en

Translation of the original instructions

FLOW METER

Type

TR3-PP
TR3-PVDF

0697-001 TR3 - 11/2020

Please read this manual before starting up.

To be retained for future reference.

Table of Contents

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1. Concerning this manual

This manual
- is part of this product
- is valid for all mentioned series
- describes the safe and proper use in all operating stages

1.1 Terms

User: Single person or organisation who is using the products e.g. customer, user, assistant
Children: Young persons up to and including the age of 14 years.

1.2 Target groups

Target group	Task
User	▶ Retain these operating instructions at the product's place of use for future reference. ▶ Demand the staff to read and observe these instructions and the additional valid documents, in particular the safety information and warnings. ▶ Observe additional regulations and instructions concerning the plant.
Qualified personnel, installer	▶ Read, observe and follow these instructions and the additional valid documents, in particular the safety information and warnings.

Tab. 1: Target groups and their tasks

1.3 Associated applicable documents

None

1.4 Warnings and symbols

Warning	Level of risk	Consequences in case of non-compliance
DANGER	direct danger	death or serious injury
WARNING	possible direct danger	death or serious injury
CAUTION	possible dangerous situation	light injury
NOTICE	possible dangerous situation	damage of property

Tab. 2: Warnings and consequences in case of non-compliance

Symbol	Meaning
⚠	Safety information ► Comply with all measures that are marked with a safety sign to prevent injuries or death.
i	Information / Recommendation
►	What to do
→	Cross reference
✓	Requirement

Tab. 3: Symbols and meaning

1.5 Latest state

Please find the latest state of this operating instruction under www.lutz-pumpen.de.

1.6 Copyright

2. Safety

The manufacturer will not be held responsible for any damages resulting from non-compliance of the overall documentation, in particular for damages in case of non-compliance of the operating instructions.

2.1 General safety information

Observe following regulations before accomplishing all activities.

Product safety

The flow meter is constructed in conformity with the state of the art and approved safety-related standards. Danger however can occur during use for life and health of the user or third parties or damage of the flow meter and other material assets. Therefore:

- Operate the flow meter only in a technically sound state, for its proper use, and conscious of safety and hazards taking into account these instructions.
- Ensure that these instructions and all associated applicable documents are complete, legible, and stored in a place that personnel can access at all times.
- Refrain from any manner of working that endangers personnel or uninvolved third parties.
- In the case of a safety-relevant malfunction, stop the flow meter immediately and enlist a responsible person to rectify the malfunction.
- In addition to the overall documentation, observe the statutory or other safety and accident prevention regulations, as well as the valid standards and guidelines of the respective operating country.

Modifications

Unless the manufacturer has provided its consent in writing, the manufacturer is not liable for interventions performed by the user (modifications) on the product, such as conversion, alteration, new design, etc. Modifications not agreed with the manufacturer may have the following effects, among others:

- Functional impairments on the appliance or plant
- Damage to the appliance and other property damage
- Environmental damage
- Personal injuries right through to death

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Duties of the operator

Safety-conscious working

- Operate the flow meter only in a technically sound state, for its proper use, and conscious of safety and hazards taking into account these instructions.
- Ensure observance and monitoring of:
  - Proper use
  - Statutory or other safety and accident prevention regulations
  - Safety provisions in handling hazardous substances
  - Valid standards and guidelines in the respective country of operation
- Provide protective equipment.

Personnel qualification

- Ensure that personnel tasked with work on the flow meter have read and understood these instructions and all associated applicable documents, particularly safety, maintenance and servicing information, before they start work.
- Clarify responsibilities, competencies and monitoring of the personnel.
- Ensure that all work is carried out by technical qualified personnel only:
  - Assembly, servicing, maintenance work
  - Work on the electrics
- Personnel to be trained must only work on the flow meter under the supervision of technical personnel.

Statutory warranty

- During the guarantee period, obtain the manufacturer's permission for modifications, maintenance work or alterations.
- Use only original parts.

Duties of the personnel

- Observe the notices on the flow meter and maintain them in a legible state.
- Use protective equipment where necessary.
- Only perform work on the flow meter during downtime.
- For all assembly and maintenance work on the flow meter, remove the batteries.
- After completing all the work on the flow meter, remount the safety devices in accordance with specifications.

2.2 Proper use

The flow meter TR3 is a flow meter for flowing liquids based on the measuring principle of a turbine wheel meter where gauging metering is not required. The flow meter is suitable for stationary use as well as for mobile filling process.

The flow meter TR3 turbine meter consists of a measuring chamber with a turbine and an electronic housing which contains the evaluation electronics, display, and keypad. The turbine is equipped with a magnet which transfers the measurement pulses to a reed switch on the evaluation electronics when a medium flows through it.

The flow meter TR3 has a non-resettable total volume memory and 8 resettable partial volume memory slots.

⚠ DANGER

The metering of non-compatible liquids damages the flow meter.
Splashing liquid can cause injury.
Check by means of the materials indicated in the technical data and a resistance table (e. g. Lutz resistance table) whether the flow meter is suitable for the delivered liquid.

