

Instruction Manual

Alfa Laval Thermometer

TE67Fxxxxxxxxx

1. General information

1.1 Information on the Instruction manual

This Instruction manual contains important information on proper usage of the device. Read this instruction manual carefully before installing and starting up the pressure measuring device.

Adhere to the safety notes and operating instructions which are given in the instruction manual. Additionally applicable regulations regarding occupational safety, accident prevention as well as national installation standards and engineering rules must be complied with!

This instruction manual is part of the device, must be kept nearest its location, always accessible to all employees.

This instruction manual is copyrighted. The contents of this instruction manual reflect the version available at the time of printing. It has been issued to our best knowledge. However, errors may have occurred. Alfa Laval Kolding A/S is not liable for any incorrect statements and their effects.

- Technical modifications reserved –

1.2 Target group

* **WARNING!** To avoid operator hazards and damages of the device, the following instructions have to be worked out by qualified technical personnel.

1.3 Limitation of liability

By non-observance of the instruction manual, inappropriate use, modification or damage, no liability is assumed and warranty claims will be excluded.

1.4 Intended use

The Alfa Laval Thermometer TE67Fxxxxxxxxx has, according to the type, been developed for applications in overpressure and vacuum measurement. It is the operator's responsibility to check and verify the suitability of the device for the intended application. If any doubts remain, please contact our local Alfa Laval Company in order to ensure proper usage. Alfa Laval Kolding A/S is not liable for any incorrect selections and their effects.

Permissible media are gases or liquids, specified in the data sheet. In addition it has to be ensured, that this medium is compatible with the media wetted parts.

- The technical data listed in the current data sheet are engaging and must be complied with. If the data sheet is not available, please order or download it from our homepage (<http://www.alfalaval.com>)

* **WARNING!** Danger through improper usage

1.5 Package contents

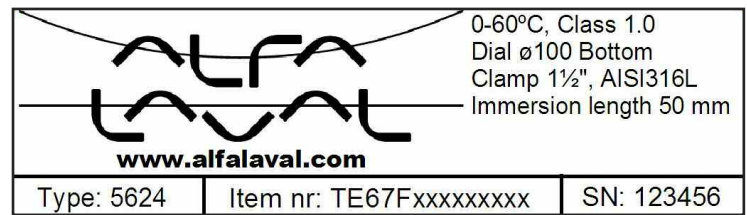
Please verify that all listed parts are undamaged included in the delivery and check for consistency specified in our order:

- thermometer
- mounting instructions

2. Product identification

The device can be identified by its manufacturing label. It provides the most important data. By the ordering code the product can be clearly identified.

Fig. 1 manufacturing label, example



The manufacturing label must not be removed from the device.

3. Mechanical Installation

3.1 Mounting and safety instructions

* **WARNING!** Install the device only when depressurized and temperature less condition.

* **WARNING!** This device may only be installed by qualified technical personnel who has read and understood the instruction manual!

Handle this high-sensitive precision measuring device with care, both in packed and unpacked condition!

There are no modification/changes to be made on the device. Do not throw the package/device!

To avoid damaging the wetted parts, remove packaging before starting assembly.

Handle the unprotected wetted parts very carefully – they are very sensitive and may be easily damaged.

Do not use any force when installing the device to prevent damage of the device and the plant!

3.2 General installation steps

Carefully remove the temperature measuring device from the package and dispose of the package properly.

Go ahead as detailed in the specific instructions below:

3.3 Installation steps for Clamp

Use a suitable seal corresponding to the medium and the pressure input.

Put the seal onto the corresponding mounting part.

Center the clamp connection on the fitting counterpart with seal.

Then fit the device with a suitable fastening element (e.g. semi-ring or retractable ring clamp) according to the supplier's instructions.

4. Initial start-up

* **WARNING!** Before start-up, the user has to check for proper installation and for any visible defects.

* **WARNING!** The device can be started and operated by authorized personnel only, who have read and understood the instruction manual.

