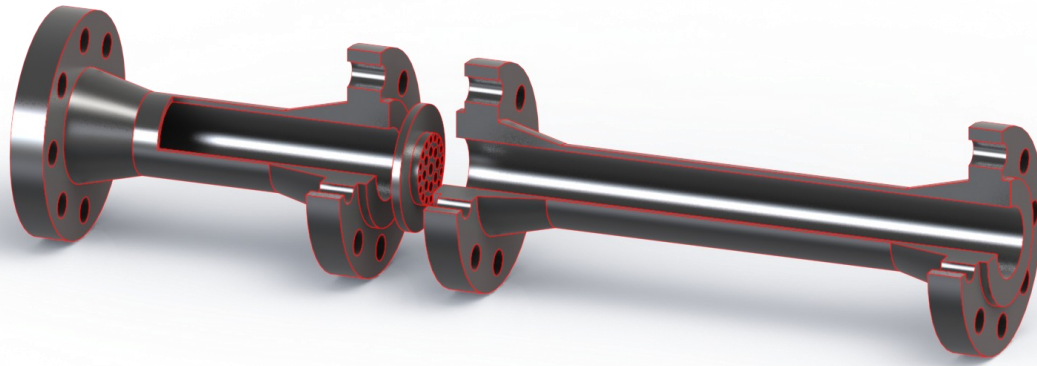


CPA 2" Tube Bundle Replacement (TBR), Type C Flow Conditioner

- The NPS 2" CPA TBR Flow Conditioner is available in both pinned and flanged configurations.
- Satisfies AGA 3 requirements for beta ratios up to 0.75 with a 13D meter run.
- Eliminates swirl and provides a fully developed velocity flow profile.
- All verification tests were performed in independent high pressure gas testing facilities.
- Minimizes flow meter uncertainty in any piping configuration.

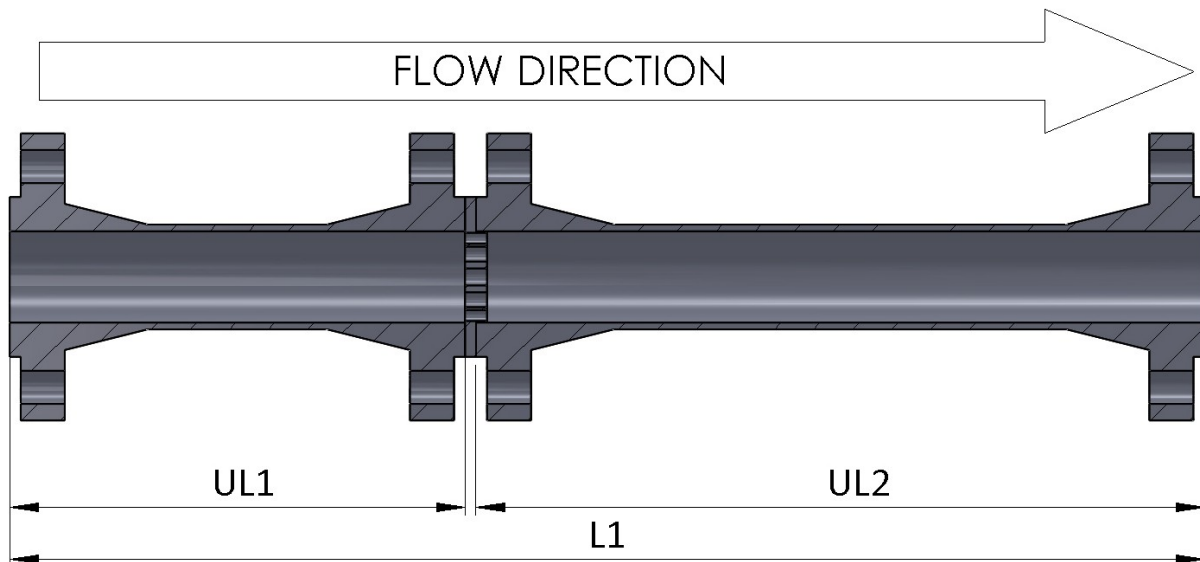
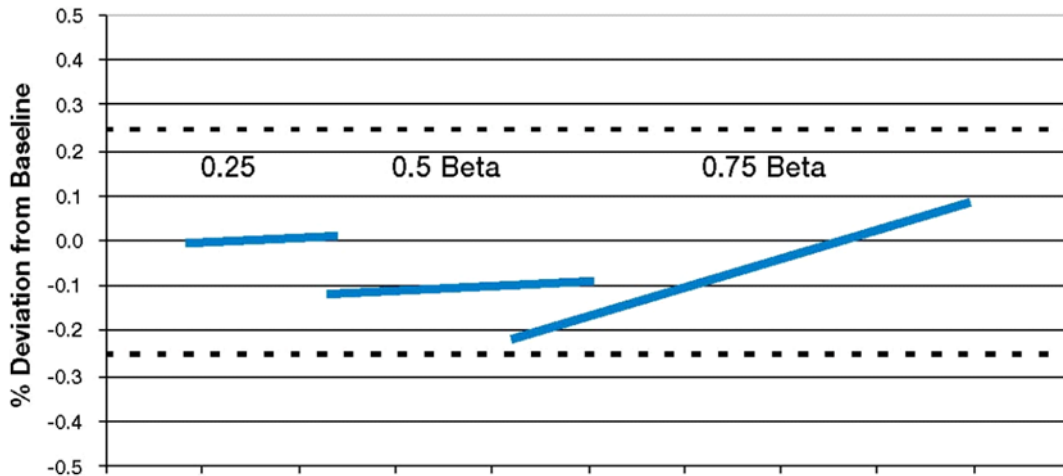


CPA 13D Meter Run

The CPA TBR must be used in meter run lengths of 13D (5D upstream of the flow conditioner, 8D downstream). At 13D the CPA TBR generates a velocity flow profile that falls within the ISO 5167 definition of a fully developed flow profile with minimal swirl. Please contact us for more information on using the CPA TBR in a 13D configuration.

Inherent to the design of pinned style flow conditioners, proper pipe ID tolerances and carefully installation must be followed. Pin style flow conditioners can still be dislodged due to impact from foreign objects or debris.

CPA 2" TBR 13D Orifice Meter Performance



Orifice meter runs with AGA - 3 April 2000 when $UL1 = 5D$, $UL2 = 8D$, $L1 = 13D$. This applies to NPS 2" CPA TBR applications only.

Inherent to the design of pinned style flow conditioners, proper pipe ID tolerances and carefully installation must be followed. Pin style flow conditioners can still be dislodged due to impact from foreign objects or debris.