TF9 Battery Powered Flow Monitor is equipped with two long life litium batteries and integrates te power supply for the sensor. It is designed to show on the LCD display flow rate and totalized flow volume with no external power supply required.
One of the two totalizers is resettable while the other is non-resettable and it is used to permanently record volume consumption.
Self explaining calibration menus allow a customized setup of all measuring parameters and e state of the art electronic design ensures long-term reliable and stable indications.
The high flexibility is maximized with only one packaging for compact pipe mount, panel or wall installation.

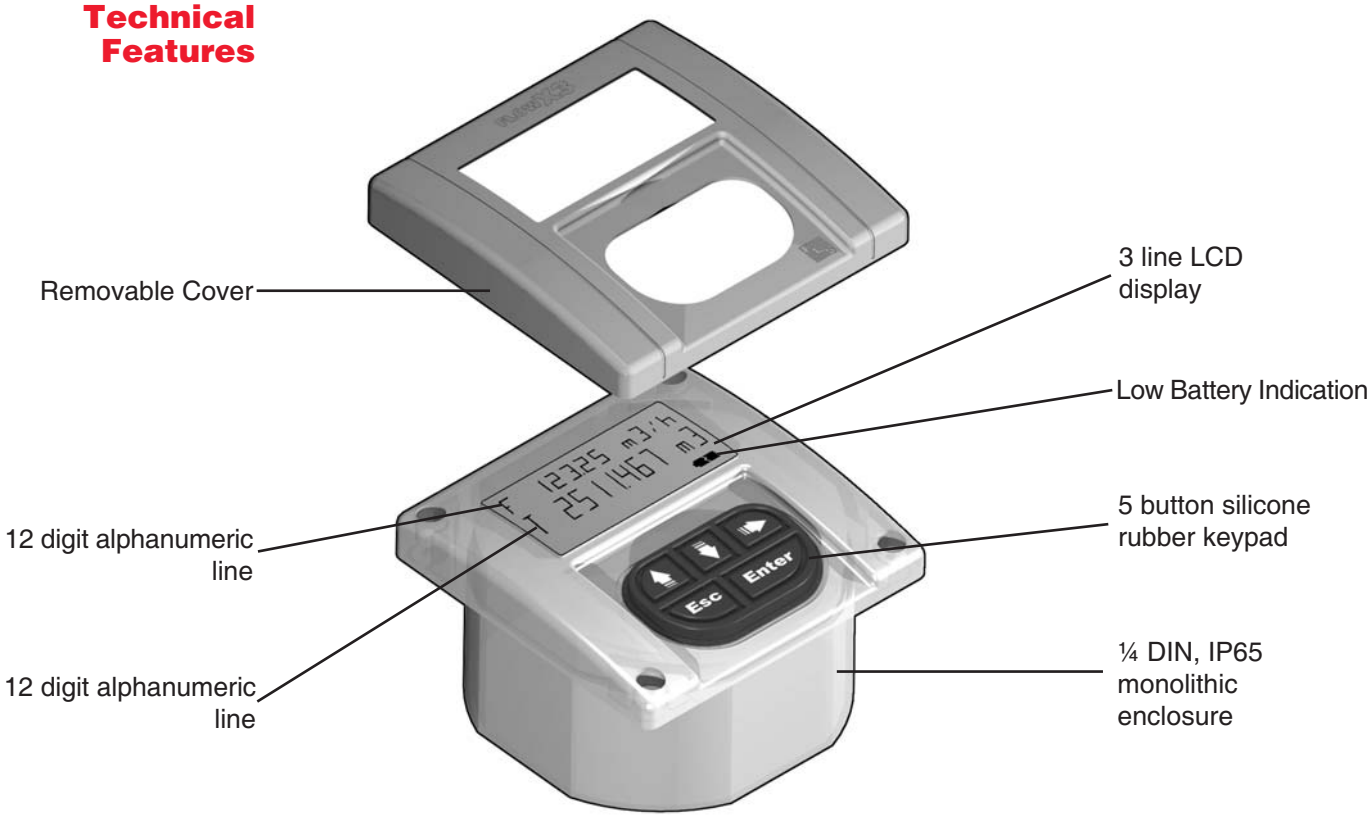
Main Features

- Battery Operated.
- Long-lasting 3.6 Volt lithium batteries included.
- 3 line alphanumeric LCD.
- IP65 monolithic packaging.
- 5 button keypad.
- No information lost during battery replacement.
- One packaging for compact/pipe, panel or wall installation.
- Self explaining calibration menus.
- Two totalizers: 10 digit permanent and 6 digit resettable.
- 5 digit flow rate indication.

