Pressure Gauge Selection Guide

To properly select a pressure gauge, consider the gauge process, range, environment, accuracy, dial size, connection and mounting requirements, here is a brief information:

ACCURACY

Accuracy is defined as a percentage of the scale range, the following are general guidelines:

- Test Gauges and Standards: 0.25% through 0.10% full scale accuracies
- Critical Processes: 0.5% full scale accuracy
- General :
  - ASME B40.1 Grade A Accuracy ± 2-1-2 % of span
  - ASME B40.1 Grade B Accuracy ± 3-2-3 % of span

Refer to ASME B40.100 for more information on accuracy

DIAL SIZE

Gauge dial sizes range from 1.5″ to 18″ diameters in general.
The following factors to be considered:

- Readability requirements
- Space limitations
- Required gauge accuracy

Example: Accuracies of 0.25% or 0.5% generally have dial sizes of 4″ or larger since more dial graduations are required.

CASE MATERIALS & STYLES

Usually the following factors determine the types:
There are range of materials such as: Plastic, Black Painted Steel, Chrome Painted Steel, Stainless Steel 304 or 316

- Ambient temperature
- Condensation & humidity
- Corrosive ambient conditions

MEDIA & WETTED PARTS:

The wetted parts of the pressure gauge, the Bourdon tube and socket must be compatible with the process media.

If medium is not compatible with the wetted parts of the gauge, corrosion will occur and cause gauge failure and possibly safety issues.

CONNECTION SIZE AND LOCATION

There are a range of connections type NPT / DIN / BSP / SAE

Sizes are usually 1/8” , 1/4”, 1/2”

Connection location are usually Lower mount or central back mount.

PRESSURE RANGES

ASME B40.100 recommends that normal operating pressure be confined to 25%-75% of the scale.

If pulsation is present in the process, maximum operating gauge pressure should not exceed 60% of the full-scale range.

We assume no responsibility of the above information and it is only as general guidelines, for more details please contact us.
Specifications subject to change without notice at any time, and information provided may vary from the actual Product.

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