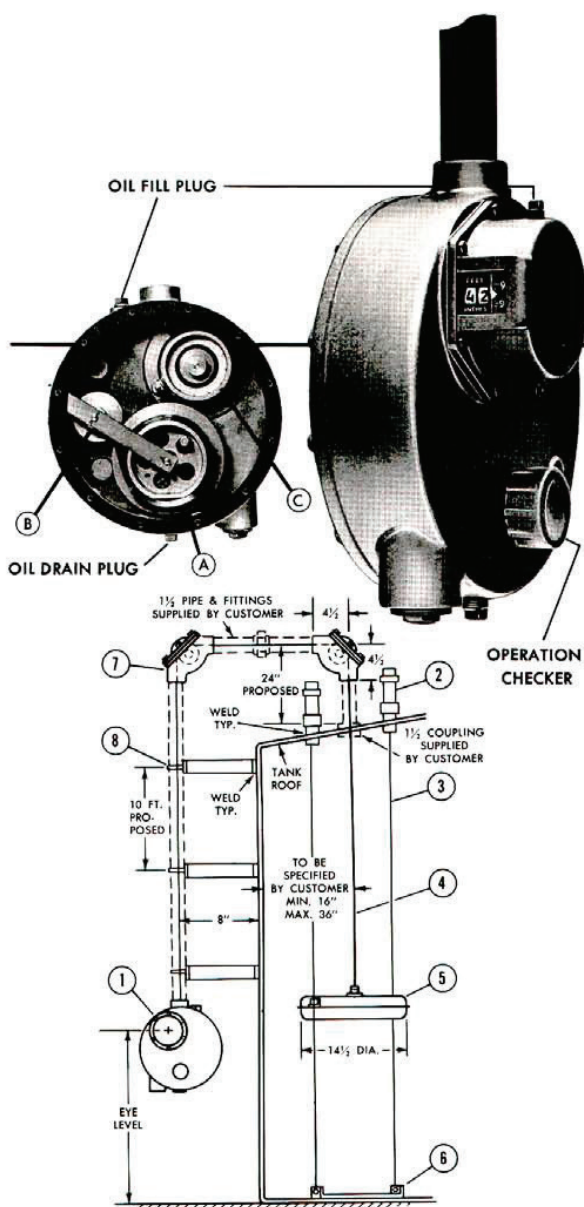


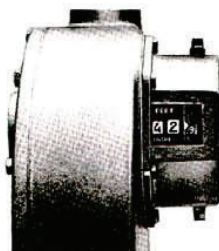
Automatic Tank Gauges

PROTECTOSEAL SERIES No. 42000A



**CAT. NO. 42000A
CONE ROOF TANK**

The drive wheel is provided with an extended pin which can be coupled to a transmitter. This permits transmitting the rotations of the shaft to a receiving station remote from the tank. The gauge is designed so it can be used with transmitting or telemetering equipment currently on the market.



The counter mechanism has large, legible, numerals to permit quick, easy readings. Liquid level of tank is given in feet, inches and fractions thereof. Digital readings to 1/16" increments are standard; however, the units may be converted to the metric system through a modified counter system if desired.

Protectoseal Series No. 42000A Automatic Tank Gauges provide high gauging accuracy in measuring liquid level in all types of low pressure cone roof, floating roof and underground tanks. They help prevent vapor loss and reduce the time needed for taking readings. The float-operated gauges are compact units and have large, legible numerals which permit quick, accurate readings.

The gauges may be used on tanks up to 65' high and for pressure ranges up to 50 p.s.i. Easy to install, they can be conveniently located, mounted at the top of the tank, or mounted at the side of the tank for ground reading.

One end of the perforated tape is connected to the float (liquid level sensing device for the gauge) in the tank and the other end is run through the pipes from the tank, rolling over the sheave wheels, down through the mounting pipe extension and is secured to the storage drum (a) in the gauge head. The storage drum is directly coupled to a "Negator" motor (b) which maintains a constant tension on the tape, regardless of the float position. As the float moves up and down in the tank, the tape winds and unwinds on the drum. The linear movement of the perforated tape imparts rotary motion to the sprocket or drive wheel (c). The rotating drive wheel turns a shaft connected directly to the counter mechanism which then registers the liquid level in feet, inches and fractions thereof.

Limit switches or program switches are available. Provisions for filling both body and counter heads with oil are provided.

Features of Construction

The Automatic Tank Gauge is designed and constructed to provide maximum trouble-free performance and service. A positive operations check that enables operator to check and assure freedom of float movement and proper functioning of the counter, is incorporated.

The standard unit, supplied for working pressures up to 15 p.s.i., is of aluminum construction. A ductile iron construction is recommended and supplied for working pressures up to 50 p.s.i. The perforated tape, shafts, drive pins, sheave wheels, and the large, circular float are of Type 316 stainless steel for maximum resistance to corrosive materials.

