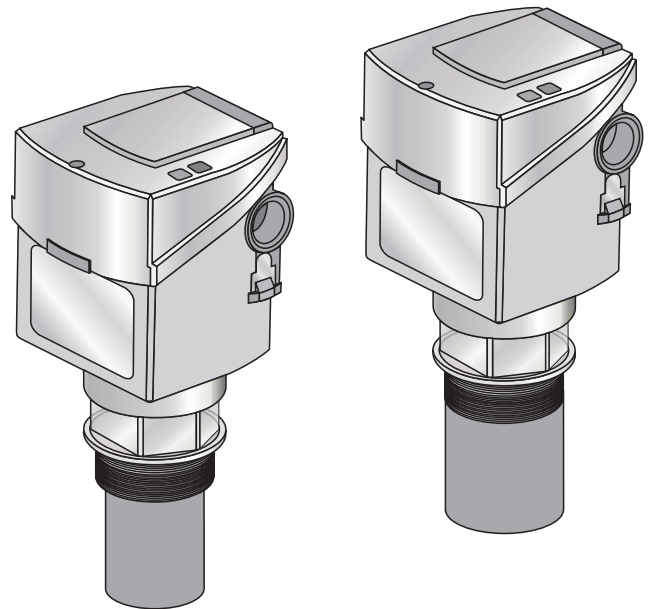
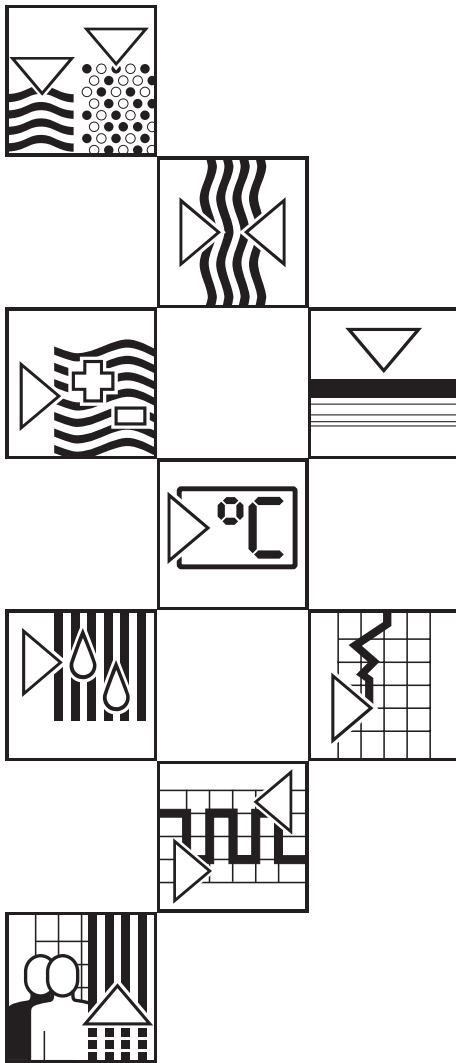


# *prosonic T* FTU 230, 231

## Ultrasonic Level Measurement

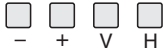
### Operating Manual



# Quick Reference Guide: Calibration

## Quick and Easy Without Display

More information starting on page 16



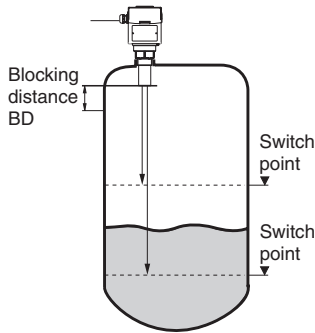
Reset



Relay energized



Relay de-energized



## More Functions With Plugged-In Display

More information starting on page 18



1. Reset instrument V9H5

- Entry: **333**

2. Select length unit V8H2

- Entry: **0: m**

**1: ft**

3. Applications V0H3

- Entry:

**0: Liquid**



1: Rapid level change



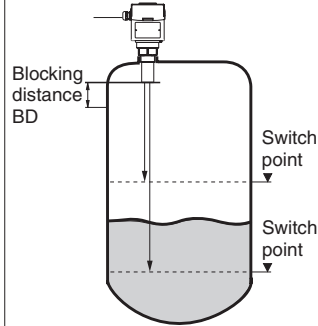
2: Dome cover



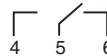
3: Coarse bulk solids



4: Conveyor belt



de-energized status



4. Relay energized in V0H5

- Entry: distance to switch point

5. Relay de-energized in V0H6

- Entry: distance to switch point



### Caution!

In order to obtain a steady measured value, a short time of approximately 20 seconds must elapse before the empty and full calibration.

