



Spiral Wound Gasket Technical Datasheet

Description

Phoenix spiral wound gaskets are manufactured by winding pre-formed metal strip and a soft filler material into a spiral seal with excellent mechanical resistance and recovery. They are available with or without retaining rings, and in a wide range of materials to ensure compatibility with the sealing media and operating conditions.

Application

Spiral wound gaskets are used in many industrial sectors including refining, chemical, power and pipeline construction. They are particularly suited to arduous operating conditions, and can be used across the full range of pipe pressure classes as well as in vessel flanges and other non-standard applications. Their versatility means they can operating at temperatures from cryogenic up to 1000°C and from high vacuum to over 400 bar.



Profiles



PM-ORIR Sealing Element, Inner Ring & Outer Ring. The outer rings centres the gasket against the bolts, the inner ring prevents inward buckling of the sealing element. For raised and flat face flanges across the range of pressure classes.



PM-OR Sealing Element & Outer Ring. The outer rings centres the gasket against the bolts. For raised and flat face flanges in low pressure classes.



PM-RIR Sealing Element & Inner Ring. The inner ring prevents inward buckling of the sealing element. For flanges where the sealing element is constrained on the outer diameter e.g. male to female flanges.



PM-R Sealing Element Only. For tongue and groove, flat to recess, and male to female flanges, where the sealing element is constrained on both the inner and outer diameters.



PM-HXR Outer Wound Nose & Sealing Element. The outer windings create a small nose to ensure correct alignment in the flange recess. For large diameter heat exchanger gaskets.



PM-HXIR Outer Wound Nose, Sealing Element & Inner Ring. As PM-HXR but with an inner ring, which prevents inward buckling of the sealing element. For large diameter heat exchanger gaskets. Can be supplied with pass partition bars in any configuration.

As the company's products are used in multiple applications and as the company has no control over the method of their use, the company excludes all conditions or warranties, expressed or implied by statute or otherwise. Any technical co-operation is given for customers assistance only and without liability on the part of the company.



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Winding Strip & Ring Materials

Available in a range of alloys including but not limited to

Material	Material
Carbon Steel	Alloy 600
304/304L	Alloy 625
316/316L	Alloy 800
321	Alloy 825
347	Monel 400
410	Alloy B2
S31803	Alloy C276
S32726	Titanium

Flange Surface Finish

The recommended a flange surface finish of 3.2 to 6.3µm RA (125 to 200RMS)

Filler Materials

Material	Temperature Min. (°C)	Temperature Max. (°C)	Pressure Max. (Bar)
Graphite	-200	450	400
APX2 Graphite	-200	500	400
PTFE	-200	260	150
PG-Therm + APX2 Graphite	-200	800	100

Availability

Thickness	Standard thickness 4.5mm, 7.2mm, 6.4mm and 3.2mm also available
Standards	ASME B16.20, ASME B16.47 Series A & B, EN1514-2, BS10, JIS Non standard configurations and bespoke
Stock	We stock standard gasket to ASME B16.20, EN1514-2 and BS10

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