

## INSTALLATION INSTRUCTIONS

# Model GX-100

### DIFFERENTIAL PRESSURE INSTRUMENT WITH ROLLING DIAPHRAGM

For efficient working of your instrument, please read all instructions carefully before attempting to install.

**CAUTION :** Do not exceed maximum operating pressure given on the instrument label.

Check fluid compatibility with wetted parts before use.

**For highly corrosive media, hazardous location or area please contact manufacturer.**

### OPERATING PRINCIPLE

High and Low pressures are separated by a sensor assembly consisting of a magnet, diaphragm and a range spring. The difference in pressure causes the sensor assembly to move in proportion to the change against a range spring.

A rotary magnet, located in a separate body compartment and isolated from the acting pressures, is rotated by magnetic coupling as per the linear movement of the sensor assembly. A pointer attached to the rotary magnet indicates differential pressure on the dial.

**Note :** These instruments are calibrated to give  $\pm 5\%$  full scale accuracy on ascending readings.

### INSTALLATION

For better performance the instrument should be mounted horizontally by keeping the dial vertical. Select instrument location where it is not subjected to heavy vibrations or shocks.

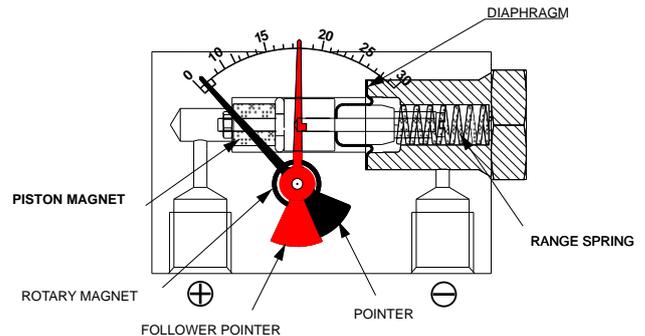
**NOTE :** This model has standard bottom porting.

Depressurize the system and connect the high and low pressure lines of your system to the "High"  $\oplus$  & "Low"  $\ominus$  ports of the instrument, respectively.

**CAUTION :** Do not install instrument backwards.

The rolling diaphragm is likely to be damaged or ruined if pressure source is applied to the "Low" side first. Always apply pressure to the "High" side first and then the "Low" side.

It is recommended to use "O" rings with male connectors to avoid excessive tightening and to prevent leakage (For parallel threads). The instrument is now ready for operation.



Model GX-100 consists of a rolling diaphragm to sense the pressure difference. It can withstand maximum operating pressure up to 100 bar for all ranges. However care should be taken to see that pressure from low port never exceeds 25 bar. If pressure exceeds these pressure limits, "O" rings & diaphragm inside the pressure chamber, will be damaged. If maximum operating pressure is within the allowable limit of 100 bar, but the differential pressure exceeds instrument range, there will be no damage to the instrument. Pointer will only go the extreme right end of the scale.

### PRECAUTIONS

Do not connect "High" and "Low" ports to wrong pipe ends. Do not subject the instrument to excessive vibration.

The instrument is never to be used in an area where a magnetic field is present. It may show wrong readings.

As the instrument works on magnetic coupling, use only non magnetic fittings, parts etc. in areas closer than 50 mm on all sides, otherwise calibration will get effected. Panel mounted instruments should be installed in non-ferrous panel material.

Do not try to open any part of the instrument for any reason, because if not reassembled properly calibration will be affected.