

TENUTE - TR/GC *sealing rings*

The model **TENUTE TR/GC**, is employed in special static or low speed applications, where shaft misalignments and a reduced housing are the characterizing factors of the sealing ring.

TENUTE srl has ever cared for these issues, rather frequent in applications such as adapters, shaft couplings, etc.

The large range of existing applications decisively influences the seal configuration. In fact, applications that seem similar to a first analysis, then require different solutions, thus determining the selection of elastomers and their features.

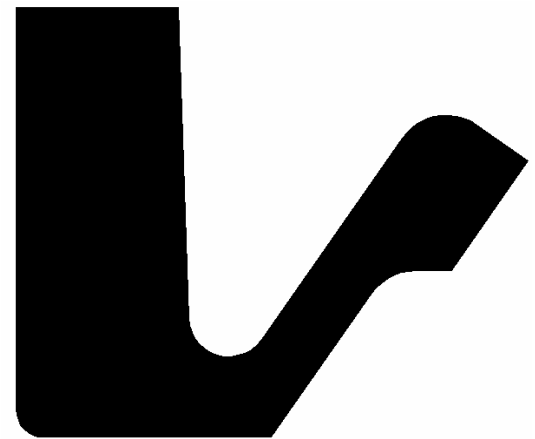


Figure 1

A prerogative of the TR/GC model is first of all the reduced section of the seal and the absence of the retaining spring thanks to an adequate study of the lip geometry.

We remind that the TR/GC is originally a grease retainer.

TR/GC can be manufactured – as endless form – up to a 2500 mm diameter.

The standard production is in Nitril elastomer NBR added with Ptfе, but for particular condition of employ, it can be produced in: HNBR hydrogenated nitril elastomer, MQ silicon elastomer, FKM (fluoro carbon elastomer).

In the table 1 there are the admissible working temperature (minimum, maximum and maximum point) for this kind of material.

MATERIAL	TEMPERATURE C°
NBR	-30° +100°(120°)
HNBR	-40° +150°(175°)
MQ	-50° +200°(250°)
FKM	-20° +200°(250°)

table 1

Assembly of TRGL sealing rings

The drawing shown in figure 2 details the size of housings and the assembly of the above mentioned model. Peculiar applications or requirements different from those detailed are to be agreed with our Technical Department..

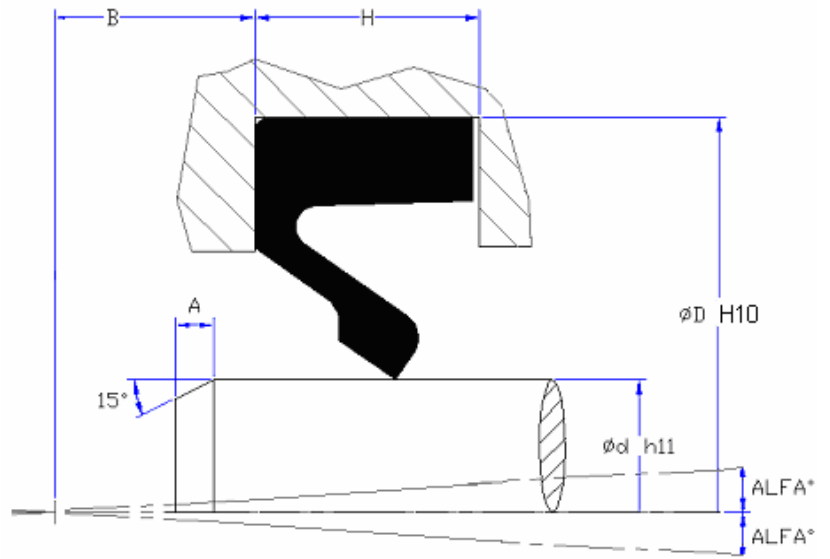


Figure 2

Tolerance and roughness of the metallic parts

Housing Height tolerance		Shaft chamfers			Housing chamfer	
H (mm)	(mm)	Ød(mm)		A minimum	H(mm)	B(mm)
UP TO 15	+0,2 / 0	OVER	UP TO	(mm)	10	1
OVER	+0,3 / 0	3	50	5	15	1.5
		50	250	10	20	2
		250	800	15	30	3
		800	1500	20	40	4
		1500	2500	25		

SURFACES FINISHING

A roughness of Ra 0.2/0.6 µm is recommended for the shaft, in normal applications, while in case of high speeds, a finishing of 0.2/0.4 µm is recommended.

