

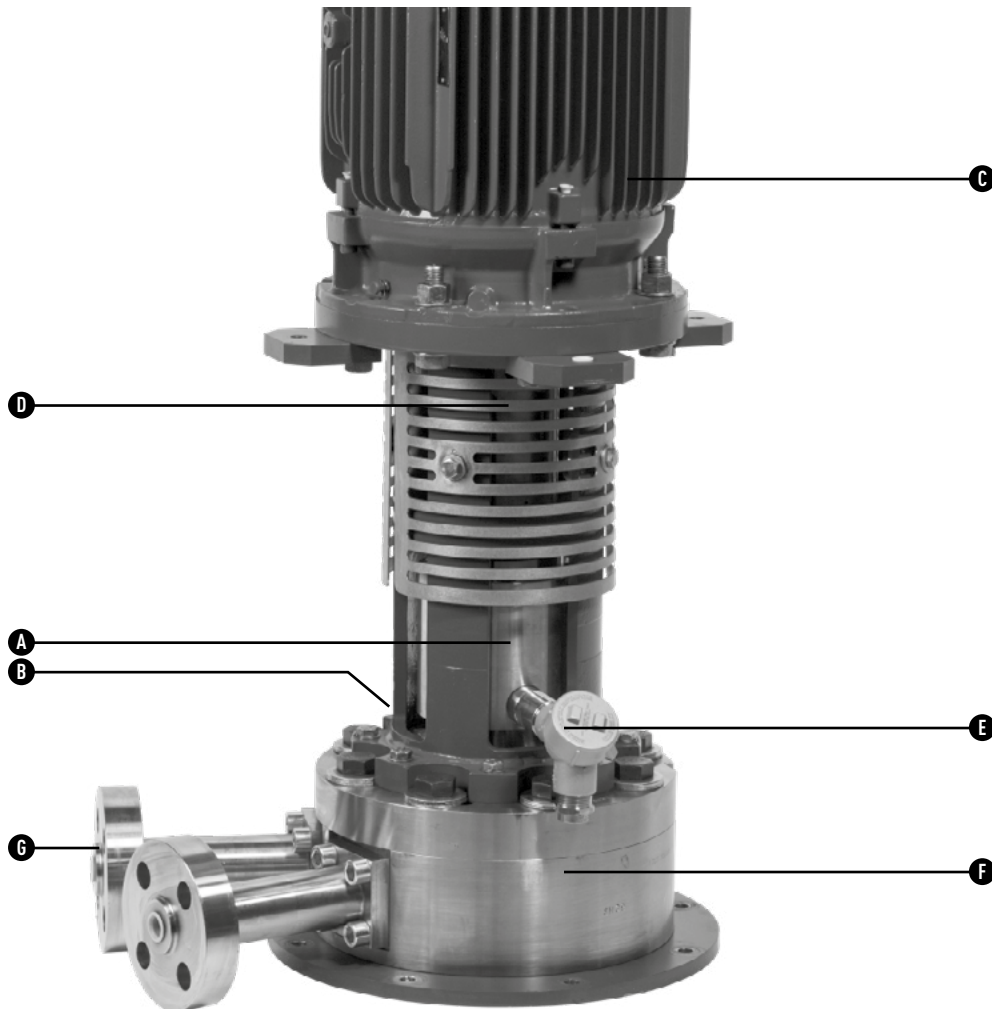


# GCU ROTARY SEAL GAS BOOSTER

GAS CONDITIONING FOR CENTRIFUGAL COMPRESSORS AT PRESSURISED STANDSTILL

Technical Specification

- A – Bearings
- B – Temperature sensor
- C – Electric motor
- D – Magnetic coupling
- E – Vibration switch
- F – Impeller casing
- G – Gas inlet/outlet



## Product Description

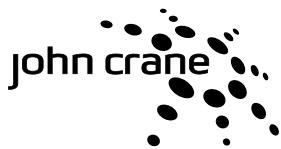
Reliable dry gas seal performance is dependent on a constant supply of clean seal gas at a pressure above that of the process, but when the compressor is stationary, there is no pressure differential within the gas seal support system to ensure clean gas flow across the seal faces. Using the John Crane Seal Gas Booster, suitable clean gas flow is provided to the seals whenever the compressor is in a transient or standstill state.

## Warranty

36 months from delivery or 24 months from commissioning whichever comes first. John Crane Seal Gas Booster can be integrated into a John Crane Gas Conditioning Unit system or into a customised booster module.