⚠ DANGER

Fire and explosion hazard due to delivered liquid!
Combustion hazard. Blast wave: Flying parts can kill you.
The flow meter is not explosion proof. It is not allowed to put the flow meter into operation inside of hazardous location and with explosion hazard, oxidizing, highly or easily flammable liquids.

⚠ DANGER

Exceeding the temperature range and the operating pressure causes damage to the flow meter.
Splashing liquid or flying parts can cause injury.
The ranges indicated in the technical data for temperature of liquid and operating pressure have to be observed.

2.2.1 Technical data

		TR3-PP		TR3-PVDF	
Material	Cover	PC			
	Keypad	PES			
	Impact protection	NBR			
Material (in contact with the medium)	Measuring chamber	PP		PVDF	
	Rotor	PP		PVDF	
	Shaft	Hastelloy C-22			
	Bearing ball	PTFE			
	Sealing	PTFE			
Volume flow range		5 – 120 l/min			
Range of viscosity		0.8 – 40 mPas			
Operating pressure (max.)		10 bar			
Burst pressure (min.)		20 bar			
Measuring accuracy (uncalibrated) *		± 2%			
Measuring accuracy (calibrated) *		± 1%			
Repeat accuracy		± 0.5 %			
Connection thread		G 1	G 1 1/4	G 1	G 1 1/4
Protection class		IP 65			
Battery		Two 1.5 V batteries (AAA) replaceable			
Temperature range		Operation: -10 °C - +50 °C			
		Storage: -20°C - +70°C			
Dimensions approx.:		85 x 123 x 52 mm			
Weight approx.:		0.22 kg		0.24 kg	

* Test assembly: Medium: water/diesel, flow in the preferred direction, settling section of 0.2 m on inlet and outlet of the flow meter

2.2.2 Liability

If the product and supplied accessories are used for other purposes than the intended purpose, it is the responsibility of the user to check the suitability and admissibility. Product use not confirmed in writing by the manufacturer absolves the manufacturer of any liability.
The manufacturer is not liable for consequences of incorrect treatment, use, maintenance, servicing and operation of the appliance, as well as normal wear and tear. The same applies if faults arise from intervention or configurations on the part of the user not confirmed by the manufacturer.

2.2.3 Prevention of obvious misapplication (examples)

⚠ WARNING

Equipment misuse can cause the meter to rupture or malfunction and cause serious injury.

- Do not pump flammable liquids.
- Do not operate the flow meter in explosion hazard area.
- Do not leave the equipment unattendedly while dispensing.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- Use only fluids and solvents that are compatible with the equipment. Read all fluid and solvent manufacturer's warnings.
- Seal all fluid connections before operating this equipment
- Do not stop or deflect leaks with hands, body, gloves or rags.
- Do not dispense liquid towards any person or any part of the body.

3. Configuration

3.1 Identification

Rating plate

Fig. 1: Rating plate

1 Type
2 Serial number
3 Year of construction (last two digits of the serial number e.g. -18 for 2018)
4 CE-Identification

3.2 Display

LCD display with

- Four-digit volume display with digits measuring 17 mm in height for current dispensation
- Seven-digit display with digits measuring 6 mm in height for totalizers
- Display in liter units (optional: GAL, PTS, QTS) and flow rate (l/min)
- Low battery alert on display.

Minimum digital step of the measured value is 0.01 litres, minimum digital step of non-resettable totalizer is 1 litre.

3.3 Keypad

Front membrane with three keys: "Reset", "Mode" and "Light".

3.4 Battery

Two 1.5 V batteries (AAA) with a minimum service life of approx. 5 years for a flow quantity of 1,000,000 liters during this period without use of the illumination. If the illumination is used, the service life decreases with frequency of use.

The battery can be replaced after opening the housing (→ chapter 8.2). Volume and calibration values are not affected by battery replacement.

4. Transport and storage

4.1 Transport

Unpacking and checking condition of delivery

► Unpack the flow meter on receipt and check for transport damages.
► Report transport damages to the manufacturer immediately.
► Check that the consignment is complete as ordered.

4.2 Storage

NOTICE

Damage of property as a result of incorrect storage!

► Complete emptying of flow meter.
► Store flow meter protected against weather effects and UV-rays.

5. Assembly

5.1 General

Before assembly all parts have to be checked for particles of packing material.

The flow meter TR3 possesses G1 external threads on both sides which allow it to be installed in any pipe. When doing so, please ensure that the meter is not under mechanical stress due to tension/ pressure or bending. To avoid this, an elastic equalizing element is to be used, and the lines are to be supported in a suitable manner. In order to prevent damage, the tightening torque at the G1 external threads are not to exceed 30 Nm.

The flow direction can be chosen freely.

We recommend the use of front-side flat seals or O-rings at the ends of the screw threads for sealing purposes.

After being screwed into the pipe, the electronic housing can be rotated freely around the measuring chamber. This allows the display to be brought into a position that is comfortable for the user.

The pressure surges that occur in the pipe are not to exceed the nominal pressure.

5.2 Assembly with drum pump connection G1

1. Screw the drum pump connector G1 (1) at the inlet of the flow meter (→ Fig. 2).

Now commercially available hose connectors G 1 can be connected at the outlet of the flow meter.

