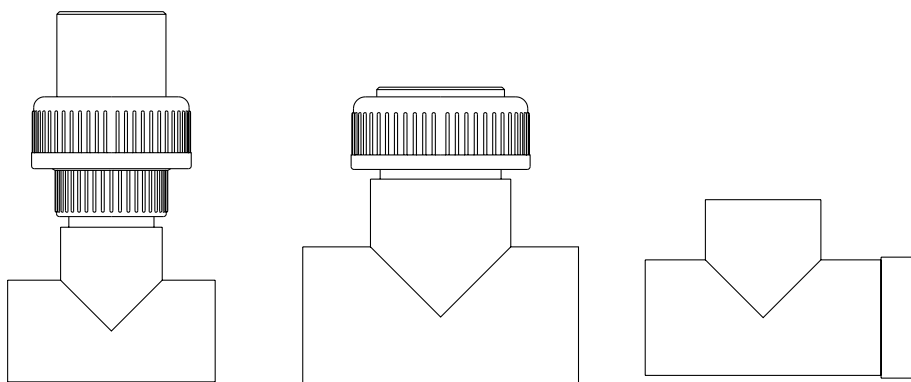


# InFlow™ 751

## Instruction manual



# InFlow™ 751

## Instruction manual

### Contents

	Page
1. Introduction	3
1.1 Conventions	3
2. Important notes	3
2.1 General	3
2.2 Safety precautions	3
3. Description of product and materials	4
4. Installation and start up procedures	4
4.1 Fitting the sensor into the housing	4
4.2 Installation of the housing	4
4.3 Checking for correct installation	6
5. Maintenance	6
6. Product specification	6
6.1 Supply	6
6.2 Technical specification	6
7. Accessories	6
8. Warranty	6
9. Housing dimensions	7

## 1. Introduction

These operating instructions describe how to use the housings InFlow™ 751.

These housings are state of the art, high-grade engineered products, tested by METTLER TOLEDO.

Nevertheless, improper handling could be dangerous.

### 1.1 Conventions



This pictogram represents safety and hazard warnings which, if ignored could result in injuries to personnel and/or in material damage.

## 2. Important notes

### 2.1 General

Immediately on receipt, check that the housing is complete and in good condition. Notify your supplier of any damage or deficiency. Please also refer to your supplier for further information on the ordering of spare parts and accessories.

### 2.2 Safety precautions

Safety and hazard warnings could, if ignored, result in injuries to personnel and/or material damage.



**Important! Work on the housing should be assigned only to trained personnel.**

- Observe local regulations concerning the safety of people and property.
- Be sure to read and follow the instructions in this operating leaflet carefully.
- The InFlow™ 751 housings are designed to contain only METTLER TOLEDO sensors. Any other kind of use could be dangerous and is not

permitted.

- The materials used for the housing are described in Section 3, «Description of product and materials». Make sure the materials are suitable for the required application.
- To ensure that the housing is correctly installed and maintained, follow the instructions given in this leaflet.
- Incorrect handling of the housing can result in a broken sensor and leakage from the vessel.
- Before doing anything to the installed housing, ensure that the process facility is in a safe condition (release pressure, empty, rinse, vent, purge, etc.).
- Use only clean sensors, housings and sockets. Replace any damaged seals and housing components immediately.
- Before starting up, always check the measuring system. Inspect the housing/sensor assembly and check for leaks from housing and apparatus.
- If ever in doubt, consult your supplier.

### 3. Description of product and materials

The insertion housings InFlow™ 751 serve as enclosures for METTLER TOLEDO sensors used for pH, redox and dissolved oxygen, conductivity and turbidity measurements, particularly in industrial waste water.

All parts of the housing in contact with the process (wetted parts) are made of PVC, or PVDF according to order specification.

O-rings in contact with the process medium are made of Viton®.

## 4. Installation and start up procedures

The housing is delivered completely assembled. To fit the sensor, and to install the housing proceed as follows:

### 4.1. Fitting the sensor into the housing (see figure 1)

When installing 12 mm sensors with PG13.5 ensure that the white (Teflon) washer is positioned directly beneath the 12 mm sensor head, with the tapered (chamfered) face pointing downwards. Then follows the O-ring.

Screw the sensor with Pg13.5 or NPT1" thread hand-tight into the housing. Put the housing into the T-piece and tighten the cap nut.

Screw the sensor with NPT 3/4" thread laterally directly into the T-piece.

Connect the cable socket to the sensor.

For the removal of the sensor, carry out the above procedure in the reverse order

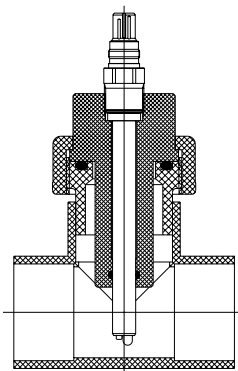
### 4.2 Installation of the housing

The housing can be directly fixed to the pipe by means of a bonding agent (PVC) or by welding (PVDF)

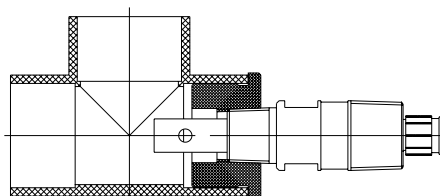
For installation of the InFlow™ 751 in a pipe, please follow the instructions of the pipe supplier.

