PGA SERIES - STRAIGHT PIGTAIL SIPHONS

Pigtail siphons are looped pipes that are placed directly on piping before a pressure gauge to protect the internal parts of the gauge from the effects of steam. Prior to installation, the siphon loop should be filled with water. When steam hits the water, it condensates and is cooled down before it can reach the gauge and cause any damage.

PGA-PTB-02

PGA-PTS-02

APPLICATIONS:

- Recommended for applications involving temperatures above 100°F (37°C).
  IMPORTANT NOTE: Do not exceed maximum temperature rating for pressure switch/ gauge.
- Ideal for steam installations.
- Straight pigtails are primarily used for vertical installation.

For applications requiring higher temperature/ pressure ratings, consider Schedule 80 or Schedule 160 carbon or stainless steel siphons. Steam pressure can be dangerous; a qualified system designer or engineer is responsible for selecting and installing the product. It is solely the responsibility of the system designer or installer to ensure compliance with all applicable national and local codes.

FEATURES:

- Protects the pressure gauge, diaphragm seal or transmitter from effects of hot pressure media, such as discoloration of the dial and hardening of the gasket.
- Reduces the effect of rapid pressure surges by reducing steam or other process media temperature prior to entering pressure gauge or transmitter.

SPECIFICATIONS:

- Steel Siphon pipe dimensions conform to ASTM A733 Standard Specification for Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples. Material conforms to ASTM A53 (Type ERW Grade B Steel) Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
- Red Brass Siphon pipe dimensions & materials conform to ASTM B43 (C23000) Standard Specification for Seamless Red Brass Pipe, Standard Sizes.
- 1/4” MPT threads conform to ANSI/ASME B1.20.1.

CERTIFICATIONS (Red Brass Siphon only):

- NSF/ANSI Standard 61 Certified (Drinking Water System Components - Health Effects)
- NSF/ANSI Standard 372 Certified (Drinking Water System Components - Lead Content) - NL Brass - (NL test criteria <0.25% Pb by weighted average)
- CRN Listed

BOSHART INDUSTRIES

25 Whaley Avenue, PO Box 310
Milverton, ON CANADA N0K 1M0
Tel: 800-561-3164

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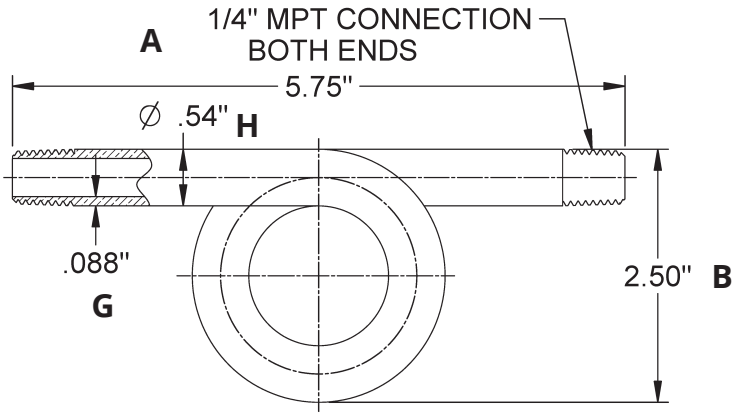
RATINGS:
Maximum Allowable Working Pressure / Temperature:
- PGA-PTS-02; 500 PSI @ 400°F (204°C)
- PGA-PTB-02; 250 PSI @ 400°F (204°C)
- When temperatures exceed 300°F, the system may require a specialty high temp pressure gauge.
- Temperature of fluid entering the gauge cannot exceed the rating of the gauge.

NL RED BRASS ALLOY C23000	
Element	**Percent of Compostion**
Copper (Cu)	84.0 to 86.0%
Lead	0.05% max
Iron	0.05% max
Zinc	Remainder

PGA-PTB-02

STEEL ALLOY (ASTM A53 Type ERW Grade B)	
Element	**Percent of Compostion**
Carbon (C)	0.3% max
Manganese (Mn)	1.2% max
Phosphorus (P)	0.005% max
Sulfur (S)	0.0045% max
Copper (Cu)	0.4% max
Chromium (Cr)	0.4% max
Nickel (Ni)	0.4% max
Molybdenum (Mo)	0.15% max
Vanadium (V)	0.08% max