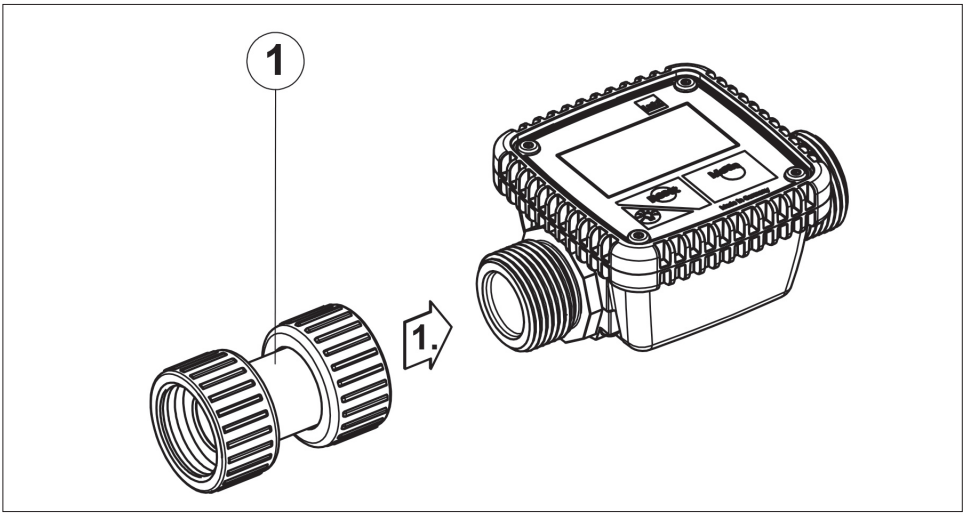

Fig. 2

5.3 Assembly with drum pump connection G1 1/4

Before assembly all parts have to be checked for particles of packing material.

1. Push the wing nut (1) onto the threaded nipple (2) (→ Fig. 3)
2. Screw the threaded nipple (2) into the threaded sleeve (3)
3. Insert the seal (4) in the threaded sleeve (3)
4. Screw the threaded sleeve (3) onto the flow meter
5. Insert the seal (5) in the reducing connector (6)
6. Screw the reducing connector (6) onto the flow meter
7. Insert the seal (7) into the wing nut (1)
8. Screw the flow meter together with the mounted parts onto the drum pump

Now commercially available hose connectors G 1 1/4 can be connected at the reducing connector (6).

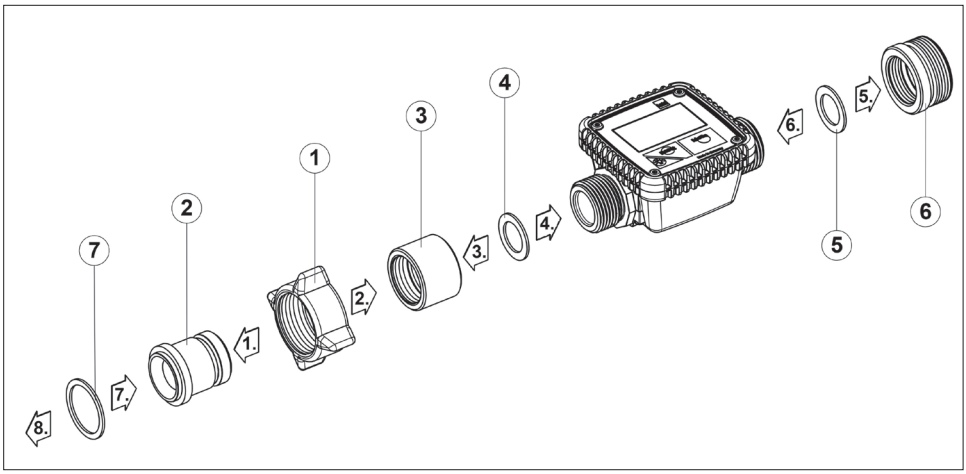

Fig. 3

5.4 Assembly at nozzle PP/PVDF with standard hose connector and hose connector twistable

Before assembly all parts have to be checked for particles of packing material.

1. Push the wing nut (1) over the threaded nipple (2) (→ Fig. 4)
2. Screw the threaded nipple (2) into the threaded sleeve (3)
3. Insert the seal (4) in the threaded sleeve (3)
4. Screw the threaded sleeve (3) onto the flow meter
5. Insert the seal (5) into the wing nut (1)
6. Screw the flow meter with wing nut (1) onto the nozzle
7. Insert the seal (6) into the connection sleeve (7)
8. Screw the connection sleeve (7) onto the flow meter
9. Screw the flow meter together with the mounted parts onto the hose connector twistable