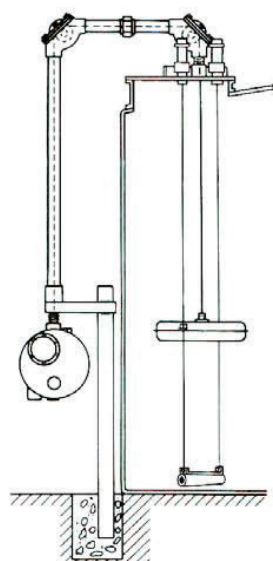
Teflon bearings which require no lubrication and reduce friction to an absolute minimum are used in the gauge. The counter provides digital readings to 1/16" increments. Design permits converting units to the metric system through modified counter system if desired.

| ITEM | PART NO. | DESCRIPTION | MATERIAL | REQ. |
|------|--------------|------------------------|---|------|
| 1 | 42000A-50 | Gauge Head Assembly | Aluminum Housing and Sheaves, Teflon Bearings | 1 |
| 2 | 41000-100-60 | Top Anchor Assembly | Steel | 2 |
| 3 | 41000-125-69 | Guide Wire | Stainless Steel Type 316 | * |
| 4 | 42000-90-69 | Tape | Stainless Steel Type 316 | * |
| 5 | 41000-225-69 | Float Assembly | Stainless Steel Type 316 | 1 |
| 6 | 41000-130-61 | Bottom Anchor Assembly | Steel | 1 |
| 7 | 42000-275-13 | Sheave Assembly | Aluminum Housing 18/8 Wheel, Teflon Bearing | 2 |
| 8 | 42000-110-61 | Brace Assembly | Steel | * |

*Depends upon tank height.

Various Applications of Automatic Tank Gauges

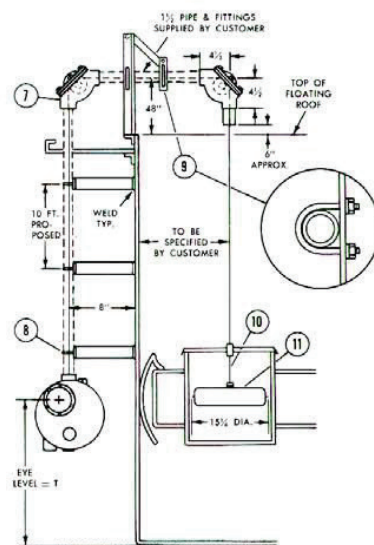
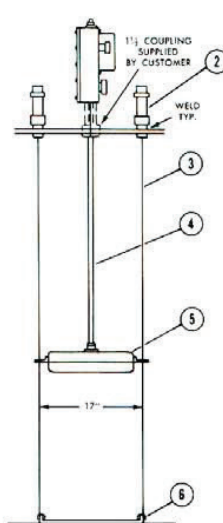
PROTECTOSEAL SERIES No. 42000A



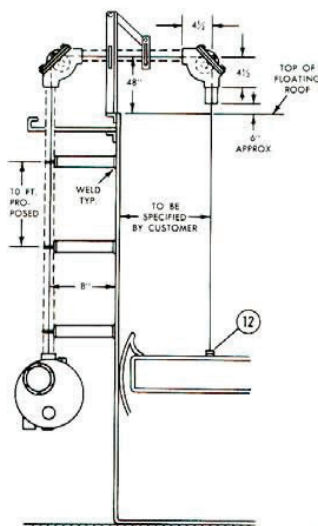
TANK IN SERVICE



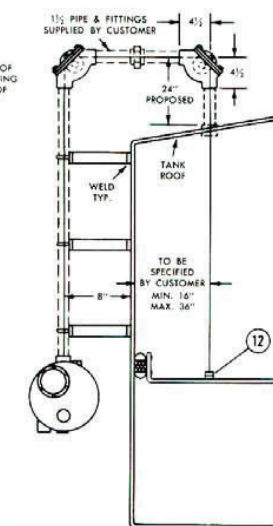
CAT. NO. 42100A
TANK TOP READING GAUGE



CAT. NO. 43000A
FLOATING ROOF TANK
FLOAT WELL



CAT. NO. 43100A
FLOATING ROOF TANK



CAT. NO. 43400A
FLOATING ROOF TANK
UNDER FIXED ROOF

| ITEM | PART NO. | DESCRIPTION | MATERIAL | REQUIRED | | | |
|------|--------------|------------------------|---|----------|-------|-------|-------|
| | | | | 42100 | 43000 | 43100 | 43400 |
| 1 | 42000A-50 | Gauge Head Assembly | Aluminum Housing and Sheaves, Teflon Bearings | 1 | 1 | 1 | 1 |
| 2 | 41000-100-60 | Top Anchor Assembly | Steel | 2 | — | — | — |
| 3 | 41000-125-69 | Guide Wire | Stainless Steel Type 316 | * | — | — | — |
| 4 | 42000-90-69 | Tape | Stainless Steel Type 316 | * | — | — | * |
| 5 | 41000-225-69 | Float Assembly | Stainless Steel Type 316 | 1 | — | — | 1 |
| 6 | 41000-130-61 | Bottom Anchor Assembly | Steel | 1 | — | — | — |
| 7 | 42000-275-13 | Sheave Assembly | Aluminum Housing 18/8 Wheel, Teflon Bearing | — | 2 | 2 | 2 |
| 8 | 42000-110-61 | Brace Assembly | Steel | — | * | * | * |
| 9 | 43000-150-62 | Pipe Bracket | Steel | — | 1 | 1 | — |
| 10 | 43000-90-69 | Tape and Cable | Stainless Steel Type 316 | — | * | * | — |
| 11 | 41000-225-69 | Float Assembly | Stainless Steel Type 316 | — | 1 | — | — |
| 12 | 41000-230-69 | Cable Attachment | Stainless Steel Type 316 | — | — | 1 | 1 |

*Depends upon tank height.

The Protectoseal Company