Applications

- Water treatment and regeneration systems.
- Mobile wastewater treatment and recovery.
- Water distribution.
- Leak detection.
- Irrigation.
- Groundwater remediation.
- Filtration systems.
- Liquid delivery systems.
- Swimming pools & Spas.

Technical Features



Engineering Data

■ The flow monitor is designed with only one packaging for compact/pipe, panel or wall installation.

■ The flow monitor has ¼ DIN panel mount standard dimensions: 96 x 96 mm (3.8 x 3.8 inch).

■ The instrument meets IP65 standards.

■ The instrument provides flow rate indication and dual totalization with fully scaleable engineering units.

■ The flow monitor is equipped with a 3 line LCD: 2 x 12 alphanumeric lines and 1 icon line.

■ The LCD display provides a 5 digit flow rate indication, a 6 digit resettable totalizer indication and a 10 digit permanent totalizer indication.

■ The flow monitor is equipped with a silicone rubber 5 button keypad.

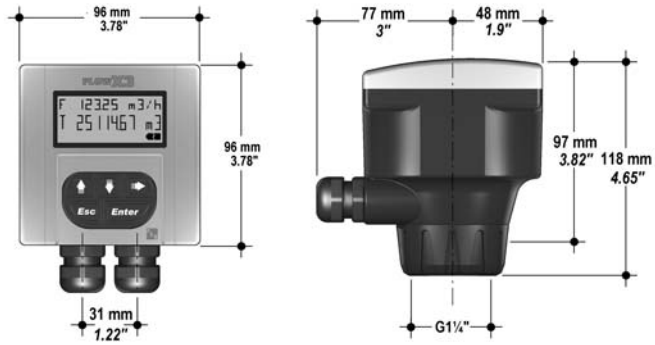
■ The instrument is compatible with all FLOW Coil and Reed sensors.

■ The flow monitor is equipped with internal 3.6 Volt, 2.8 Amp/hour, lithium batteries with a nominal life expectation of 5 years.

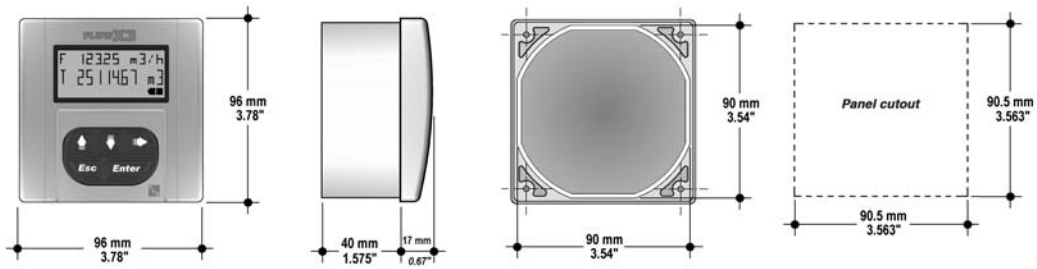
■ The instrument provides a low battery indication and a system to retain all calibration settings during battery replacement.

