

SPIRAL-WOUND GASKETS

DESCRIPTION

The FNW figure SWG spiral-wound gaskets are made of a preformed metallic v-shaped strip and a soft filler material wound together under pressure, with an outer guide ring.

CONSTRUCTION

The winding is manufactured in the form of a spiral with filler material between the windings. The filler materials fill the irregularities of the flanges. The external guide ring has the function of centering the gasket in the flanges and gives the sealing elements additional resistance against line pressure and excessive bolt torque.

APPLICATION / SERVICE

FNW spiral-wound gaskets are made for applications with high temperature variations (thermal cycling), and/or pressure variations, and/or flange rotation problems etc., and where gaskets with adequate residual stress (stress retention) and flexibility are needed.



Features

- Manufactured According To ASME B16.20
- Designed For Use In ASME B16.5 Flanges
- Fire Resistant
- Stainless Steel Windings (AISI 304 or AISI 316)
- Flexible Graphite Filler - GRAFLEX®
- Carbon Steel Outer Guide Ring (with Zinc Dichromate Coating)
- Maximum Temperature: 842°F
- Maximum Pressure: Per ASME B16.5
- 1/2" To 3" 300# Gaskets Are Multirated & Stamped "3/600#"

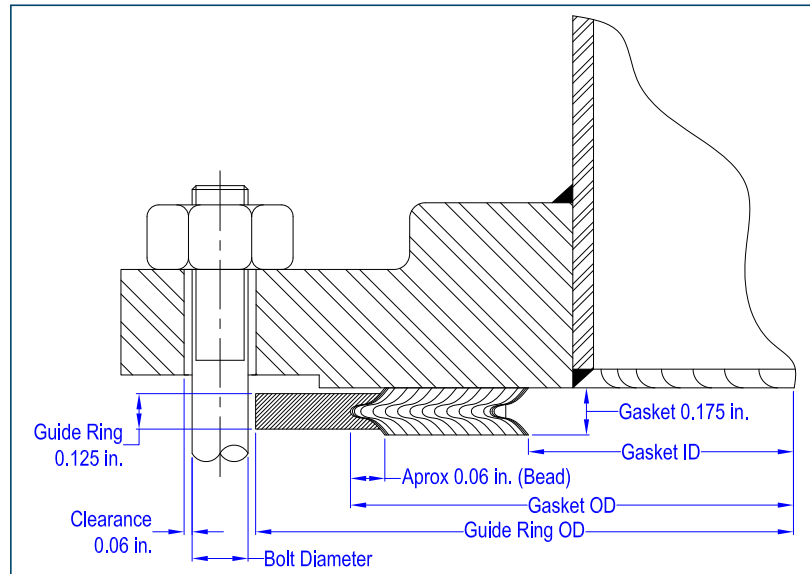
Figure Number Matrix

FNW SWG CLASS WINDING FILLER SIZE					COLOR CODES	
CLASS	WINDING	FILLER		SIZE		
1 = 150#	4 = 304SS	F = FLEXIBLE GRAPHITE	D = 1/2	M = 3	14 = 14	Continuous color on guide ring edge denotes winding material.
3 = 300# *	6 = 316SS		F = 3/4	P = 4	16 = 16	
			G = 1	S = 5	18 = 18	Intermittent stripe on guide ring edge denotes filler material.
			H = 1-1/4	U = 6	20 = 20	
			J = 1-1/2	X = 8	24 = 24	
			K = 2	10 = 10		
			L = 2-1/2	12 = 12		
* 1/2" To 3" 300# Gaskets Are Multirated & Stamped "3/600#"						
Other configurations are available POA. For spiral-wound gaskets with inner guide rings, alternate materials, or non-standard dimensions, contact an FNW sales associate at (503) 287-8383.						
					YELLOW = 304SS	
					GREEN = 316SS	
					GRAY = FLEXIBLE GRAPHITE	

SPIRAL-WOUND GASKETS

Dimensions (inches)

Size	Gasket			Guide Ring	
	OD	ID		OD	
	Cls 150 & 300	Cls 150	Cls 300	Cls 150	Cls 300
1/2	1.25	0.75	0.75	1.88	2.13
3/4	1.56	1.00	1.00	2.25	2.63
1	1.88	1.25	1.25	2.63	2.88
1-1/4	2.38	1.88	1.88	3.00	3.25
1-1/2	2.75	2.13	2.13	3.38	3.75
2	3.38	2.75	2.75	4.13	4.38
2-1/2	3.88	3.25	3.25	4.88	5.13
3	4.75	4.00	4.00	5.38	5.88
4	5.88	5.00	5.00	6.88	7.13
5	7.00	6.13	6.13	7.75	8.50
6	8.25	7.19	7.19	8.75	9.88
8	10.38	9.19	9.19	11.00	12.13
10	12.50	11.31	11.31	13.38	14.25
12	14.75	13.38	13.38	16.13	16.63
14	16.00	14.63	14.63	17.75	19.13
16	18.25	16.63	16.63	20.25	21.25
18	20.75	18.69	18.69	21.63	23.50
20	22.75	20.69	20.69	23.88	25.75
24	27.00	24.75	24.75	28.25	30.50



Flange Sealing Surface

Although most commercial flange finishes can be used, the following are considered most appropriate for FNW spiral-wound gaskets.

Media	Flange Sealing Surface Finish (Ra)	
	μ m	μ in
General Use	6.3	250
Dangerous Service & Gases	3.2	125

Note: The sealing surface of flanges cannot have scratches or radial tool marks going from the inside to the outside diameter. These irregularities make the sealing very difficult for any style of gasket and especially for spiral-wound gaskets. **A smooth and polished surface can permit the gasket to inward buckle and should be avoided.**

Bolting Calculation

For ASME Code calculations

Gasket Factor (m value)	3.00
Minimum Design Seating Stress (y value)	10,000 PSI
Maximum Seating Stress*	30,000 PSI

* Note: Per Division 2 Section VIII of the ASME Pressure Vessel and Boiler Code, the Maximum Gasket Stress or $S_{g(max)}$ value should not exceed the Maximum Seating Stress.