

WGC30

WGC30-5 Wet Gas Compressor Specifications

Compressor	Type	Low speed double acting reciprocating compressor	
	Power	30hp 3-phase TEFC electric motor	
	Capacity Control	VFD speed control and auto start/stop controlled by PLC, 100% turndown	
	Wiring	Class 1 Div 2 Hazardous location	
	Piping	SA-106B Threaded spools	
	Max Operating Discharge Pressure	500 psi std / 1500 optional	3447 / 10300 kPa
	Max Shut-in Pressure	1100 psi std / 1500 optional	7600 / 10300 kPa
	Max Design Discharge Temperature	400°F	200°C
		5" Cylinder	
	Max ΔP	200 psi	1380 kPa
	Max Geometric Displacement	140481 ft ³ /day	3978 m ³ /day
	2 Phase Max Continuous Water Flow (For other liquids viscosity dependent)	1258 bbl/d	200 m ³ /day

Controls and Instrumentation	Local interface	PLC Webserver based HMI over Wi-fi
	Remote reporting	Cellular callout for operating conditions, Alarms, Shutdowns Optional satellite
	Suction and discharge pressure	User adjustable maximum and minimum set points
	Discharge temperature	User adjustable limits

Alarms and Shutdowns	Warnings (Doesn't pause compression)	Alarm (Pauses compression until conditions change)	Shutdown (Shuts down compressor)
	Oil Level Low	Discharge Pressure High	VFD Fault
	Oil Usage Alarm	Crosshead Temperature High	Motor Overload
	Gas Seal Leak	Compression Cylinder Temp High	Oil Level Low
	Compression Failure	Control Panel Temperature High	Gas Leak
	VFD Torque Limiting		Sensor Failure

Weight and Dimensions	Compressor on Concrete Slab	3500 lb / 1587 kg	96" x 36" x 45" / 244 cm x 91 cm x 114 cm
	Control Panel on Concrete Slab	1000 lb / 205 kg	37" x 37" x 65" / 94 cm x 94 cm x 165 cm
	Inlet Connector	1 ½" 600# flange or union	
	Discharge Connector	1 ½" 600# flange or union	

Key Features	Options
<ul style="list-style-type: none"> • Low cost –easy to replace wear parts • Low speed long stroke compression cycle • High efficiency design • Liquid handling capability - Can process 100% liquids, at reduced capacity, and up to 5% of displacement at full speed • Automatic inlet pressure control • 100% turndown • High shut in pressure rating – 1100 psi standard, 1500 optional – typically no ESD required • No pneumatic valves, separator or liquid pumps • Variable speed drive with proprietary control software • Auto start/stop, automatic restart after power outage • PLC controlled • Cellular monitoring system 	<ul style="list-style-type: none"> • Optional Satellite monitoring system • 3" cylinder (550 ΔP) • 4" cylinder (310 psi ΔP) • 1500 psi shut in pressure

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DISCHARGE PRESSURE Max ΔP: 200 psi / 1380 kPa											
		75	100	125	150	175	200	225	250	275	300
		520	700	860	1035	1205	1380	1550	1725	1900	2070
SUCTION	5	35	130 3.7	124 3.5	117 3.3	110 3.2	104 3.0	98 2.8			
	10	70	174 5.0	166 4.8	159 4.5	152 4.3	145 4.1	138 4.0			
	15	105	218 6.2	209 6.0	202 5.8	194 5.5	183 5.2	170 4.9			
	20	140	261 7.5	253 7.2	244 7.0	232 6.6	213 6.1	198 5.7			
	30	210	349 10.0	340 9.7	330 9.4	300 8.6	274 7.8	254 7.2	224 6.4		
	40	275	438 12.5	427 12.2	416 11.9	373 10.6	337 9.6	310 8.9	273 7.8		
	50	345	528 15.1	516 14.7	504 14.4	452 12.9	404 11.5	369 10.5	322 9.2	283 8.1	
	75	520		742 21.2	727 20.8	703 20.1	601 17.2	535 15.3	460 13.1	399 11.4	373 10.7
	100	700			955 27.3	938 26.8	879 25.1	749 21.4	629 18.0	571 16.3	492 14.1
	125	860				1168 33.4	1149 32.8	1054 30.1	894 25.5	747 21.3	633 18.1
150	1035					1381 39.5	1360 38.8	1228 35.1	1039 29.7	863 24.6	
175	1205						1595 45.6	1571 44.9	1403 40.1	1184 33.8	
200	1380							1808 51.7	1781 50.9	1575 45	
										1326 37.9	

Drive Ratio

L 7.5" (12.3:1)

M 6.3" (14.7:1)

H 5.2"(17.8:1)

Projected Performance based on 2500 ft, gas density .665, temp 68°F – Flow Rates in **mscfd e³m³/day**