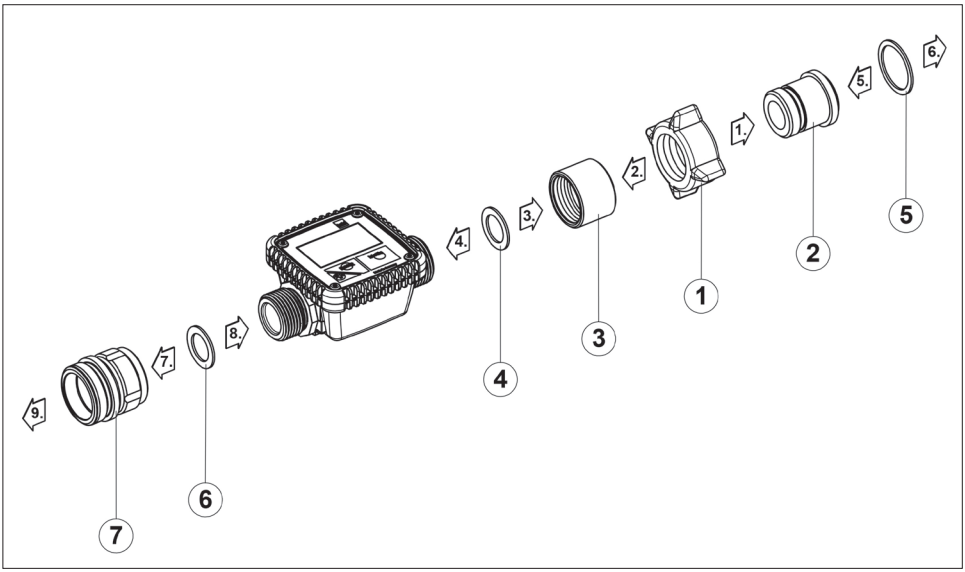

Fig. 4

Now commercially available hose connectors G 1 1/4 or hose connector twistable can be connected at the flow meter.

If our hose connector twistable is used, sliding surfaces and seal ring must be wetted with a suitable lubricant. Compatibility with the flow medium must be observed!

5.5 Insert battery

NOTICE

- ► Use the Torx T10 allen key supplied for the screws.
- ► Only tighten the screws hand-tight.

To insert the battery, loosen the front cover (1) by unscrewing the four screws (2) on the top and then pull it off upwards (→ Fig. 5). Remove the battery holder (3) from the housing and insert the supplied batteries (4) (1.5V type AAA). The device is then closed back up in reverse order. When doing so, ensure that the rubber shock protector is in the correct orientation. The battery cable needs to be laid such that it is not pinched between the reed switch and the housing.

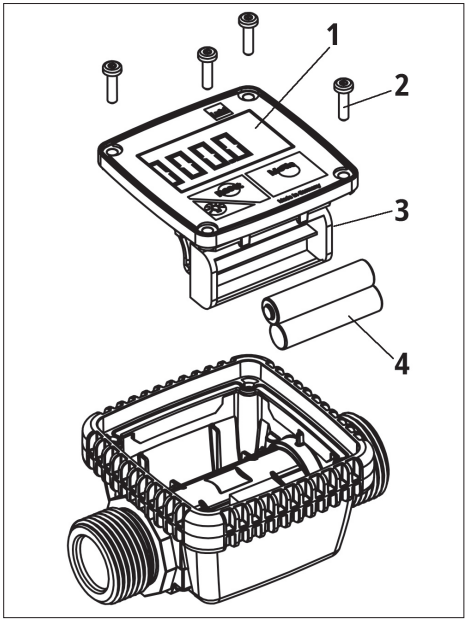

Fig. 5

5.6 Rotating the display

NOTICE

- ► Use the Torx T10 allen key supplied for the screws.
- ► Only tighten the screws hand-tight.

The display of the flow meter TR3 (1) can be mounted either vertically or horizontally for easy reading depending on how the meter is mounted (→ Fig. 6).
To turn the display, the four screws (2) on the top side are loosened and the display is pulled upwards. The display can now be replaced in any desired orientation.
The rubber shock protector (3) is not to be rotated along with the display.
The battery holder (4) may have to be placed on the other side of the meter housing (5) to avoid collision between the battery holder and the battery plug (6).
The battery cable needs to be laid such that it is not pinched between the reed switch and the housing.

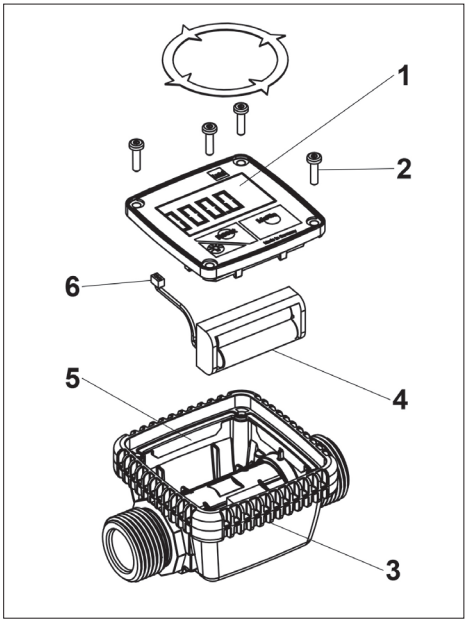

Fig. 6

6. Operation

✓ All connections and fittings are properly tightened.

The flow meter TR3 is operated using three keys (→ Fig. 7): "Reset" (2), "Mode" (3) and "Light" (1). Information is shown on the LCD display (4) with a permanently visible display.
The flow meter is set by the manufacturer with unit of measurement “Litres” and calibration factor “1.000”. The accuracy of the display can be increased by calibration, and the unit of measurement can be adjusted (→ chapter 7). After installation, the meter is ready to measure dispensations without requiring further configuration.

