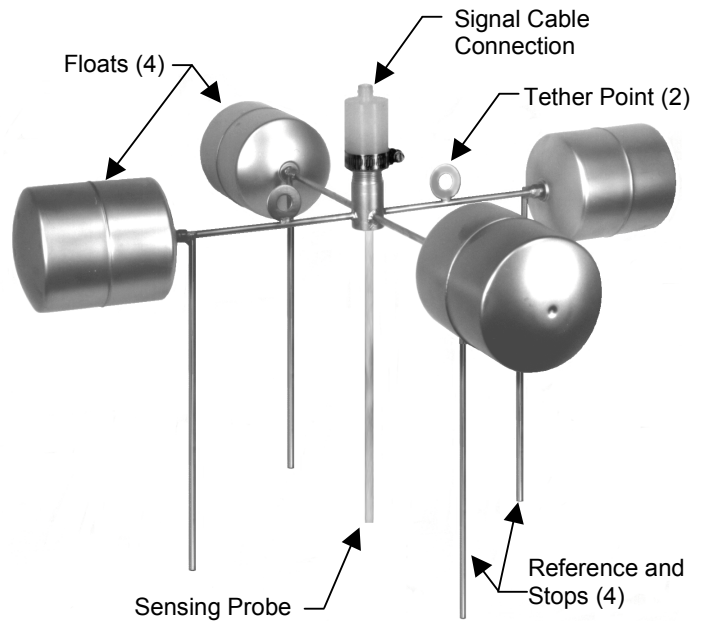


# P91 FLOATING PROBE FOR OIL SKIMMER

TS P91

## ADVANTAGES

- Measures 2 to 36 inches (50 to 900 mm) of oil floating on water.
- Neither oil nor water level has to be held constant; up to 50 feet (15 M) total elevation change.
- Works on large tank tramp oil collectors.
- Works well on fresh or salt water.
- Entire transmitter can be submerged to 50 feet (15 meters) without harm.
- All 316 S.S. electronic housings are optional for highly corrosive and offshore applications.
- Insensitive to tank pressure from vacuum to 60 PSIG (-1 to 4 bar) is basic.
- Hastelloy "C"® is optional.
- Unaffected by foam, bubbles, and froth.
- Works great with lip type skimmers.



## APPLICATION FOR INTERFACE SERVICE

The P91 probe floats on the top surface of oil in a skimmer or separation vessel. A vertical sensing rod, with parallel ground reference rods, is supported by outrigger floats. The sensing rod goes through the floating oil and into the water. The P91 probe/module measures the distance from the top of the oil to the interface between the water and the floating oil. This measurement is then converted into a 4-20 mA DC signal equivalent to the thickness of oil present. Optionally, an on/off differential control signal can be produced to control a drainage pump or skimmer trough.

The P91 is used by petroleum refineries; machinery manufacturing plants, oil field salt water disposal companies and similar industrial operating companies.

## SPECIFICATION

**Electronics Module:** Remoted from sensor

**Range:** 0-6 to 0-36 inches (150 to 900mm)

**Oil Specific Gravity:** 0.70 minimum

**Tank Pressure:** From hard vacuum to 60 PSIG (-1 to 4 BAR) is optional

**Attachment:** 0.0620 316 S.S. cable

**Interconnection:** Oil resistant; allows pull up for testing and maintenance. Also acts as a tether in large pond applications. Has a rubber tubular jacket over signal cable; up to 60 feet (4 meters) long

**Floats and Frame Support:** 316 S. S.

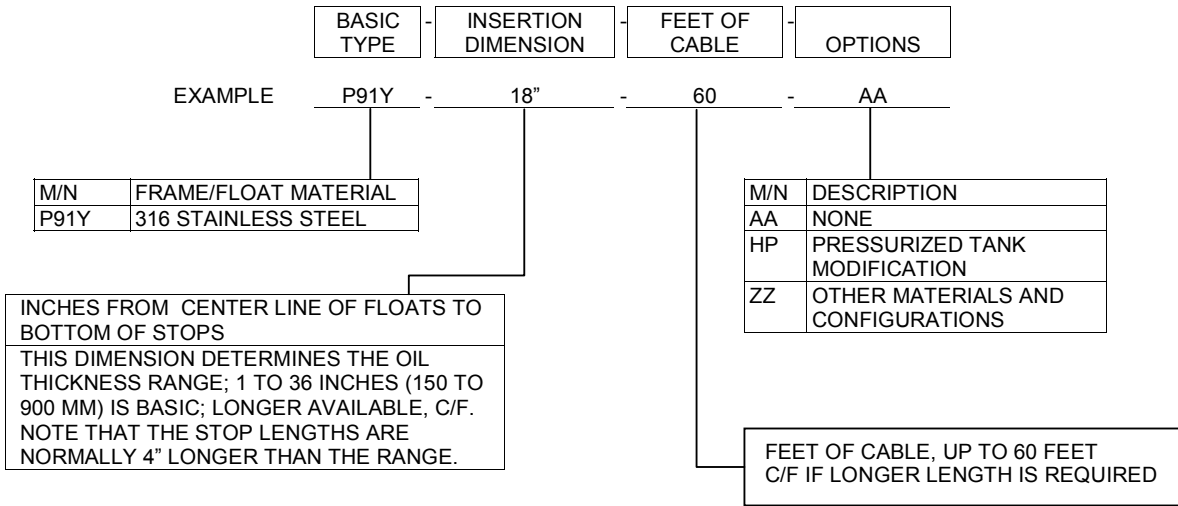
**Sensing Rod Jacket and Seals:** PTFE extruded and welded Teflon®

