

High Pressure Technology • Testing Equipment Hydraulics • Pneumatics



## up to **40% Energy saving** compared to standard air driven systems



## » MAXIMATOR Gas Filling Station 400 / 900 bar

The most efficient gas filling station for up to 1,600 IN/min<sup>1</sup>

# **MAXIMATOR Gas Filling Station - Series GFS**

# **GFS - Gas Filling Stations** Cost and energy efficient gas filling solution

### The Maximator GFS Series are standalone Gas Filling Stations for small scale applications with build in air compression.

Our Smart Gas Filling Station is driven by Maximator Efficency Drive Technology (EDT) which enables an unmatched cost and energy efficient for small scale or fleet applications up to 900 bar. Besides EDT as a drivetrain another unique and patented feature is included which is called Flexdrive. This additional feature on the one hand increases energy and cost effiency and on the other hand optimizes the overall availability of the Gas Filling Systems.

We designed this gas filling station especially for small scale filling processes for e.g. Hydrogen refuelling in labaratory applications, drones, small fleet FCEV's and home energy storage solutions and many more.

### Efficiency Drive Technology

The Efficiency Drive Technology (EDT) is based on a closed loop drive system which increases the efficiency of the nitrogen or electro hydraulic operated gas boosters significantly and reduces the energy required for the drive. Nitrogen, required for purging and drive is already on board. The integrated frequency converter ensures maximum efficiency along the complete working range of this systems.





### Safety

Within the Gas filling Sytems there is a strict separation between ATEX and NON-ATEX areas.

All necessary sensors and an intelligent purging ensures a high level of satefy.

Moreover the entire MAX Smart Refuel system is controlled by a safety PLC.





### Water Cooling

Thanks to intelligent water cooling, the temperature increase during gas compression is very low, which protects components, seals and increases the service life of the gas boosters.





### **Flex Drive**

This patent protected drive modification for efficient filling processes is specially developed for Maximator gas boosters with two air drive sections.

Depending on the current conditions, only the required numbers of air sections will be activated by the PLC.

	GFS56	GFS400	GFS2500	GFS5000	GFS900	GFS9000
Pressure class	400 bar	400 bar	500 bar	500 bar	900 bar	900 bar
Temperatur different <sup>2</sup>	5°C	5°C	5°C	5°C	10°C	10°C
Volume flow $(N_2)^1$	25 I <sub>N</sub> /min	200 I <sub>N</sub> /min	800 I <sub>N</sub> /min	1.600 l <sub>N</sub> /min	200 I <sub>N</sub> /min	1.600 l <sub>N</sub> /min
Mass flow $(H_2)^1$	0,14 kg/h	1 kg/h	5 kg/h	10 kg/h	1 kg/h	10 kg/h
Power consumption	4 kW	8 kW	22 kW	30 kW	11 kW	30 kW
Dimension (LxWxH) in mm	1.500 x 1.500 x 2.000	2.000 x 3.000 x 2.000	2.000 x 3.000 x 2.000	2.000 x 3.000 x 2.000	2.000 x 3.000 x 2.000	2.000 x 3.000 x 2.000
Weight	1.800 kg	2.800 kg	3.600 kg	4.100 kg	3.100 kg	4.100 kg
Control System	Safety PLC + Web application					

<sup>1</sup> Based on gas supply pressure of 40 bar, <sup>2</sup> Gas temperature different between inlet gas temperature and outlet gas temperature

#### On your side everywhere

Maximator is one of the leading companies providing high pressure equipment up to 25,000 bar. The standard air driven Maximator boosters have been used in hydrogen applications for over 20 years.

Maximator GmbH, with its company headquarter in Nordhausen, has been extremely successful worldwide for more than five decades.

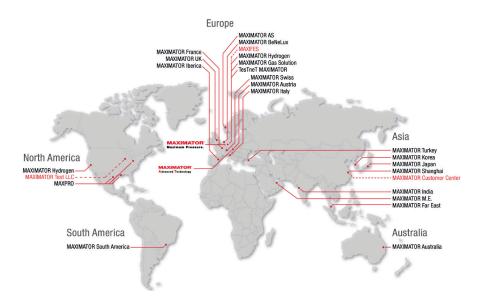
With our products and innovative system solutions, we are the long-standing partner of companies of repute in the automotive and supplier industry, as well as the life sience, chemical and mechanical engineering, energy, oil and gas industry sectors.

With our international partner companies, experienced experts in high-pressure technology are always ready to assist you. We have compiled detailed contact information for our international partners which you can find on our website at:

www.maximator.de/worldwide+distribution

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