

# OVER PRESSURISATION SKID

## Basic Operating Instructions

Designed to be installed in-line during pumping/pressurisation operations to provide protection against accidental over-pressurisation of system.

Tied into the shut-down system of the diesel/electric driven pump, the OPPS automatically senses any over-pressurisation of the system and shuts down the pump whilst safely venting excess pressure.

Depending on Skid - One Adjustable Pressure Switch on the OPPS can be set to relieve between 10 psi and 20,000psi.

Three skid options: 10psi to 10,000psi, 75psi to 15,000psi and 10,000psi to 20,000psi

**Note - 15k OPS skid:** There are two sections to the 15k OPS skid but only one can be in operation at one time – either 75psi to 10,000psi or 10,000psi to 15,000psi. **It is not possible to use both sections at the same time!**

### Connections: Inlet Side

a) **Sensing Port Inlet:** To supply pressure from the system being pressurised that the skid is protection when in normal mode.

b) **Calibration Port Inlet:** To supply pressure from an external source to set up the skid to its desired switching pressure when in calibration mode.

c) **Shutdown Connection From Pump:** To tie into the shutdown system on a diesel driven unit or from a Metnor air driven pump shut down valve.

d) **Air Inlet:** Minimum 100psi Air supply from a compressor to operate the skids own system.

### Connections: Outlet Side

a) **Relief Valve Outlet:** The main skid protecting valve, prevents the skid from being over-pressurised. The outlet is designed so if a noxious substance is being pressured it can be piped out to a safe location.

b) **Air Supply Vent:** Can be used to vent the skid and any associated supply air lines from a compressor.

c) **Chart Recorder Outlet:** If the pressurising being undertaken requires a permanent record this can be used to supply pressure to the recorder.

d) **Gas Vent:** Used to vent the system being pressurised.

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## To set the Over-Pressure Protection Skid:

Note: The following is only a guideline. There is a choice of three OPS skids available with different pressure ranges so there maybe slight differences in set up. However, the following gives a good understanding.

1. Close valves to isolate Sensing Port, Vent Ports and Chart Recorder port.
2. Connect suitable hose to crowfoot Air Inlet to supply clean dry air at 100psi.
3. Depending on OPS skid allocated - connect a suitable Pressure Gauge to the BSP port.
4. Connect a suitable pressure source to Calibration Port Inlet.  
**Note:** if water is the testing medium, BSP Gauge Mounting isolation valves should be opened and any air trapped in the OPPS bled out.
5. Turn "Normal / Calibrate" valve to 'Calibrate'.
6. Select the Pressure Switch for the Shut-Down Range and turn the Selector Valve to the 'ON' position.
7. Using the hex on the end of the selected Pressure Switch, turn clockwise 2 turns.
8. Ensure that supplied Calibration Pressure is set at desired switching point.
9. Slowly rotate the Pressure Switch clockwise until Selector Valve Pressure Gauge drops to atmosphere.
10. Close valve to isolate Calibration Inlet Port.
11. Vent OPPS skid to atmospheric pressure by opening Gas Vent Valve.
12. Turn "Calibrate / Normal" valve to 'Normal' position.
13. Tie pump to OPPS skid by connecting suitable hose to Shut Down Connection from Pump inlet.
14. Tie system to be pressurised to OPPS skid by connection suitable hose to Sensing Port Inlet.
15. Open Sensing Port Isolation valve
16. Do not adjust large pressure relief valve on unit under any circumstances, it is for panel protection only.

**The Over Pressure Control Skid is now ready for use.**