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Alfa Laval Thermometer

TE67Fxxxxxxxxx

* WARNING! The device has to be used within the technical specifications only ! (Compare the data in the data sheet)

5. Placing out of service

* WARNING! Disassemble the device only in pressure and temperature less condition!

* WARNING! Depending on the medium, it may cause danger for the user. Comply therefore with adequate precautions for purification.

6. Maintenance

In principle, this device is maintenance-free. If desired, the housing of the device can be cleaned using a damp cloth and non-aggressive cleaning solutions. Depending on the measuring medium, however, the wetted parts may be polluted or coated with deposit. Is there a pollution tendency of the medium, the user has to determine the appropriate cleaning interval. After placing the device out of service correctly, the wetted parts can usually be cleaned carefully with a non-aggressive cleaning solution and a soft brush or sponge. If the wetted parts are calcified, it is recommended to send the device to Alfa Laval Kolding for decalcification. Please note the chapter "Service/Repair" below.

A false cleaning of the device can cause an irreparable damage on the wetted parts. Therefore never use pointed objects or pressure air for cleaning the wetted parts.

7. Service / Repair

7.1 Return

Upon every return of the device, no matter if for recalibration, decalcification, modifications or repair, it is necessary to contact your local Alfa Laval office to guarantee a quick execution of your request.

Please inform us by sending an email to:

Alteq.PartsandService@alfalaval.com

Include the number of devices sent and request a Return Number. Afterwards clean the device, pack it shatterproof and send it to Alfa Laval Kolding A/S indicating the Return Number.

8. Warranty conditions

The warranty conditions are subject to the legal warranty period of 12 months from the date of delivery. In case of improper use, modifications of or damages to the device, we do not accept warranty claims. Damaged wetted parts will also not be accepted. Furthermore, defects due to normal wear are not subject to warranty services.

How to contact Alfa Laval Kolding A/S

For further information please feel free to contact:

Alfa Laval Kolding A/S

PO Box 802

6000 Kolding

Denmark

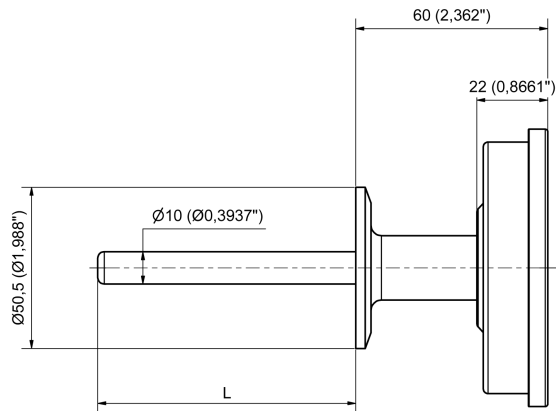
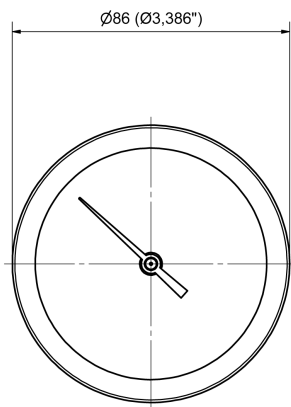
Phone no.: +45 79 322200, Fax no.: +45 79 322580

www.alfalaval.com

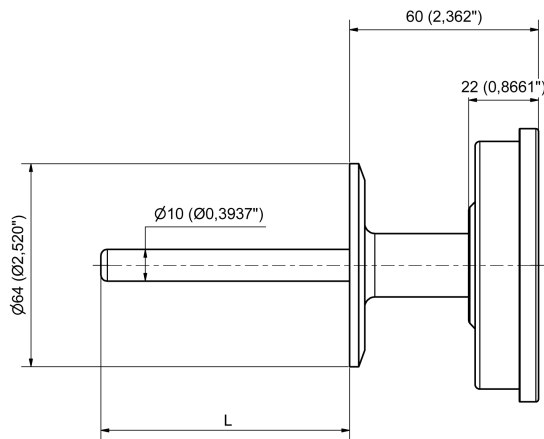
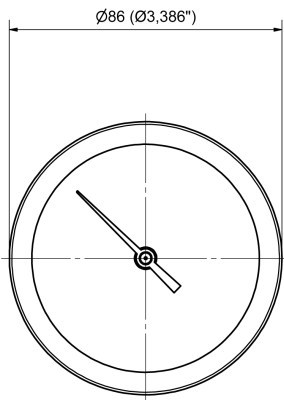
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TE67FX1xxx2xxx Dial 80 mm, Clamp 38



