InTrac Retractable Sensor Housings for Harsh Applications

Wide Range of Options Intelligent Sensor Locking System Highly Efficient Sensor Cleaning Compliance with International Standards

InTrac 781 / 784 – Versatile and Rugged For the Toughest Process Conditions



Retroctable Housings

When Reliability is Paramount Developed for Harsh Applications

METTLER TOLEDO provides a wide range of complete in-line process analytical solutions that allow you to make your processes more efficient, more productive and safer. Our advanced housings are not only designed to withstand the toughest conditions, they also prevent escape of process media, protect sensors, and enable sensor maintenance and exchange without process interruption.

The InTrac 781/784 series of retractable sensor housings combine rugged design with installation versatility to meet the demands of the harshest conditions in chemical, petrochemical, pulp and paper, or utilities applications. InTrac 781/784 combine reliability with low maintenance and ease of operation. Advanced safety features protect operators and the plant environment at all times.

ndustries



Petrochemical industry



Chemical industry



Utilities industry



Pulp and Paper industry





Wide range of options

Various construction materials, process connections, insertion lengths, and high process temperature and pressure options ensure model availability to meet your process requirements.



Uninterrupted processes

The sensor can be cleaned, calibrated or exchanged without process interruption.



Highly efficient sensor cleaning

New cleaning chamber design with four integrated spray nozzles makes sensor cleaning more efficient than ever. Operation with EasyClean systems is possible for fully automatic sensor cleaning, flushing and calibration.



Compliance with international standards

The housings meet the strict requirements of major international guidelines including ATEX.

Flexible, Tough and Safe To Meet Your Requirements

Sensors housings must not only be process tolerant, they must also provide ease of use and ensure risk-free operation. All these elements were considered when designing the InTrac series. The result is our most advanced series of housings.



Wide Range of Options

Wetted parts are available in different materials, i.e., stainless steel 1.4404/SS316L; Alloy C-22; PP, PVDF or PEEK, offering suitability with many applications.

Various immersion lengths (approx. 80 mm or 280 mm) and types of process connections (flanges-DIN, AISI, NPT or Ingold DN 25) are available, providing excellent installation flexibility at the measurement point.



Remove the Sensor Without Stopping the Process The advanced drive train allows insertion or retraction of the sensor in process pressures of up to 16 bar!

Housing design allows sensor inspection, cleaning, calibration or exchange at any time without the need for stopping the process.

The intelligent sensor locking system prevents deployment of the insertion rod if no sensor is present in the housing.





Highly Efficient Sensor Cleaning

Four integrated spray nozzles, and the large bore size cleaning chamber design ensures particle/dirt is flushed away.

Operation with EasyClean systems enables fully automatic sensor cleaning, flushing and calibration (for pH sensors). Giving engineers more time for other tasks!

Depending on the operating system, backwash flushing of the sensor is possible as soon as the sensor is retracted from the process.



No Compromise on Safety

InTrac 781/784 housings meet the strict requirements of major international guidelines including ATEX and FM approvals. The housings can be safely operated in Ex-classified environments.

The intelligent sensor locking system and visualized sensor position rod provide additional information on sensor status, enhancing operational safety. In addition, it is not possible to remove the sensor when the housing is in the measurement position.

An inspection window allows operators to visually check the status of seals.

Complete Solutions Performance by Design

InTrac housings are designed to work seamlessly with METTLER TOLEDO's leading-edge sensors, transmitters and automatic sensor cleaning/calibration systems. Giving you greater confidence in your process analytics.

InTrac 781/784 versatility at a alance

With the InTrac 781/784 series of retractable housings, reliable measurements of pH/ORP, dissolved oxygen, dissolved carbon dioxide and conductivity can be achieved in many applications. The InTrac 781 operates mainly with the 12 mm diameter (PG 13.5) sensors, while the InTrac 784 is designed for use with the long proven pH measurement problem solver InPro 2000 (i) or 465 pH/ORP sensor.

Key technical data for the InTrac 781/784

•	
Operation	Manual or pneumatic or pneumatic with inductive check-back
Ambient temperature	SS316L, Alloy C-22: -10 to 70 °C; PP, PVDF, PEEK: 0 to 70 °C
Max. permissible pressure and temperature	SS316L, Alloy C-22: 16 bar/120°C or 10 bar/140°C PP: 4 bar/60°C or 2 bar/70°C PVDH: 6 bar/90°C or 4bar/100°C PEEK: 10 bar/100°C or 6 bar/120°C PVDF: 2 bar/90°C
Insertion length (approx.)	80mm or 280mm
Wetted parts	SS316L, Alloy C-22, PP, PVDF, PEEK or combination of PVDF/Alloy C-22 (PVDH)
Wetted O-rings	FPM-Viton [®] , FFKM-Kalrez [®] or EPDM
Process connections	Flanges: DIN or AISI, NPT or Ingold DN 25
Pneumatic condition	4 to 6 bar
Flushing condition (water)	1 to 6 bar
Certificate and approval	Declaration of conformity CE; ATEX, FM approvals



InTrac 781 R (pneumatic/with inductive check-back) InTrac 781 M (manual) InTrac 784 R (pneumatic/with inductive check-back)



InTrac 784 M (manual)







ISM®

High precision analytical in-line sensors

Our wide portfolio of in-line solutions includes process pH/ORP and conductivity measurement for all process industries.

Our range of in-line probes and meters includes ATEX and FM approved sensors, sensors and analyzers for pure and ultrapure water, and probes featuring Intelligent Sensor Management (ISM) technology.

ISM provides predictive diagnostics allowing maintenance to be planned for when it will be needed. This reduces the maintenance effort and complexity while also increasing process reliability.

Transmitter

Transmitters are an integral part of in-line measurement systems used to monitor and control industrial processes. METTLER TOLEDO offers a comprehensive range of transmitters for pH, DO, conductivity, CO₂ etc.

A wide range of transmitters meet specific customer needs in many different industries and with highest standards in line with the demands of modern process technology – from basic applications to sophisticated requirements such as HART®-, Profibus®-PA and FOUNDA-TION Fieldbus™ communication as well as Ex approvals for installation in hazardous areas.

Cleaning/calibration system

The EasyClean family consists of different models, each designed to fulfill a defined program of flushing, cleaning or calibration.

With EasyClean 400, fully automatic sensor cleaning and calibration eliminates the effort in manually maintaining sensors.

EasyClean 200 enable flushing of sensors with water and additional cleaning with cleaning agent.

EasyClean 100 and 150 enable automatic rinsing of sensors with water or with the aid of compressed air.

Get On-line Support via www.mt.com/pro

Visit our website at any time for fast and competent information. The very latest, updated product and support documentation are available in many languages.



Product details

Visit us at for more information:

- Brochures
- Case studies
- Application notes
- Technical datasheets
- Certificates
- Operation manuals

www.mt.com/pro

www.mt.com/pro.

Visit for more information

Sales and service:



Mettler-Toledo GmbH Process Analytics

Im Hackacker 15, CH-8902 Urdorf Phone +41 44 729 62 11 Fax +41 44 729 66 36

Subject to technical changes. © 08/2016 Mettler-Toledo GmbH. Printed in Switzerland. 30 283 317