



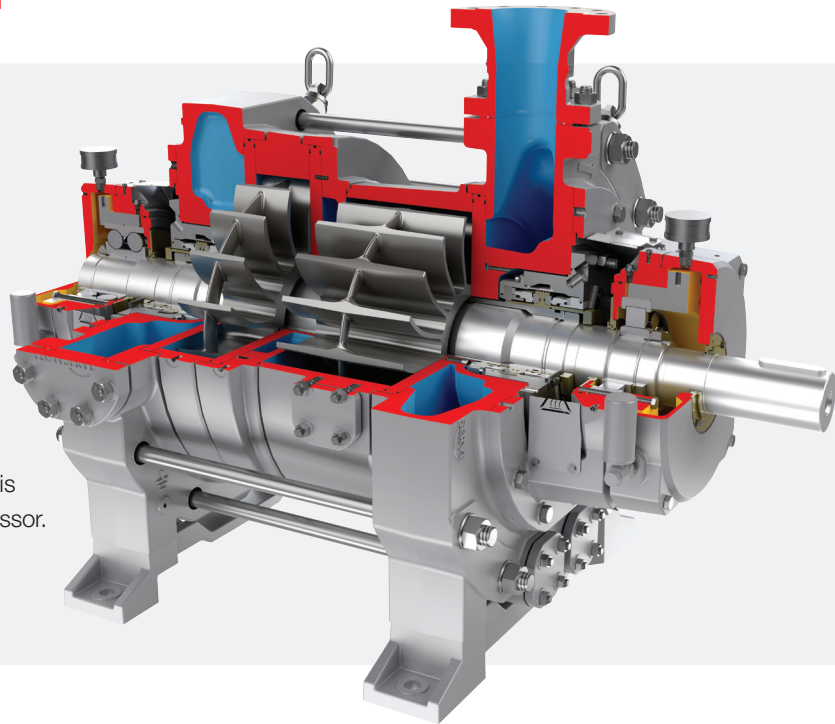
# SIHI® KPH 85229 High-Efficiency, Two-Stage Liquid Ring Compressor

## Best-in-class efficiency and compliance with API 681

Flowserve SIHI® liquid ring compressors are designed to compress many different kinds of gases and vapors. Proven technology enables them to operate under the most severe conditions requiring safety, reliability and special processes.

SIHI KPH 85229 two-stage liquid ring compressors can operate in applications where gas must be compressed carefully to an over-pressure up to 10 barg (145 psig) with a suction capacity up to 2,100 m<sup>3</sup>/h (1,236 cfm).

Near-isothermal compression is achieved while the gas is pumped against the cool-running liquid ring of the compressor. The non-metallic contact between the individual rotating parts contributes to less wear and maintenance.



### Benefits

- **Best-in-class efficiency:** The optimized two-stage hydraulic design ensures a higher energy transfer between the impellers and the service liquid ring. The KPH 85229 needs up to 23% less power consumption compared to other liquid ring compressors.
- **Easy installation:** Engineered system packages based on customer specifications and requirements make the on-site installation easy and cost-effective. Existing installations can be replaced due to the small dimensional footprint and discharge connection located on the right or left side.
- **Safe and reliable:** Compliance with API 681 requirements guarantees the highest safety standards. The sturdy between bearings design provides stability, less vibration, minimal wear and long-term reliability in hazardous, flammable or explosive environments.
- **Simplified on-site service:** The between bearings design and integrated rotor support enable seal and bearing changes after 50,000 hours without disconnecting piping or removing the pump from the installation.
- **Low cost of ownership:** Easy installation, simple maintenance, low power and service liquid consumption, and simplified on-site service all contribute to lower overall costs.

### Key industries

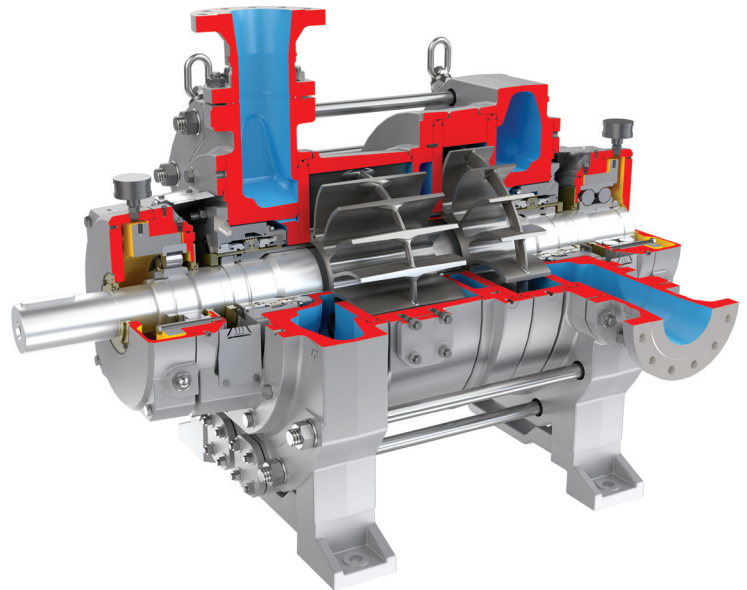
- Chemical — basic, biofuels and petrochemicals
- Oil and gas — downstream processing
- Power — geothermal
- Water — treatment and desalination

### Key applications

- Flare gas recovery
- Vapor recovery
- Vinyl chloride monomer recovery
- Dry and wet chlorine compression
- Condensable gases
- Non-condensable gases
- Waste gas disposal
- Gas transfer

### Operating parameters

- Suction capacity to 2,100 m<sup>3</sup>/h (1,236 cfm)
- Compression over-pressure to 10 barg (145 psig)
- Maximum gas inlet temperature to 100°C (212°F)



### Materials of construction

Component	Material
Casing	ASTM A351 CF3M
Central body	ASTM A351 CF3M
Intermediate piece	ASTM A351 CF3M
Flange connection	ASTM A351 CF3M
Guide disc	ASTM A240 316L
Shaft	ASTM A276, Type 420
Vane wheel impeller	ASTM A890, Grade 4A
Clamping sleeve	ASTM A276 UNS S31803
Mechanical seal	Flowserve HSH/HSH

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