

igubal® Pillow Block Bearings



Maintenance-free, self-lubricating

High strength under impact loads

High tensile strength

Compensation for alignment errors

Resistant to chemicals

Light weight



mm

Inch



igubal®
Pillow Block Bearings

Phone +49 - 22 03 - 96 49-145
Fax +49 - 22 03 - 96 49-334

igus® GmbH
51147 Cologne

Internet www.igus.de
E-mail info@igus.de



igubal® pillow block bearings are bearing units that are especially easy to install and are able to compensate for alignment errors and prevent edge loads.

Areas of Application

The ability to pivot allows igubal® pillow block bearings to compensate for misalignment and possible shaft deflection. Applications in which these effects cannot be prevented are suitable for igubal® pillow block bearings.

Tolerances

Maintenance-free igubal® pillow block bearings are designed with an inside diameter tolerance of E10. The shaft should be made to tolerance class h6 to h9. These recommended tolerances allow for changes in the bearing due to temperature.

Fitting

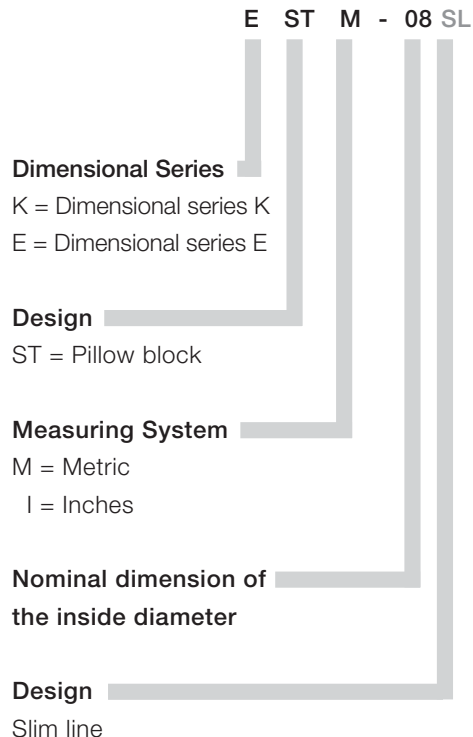
igubal® pillow block bearings are designed for mounting with 2 bolts. Precision mounting of the bearing is not necessary, since the spherical ball compensates for alignment errors.

Product Range

igubal® pillow block bearings can be supplied in the standard dimensions for shafts of 5 to 50 mm.

Structure of Part Numbers for igubal® Pillow Block Bearings

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



The example shows a pillow block bearing of the dimensional series K with metric dimensions. The spherical ball has an inner diameter of 8 mm.



Picture 53.1: igubal® pillow block bearings in conveyor systems for the food industry (for details see pictures 53.2 and 53.3)



Picture 53.2: Application picture of igubal® pillow block bearings in the conveyor system



Picture 53.3: Application picture of igubal® pillow block bearings in the conveyor system



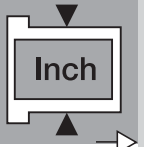
Picture 53.4: Sideboard with integrated TV-lifting mechanism (for details see picture 53.5)



Picture 53.5: igubal® pillow block bearings with DryLin® T linear guide in the lifting mechanism

igubal®
Pillow Block Bearings

Phone +49 - 22 03 - 96 49-145
Fax +49 - 22 03 - 96 49-334





Special Properties

- Maintenance-free, self-lubricating
- High strength under impact loads
- High tensile strength for varying loads
- Compensation for alignment errors
- Compensation for edge loads
- Resistant to corrosion
- Chemical resistant
- High vibration dampening capacity
- Suitable for rotating, oscillating and linear movements
- Light weight



