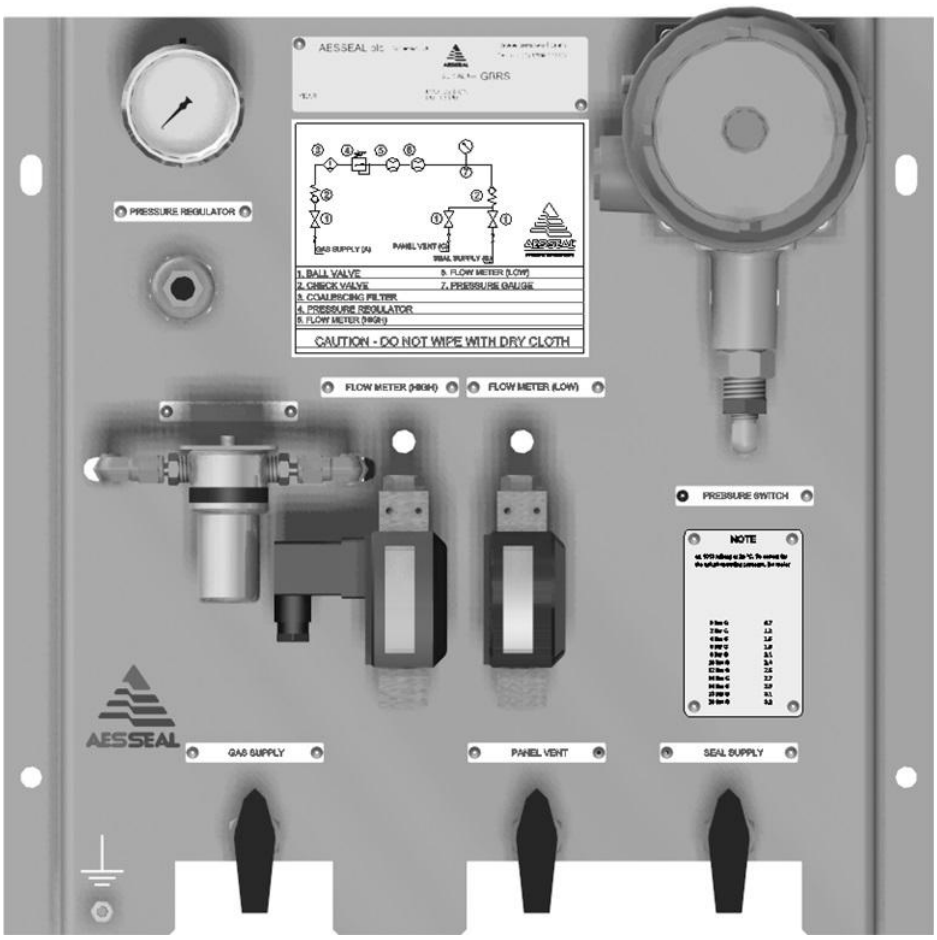
10 & 21 Bar Standard Gas Panel

Installation, Operation & Maintenance Instructions



EXPERIENCE THE EXCEPTIONAL

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Health and Safety

- This system has been designed for use only as a gas support system for mechanical seals using a suitable inert gas (Nitrogen).
- Isolate the process and power on installation, maintenance and decommissioning, and ensure that the system pressure has been relieved before undertaking maintenance.
- The system should be installed by comptent engineering personnel.
- Electrical connections must be made in compliance with applicable legislation and / or local requirements by a competent / qualified electrician.
- Pressure test the complete system assembly at 1.1x maximum working pressure (duration 5 minutes), and ensure the system is completely leak free before full operation.
- Do not over-pressurise the system beyond the maximum design pressure. If there is any possibility of over pressurisation, the system must be fitted with a suitable protection device.
- Pipe relief or vent valves should be discharged with respect to safety.
- Do not exceed the operating limits of the system. Not designed for cyclic loading

Environment

Once the system has reached the end of its life, it should be disposed of in accordance with local regulations and with due regard to the environment.