## Design Features

- Designed for 5 years intermittent (2000 start/stop) operation
- Zero maintenance
- Electrically powered on demand automatic start-up
- NACE compliant materials
- VFD available
- NEMA/ATEX Zone 1 & 2 classification available
- Process Gas fully confined through magnetic coupling

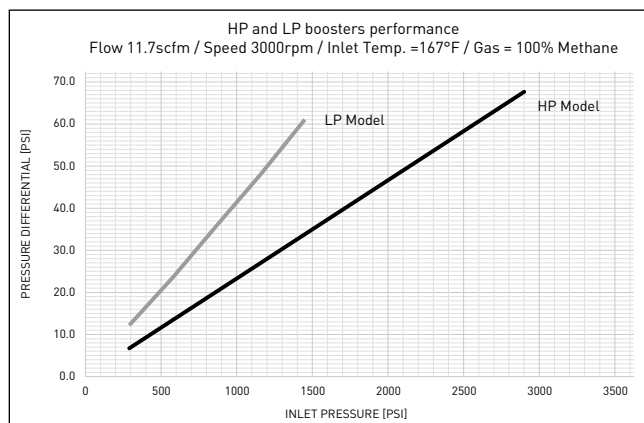
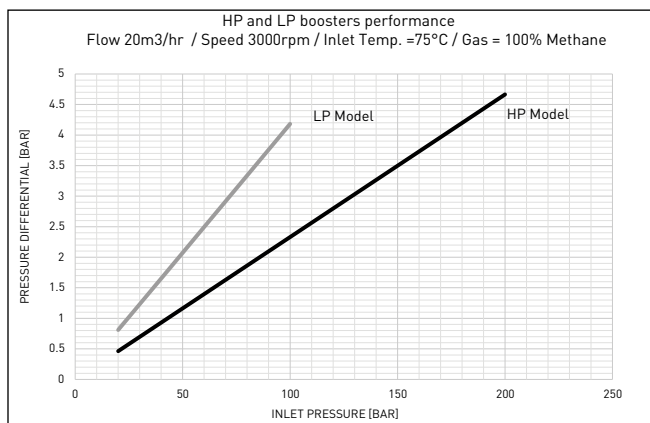


# GCU ROTARY SEAL GAS BOOSTER

GAS CONDITIONING FOR CENTRIFUGAL COMPRESSORS AT PRESSURISED STANDSTILL

Technical Specification

Main Performance and features	HP Model	LP model
Gas Composition	Natural Gas with H <sub>2</sub> , H <sub>2</sub> S, NH <sub>3</sub>	
Max Design Pressure	2900psig/210barg.	1450psig/100barg.
Max Design Temperature	392F° / 200°C	
Max Inlet Temperature	302F° / 150°C	
Flow rate range@3000rpm	4.2 to 24.7cfm – 7 to 42Am <sup>3</sup> /h	5.3 to 35.3cfm – 9 to 60Am <sup>3</sup> /h
Differential pressure in CH <sub>4</sub> @50bara,40°C	Up to 2.5bar @3000rpm	Up to 3bar @3000rpm
Max Shaft Speed	Max 3600 rpm (Optional VFD)	
Electric Motor certifications	NEMA, ATEX, IEC Ex	
Overall dimensions range [Height/L x W]	1238-1281mm/ 610x440mm	1185-1273mm/ 606x440mm
Weight (Booster and std. motor)	350kg	
Materials	<ul style="list-style-type: none"> <li>- Stainless Steel NACE compliance in standard configuration</li> <li>- Duplex and Nickel Alloy in customized configuration</li> </ul>	
Customisations available applicable to:	<ul style="list-style-type: none"> <li>Electric motor</li> <li>- Variable frequency driver.</li> <li>- Material of construction.</li> <li>- Gaskets</li> <li>- Painting</li> <li>- Temperature sensor</li> <li>- Flanges connections</li> <li>- Vibration sensor</li> </ul>	



## Performance

The John Crane Seal Gas Booster delivers assured differential pressure and gas flow across the seal faces such that the gas seals remain in optimum operational condition and equipment is always ready, allowing for trouble-free start-up first time, every time.



**North America**  
United States of America  
Tel: 1-847-967-2400

**Europe**  
United Kingdom  
Tel: 44-1753-224000

**Latin America**  
Brazil  
Tel: 55-11-3371-2500

**Middle East & Africa**  
United Arab Emirates  
Tel: 971-481-27800

**Asia Pacific**  
Singapore  
Tel: 65-6518-1800

If the products featured will be used in a potentially dangerous and/or hazardous process, your John Crane representative should be consulted prior to their selection and use. In the interest of continuous development, John Crane Companies reserve the right to alter designs and specifications without prior notice. It is dangerous to smoke while handling products made from PTFE. Old and new PTFE products must not be incinerated. ISO 9001 and ISO14001 Certified, details available on request.