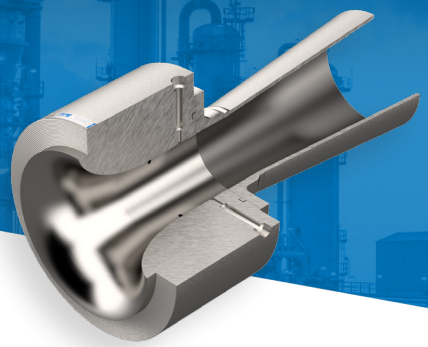
PRODUCT DATASHEET

ASME PTC-6 Flow Nozzle



Description

The ASME PTC-6 Throat Tap Flow Nozzle provides the highest possible dP device accuracy and precision which is needed for the testing of steam turbine efficiency as prescribed in the ASME PTC-6 Performance Test Code. The PTC-6 Flow Nozzle is supplied complete with integrated up/down pipe spools, a flow conditioner and with an optional nozzle outlet diffuser cone for considerably reduced pressure loss. All PTC-6 Flow Nozzles supplied by Primary Flow Signal are guaranteed to meet the strict laboratory calibration criteria required to maintain the uncertainty needed for turbine performance testing.

Common Materials

- Carbon Steel
- 304 / 316SS
- Chrome Moly

Design Standards

- ASME PTC-6

Construction Standards

- ASME Section I
- ASME B31.1 – Power Piping
- ASME B31.3 – Process Piping

Applications

- Steam and Water

Special Features

- Highest accuracy dP device available
- Stringent Laboratory Calibration Requirements
- Extended product life with no moving parts
- Lower susceptibility to erosion
- Widely used for high pressure and/or high temperature steam and water flow
- Useful for flow measurement at high velocities
- Repeatability of better than ± 0.1%
- Designed per ASME PTC-6
- Used in power plant efficiency test applications

Model Types

- PTFFR – PTC-6, Flanged Nozzle, Flanged Ends, Run
- PTFWR – PTC-6, Flanged Nozzle, Welded Ends, Run
- PTWFR – PTC-6, Welded Nozzle, Flanged Ends, Run
- PTWWR – PTC-6, Welded Nozzle, Welded Ends, Run

Specifications

Standard Line Size: 4 to 28 inches (not limited to)

Head Loss (permanent pressure loss) in % of Differential: 60% to 85% (18% to 25% with optional outlet diffuser cone), Beta Dependent

Basic Accuracy (% of Total): (Always Calibrated) +/- 0.25% or Better

Recommended Application, THROAT Reynolds Number: Greater than 1,000,000 (lower possible with calibration)

Required Straight Piping: 20D Upstream / 10 D Downstream

Beta Range: 0.25 through 0.50

Useful Service Life: Medium to Long

Note: PFS specializes in the refurbishment of nozzle runs