TURTLE TOUGH®

The **pH & ORP sensor for Pulp & Paper** is designed specifically for abrasive pulp slurries and high pressure, high-velocity flow paper processing lines.

Application specific
pH & ORP sensor for Pulp & Paper

Code: TT-Paper-pH-ORP

Features

- Designed for bleaching and digestion
- Abrasive pulp slurries
- Ultra Tough Glass
- 6m cable
- RYTON with ¾″ Front-end & 1″ MNPT Back-end
- -5°C to 105°C (130°C optional)
- Inline, Sanitary, Immersion & Submersible versions available
- Double Junction (triple optional)
- Sulphide resistant
- High capacity KYNAR Reference
- Digital Smart Sensor Technology *(optional)*

Application specific
pH & ORP sensor for Pulp & Paper

Code: TT-Paper-pH-ORP

Turtle Tough's Pulp and Paper pH & ORP sensor is designed specifically for abrasive pulp slurries and high pressure, high-velocity flow paper processing lines. The unique solid state reference is designed specifically to resist dissolved chlorine gas. The ultra-tough glass resists high levels of abrasion and impact and allows for harsh cleaning.

The standard configuration is designed for immersion and submersible applications. Our VRS model is compatible with inline and sanitary (tri-clover) installations.

The RYTON body plastics combined with our advanced high capacity KYNAR reference is designed for chemical resistance, including chlorine and sulphides. Utilising our proprietary toughened glass the sensor is ideal for slurries and abrasive media as well as being capable of resisting acids or fluorides that may chemically attack the glass.

The ¾″ x 1″ MNPT threaded connection allows for flexible immersion points into the process. With appropriate sealing onto an immersion rod, the sensor may also be fully submerged without additional sealing (optional). Both body plastics and advanced reference system give this sensor an excellent operating range up to 105°C.

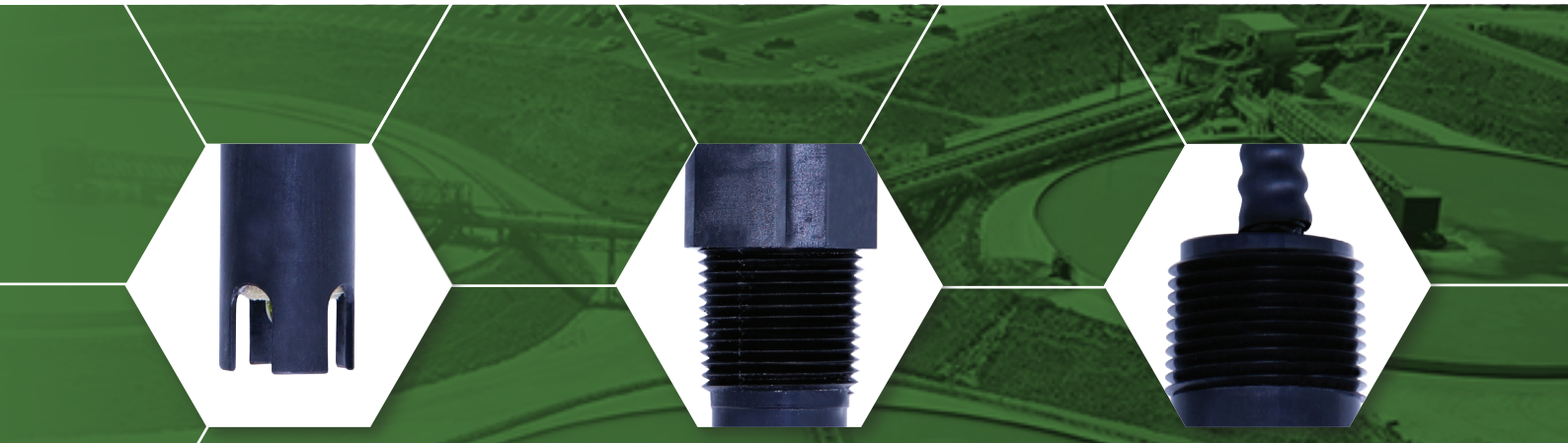
This sensor is ideal for any applications where process media containing free sulphide species such as hydrogen sulphide gas (H2S), hydrogen sulphide (HS–) or sulphide ions (S2-).

Any measurement where aggressive chemical cleaning is needed to remove fouling or low maintenance operation is required with minimal cleaning and recalibration.

Digital Smart Sensor Technology

This sensor is available with our Digital Smart Sensor technology.

- **With a quick connect fitting,** this plug and play sensor eliminates the need for hard wiring to the analyser.
- **The on-board sensor memory** allows the storage of calibration data, analyser configurations and sensor service history. This allows the sensor to be conveniently maintained and calibrated off-site or in the laboratory and pre-programmed with calibration data and analyser configurations.
- **One device to calibrate and interface with ALL sensors.** The stored information automatically uploads to the analyser upon connection and eliminates the need for any interaction with the analyser, simplifying the change-out of sensors. A service log stored on the sensors is ideal for maintenance and quality assurance records.



