

Suggested specification of O gauge

The instrument should work on a 24VDC input and have

- four hermetically sealed contacts rated at 5 A, 250 VAC; 3 A, 24 VDC,
- one analog current output (0 – 20 mA),
- one analog voltage output (0 – 10 VDC).

The instrument should have a facility such that, each relay's lower and upper limit (cutin and cutoff) can be adjusted over 100 % of the range. Each relay should have the facility of manual reset for the upper limit. The relays should have a response time of 30 ms or lower.

The zero and span of both the analog outputs (independantly) should be configurable within the range, and the outputs should also be configurable for reverse output (20 mA – 0 mA or 10 VDC – 0 VDC) or custom output.

The display should have a facility to set four colours to indicate if the pressure is within safe, ultra safe, dangerous or extremely dangerous zone. The display should also be capable of showing the status of each of the relays, and / or the lower and upper limits of each of the relays. A full LED bargraph for visibility of approx pressure limits from afar is a must.

The instrument should have a local datalogging facility, as also to the cloud application via wifi.

All parameters should be accessible and configurable via

- a local keyboard,
- a wireless Bluetooth connection and
- a cloud based application through wifi

A three tier role based heirarchy for each of these access methods is a must to avoid tampering, and for security. The real time process value should be remotely readable within a 15 feet radius via a wireless Bluetooth connection. It should also be visible on the cloud application.

The device should be able to store it's GPS location correct to approximately 15 feet of it's installation.

The cloud based application should be capable of limiting access roles to various personnel, as also be able to store data from the instrument for further analysis.

The instrument should comply to the necessary statutory regulations.

Suggested instrument is O gauge manufactured by Kaustubha Udyog, Pune , India.