

## PTC-6 ASME Flow Nozzle

### Precision Flow Measurement for Steam Turbine Acceptance Tests

**P**rimarily Flow Signal, Inc. is a leader in the design and manufacture of Venturi differential flow meters. Field-proven in hundreds of thousands of installations worldwide, differential metering ensures the most accurate and reliable metering available anywhere. Through innovation, coupled with peerless engineering and technical expertise, PFS delivers customers versatile, ultra-long lasting liquid and gas metering solutions for a variety of applications and industries.



The **PFS PTC-6 ASME flow nozzle** provides the high precision needed for the testing of steam turbines under ASME PTC-6 2004 Performance Test Code. The PTC-6 ASME integrates flow conditioners for added accuracy, and diffuser cones to reduce downstream pressure loss, and also provides flanged-end PTC6-PTFFR and weld-in PTC6-PTWWR style nozzles.

#### PTC-6 ASME Flow Nozzle Features

**Line size:** available from 4" to 24"

**Cones:** available in PTC6-PTFFR (flanged-end) and PTC6-PTWWR (weld-in)

**Engineered to PTC-6 recommended standards:**

- 35 hole perforated plate
- 19 (standard) to 61 tube bundle

**Diffuser Cone:** mitigates any pressure loss by as much as 70%

**ASME design standards:**

- ASME PTC-6 2004
- ASME PTC 19.5 2004
- ASME Research Committee Report on Fluid Meters - 6th. Edition

**ASME fabrication standards:**

- ASME Section I
- ASME B31.1 - Power piping
- ASME B31.3 - Process piping

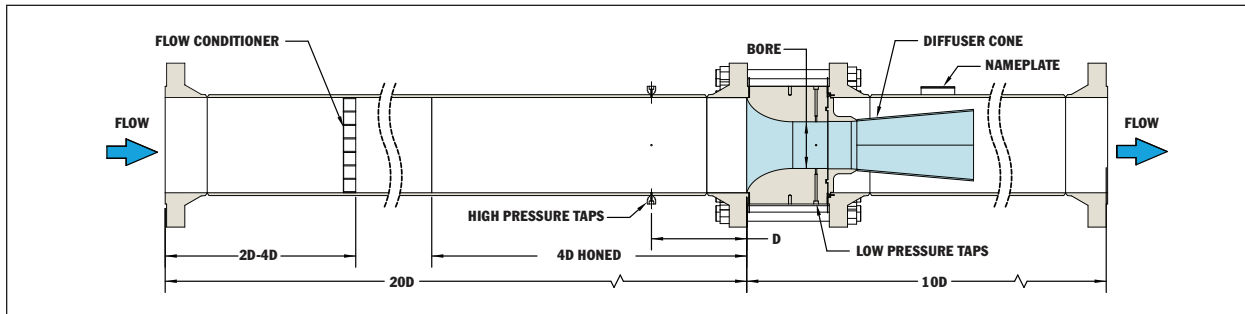
**End connections:** both the flanged-end PTC6-PTFFR and weld-in PTC-PTWWR are equipped with four (4) integrally machined throat pressure taps, and are precision-machined and polished for a cylindrical, hydraulically smooth surface.

# Data Sheet

## PTC-6 ASME

### PTC-6-PTFFR: Flanged-end Style

Ideal for condensate return flow where line pressures are low to moderate



**Application:** clamped between two mating flanges

**Construction:** this assembly allows for easy removal and inspection of the nozzle, pressure taps, and piping during performance testing

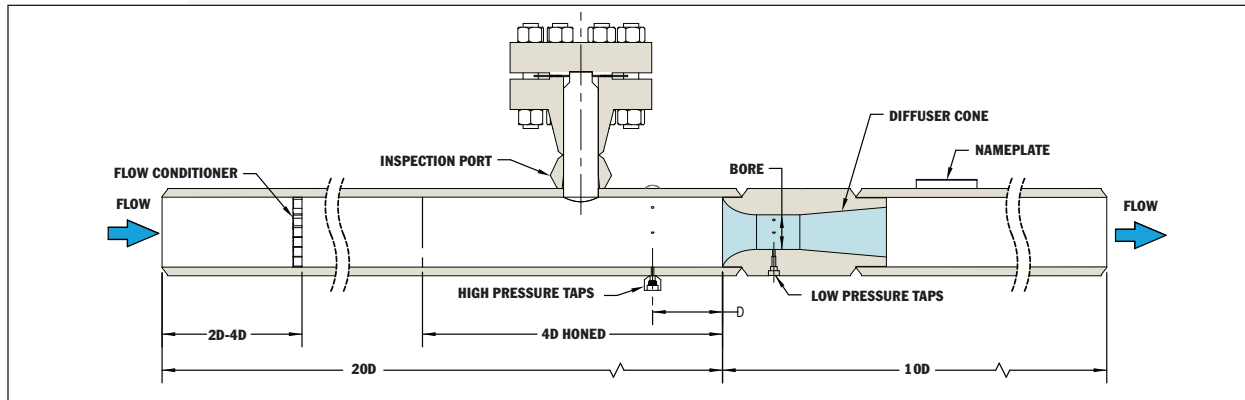
**Nozzle:** can be furnished with the diffuser cone integral to the flow nozzle or as an attachment

**End connections:** flanges may be flat faced, ring type joint, large groove, or tongue-and-grooved

**Material:** carbon steel process piping, 304 stainless steel flow nozzle/flow conditioner, other material combinations and grades available

### PTC6-PTWWR: Weld-in Style

Ideal for the measurement of final feed water flow where line pressures are high



**Application:** permanently welded in place between the upstream and downstream pipe sections

**Inspection:** standard ports to allow for code-recommended nozzle inspection

### Support Services

In addition to a wide range of differential producing Venturi flow meters, orifice plates, WedgeType™ flow meters, and open channel flow elements, PFS provides comprehensive, specialized services for new and existing flow meters, including rehabilitation, hydraulic analysis, and full engineering support.

### Certifications

ISO 9001, ASME S, U, R; European PED Module H; and other internationally recognized certifications, such as GOST, IBR, and CRN.

**Contact a Field Application Engineer for assistance.**



**All PFS products are proudly made in the U.S.A.**



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