Labyrinth Metal Seal
Type M

M 100 X 120 X 10
Item number 301437

Technical data

- Outer ring material*: Aluminum (GD AlSi 12)
- Inner ring material: Unalloyed construction steel
- Inner diameter ID: 100 mm
- Outer diameter OD: 120 mm
- Installed width W: 14 mm
- Sealing gap: Horizontal
- Axial play $S_{ax}$**: 0.7 mm
- Radial play $S_{rad}$**: $S_{rad} = S_{ax} \tan (42.5^\circ)$
- Gap diameter $e$: 115 mm
- Gap height: Constant 0.2–0.5 mm (depending upon size)
- Keyway width $c$: 4 mm
- Speed limit: 11700 rpm
- Weight: 0.25 kg
- Operating temperature $t$: -40° to 200°C

*Aluminum outer ring
**Entire movability from one end position to the other.

Heavy and direct splashing liquids could be drained through a certain number of grooves in the outer ring into a circular groove inside the housing; Width of the circular groove in the customer part: $R = c + 1$ mm ($c =$ Keyway width)

Installation

"I" Length (chamfering of shaft and housing) depending on the width $W$: $l = 0.1 \times W$

Component tolerances

Surrounding structure (mating parts)
- Housing: K7 / Shaft: h6
- Surface quality: $Rz \leq 16 \mu m$; $Ra \leq 3.2 \mu m$