

RANGE

The maximum operating pressure should not exceed 75% of the full-scale range. The normal operating range should be in the middle half of the range (between 25% and 75% of the full-scale range); whenever possible.

DIAL SIZE

Select a dial size that allows you to comfortably read the dial from the normal distance when installed.

PRESSURE SYSTEM MATERIAL

The media to which the gauge will be subjected is critical to the selection of the proper material for the bourdon tube, bellows, and socket. Consult "corrosion chart" on Page 5 for proper selection of pressure system materials. Weksler offers various models with:

- Phosphor bronze bourdons (or bellows) with brass sockets.
- 316 stainless steel bourdons (or bellows) with 316 stainless steel sockets.
- 316 stainless steel bourdons with alloy steel sockets.
- Monel bourdons with monel sockets..

For applications where the above materials may not be suitable, a diaphragm seal will be necessary to protect the pressure gauge system.

ACCURACY

Select a gauge having the desired accuracy as follows:

- ¼% – test gauges only (not for in-line service)
- ½% – Weksler "Royal" gauges (4½" dial size and larger)
- 1% – Weksler "Regal" gauges, 3½" "Royal Gauges, 100 MM Gauge, "EA14" gauge
- 2-1-2% – Weksler Duplex, Differential and Low Pressure Gauges
- 3-2-3% – Weksler BY12, BY42, BK72, UA15, UA20, UA25, UA35 series utility gauges

MOVEMENT

Select either a gauge with 300 series stainless steel movement for long wear (Weksler "Royal" gauges, 100 mm gauges, and BY42 series gauges); or a gauge with bronze or brass movement for applications where vibration and pulsation are not present (all other Weksler gauges).

CASE

A wide variety of case styles and materials are offered. Determine how the gauge is to be mounted: direct, surface (wall) or flush (in panel). Determine the desired case materials: polypropylene (or phenol); aluminum (black enameled) or stainless steel (300 series).

Determine case type: Safety (solid front with blow-out back)

- Standard (open front with rubber blow-out disc at rear)
- Note – All safety case styles are designated by a number.
- Standard case styles are designated by a letter.

WINDOW

A glass face is standard in most gauges. If breakage is a concern, a plastic or shatterproof glass face is optional at extra cost on most Weksler "Royal" and "Regal" gauges. (Glycerine filled and sanitary gauges have plastic face as standard).

POINTER

All Weksler gauges (except utility types) have adjustable pointers. This permits pointer repositioning during calibration check or allows maximum precision at a specific point.

TEMPERATURE

The ambient temperature to which the gauge will be subjected should not exceed 150°F. If higher temperatures are encountered the gauge must be isolated from the source of heat. The temperature of the media to which the gauge is subjected to is also critical. Gauges with phosphor bronze bourdons should not be subjected to process temperatures in excess of 150°F. Gauges with metal cases and either 316 stainless steel or monel bourdons can withstand higher process temperatures, but as temperature exceeds 150°F hardening of the gasketing and discoloration of the dial may occur. In addition, accuracy will be affected by approximately 1.5% per 100°F. Both 316 stainless steel and monel gauges in metal cases will withstand 750°F for short periods of time without rupture, but other parts of the gauge will be destroyed and calibration will be lost.

VIBRATION

If present, a glycerine filled gauge is recommended.

PULSATION

If present, a pressure snubber or throttle screw is recommended.

WARNING: Misuse, Including Excessive Pressure, Vibration, Pulsation, Temperature And Corrosion May Cause Failure That Can Result in Damage Or Injury.

We suggest that users of Pressure Gauges refer to American National Standard ASME B40.1 entitled "Gauges, Pressure And Vacuum Indicating Dial Type – Elastic Element" for guidance in Gauge selection. This document may be obtained from American Society of Mechanical Engineers (ASME) United Engineering Center, 345 East 47th Street, New York, N.Y. 10017.