TE67FX2xxx2xxx Dial 80 mm, Clamp 51

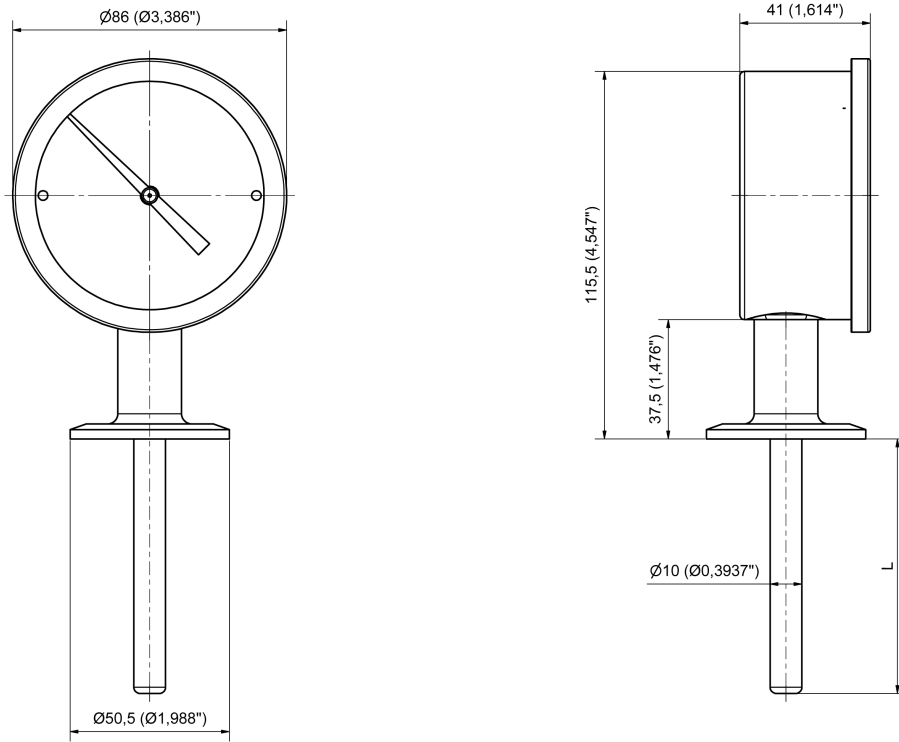


Specifications

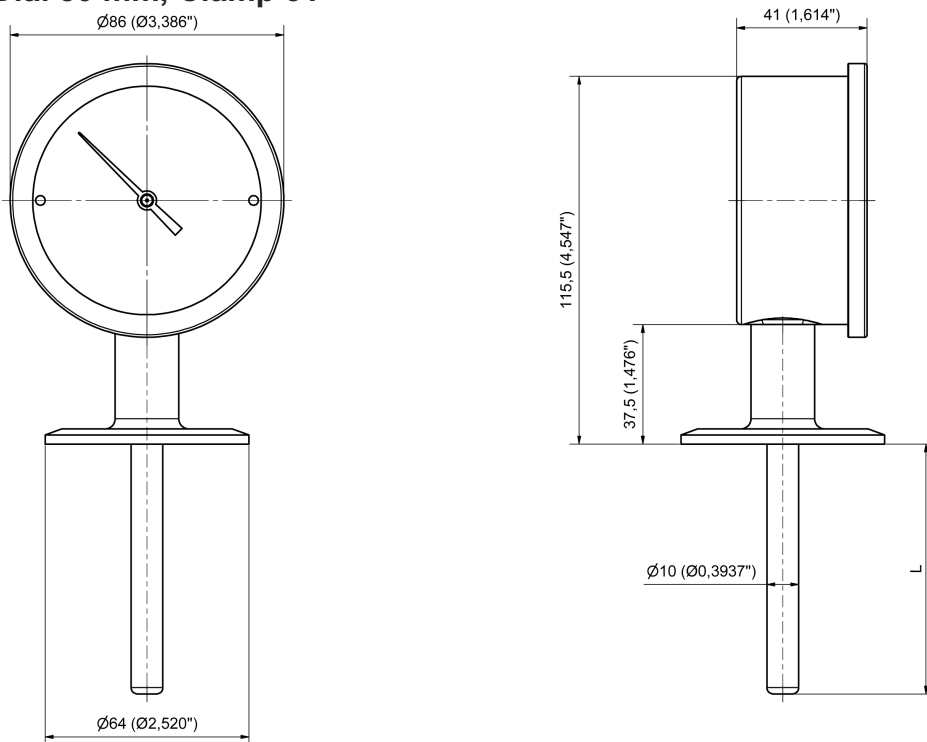
Case material	AISI 304
Window	PC (unbreakable)
Bezel	AISI 304
Liquid filling	Glycerine
Sensing element	Stainless steel AISI 316 L
Connection material	AISI 316 L
Accuracy	Class 1 acc. to EN 13190: 2001
Approvals	Conforms to EN 13190: 2001

Measuring range	L
-20 to +120°C (0 to 250°F)	50mm (1,969in)
0 to 60 (35 to 140°F)	100mm (3,937in)
0 to 100 (35 to 210°F)	150mm (5,906in)
0 to 120 (35 to 250°F)	200mm (7,874in)
0 to 160 (35 to 320°F)	250mm (9,843in)
0 to 200 (35 to 390°F)	300mm (11,810in)