For further information please contact AESSEAL®

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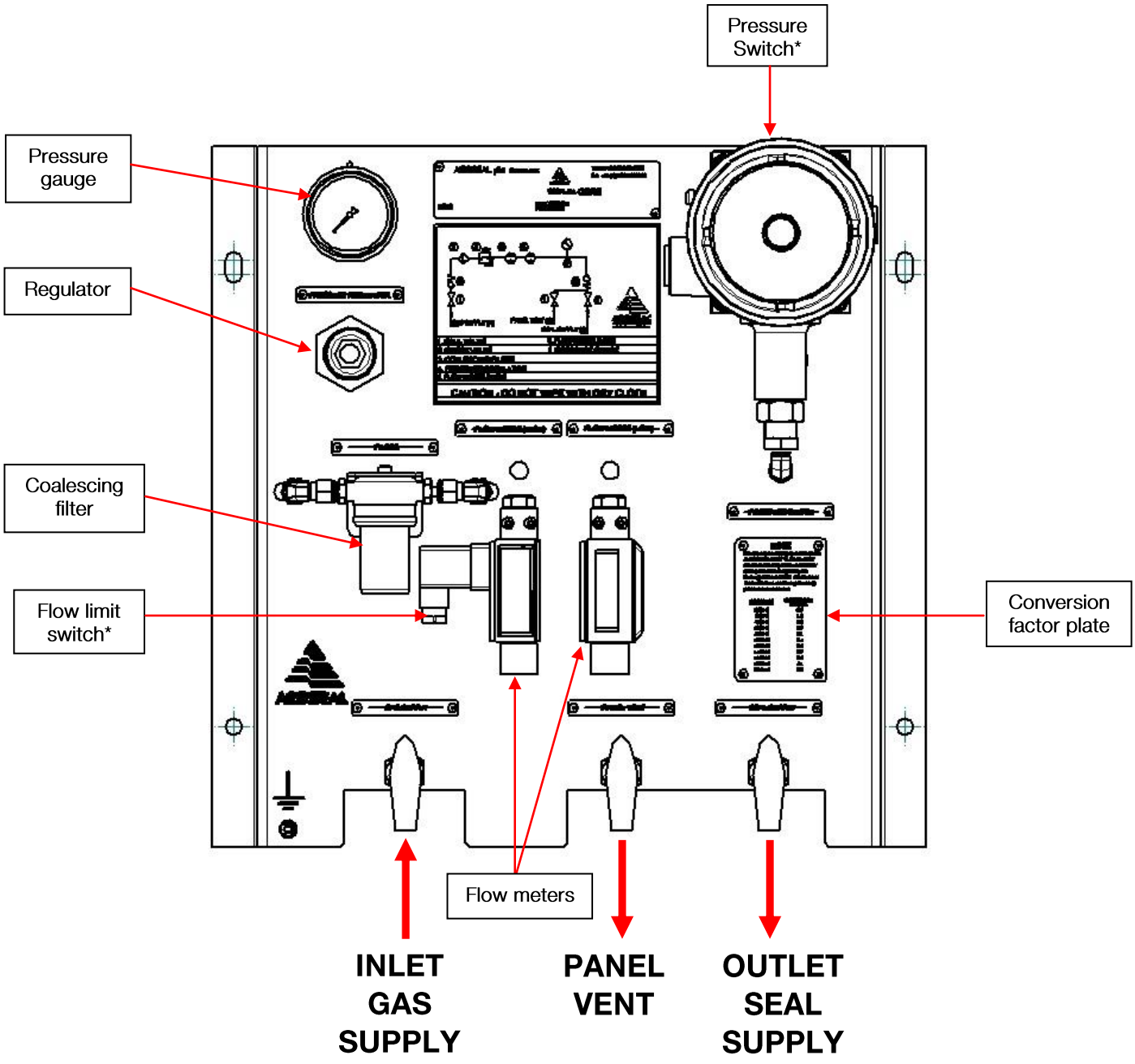
Installing & Commissioning

Typical Standard 10 & 21 Bar Gas Panel System Arrangement



*Instrumented options

Fig.1a

Please also refer to the drawing contained in the document pack whilst reading these instructions!

