

Astra Seal

Simply no better seal for cryogenic applications

Extreme low temperatures make most O Rings brittle which in turn leads to failure. The Astra seal was created by an Aerospace Engineer to combat the harsh environments associated with liquid oxygen and the problems involved with sealing in other cold media, such as liquid nitrogen and hydrogen.

Since then the seals have been successfully used in several space shuttle/rocket launches and a multitude of other applications by organisations such as Boeing, NASA, Lockheed and the newly founded Space X.

Description:

The Astra seal is comprised 302 stainless flat wound ribbon spring encapsulated in either a FEP or PFA jacket to form an O Ring.

Spring Material

ASTM Type 302 / AMS 5059

Temperature Range

FEP/Astra: -250°C to +204°C

PFA/Astra: -250°C to +260°C



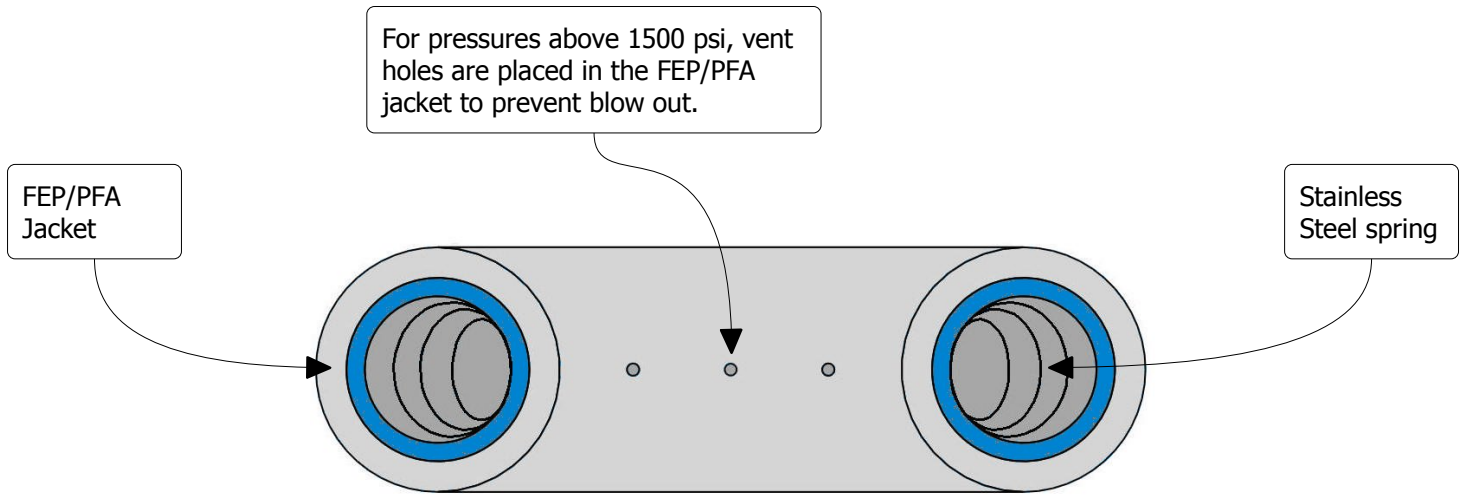
All our products are manufactured through our world class quality system; our quality rating is so high that we achieve a reject rate of less than 0.03%.

As always all our products are supported by our excellent levels of customer service, which allow you to improve your profits, increase your market share plus add value to your business.

We would welcome any questions or enquiries you have in relation to this product, please contact our customer support team, with any further requests.

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Available cross sections and force required to compress (pounds per linear inch)

Cross Section	Squeeze	Groove Depth	Groove Width	Minimum ID	Force Pounds
1.91mm	0.56mm	1.35mm	2.67mm	12.70mm	40
2.40mm	0.61mm	1.78mm	3.18mm	19.05mm	40
2.62mm	0.71mm	1.90mm	3.53mm	19.05mm	45
2.93mm	0.76mm	2.16mm	3.94mm	31.75mm	40
3.00mm	0.76mm	2.24mm	3.96mm	31.75mm	45
3.10mm	0.76mm	2.34mm	4.07mm	31.75mm	50
3.53mm	0.76mm	2.79mm	4.95mm	31.75mm	65
3.76mm	0.84mm	2.92mm	4.95mm	38.10mm	85
4.00mm	0.89mm	3.10mm	5.08mm	38.10mm	70
4.32mm	1.02mm	3.30mm	5.84mm	38.10mm	90
4.50mm	1.02mm	3.48mm	6.02mm	38.10mm	100
4.88mm	1.12mm	3.76mm	6.48mm	44.45mm	110
5.34mm	1.14mm	4.19mm	7.11mm	50.80mm	140
5.59mm	1.14mm	4.44mm	7.37mm	50.80mm	140
5.72mm	1.14mm	4.57mm	7.49mm	50.80mm	150
6.35mm	1.27mm	5.08mm	8.25mm	76.20mm	110
6.99mm	1.27mm	5.71mm	8.89mm	88.90mm	95
8.00mm	1.52mm	6.48mm	9.90mm	101.60mm	80

Excessive stretching must be avoided when installing Astra seals to ensure the coils do not separate. Astra seals are best used in OD sealing applications.