Dimensions

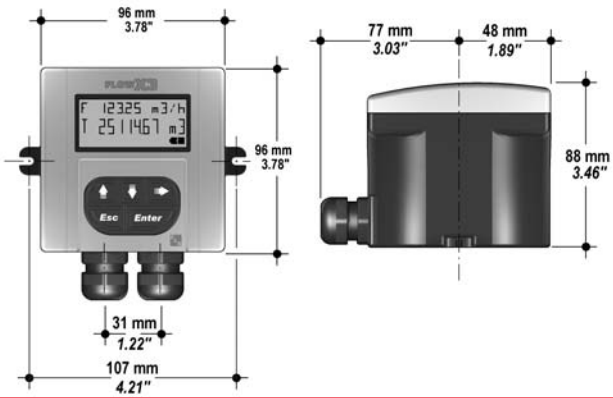
Compact Mount



Panel Mount



Wall Mount

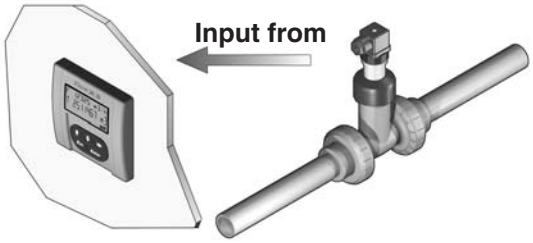


Installation

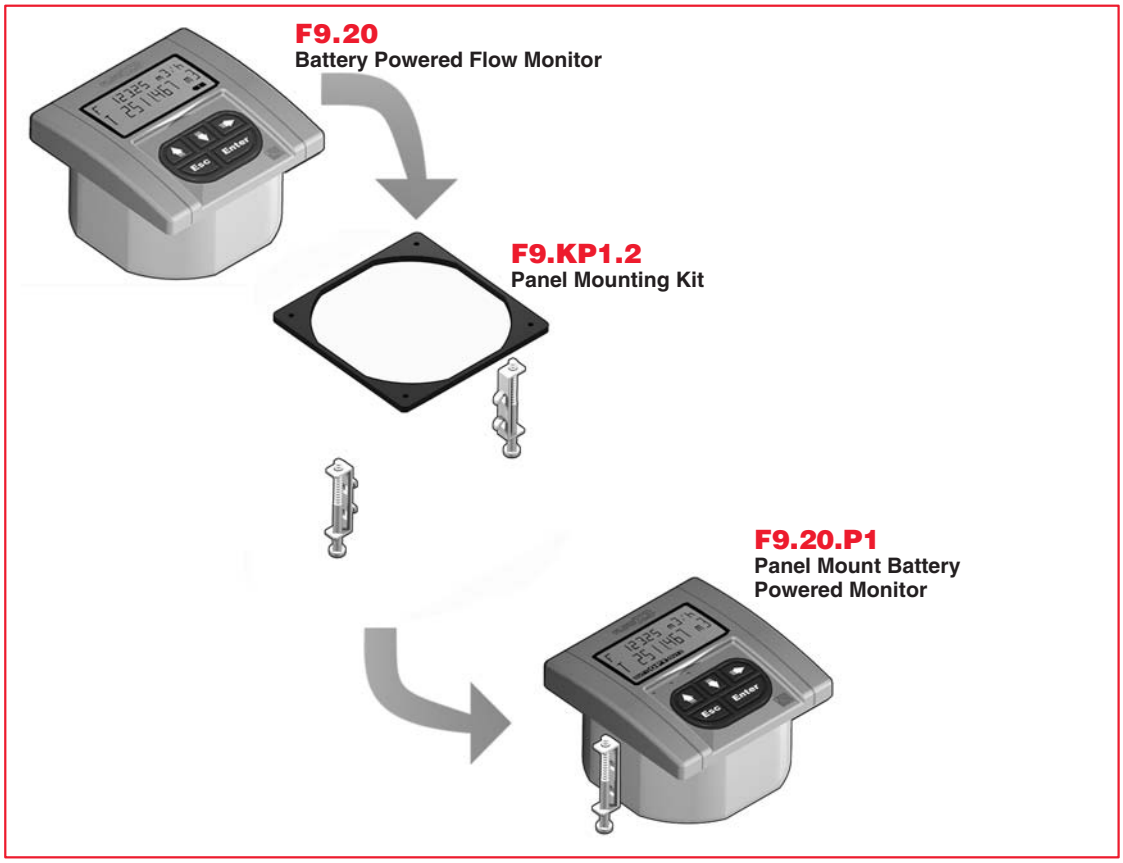
The flow monitor is available just in one packaging for compact field version, panel or wall installation. The compact field version is mounted on top of the sensor using the compact mounting kit (F9.KC1), the panel version is installed using the panel mounting kit (F9.KP1.2), while the wall mounting version is fixed to the wall by the mounting kit (F9.KW1).

The mounting kits can be ordered directly connected to the monitor or separately and then simply installed on it.
Please refer to Ordering Data section for a complete listing of part numbers.

Panel Mount



The panel mounting version consists of the monitor and the mounting bracket kit F9.KP1.2 with gasket for IP65 watertight panel installation. The monitor perfectly fits into a standard ¼ DIN panel cutout. The instrument and the kit can be ordered separately (code F9.20 for the monitor and code F9.KP1.2 for the mounting bracket) or together using the code F9.20.P1.