Material

Housing: igumid G

► Page 70.6

Spherical Bearing:

iglidur® W300

► Chapter 5

Load Data

igubal® – Pillow Block Bearing KSTM

Part Number	Maximum Static Tensile Strength Short term	Maximum Static Tensile Strength Long term	Maximum Static axial Compressive Strength	Maximum Torque for Longitudinal holes
	[N]	[N]	[N]	[Nm]
KSTM-05	700	350	300	0,6
KSTM-06	1100	550	300	1,3
KSTM-08	1300	650	400	1,3
KSTM-10	1500	750	500	2,5
KSTM-12	2200	1100	600	2,5
KSTM-14	2400	1200	600	4,5
KSTM-16	3000	1500	1000	4,5
KSTM-18	3500	1750	1200	10,5
KSTM-20	4700	2350	1300	10,5
KSTM-22	6100	3050	1400	10,5
KSTM-25	6600	3300	1600	10,5
KSTM-30	8100	4050	2100	21,5

Load Data

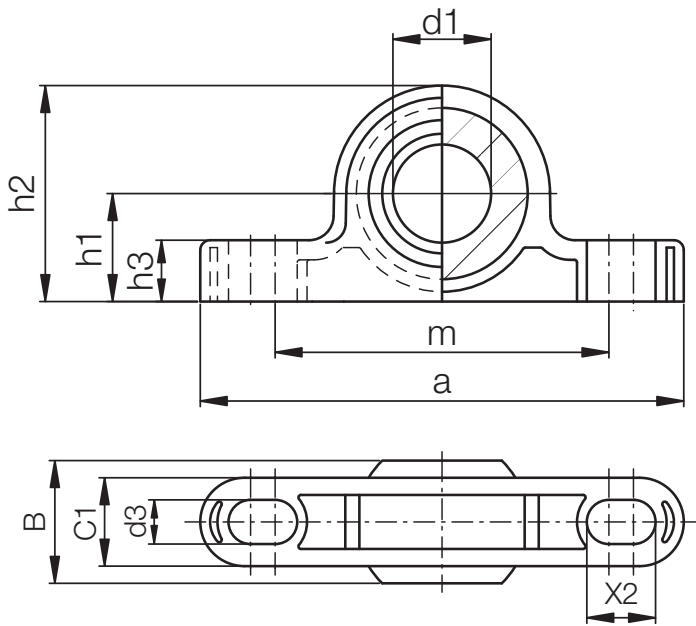
igubal® – Pillow Block Bearing KSTI

Part Number	Maximum Static Tensile Strength Short term	Maximum Static Tensile Strength Long term	Maximum Static axial Strength	Maximum Torque Longitudinal holes
	[N]	[N]	[N]	[Nm]
KSTI-03	550	275	300	0,6
KSTI-04	600	300	300	0,6
KSTI-05	800	400	400	0,8
KSTI-06	1000	500	500	1,3
KSTI-07	1100	550	600	2,5
KSTI-08	1200	600	600	2,5
KSTI-10	2100	1050	800	2,5
KSTI-12	3100	1550	1200	4,5
KSTI-16	5400	2700	1600	10,5

The maximum torques for longitudinal holes correspond to the permissible torque of the fixing screws (fixing category 5.8).

Available from stock

Lifetime calculation, CAD files and much more support ► www.igus.de/en/kstm



Data in mm

Structure – part no.

K ST M-05



Dimension

Metric

Design

(Pillow Block)

Dimensional series

Pillow Block Bearings

mm/inch KST...

Dimensions [mm]

igubal® – Pillow Block Bearing KSTM

Part Number	a	d1 E10	B	C1	h1	h2	m	h3	d3	X2	Max. Pivot Angle
KSTM-05	34	5	8	6,0	7	14	25	4	3,3	5	30°
KSTM-06	43	6	9	7,0	10	18	33	5,5	4,5	6	29°
KSTM-08	47	8	12	9,0	10	20	33	6	4,5	7	25°
KSTM-10	62	10	14	10,5	14	26	46	7,5	5,5	8	25°
KSTM-12	65	12	16	12,0	14	28	46	8,5	5,5	9	25°
KSTM-14	82	14	19	13,5	18	34	60	9,5	6,6	11	23°
KSTM-16	86	16	21	15,0	18	36	60	10,5	6,6	12	23°
KSTM-18	93	18	23	16,5	22	42	68	11,5	9,0	13	23°
KSTM-20	98	20	25	18,0	22	44	68	13	9,0	14	23°
KSTM-22	108	22	28	20,0	24	48	74	14	9,0	16	22°
KSTM-25	124	25	31	22,0	27	54	86	16	9,0	17	22°
KSTM-30	139	30	37	25,0	32,5	64	96	17	11,0	20	22°

