Leader Spiral Wound Gasket Type SI
High Integrity SPW Gaskets

DESCRIPTION

Designed more than 100 years ago, Spiral Wound Gaskets (SWG's) 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. As standard metallic material for winding and inner ring SS316L is used and for the soft fillers, graphite, PTFE or LeaderTHERM NXT 1000 (high temp. modified Phlogopite). Due to the gaskets construction, SWG's offer high compressibility and recovery. Leader Style SI SWG's are provided with an inner ring. The SI gaskets are suitable for ASME B16.5 tongue and groove or male / female (Spigot to Recess) flanges up

APPLICATION

(Petro-) Chemical Industry, Steam, On- and Offshore exploration, pipeline systems, pressure vessels and exchangers.

CHEMICAL COMPATIBILITY

Spiral Wound Gaskets can be used in a wide variety of media, i.e. a pH range varying from 0-14. Application/ compatibility guide is available on request.

DELIVERY OPTIONS

Standard style SI gaskets are normally manufactured according to particular customer drawings, or by given sizes. Gaskets can be manufactured in a thickness of 2,5/3,2/4,5/6,4/7,2 mm. Different materials are available.

TEMPERATURE

Spiral Wound Gaskets "SI" can be used in a wide variety of media, temperature acc. to used material(table of materials); standard SS316L - 100 °C up to 550 °C.

APPROVALS & CERTIFICATES
• EN10.204 3.1

SEALING CHARACTERISTICS
• blow out safe
• low leak rate
• Firesafe
• Design suitable for fluctuating temperatures and pressures
• broad chemical resistance (pending on the metallic materials and filler)
• wide seating stress range
• non sticking to the flanges

TECHNICAL DATA	
max Temperature [°C]	See material table below
max Pressure [bar]	200
Minimum initial stress [DIN E 2505 part 2] [N/mm2]	50
Maximum initial stress [DIN E 2505 part 2] [N/mm2]	300
M-Value	3
Y- Value [psi]	10000
Gasket required flange roughness [Ra micron]	3,2-6,3
Gasket required flange roughness [RMS]	125-250
ROTT [Gb]	926
ROTT [a]	0.341
ROTT [Gs]	2.9

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TECHNICAL DATA

min Temperature [°C]	See material table below

SOFT FILLER MATERIALS

	Identification	Color coding	Temperature Range
	ASME B16.20	ASME B16.20	Degrees C.
Graphite	FG	Gray stripe	- 250 / + 450 (+ 550)
PTFE	PTFE	White stripe	-240 / +260
Ceramic	CER	Light green stripe	- 50 / + 1000
Mica	MICA	Light blue stripe	- 50 / + 900

METALLIC MATERIALS

	Identification	Color coding	Temperature Range
	ASME B16.20	ASME B16.20	Degrees C.
Carbon Steel	CRS	Silver	- 25 / + 500
SS304(L)	304(L)	Yellow	- 200 / + 900
SS316(L)	316(L)	Green	- 100 / +550
SS321	321	Turqoise	-200/+550
SS347	347	Blue	-200/+550
Duplex (ASTM A182-F51)	31803	No colour	-60/+300
Avesta 254 SMO (6Mo)	31254	No colour	-100/+550
Carpenter 20 CB3	A20	Black	-100/+500
Nickel 200	NI200	Red	-100/+450
Nickel 201	NI201	Red	-100/+550
Monel® / Alloy 400	MON	Orange	-50/+500
Inconel® / Alloy 600	INC600	Gold	-100/+650
Inconel® / Alloy 625	INC625	Gold	-100/+800
Inconel® / Alloy X-750	INX	No colour	-100/+700
Incoloy® / Alloy 800	IN800	White	-100/+550
Incoloy® / Alloy 825	IN825	White	-200/+800
Hasteloy® / Alloy B2	HAST B	Brown	-100/+500
Hasteloy® / Alloy C276	HAST C	Beige	-100/+600
Titanium	TI	Purple	-100/+350
Zirconium	ZIRC	No colour	-50/+900

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