

Clevis joints with spring-loaded fixing clips, detectable, FDA and EU10/2011-compliant: GERMF-FC



Order key

Type	Size [mm]	Version
G E R M F - 04 - FC		
Clevis joint	E series	Thread
	Metric	Spring-loaded fixing clip
	Inner Ø	Suitable for food contact

- Lubrication and maintenance-free
- Optically and magnetically detectable
- Compliant with Regulation (EU) No. 10/2011 and FDA guidelines

- Corrosion and media-resistant
- Vibration-dampening
- Cost-effective

Material: igumid FC ▶ Page1655

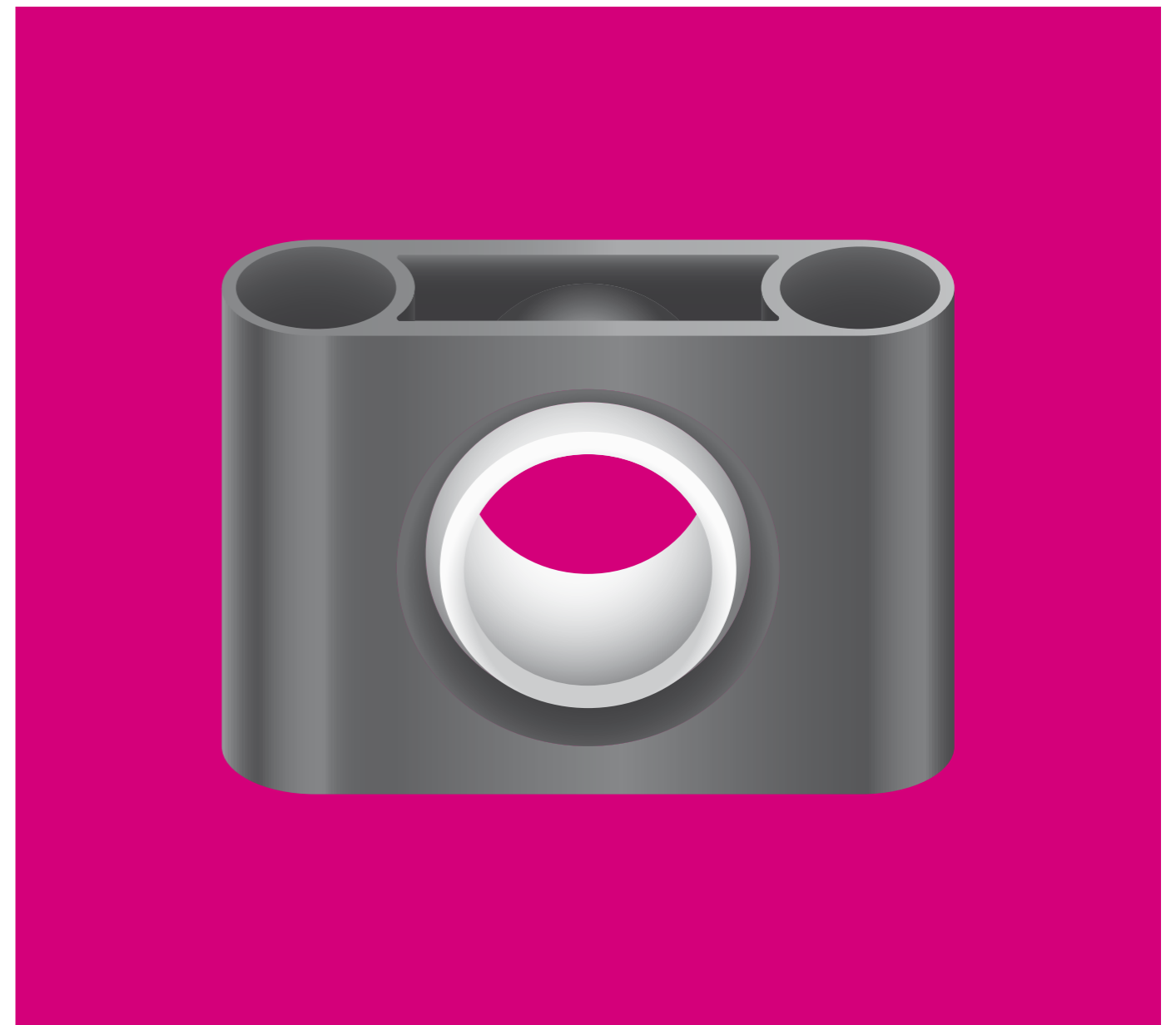
Technical data

Part No.		Max. static tensile strain		Max. static axial force		Weight [g]
		Short-term	Long-term	Short-term	Long-term	
		[N]	[N]	[N]	[N]	
GERMF-04-FC	New	400	200	200	100	1.3
GERMF-05-DIN-M5-FC	New	700	350	250	125	2.3
GERMF-06-FC	New	1,200	600	250	125	3.7
GERMF-08-FC	New	2,000	1,000	650	325	9.1
GERMF-10-FC	New	3,000	1,500	800	400	18.3
GERMF-10-FC-F	New	3,000	1,500	800	400	18.3
GERMF-12-FC	New	3,000	1,500	900	450	29.0
GERMF-12-FC-F	New	3,000	1,500	900	450	29.0

Dimensions [mm]

Part No.		d1	g	a1	a2	b1	d2	d3	l2	h1	l1
				+0.3	+0.3						
				-0.16	-0.16						
GERMF-04-FC	New	4	8.0	8.0	8.0	4.1	M4	8	21.0	16.0	6.0
GERMF-05-DIN-M5-FC	New	5	10.0	9.9	9.9	5.3	M5	9	24.5	20.0	7.5
GERMF-06-FC	New	6	12.0	12.0	12.0	6.2	M6	10	31.0	24.0	9.0
GERMF-08-FC	New	8	15.9	15.8	15.8	8.2	M8	14	42.0	32.0	12.0
GERMF-10-FC	New	10	19.5	19.9	19.9	9.5	M10	18	51.3	39.5	14.8
GERMF-10-FC-F	New	10	19.5	19.9	19.9	9.5	M10 x 1.25	18	51.3	39.5	14.8
GERMF-12-FC	New	12	24.0	23.7	23.7	12.2	M12	20	61.3	48.0	18.0
GERMF-12-FC-F	New	12	23.5	23.7	23.7	12.2	M12 x 1.25	20	61.3	48.0	18.0

Left-hand thread upon request



igubal® pillow block bearings

Maintenance-free dry operation

Robust

Durable

Media-resistant

High radial loads



