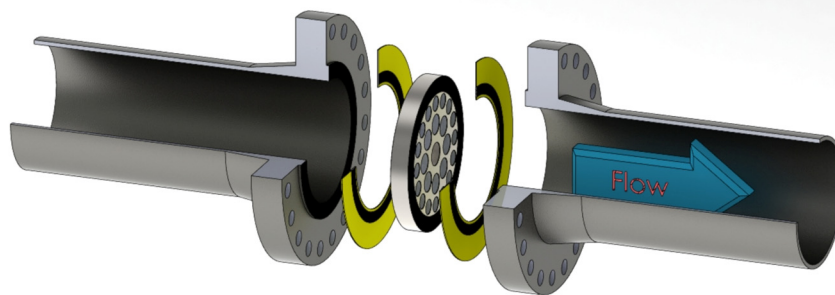


## CPA Type B Flow Conditioner – Full Width Wafer Style – FWO

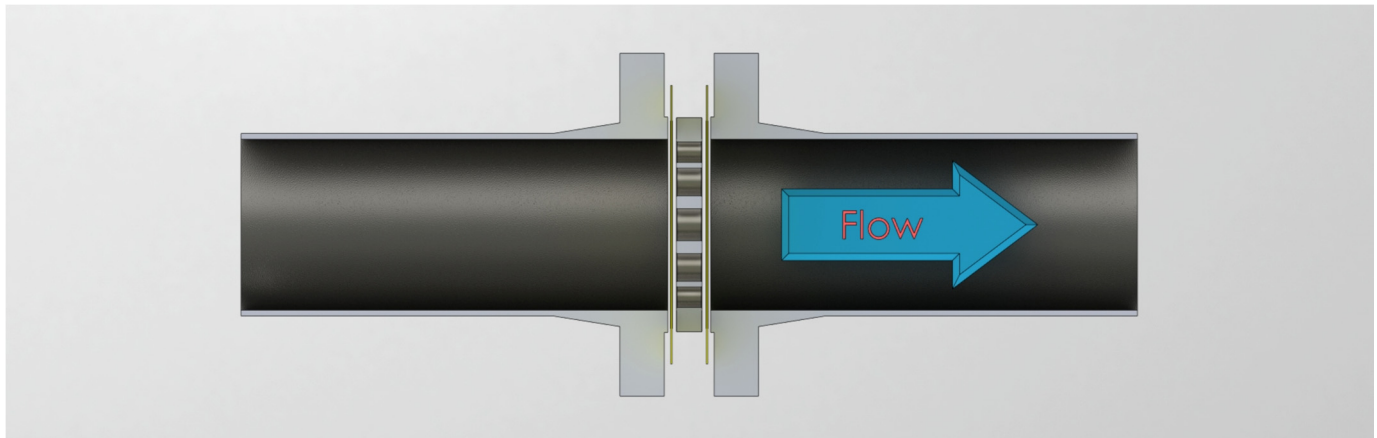
Canada Pipeline Accessories also offers the CPA (50E, 55E, 65E) flow conditioner in a Full Width Wafer Option (FWO) for ANSI raised face applications. The CPA FWO use a flange lip that is the same thickness as the actual flow conditioner and does not insert into the pipe when installed. This allows the flow conditioner to easily be slid in and out of the pipe without having to spread the flanges apart.

In typical raised face configurations, installation of the CPA WO flow conditioner involves placing the plate between two ANSI Raised Face (RF) flanges.



