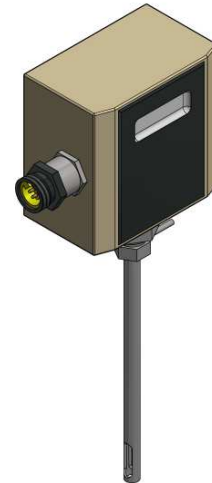


FLMTR Series

Natural Gas Flow Meter Kits for Boiler Commissioning or Flow Totalization



Product Description

The Natural Gas Flow Meter Kits reliably measure and display the instantaneous flow of natural gas. A commissioning kit is available to display the current gas flow in SCFH for accurate commissioning of a boiler. Two flow totalization kits are available to measure gas flow and transmit the information to either an LMV52 controller or a PLC.

Features

- Measures and displays the instantaneous flow of natural gas
 - Automatically compensates for temperature and pressure of the gas
 - Mounts on pipe sizes ranging from 1" to 6"
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Product Part Numbers

Table 1: Available Natural Gas Flow Meter Kits

Part Number	Description
FLMTR-0.75-6.0KIT	Natural gas flow meter kit for boiler commissioning
KT-LMV52-PIK-100	Natural gas flow meter kit for measurement and totalization of flow through a 1" pipe on an LMV52 controller
KT-LMV52-PIK-125	Natural gas flow meter kit for measurement and totalization of flow through a 1-1/4" pipe on an LMV52 controller
KT-LMV52-PIK-150	Natural gas flow meter kit for measurement and totalization of flow through a 1-1/2" pipe on an LMV52 controller
KT-LMV52-PIK-200	Natural gas flow meter kit for measurement and totalization of flow through a 2" pipe on an LMV52 controller
KT-LMV52-PIK-250	Natural gas flow meter kit for measurement and totalization of flow through a 2-1/2" pipe on an LMV52 controller
KT-LMV52-PIK-300	Natural gas flow meter kit for measurement and totalization of flow through a 3" pipe on an LMV52 controller
KT-LMV52-PIK-400	Natural gas flow meter kit for measurement and totalization of flow through a 4" pipe on an LMV52 controller
KT-LMV52-PIK-500	Natural gas flow meter kit for measurement and totalization of flow through a 5" pipe on an LMV52 controller
KT-LMV52-PIK-600	Natural gas flow meter kit for measurement and totalization of flow through a 6" pipe on an LMV52 controller
KT-BMK-PLC-100	Natural gas flow meter kit for measurement and totalization of flow through a 1" pipe on a PLC
KT-BMK-PLC-125	Natural gas flow meter kit for measurement and totalization of flow through a 1-1/4" pipe on a PLC
KT-BMK-PLC-150	Natural gas flow meter kit for measurement and totalization of flow through a 1-1/2" pipe on a PLC
KT-BMK-PLC-200	Natural gas flow meter kit for measurement and totalization of flow through a 2" pipe on a PLC
KT-BMK-PLC-250	Natural gas flow meter kit for measurement and totalization of flow through a 2-1/2" pipe on a PLC
KT-BMK-PLC-300	Natural gas flow meter kit for measurement and totalization of flow through a 3" pipe on a PLC
KT-BMK-PLC-400	Natural gas flow meter kit for measurement and totalization of flow through a 4" pipe on a PLC
KT-BMK-PLC-500	Natural gas flow meter kit for measurement and totalization of flow through a 5" pipe on a PLC
KT-BMK-PLC-600	Natural gas flow meter kit for measurement and totalization of flow through a 6" pipe on a PLC

Specifications

Operating characteristics	Media to be measured	Natural gas
	Units for flow	SCFH
	Maximum flow	See Table 2
	Calibrated operating gas pressure	5 psig [0.3 bar] ¹
	Calibrated operating gas temperature	55°F [13°C] ¹
	Ambient temperature	-40 to 120°F [-40 to 49°C]
	Gas pressure operating range	0 to 120 psig [0 to 8.3 bar]
	Accuracy	±1% of full scale plus 3% of reading (correlation)
	Repeatability	±0.24% of full scale

Table 2: Pipe Size vs. Maximum Flow Rate

Pipe Size	Max Flow (SCFH)	Approx. Boiler Horsepower at Max Flow (BHP) ²
1"	3601	91
1-1/4"	6232	158
1-1/2"	8483	215
2"	13982	355
2-1/2"	19949	507
3"	30803	782
4"	53042	1347
5"	83358	2117
6"	120376 ³	3057 ³

Notes:

1. Meter automatically compensates for temperature and pressure of the gas
2. Boiler Horsepower numbers assume a natural gas heating value of 1000 BTU / SCFH and a boiler efficiency of 85%.
3. When using commissioning kit FLMTR-0.75-6.0KIT on a 6" pipe, max flow is 99912 SCFH which is approximately 2537 BHP.