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

Maintenance-free
dry operation

Robust

Durable

Maintenance and
lubrication-free

Media-resistant

High radial loads



When to use it?

- If chemical resistance is required
- If a cost-effective option is requested
- If you need dirt-resistant bearings
- To adjust misalignment
- If you need split components



When not to use it?

- When temperatures are higher than +80°C
- When an integrated fixing collar is required
- When diameters above 50mm are required
- When rotation speeds higher than 0.5m/s are required



Available from stock

Detailed information about delivery time online.



Price breaks online

No minimum order value. No minimum order quantity



Max. +80°C
Min. -30°C



6 types
Ø 5–150mm



Imperial dimensions available
▶ Page 1609



Online product finder
▶ www.igus.eu/igubal-finder

Typical sectors of industry and application areas

- Plant design
- Machine building
- Packaging etc.



Improve technology and reduce costs –
110 exciting examples online

▶ www.igus.eu/igubal-applications



Stone processing



▶ www.igus.eu/solar



Paper industry



▶ www.igus.eu/packaging

Advantages

- Maintenance-free dry operation
- Robust
- Durable in varying loads
- Compensation of misalignment errors
- Resistant to edge loads
- Corrosion-free
- Chemical resistance
- Vibration-dampening
- Suitable for rotating, oscillating and linear movements
- Lightweight
- High radial loads
- Media-resistant
- Space-saving
- Easy to fit
- Predictable service life
- Maintenance and lubrication-free

Product range

igubal® pillow block bearings are available in the dimensional K and E series for shaft diameters from 5 to 150mm. The dimensional K series is available in imperial dimensions. Please ask us for other dimensions.