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Typical Standard 10 Bar Hoffman Enclosure Gas Panel System Arrangement

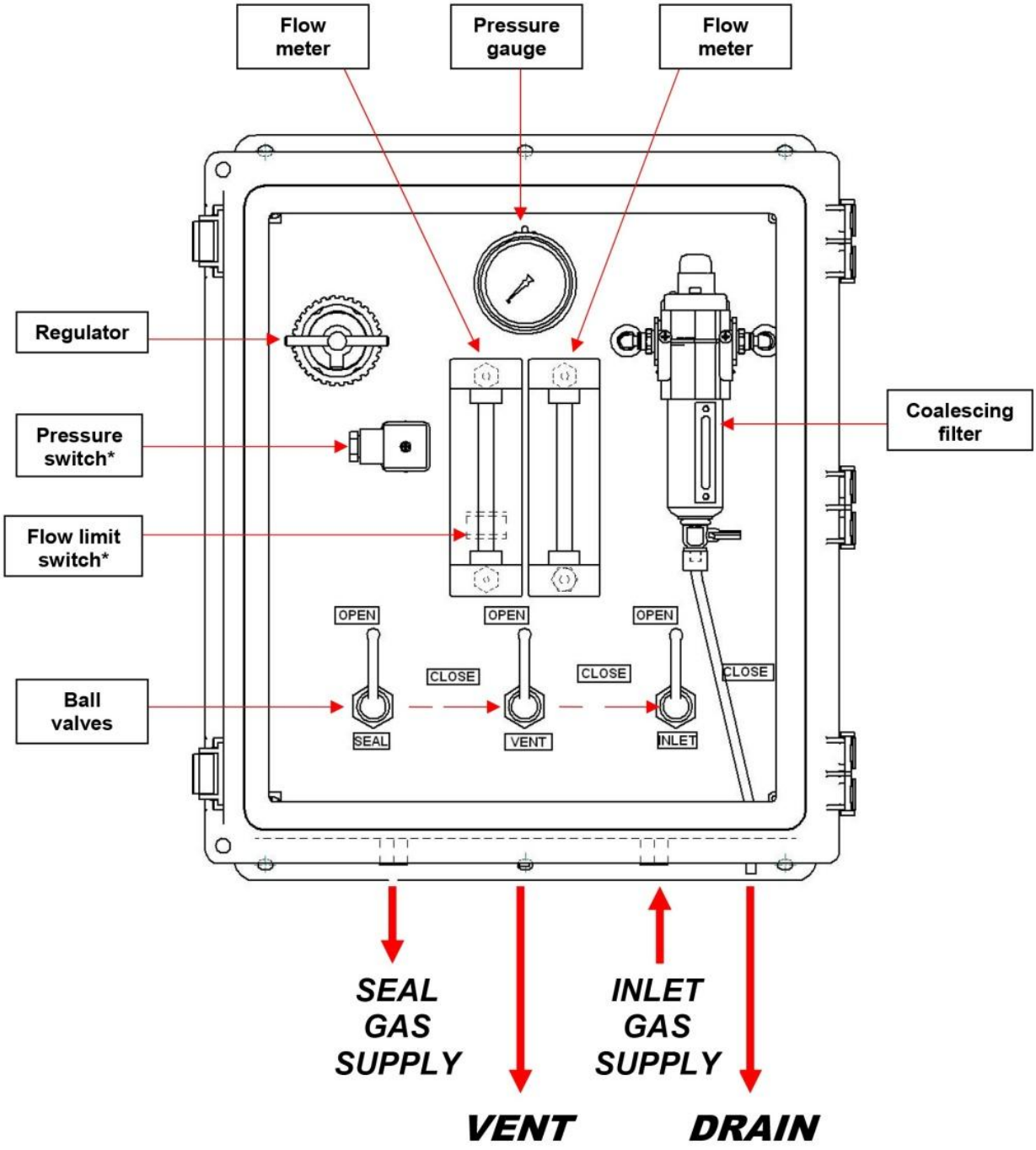

Fig.1b

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Fig. 2 Typical P&ID Configuration

