

# Detectaseal® XN7H

Magnetic and metal detectable black 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 in to 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 material suitable for dry food contact applications
- 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			Black
Hardness (°IRHD)	D1415	ISO48	70
Tensile Strength (MPa)	D412	ISO37	10
Elongation at break (%)	D412	ISO37	250
Compression Set:			
24 hrs@70°C (158°F)	D395	ISO815	30.0%
24 hrs@ 100C	D395	ISO815	36.0%
Minimum Operating Temperature			-40°C (-40°F)
Maximum Operating Temperature			+120°C (+248°F)

**Special Note:** This information is the best of our knowledge accurate and reliable. However, Abbey Seals International 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. The material properties above should not be used for specification purposes

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