**Figure 1**

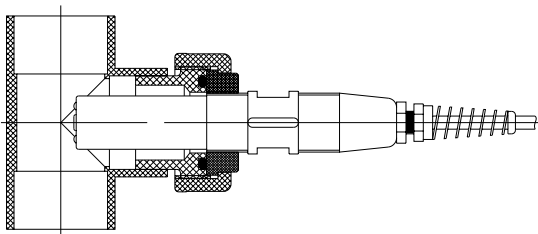
Sensor/electrode with Pg13.5 thread  
mounted in an InFlow™ 751.



Sensor with a NPT 3/4" thread  
mounted in an InFlow™ 751.



Electrode with a NPT 1" thread  
mounted in an InFlow™ 751



4.3 Checking for correct installation



**Important !** Each time before starting up, check the measuring system, inspect the sensor assembly and examine for leaks from housing and apparatus.

Do not begin operation until the measuring system has been checked and any necessary corrective action taken.

5. Maintenance

The sensor, housing and socket must be kept clean. Replace any damaged seals or components immediately.

Details on maintenance of the sensor are contained in the sensor operating instructions.



**Attention:** Before mounting the housing, it is imperative to clean and grease the O-rings with anti-seize.



**Important:** It is advisable that all O-rings are replaced periodically.

6. Product Specification

6.1 Supply

A standard delivery comprises the following items:

- Housing Type InFlow™ 751
- Operating instructions

6.2 Technical specification

<b>Temp.-range:</b>	0...60 °C	PVC
	0...100 °C	PVDF
<b>Pressure range:</b>	PVC	0...4 bar up to 45 °C
	PVC	0...1 bar > 45 °C
	PVDF	0...4 bar up to 75 °C
	PVDF	0...1 bar > 75 °C
<b>Material:</b>	All wetted parts made of PVC or PVDF	

according to order specification.  
Seals made of Viton®

**Dimensions:** see chapter 9

**For further details on sensors, see sensor data sheets or ask the supplier of your housing.**

7. Spare parts

Articles	Order-No.
Electrode holder PVC d=32	52 400 653
Electrode holder PVC d=50	52 400 654
Electrode holder PVC d=63	52 400 655
Electrode holder PVDF d=32	52 400 656
Electrode holder PVDF d=50	52 400 657
Electrode holder PVDF d=63	52 400 658

8. Warranty

The housings are of high technical quality and undergo a policy of continuous design review to incorporate the latest advances. Their reliability is ensured by a thorough final inspection prior to leaving our factory.

The warranty is valid for one year from the date of delivery and covers any defects due to faulty materials or manufacture.

Not covered by the warranty are normal wear and tear and any damage caused by improper use (e.g. chemical incompatibility of the materials, etc.).

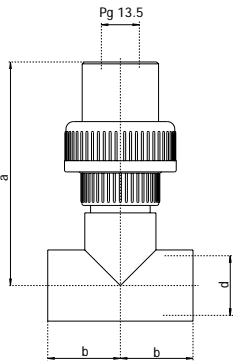
The warranty extends only to replacement or repair of deficient products, at our discretion.

The warranty is void if the customer or others modify in any way the products supplied by us. Defects must be reported to the supplier immediately upon discovery, and, under all circumstances, within the warranty period.

9. Housing Dimensions

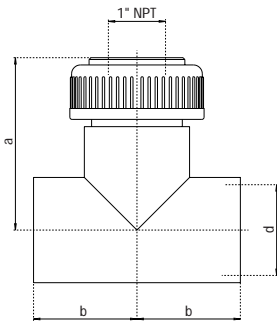
Pg13.5

	d	a	b	a	b
DN25	32	120	39	120	38
DN40	50	113	57	113	51
DN50	63	107.5	71	106.5	62



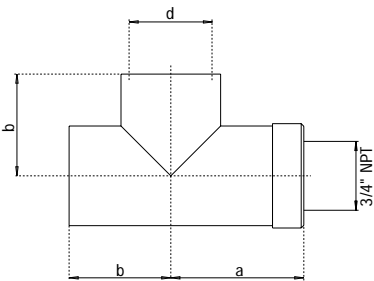
1" NPT

	d	a	b	a	b
DN40	50	93	57	88	51
DN50	63	108	71	102	62



3/4 inch NPT

	d	a	b	a	b
DN25	32	51	39	51	38
DN40	50	63	57	63	51
DN50	63	77	71	77	62



- BR** **Mettler-Toledo Ind. e. Com. Ltda.**, Alameda Araguaia, 451-Alphaville, BR-06455-000 Barueri-SP, Brazil, Tel. +55 11 4166-74 00, Fax +55 11 4166-74 01
- CH** **Mettler-Toledo (Schweiz) AG**, Im Langacher, CH-8606 Greifensee, Switzerland  
Tel. +41 1 944 45 45, Fax +41 1 944 45 10
- D** **Mettler-Toledo GmbH**, Prozeßanalytik, Ockerweg 3, D-35396 Gießen, Germany  
Tel. +49 641 507-333, Fax +49 641 507-397
- F** **Mettler-Toledo Analyse Industrielle Sàrl**, 30 Boulevard Douaumont, PB 949, F-75829 Paris Cedex 17, France  
Tel. +33 1 47 37 06 00, Fax +33 1 47 37 46 26
- USA** **Mettler-Toledo Ingold, Inc.**, 36 Middlesex Turnpike, Bedford, MA 01730, USA  
Tel. +1 781 301-8800, Fax +1 781 271-0681

Mettler-Toledo GmbH, Process Analytics, Industrie Nord, CH-8902 Urdorf

Tel. +41 1 736 22 11, Fax +41 1 736 26 36

9/97 Subject to technical changes. © Mettler-Toledo GmbH