

Detectaseal® XN7A

Magnetic and metal detectable blue nitrile elastomer



Description

Detectaseal® is the latest advance in contamination detection and containment. This unique range of metal detectable elastomer compounds has been developed specifically to meet the stringent demands of the pharmaceutical and food processing industries.

Detectaseal® fragments as small as 2-3mm can be easily identified by in-line metal detection equipment used to detect product contaminated by process lines.

The Detectaseal® range includes Nitrile, EPDM, Silicone and Fluoropolymer (FKM) elastomer compounds (all FDA-compliant) available in blue and black, which allows the most appropriate material to be selected for every application.

Detectaseal® compounds can be moulded into O-rings and custom components.

Key Attributes

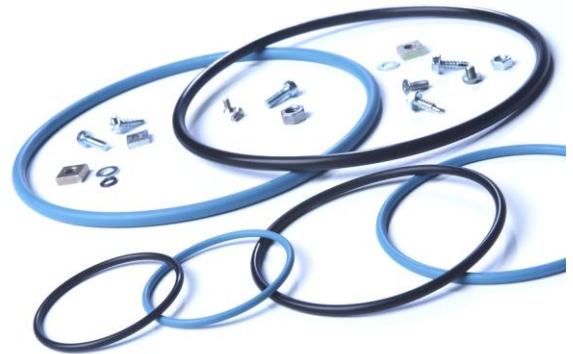
- ▶ Early detection and containment of contamination
 - Reduced product loss
 - Increased productivity
- ▶ Blue seals to assist in easy identification
- ▶ Excellent mechanical properties and sealing efficiency
- ▶ Exceptional water and steam resistance
- ▶ FDA compliant extraction tested to CFR 21§ 177.2600 (e,f)
- ▶ Free from animal-derived ingredients

Typical Applications

Static sealing applications
 Food processing equipment
 Pharmaceutical drug manufacturing equipment
 Bioscience industry

Other materials in this range

Detectaseal® XV7H (Fluoroelastomer - Black)
 Detectaseal® XV7A (Fluoroelastomer - Blue)
 Detectaseal® XN7H (Nitrile - Black)
 Detectaseal® XE7H (EPDM - Black)
 Detectaseal® XE7A (EPDM - Blue)
 Detectaseal® XS7H (Silicone - Black)



Typical Material Properties

Property	ASTM	ISO	Value
Material Type	NBR	NBR	
Colour			Blue
Hardness: (°IRHD)	D1415	ISO48	70
Tensile Strength (MPa)	D412	ISO37	7
Elongation at break (%)	D412	ISO37	250
Compression Set: 24 hrs @ 100°C (212°F)	D395	ISO815	55.0%
Minimum Operating Temperature			-40°C (-40°F)
Maximum Operating Temperature			+120°C (+248°F)
Heat Resistance: 70 hrs @100°C (212°F)	D573	ISO188	
Hardness change (points)	D1415	ISO48	15 IRHD
Tensile strength change	D412	ISO37	±20%
Elongation at break change	D412	ISO37	±40%

SPECIAL NOTE: This information is to the best of our knowledge accurate and reliable. However, Precision Polymer Engineering Ltd makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It is the customer's responsibility to evaluate parts prior to use, especially in applications where their failure may result in injury and/or damage. It should also be noted that all elastomeric parts have a finite life. Therefore a regular programme of inspection and replacement is strongly recommended. In non-black grades of elastomer, it is possible to observe slight variations in colour. This is normal and is inherent in the part: it is not indicative of foreign matter. These colour variations are not expected to adversely effect the performance of the part. The material properties above should not to be used for specification purposes.

Detectaseal® is a registered trademark of Precision Polymer Engineering Limited.