### Plate Installation

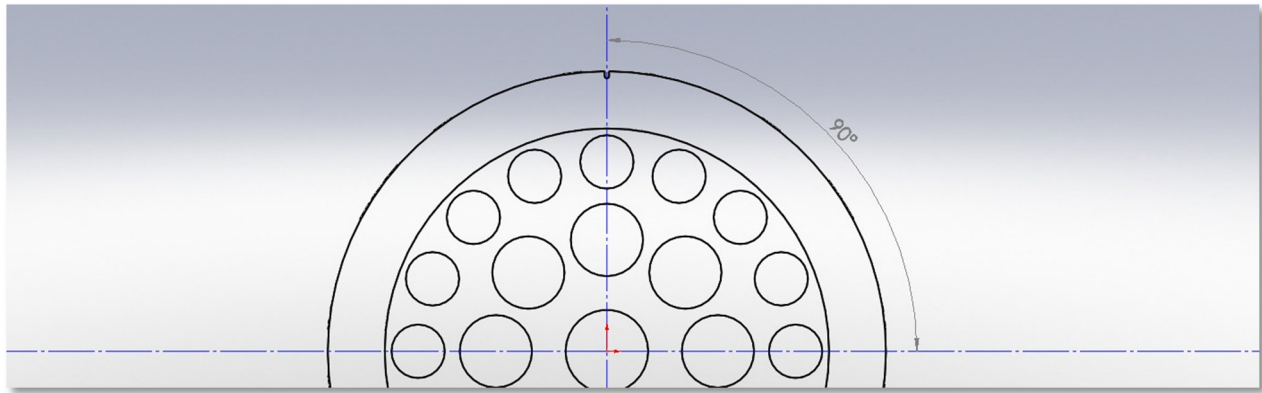
Either face of the CPA FWO can be positioned against the upstream flange of the meter tube. Even though there is a directional flow arrow on the flange, the flow conditioner itself is bidirectional and can be installed in either orientation. Extra attention needs to be taken to make sure the flow conditioner is centered in the pipe as it cannot be inserted inside pipe bore for alignment. To assist with this, CPA recommends use of the FloAlign Tabs.



CPA recommends use of spiral wound gaskets that have an OD centering ring and an ID ring to contain the gasket windings. This helps reduce the possibility of the gasket sliding and blocking the flow conditioner holes during installation or unwinding during operation.

### Plate Orientation

For installation convenience, the CPA FWO has a top dead center marker known as the FloAlign notch on the outer circumference of the flange. This engraved notch is aligned with the 90-degree axis of the flow conditioner and is provided to help with flow conditioner orientation when using Ultrasonic flow meters. CPA flow conditioner orientation is not applicable to measurement performance when using other flow meter types.



### Plate Maintenance and Cleaning

The CPA flow conditioner is a low maintenance device and does not require scheduled servicing. It should be inspected on a regular basis for debris collection and hole blockages. These obstructions can result in a severe reduction in flow conditioner performance that can increase flow meter error.

Over time, a build up of dirt and contamination will require cleaning of the flow conditioner. This can be done with a soft rag and any available solvent. **CLEANING MUST NOT BE PERFORMED WITH ANY TYPE OF ABRASIVE MATERIAL OR HONING DEVICE.** Abrasive cleaning can inadvertently change the dimensions of the plate and cause it to fall out of CPA's specifications. This will reduce the performance of the CPA FWO as well as possibly resulting in undesired acoustic and pressure drop behavior.

Physical damage to the CPA flow conditioner due to debris impacts will require replacement of the flow conditioner to maintain the CPA specified performance.

### CPA FloAlign Tab

To assist with installing, aligning and centering the flow conditioner in the pipe, CPA recommends combining a CPA FWO with a CPA FloAlign Tab. The FloAlign tab is welded to the flow conditioner at top dead center and uses an ANSI specific bolt pattern to help center the flow conditioner in the flange.

*Canada Pipeline Accessories offers spare parts such as gaskets. Please contact CPA for more information!*

### Sizes and Availability

- Available in a range of sizes, from NPS 1/2" to NPS 48".
- Custom made for every application.
- Wide range of material options: Nickel Surfaced Carbon Steel, 304 Stainless Steel, 316 Stainless Steel, Inconel, Monel, Duplex, Hastalloy.
- Compatible with ANSI ratings of 150# to 2500#.