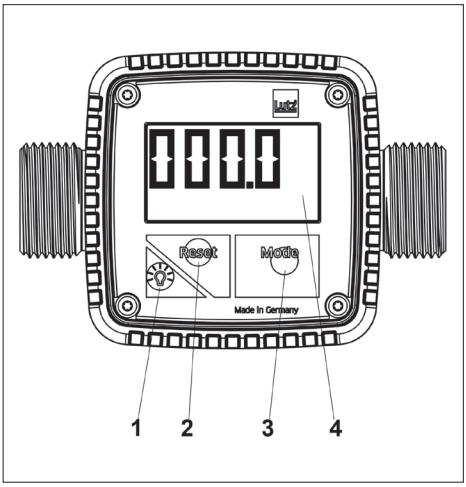

Fig. 7

6.1 Description of display

The display is divided into various areas (→ Fig. 8)

1. Four-digit partial volume display with floating point, values range from 0.00 to 9999
2. Battery symbol
3. Indicates partial volume totalizer (TOTAL 1 – TOTAL 8) or total volume totalizer (TOTAL)
4. Seven-digit totalizer display, values range from 0 to 9999999
5. Volume flow display
6. Volume unit display

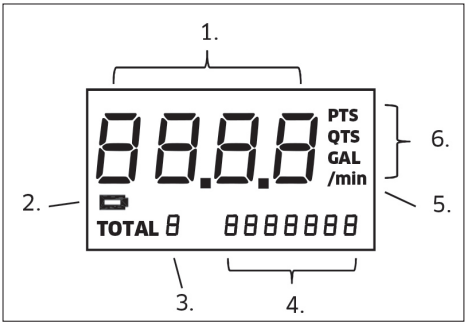

Fig. 8

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6.2 Dispensation mode

For daily use, the flow meter TR3 is set to **dispensation mode**.

6.2.1 Dispensation active

During a dispensation, both the partial volume display as well as the selected totalizer will be continually updated. The total volume totalizer will always be updated in the background even if it is not shown on the display.

The following key combinations are possible during dispensation:
"Light" key: The display illumination is turned on for 15 seconds.

"Mode" key: The current flow rate is shown in the partial volume display for as long as the "Mode" key is held down.

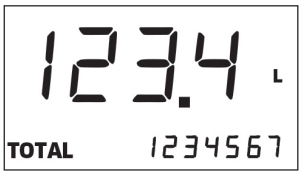
6.2.2 No active dispensation

The partial volume for the last dispensation as well as the current value for the selected totalizer are shown on the display. The following key combinations are possible:
"Light" key: The display illumination is turned on for 15 seconds.

"Reset" key: Pressing this key for a short time resets the partial volume display.

Holding it down for a longer time resets the active partial volume totalizer. The total volume totalizer cannot be reset.

"Mode" key: Pressing this key for a short time toggles between partial volume totalizers (TOTAL 1 – TOTAL 8) and the total volume totalizer (TOTAL) shown.



Holding down the "Mode" key for a longer time until the program version is shown (e.g. "P1.33") switches the device to **programming mode** (→ chapter 7).

7. Programming the meter

The device allows the unit of measurement (liters, US gallons, US quarts, US pints, imperial gallons, imperial quarts, imperial pints) to be selected, the basic selection of the medium characteristic curve (watery media, thin mineral oils) to be performed, as well as a calibration to be performed to optimize measurement accuracy.

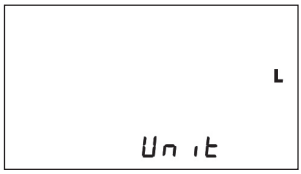
7.1 Change over into programming mode

Hold down the "Mode" key until the program version is shown (e.g. "P1.33") to switch to **programming mode**.

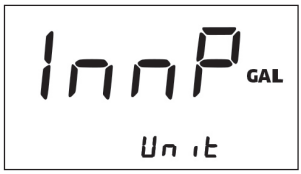
Once the key is released, a display test is carried out. Subsequently, multiple settings can be configured in succession, beginning with the **selection of the unit of measurement for volume**. In programming mode, the display will blink. If no key is pressed for more than 60 seconds, the device will cancel programming mode and return to **dispensation mode**.

7.2 Setting the unit of measurement

The configured unit of measurement is shown and can be changed if necessary. If the unit is changed, the partial volume shown as well as all totalizers will automatically be converted.



"Reset" key: Toggles between the units liters (L), US gallons (US GAL), US quarts (US QTS), US pints (US PTS), imperial gallons (IMP GAL), imperial quarts (IMP QTS) and imperial pints (IMP PTS).



"Mode" key: Confirms the volume unit shown and switches to **meter type selection**.

7.3 Setting the meter type

The flow meter TR3 meter is configured with two optimized characteristic curves for the measuring chamber made of PP and measuring chamber PVDF. One of these two characteristic curves can be chosen.

"Reset" key: Switches between the characteristic curves for the measuring chamber PP and measuring chamber PVDF.

"Mode" key: Confirms the characteristic curves shown and switches to **calibration**.