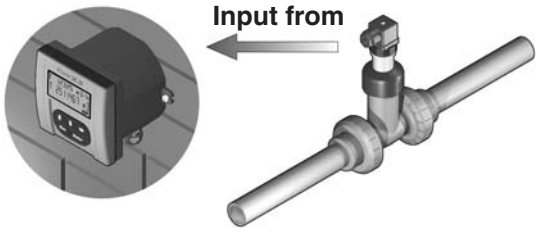


Input from

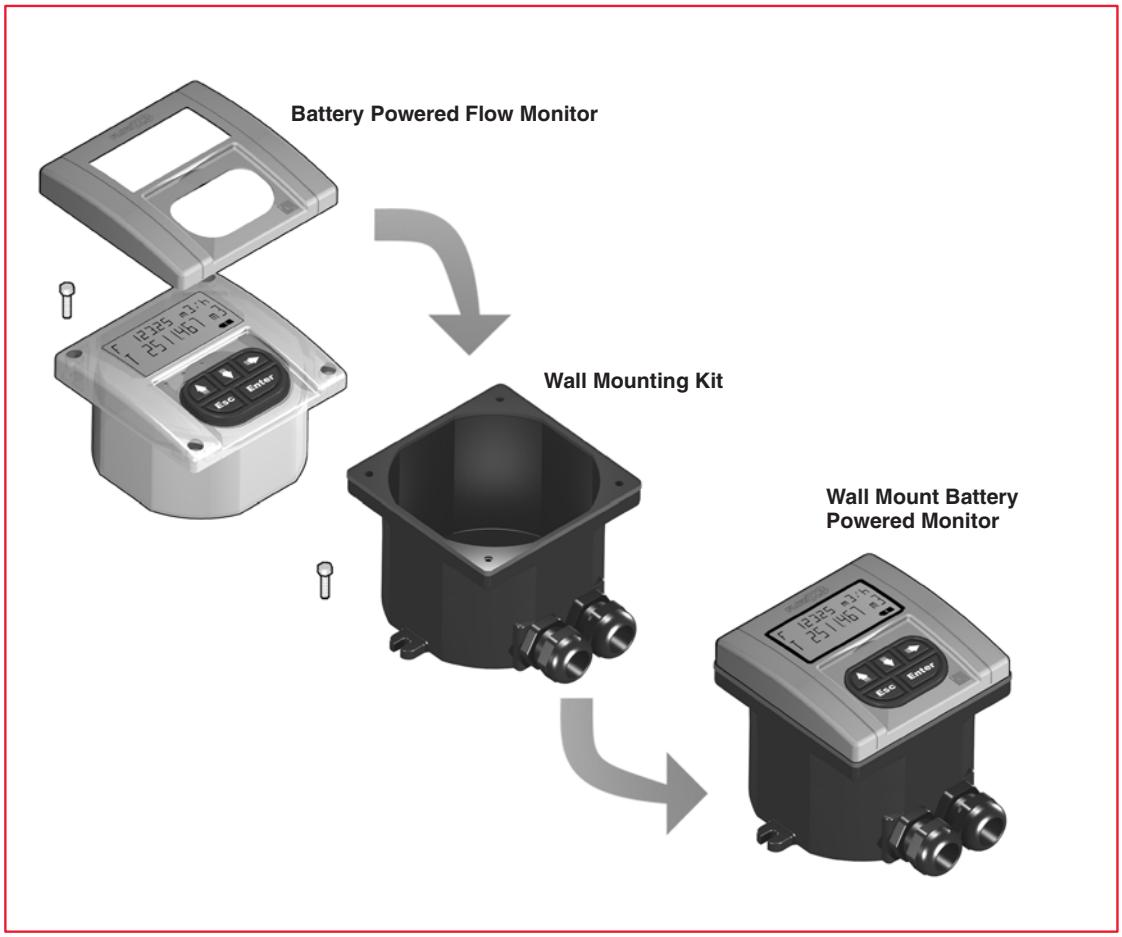
	F3.00.C.XX ULF01.R.X ULF03.R.X F111.C

Installation

Wall Mount



The wall mounting version consists of the monitor and the wall mounting kit.
The F9.KW1 kit includes the plastic adapter, the gasket for IP65 watertight wall installation and the fixing screws.
The instrument and the kit can be ordered separately (code F9.20 for the monitor and code F9.KW1 for the kit) or together using the code F9.20.W1.



