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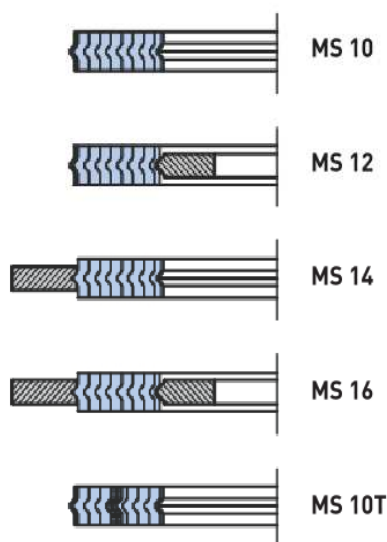


Industrial Gaskets **SPIRAL WOUND GASKETS**



PROPERTIES AND APPLICATIONS

Spiral wound gaskets are special semi-metallic gaskets of great resilience, therefore they are very suitable for applications featuring heavy operating conditions. spiral-wound gaskets are manufactured by spirally winding a V-shaped metal strip and a strip of non-metallic filler material. The metal strip holds the filler, providing the gasket with mechanical resistance and resilience. spiral-wound gaskets can be reinforced by an outer centering ring and/or inner retaining ring. The outer centering ring controls the compression and holds the gasket centrally within the bolt circle. The inner retaining ring increases the axial rigidity and resilience of the gasket. Spiral wound gaskets should always be in contact with the flange and should not protrude into the pipe or project from the flange. Spiral wound gaskets can be used for sealing flange joints, manhole and handhold covers, tube covers, boilers, heat exchangers, pressure vessels, pumps, compressors and valves; in industries such as petrochemical, pharmaceutical, shipbuilding, and food processing, in power industries and nuclear power stations. They are ideal for steam, oil, liquids, gases, acids, alkalines, various organic media



ADVANTAGES

Sealing under heavy operating conditions. Strong stress compensation, stable and reliable sealing performance even under frequent pressure fluctuation conditions. Solid construction provides stability and sealability even when the sealing surfaces are slightly corroded or bent. Easy installation.

SHAPE AND CONSTRUCTION

Spiral wound gaskets are produced in several styles and combination of materials to fit the most stringent application. spiral-wound gaskets are usually of circular shape, however we can produce them in other shapes such as: oval, rectangular, with round corners, etc. Our standard production program comprises a range of spiral wound gaskets with inner diameters of 10 mm to 3000 mm and a nominal thickness of 3.2 mm, 4.5 mm and 6.5 mm. spiral-wound gaskets of non-standard dimensions and shapes, and larger diameters are available on request.

GASKET STANDARD STYLES

Gaskets without centering and inner ring (Type MS 10)
Gaskets without centering and inner ring (Type MS 10T)*
Gaskets with inner ring (Type MS 12)
Gaskets with centering (outer) ring (Type MS 14)
Gaskets with centering and with inner ring (Type MS 16)

Metallic strip

Standard thickness of the metallic strip is 0.2 mm (0.18).

MATERIALS FOR METALLIC STRIP	
ASTM	EN (DIN) Material No.
AISI 304	1.4301
AISI 316, 316 L	1.4401, 1.4404
AISI 321	1.4541
AISI 316 Ti	1.4571
Monel (NiCu30Fe)	2.4360

Other alloys available on request.

Filler

- Filler is normally used for thicknesses from 0.5 mm to 0.6 mm.
- Flexible graphite 98%
- Flexible graphite 99.85%
- PTFE, E-PTFE
- Ceramic

Centering ring

The centering ring does not come into direct contact with contained fluid. It is normally made of carbon steel and electroplated or painted to avoid corrosion. Other materials are available on request.

Inner ring

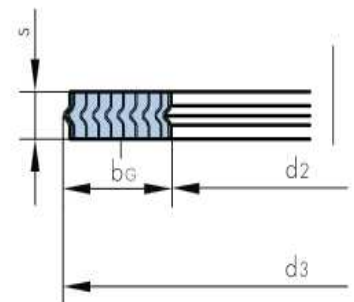
The inner ring is used to avoid excessive compression due to high seating stress in high-pressure service and it is also used to reduce turbulence in the flange area. It is normally made of the same material as the gasket metallic strip.

DIMENSIONS

Manufacturing sizes

Limitations for manufacturing of dimensions are general and can vary according to the special customer requirements.

LIMITATIONS FOR MANUFACTURING DIMENSIONS			
Thickness [mm]	Max diameter d3[mm]	Maximum width - bg [mm]	
		Graphite	PTFE
2.5	300	16	13
3.2	700	22	19
4.5	1500	30	24
6.5	3000	35	24
7.2	3000	30	24



Thickness

The standard manufacturing thicknesses for spiral wound gaskets are: 3.2 mm; 4.5 mm; 6.5 mm (measured across metallic strip not including the filler, which protrudes 0.2-0.3 mm beyond the metal).

Manufacturing tolerances

The tolerance of the gasket diameters (d1, d2, d3, d4, s, s1, s2) are stipulated by ASME B 16.20 and EN 1514-2 standards. The gaskets designed for non-standard flanges meet the recommendations by the ASME B 16.20.

Dimensions

The dimensions of the standard SWG meet the ASME, BS and EN (DIN) standards.