7.4 Setting the calibration factor

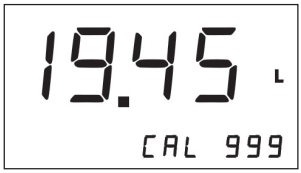
7.4.1 Calibration

The selected characteristic curve of the flow meter TR3 can be subjected to an additional calibration to compensate for special operating conditions, such as unusual fluid temperatures or borderline flow values.

The partial volume display shows the measured quantity of the last dispensation and the calibration factor in the bottom line (factory setting 1000, setting range 500 - 1500).

"Reset" key: Increases calibration factor by 1, increases the displayed output quantity per revolution of the turbine wheel by 1/1000. Hold the key to increase the setting speed.

"Light" key: Decreases calibration factor by 1, decreases the displayed output quantity per revolution of the turbine wheel by 1/1000. Hold the key to increase the setting speed.



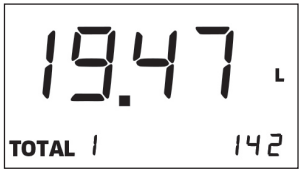
"Mode" key: Confirms the calibration factor shown and switches back to **dispensation mode**.

7.4.2 Calibration with measuring vessel

One easy way to perform a calibration is by performing a comparison using a sufficiently large and precise measuring vessel. Proceed as follows:

1. Meter is in dispensation mode, partial volume counter has been deleted.

2. The dispensation is carried out at a flow speed that is as constant as possible until the measuring vessel is filled to the defined volume.



3. Switch to programming mode, sub-menu "Calibration" (skip volume unit and fluid menus with the "Mode" key).

4. Adjust the calibration factor until the quantity displayed corresponds to the quantity dispensed into the measuring vessel.

5. Save the new calibration factor and return to **dispensation mode**.

8. Maintenance

8.1 Cleaning the flow meter

In the case of dirt or stains on the exterior of the device, clean it carefully using a damp cloth and mild cleaning agent. Do not use any aggressive (e.g. abrasive, chlorine-containing) cleaning agents or solvents. The screen of the display may turn milky upon contact with solvents.

8.2 Changing the batteries

When the battery symbol appears on the display, it is recommended that the batteries of the flow meter TR3 be changed as soon as possible. It will be possible to continue using the meter, but the display illumination will not work.

If all that appears on the display is a blinking battery symbol, it will be necessary to change the batteries before the meter can be used again.

NOTICE

- ► Use the Torx T10 allen key supplied for the screws.
- ► Only tighten the screws hand-tight.

All displayed and saved values are retained during a battery change.
To change the battery, remove the front cover by loosening the four screws on the top and pulling the cover upwards (→ Fig. 9). Now remove the battery holder from the device housing and replace the batteries with normal store-bought batteries (1.5 V, type AAA). The device is then closed back up in reverse order. When doing so, ensure that the rubber shock protector is in the correct orientation. The battery cable needs to be laid such that it is not pinched between the reed switch and the housing.

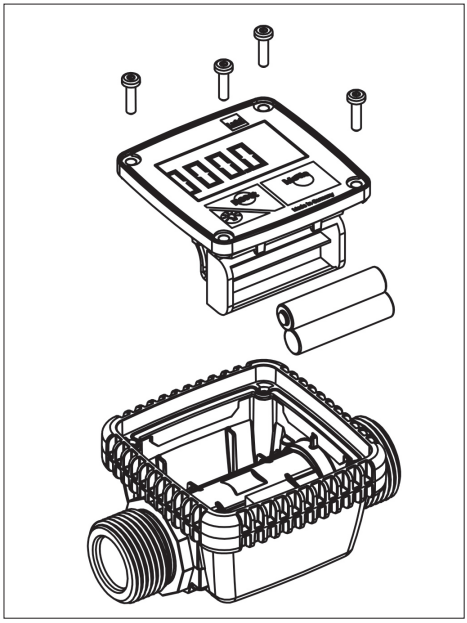


Fig. 9

9. Error messages – What do I do when...?

...the battery symbol appears on the display?
Change the batteries. (→ chapter 8.2)

...nothing appears on the display?
Ensure that the batteries have been placed in the correct orientation and the battery cable has been connected to the control circuit board.
Check if the batteries have sufficient charge. Replace batteries if necessary. (→ chapter 8.2)

...the value on the display does not change, or only moves very slowly?
Free the turbine in the measuring chamber of foreign objects.

...the display shows too much or too little?
Check that the permissible flow rate and media specifications are complied with.
Calibrate the flow meter (→ chapter 7.4)

...the illumination no longer works?
Change the batteries (→ chapter 8.2)

10. Waste disposal

The device is to be emptied completely and the liquids properly disposed of in case it is taken out of service. In case the device is put out of service permanently then it has to be disposed of properly:

- ► Return old metal for recycling.
- ► Return plastic parts for recycling.
- ► Return electronic waste for recycling.

NOTICE

The water legal regulations are to be followed.