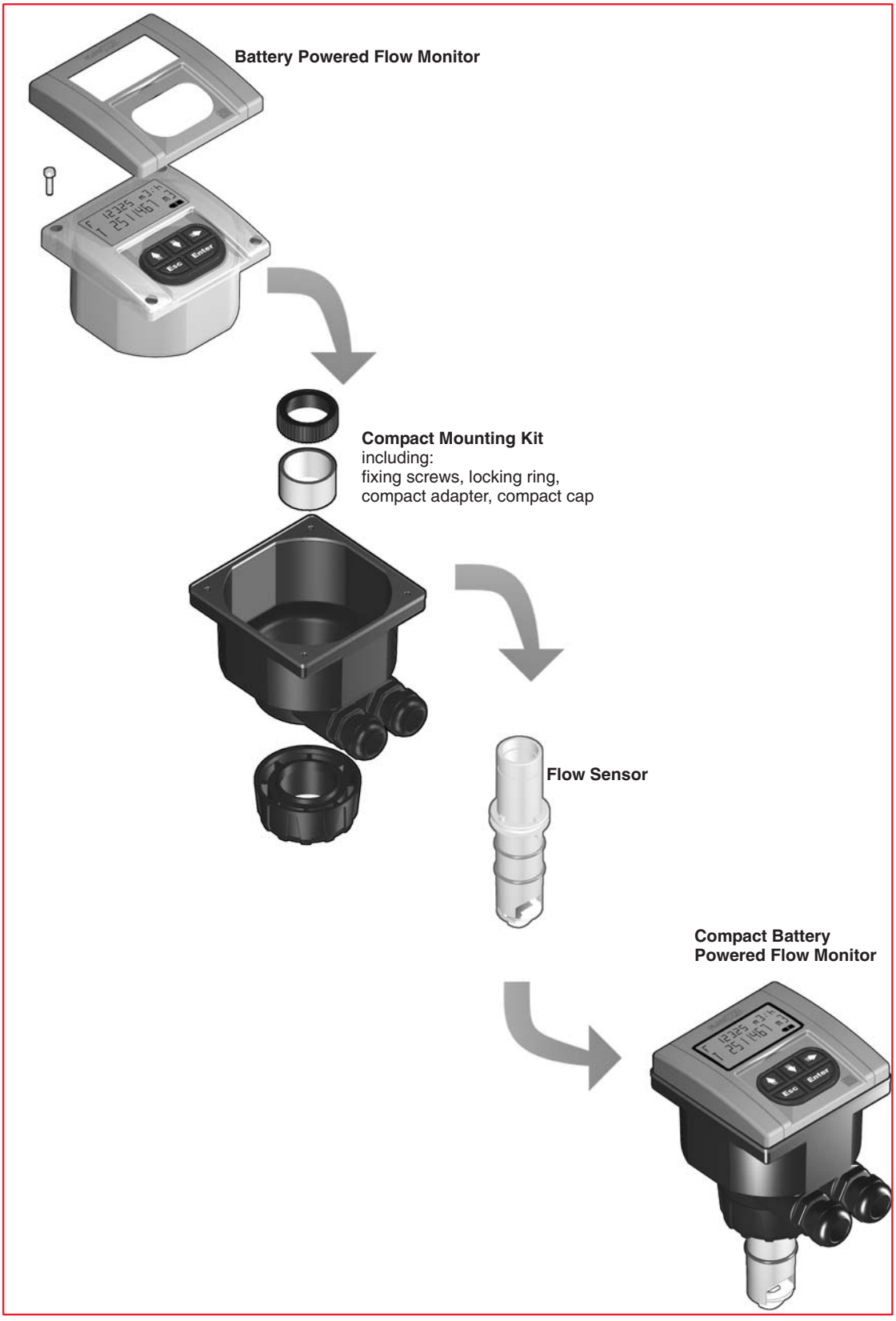
Input from

	F3.00.C.XX ULF01.R.X ULF03.R.X F111.C

Installation

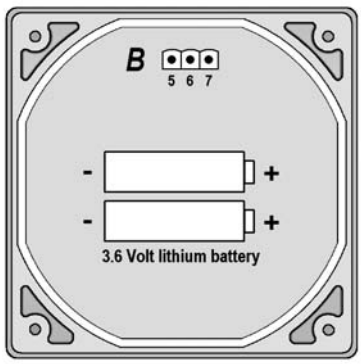
Compact Mount

The compact mounting kit F9.KC1 includes the compact plastic adapter with gasket for IP65 watertight installation, the compact cap, the locking ring and four fixing screws for mounting the monitor directly onto the sensor.
The instrument and the kit can be ordered separately (code F9.20 for the monitor and code F9.KC1 for the kit) or together using the code F9.20.XX.



