

HAYWARD FLOW CONTROL GDS SERIES PRESSURE GAUGES INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

PLEASE READ THE FOLLOWING INFORMATION PRIOR TO INSTALLING AND USING HAYWARD GDS SERIES PRESSURE GAUGES. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN PRODUCT DAMAGE, PROPERTY DAMAGE, PERSONAL INJURY, OR EVEN DEATH.

1. Hayward Flow Control (Hayward), a division of Hayward Industries, guarantees its products against defective material and workmanship only. Hayward assumes no responsibility for property damage or personal injury resulting from improper installation, misapplication, or abuse of any product.
2. Hayward assumes no responsibility for property damage or personal injury resulting from chemical incompatibility between its products and the process fluids to which they are exposed. Determining whether a particular PVC, CPVC, or PP product is suitable for an application is the responsibility of the user. Chemical compatibility charts provided in Hayward literature are based on ambient temperatures of 70°F and are for reference only.
3. Hayward products are designed for use with non-compressible liquids.

WARNING

Hayward PVC and CPVC products should NEVER be used or tested with compressible fluids such as compressed air or nitrogen. Use of PVC and CPVC products in compressible fluid applications may result in product damage, property damage, personal injury, or even death.

WARNING

The Series GDS Pressure Gauge is intended for use in liquid service only. Do not attempt to use this gauge for air or gases. Use of this product in air or gas service may result in product damage, property damage, personal injury, or even death.

4. The maximum recommended fluid velocity through any Hayward product is eight feet per second (8 ft/s). Higher fluid velocity can result in damage due to the water hammer effect.
5. Piping systems must be designed and supported to prevent excess mechanical loading on Hayward products due to system misalignment, weight, shock, vibration, and the effects of thermal expansion and contraction.
6. The effect of temperature on plastic piping systems must be considered when the systems are initially designed. The pressure rating of plastic systems must be reduced with increasing temperature. Maximum operating pressure is dependent upon material selection as well as operating temperature. Before installing any Hayward product, consult Hayward product literature for pressure vs. temperature curves to determine any operating pressure or temperature limitations.
7. PVC and CPVC plastic products become brittle below 40°F. Use caution in their installation and operation below this temperature.

WARNING

Hayward PVC and CPVC products should not be used in services with operating temperature below 34°F.

8. Due to differential thermal expansion rates between metal and plastic, transmittal of pipe vibration and pipe loading forces, **DIRECT INSTALLATION OF GAUGES INTO METAL PIPING SYSTEMS IS NOT RECOMMENDED.** Wherever installation of plastic gauges into metal piping systems is necessary, it is recommended that at least 10 pipe diameters in length of plastic pipe be installed upstream and downstream of the gauge to compensate for the factors mentioned above.
9. Published operating requirements are based on testing of new vessels using clean water at 70°F. Gauge performance is affected by many factors including fluid chemistry, viscosity, specific gravity, flow rate, and temperature. These should be considered when sizing Hayward products.
10. Systems should always be depressurized and drained prior to installing or maintaining any Hayward product.

WARNING

Failure to depressurize and drain system prior to installing or maintaining gauge may result in product damage, property damage, personal injury, or even death.

PRODUCT SPECIFICATIONS:

Materials:	Housing:	PVDF or PP
	Movement:	316 SS (Non-Wetted)
	Diaphragm:	FPM
	Bourdon Tube:	316 SS (Non-Wetted)
	Filling:	Glycerin
Max. Temperature:	PP:	170°F
	PVDF:	195°F
Accuracy:	± 1.5% of full scale	

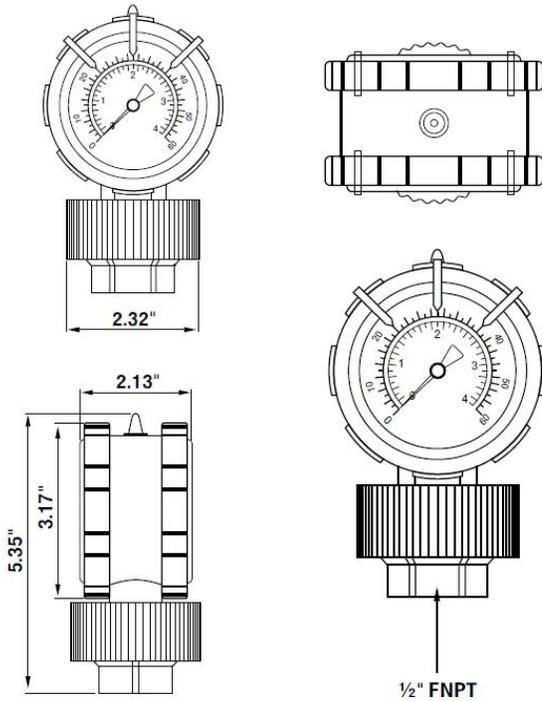
WARNING

The maximum recommended fluid velocity through any plastic piping system is eight feet per second (8 ft/s). Higher fluid velocity can create excess water hammer effect, resulting in property damage, personal injury, or even death.

CAUTION

Published operating requirements are based on testing of new meters using clean water at 70°F. Gauge performance is affected by many factors including fluid chemistry, viscosity, specific gravity, flow rate, and temperature. These should be considered when sizing Hayward products.

PRODUCT DIMENSIONS:



WARRANTY TERMS AND CONDITIONS:

TWO YEAR WARRANTY: All products manufactured by Hayward are warranted against defects in material or workmanship for a period of two years from date of shipment. Our sole obligation under this warranty is to repair or replace, at our option, any product or any part or parts thereof found to be defective. **HAYWARD MAKES NO OTHER REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** The warranty set forth above is the only warranty applicable to Hayward products and in no event shall Hayward be liable for any delay, work stoppage, cartage, shipping, loss of use of equipment, loss of time, inconvenience, loss of profits of any direct or indirect incidental resulting from or attributable to a breach of warranty. **The remedies under this warranty shall be the only remedies available. OUR MAXIMUM LIABILITY SHALL NOT IN ANY EVENT EXCEED THE CONTRACT PRICE FOR THE PRODUCT.**