### Caution!

If the parameters are locked by pressing push buttons, the programming is no longer possible via the display.

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## **IMPORTANT NOTICE RETURN AUTHORIZATION POLICY**

Endress+Hauser must pre-approve and assign a Return Authorization number to any instrument you plan to return. Please identify the Return Authorization number clearly on all shipping cartons and paperwork.

Please note that the issuance of a Return Authorization number does not automatically mean that credit will be issued, or that the return is covered by our warranty. An Endress+Hauser associate will contact you regarding the disposition of your returned equipment.

In order to serve you better, and to protect our employees from any potentially hazardous contaminants, Endress+Hauser must return unopened, at the sender's expense, all items that do not have a Return Authorization number.

To get a Return Authorization number, call

**1-800-428-4344  
In Canada 1-800-668-3199**

Please be sure to include the following information when requesting a Return Authorization number. This information will help us speed up the repair and return process.

Customer name:

Customer address:

Customer phone number:

Customer contact:

Equipment type:

Original sales order or purchase order number:

Reason for return:

Failure description, if applicable:

Process material(s) to which the equipment has been exposed:

OSHA Hazard Communication Standard 29CFR 1910.1200 mandates that we take specific steps to protect our employees from exposure to potentially hazardous materials. Therefore, all equipment so exposed must be accompanied by a letter certifying that the equipment has been decontaminated prior to its acceptance by Endress+Hauser.

The employees of Endress+Hauser sincerely appreciate your cooperation in following this policy.

Address your equipment to:

Endress+Hauser

2350 Endress Place

Greenwood, IN 46143

Return Authorization number:

In Canada:

Endress+Hauser

1440 Graham's Lane, #1, Burlington

Ont. Canada L7S 1W3

Return Authorization number:

# 1 Safety Instructions

The Prosonic T FTU compact transmitters have been designed to operate safely in accordance with current technical and safety standards and must be installed by qualified personnel according to the instructions in this manual. The manufacturer accepts no responsibility for any damage arising from incorrect use, installation or operation of the equipment. Changes or modifications to the equipment not expressly approved in the operating instructions or by the bodies responsible for compliance may make the user's authority to use the equipment null and void. Damaged instruments which may be a safety hazard must not be operated and are to be marked as defective.

## 1.1 Certificates

FTU 23XA - <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		FTU 230/FTU 231 4-wire non Ex
A	Standard	X
N	CSA General Purpose for Version A only	X

## 1.2 Installation and Startup

Installation, electrical connection, startup, operation and maintenance may only be carried out by trained and authorized personnel. Personnel must read and understand these operating instructions before installing and programming the system.

## 1.3 Operation

The instruments may only be operated by trained personnel authorized by the plant operator. The instructions given in this manual are to be followed exactly.

## 1.4 Repairs, Dangerous Chemicals

The procedures listed below must be carried out before a Prosonic T is sent to Endress+Hauser for repair.

- A note must be enclosed with the instrument, containing a description of the fault, the application and the chemical and physical properties of the material being measured.
- Remove all residue which may be present. Pay special attention to the gasket grooves and crevices where material may be present. This is especially important if the material is dangerous to health, e.g. corrosive, poisonous, carcinogenic, radioactive, etc.
- No instrument should be returned to us without all dangerous material being removed first.

Incomplete cleaning of the instrument may result in waste disposal requirements or cause harm to personnel (burns, etc.). Any costs arising from this will be charged to the operator of the instrument.

See Return Authorization Policy on page 4.

## 1.5 Technical Improvements

The manufacturer reserves the right to modify technical data without prior notice.

以上内容仅为本文档的试下载部分，为可阅读页数的一半内容。如要下载或阅读全文，请访问：<https://d.book118.com/005021204123011222>