

Effective: Replaces: February 2017 **NGH100 Series Horizontal Compressors** Oil-Free Reciprocating Gas Compressors



Market

The Blackmer® NGH Series Oil-Free Reciprocating Gas Compressor is a 100 BHP rated horizontal unit that has been developed for use in vapor-recovery, wellhead-transfer and artificial-lift applications in the Upstream Oil & Gas Market.

Construction

The NGH100 compressor features a horizontal non-lubricated design and is available in single- and two-stage configurations. It offers flexible cylinder sizes for various flow rates and pressures and motor-speed capabilities up to 1,800 rpm. All castings are constructed of ductile iron with a balanced forged-steel crankshaft. Piston rings and rider bands are PTFE/PEEK and needle bearings are steel with no yellow metals used. Multi-packing seals are standard.

Applications

- · Wellhead extraction and transfer
- · Vapor-recovery units
- Artificial lift of natural gas

Features

- · Wet and dry gas-handling capability
- Compatible with sour gas up with up to 8% dry hydrogen sulfide (H₂S)

Spec Sheet 601-101

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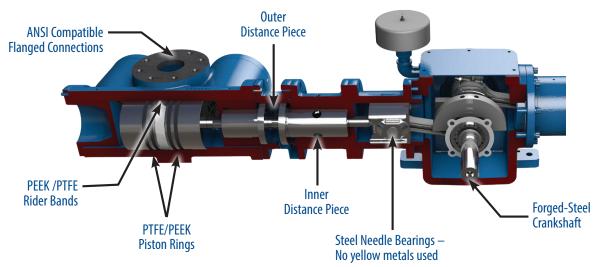
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Section:

- Maximum BHP: 100 HP (74.5 kW)
- · Motor speeds up to 1,800 rpm
- Maximum Allowable Working Pressure (MAWP) to 1,500 psig (103.42 bar)
- Flow rates to 3,000 MSCFD
- All casted parts are ductile-iron construction
- · Forged steel crankshaft
- Steel needle bearings
- No yellow metal construction
- Triple-seal packing is standard
- Single-stage initial configurations: 6" x 6" and 3.25" x 3.25"
- Two-stage initial configuration: 6" x 3.25"



The inside view on why Blackmer® compressors are superior in handling wellhead gases and controlling vapor emissions



Model		NGH1013		NGH1023
Number of Cylinders Per Stage		2	2	1
Bore – in. (mm)	Cyl 1	3.25 (82.55)	6.00 (152.4)	6.00 (152.4)
	Cyl 2	3.25 (82.55)	6.00 (152.4)	3.25 (82.55)
Stroke – in. (mm)		3.0 (76.2)	3.0 (76.2)	3.0 (76.2)
MAWP – psig (bar)	Stage 1	1,500 (103.42)	500 (34.47)	500 (34.47)
	Stage 2	N/A	N/A	1,500 (103.42)
Minimum Speed — RPM		500	500	500
Maximum Speed — RPM		1,800	1,800	1,800
Piston Displacement CFM (m³/h)				
at 100 RPM		5.3 (9)	19.2 (32.6)	9.6 (16.3)
at 900 RPM		48 (81.6)	172.9 (294)	86.4 (147)
at 1,200 RPM		64 (109)	231 (392)	115.3 (196)
	at 1,800 RPM	96 (163)	345.8 (588)	172.9 (294)
Maximum Discharge Temperature – °F (°C)		350° (176.7°)	350° (176.7°)	350° (176.7°)
Maximum Brake Horsepower		100	100	100
Maximum Rod Load — lbs (kg)		7,000 (3175.2)	7,000 (3175.2)	7,000 (3175.2)
Bare Compressor Weight* – lbs (kg)		1,300 (589.7)	1,500 (680.4)	1,400 (635.0)
Stage 1	Inlet/Outlet	1.5" 900# ANSI	3" 300# ANSI	3" 300# ANSI
Stage 2	Inlet/Outlet	N/A	N/A	1.5" 900# ANSI

* Compressor weights vary depending upon options selected, consult factory for detailed weights.

Contact your Blackmer Distributor

Our Application Engineers can provide expert assistance in selecting the right compressor, the right options, and the right accessories for your specific application. Please call +1 (616) 241-1611 or visit our website at blackmer.com for more information.



Process | Energy | Military & Marine **PSG Grand Rapids** 1809 Century Avenue SW, Grand Rapids, MI 49503-1530 USA T: +1 616.241.1611 • F: +1 616.241.3752

blackmer.com

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