1	85305	84808	20,000 (1380)	80 (5.5)					
2393	140:1		84806	14,000 (965)	100 (6.9)	27 ¹ /8" 68.90cm				
2395	70:1		85804	14,000 (965)	200 (13.8)					

Pressure psig (bar)	Average Output/ Cycle	at 75 cycles/min	Temperature Range	Parts Materials	Pump Stroke	Material Outlet	Gauge Port
20,000 (1380)	2 in³ (33cc)	0.67 GPM (2.5 LPM)	-40°F to +180°F -40°C to +82°C	Carbon Steel, Brass, Polyurethane	6" (152mm)	Autoclave Engineers Medium Pressure Port for ⁹ /16" Tube, ¹³ /16 – 16 Thread	Autoclave Engineers Medium Pressure Port for 1/4" Tube, 7/16 – 20 Thread

Features

Benefits

- Strengthened tube design and PowerMaster III format adds 8-inch motor capability to the previous 6-inch limit to yield 20,000 psig (1360 bar) vs.14,000 psig (952 bar) capacity
- ◆ Autoclave fittings—the industry standard
- Series III advantages: Modular air motor, 6-inch stroke



THE CYPHER COMPANY

higher pressures

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