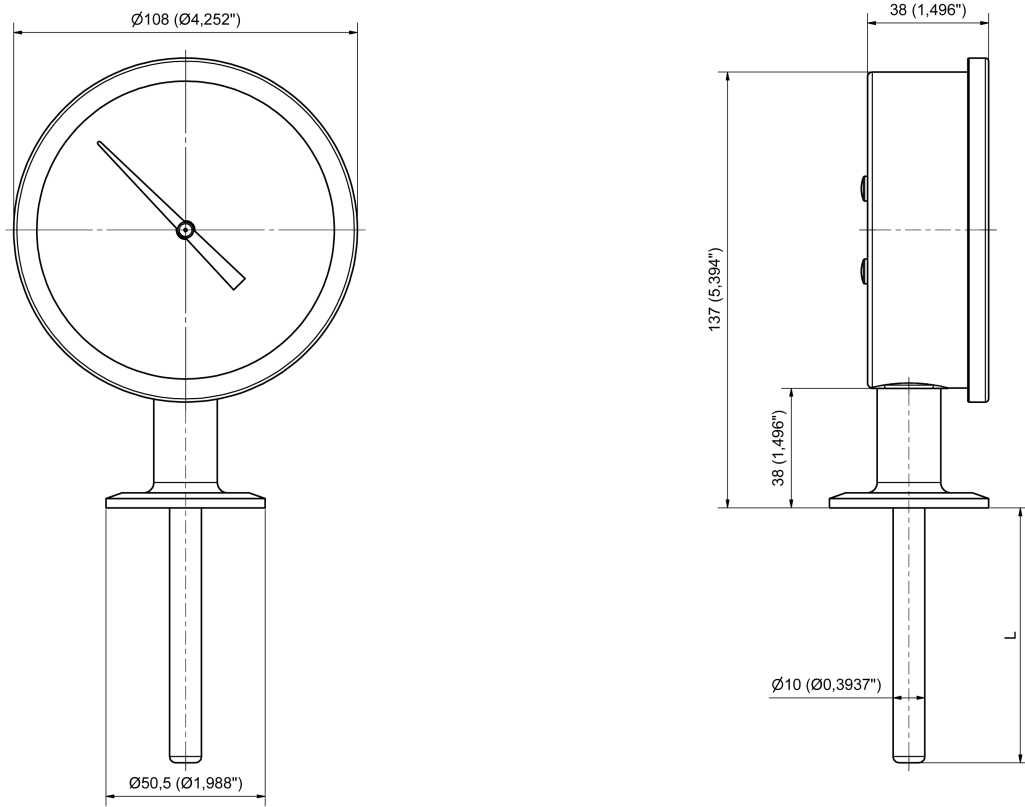
TE67FX1xxx1xxx Dial 80 mm, Clamp 38



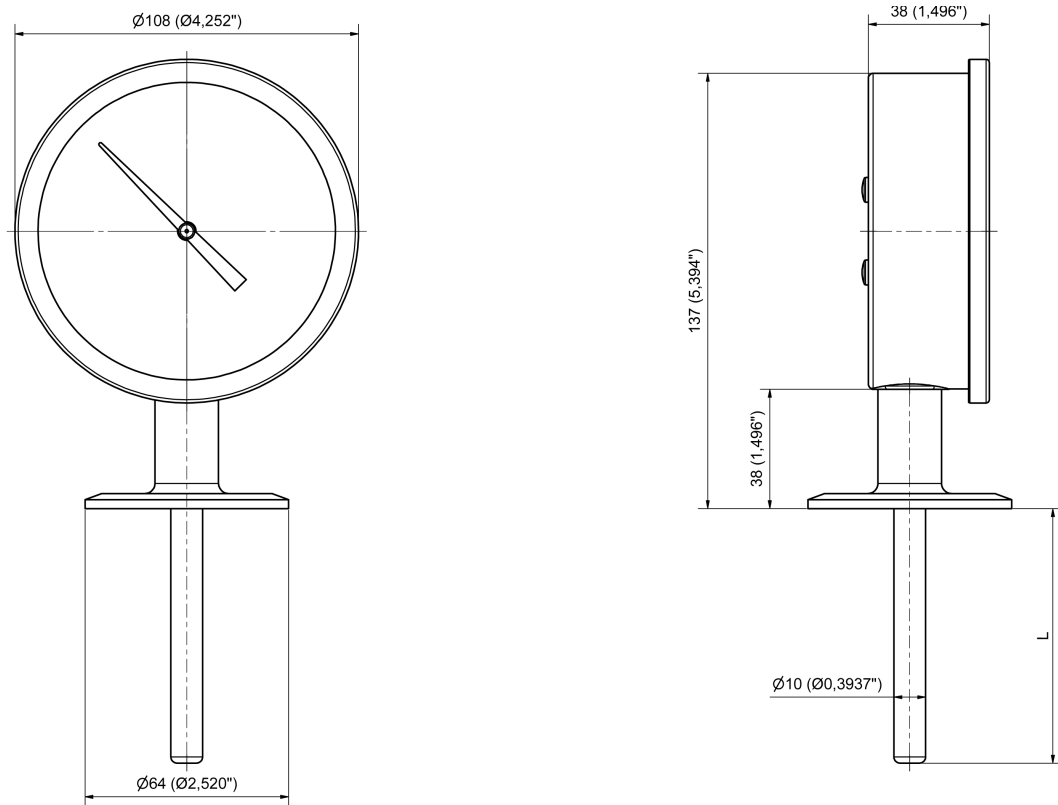
TE67FX2xxx1xxx Dial 80 mm, Clamp 51



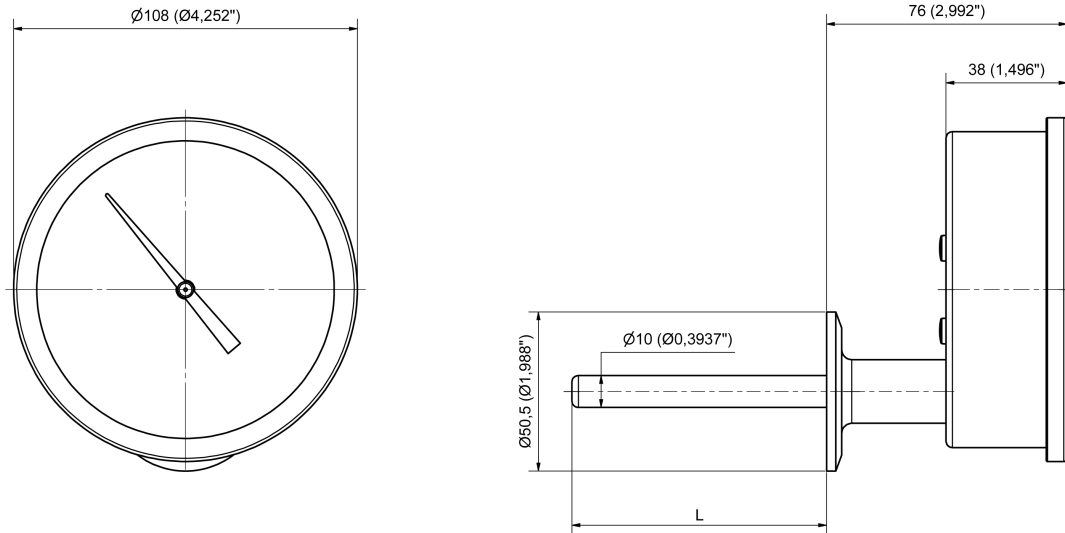
TE67FX2xxx1xxx Dial 100 mm, Clamp 38



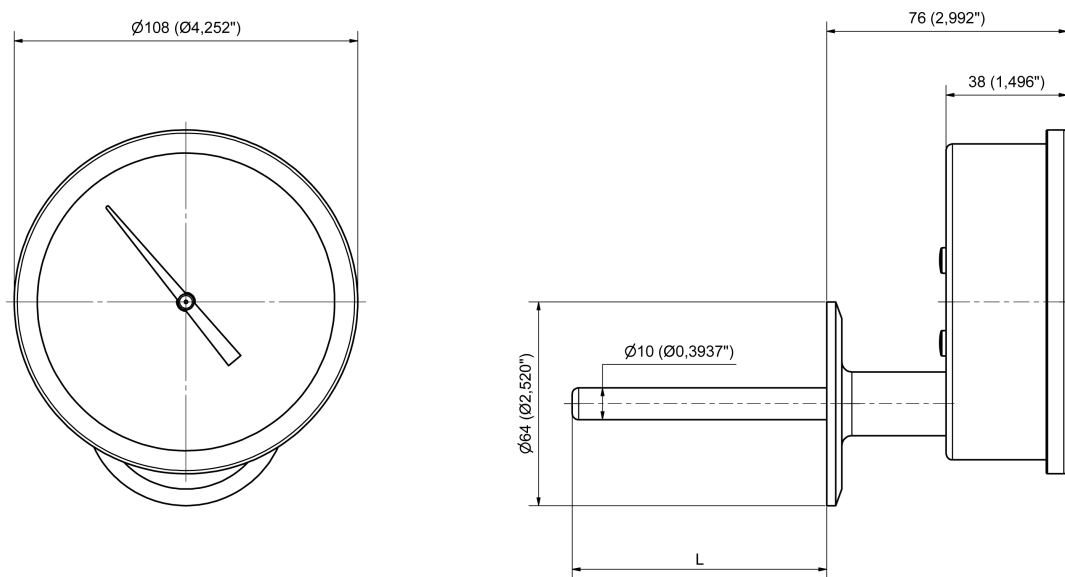
TE67FX2xxx1xxx Dial 100 mm, Clamp 51



TE67FX1xxx2xxx Dial 100 mm, Clamp 38



TE67FX2xxx2xxx Dial 100 mm, Clamp 51



Alfa Laval Kolding A/S
PO Box 802
6000 Kolding
Denmark
www.alfalaval.com

Ordering Key Table	Thermometer	
Description	Option	Item Nr. Code
Measuring Range	0 to 60 °C	TE67F1xxxxxxxx
	0 to 100 °C	TE67F3xxxxxxxx
	0 to 120 °C	TE67F5xxxxxxxx
	0 to 160 °C	TE67F7xxxxxxxx
	0 to 200 °C	TE67F8xxxxxxxx
	-20 to 120 °C	TE67F9xxxxxxxx
