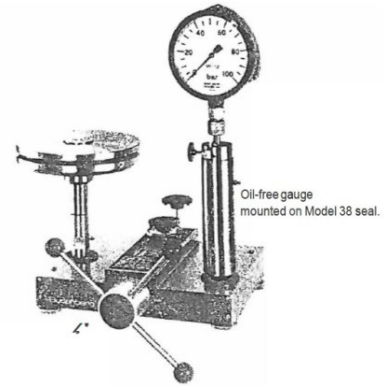
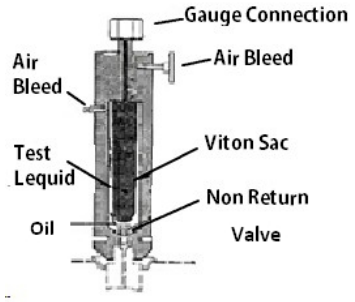
# Budenberg

## Oil Separator model 38




**Application:**
The calibration of pressure gauge or transducers which cannot be connected directly to an to an oil or water dead-weight tester.
Examples are gauge for use on liquids which must not be contaminated by oil or water, gauge for Oxygen or Medical Gases, gauge that have been contaminated by fluids which might harm a dead-weight tester.
See pages 3-39 for notes on fluids for use in hydraulic testers.
It is preferable to calibrate oxygen gauge for pressure up to 120 bar (1600 psi) using an air dead-weight tester since this does not introduce any liquid into the tube of the gauge.




**Description** (see illustration)
The gauge to be calibrated is screwed into the stainless steel connection on top of the seal and so is connected to the interior of the systhetic rubber sac, the gauge and sac being filled with the test liquid. The sac is fitted into the test chamber which is filled with oil and connected to the oil dead-weight tester by screwing in place to the gauge port. Bleed screws are provided to bleed air from the test liquid and from the oil. The sac us ussualy made from Viton, but butyl rubber sacs are available. The seal can easily be dismantled for cleaning and for replacement of the sac.

**CONNECTION TO TESTER**
The seals if fitted with a non return valve to enable the seal to be removed from the tester without any spillages, and reduce the time to re-fill the oil seal when reconnecting to the tester.

**Test Liquids**
The most common test liquids are water and solvents, such as carbon tetrachloride, toluene, benzene, xylene or industrial alcohol. When the test liquid is an ester based hydraulic fluid or castor based fluid, a butyl sac should be used.
The test liquid is often the liquid which the gauge is to be used. This prevents the process liquid from contamination when the gause is in use.

**Accuracy**
The error introduced by the sac is not more than 0.014 bar (0.2 psi) on a pressure gauge when the tube has been filled with the test liquid and not more tha 0.028 bar (0.4 psi) if there is air in the gauge tube.

**Pressure Rating**
The seal is suitable for use at pressures up to **700 bar (10,000 psi)**. The lowest graduation of pressure gauge which can be calibrated is dependent upon the accuracy required (See"Accuracy")

**Testers**
The seal may be used with oil operated dead-weight tester and comparators model : 278, 279 480C. 480L, 480M.
For use with model 480HX and Model 480C upto **1200 bar(16,000 psi)** we offer a small seal, **Model 25**, detail available on request.

**Specification**
Model 38 bench mounting oil seal with stainless steel gauge connections tapped 3/4" and ½" BSP, connection to tester screwed ¾" BSP suitable for maximum working pressure of **700 bar (70,000 kPa, 10,000 psi)** complete with spare synthetic rubber sac and 'O' ring.

**Packing**
**Packing specification (inland transit air freight or container shipment).**
1 carton
38x27x14 cm (0.014m$^3$)
Nett 5.4 kg
Gross 6.1 kg

**NPT Connections**
½" and ¼" NPT Connections can be supplied as alternatives to or in addition to BSP connections.