10.1 Return of batteries

Batteries must not be disposed of with the domestic waste. Batteries can be returned free of charge via a suitable collecting point or to the dispatch stores. Consumers are legally obliged to return used batteries.
Batteries that contain harmful substances are marked with a crossed out dustbin (see above) and the chemical symbol (Cd, Hg or Pb) of the heavy metal that is decisive for the classification as containing harmful substances:

1. "Cd" stands for cadmium.
2. "Pb" stands for lead.
3. "Hg" stands for mercury.

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Ersatzteil-Liste

Techn. Stand: **2019-02**

Durchflusszähler
TR3-PP/PVDF

Spare Part List

State of Art: **2019-02**

Flow Meter
TR3-PP/PVDF

Pos. Item	Best.-Nr. Order No.	Bezeichnung	Description	St. Qty.
	0204-097	Anschlussmuffe PP, G 1 1/4, für Ausführung Zapfpistole	connection sleeve PP, G 1 1/4, for nozzle version	1
	0204-098	Anschlussmuffe PVDF, G 1 1/4, für Ausführung Zapfpistole	connection sleeve PVDF, G 1 1/4, for nozzle version	1
	0213-113	Reduziernippel (PP, für Fasspumpenanschluss G 1 1/4)	reducing connector (PP, for drum pump connection G 1 1/4)	1
	0213-114	Gewindenippel (PP, für Fasspumpenanschluss G 1 1/4 oder Anschluss an Zapfpistole)	threaded nipple (PP, for drum pump connection G 1 1/4 or connection on nozzle)	1
	0213-115	Gewindebuchse (PP, für Fasspumpenanschluss G 1 1/4 oder Anschluss an Zapfpistole)	threaded sleeve (PP, for drum pump connection G 1 1/4 or connection on nozzle)	1
	0213-116	Reduziernippel (PVDF, für Fasspumpenanschluss G 1 1/4)	reducing connector (PVDF, for drum pump connection G 1 1/4)	1
	0213-117	Gewindenippel (PVDF, für Fasspumpenanschluss G 1 1/4 oder Anschluss an Zapfpistole)	threaded nipple (PVDF, for drum pump connection G 1 1/4 or connection on nozzle)	1
	0213-118	Gewindebuchse (PVDF, für Fasspumpenanschluss G 1 1/4 oder Anschluss an Zapfpistole)	threaded sleeve (PVDF, for drum pump connection G 1 1/4 or connection on nozzle)	1
	0213-132	Fasspumpenanschluss G 1, PP beinhaltet: 0313-009	drum pump connection G 1, PP consisting of: 0313-009	1
	0213-137	Fasspumpenanschluss G 1, PVDF beinhaltet: 0313-009	drum pump connection G 1, PVDF consisting of: 0313-009	1
	0213-163	Messkammer kpl. PP	measuring chamber cpl. PP	1
	0213-164	Messkammer kpl. PVDF	measuring chamber cpl. PVDF	1
	0313-009	Flachdichtung PTFE	flat seal PTFE	2
	0313-195	Dichtung PTFE (für Fasspumpenanschluss G 1 1/4 oder Anschluss an Zapfpistole)	seal PTFE (for drum pump connection G 1 1/4 or connection on nozzle)	1
	0332-028	Batterie	battery	2
	0343-106	Flügelüberwurfmutter (PP, für Fasspumpenanschluss G 1 1/4 oder Anschluss an Zapfpistole)	wing nut (PP, for drum pump connection G 1 1/4 or connection on nozzle)	1
	0343-197	Flügelüberwurfmutter (PVDF, für Fasspumpenanschluss G 1 1/4 oder Anschluss an Zapfpistole)	wing nut (PVDF, for drum pump connection G 1 1/4 or connection on nozzle)	1
	0373-123	Deckel kpl. beinhaltet: 0332-028	cover cpl. consisting of: 0332-028	1
	0373-124	Batteriehalter	battery-holder	1

• Verschleißteil / wearing part + Neuteil / new part

Bei Ersatzteilbestellungen immer Bestell.-Nr. angeben und Fertigungs-Nr oder Auftrags-Nr. des zu reparierenden Gerätes.
Der Nettowarenwert einer Bestellung muß mindestens EUR 25,-- (ohne MWSt.) betragen.
When ordering spare-parts always indicate the corresponding order No. and production No. or order No. of the unit to be repaired.
Minimum net value of spare part order shall amount to EUR 25,-- (without VAT).
Änderungen vorbehalten. / Subject to change.

Lutz Pumpen GmbH * Erlenstr. 5-7 * 97877 Wertheim * Tel. 09342/879-0 * Fax 09342/879-404
Internet: http://www.lutz-pumpen.de * e-mail: info@lutz-pumpen.de

Ersatzteil-Liste

Techn. Stand: **2019-02**

Durchflusszähler
TR3-PP/PVDF

Spare Part List

State of Art: **2019-02**

Flow Meter
TR3-PP/PVDF

Pos. Item	Best.-Nr. Order No.	Bezeichnung	Description	St. Qty.
	0213-050	Durchflusszähler TR3-PP für Fasspumpenanschluss G 1 1/4	flow meter TR3-PP for drum pump connection G 1 1/4	1
	0213-051	Durchflusszähler TR3-PP für Fasspumpenanschluss G 1	flow meter TR3-PP for drum pump connection G 1	1
	0213-052	Durchflusszähler TR3-PP an Zapfpistole	flow meter TR3-PP on nozzle	1
	0213-060	Durchflusszähler TR3-PVDF für Fasspumpenanschluss G 1 1/4	flow meter TR3-PVDF for drum pump connection G 1 1/4	1
	0213-061	Durchflusszähler TR3-PVDF für Fasspumpenanschluss G 1	flow meter TR3-PVDF for drum pump connection G 1	1
	0213-062	Durchflusszähler TR3-PVDF an Zapfpistole	flow meter TR3-PVDF on nozzle	1