	Process Connection	Clamp DN 38 (ISO2852) / Clamp DN 40 (DIN32676)
Clamp DN 50 (ISO2852) / Clamp DN 51 (DIN32676)		TE67Fx2xxxxxx
Surface Finish Wetted Parts	Ra<0,8µ	TE67Fxx1xxxxxx
	Ra<0,4µ (Electropolished)	TE67Fxx2xxxxxx
Sensor Length	0 cm	TE67Fxxx0xxxxx
	10 cm	TE67Fxxx1xxxxx
	20 cm	TE67Fxxx2xxxxx
	30 cm	TE67Fxxx3xxxxx
Sensor length	0 cm	TE67Fxxxx0xxxx
	5 cm	TE67Fxxxx5xxxx
Sensor Outlet	bottom	TE67Fxxxxx1xxx
	back	TE67Fxxxxx2xxx
Accuracy	Class 1	TE67Fxxxxxx1xx
Others	Dial Ø80, Scale: °C	TE67Fxxxxxxx1x
	Dial Ø100, Scale °C	TE67Fxxxxxxx2x
	Dial Ø80, Scale: Fahrenheit	TE67Fxxxxxxx3x
	Dial Ø100, Scale Fahrenheit	TE67Fxxxxxxx4x
Certificates	Calibration Certificate	TE67Fxxxxxxx1
	3.1. Certificate	TE67Fxxxxxxx2
	3.1. Certificate + 3A	TE67Fxxxxxxx3
