Quick Start Guide

Tek-Flux 1400A

Quick Start Guide

1. Before you begin

Before installation check the model, specifications, and installation location for the transmitter. Follow the full User Guide for detailed installation and other information.

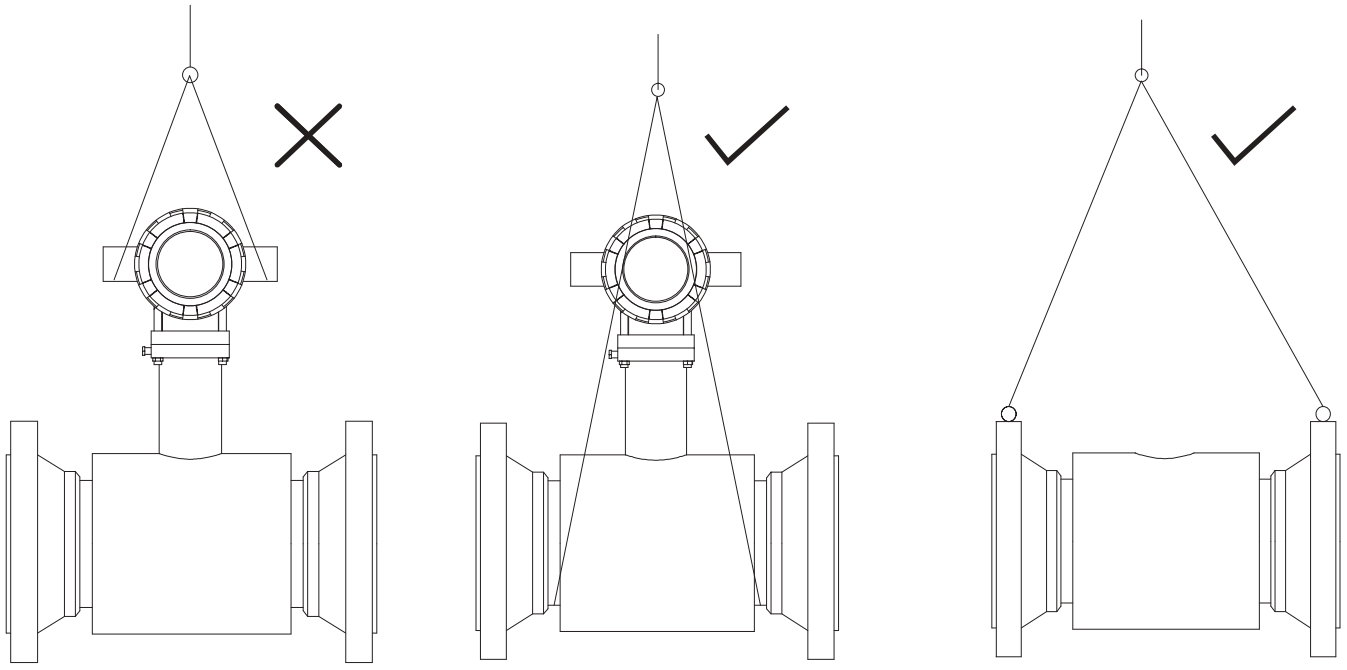
- Verify that the operating atmosphere of the flow tube and transmitter is consistent with the appropriate hazardous locations certifications
- Do not remove the transmitter cover in explosive atmospheres when the circuit is alive
- Before connecting a HART-based communicator in an explosive atmosphere, make sure the instruments in the loop are installed in accordance with intrinsically safe or non-incentive field wiring practices
- Make sure only qualified personnel perform the installation
- Do not perform any service other than those contained in this manual unless qualified

2. Unpack

Tek-Flux 1400A Electromagnetic Flowmeter

3. Meter Handling

All parts should be handled carefully to prevent damage. Whenever possible, transport the system to the installation site in the original shipping containers. The flow tube is shipped with end covers to protect it from mechanical damage and normal unrestrained distortion. End covers should not be removed until just before installation. Keep shipping plugs in conduit connections until conduits are connected and sealed.