Rear Terminal View

Terinal TF9.20



B Sensor

SENSOR	
5	GND
6	IN
7	V+

Technical Data

General

- Associated flow sensor:
  - FLS FlowX3 Coil effect with frequency output
  - FLS FlowX3 Reed effect.
- Materials:
  - Case: PC
  - Panel gasket: Neoprene
  - Wall and Field gasket: EPDM
  - Keypad: 5 button silicone rubber.
- Display:
  - 3 line LCD: 2 x 12 alphanumeric lines and 1 icon line
  - Update rate: 1 second.
- Enclosure: IP65 front.

Electrical

- Supply Voltage: 2 x 3.6 Volt Lithium thionylchloride battery, 2.8 AHr.
- Battery life: nominal 5 years.
- Sensor Input (Frequency):
  - Sensor power: 3.6 Volt
  - Range: 1 to 500 Hz.
  - Accuracy: ±0,5 Hz.

Environmental

- Operating temperature: -5°C to +60°C (23°F to 140°F).
- Storage temperature: -1°C to +80°C (14°F to 176°F).
- Relative humidity: 0 to 95% non condensing.

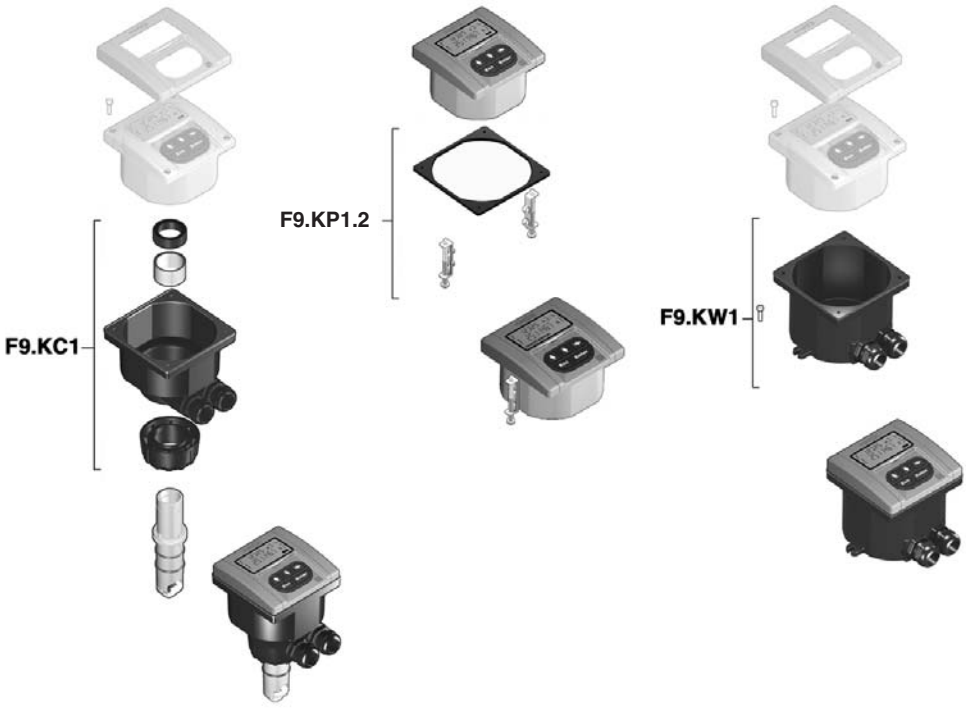
Standards & Approvals

- Manufactured under ISO 9001 (Quality).
- Manufactured under ISO 14001 (Environmental Management).
- CE.

Ordering Data

Mounting Kits

Part No.	Name	Description
TF9.KC1	Compact mounting Kit	Plastic adapter with gasket, compact cap, locking ring and 4 fixing screws
TF9.KP1.2	Panel mounting Kit	Mounting bracket with gasket
TF9.KW1	Wall mounting Kit	Plastic adapter with gasket and fixing screws



Spare Parts

Item	Part No.	Name	Description
1	**TF9.SP3**	Cover	PC front cover, no LED
2	**TF9.SP4.1**	PG 1 ,5	PG1 ,5 Cable Gland for Compact or Wall mounting Kit
	TF9.SP4.2	PG 11	PG11 Cable Gland for Compact or Wall mounting Kit
3	**.SP6**	Replacement battery	3.6 Volt Lithium thionyl chloride battery