



# **INSTALLATION GUIDE**

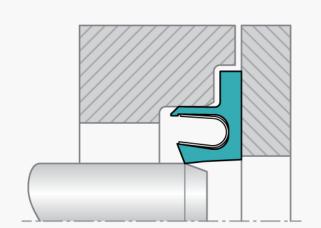
# Turcon® Roto Variseal®

### Introduction

The Turcon<sup>®</sup> Roto Variseal<sup>®</sup> comes with a standard flanged outer diameter designed to be clamped between two mating surfaces. Therefore it is possible to install the Turcon<sup>®</sup> Roto Variseal<sup>®</sup> into split housings only.

Installation should be performed in the following steps in order to ensure a concentric and strain—free fit:

- Place the seal ring in into the open groove
- Fit the cover loosely onto the housing
- Insert the shaft
- Tighten the cover



### **General Installation considerations**

The following points should be observed before installation of the seals:

- Check whether housing or rod has a lead-in chamfer; if not, use an installation sleeve
- Deburr and chamfer or round sharp edges, cover the tips of any screw threads
- Remove machining residues such as chips, dirt and other foreign particles and carefully clean all parts
- If the seals are installed with grease or oil, attention must be paid to the compatibility of the seal
  materials with these lubricants. Use only grease without solid additives (e.g. molybdenum disulfide
  or zinc sulfide)
- Do not use installation tools with sharp edges Installation of Turcon<sup>®</sup> Roto Variseal<sup>®</sup>





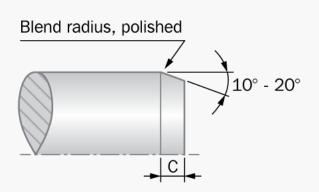
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#### Lead-in chamfers

In order to avoid damage during installation, leadin chamfers and rounded edges must be provided on the housing and on the rod. If this is not possible for design reasons, a separate installation tool is recommended.

The minimum length of the lead-in chamfer depends on the profile size of the seal and can be seen from the following tables. If concentricity between the parts is not ensured during installation the lead-in chamfers must be increased correspondingly. For the surface quality of the lead-in chamfer, the same recommendations apply as given for the sealing surfaces in the table below.



Series	Lead-in chamfers Length C <sub>min.</sub>
TVM1	4.5
TVM2	5.0
TVM3	8.0
TVM4	12.0

### **Mating surface materials**

Sealing of applications with rotating movements require very good mating surfaces. A minimum hardness 55 HRC is recommended to a hardening depth of at least 0.3 mm. Particular attention must be paid to coated surfaces and good heat dissipation through the coating is required.

### Shaft bearing/Radial clearance for bearing

In general the sealing elements should not take on any bearing tasks as this will reduce the functioning of the seals. Consequently we recommend to guide the components by means of a roller or slide bearing.

### **Important Note**

Installation suggestions, material recommendations, parameters and further data provided are always subject to the particular field of use and the application in which the seal is intended to be used, in particular the interaction of the seal with other components of the application. Therefore they neither constitute an agreement on the legal and factual nature nor a guarantee of quality. Technical changes and errors remain reserved.