Components

Figure 1 shows the components included with the FLMTR-0.75-6.0KIT commissioning kit. See Installation Instructions LV5-4050 for more information.



Figure 1: Components Included in the FLMTR-0.75-6.0KIT Commissioning Kit

1. Enclosure with remote display and convenience outlet
2. Natural gas flow meter
3. Interconnecting cable, 25 feet long
4. Brass packing gland for 3/8" tube, 1/2" NPT connection, with O-rings and washers installed
5. Spare O-rings, Dash 204 (qty 4)
6. 120 VAC power cord, 10 feet long, 10A max

Components (continued)

Figure 2 shows the components included with a KT-LMV52-PIK... totalization kit. See Installation Instructions LV5-4150 for more information.



Figure 2: Components Included in a KT-LMV52-PIK... Totalization Kit

1. Natural gas flow meter with ½" NPT conduit connection
2. Milliamp-to-pulse converter
3. 115 / 230 VAC to 15 VDC power supply
4. 100 / 240 VAC to 24 VDC power supply
5. 4 pin plug for LMV52 connection
6. Stainless steel tubing adapter for 3/8" tube, ½" NPT connection, with stainless steel ferrule installed

Components (continued)

Figure 3 shows the components included with a KT-BMK-PLC... totalization kit. See Installation Instructions LV5-4250 for more information.



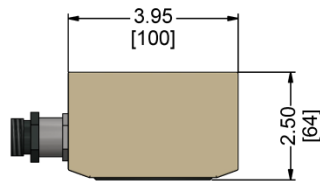
Figure 3: Components Included in a KT-BMK-PLC... Totalization Kit

1. Natural gas flow meter with $\frac{1}{2}$ " NPT conduit connection
2. 115 / 230 VAC to 15 VDC power supply
3. Stainless steel tubing adapter for $\frac{3}{8}$ " tube, $\frac{1}{2}$ " NPT connection, with stainless steel ferrule installed

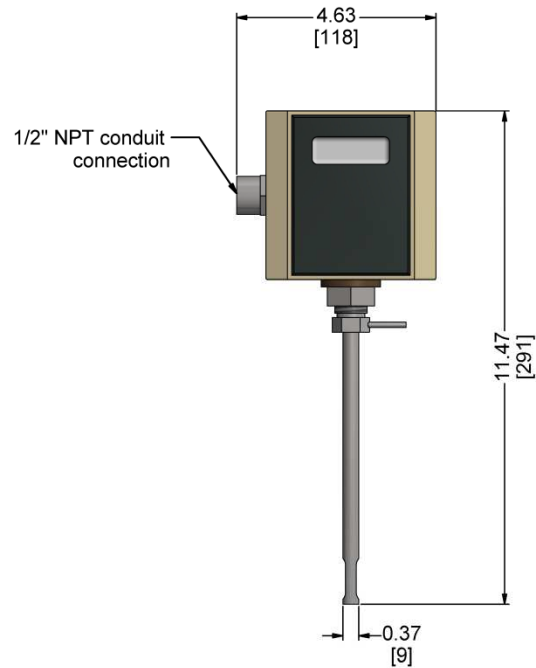
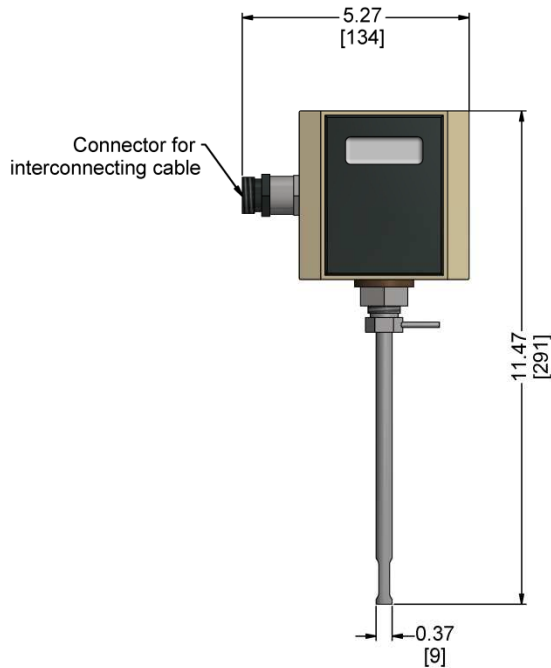
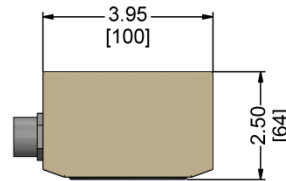
Dimensions

Dimensions in inches; millimeters in brackets

FLMTR-0.75-6.0KIT



KT-LMV52-PIK..., KT-BMK-PLC...



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