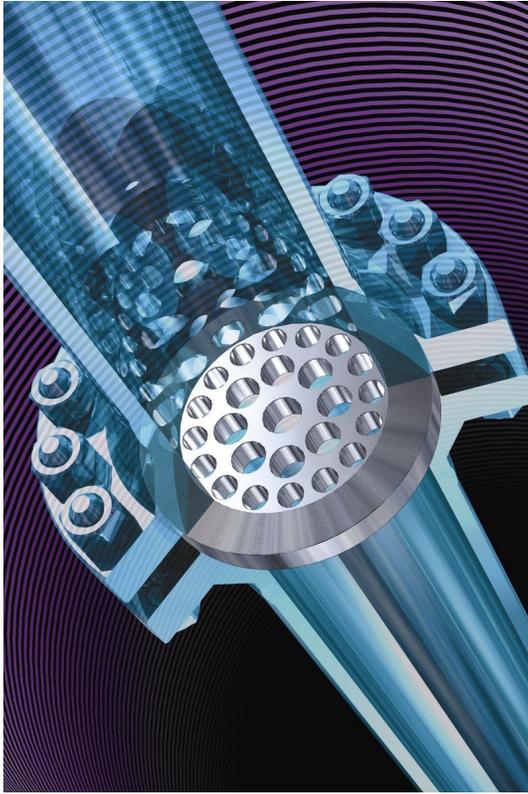


## CPA Flow Conditioners



### Quick Specifications

- CPA isolating perforated plate flow conditioners are applicable for all volumetric metering applications: Orifice, Ultrasonic, Venturi, Vortex, Turbine, Cone, Coriolis etc.
- Compatible with all liquid and gas scenarios: methane, natural gas, air, carbon dioxide, nitrogen, water, petroleum products, crude oil and many others!
- Eliminates swirl and provides a fully developed velocity flow profile.
- All verification tests were done in independent high-pressure gas testing facilities and low Reynolds Number (Re) liquids testing facilities.
- Stocked in sizes 1" to 20", 316SS NACE MR0175
- Can custom manufacture for 3/8" to 48" pipe sizes.
- Available in Carbon Steel, Nickel Coated Carbon Steel, 316SS, 304SS, Aluminum, Hastelloy, Duplex, Monel, Inconel, Titanium, etc.
- Stocked for Raised Face (RF) installations, but can be ordered for Ring Type Joint (RTJ) flanges, pinned, weld in and insertion installations.
- Can be ordered with lifting tabs with ANSI specific bolt patterns, allowing the flow conditioner to easily be installed, centered and removed from a flange.
- EN 10204 3.1b material quality reports are included with the CPA50E and are available in our online database.
- Detailed custom pressure drop calculations are available for all fluid applications using the process conditions for the specific scenario.
- AGA 3 (2000) data is available.
- Comprehensive product and technical support from CPA's engineers.

### FloAlign Notch

All 3" and larger Raised Face CPA flow conditioners automatically include the FloAlign Notch. This is a 1/8" mark machined into the flange at the top dead center location of the flow conditioner. It is used as a visual reference to indicate the orientation of the flow conditioner while installed in the flange. The FloAlign notch is a valuable reference for Ultrasonic flow measurement. Maintaining the calibrated position of the flow conditioner is important for minimizing deviation from the calibrated lab performance of the flow meter and reducing measurement uncertainty. The FloAlign notch has no relevance for orifice or turbine flow measurement.

### ANSI Rating

CPA flow conditioners are designed for use with ANSI Raised Face (RF) flanges and are compatible with ANSI 150# to 2500# applications. Due to the specification of ANSI RF flanges, the raised face diameter is standard across the ANSI pressure range when dealing with a particular pipe NPS.

### CPA 13D Meter Run

The CPA 50E can be used in meter run lengths down to a minimum of 13D (5D upstream of the flow conditioner, and 8D downstream). At 13D the CPA 50E generates a fully developed flow profile that falls within the ISO 5167 definition of fully developed pipe flow with minimal swirl. Please contact CPA for more information on using the CPA 50E in a 13D configuration.