	3A	TE67Fxxxxxxx4
	Calibration Certificate + 3A	TE67Fxxxxxxx5
	Calibration Certificate + 3.1. Certificate	TE67Fxxxxxxx6
	Calibration Certificate + 3.1. Certificate + 3A	TE67Fxxxxxxx7
	N/A	TE67Fxxxxxxx0

Initially Issued: 8/24/2011

Authorization No.: 1612



This Is To Certify That

Alfa Laval Tank Equipment A/S
Baldershoj 19, 2635 Ishoj, DENMARK

Is hereby authorized to continue to apply the 3-A Symbol to the models of equipment, conforming to 3-A Sanitary Standards for:

Sensors and Sensor Fittings and Connections, Number: 74-03, set forth below:

Model Designations: Pressure Gauge Type 67Dxxxxxxxx3, 4, 5, or 7, and
Thermometer Type 67Fxxxxxxxx3, 4, 5, or 7.

Valid through: December 31, 2011

Timothy R. Rugh

Executive Director, 3-A Sanitary Standards, Inc.

The issuance of this authorization for the use of the 3-A Symbol is based upon the voluntary certification, by the applicant for it, that the equipment listed above complies fully with the 3-A Sanitary Standards designated. Legal responsibility for compliance is solely that of the holder of this Certificate of Authorization, and 3-A Sanitary Standards, Inc. does not warrant that the holder of an authorization at all times complies with the provisions of the said 3-A Sanitary Standards. This in no way affects the responsibility of 3-A Sanitary Standards, Inc. to take appropriate action in such cases in which evidence of nonconformance has been established.

Next TPV Inspection/Report due: May 2014