

# 45X68X10 HMSA10 RG

## Radial shaft seal with rubber outside diameter and single sealing lip, for oil or grease

Radial shaft seals are used between rotating and stationary machine components, or between components in relative motion. HMSA10 seals are designed with a rubber outside diameter. They have a conventional sealing lip made of elastomer or thermoplastic. A garter spring in the seal and a non-contacting auxiliary lip optimize the sealing against the shaft also in polluted environment.

- High pumping rate
- Higher contamination exclusion with dust lip
- With garter spring
- Accommodate misalignment

## Overview

### Dimensions

| | |
|---|---|
| Housing bore diameter | 68 mm |
| Seal width | 10 mm |
| Shaft diameter | 45 mm |

### Performance

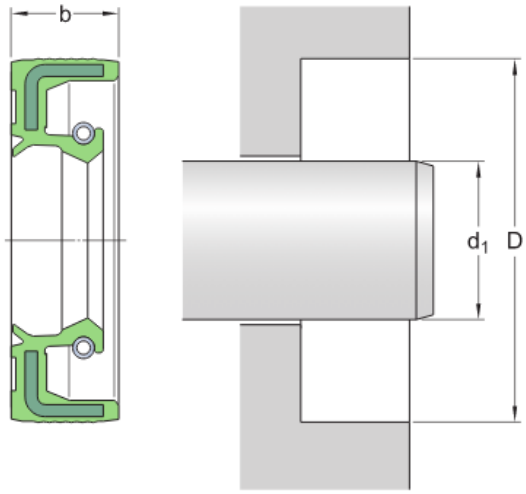
| | |
|---|---|
| Permissible circumferential speed | 7.41 m/s |

### Properties

| | |
|---|---|
| Auxiliary lip | Yes |
| Design | HMSA10 |
| Metric/inches measurement system | Metric |
| Sealing lip material | Nitrile rubber (NBR) |

# Technical Specification

| | |
|---|---|
| US stock number | . |
| Type of outside diameter | Rubber metal reinforced |
| Lip material | Nitrile rubber (NBR) |
| Seal design | HMSA10 |
| Compliance with standard | ISO 6194, DIN 3760 |




## Dimensions

| | | |
|---|---|---|
| $d_1$ | 45 mm | Shaft diameter |
| D | 68 mm | Housing bore diameter |
| b | 10 mm | Seal width |

## Application and operating conditions

| | |
|---|---|
| Operating temperature | min. -40 °C |
| Operating temperature | max. 100 °C |
| Operating temperature, short periods | max. 120 °C |
| Circumferential speed | max. 7.41 m/s |
| Rotational speed | max. 3 120 r/min |
| Pressure differential | 0.03 N/mm |

## Associated products

| | |
|---|---|
| SKF Speedi-Sleeve | 99177 |

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