

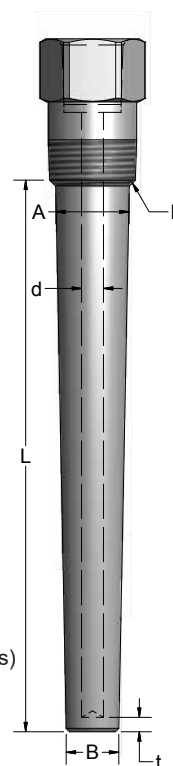
Based on calculations in accordance with ASME PTC 19.3 TW

ASME PTC 19.3 TW, the U.S. standard for evaluating the mechanical design of a thermowell used in a broad range of applications, was updated in 2016 to include a greater number of thermowell and process variables. Sometimes referred to as "Wake Frequency Calculation", the revision incorporates new elements for evaluating thermowell constructions that will reduce the chance of vibration and stress damage to the vessel, as well as avoid vibration damage to the temperature sensor it protects.

Please input data regarding your thermowell dimensions, thermowell properties and material/media/process properties in the designated spaces below. We will review the data, process the calculations and contact you with the results. Feel free to contact one of our Product Engineers to go through the process calculations.

| | | |
|----------------------------------------------------|---------------|---------------------------|
| Unit of Measure: | English Units | ▼ |
| Mounting Type: | Threaded | ▼ |
| Shank Profile: | Tapered | ▼ |
| Material: | 316SS | ▼ |
| Process Connection: | 1" NPT | ▼ |
| Unsupported Length (L): | 6 | in |
| Bore Diameter (d): | 0.260 | ▼ in |
| Root Diameter (A): | 1.0625 | in |
| Tip Diameter (B): | 0.625 | in |
| Minimum Tip Thickness (t): | 0.188 | in |
| ? Fillet Radius at Support Plane (b): | 0.178 | in |
| ? Fillet Radius at Base of Step (b _s): | | in |
| Reduced-Diameter Shank Length (L _s): | | in |
| ? Damping Factor (ζ): | 0.0005 | |
| ? Shielded Length of T-Well (L _s): | 0 | in |
| Max. Fluid Velocity (V): | 15.5 | ft/s |
| Fluid Density (ρ): | 4.3 | lb/ft ³ |
| Max. Operating Temperature (T): | 450 | F |
| Max. Operating Pressure (P): | 150 | psig |
| Dynamic Viscosity (μ): | | cP (1 centipoise = mPa*s) |
| Tag/Reference #: | TW-100 | |

1. Input your data online
2. We review and process the calculations
3. We will contact you with results
4. (Optional) Contact one of our Product Engineers to go through process calculation questions



Find this page at: www.Pyromation.com/TechInfo/WakeFreq.aspx

Pyromation makes no claims regarding performance or safety based on the calculations provided. The results communicated are based on the ASME PTC 19.3 TW design standard for reliable service of tapered, straight and stepped-shank thermowells in a broad range of applications. The user assumes full responsibility for installation, application and operation of the product.