



Proven Performance  
for Over 50 Years

Accessory  
Bulletin 44-FS

## Flow Straighteners

### TO PREVENT FALSE TURBINE FLOWMETER READINGS RESULTING FROM FLUID SWIRL

COX Flow Straighteners are recommended for use with turbine flowmeters to prevent false readings resulting from fluid swirl. Installed upstream of a turbine meter they reduce liquid rotation by means of a six-vane swirl eliminator and a straight run of tubing. (The swirl eliminator is not used on sizes below  $\frac{1}{2}$ ".)

Upstream Flow Straighteners are a minimum of seven pipe diameters in length. A pressure tap, with flared fitting and stainless steel cap, is provided.

Downstream Straighteners with pressure tap, but without swirl eliminators, are available for facilitating pressure drop measurements across the flowmeter. These straighteners are a minimum of one half the Upstream Straightener length. Pressure drop across the Straightener length is negligible.

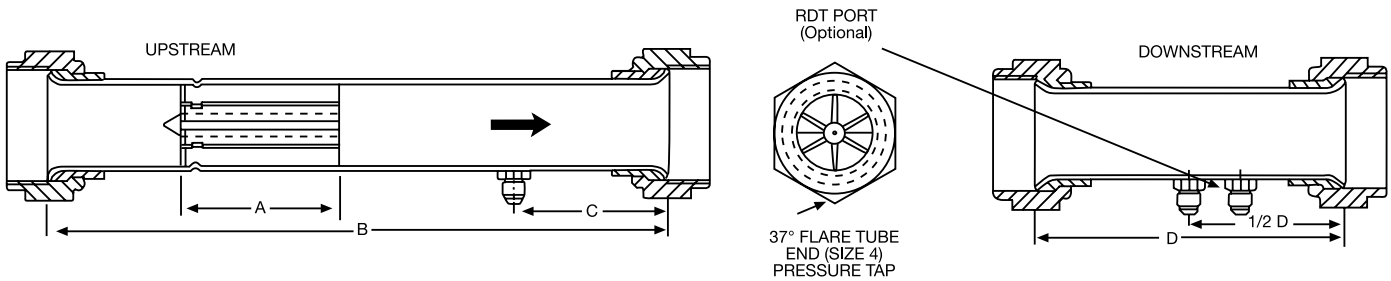
### FLARED UNITS—ALL STAINLESS STEEL

Fabricated of 304 stainless steel seamless tubing with 37° flared fittings. Nuts and sleeves are stainless steel. Nominal working pressure is 3,000 psi.

Tube Size	UPSTREAM	DOWNSTREAM	
	Part No.	Part No. (one port)	Part No. (two ports)
$\frac{3}{8}$ "	82C0021R0160	82C0021R0160	(not available)
$\frac{1}{2}$ "	82C0021R0170	82C0022R0170	93E0003R001
$\frac{5}{8}$ "	82C0021R0180	82C0022R0180	93E0003R002
$\frac{3}{4}$ "	82C0021R0190	82C0022R0190	93E0003R003
1"	82C0021R0200	82C0022R0200	93E0003R004
1 $\frac{1}{4}$ "	82C0021R0210	82C0022R0210	93E0003R005
1 $\frac{1}{2}$ "	82C0021R0220	82C0022R0220	93E0003R006
2"	82C0021R0230	82C0022R0230	93E0003R007
2 $\frac{1}{2}$ "	82C0021R0240	82C0022R0240	See Factory



# Flow Straighteners

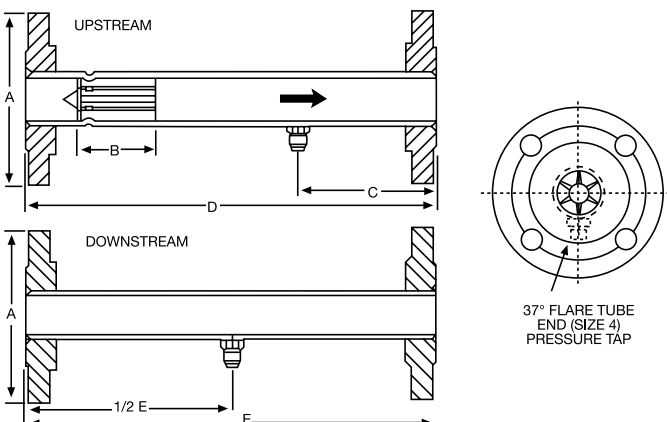


Tube Size	UPSTREAM			DOWNSTREAM	Tube Size	UPSTREAM			DOWNSTREAM
	A	B	C	D		A	B	C	D
3/8"	-	5"	2 1/2"	5"	1"	1 11/16"	10"	3"	5"
1/2"	13/16"	5"			1 1/4"	2 3/16"	11"	3 1/2"	6"
5/8"	15/16"	6 1/4"			1 1/2"	2 11/16"	12"		
3/4"	1 3/16"	7 1/2"			2"	3 1/2"	14"	4"	7"
					2 1/2"	4 15/16"	18"		9"

## FLANGED UNITS

Fabricated of 304 stainless steel with integral ASA flanges.

Tube Size	A		UPSTREAM				DOWNSTREAM	
	ASA Flange Pressure Rating**							
	150lb.	300lb.      600 lb.	Part No.	B	C	D	Part No.	E
1/2"	3 1/2"	3 3/4"	83C0016R0060	7/8"	2"	6"	89C0018R0060	6"
3/4"	3 7/8"	4 5/8"	83C0016R0010	1 1/4"	2 1/4"	7 1/2"	89C0018R0010	7 1/2"
1 "	4 1/4"	4 7/8"	83C0016R0040	1 3/4"	3"	10"	89C0018R0030	10"
1 1/4"	4 5/8"	5 1/4"	83C0016R0030	2 1/4"	3 3/4"	11 "	89C0018R0050	
1 1/2"	5"	6 1/8"	83C0016R0020	2 11/32"	4"	12"	89C0018R0040	12"
2"	6"	6 1/2"	83C0016R0050	3 9/16"	4 1/2"	14"	89C0018R0020	
2 1/2"	7"	7 1/2"	Consult Factory	4 15/16"	5 1/4"	17 1/2"	Consult Factory	



For more information, contact COX Instruments or your local COX Instruments representative.



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