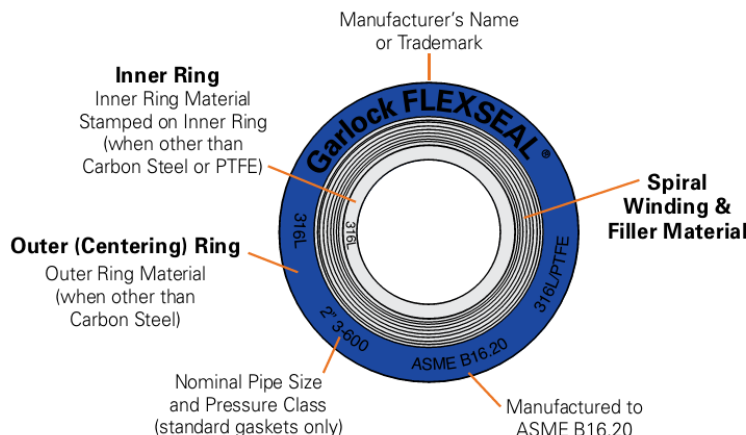


FLEXSEAL® Spiral Wound Gasket

FLEXSEAL® Spiral wound gaskets are made with an alternate combination of preformed metal wire and soft filler material(s) that forms a highly effective seal when compressed between two flanges. A v-shaped crown centered in the metal strip acts as a spring, giving the gasket greater resiliency under varying conditions.

Identification (per ASME B16.20)



Configurations



SW – Spiral windings only – designed for tongue & groove, male-female, and groove-to-flat flanges.



SWI - Spiral windings and an inner ring* – designed for tongue & groove, male-female, groove-to-flat flanges where the ID is open to the process stream.



RW – Spiral windings and an outer centering ring that is used to locate the gasket, provide additional radial strength and can act as a compression limiter.



RWI** - Spiral windings, an outer centering ring that is used to locate the gasket, provide additional radial strength and can act as a compression limiter, and an inner ring* to reduce/prevent radial buckling.

*NOTE – Spiral wound gasket inner ring metallurgy is typically the same as the winding material.

**NOTE - ASME B16.20 mandates inner rings on all PTFE filled spiral wound gaskets, and for 24" NPS and larger gaskets in Class 900#, 12" NPS and larger in 1500#, and 4" NPS and larger gaskets in Class 2500#. Also, gaskets ordered in compliance with ASME B16.20 are sold with inner rings (FLEXSEAL RWI) unless otherwise specified by the customer at the time of order.

Design Factors

	Gasket Factors		Gasket Constants			Stress required for tightness		
Filler	M	Y (psi)	Gb (psi)	a	Gs (psi)	S 100 (psi)	S 1,000 (psi)	S 10,000 (psi)
Graphite	3.00	10,000	2,300	0.237	13	6,581	11,823	20,405
PTFE	3.00	10,000	4,500	0.140	70	8,575	11,836	16,339

Tolerances (for ASME B16.20 gaskets)

	Outside Diameter Tolerances	Inside Diameter Tolerances
½" through 8" NPS	+/- .030"	+/- .016"
10" through 24" NPS	+.060" / -.030"	+/- .030"

Tolerances (for Non-ASME windings)

Gasket Diameter	ID	OD	Gasket Thickness		Width Limits		Compressed Thickness
			Thickness**	Tolerance	Minimum	Maximum†	
Up to 1"	+.016" / -0"	+0" / -.031"	.125"	+/- .005"	3/16"	1"	.090" - .100"
1" to 24"	+.031" / -0"	+0" / -.031"	.175"	+/- .005"	¼"	1-1/2"	.125" - .135"
24" to 36"	+.047" / -0"	+0" / .063"	.250"	+/- .005"	5/16"	1-1/2"	.180" - .200"
36" to 60"	+.063" / -0"	+0" / .063"	.285"	+/- .005"	5/16"	1-1/2"	.200" - .220"
60" and above	+.094" / -0"	+0" / .094"					

**Measured across the metallic portion of the gasket not including the filler, which may protrude slightly. The thickness tolerance exception is +.010" / -.005" on gaskets with 1) less than a 1" ID and greater than 26" ID, 2) PTFE filled gaskets, and 3) gaskets with flange widths of 1" or greater.

† For widths larger than what is shown, please contact Garlock.

Temperature Limits & Color Coding for Metals (ASME B16.20)

Material	Minimum °F	Minimum °C	Maximum °F	Maximum °C	Abbreviation	Guide Ring Edge Color Code
304 Stainless Steel	-320	-195	1,400	760	304	Yellow
316L Stainless Steel	-150	-100	1,400	760	316L	Green
317L Stainless Steel	-150	-100	1,400	760	317L	Maroon
321 Stainless Steel	-320	-195	1,400	760	321	Turquoise
347 Stainless Steel	-320	-195	1,700	925	347	Blue
Carbon Steel	-40	-40	1,000	540	CRS	Silver
20Cb-3 (Alloy 20)	-300	-185	1,400	760	A-20	Black
HASTELLOY® B 2	-300	-185	2,000	1,090	HAST B	Brown
HASTELLOY® C 276	-300	-185	2,000	1,090	HAST C	Beige
INCOLOY® 800	-150	-100	1,600	870	IN 800	White
INCOLOY® 825	-150	-100	1,600	870	IN 825	White
INCONEL® 600	-150	-100	2,000	1,090	INC 600	Gold
INCONEL® 625	-150	-100	2,000	1,090	INC 625	Gold
INCONEL® X750	-150	-100	2,000	1,090	INX	No Color
MONEL® 400	-200	-130	1,500	820	MON	Orange
Nickel 200	-320	-195	1,400	760	NI	Red
Titanium	-320	-195	2,000	1,090	TI	Purple

Temperature Limits & Color Coding for Fillers (ASME B16.20)

Material	Minimum °F	Minimum °C	Maximum COT °F	Maximum COT °C	Abbreviation	Guide Ring Edge Stripe Color Code
Ceramic	-350	-212	2,000	1,090	CER	Light Green
Flexible Graphite	-350	-212	850	454	F.G.	Gray
PTFE	-400	-240	500	260	PTFE	White
4122 THERMa-PUR™	-	-	1,832	1,000	4122	Light Blue

Domestically made FLEXSEAL spiral wounds are available with different grades of flexible graphite upon request. Imported FLEXSEAL spiral wounds are manufactured with graphite filler that has a minimum purity level of 98% and contains an oxidation inhibitor.