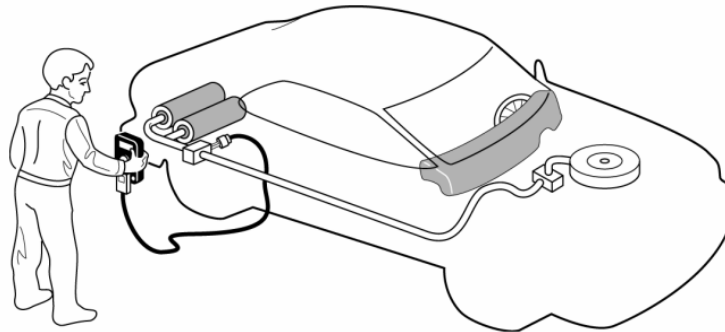


Hand-held Pressure Monitor for Compressed Natural Gas

Application Note



PROBLEM:

Routine maintenance of natural gas vehicles includes analysis of the fuel delivery system. In this application a technician uses a hand-held tool to make pressure measurements. Pressure, ranging from 175 psi \pm 5 psi to 300 psi \pm 5 psi, is measured at the outlet side of the fuel supply pressure regulator. Maximum pressure at the inlet side of the regulator is 3600 psi. Formerly, oil-filled mechanical gauges were used to make this measurement. However, the mechanical gauges tended to leak and in the event of a catastrophic regulator failure (allowing passage of the full 3600 psi supply pressure) they might burst. A suitable replacement for the mechanical gauges would need to be low-cost (mechanical gauges are inexpensive) with a low-excitation voltage and current (for battery operation) and a high burst-pressure rating (for safety).

SOLUTION:

A MLH Series pressure sensor with a burst pressure rating of 10,000 psi delivers the required safety margin in the event of regulator failure. The MLH 5.0 Vdc excitation rating allows for battery operation, and with accuracy of 0.5 %, system-performance is exceeded. The MLH cost is comparable to the mechanical gauges it replaced.

ENVIRONMENT:

The vehicles are serviced in a garage where temperatures vary from 10 °C to 32 °C [50 °F to 90 °F], well within the MHL Series compensated-temperature range. The MLH series sensors are protected from many environmental conditions by a housing designed to meet IP65 standards.

SUMMARY:

The rugged and highly dependable Honeywell MLH Series pressure sensors are a perfect choice for this type of application. The thru-wall mounting capability, broad range of pressures, along with a variety of pressure ports and connector styles to choose from make this a very versatile product that can be readily adapted to a variety of applications.

⚠ WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. **The foregoing is Buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.**

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

For application assistance, current specifications, or name of the nearest Authorized Distributor, contact a nearby sales office. Or call:

1-800-537-6945 USA/Canada

1-815-235-6847 International

FAX

1-815-235-6545 USA

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