

# Spiral Wound Gasket Datasheet

## Design

Phoenix spiral wound gaskets comprise a pre-formed metal strip and a softer filler material, spirally wound together to form a seal with both excellent mechanical resistance and an ability to accommodate fluctuations in temperature and pressure during service. They are available with or without retaining rings and in a range of different materials to suit the applications conditions .

## Application

Spiral wound gaskets have wide scale applicability in a range of industrial sectors including refineries, chemical facilities, power plants and in general pipeline construction. The robust nature of their design means that they are particularly suited to arduous operating conditions . They can be used across the full range of pipe pressure classes as well as in vessel flanges and other non-standard applications. Temperature and pressure limits are shown at the bottom of the datasheet. The correct style of gasket should be selected from the list below.

## Styles

### PM-R



**Sealing Element Only**  
Ideal for tongue and groove, flat to recess and male to female flanges.

### PM-RIR



**Sealing Element + Inner Ring**  
Ideal for male to female flanges

### PM-OR



**Sealing Element + Outer Ring**  
Ideal for raised and flat face flanges. The outer ring acts as a location aid and compression stop

### PM-ORIR



**Sealing Element + Inner and Outer Ring**  
Ideal for raised and flat face flanges, outer ring acts as a location aid and compression stop

### PM-HXR



**Sealing Element**  
Ideal for large diameter heat exchanger gaskets

### PM-HXIR



**Sealing Element with Inner Ring**  
As PG-HXR but with inner ring, the inner ring prevents over compression of the sealing element

## Flange Surface Finish

We recommend a flange surface finish of 3.2 to 6.3µm Ra (125 – 200 RMS) for operation of the gaskets.

## Sealing Element Thickness (Uncompressed)

Spiral wound gaskets are available in the following thicknesses: 7.2mm, 6.4mm, 4.5mm and 3.2mm

## Operating Temperatures and Pressures

### Sealing Material

Sealing Layer	Temperature Minimum (Deg C)	Temperature Maximum (Deg C)	Maximum Pressure (Bar)
Graphite	-200	+450	400
APX 2 Graphite	-200	+500	400
P.T.F.E	-200	+260	150
PG-Therm + APX2 Graphite	-200	+800	100

### Core Material

Core Material	Temperature Maximum (Deg C)	Core Material	Temperature Maximum (Deg C)
Carbon Steel	500	Duplex	800
Stainless Steel 316	550	Nickel 200	600
Stainless Steel 304	550	Monel 400	600
Stainless Steel 347	850	Incoloy 825	450
Stainless Steel 321	850	Hastelloy B2	450
Inconel 600	900	Hastelloy C276	450
Inconel 625	900	Titanium	350