



The profile NHA is excellent for both static and intermittently dynamic applications at high pressures. The seal can be used for reciprocating or rotating movements on either inner or outer diameter.

Profile NHA is particularly suitable for high-pressure valve stems, connectors, pistons and swivel joints.

### Features

- Extended heel that reduces effects of extrusion.
- Helical wound spring for high load and small deflection range.
- Rounded lip profile for easy installation and improved lubrication of a reciprocating sealing surface.
- Good choice for installation into non-split grooves: the short heel and helical spring stretch easily and the rounded lips will not hang-up.
- Widest range of cross-sections and diameters available, including sizes for upgrading standard O-ring grooves.
- Many high-resilience energizer options available, including choice of light, medium and heavy loads and NACE for oil field use.
- Low-cost elastomeric energizers available, all with excellent fatigue resistance.

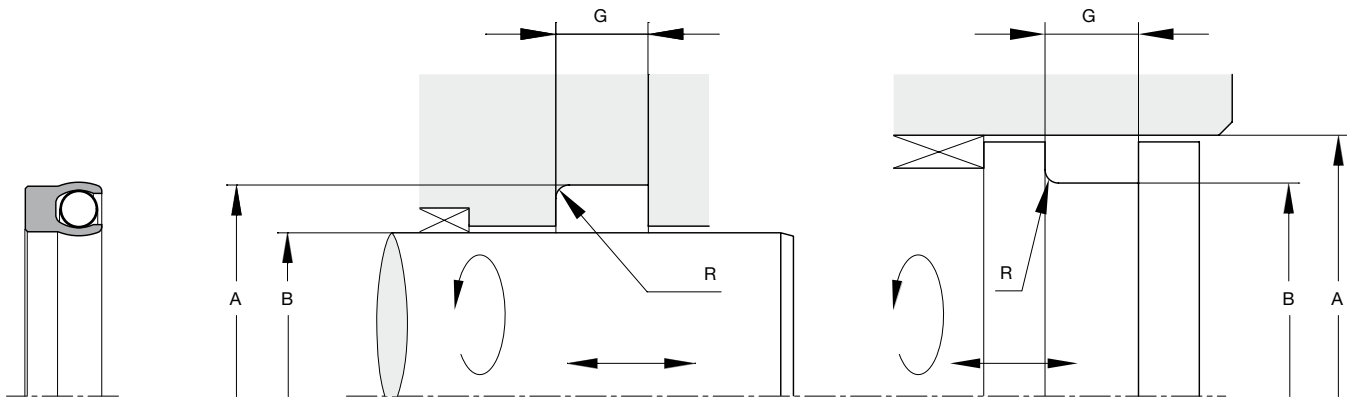
### Range of Application

For high-pressure, static and intermittently dynamic sealing.

Operating pressure	≤ 55 MPa
Operating temperature	-260 to +315 °C
Surface speed	≤ 0.005 m/s

### Compounds

The NHA seal is available in a wide range of polymers. These include unfilled PTFE, filled PTFE, UHMW-PE, PEEK and many others. See the compound list for further information.



**Housing dimensions**

Nominal Cross-section	Cross-section code	Recommended inner Ø range		Outer Ø Tolerance H8 A (mm)	Groove width min. G (mm)	Radius max. R (mm)
		≥	≤			
1/16"	01	7.5	75	B + 2.84	3.8	0.30
3/32"	02	5.5	180	B + 4.52	4.6	0.50
1/8"	03	6.0	250	B + 6.15	6.0	0.50
3/16"	04	12.5	300	B + 9.45	8.5	0.75
1/4"	05	50.0	500	B + 12.12	12.1	0.75
3/8"	06	150.0	1400	B + 18.75	15.8	0.75
1/2"	07	300.0	3000	B + 25.40	20.5	0.75

FlexiSeal®

**Ordering example**

Shaft 70 mm  
Cylinder bore 76.15 mm

NHA M007000 03 XXX Y

NHA profile  
M007000 inner groove diameter in mm times 100  
03 cross-section code corresponding to a 6.15 mm groove diameter difference  
XXX jacket material  
Y spring-energizer material