• Verschleißteil / wearing part + Neuteil / new part

Bei Ersatzteilbestellungen immer Bestell.-Nr. angeben und Fertigungs-Nr oder Auftrags-Nr. des zu reparierenden Gerätes.
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Durchflusszähler
TR3-PP/PVDF

Spare Part List

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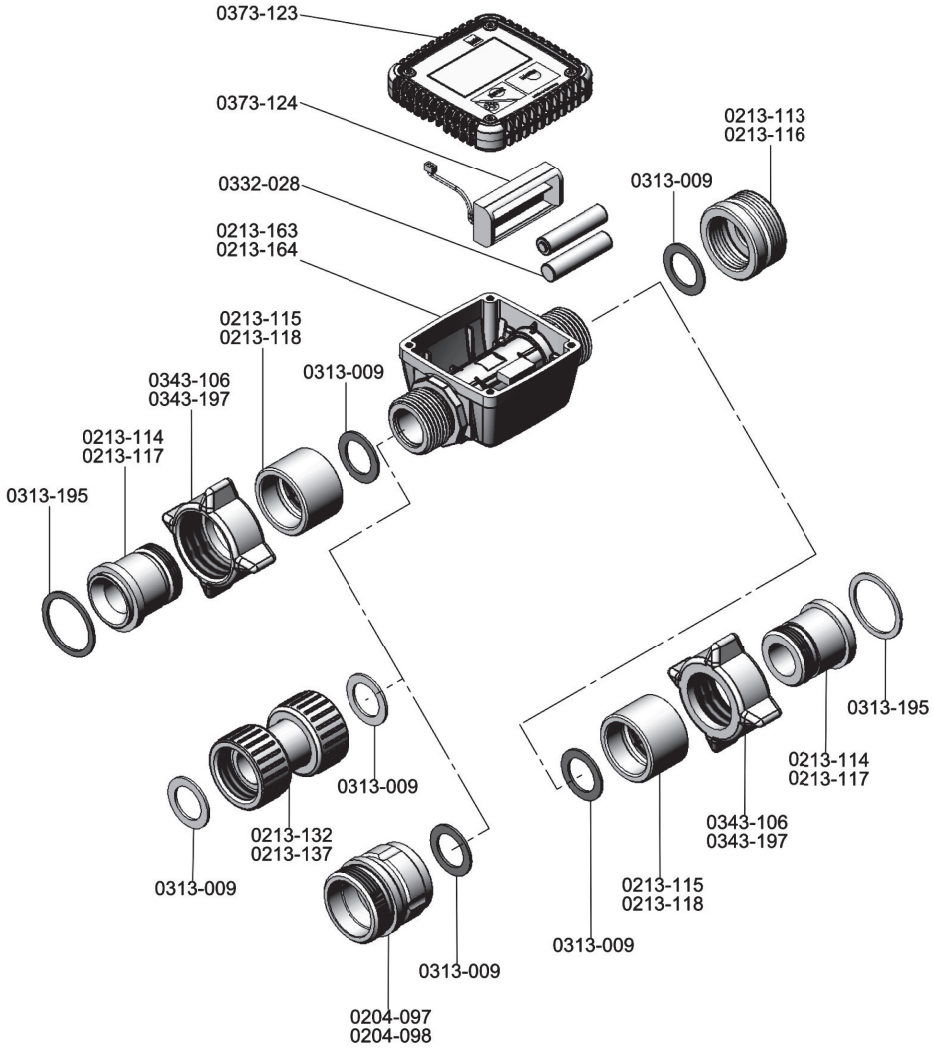
Flow Meter
TR3-PP/PVDF



Translation of the original declaration of conformity

We herewith declare under the sole responsibility that the following product complies with the EU Directives listed.

Manufacturer:	Lutz Pumpen GmbH Erlenstraße 5-7 D-97877 Wertheim	
Product:	**Flow meter**	
Type:	**TR3-PP** **TR3-PVDF**	
Relevant European Directives:	EMC RoHS	2014/30/EU 2011/65/EU, 2015/863/EU
Applicable harmonized standards:	EN 55011:2018-05 EN 61000-4-2:2009-12 EN 61000-4-3:2011-04 EN 61326-1:2013-07 EN 50581:2012	

Wertheim, 07.02.2020

Heinz Lutz, CEO

Lutz Pumpen GmbH
Erlenstraße 5-7
D-97877 Wertheim
Tel. (+49 93 42) 8 79-0
Fax (+49 93 42) 87 94 04
e-mail: info@lutz-pumpen.de
http://www.lutz-pumpen.de

Subject to technical changes. 11/2020 Order No. 0697-001 Printed in Germany