REFERENCE

CERTIFICATE

ISO 9001 : 2008
ISO 14001 : 2004
BS OHSAS 18001 : 2007

1 WARNING

1a For efficient working of your gauge, please read all instructions carefully before attempting to installation and Operation.

1b Do not exceed maximum operating pressure given on the gauge label / Dial. Check fluid compatibility with wetted parts before use.

1c Do not connect “High” and “Low” ports to wrong pipe ends. Do not subject the gauge to excessive vibration. The gauge is never to be used in an area where a magnetic field is present. It may affect readings. As the gauge works on magnetic coupling principal, use only nonmagnetic fittings, parts etc. in areas closer than 2″ on all sides, otherwise calibration will be affected. Do not try to open any part of the gauge for any reason, because if not reassembled properly, calibration and operation will be affected.

1d Supply voltage should not exceed switch rating. For higher voltages, the use of relay circuit is recommended.

2 GENERAL

Variations in pressure between high and low ports are sensed by a piston or diaphragm sensor which moves in proportion to the pressure difference. A primary magnet _ is attached to the sensor and moves with it in the same proportion. A rotary magnet with pointer is magnetically coupled with the primary magnet, and is situated in an isolated cavity. Movement of rotary magnet with pointer indicates differential pressure on the dial. Process fluids are isolated from dial case and switch enclosure.

3 SWITCH

3a An auxiliary magnet situated in the tube extension moves with the pressure sensors. Reed switches mounted on the extension tube are activated due to interaction between switch contacts and field of the auxiliary magnet. Switches can be adjusted to open or close at preset points.

3b The gauges are calibrated to give ±2%full scale accuracy on ascending readings.

4 INSTALLATION

4a Depressurize the system and connect the high and low pressure lines of your system to the “High” and “Low” ports of the gauge, respectively. Apply “High” and “Low” pressures simultaneously, to avoid damage to the internal parts. If pressure exceeds the rated maximum pressure, “O” rings used on male connectors, and the Teflon seal inside the pressure chamber of piston instrument will be damaged. In diaphragm instrument diaphragm may rupture.

4b If maximum operating pressure is within the allowable limit, but the differential pressure exceeds gauge range, there will be no damage to the gauge. Pointer will only go the extreme right end of the scale.

5 EXPLOSION PROOF SWITCH

Switches and electrical connections are mounted in an explosion proof enclosure.

6 SWITCH SETTING

The switches are normally factory set to save time at customer end. However, they are field adjustable.

SWITCH ADJUSTMENT

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The following procedure can be done by putting the gauge on a test bench or while in service. Unscrew the cover of the electrical enclosure. Knurled head set screws are provided at bottom for set point adjustment. Rotate the screw clockwise (right) to decrease the set point and counter-clockwise (left) to increase the set point. One or two trials may be necessary to attain the exact set point.

MAINTENANCE

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All the gauges should be checked regularly for wear and tear, accuracy, and proper functioning by comparing them to a precision test gauge or a dead weight tester. Replace all broken or damaged parts immediately.