

## High-Pressure Piston Seal – HDP 330

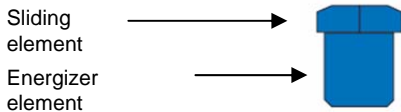
The special polyamide seal HDP 330 complements the Merkel piston seal program for the installation space DIN ISO 7425-1. It withstands the most extreme pressures (up to 800 bar) and allows for use of rougher cylinder liner surfaces, which can cut cylinder production costs.



The HDP 330 piston seal withstands extreme pressure up to 800 bar.

### Product Description

The HDP 330 is a two-part seal set, consisting of a PA slide ring with a stepped cut and an elastomer energizing element for producing pre-load.



### Material

#### Slide ring

Material	Code
Fiberglass filled modified polyamide	PA 4112

#### Contact pressure element

Material	Code	Hardness
Nitrile rubber NBR	70 NBR 177605	70 Shore A

### Product Features & Benefits

- Extreme strength against gap extrusion
- Extremely high abrasion resistance
- Tight sealing function and drift resistance due to special molding technology (flat sealing area, precise step cut geometry)
- Quick and easy installation – stepped cut for easy fitting in a closed housing
- Greater bore surface roughness permissible in comparison to conventional seals
- Capable of running over properly designed ports
- Rectangular contact pressure element produces consistently high pre-loading force and offers high protection against twisting in the housing
- Housings should preferably comply with ISO 7425-1
- Dynamic and static tightness comparable to PTFE piston seals
- Special chamfers on inner diameter allow interchangeability with O-ring energized seals (e.g. PTFE seals)
- High temperature elastomer material HNBR energizers available

### Applications

- **Construction Equipment Applications** – for extreme conditions (e.g. shock pressures)
- **Material Handling Applications** – for cost efficient cylinders (cold drawn tubes)
- **Hydraulic Pump applications** – for small housings and high pressures

### + In brief

- For applications with extreme operating conditions; offers high functional reliability up to 800 bar
- Enables more cost effective cylinder construction (rougher surface finishes and sealing over ports allowed)
- Quick and precise assembly
- Tight sealing function due to special molding technology

