

## MPTP50

## MPTP Specifications

<b>Multiphase Pump</b>	Type	Hydraulic drive low speed reciprocating multiphase pump			
	Capacity Control	Automatic by PLC, 100% turndown			
	Wiring	Class 1 Div 2 Hazardous location			
	Piping	SA-106B Threaded spools			
	Max Discharge Pressure	1100 psi std / 1500 optional		7600 / 10300 kPa	
	Max Design Discharge Temperature	400°F		200°C	
		<b>Low pressure pump</b>		<b>Very high pressure pump</b>	
	Max ΔP	170 psi	1172 kPa	350 psi	2413 kPa
	Max Continuous Liquid Flow	16730 bbl/d	2660 m <sup>3</sup> /day	8550 bbl/d	1360 m <sup>3</sup> /day

<b>Hydraulic Power Pack</b>	Driver	50 hp 3 phase TEFC electric motor		
	Pump	Internal Gear		
	Hydraulic Oil Filter	6 Micron		
	Oil Capacity	69 gal / 260 L		
	Cooling	Finned tube, fan-cooled		
	Oil Temperature Control	Automatic: warm-up, air intake louver, cold-start protection		
	Wiring	General purpose (remote from compressor)		

<b>Controls and Instrumentation</b>	System Control	PLC with data logging
	Readout	PLC hosted wifi with web browser HMI
	Web Enabled Remote Monitoring	Cellular Network IOT system

	Alarm	Shutdown
Suction Pressure Low	✓	
Discharge Pressure High	✓	
Differential Pressure High	✓	
Discharge Temperature High	✓	
Oil Temperature Low	✓	
Oil Temperature High	✓	✓
Oil Leak	✓	✓
Oil Level Low	✓	✓
Oil Filter High ΔP	✓	
Motor Overload		✓
ESD		✓

<b>Weight and Dimensions</b>	Compressor on Concrete Slab	3200 lb / 1452 kg	172" x 25" / 437 cm x 64 cm
	Power Pack	2750 lb / 1247 kg	103" x 53" / 262 cm x 135 cm
	Inlet Connector	2" #600 Flange	1-1/2" Hose available
	Discharge Connector	2" #600 Flange	1-1/2" Hose available

Key Features	Options
<ul style="list-style-type: none"> <li>No operator setup or adjustment required</li> <li>Minimum moving parts, minimum maintenance</li> <li>Self-start/auto restart after power outage</li> <li>Call system allows instant notification of shutdowns</li> <li>No process valves</li> <li>Liquid fractions from 0 - 100%</li> <li>100% turndown</li> <li>Seals easily replaced on site; no additional lifting equipment required for servicing</li> <li>Piping for corrosive gas</li> </ul>	<ul style="list-style-type: none"> <li>High discharge pressure transmitter</li> <li>Hydraulic heat trace</li> </ul>

## Multiphase Transfer Pump 50hp Projected Performance

		DISCHARGE PRESSURE (psig kPag)															
		100 700	150 1035	200 1380	250 1725	300 2070	350 2420	400 2760	450 3100	500 3450	550 3790	600 4135	650 4480	700 4825	750 5170	800 5515	850 5860
SUCTION PRESSURE (psig kPag)	10 70	133 3.8	123 3.5	93 2.6	70 2.0	53 1.5	48 1.4										
	20 140	198 5.6	187 5.3	144 4.1	112 3.2	86 2.4	81 2.3										
	30 210	265 7.5	254 7.2	227 6.4	179 5.1	144 4.1	113 3.2										
	40 280	331 9.4	322 9.1	290 8.2	230 6.5	183 5.2	145 4.1										
	50 345	397 11.2	389 11.0	357 10.1	279 7.9	233 6.6	178 5.1	170 4.8									
	75 520	563 15.9	554 15.7	536 15.1	420 11.9	332 9.4	263 7.5	247 7.0									
	100 700		720 20.3	711 20.1	643 18.2	510 14.4	411 11.6	334 9.4	312 8.8								
	150 1035			1044 29.5	1034 29.2	931 26.3	732 20.7	595 16.8	486 13.7	450 12.7							
	200 1380				1367 38.6	1358 38.4	1218 34.4	963 27.2	786 22.2	637 18.0	596 16.8						
	250 1725					1710 48.3	1700 48.0	1497 42.3	1187 33.5	966 27.3	799 22.6	730 20.6					
	300 2070						2037 57.5	2027 57.3	1801 50.9	1409 39.8	1143 32.3	947 26.8	867 24.5				
	350 2420							2363 66.8	2354 66.5	2076 58.6	1627 46.0	1323 37.4	1098 31.0	1001 28.3			
	400 2760								2690 76.0	2681 75.7	2346 66.3	1843 52.1	1500 42.4	1253 35.4	1134 32.0		
	450 3100									3017 85.2	3008 85.0	2655 75.0	2056 58.1	1685 47.6	1401 39.6	1265 35.7	
500 3450										3344 94.5	3335 94.2	2944 83.2	2296 64.9	1860 52.6	1549 43.8	1393 39.4	

\* Projected performance based on elevation 2500ft, gas density .66, temp 68°F

Hyd. Pump Pressure Range	Maximum Flow		Maximum ΔP	
	m3/d	bpd	psi	kPa
Very High	1360	8,550	350	2413
High	1750	11,010	270	1861
Medium	2180	13,710	220	1517
Low	2660	16,730	170	1172

Increased liquid flow will reduce gas capacity – contact Compact Compression for a specific estimate based on expected operating conditions. Pumps can be replaced in the field to optimize for changes in operating conditions.