

Use and Care

of KELLER level and pressure transmitters

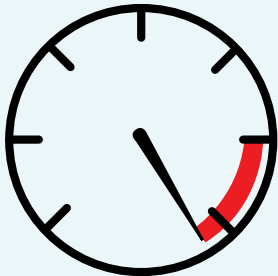
Safe Handling

Safe handling of KELLER pressure measurement devices is accomplished if a nominal amount of care is taken. Things to avoid are:

- Contact with chemicals known to be corrosive to the materials of construction
- Sharp impact against hard surfaces
- Probing of pressure sensing membrane with ANYTHING

WARNING!

Under no circumstances should the membrane or pressure input port to the KELLER device be probed with any object. Damage to the sensing membrane is permanent and, in most cases, requires repair or replacement.



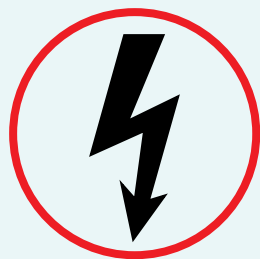
Limits of Pressure

KELLER pressure sensors, transducers and transmitters are designed to withstand a certain amount of overpressure without damage or calibration shift. It can range from 15X for the lower pressure ranges to 1.1X for the highest ranges. This value is different for each product and is referred to in the literature as “Overpressure.” Also found in the literature is usually a value for “Burst Pressure,” which is the pressure at or above which there may be catastrophic failure of the product.

It is the User’s responsibility to insure that the proper KELLER product is chosen for the particular pressure conditions expected.

Environmental conditions

Each KELLER product is designed to be compatible with a particular environment. It is the user’s responsibility to insure that the KELLER product is not exposed to an environmental condition for which it is not designed. These conditions can include operating temperature range and exposure to high-pressure water jets, media not compatible with the materials of construction, submergence of transmitters not designed for that purpose, or potentially explosive atmospheres. A KELLER engineer can help the user determine the correct choice of enclosure to suit the particular application.



Electrical conditions

Each KELLER product is designed to operate properly within a specific range of electrical conditions. All KELLER transmitters are CE-approved and many are Ei (intrinsically safe) or Ex (explosion proof) rated. In addition, several models include guaranteed protection against damage from electrical surge e.g. lightning. The specific product label defines the rating(s), if any, that applies to the product to which it is affixed. It is the User’s responsibility to insure that all electrical connections are made to the KELLER products in accordance with KELLER recommendations. Wire colors or connector pinouts are either printed on the label affixed to the product or provided separately.

Use and Care - CONTINUED

Cleaning

Regarding media-isolated products, should the pressure input to the sensor, transducer or transmitter become fouled, it may be cleaned in the following manner. In the simplest case, and depending upon the specific KELLER product in question, the device should be slowly lowered membrane-first into a solution of warm, soapy water. Care should be taken not to submerge the entire device, unless it is specifically designed for continuous submergence. Agitate the solution with the device and the fouling should disperse after a time. Continue agitating until the input to the device is clear.

Should the fouling be of a nature that it cannot be dissolved with soapy water, use of a solvent is recommended, but only after compatibility with any o-ring seals in the KELLER product is determined. Follow the solvent manufacturer's recommendations for safe handling.

Warranty

Except in the case of special agreements in writing between KELLER and the Customer, the following conditions apply:

Keller America, Inc. warrants that the products that it sells are delivered free from defects in material and workmanship. Keller America, Inc.'s liability under this warranty is limited to replacing or repairing or issuing a credit note, at its option, for any product which is returned to the factory, transportation charges prepaid, and which is determined by Keller America, Inc. to be defective. Suitability for use is the responsibility of the buyer. The above mentioned warranty applies only if the recommended conditions of storage and use are respected by the User.

This warranty does not apply to batteries and accumulators and to any product which has been subjected to or damaged due to misuse, misapplication, negligence or accident, or which has been repaired or altered without express prior and written consent from Keller America, Inc. In order to obtain service under the terms of the warranty, Buyer must notify Keller America, Inc. of any defects before the expiration of the warranty period and make suitable arrangements for the performance of services.

In all cases, Buyer shall be responsible for packaging and shipping the products to the Keller America, Inc. plant with shipping charges prepaid. Keller America, Inc. shall pay for the return of any products to Buyer if the shipment is to a location within the continental USA. Buyer shall be responsible for paying all shipping duties, taxes, and other charges for products returned to any other location. Keller America, Inc. will provide on-site service only upon prior agreement and upon payment of all travel expenses by Buyer.

Warranty period for the Levelgage, LevelRat, Acculevel, Microlevel, Nanolevel, Digilevel, Preciseline, and Value-line products is 24 (twenty-four) months from date of shipment. Warranty period for all other products is 12 (twelve) months from date of shipment. Warranty repair covers all applicable parts and labor. This warranty is given in lieu of any other warranty, express or implied. Keller America, Inc. explicitly disclaims any implied warranties of merchantability and fitness for a particular purpose. KELLER's responsibility is limited to the correct operation of our products and to the repair or replacement of any products which, in our opinion, are deemed to be defective and to which this warranty applies. KELLER is not responsible for indirect loss or damage.

There are no warranties, express or implied, that extend beyond the description herein. The sole and exclusive remedy for any claims against Keller America, Inc. shall be the warranty described in this document. All damages, direct or consequential, limited to the described warranty are excluded.