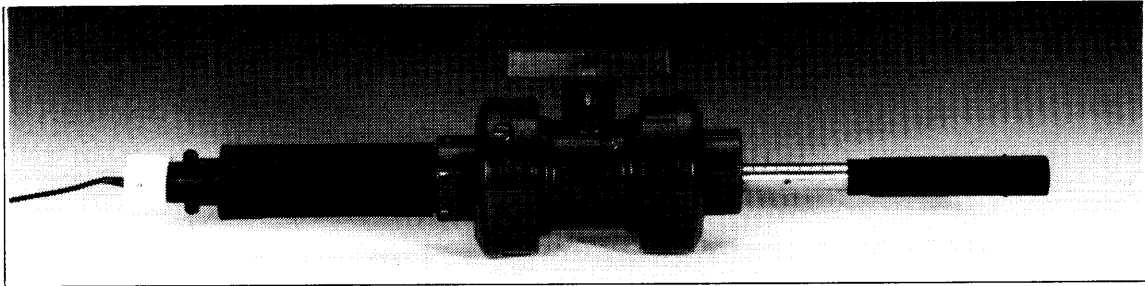




Innovative Sensors, Inc.

ISI SOLUTIONS - Specialty Sensors for Universal Applications

Model 40 - Valve Insertable Sensor



The Model 40 sensor is designed to be installed into any 1" fully ported ball valve, typically for tank or main line insertion. This product is built as a complete unit: sensor, extension tube, cable and connector. There are no detachable parts which eliminates noise and signal problems often associated with on-line measurements.

The M-40 allows for measurements in process streams without the need for line shutdown during maintenance, calibration or sensor replacement. Mounting hardware is required for initial installation. This hardware consists of a 1" NPT barrel housing, a compression nut, a tube seal cap and a depth locking ring. These parts are ordered as part number "M-40-Assembly".

The sensor has a recessed pH bulb to prevent breakage when being inserted into the ball valve. The stainless steel shaft allows for standard insertions up to 15". Longer lengths can be ordered. A length rule is silk screened onto the tube to allow for proper placement into the line and the locking ring can be used for easy return to the same insertion depth every time.

Applications

The Model 40 is recommended for any application where a retractable sensor is desired. All elements of sensor construction are designed to withstand harsh chemical processes as well as general purpose applications.

Specifications

pH Range	0 to 14 pH
Temperature Range	-5°C to +110°C
Pressure Range	100psig @ 25°C
Membrane Impedance	400Meg ohms @ 25°C
Reference Cell	Annular, Double Junction
Reference Junction	Porous Teflon*
Zero Potential	7.0 pH ± 0.2 pH
Output Signal	59.16 mV per pH unit @ 25°C
Insertion Length (L)	15 inches (retractable)
Response Time	95% of reading in 5 seconds
Drift	Less than 2mV per week
Wetted Materials	Teflon*, Viton*, Glass, PPA, 316 Stainless Steel

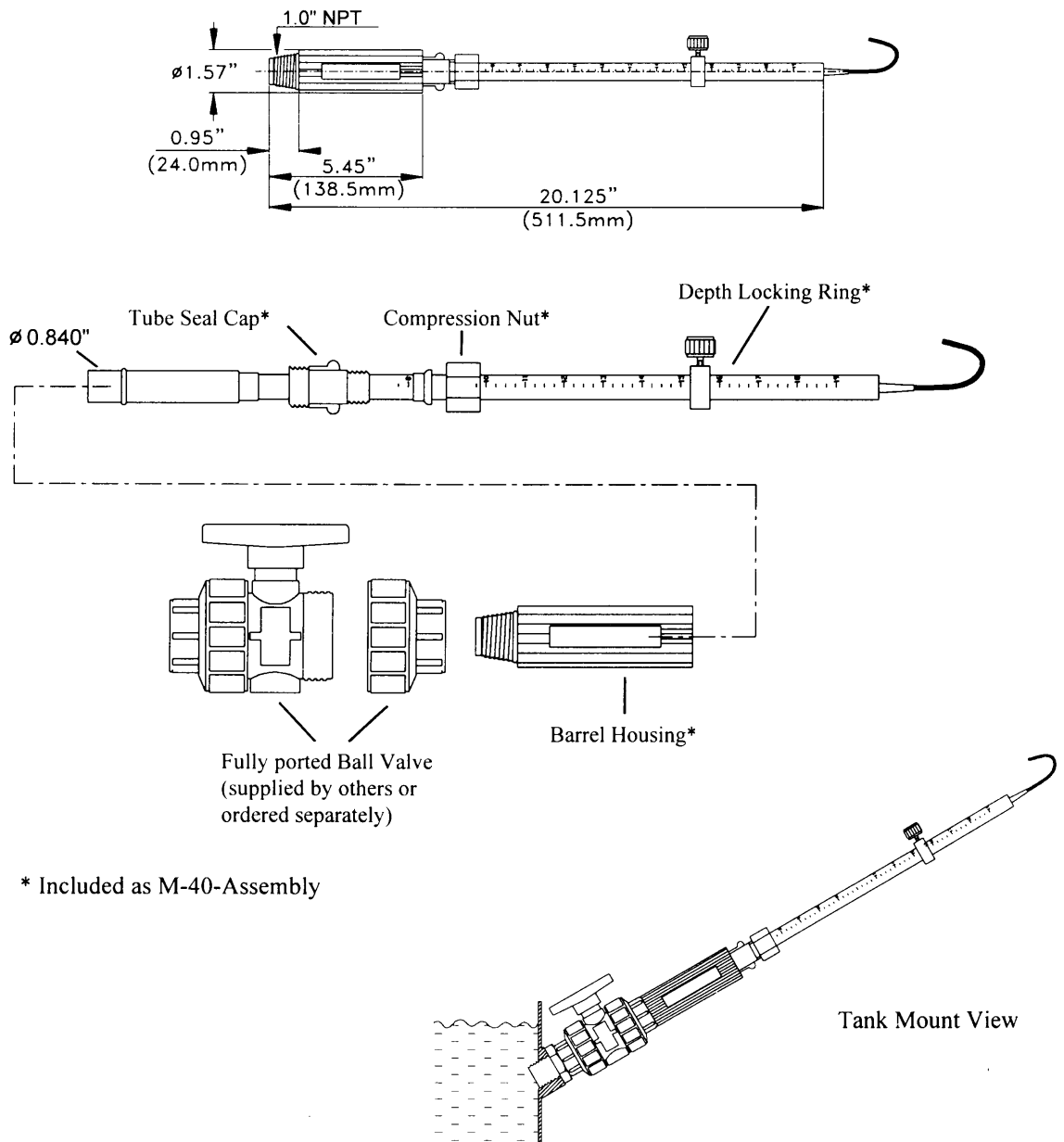


Available Options

M-40	Valve insertable sensor with recessed bulb
M-40-ORP	Platinum sensing element for redox measurement (ORP)
M-40-FLAT	Flat pH bulb for optimum use in extremely viscous liquids
M-40-PT100	Includes DIN standard PT100 RTD
M-40-PT1000	Includes DIN standard PT1000 RTD
M-40-3KTC	Includes standard 3000 ohm temperature compensator
M-40-SG	Solution ground option
M-40-18"	Extended insertion tube for 18" depth
M-40-24"	Extended insertion tube for 24" depth
M-40-Assembly	Installation Hardware

The Model 40 is supplied with a 10 foot TPE high temperature/ultra low noise cable and a BNC connector as standard.

Installation Guide



* Included as M-40-Assembly

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Form Ref. M40-DS-A96