



# 45X60X10 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	60 mm
Seal width	10 mm
Shaft diameter	45 mm

#### Performance

Permissible circumferential speed	7.41 m/s
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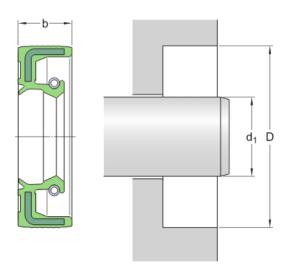
# **Properties**

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



# Technical Specification

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	60 mm	Housing bore diameter
b	10 mm	Seal width

# Application and operating conditions

Operating temperature	min40 °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
Siti Specal Steeve	7,211



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