Dimensions [inch]

igubal® – Pillow Block Bearing KSTI

Part Number	a	d1 E10	B	C1	h1	h2	m	h3	d3	X2	Max. Pivot Angle
KSTI-03	1,4000	,1900	,312	,234	,290	,566	1,000	,165	,137	,200	25°
KSTI-04	1,7500	,2500	,375	,250	,390	,705	1,250	,205	,137	,250	25°
KSTI-05	1,9500	,3125	,437	,312	,430	,824	1,350	,236	,150	,280	25°
KSTI-06	2,4000	,3750	,500	,359	,550	1,022	1,800	,376	,180	,300	22°
KSTI-07	2,5000	,4375	,562	,406	,570	1,082	1,850	,315	,205	,330	22°
KSTI-08	2,8000	,5000	,625	,453	,600	1,191	2,000	,354	,205	,380	22°
KSTI-10	3,3500	,6250	,750	,484	,700	1,409	2,300	,413	,205	,470	22°
KSTI-12	3,7500	,7500	,875	,593	,860	1,687	2,700	,472	,270	,530	22°
KSTI-16	5,0000	1,0000	1,375	1,005	1,100	2,163	3,500	,630	,520	,680	20°

Available from stock

mm

Inch

Phone +49 - 22 03 - 96 49-145
Fax +49 - 22 03 - 96 49-334



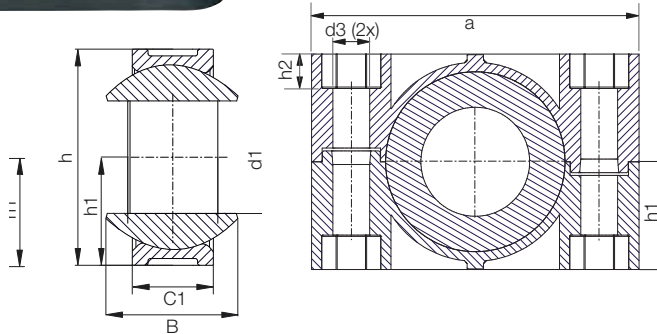
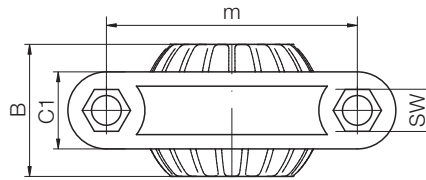
KSTM-GT
Pillow Block Bearings

mm

Phone +49 - 22 03 - 96 49-145
Fax +49 - 22 03 - 96 49-334

igus® GmbH
51147 Cologne

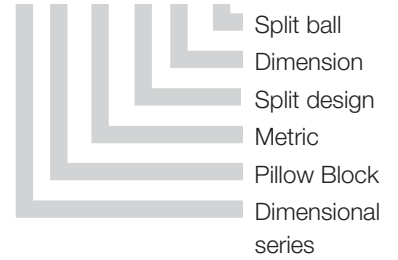
Internet www.igus.de
E-mail info@igus.de



Data in mm

Structure – part no.

K ST M-GT35 GT



Material

- Housing: RN33
- Page 70.6
- Spherical Bearing: iglidur® J
- Chapter 3

Special Properties

- With the split ball (size 40mm), fitting is easy, and does not require shaft removal
- Maintenance-free, dry running
- For high static loads
- Space- and weight-saving design
- High stiffness
- Predictable lifetime
- Dimensions 40 and 50 also available with split ball (50 upon request)

