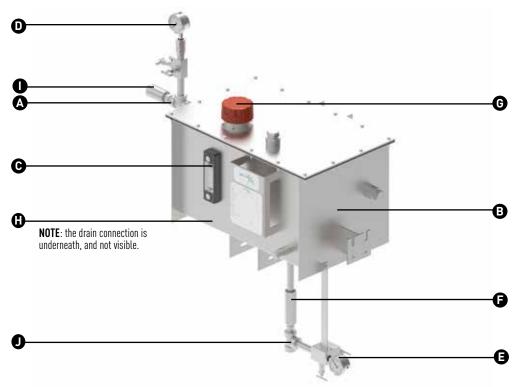


GS USP-R

UPSTREAM PUMPING SEAL SUPPORT SYSTEM

Technical Specification

- A Filter
- B Reservoir
- C Level indicator
- D Supply pressure gauge
- E Seal pressure gauge
- F Check valve
- **G** Filler breather
- **H** Drain port
- I Supply inlet
- J Seal connection



Product Description

The GS USP-R utilizes an external source to provide clean, low-pressure barrier water to an upstream pumping mechanical seal. The GS USP-R global standard system is a pre-engineered design to provide a best-practice solution to the overly complex design process between supplier and customer, significantly reducing specification and delivery timescales.

Performance Capabilities

• Temperature: Ambient: 5° to 60°C/40° to 140°F

Operation: 5° to 80°C/40° to 176°F

• Pressure: 6 bar/87 psi (supply)

42 bar/610 psi (excluding the reservoir)

6 bar/87 psi (operation)

• Footprint: L x W x H: 470mm x 975mm x 990mm/18.5" x 38.4" x 40"

Design Features

- Best practice design to deliver low-pressure barrier water for optimal mechanical seal performance and centrifugal pump up-time
- Instrumentation to suit the monitoring needs of the user
- Connects directly to site water supply and auto-refills using a float valve
- Contains a reservoir of water able to keep the mechanical seal running for several hours if the water supply is lost
- Safeguards against the toughest environments and provides full containment of VOCs for zero-emission control

- Streamlined design to minimize footprint and obstruction
- Design modularity and specified component flexibility
- Quick delivery with lead times to meet or exceed your needs

The GS USP-R global standardized seal support system is a preengineered design that is already certified for regional qualifications. By providing clear component description and simplified selection criteria, customers receive an improved and faster process of doing business. The GS USP-R is designed to deliver high reliability with long-term low cost of ownership.

Materials of Construction and Component Details

Seal Components	Materials/Description
System assembly	Reservoir: 304 SS Pipe and fittings: 316 SS
Pressure indicating transmitter	316L wetted parts 4-20mA signal, HART protocol or Foundation Fieldbus Rated for explosive atmosphere zones*
Level indicating transmitter	316L wetted parts 4-20mA signal, HART protocol or Foundation Fieldbus Rated for explosive atmosphere zones*
Filter	316 SS
Check valve	316/L SS
Float valve	316 SS with viton seat

^{*}Region specific

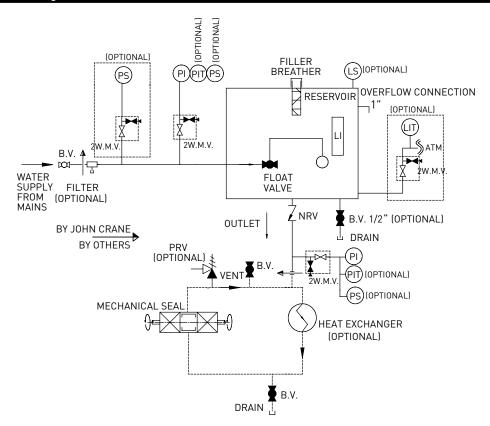


GS USP-R

UPSTREAM PUMPING SEAL SUPPORT SYSTEM

Technical Specification

GS USP-R Typical Arrangement



Options

Standard Component	Alternate Option
Pressure gauges	Pressure switch Pressure indicating transmitter
Level Indicator	Level switch Level indicating transmitter
No filtration as standard	25µm filter 10µm filter
No pressure relief as standard	Pressure relief valve
No stand	Mounting stand
No heat exchanger	External heat exchanger (air or water cooled)



North America United States of America

Tel: 1-847-967-2400

Europe United Kingdom Tel: 44-1753-224000

Latin America Brazil Middle East & Africa United Arab Emirates

Asia Pacific Singapore

Tel: 971-481-27800 Te

Tel: 65-6518-1800

If the products featured will be used in a potentially dangerous and/or hazardous process, your John Crane representative should be consulted prior to their selection and use. In the interest of continuous development, John Crane Companies reserve the right to alter designs and specifications without prior notice. It is dangerous to smoke while handling products made from PTFE. Old and new PTFE products must not be incinerated. ISO 9001 and ISO14001 Certified, details available on request.

Tel: 55-11-3371-2500



