

NEW-FLOW STRAIGHTENING VANES

SGN SERIES

AGA Report No.3 recommends fabrication of the 1998 Uniform Concentric 19-tube bundle flow straightener. No flow conditioner can eliminate all possible profile effects unless properly installed and used. Care should be taken to minimize flow disturbances and swirl-generating configurations in the metering system, particularly upstream of the orifice. Thus, when properly located, in well designed installations, the 1998 Uniform Concentric 19-Tube Bundle Flow Straightener can eliminate bias in orifice measurement. For further information on proper installation of this flow straightener.



Approvals:



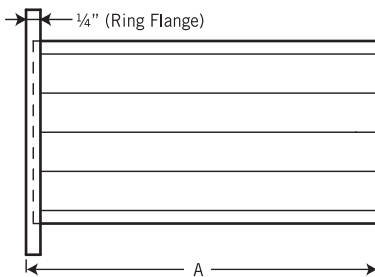
Technical Data

Size: 2" to 36" available
Pressure Rating: 150# to 900#, and option available
Material: C.S., SS304, SS316, and option available

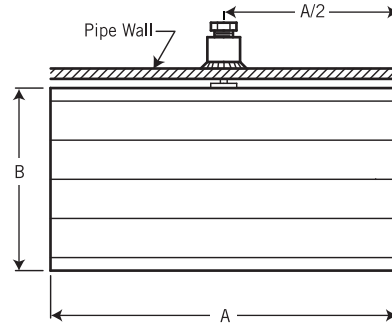
Size and Type Specification

Ring Flange / All Pipe Size

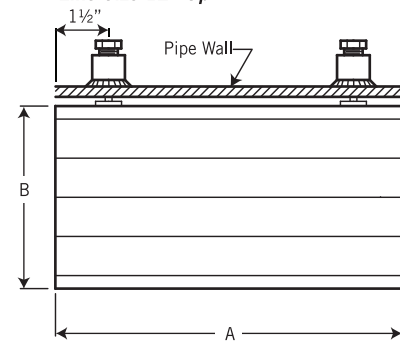
(NOTE: Ring Flange size is same O.D. dimension as raised face of flange.)



Line Size 2" ~ 10"

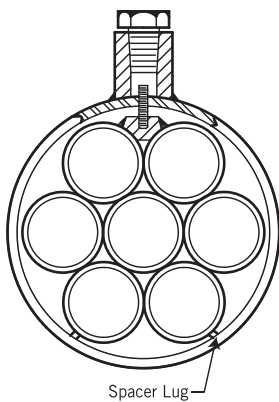


Line Size 12" Up



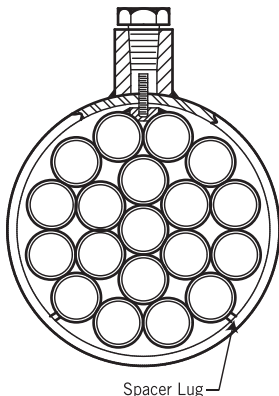
Standard Straightening Vane Bundles

Type I: 7-Tube Concentric Bundle for 2" Size Only



Standard Straightening Vane Bundles

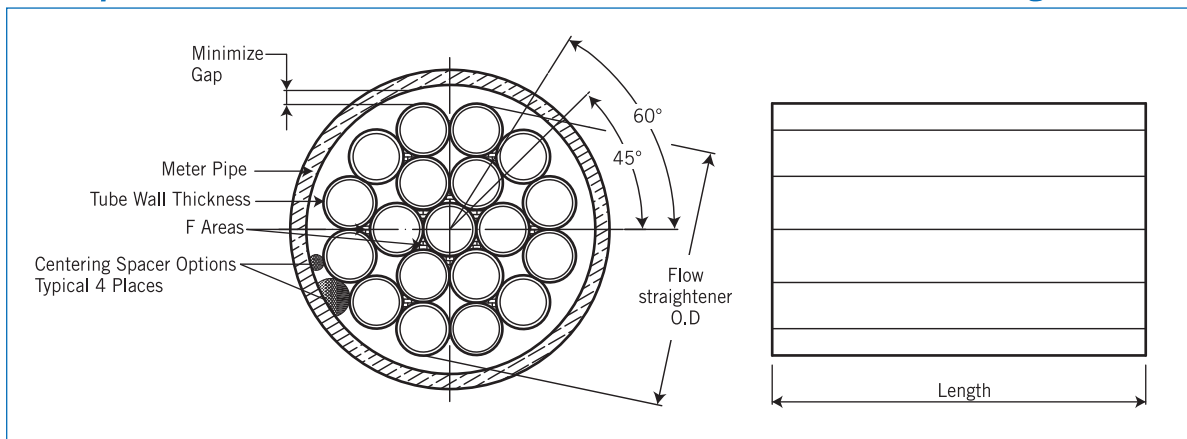
Type II: 19-Tube Concentric Bundle for 3" Size and Larger