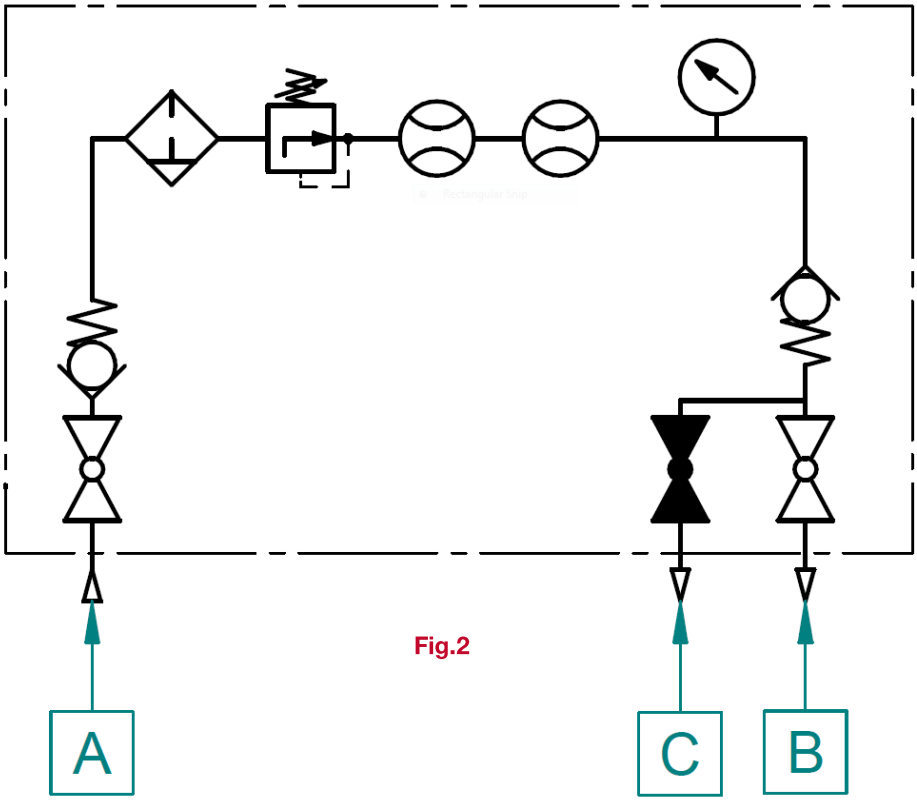

Fig.2

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Installing & Commissioning

Connections

Ensure all connections are made:

A Gas supply

B Seal supply

C Panel vent

- Securely attach the mounting panel to a wall (or other vertical partition), using the correct size screws through the 4 off holes provided in the mounting panel.
- The gas panel should be installed as near as possible to, and higher than the seal.
- Before connecting the seal supply line, ensure that the feed line is free from debris.
- Fully close the regulator.
- Make sure the vent valve C is closed, open the Inlet A, & seal supply B valves.
- Connect the supply line to the gas panel via connection A gas supply valve.
- Connect the panel to the seal using the appropriate pipe via inlet valve connection B.

Operation

- Gently open the air/nitrogen supply to the gas panel.
- Slowly open the regulator until a reading on the pressure gauge & flow meters is observed, and check for any leaks. Rectify leaks before proceeding.
- If flow limit switches are fitted, they will need to be adjusted to the required flow switch point.
- If a pressure switch is fitted, set to the required pressure set point. (See pressure switch specifications for setting/adjustment)
- Continue to adjust the regulator to the required pressure setting.
- Refer to the gas conversion factor plate to correct for actual operating pressure, the flow meter reading should be multiplied by the correction factor nearest to the actual gas working pressure.
- NOTE: Continue to monitor the gas panel, particularly pressure and flow readings, and adjust as necessary during the **first hour** of running.

10 Bar Gas Inlet/Outlet Pressures

Maximum gas inlet pressure 14 bar G (203 psi G)

Maximum gas outlet pressure 10 bar G (145 psi G)

21 Bar Gas Inlet/Outlet Pressures

Maximum gas inlet pressure 25 bar G (363 psi G)

Maximum gas outlet pressure 21 bar G (304 psi G)

Do not exceed the above pressures

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Maintenance

The system should be maintained in accordance with site standards, or local regulations.

Daily

- Check system pressure reading, any change may be a sign of a developing problem, such as fluctuating gas supply pressure.
- Check for signs of leakage from seal, system, and pipe work.
- Check barrier gas supply.
- Check any alarms on the pressure and level switches or transmitters if fitted.

Monthly

- The coalescing filter has a drain at the base to allow removal of any moisture which may be present. To drain, unscrew the plug anti-clockwise using the appropriate sized spanner.
- Any discolouration or contamination of the filter is a sign that there is a problem with the gas supply, and should be investigated immediately.

Instrumented Options

Pressure & Flow Switches / Transmitters

- Adjust the pressure & flow switches if fitted, until desired working settings are reached, consult manufacturers operating manuals for any technical information.
- System is not supplied with a nitrogen/air drier.
- If you have purchased other optional extras, please refer to the installation instructions supplied by the manufacturer.

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