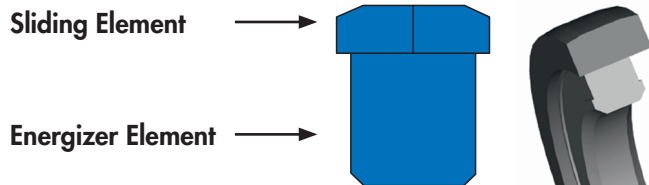




# HDP 330 HIGH-PRESSURE PISTON SEAL

The special polyamide seal HDP 330 complements the Merkel piston seal program for the installation space DIN ISO 7425-1. This seal 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 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

## VALUES TO THE CUSTOMER

- **Well suited 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)
- **Allows quick and precise assembly**
- **Provides tight sealing function**

## 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

# HDP 330 HIGH-PRESSURE PISTON SEAL

## FEATURES AND BENEFITS

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- 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



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