Dimensions Data

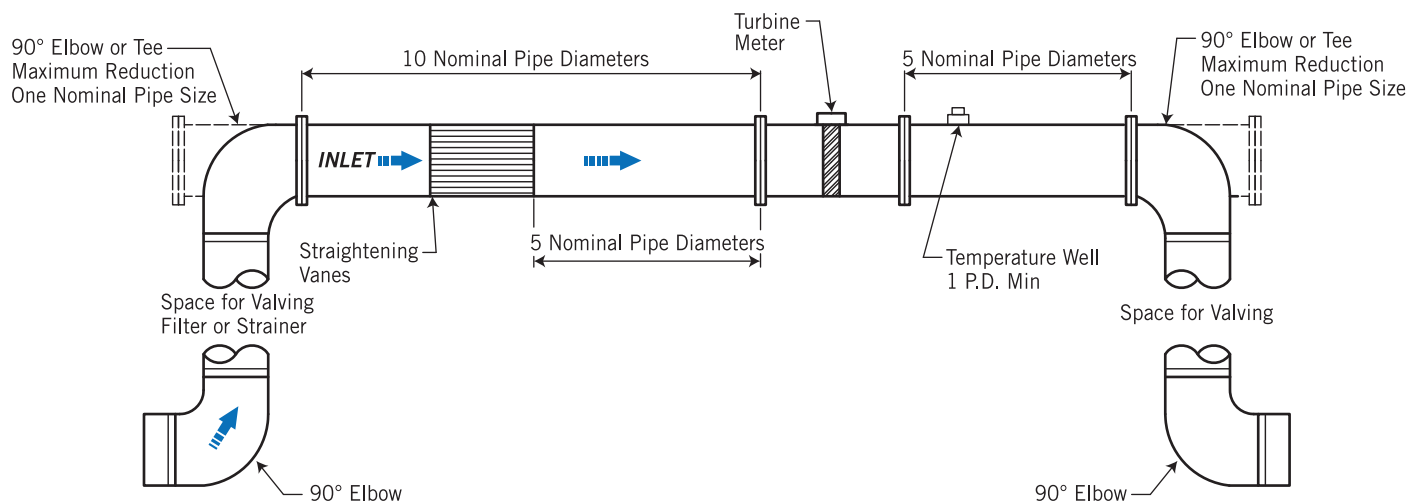
LINE SIZE	BUNDLE TYPE	LINE I.D.	LENGTH OF VANE		O.D. OF VANE	O.D. OF TUBES	I.D. OF TUBES	TUBES THICKNESS	NUMBER OF TUBES	APPROXIMATE WEIGHTS	
			A	B						FLANGE	LINE
inch		mm	mm	mm	mm	mm	mm			Kg	Kg
2	I	52.7	152.4	60.5	17.3	12.7	2.3	7		1.14	0.91
3	II	78.1	203.2	89.1	13.8	9.2	2.3	19		1.82	1.36
4	II	102.3	254.0	114.3	20.4	14.8	2.8	19		3.41	2.95
6	II	151.0	304.8	165.2	27.2	21.4	2.9	19		9.32	8.41
8	II	202.7	406.4	219.1	39.0	32.0	3.5	19		16.82	15.68
10	II	254.5	508.0	273.1	48.6	41.2	3.7	19		25.91	24.32
12	II	303.3	609.6	323.9	60.3	52.5	3.9	19		36.82	35.00
14	II	333.4	711.2	355.6	60.3	52.5	3.9	19		47.73	45.45
16	II	381.0	812.8	406.4	73.0	62.6	5.2	19		124.55	121.82
18	II	428.6	914.4	457.2	76.3	65.9	5.2	19		175.45	171.82
20	II	477.8	1016.0	508.0	89.1	78.1	5.5	19		216.82	212.73
24	II	574.6	1219.2	609.6	114.3	102.3	6.0	19		320.00	315.00
26	II	625.4	1320.8	660.4	114.3	102.3	6.0	19		370.00	361.82
30	II	727.0	1524.0	762.0	139.8	126.6	6.6	19		588.64	578.64
34	II	828.6	1727.2	863.6	165.2	151.0	7.1	19		719.10	708.64
36	II	876.4	1828.8	914.4	168.3	154.1	7.1	19		854.55	845.45