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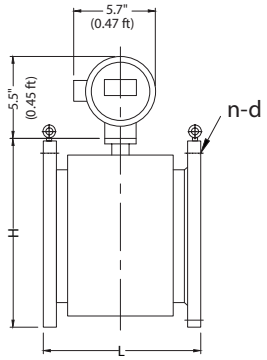
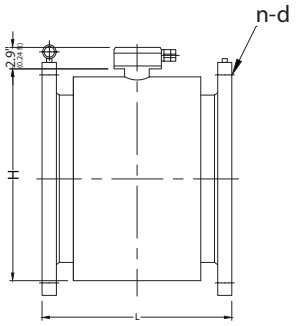
4. Dimensions

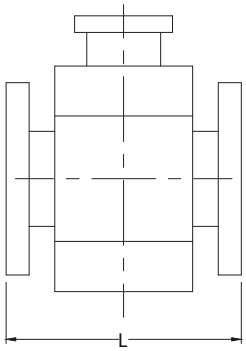
Note: For additional dimensions, refer to the detailed manual.



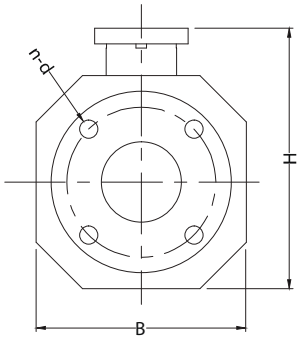
Direct Mount Type (≥4")



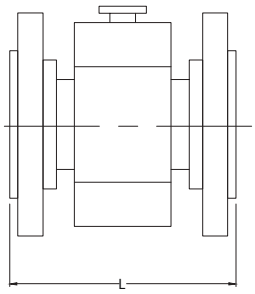
Remote Mount Type (≥4")

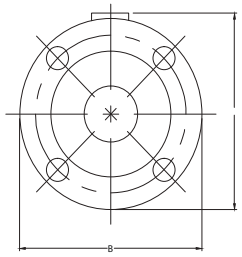


Sensor (½"to 3")

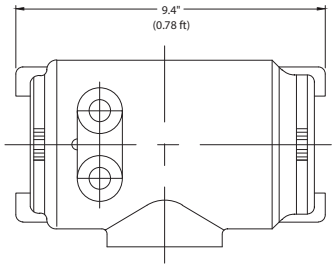


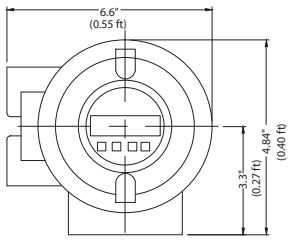
Sensor(½" to 3")





Outline dimension of medium and High Pressure Sensor





Direct Mount Transmitter

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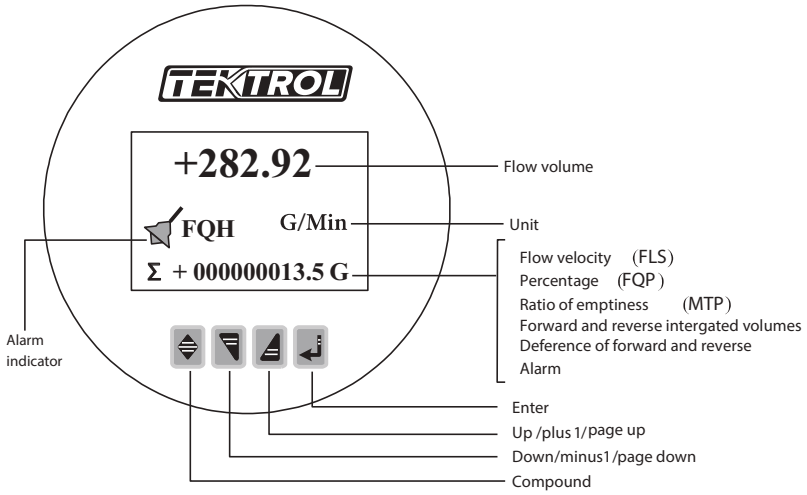
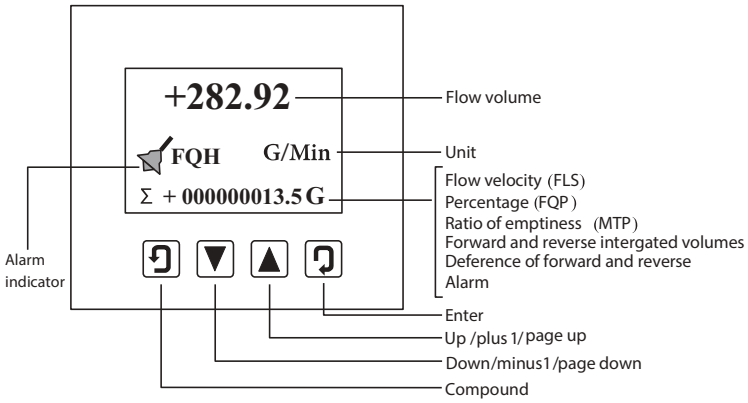
5. Display