PGA-PTS-02

DIMENSIONS											
Part No.	**Nominal Pipe Size**	**H - Outside Dia.**		**G - Wall Thickness**		**A - Length inches (tolerance of +/- 1/4")**		**B - Height inches (tolerance of +/- 1/4")**		**Total Tube Length**	
		in	**mm**	**in**	**mm**	**in**	**mm**	**in**	**mm**	**in**	**mm**
PGA-PTB-02	1/4	0.540	13.72	0.088	2.24	5.750	146.05	2.50	63.50	5.75	146.05
PGA-PTS-02	1/4	0.540	13.72	0.088	2.24	5.750	146.05	2.50	63.50	5.75	146.05

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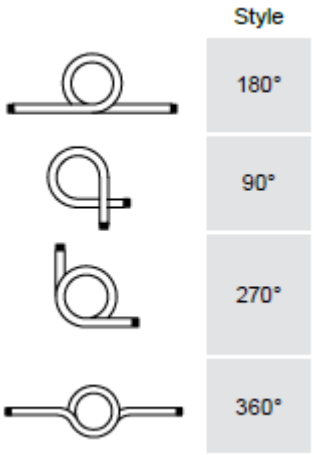
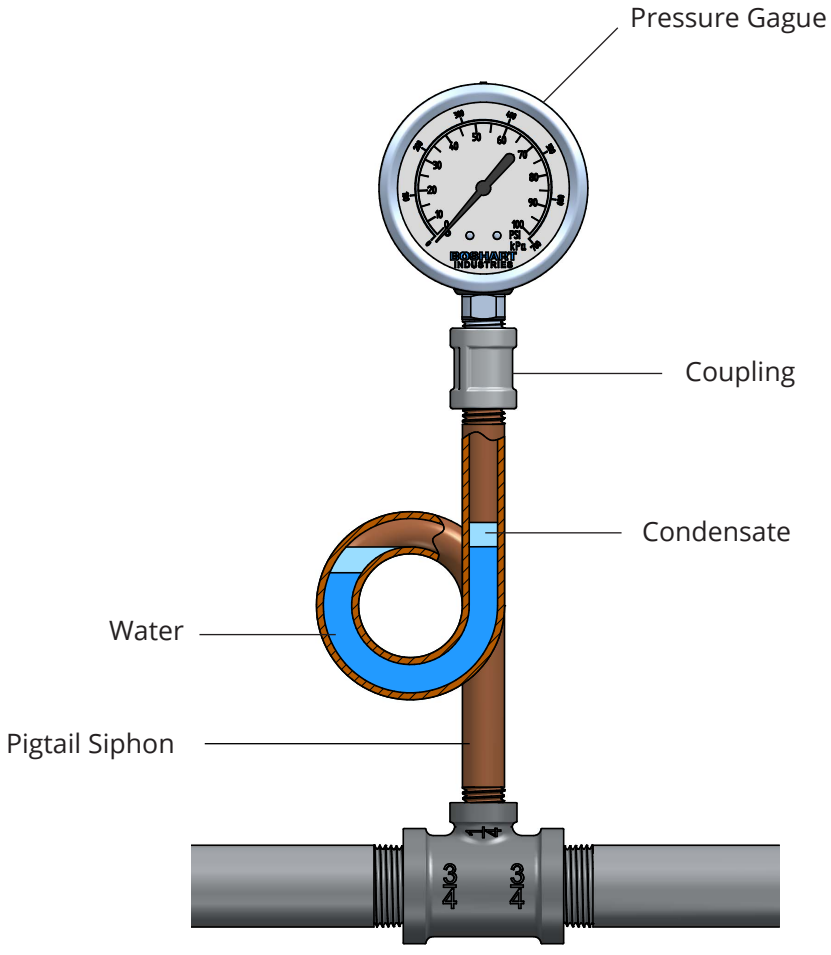
How do Pigtail Siphons work?

There are four different types of steam siphons: 180°, 90° (meant for vertical piping configurations), 270° and 360° (meant for vertical or horizontal applications). Prior to installation, the siphon loop should be filled with water, or any suitable liquid that is compatible with the components of the pressure gauge and piping system. Steam travelling through the pipe will go up the siphon and will condensate in the loop, after being cooled by the water, before reaching the pressure gauge. Pressure can still get through to the gauge to be measured, but not at the full temperature of the steam which can cause damage to the internal parts. The siphon does NOT modify the pressure measurement. The liquid in the siphon does not have any effect of the pressure reading.

The use of a ball valve between the siphon and the pressure gauge is an option (not pictured) instead of a coupling, giving the option to isolate the gauge when not in use, which will protect it further. Another benefit to using a ball valve here is for changing the gauge, as the ball valve can be shut to allow for the change of the gauge without shutting off the whole main line. Ensure the valve meets the temperature and pressure ratings for the system.





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