

Leader Spiral Wound Gasket Type S

High Integrity SPW Gaskets

DESCRIPTION

Designed more than 100 years ago, Spiral Wound Gaskets are widely used as high-integrity and sustainable gaskets. The sealing element is manufactured from preformed, V-shaped metallic windings with intermediate soft sealing fillers. The standard metallic material used for winding is SS316L, while the soft filler consists of graphite, PTFE, or LeaderTherm NXT 1000 (a high-temperature modified Phlogopite). Due to the gasket's construction, SWGs offer high compressibility and recovery. Leader Style S SWGs are provided with a sealing element only. The S gaskets are suitable for ASME B16.5 tongue and groove or male/female (Spigot to Recess) flanges up to 2500 Class. They are primarily used in pumps and valves.

APPLICATION

Petrochemical Industry, Steam, On and Offshore Exploration, Pipeline Systems, Pressure Vessels and Exchangers.

CHEMICAL COMPATIBILITY

Subject to materials, Spiral Wound Gaskets can be used in a wide variety of media, with a pH range varying from 0-14. Application/Compatibility Guide is available on request.

AVAILABLE OPTIONS

Standard style S gaskets are normally manufactured according to customer drawings, or by given sizes. Gaskets can be manufactured in a thickness of .125" / .175" / .250" / 285".

APPROVALS & CERTIFICATES

- EN10204 3.1

SEALING CHARACTERISTICS

- Low leak rate
- Non-sticking to flanges
- Blow out safe
- Design suitable for fluctuating temperatures and pressures
- Broad chemical resistance (depending on the metallic materials and filler)
- Wide seating stress range
- Firesafe when using FG or NXT as filler
- Design suitable for fluctuating temperatures and pressures

TECHNICAL DATA

Maximum Temperature	See Material Table Below
Maximum Pressure (PSI)	ASME B 16.5 2500 class
Minimum Initial Stress	7250 PSI
Maximum Initial Stress	43500 PSI
M-Value	3
Y-Value	10000 PSI
Flange Surface Finish (Microinch RA)	125/250
Flange Surface Finish (Micrometer RA)	3.2 - 6.3
Maximum Seating Stress	43500 PSI
Minimum Recommended Seating Stress at Assembly	12500 PSI
ROTT [Gb]	926
ROTT [a]	0.341
ROTT [Gs]	2.9

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Color Code Chart - ASME B 16.20

Material	Minimum		Maximum		Abbreviation	Guide Ring Color Code
	°F	°C	°F	°C		
304 Stainless Steel	-320	-195	1400	760	304	Yellow
316L Stainless Steel	-150	-100	1400	760	316L	Green
317L Stainless Steel	-150	-100	1400	760	317L	Maroon
321 Stainless Steel	-320	-195	1400	760	321	Turquoise
347 Stainless Steel	-320	-195	1600	925	347	Blue
Carbon Steel	-40	-40	1000	540	CRS	Silver
20Cb-3 (Alloy 20)	-300	-185	1400	760	A-20	Black
HASTELLOY® B 2	-300	-185	2000	1090	HAST B	Brown
HASTELLOY® C 276	-300	-185	2000	1090	HAST C	Beige
INCOLOY® 800	-150	-100	1600	870	IN 800	White
INCONEL® 600	-150	-100	2000	1090	INC 600	Gold
INCONEL® X750	-150	-100	2000	1090	INX	No Color
MONEL® 400	-200	-130	1500	820	MON	Orange
Nickel 200	-320	-195	1400	760	NI	Red
Titanium	-320	-195	2000	1090	TI	Purple

Non-Metallic Fillers - ASME B 16.20

Material	Minimum		Maximum		Abbreviation	Guide Ring Color Code
	°F	°C	°F	°C		
Ceramic	-350	-212	2000	1090	CER	Light Green
Flexible Graphite	-350	-212	975	510	FG	Gray
PTFE	-400	-240	500	260	PTFE	White
LeaderTherm NXT	-350	-212	1800	677	LTNXT	Light Blue
LeaderTherm / Graphite	-350	-212	1500	816	LTD	Lt Blue / Gray