FLOW NOZZLE ASSEMBLY
DESCRIPTION:
Flow nozzle is a DP type flow meter consisting of rounded profile at inlet providing a smooth inlet to the fluid & the particles in the steam there by reducing the wear & tear thus extending the product life. This smooth inlet passage leads to lesser pressure drop & more efficiency. Eureka's NZL series is typically used for measurement of erosive & high velocity flow, such as high pressure high temperature steam. It can also be used with other fluids such as water, air or other gases.

APPLICATIONS:
- POWER PLANT
- SUGAR INDUSTRY
- PULP & PAPER INDUSTRY
- GAS PROCESSING & TRANSMISSION

FEATURES:
- Best suitable for measurement of high pressure high temperature high velocity steam measurement.
- Smooth profile & rigid structure makes the assembly extremely stable.
- Absolutely leakage free for weld in type assembly.
- Zero maintenance since no moving parts.
- Repeatability: 0.3%
- Less straight lengths requirement.

NOMINAL SIZES AVAILABLE:
- Diameters 50mm to 630mm, as specified by standards for respective type
  (For larger sizes please consult Eureka representative.)

MODELS AVAILABLE:
- BASED ON ELEMENT
  - Long Radius High Beta
  - Long Radius Low beta
  - ISA 1932

ORDERING INFORMATION:

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<th>SERIES</th>
<th>MOC OF ELEMENT</th>
<th>LINE SIZE</th>
<th>FLANGE RATING / TYPE</th>
<th>MOC OF PIPE / FLANGE</th>
<th>NOZZLE TYPE</th>
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<tr>
<td>NOZZLE</td>
<td>SA 105 - CS</td>
<td>50</td>
<td>NA - WELDIN TYPE</td>
<td>A106 GR. B / SA105 - CS</td>
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<td>F11 - AS1</td>
<td>80</td>
<td>300# - WN / RF/RTJ</td>
<td>SA335P11 / SA335P22 / SA335P91</td>
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<td>F22 - AS2</td>
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<td>600# - WN / RF/RTJ</td>
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<td>F91 - AS9</td>
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<td>900# - WN / RF/RTJ</td>
<td>SA335P91 / SA182F91 - AS9</td>
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<td>SA182 F316 - S6</td>
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<td>SA182 F304 - S4</td>
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<td>SA312 TP304 / SA182F304 - S4</td>
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</table>

** - Please specify wall thickness for non standard schedule.
Note 1: Default pipe schedule will be Sch. STD
Note 2: Required testing to be mentioned separately.

BASED ON MOUNTING
- Weldin type
- Flanged type
- Flanged type with throat tap nozzle (as per PTC-6 standard)

DESIGN & MANUFACTURING STANDARD:
- ISO-5167 part III
- ASME PTC-19.5
- ASME PTC-6 (The results are used as the basis of Turbine acceptance)
- ASME MFC

DIAMETER RATIO:
- 0.25 to 0.8 - for Long Radius High Beta
- 0.20 to 0.5 - for Long Radius Low Beta
- 0.3 to 0.8 - for ISA 1932

PRESSURE TAPPING:
- Radius taps (D-D/2 tapping) – For Long Radius high beta
- Throat taps – For Long Radius Low beta
- Corner taps – For ISA 1932

UNCERTAINTY:
- Long Radius High Beta - 2%
- Long Radius Low Beta - 0.25%*
- ISA 1932 - 0.8% to 1.2%
  *when used with PTC-6 standard

MATERIALS:
Selection based on temperature & process conditions.
Available materials are:
- Element : SA.182 F316
- Pipe: SA.106Gr. B / SA335 P11 / SA335 P22 / SA.335P91
- Flange material: SA105 / SA182F11 / SA182F22 / SA182F91
  * Other materials available on request

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