Description of the 1998 Uniform Concentric 19-Tube Bundle Flow Straightener



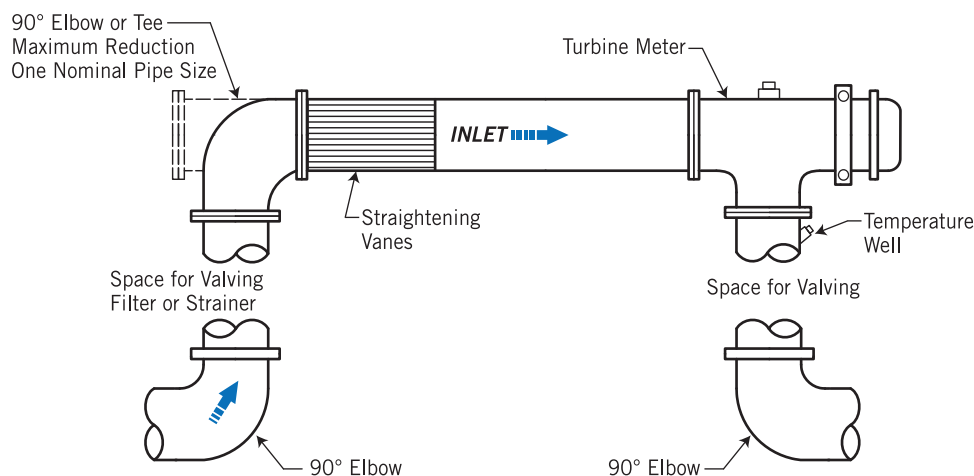
Recommended Installation for In-Line Meters

(1) Recommended Installation of an In-Line Gas Turbine Meter (Minimum Lengths)



NOTE:
Additional upstream or downstream pipe lengths are required when throttling devices are installed close to the meter.

(2) Recommended Installation of an Angle Body Gas Turbine Meter (Minimum Lengths)



NOTE:
Inlet Piping 10 Nominal Pipe Diameters Long (5 Nominal Pipe Diameters with Straightening Vanes).
Horizontal Installation (Inlet in Horizontal Plane, Outlet Down).

Ordering Information

SGN	Code	Body (meter pipe) Material								
↓	1	Carbon Steel	2	SS304	3	SS316	4	option		
		Code	Inlet Tube (straightener vanes) Material							
	↓	1	Carbon Steel	2	SS304	3	SS316	4	option	
			Code	Type						
		F	Ring Flange type							
	↓	L	Line type							
			Code	Size						
				(1) 2" (2) 3" (3) 4" (4) 6" (5) 8" (6) 10"						
				(7) 12" (8) 14" (9) 16" (10) 18" (11) 20" (12) 24"						
		(13) 26" (14) 30" (15) 34" (16) 36"								
Code	Pressure Rating									
	(1) ANSI 150# (2) ANSI 300# (3) ANSI 600# (4) ANSI 900#									
	(0) option									
SGN								Complete Ordering Code		