Tek-Flux 1400A has a two-line backlit LCD display which measures forward and reverse flow and is used to set parameters, password, menu control, and memory function.

Display for direct mount transmitter



Display for remote type transmitter



Key function for self testing

Down	Selecting displayed data in lower lines
Up	Selecting displayed data in higher lines
Enter	Press it to come into the interface
Compound & Enter	To enter parameter setting

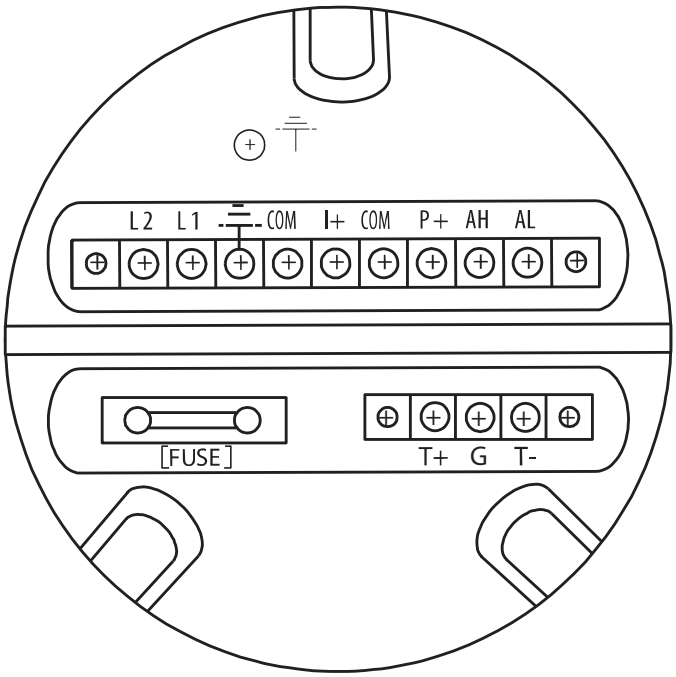
Key functions for parameter setting

Down	Subtract 1 from the number above cursor
Up	Plus 1 to the number above cursor
Compound & Down	To shift cursor to left
Compound & Up	To shift cursor to right
Enter	To enter or exit the submenu

Note: When using "Compound" key, you should press "Compound" key and "Up" or "Down" simultaneously

6. Power Supply wiring

Wiring for direct mount transmitter



I+	Output Current for Flow Measurement
COM	Output Current (Ground) for Flow Measurement
P+	Frequency(Pulse) Output for Bi-directional Flow
COM	Frequency (Pulse) Output (Ground)
AL	Alarm Output for Low Limit
AH	Alarm Output for Upper Limit
COM	Alarm Output (Ground)
FUSE	Fuse for Power Supply
T＋	+Communication Input Signal
T—	-Communication Input Signal
G	RS232 Communication Ground
L1	220VAC(24VDC) Power Supply
L2	220VAC(24VDC) Power Supply

