



igubal® Pivoting Bearings | Technical data



The use of pivoting bearings is usually associated with high weight materials, difficult installation, and high costs. Most of the time, maintenance is still necessary long term, and the bearings are only corrosion resistant in special designs. Often roller bearings or plain bearings malfunction prematurely due to high edge loads, or because they need to be readjusted, reamed, or refitted in order to compensate for alignment errors.

igubal® pivoting bearings put an end to all of these disadvantages and open up many new possibilities for your engineering design.

igubal® pivoting bearings are:

- Easy to fit
- Especially cost-effective
- Light weight
- High strength

Area of Application

Ease of installation makes diverse applications possible for igubal® pivoting bearings. They can be used anywhere. The self-aligning feature offers design advantages or helps to simplify assembly.

Tolerances

Maintenance-free igubal® pivoting bearings are designed to be oversized before being pressfitted. After correct installation into a recommended housing bore, the inner diameter adjusts to meet our specified tolerances. Please pressfit the igubal® pivoting bearings into a housing tolerance of H7, and use a shaft of h tolerance, normally h6 to h9 (see page 64.45 for igus shafts). This will help to ensure optimal performance of iglidur® plain bearings. If you have any questions, please contact an iglidur® technical expert for assistance.

Installation

igubal® pivoting bearings are pressfitted into a recommended housing bore and axially secured. An exact orientation of the bearing housing is not necessary, since the spherical bearing compensates for alignment errors.

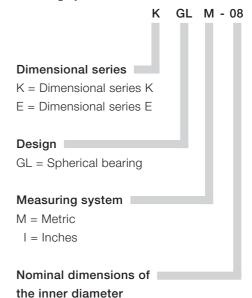
Dimensions

igubal® pivoting bearings are manufactured according to DIN ISO 12240 dimensional series K and E.

The product range provides dimensions from 0.19 to 1.0" and 2 to 30 mm. Please contact us if you need other dimensions.

Structure of the part numbers for igubal® pivoting bearings

The part numbers of igubal® pivoting bearings are designed according to the following system:



The example shows a metric spherical bearing of the dimensional series K with a spherical ball inner diameter of 8 mm.

igubal® KGLM/EGLM | Pivoting Bearings | mm



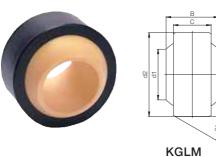


KGLM/EGLM **Pivoting Bearings**

E E

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Special Properties

- Compensates for alignment
- Corrosion resistant
- Compensates for edge loads
- High vibration dampening capacity
- Suitable for rotating, oscillating and linear movements
- Light weight

Structure - part no. K GL M-04



Metric Pivoting bearing

Dimensional series



Material

Housing: igumid G

► Page 70.6

Data in mm

Structure - part no. **E GL M-04**

3,0

4,0

4,0

5,0

6,0

7,0

9,0

9,5

10,0

12,0

16,0

18,0

37°

33°

27°

24°

24°

21°

21°

21°

21°

18°

16°

13°

Spherical Bearing:

iglidur® W300 ► Chapter 5

Load Data and Dimensions [mm]

Part Number		. static live Strength axial [N]	Maximum Torque through ball [Nm]	d1 [mm] E10	d2 [mm]	B [mm]	C [mm]	Max. Pivot Angle
KGLM-02	300	60	1	2	8	4	3,0	32°
KGLM-03	550	200	2	3	10	6	4,5	32°
KGLM-05	1300	500	5	5	13	8	6,0	30°
KGLM-06	1800	650	10	6	16	9	6,5	29°
KGLM-08	2700	1200	12	8	19	12	9,0	25°
KGLM-10	4000	1400	20	10	22	14	10,5	25°
KGLM-12	5400	1500	30	12	26	16	12,0	25°
KGLM-14	6000	2500	35	14	28	19	13,5	23°
KGLM-16	8000	3000	40	16	32	21	15,0	23°
KGLM-18	9000	4000	45	18	35	23	16,5	23°
KGLM-20	10000	5000	55	20	40	25	18,0	23°
KGLM-22	11700	6500	60	22	42	28	20,0	22°
KGLM-25	13600	7500	65	25	47	31	22,0	22°
KGLM-30	20000	9000	70	30	55	37	25,0	22°



EGLM-04

EGLM-05

EGLM-06

EGLM-08

EGLM-10

EGLM-12

EGLM-15

EGLM-16

EGLM-17

EGLM-20

EGLM-25

EGLM-30

600

1000

1200

1800

2500

3800

5500

6000

6300

9000

14000

17000

50

130

150

175

400

650

1000

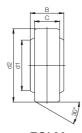
1150

1200

1400

2900

4000



EGLM								d1 Metric Pivoting bearing	
	Load Data an	d Dimensio	ns [mm]					Dimension series	onal
			Maximum Torque through ball [Nm]	d1 [mm] E10	d2 [mm]	B [mm]	C [mm]	Max. Pivot Angle	

10

15

16

17

20

25

30

2,5

30

32

35

40

55

70

12

14

16

19

22

26

28

30

35

42

47

9

12

13

14

16

20

22



55.3