EagleBurgmann
a member of EKK and FREUDENBERG

RELY ON EXCELLENCE

GSS
Gas supply system

Seal Supply Systems | Gas supply systems

Advantages

- Available with a wide range of different instruments
- Safe operation thanks to incorporated pressure regulator with integrated filter
- System mounted on a plate or in housing
- Three variants of the housing version available: painted steel, stainless steel, glass fabric
- Easy wall or rack mounting
- For operating pressures of up to 16 bar (232 PSI)

Recommended applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Refining technology
- Pharmaceutical industry
- Food and beverage industry

Features

Gas supply systems of the GSS range are specially designed for contact-free operated, gas-lubricated mechanical seals. The gas supplied from the supply network (e.g. air or nitrogen) is regulated/monitored by the GSS in accordance with the requirements of the seals being supplied. The GSS systems are equipped with alarm and/or switch-off points depending on specific safety requirements. Centralized monitoring of the measurement values is also possible on request.

Circulation in accordance with API 682 / ISO 21 049: Plan 72, Plan 74

Functional description

Buffered, gas-lubricated mechanical seals may only be used in conjunction with adequately pressurized gas (e.g. from a closed circular nitrogen pipeline provided by the operator). For Plan 74 systems the barrier gas pressure level p3 must always be higher than the pressure level p1 of the sealed product, whatever the operational state of the machine. The minimum pressure overlay level (Δp) is specified for the individual seal types.

Main GSS functions:

All technical specifications are based on extensive tests and our many years of experience. The diversity of possible applications means, however, that they can serve only as guide values.
We must be notified of the exact conditions of application before we can provide any guarantee for a specific case. Subject to change.

- Filtering of the buffer and flushing gas
- Pressure monitoring and regulation
- Flow monitoring

Typical tasks for the GSS:

- Buffer/barrier gas supply for double seals
- Gas flushing for single seals
- Gas supply for tandem seals

Notes

To assure a sufficient supply of the mechanical seal, pressure at entry of the supply system must be min. 2 bar (29 PSI) above max. barrier pressure always.

Installation, details, options

Operating and installation diagram for a GSS system.

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Product variants

GSS4016/A1... range(system mounted on a plate)
Description
Pressure gauge
Flow for smallmeasuring range
Flow for largemeasuring range

GSS4016/A2... range(system in housing)
Description
Pressure gauge
Flow for smallmeasuring range
Flow for largemeasuring range

GSS4016/A3... range(system in stainless steel, in housing)
Description
Pressure gauge
Flow for smallmeasuring range
Flow for largemeasuring range

GSS4016/A... range(system in housing)
Description
Preferred systemfor agitator seal type
Pressure gauge
Flow for smallmeasuring range
Flow for largemeasuring range
Pressure to be sealed
Barrier pressure mechanical seal
Design pressure
Material housing

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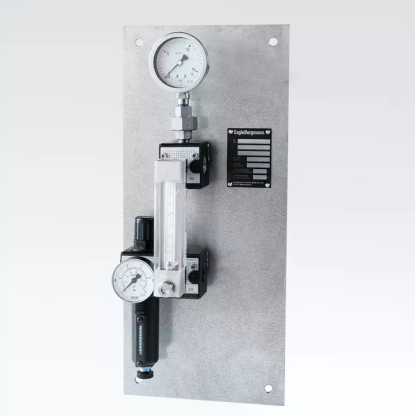
GSS6000/A4... range(System acc. to API682 4. edition, mounted on a plate)
Designation
API-Plan
Design code
Allowable pressure
Allowable temperature
Process connections
Metal parts



GSS4016
mounted on a plate

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