



I-HP Technical Datasheet

Description

Phoenix I-HP gaskets comprise a 316 stainless steel core laminated with a high strength glass reinforced epoxy. Two PTFE spring energised face seals, or elastomeric O-rings, are housed within the core. The kits are designed for flange isolation and corrosion control across the full range of pressure applications, and for a variety of media including gas, seawater, oil and hydrocarbons.

Application

- Dissimilar metal flange connections to mitigate galvanic corrosion
- High Pressure flow lines / wellheads for isolation
- Flange isolation in conjunction and cathodic protection systems
- Raised Face (RF) and Ring Type Joints (RTJ) flanges
- Mismatch flange assemblies - RF/RTJ
- Pressure class ANSI B16.5 150 to 2500lbs and API2 to 10K
- Corrosive environments including concentrations of CO₂ and H₂S
- Recommended flange surface finish of 3.2 to 6.3µm RA (125 to 200RMS)

Typical Physical Properties

Material

ASTM	Test Method	G10	G11
D149	Dielectric Strength (VPM)	800	550
D638	Tensile Strength (psi)	40,000	41,000
D695	Compressive Strength	50,000	50,000
D790	Flexural Strength (psi)	55,000	55,000
D732	Shear Strength (psi)	21,000	21,000
D256	Impact Strength (ft-lb/in)	12	10
D570	Water Absorption (%)	0.1	0.1
	Temperature Range	-129 to 150°C	-46 to 200°C



Availability

Thickness	Gasket 6.6/7.8mm
Metal Core	SS316/SS316L as standard. Other alloys on request.
GRE Options	G10 & G11
Seals	PTFE (spring energised) as standard NBR & FKM on request
Sleeves	G10 as standard, Mylar & G11 on request
Washers	G10 as standard. G11 & Mylar on request HCS as standard, G10, ZPS, Stainless Steel on request
Standard	ASME B16.21, B16.47 series A & B, API-6A

As the company's products are used in multiple application 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.