Furthermore, in case of water, it is advisable to perform chromium plating of the shaft/sealing lip contact surfaces, in order to avoid a rapid wear due to iron oxides that are removed by the sealing lip. A finish turning is enough for housings.

We suggest to ask our Technical Department for more information, for the assembling and the applications.

Tooling List Up-To Date on 04_05_2005

Ød	ØD	H	PROFILE
200	212	8	TR/GC
208	230	12	TR/GC
210	222	8	TR/GC
230	250	14	TR/GC
250	280	15	TR/GC
265	285	14	TR/GC
275	295	14	TR/GC
290	310	13	TR/GC
310	330	12	TR/GC
310	338	18	TR/GC
311	331	14	TR/GC
315	338	20	TR/GC
320	340	11	TR/GC
330	362	20	TR/GC
360	390	15	TR/GC
380	410	15	TR/GC
385	405	11	TR/GC
385	418	20	TR/GC
450	480	15	TR/GC
460	496	22	TR/GC
470	506	22	TR/GC
530	566	22	TR/GC
615	655	27	TR/GC
990,6	1016	12,7	TR/GC

TENUTE TR/GL sealing ring

The initials TR/GL identify a seal purposely studied to withstand large misalignments of some millimeters in static conditions.

However, it can be used for dynamic seals with limited radial speeds.

The figure shows a reference section of this particular seal.

In the case of the TR/GL model, a standard section cannot identify all the peculiar features these seals have to comply with.

Indeed, housing size and application particular movements determine the final section of this product.

Generally speaking, these sealing rings are produced from NBR nitrilic compounds. The body is made of differentiated compounds.

They have a semi-rigid back (sometimes also made of rubberized fabric), and a particularly flexible sealing lip. The spring inserted in the lip ensures the constant load operation, able to preserve the sealing over time.

TR/GL requires a housing provided with retaining plate for a good operation.

This seal can be manufactured – as endless form – up to a 2500 mm diameter. .



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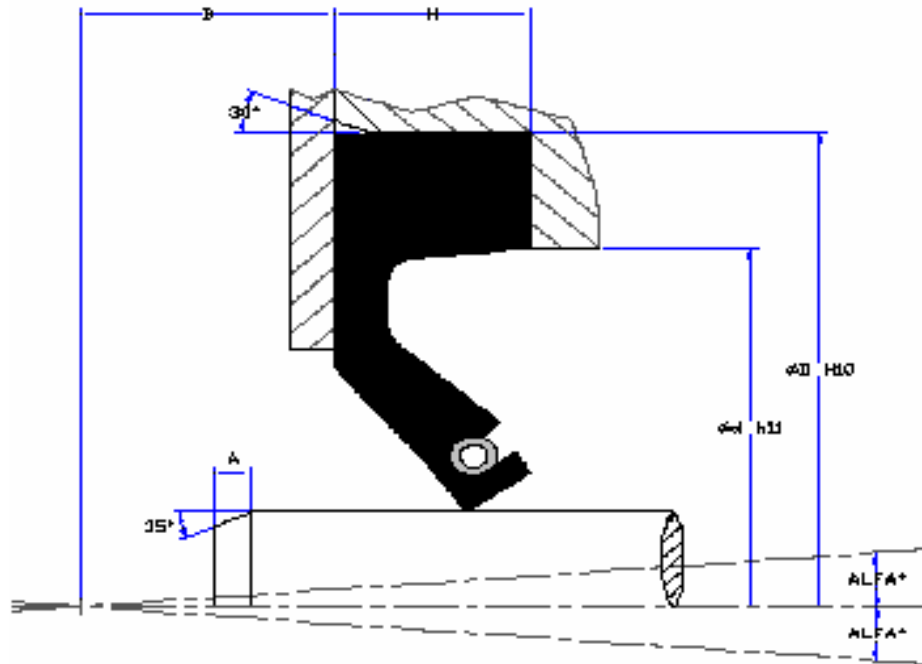


Figura 2

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