Load Data

igubal® Pillow Block Bearing KSTM-GT

Part Number	Max. radial tensile strength		Max. axial tensile strength		Max. Torque	
	Short term [N]	Long term [N]	Short term [N]	Long term [N]	through ball [Nm]	fixing holes [Nm]
KSTM-GT35*	11000	5500	2500	1250	20	15
KSTM-GT40	11000	5500	2500	1250	20	15
KSTM-GT40GT**/**	11000	5500	2500	1250	20	15
KSTM-GT45*	15000	7500	3000	1500	20	20
KSTM-GT50	15000	7500	3000	1500	20	20
KSTM-GT50GT**	15000	7500	3000	1500	20	20

Dimensions [mm]

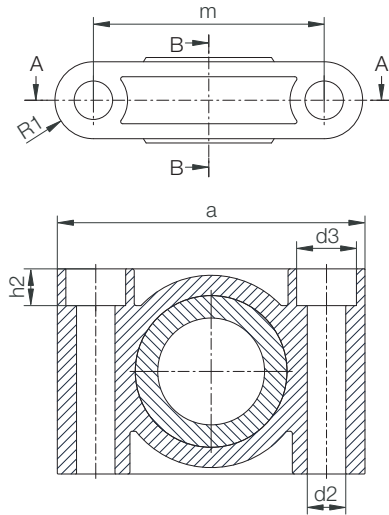
igubal® Pillow block Bearing KSTM-GT

Part Number	d1 (E10)	d3	h	h1	h2	SW	a	m	C1	B	Max. Pivot Angle
KSTM-GT35*	35,0	13,5	79,0	39,5	12,6	19,0	120,5	91,0	29,5	48,5	24°
KSTM-GT40	40,0	13,5	79,0	39,5	12,6	19,0	120,5	91,0	29,5	48,5	24°
KSTM-GT40GT**/**	40,0	13,5	79,0	39,5	12,6	19,0	120,5	91,0	29,5	48,5	24°
KSTM-GT45*	45,0	13,5	100,0	50,0	12,6	19,0	149,0	114,0	35,0	60,0	24°
KSTM-GT50	50,0	13,5	100,0	50,0	12,6	19,0	149,0	114,0	35,0	60,0	24°
KSTM-GT50GT**	50,0	13,5	100,0	50,0	12,6	19,0	149,0	114,0	35,0	60,0	24°

* Diameter given by iglidur® J bore reducer;

** split Pillow Block with split ball

*** Available upon request



Data in mm

Structure – part no.

E ST M-16



Dimension
Metric
Design
(Pillow Block)
Dimensional series



Material

Housing: igumid G

► Page 70.6

Spherical Bearing:

iglidur® J

► Chapter 3

Special Properties

- High radial loads
- Can be used in liquid media
- Space-saving design
- Easy to install
- Predictable lifetime
- Maintenance-free, self-lubricating

Load Data

igubal® Pillow Block Bearing ESTM

Part Number	Max. radial tensile strength		Max. radial compressive strength		Maximum axial strength		Max. Torque fixing holes [Nm]
	Short term [N]	Long term [N]	Short term [N]	Long term [N]	Short term [N]	Long term [N]	
ESTM-08	2500	1250	4300	2150	600	300	1,3
ESTM-10	3400	1700	5300	2650	700	350	2,5
ESTM-12	4500	2250	6500	3250	750	375	2,5
ESTM-16	6700	3350	8500	4250	1100	550	4,5
ESTM-20	8500	4250	11000	5750	1400	700	4,5
ESTM-25	13500	6750	18500	9250	2300	1150	10,5
ESTM-30*	10000	5000	16500	8250	2500	1250	10,5

* Due to the different manufacturing method, the load values of the ESTM-30 are lower than ESTM-25