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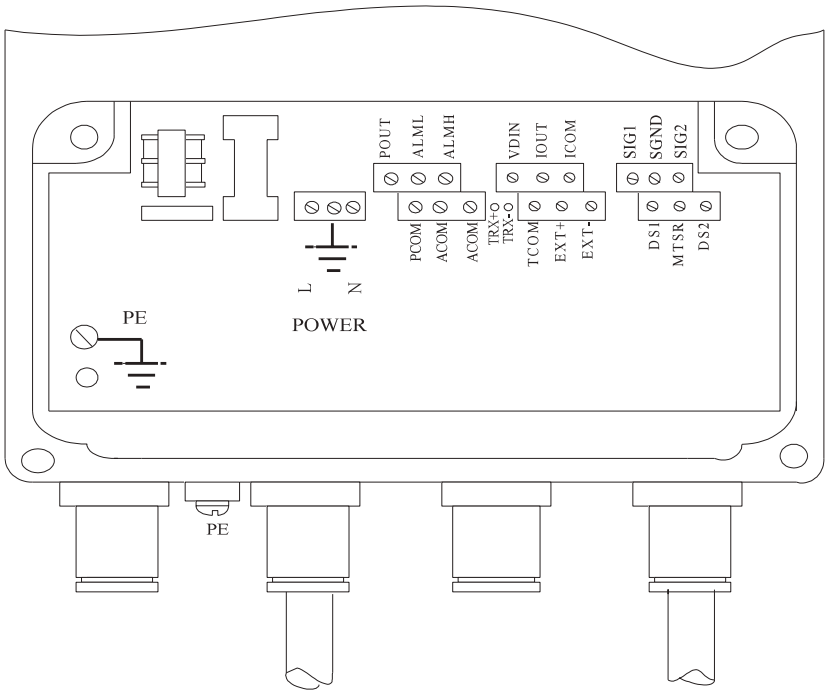
Wiring for remote type transmitter



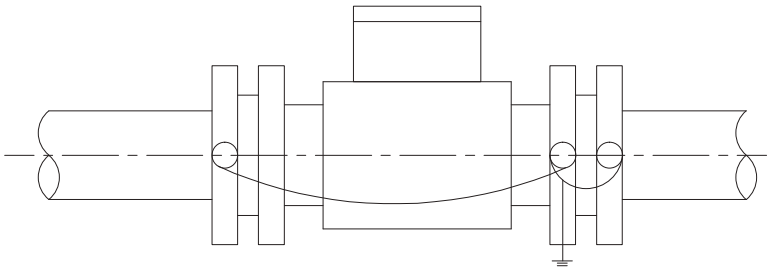
To the mounting sensor	SIG1	Signal1
	SGND	Signal Ground
	SIG2	Signal2
	DS1	Shielded Exciting1
	DS2	Shielded Exciting2
	EXT+	Exciting Current+
	EXT-	Exciting Current-
Analog Current Output	VDIN	Current Two lines 24V Spots
	ICOUT	Analog Current Output
	ICCOM	Analog Current Output Ground
Frequency (Pulse) Output	POUT	Flow Frequency (Pulse) Output
	PCOM	Frequency (Pulse) Output Ground
Two Alarm Outputs	ALMH	Upper Limit Alarm Output
	ALML	Low Limit Alarm Output
	ALCOM	Alarm Output Ground
Communication Input	TRX+	Communication Input
	TRX-	Communication Input
	ALCOM	232 Communication Ground

Cable should be no more than 328 ft to prevent accuracy and interference. transmitter should be installed closely to sensor as much as possible.

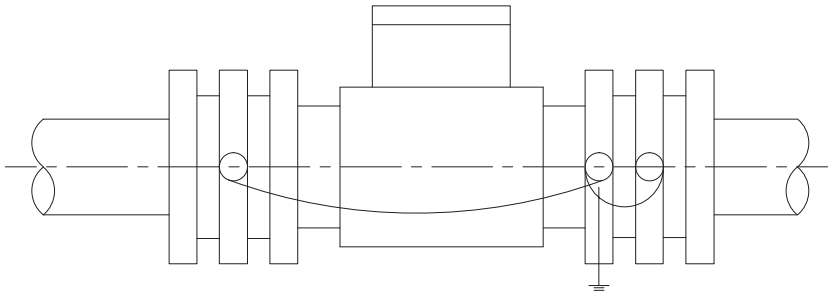
Note: For remote type flowmeter, when flow conductivity is more than 50μS/cm, flow signal cable should be shield signal cable with polyvinyl chloride jacket and metal net; when flow conductivity is less than 50μS/ cm or the signal is transmitted for long distance, double shield signal cable with equipotential double cores should be used.

7. Grounding

If flowmeter is installed in a metal pipeline, there should be no insulating coating on pipeline in wall.



If flowmeter is installed in a pipeline with insulating paint, grounding rings should be used on the sensor for both sides.



If flowmeter is installed in a pipeline with cathodic protection, with inner and outer surface insulated, then the grounding rings and flange should be insulated as well.