

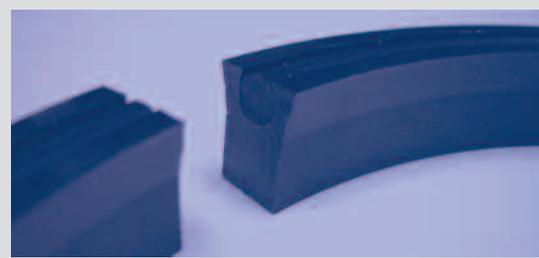
The NuPac is a precision molded seal combining a U-Cup with an O-Ring. Under zero and low pressure, the O-Ring pressurizes the lips of the U-Cup allowing it to seal. As system pressure increases, the O-Ring is energized and forces the lips outward, changing its behavior from a squeeze type seal to a traditional lip seal. The NuPac is suitable for temperatures between -40°F and 212°F (-40°C to 100°C) and pressures from zero to 6000 PSI.



**DICHTOMATIK**  
AMERICAS



## Dichtomatik Loaded U-Cups: The NuPac



### ADVANTAGES

- O-Ring Energizes the Sealing Lips for Low Pressure Sealing
- 6000 PSI Maximum Operating Pressure
- Available in Several Materials: Polyurethane, FKM, XNBR, HNBR and More
- Interchangeable with Other Manufacturers' Loaded U-Cups
- Excellent Performance as a Piston Seal or Rod Seal

Profile	Style	Lip Geometry	Seal Height
	<b>Standard</b>	Straight	Equal to cross section
	<b>Deep</b>	Straight	Greater than cross section
	<b>Square B (SQB)</b>	Beveled	Equal to cross section
	<b>B-Lip</b>	Beveled	Greater than cross section

### Seal Height:

- Standard and Square B NuPac heights are designed equal to their cross sections, allowing them to fit into compact O-Ring grooves.
- B-Lip and Deep NuPac heights are greater than their cross sections, providing for improved stability in heavy duty applications.

### Lip Geometry:

- Deep and Standard NuPac designs can be used in either rod or piston applications, but most often are used in piston seal applications. Pressure trapping can occur when two beveled seals are used back-to-back in a double acting cylinder. For double acting piston applications, the straight lip geometry is a better choice to ensure long cylinder life.
- B-Lip and Square B NuPacs are designed with beveled lips to increase their ability to cut through the oil film, making them an excellent choice as a rod seal.

*\*Call customer service for pricing and availability*



## Materials

Dichtomatik NuPacs come standard with an NBR 70 durometer O-Ring, exceptions noted.

Abbreviation	Material P/N Code	Full Material Name	Advantages
PU92 (Standard Material)	blank	Thermoplastic Polyurethane	Polyurethane offers excellent wear resistance, abrasion resistance, and extrusion resistance.
FKM 90	F1	Fluoroelastomer (FKM)	FKM is one of the most highly temperature resistant of all commercially available elastomers. FKM is also great for oil resistance and chemical resistance. The FKM NuPac comes standard with an FKM 75 durometer O-Ring. FKM NuPacs have an increased temperature range of 5° F to 390° F (-15° C to 200° C).
XNBR 85 XNBR 85L XNBR 90	X1 X2 X3	Carboxylated Nitrile (XNBR)	XNBR has higher abrasion resistance, modulus, and tensile strength than standard Nitriles. The XNBR 85L compound contains 6% MoS2 for internal lubrication.
HNBR 90 HNBR 85 HNBR 80	HN1 HN2 HN3	Hydrogenated Nitrile (HNBR)	HNBR has high tensile properties, low compression set, good low temperature properties, heat resistance, excellent ozone resistance, good resistance to aggressive oils, resistance to crude oil in the presence of hydrogen sulfide and amines, and resistance to alkaline and oxidizing media. HNBR is primarily used in oil field applications.
PE 55D	PE	Polyester 55D (DuPont Hytrel®)	Hytrel® has good creep resistance, high energy absorption and low temperature flexibility. Hytrel® is primarily used in industrial applications.

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### Dichtomatik Americas Products

#### Fluid Power Seals

- NuPac Seals - O-Ring energized U-Cups
- Tee Seals
- Polyurethane U-Cups
  - MA25: Symmetrical U-Cup
  - MA39: Double Lip Rod Seal
  - MA28: Asymmetrical Piston Seal
- NBR U-Cups
  - AN6226 series
  - 8400/8500 series
- PTFE Seals
- Wear Rings
- Rod Wipers — AN, D, H, Metal Clad
- Back-Up Rings

#### Spliced Rings and Extruded Cord

- Spliced O-Rings, precision vulcanized
- Extruded Cord in various compounds and cross-sections
- Splicing Kits

#### Radial Shaft Seals

- Oil Seals
- Grease Seals
- Medium Duty Oil Bath Seals
- AP Excluder Seals
- Axial Face Seals
- V-Rings
- Valve Stem Seals
- End Caps
- SHAFT-EZE Shaft Sleeves

#### Fitting and Fastener Seals

- Thread Seals
- Fastener Seals
- Bonded Seals

#### Custom Molded Rubber

- Rubber Only
- Rubber-to-Metal Bonded
- Unique shapes and materials to your specifications

#### O-Rings

- All AS568 sizes in stock, including
  - NBR 70 and 90
  - FKM 75 Black and Brown
  - EP70
  - Silicone 70
- Metric O-Rings
- Select sizes of:
  - PTFE-Encapsulated FKM and Silicone
  - Polyurethane
  - Solid PTFE
- Wide variety of materials available
- O-Ring Kits
- X-Rings
- D-Rings
- Square Rings
- Back-Up Rings

... and many more products — just call us!