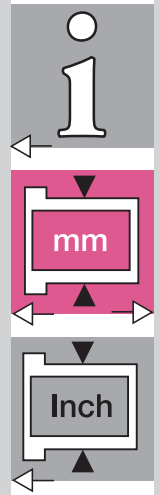
Dimensions [mm]

igubal® Pillow Block Bearing ESTM

Part Number	d1	d2	d3	h	h1	h2	a	m	C1	B	R1	Max. Pivot Angle
ESTM-08	8,0	4,5	–	19	9,5	–	31,0	22,0	9,0	8,0	4,5	22°
ESTM-10	10,0	5,5	–	22	11	–	36,0	26,0	10,0	9,0	5,0	22°
ESTM-12	12,0	5,5	–	26	13	–	38,0	28,0	10,0	10,0	5,0	22°
ESTM-16	16,0	6,6	10,6	34,0	17,0	6,4	50,0	37,0	13,0	13,0	6,5	22°
ESTM-20	20,0	9,0	14,0	40,0	20,0	8,6	62,0	46,0	16,0	16,0	8,0	22°
ESTM-25	25,0	9,0	14,0	48,0	24,0	8,6	72,0	54,0	18,0	20,0	9,0	20°
ESTM-30	30,0	11,0	17,0	56,0	28,0	10,6	86,0	64,0	22,0	22,0	11,0	20°

Pillow Block Bearings
ESTM
mm

Phone +49 - 22 03 - 96 49-145
Fax +49 - 22 03 - 96 49-334





ESTM SL

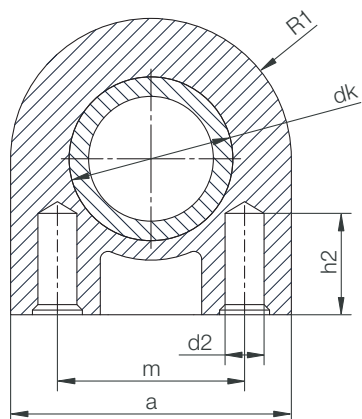
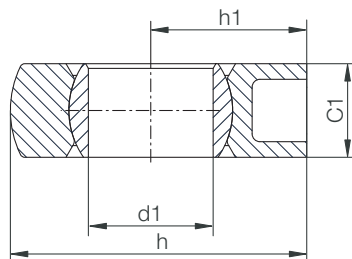
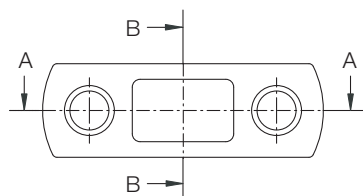
mm

Pillow Block Bearings

Phone +49 - 22 03 - 96 49-145
Fax +49 - 22 03 - 96 49-334

igus® GmbH
51147 Cologne

Internet www.igus.de
E-mail info@igus.de



Data in mm

Structure – part no.

E ST M-05 SL



Material

Housing: igumid G

▶ Page 70.6

Spherical Bearing:

iglidur® J

▶ Chapter 3

Special Properties

- light weight
- extremely space saving
- screwed in base
- low cost
- predictable lifetime
- maintenance- and lubricant-free
- with M3-part No., e.g. ESTM-10-SL-M3
- for spax screw with outer diameter 3,5 mm

Load Data

igubal® Pillow Block Bearing ESTM-SL

Part Number	max. radial tensile strength		max. radial compressive strength		max. lateral strength		max. axial strength	
	short term	long term	short term	long term	short term	long term	short term	long term
	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
ESTM-05 SL	1500	750	1400	700	900	450	150	75
ESTM-06 SL	1500	750	1400	700	900	450	150	75
ESTM-08 SL	1600	800	1400	700	950	475	100	50
ESTM-10 SL	1600	800	1400	700	1000	500	100	50

Dimensions [mm]

igubal® Pillow Block Bearing ESTM-SL

Part Number	d1 (H10)	d2	dk	h	h1	h2	a	m	C1	R1	Max. Pivot Angle
ESTM-05 SL	5,0	2,5	8,9	18,0	10,0	6,5	16,0	10,0	6,0	8,0	17°
ESTM-06 SL	6,0	2,5	8,9	18,0	10,0	6,5	16,0	10,0	6,0	8,0	17°
ESTM-08 SL	8,0	2,5	10,5	19,0	10,0	6,5	18,0	12,0	6,0	9,0	17°
ESTM-10 SL	10,0	2,5	12,4	20,0	10,0	6,5	20,0	14,0	6,0	10,0	17°