

ADDING PRESSURE SENSORS TO SMART NATURAL GAS METERS

Background

Natural gas is the cleanest and one of the cheapest fossil fuels, which will continue to be a large source of energy in the future. Despite the many benefits of natural gas, it is a safety concern due to its flammability. As natural gas is distributed through its network, any leakage could cause a fire or explosion. Also, if buildings and homes become over pressured, natural gas infrastructure and appliances inside could be at risk to future leaks and be the cause of fire and explosion.

Solution

Applying pressure sensors at nodes throughout the natural gas distribution networks is a practical and cost effective approach to mapping and monitoring an areas network. One location that makes sense is a residential or commercial smart gas meter. These smart meters are already equipped with the ability to communicate wirelessly and are providing benefits in terms of more accurate billing. Adding pressure sensors will allow utilities to map pressure in their network in real time. Similarly, and perhaps most important, they could be used to trigger remote shutoff valves in the meter to protect the building in case of an overpressure event.

Sensata Technologies, a world leader in pressure sensors, has developed the 8MPP2, offering low power digital I²C electrical output in a package convenient for mounting in a meter. The 8MPP2 features high accuracy and long-term stability, designed and tested specifically to be used with natural gas media.

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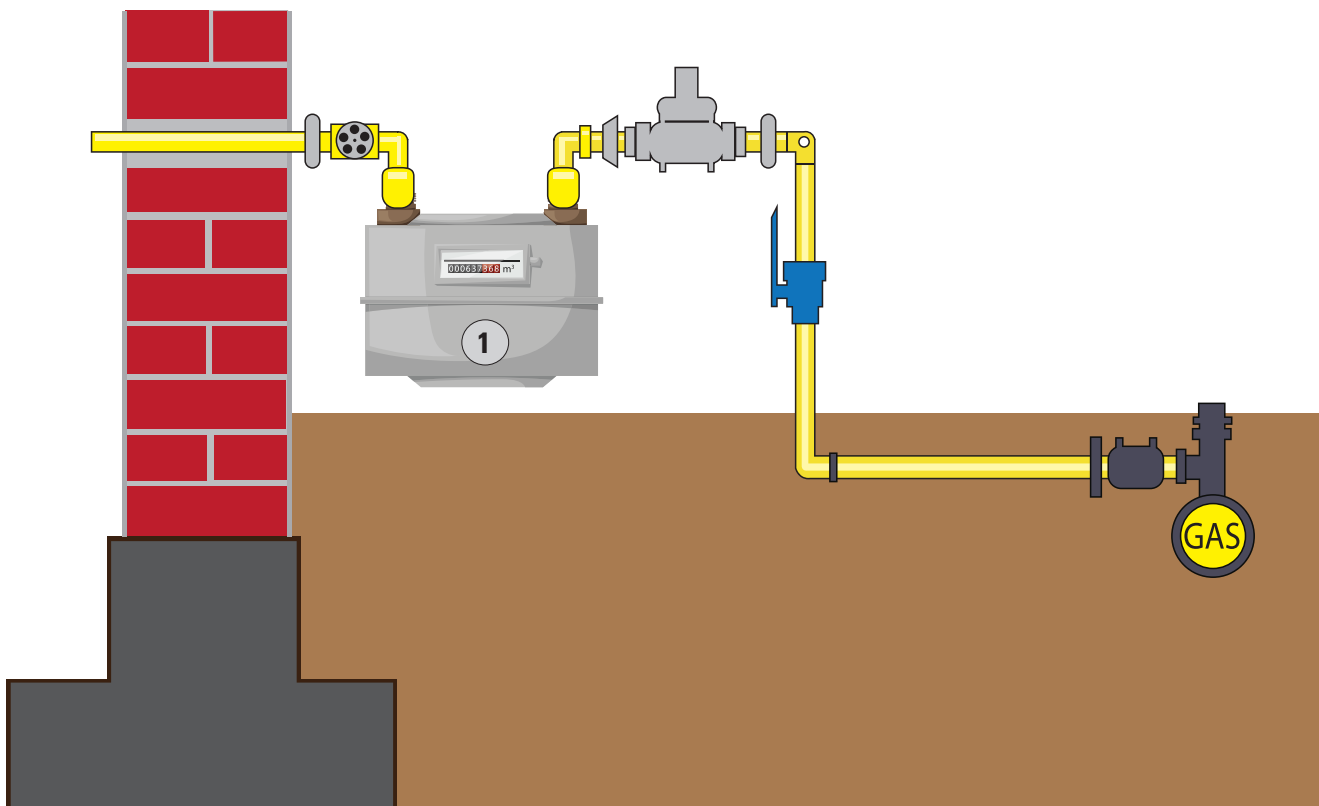


RECOMMENDED PRODUCTS

Reference on Diagram	Product	Features	Function	Brand
1	 8MPP2 Series	<ul style="list-style-type: none"> Operating pressure range: 0-69 mbar to 0-345 mbar (0-1psig to 0-5 psig) Low power consumption (8µA @1Hz) Convenient mounting and interface Natural gas compatibility 	Monitor natural gas distribution network pressure	Sensata Technologies



SMART NATURAL GAS METERS



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