

FC10 Installation Instructions for Insertion Meters



For use with All Fox Flow Meters

Definition: The FC10 is a flow conditioner installed between two flanges upstream of the flow meter that corrects irregular flow profiles ensuring flow meter accuracy.

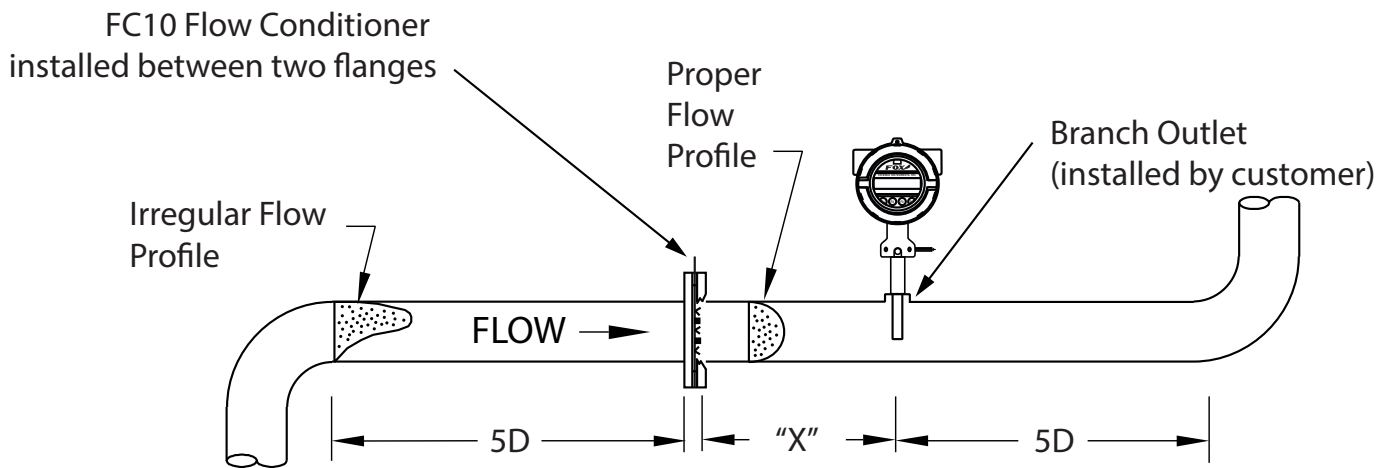
Scope: The FC10 is used with flanges in schedule 40 pipe with insertion style meters.

Purpose: This procedure describes proper installation of the FC10 to ensure flow meter accuracy.

Directions:

1. Ensure proper installation of the branch outlet for the flow meter. See Fox Document 107590 for more information.
2. Determine the correct distance for dimension "X" for the appropriate schedule 40 pipe in the table below.

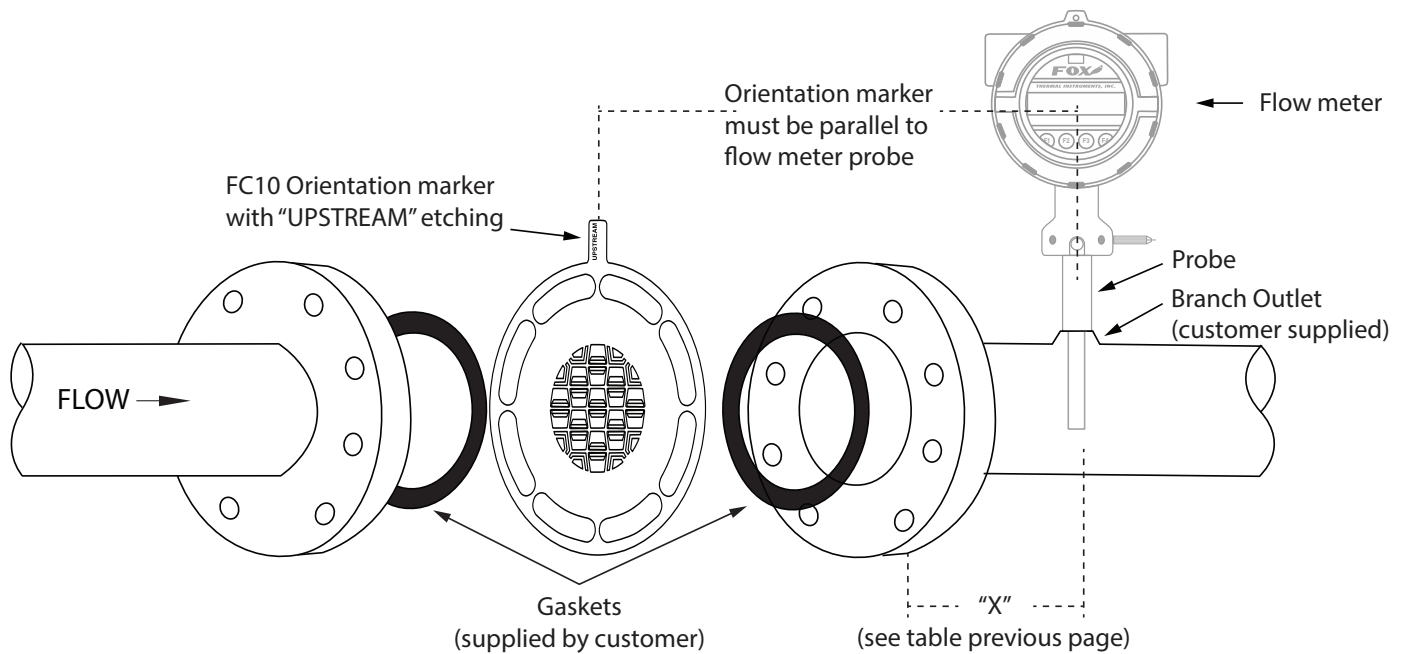
Figure 1.1: FC10 Minimum Straight Run Requirements



Schedule 40 Pipe Size	"X" Inch (mm)	5D Min. Up/Downstream Inch (mm)	Schedule 40 Pipe Size	"X" Inch (mm)	5D Min. Up/Downstream Inch (mm)
1.5	6 (152)	8 (203)	5	10 (254)	25 (635)
2	6 (152)	10 (254)	6	12 (305)	30 (762)
2.5	9 (229)	15 (381)	8	16 (406)	40 (1016)
3	9 (229)	15 (381)	10	20 (508)	50 (1270)
4	9 (229)	20 (508)			

3. Position the FC10 Flow Conditioner correctly between the flanges.
 - The FC10 must be installed between flanges and two gaskets for optimum seal.
 - Center the flow conditioner between the flanges.
 - The FC10 is equipped with an orientation marker. This marker must be aligned in parallel with the probe of the flow meter.
 - The Orientation marker is also etched with “UPSTREAM” to indicate which side, or face, of the FC10 must be pointed upstream. When installed correctly, the louvers will point downstream.

Figure 1.2: Orientation of FC10 Flow Conditioner



4. Tighten bolts on the flanges to complete installation of the FC10.