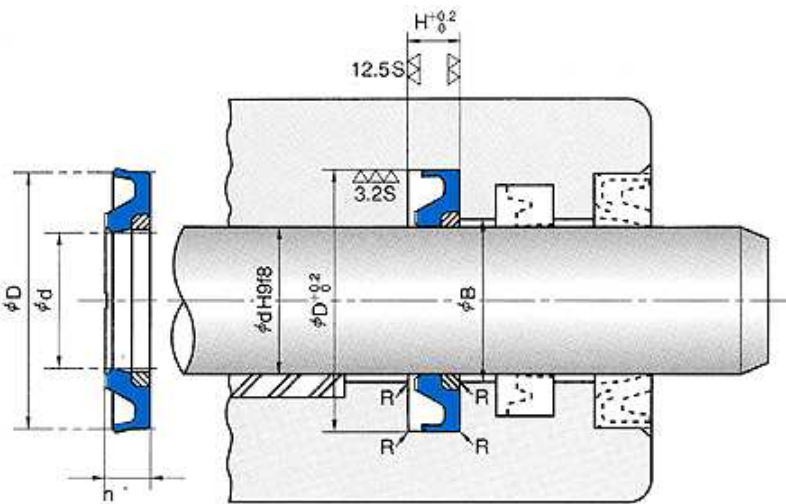




# DISOGRIN / NOK HBY Buffer Ring

sizes



## Features

This is used in combination with rod packing to absorb the impact and fluctuating pressures at high load, to isolate high temperature fluids, and to improve the durability of the packing. It has a special shaped slit at the sliding lip that can leak back pressure, and eliminates the pressure between the rod packing and the buffer ring. Used with general petroleum hydraulic fluid oil.

- no adhesion effect on sliding surface
- relieves any pressure build-up which may occur
- superior abrasion and wear resistance

$R = 0.3$  or below

\* above dimensions are in millimeters

## Applications



- bulldozers
- cranes
- construction equipment
- agricultural equipment
- mobile arm trucks
- injection molding machines
- hydraulic presses
- shears
- general cylinders

## Materials

NOK Packing Material	
Material:	Noxlan <a href="#">U801</a>
Hardness:	94 Shore A
NOK Backup Ring	
Material:	POM <a href="#">80NP</a>
Hardness:	120 Rockwell R
Disogrin Sealing Element	
Material:	Polyurethane <a href="#">9250</a>
Hardness:	92 Shore A
Disogrin Backup Ring	
Material:	Polyamide
Hardness:	120 Shore R

## Operating Limits

The operating limits of this seal are highly dependant on the application. Combinations of pressure, temperature, fluid medium and other factors, all greatly effect the performance and longevity of the seal.

Pressure	<b>8000 PSI / 55 MPa</b>
Linear Velocity	<b>1.5 ft/s / 0.5 m/s</b>
Temperature	<b>-54°C/149°C to -65°F/300°F</b>

## Installation

For complete Installation Instructions, [click here](#).

## Design Reference

### Surface Finish

For more information on surface finish and conditions, [click here](#).

Roughness Depth	$R_{max}$	$R_a$
Bottom of groove	$\leq 125 \mu m$	$\leq$
Sides of groove	$\leq 32 \mu m$	$\leq$

### Gap dimension (B) With Back-Up Ring

Please determine the B dimension according to the table below. If you require a smaller B dimension because of the cylinder configuration, please consult Freudenberg-NOK. See: [Gap widths and fits](#).

Back-Up Ring	5000 PSI	6100 PSI	7300 PSI
Material	35 MPa	42 MPa	50 MPa
POM 80NP	d + 0.8	d + 0.4	d + 0.25

**Gap dimension (B) With No Back-Up Ring**

To determine the B dimension, please refer to the graph to the left for the maximum extrusion gap considering the eccentricity of the operating conditions.