

Servo Electric Boosting System



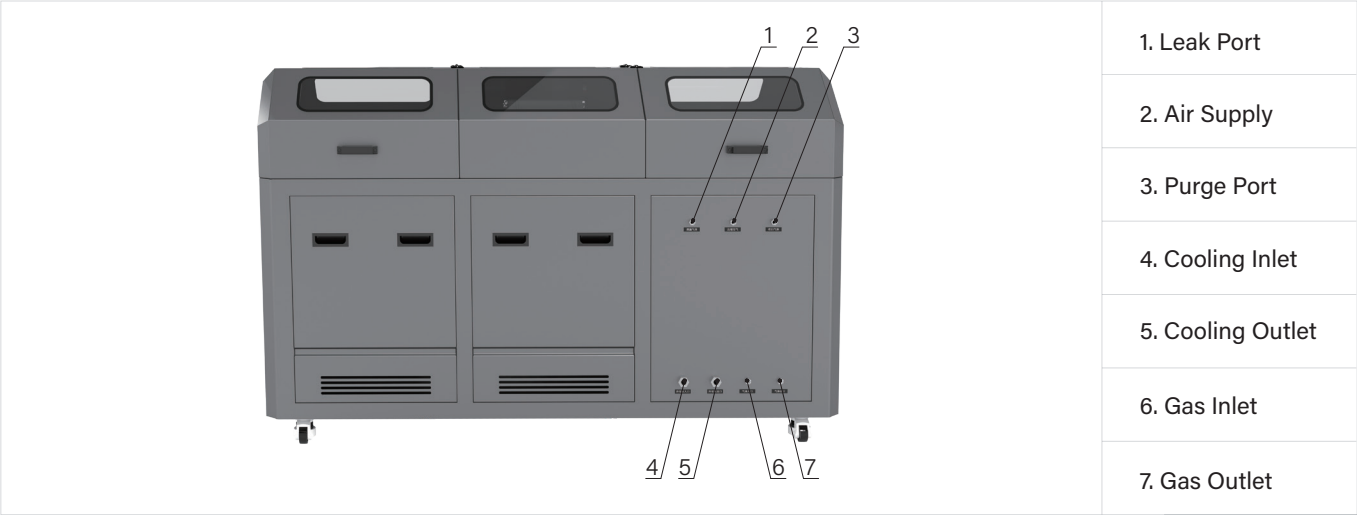
HiFluid Servo Electric Boosting System



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 120MPa. 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, operates without oil lubrication, and features long maintenance intervals.
- 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.

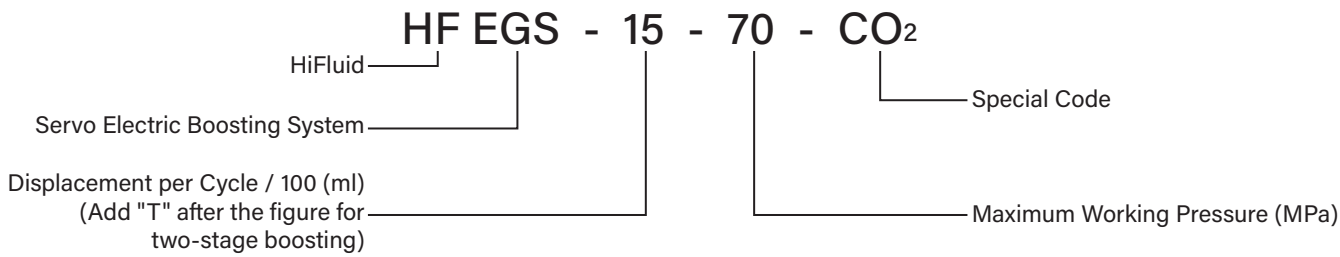
Typical Applications

- **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 Nm ³ /h
			MPa	psi	MPa	psi	MPa	psi	MPa	psi	
Single-Stage Double-Acting	HFEGS-80-12	8042	12	1740	0.34	50	12	1740	5	725	917
	HFEGS-30-35	3141	35	5075	0.34	50	35	5075	5	725	358
	HFEGS-15-70	1539	70	10150	0.34	50	70	10150	10	1450	351
	HFEGS-10-120	950	120	17400	0.34	50	120	17400	20	2900	433
Double-Stage Single-Acting	HFEGS-40T-35	4020	35	5075	0.34	50	12	1740	5	725	458
	HFEGS-40T-70	4020	70	10150	0.34	50	12	1740	8	1160	733
	HFEGS-40T-120	4020	120	17400	0.34	50	12	1740	10	1450	917
	HFEGS-15T-70	1570	70	10150	0.34	50	35	5075	10	1450	358
	HFEGS-15T-120	1570	120	17400	0.34	50	35	5075	20	2900	716

Structural dimensions

