

Servo Electric Boosting System

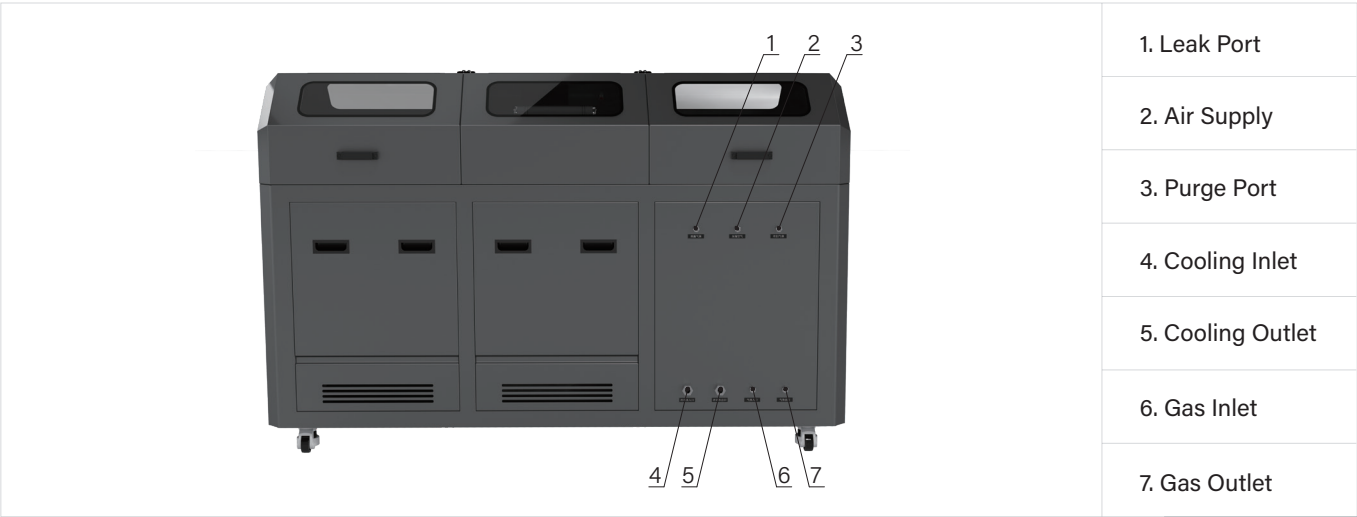


Servo Electric Boosting System

HiFluid offers a comprehensive product portfolio, delivering suitable solutions for a wide range of applications worldwide.

Independently developed and manufactured by HiFluid Industrial, the Servo Electric Gas Booster System operates without a hydraulic power unit or compressed air supply. It adopts direct motor-driven technology combined with an advanced servo control system to efficiently boost gas media, enabling precise control of both pressure and flow.

The system is designed with a standard maximum working pressure of up to 1,200bar. For applications requiring higher operating pressures, customized designs can be provided to meet specific process requirements.



Key Advantages

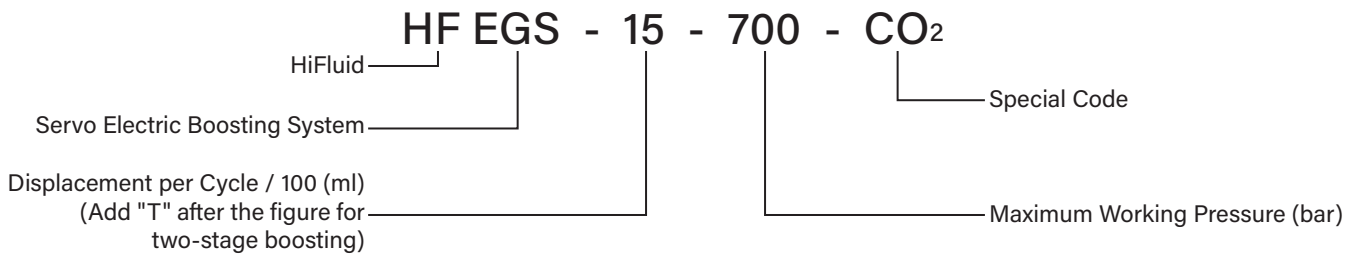
- Specially designed for high-pressure gas applications; compatible with multiple gases.
- Compact footprint, low noise, environmentally friendly, and energy-efficient.
- Intelligent automated control, fully compatible with various communication protocols.
- Equipped with a self-cooling system featuring spiral flow guidance for uniform and efficient heat exchange.
- Optional remote monitoring modules available.
- Excellent primary sealing performance with oil-free lubrication, ensuring long service life.
- Maintenance-friendly design, significantly reducing seal replacement time.
- Modular design with flexible configurations and diverse options.
- Flow continuously adjustable from 0% to 100%.
- Extremely high power efficiency.

Typical Applications

- **Leak Testing:** Supplies high-pressure gas for airtightness tests to detect leaks in components.
- **Gas Filling:** Enables contamination-free, high-flow gas filling of cylinders, equipment, or systems to achieve required pressure levels.
- **Semiconductor CO₂ Applications:** Semiconductor manufacturing processes such as cleaning, atomization, and etching.
- **Gas-Assisted Molding:** Provides high-pressure, high-flow gas to improve molding processes and product quality.
- **Hot Isostatic Pressing (HIP):** Pressurizes inert gas for HIP furnaces to achieve superior material performance.
- **Chemical Production:** Multi-stage pressurization of ethylene for polymerization in batch and tubular reactors.

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Type Coding



Product Parameters

Type	Model	Displacement /Cycle (ml)	Pressure Limit						40 Times Per Minute Typical Flow Rate Reference		
			Max. Outlet Pressure		Min. Inlet Pressure		Max. Inlet Pressure		Inlet Pressure		Flow Rate Nm³/h
			bar	psi	bar	psi	bar	psi	bar	psi	
Single-Stage Double-Acting	HFEGS-80-120	8042	120	1740	3.4	50	120	1740	50	725	917
	HFEGS-30-350	3141	350	5075	3.4	50	350	5075	50	725	358
	HFEGS-15-700	1539	700	10150	3.4	50	700	10150	100	1450	351
	HFEGS-10-1200	950	1200	17400	3.4	50	1200	17400	200	2900	433
Double-Stage Single-Acting	HFEGS-40T-350	4020	350	5075	3.4	50	120	1740	50	725	458
	HFEGS-40T-700	4020	700	10150	3.4	50	120	1740	80	1160	733
	HFEGS-40T-1200	4020	1200	17400	3.4	50	120	1740	100	1450	917
	HFEGS-15T-700	1570	700	10150	3.4	50	350	5075	100	1450	358
	HFEGS-15T-1200	1570	1200	17400	3.4	50	350	5075	200	2900	716

Structural dimensions

