

## KMF-Thin Ring Bearing-Slewing bearing

### *Light silent and combined loadable*

Due to increasing automating in many industries, e. g. the semiconductor industry more space saving insert elements or thin ring bearings are required. From direct driven rotary tables to simple handling tools space and weight saving as well as precised bearing units are requested.

In order to fulfill these market needs, KMF offers a large variety of bearing elements like wire ball bearings, SLIM-SPLIT-BEARINGS, axial bearing washers and axial roller and cage assemblies as insert elements for direct integration in customers constructions.

Actually this delivery programm is increased by the slewing bearing assembly YKT, which are complete ready to assemble and pregreased bearing units.

The raceway system consists of two axial thrust ball bearings type PBAU with four point geometry. This bearing design is able to take loads from all directions (axial and radial), as well as moment loads.

Typically for insert elements is the relatively small bearing hight of 14 mm of the YKT bearing series. The both axial thrust ball bearing, which are forming the raceway system, are undependant of the diameter; this guarantees a stable bearing cross-cut

of only 37,5 x 20 mm, which is valid for the complete preferred series from bore diameter 100 to 450 mm.

Furthermore this system offers the possibility of manufacturing types between preferred series as well as slight changes to bearing shape.

*KMF-Slewing bearing – SLIM-SPLIT-BEARING with it's extremely high integrated in constructions, which have not sufficient space for conventional catalogue bearings.*

The ready to assemble easy mounting and easy to maintain bearing units type series YKT are fixed and screwed with the connecting parts via the bearing centering (see tabl of dimensions).

The play and the preload in the bearing is adjustable. The shape of the bearing with its two raceway systems guarantees a stable running culture with small starting torques and small noise development. The starting torque depends on the axial preload; increasing the preload increases therefore the torque.

Despite of the filigree construction of the KMF slewing bearings, they are nevertheless constructed according to the principle of economy. Different special options increase the application spectrum and assist individual construction demands without changing basic pricings considerably.

Bearing units of the type series YKT are offered in different versions, using bearing rings made of steel or completely corrosion resistant. This completely corrosion resistant version has the short sign „SS“ for stainless steel, the eloxated light metal version the short sign „AL“ for aluminium.

Furthermore offers the light metal version naturally the advantage of the weight decrease of up to 66% compared with the steel version.

Additionally, changes to the bore plan can be realised as well as lubrication bores.

Spur-toothed bearing inner and outer rings belong to the enhanced standard version as well as worm gear toothing for direct drives.

Additionally externally flanged or integrated slip ring solutions for power transmission from the static to the dynamic bearing ring is possible.

The KMF-Slewing bearing – SLIM-SPLIT-BEARING is suitable for many application areas, e. g. clean room, medicine- and food industry due to special material combinations (corrosion resistant steel, light metal, ceramic, plastics).

# Slewing bearing – SLIM-SPLIT-BEARING

## Dimensions YKTI (inner toothing)

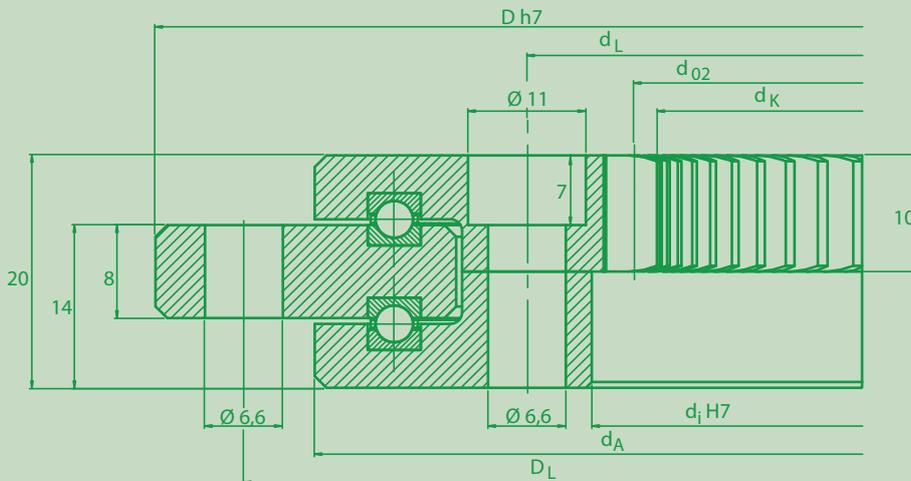


Table of dimensions YKTI (inner toothing)

Inner toothing											
KMF-type <sup>1)</sup>	Pitch-circle-Ø	Module	Number of teeth	Tip-circle-Ø	Weight		Limiting speeds	Maximum permissible tooth force			
					Steel	AL		Steel		AL	
								$F_{Z \text{ norm.}}$	$F_{Z \text{ max.}}$	$F_{Z \text{ norm.}}$	$F_{Z \text{ max.}}$
mm	mm	Pieces	mm	kg	kg	$n_{G \text{ grease}}$	N	N	N	N	
YKTI 100	94	2	47	90	1,8	0,8	1090	935	2040	680	1885
YKTI 150	144	2	72	140	2,4	1,1	800	950	2080	695	1915
YKTI 200	194	2	97	190	3,1	1,3	640	970	2115	705	1950
YKTI 250	244	2	122	240	3,7	1,6	530	985	2140	715	1980
YKTI 300	294	2	147	290	4,3	1,9	450	1000	2180	730	2015
YKTI 350	344	2	172	340	5,0	2,2	390	1020	2220	740	2050
YKTI 400	394	2	197	390	5,6	2,4	350	1040	2260	755	2090
YKTI 450	444	2	222	440	6,2	2,7	310	1055	2300	765	2120

1) Other dimensions on request

Toothing acc. to DIN 3967

Quality 8e25

Reference DIN 867

## Example of order YKT

YKT 250 ○

SS

AL

YKTI 250 ○

SS

AL

YKTA 250 ○

SS

AL