General Specifications

Description	
Part Number	
pH Range	
Temperature Range	
Pressure	
Body Type	
Junction Material	
Dimensions	
Cable Length	
Temperature Compensation	
Preamplifier	
Waterproofing	
Analogue Connection	
Digital Connection	
Special Features	
Options	

pH Sensor Specifications

Measuring Glass Type	
Glass Dimensions	
Initial Impedance	
Sodium Ion Error	
Acidic Errors	

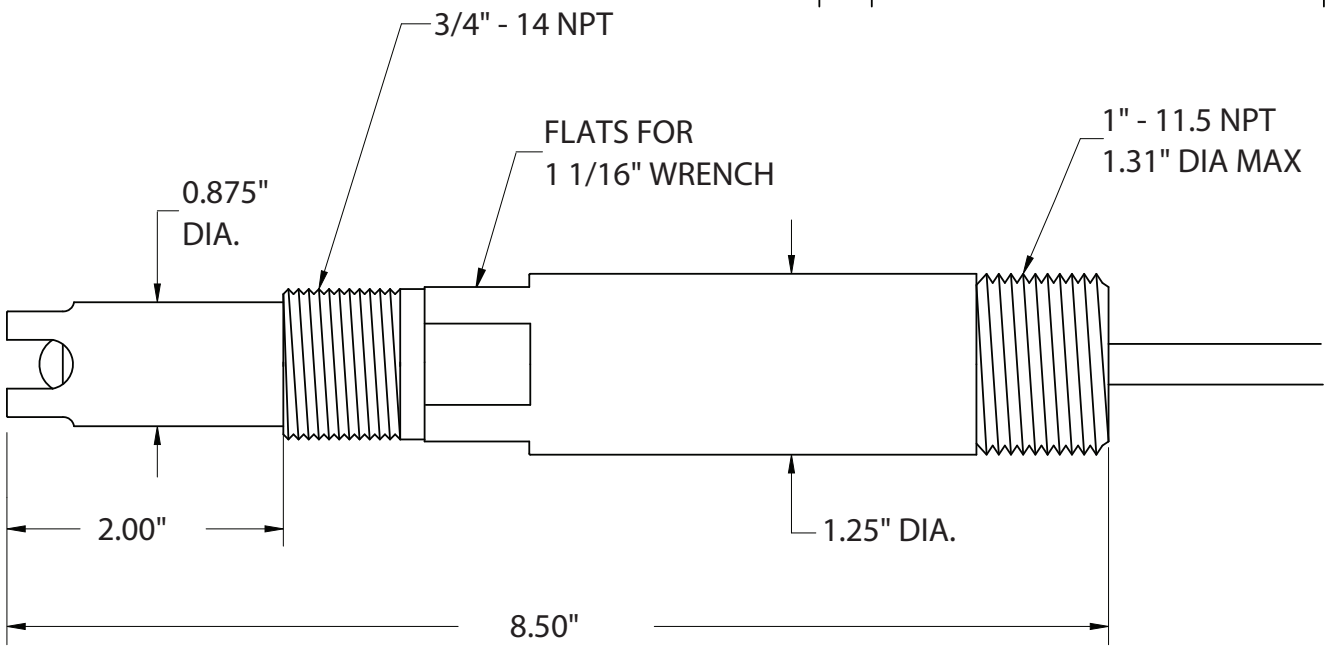
Reference System Specifications

Type	
Reference Half Cell	
Primary Junction	
Secondary Junction	

Application Specifications

Recommended Applications	Specifically designed for the Brine industry, chemical, food & beverage, semiconductor, pharmaceutical & wastewater. Any measurement where aggressive chemical cleaning is needed to remove fouling or low maintenance operation is required with minimal cleaning and re-calibration
Analyser / Interface	All Turtle Tough pH Analysers
Storage	Item should be kept at room temperature with closed protector cap, filled with storage solution in an upright position. Shelf life warranted for 12 months from the date of purchase
Warranty	12 Month Conditional Warranty Please see www.turtletoughsensors.com/support/warranty-returns

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED



NOTES

1. All dimensions are in inches, unless otherwise indicated with tolerances as detailed below.
2. Sensor body material of construction is RADEL, PEEK or RYTON.
3. Drawing shown in the standard with protective tines configuration (4 places, 90 degrees apart). The 2 protective tines only configuration (2 places, 180 degrees apart) is optional.
4. In the alternate without tines configuration, the sensor body is exactly 8.0 inches in length. The max displacement for hemispherical pH glass is 0.3" yielding a max insertion depth of 1.8 inches past threads & overall max length of 8.3 inches.
5. Do not use any sensor beyond the factory defined maximum temperature or pressure rating.

TOLERANCES	
1 Place: ± .1	3 Places: ± .005
2 Places: ± .01	4 Places: ± .0005
Angular: ± 0.25°	

DRAWN BY: RH
CHECKED BY: TADP
APPROVED BY: MJP

TURTLE TOUGH
Turtle Tough Sensors
turtletoughsensors.com

TITLE: 3/4"-1" MNPT Inline / Immersion / Submersible

SIZE	PROJECT	DRAWING NO.	REV
B	IMMERSION	6-1 pH SENSORS	/

SCALE Not to Scale | MODEL 6X31,6X41,6X51,6X52 | SHEET 1 OF 1