**Rating:** Intrinsically safe; Class 1, Divisions 1 and 2; Groups ABCD, EFG

**DESIGNED AND BUILT IN THE  
USA BY DELTA CONTROLS**

**DELTA CONTROLS** Corporation

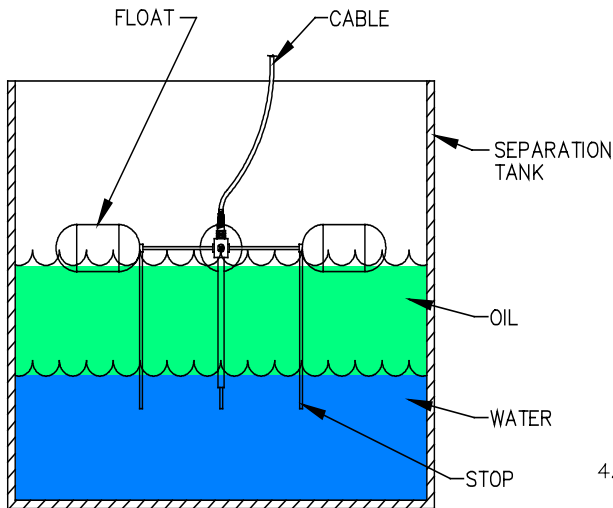
## MODEL NUMBERING SYSTEM



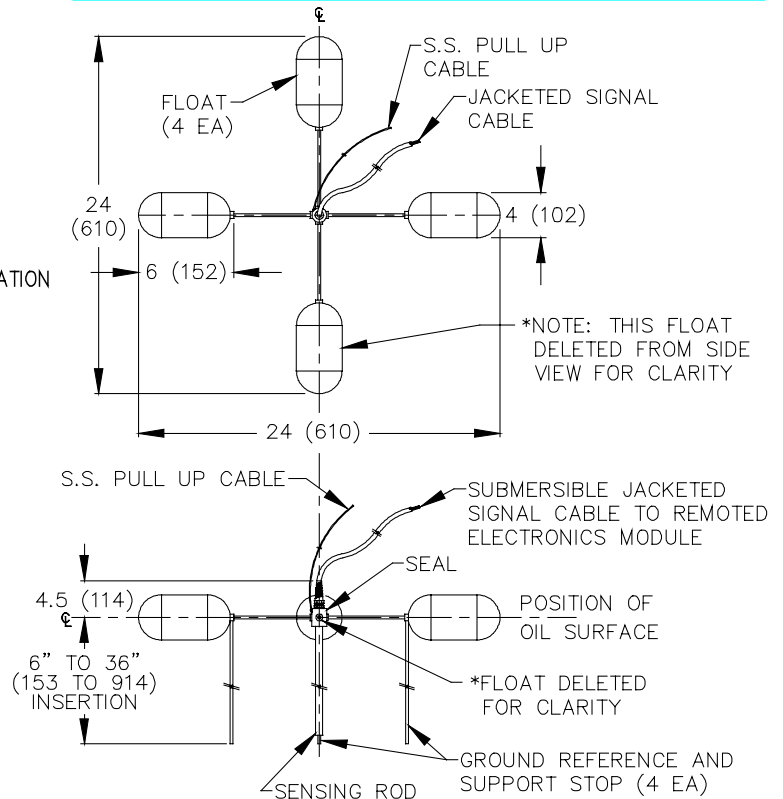
## ESTIMATING PROBE PERFORMANCE

The P91 sensing probe has adequate sensing unit change per inch of oil level to perform properly in this specialized application. There is no need to produce a mathematical computation of probe performance on a basic unit limited to the parameters listed under "Specifications". Other configurations, range, etc. will require a workup by Delta's factory engineering group.

### TYPICAL INSTALLATION



### OUTLINE DIMENSIONS



## DELTA CONTROLS Corporation

585 FORTSON STREET  
SHREVEPORT, LA. 71107 - USA  
PHONE: 318-424-8471 FAX: 318-425-2421

e-mail: [delta@deltacnt.com](mailto:delta@deltacnt.com) Web Site: <http://www.deltacnt.com>