Application areas

igubal® pillow block bearings ideally compensate for shaft misalignments, tilts and bends through their spherical adjustability. Applications in which these effects cannot be prevented are suitable for igubal® pillow block bearings.

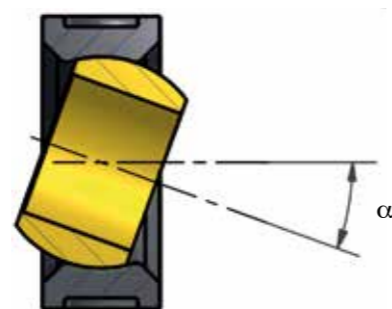
Tolerances

Maintenance-free igubal® pillow block bearings are designed with an inner diameter tolerance of E10. The shaft tolerance should be included between h6 and h9. These recommended tolerances allow for changes in the bearing due to temperature. All values and tolerances according to ISO 2768-m.

Assembly

igubal® pillow block bearings are designed for mounting with two bolts. An exact orientation of the bearing housing is not necessary, since the spherical bearing compensates for alignment errors. Special adjusting rings can be used to fix the shaft.

Pivot angle



igubal® pillow block bearings – standard design



Compensation of misalignment errors

K series
▶ Page 792

Compensation of misalignment errors, imperial dimensions

K series
▶ Page 1515

igubal® pillow block bearings – space-saving



Easy to disassemble, split housing and ball

K series
▶ Page 794



Easy to fit

E series
▶ Page 795



For quick assembly and low total moisture absorption

E series
▶ Page 796



Split housing with parallel hole

E series
▶ Page 797



Extremely light, compact design

E series
▶ Page 798



New

Split pillow block bearings for square profiles

E series
▶ Page 799



New

Pillow block with cost-effective metallic housing

▶ Page 800

igubal® combination with xiros® ball bearings



Low coefficient of friction, fixed version

E series
▶ Page 934




Low coefficient of friction, pivoting version


E series
▶ Page 935

Pillow block bearings: KSTM



- Maintenance-free dry operation
- Robust
- Durable in varying loads
- Compensation of misalignment and edge loads
- Resistant to corrosion and chemicals
- Vibration-dampening
- Suitable for rotating, oscillating and linear movements
- Lightweight

 Imperial dimensions available
▶ Page 1609

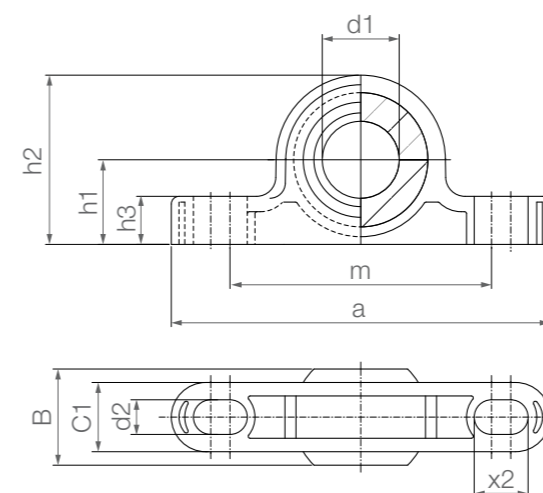
 Service life calculation online
▶ www.igus.eu/igubal-expert

Technical data

Part No.	Max. static tensile strain		Max. axial static compressive force [N]	Max. tightening torque for longitudinal holes ¹⁴⁴⁾ [Nm]	Weight [g]
	Short-term [N]	Long-term [N]			
KSTM-05	700	350	300	0.6	1.7
KSTM-06	1,100	550	300	1.3	2.9
KSTM-08	1,300	650	400	1.3	4.6
KSTM-10	1,500	750	500	2.5	8.6
KSTM-12	2,200	1,100	600	2.5	11.8
KSTM-14	2,400	1,200	600	4.5	18.4
KSTM-16	3,000	1,500	1,800	4.5	23.7
KSTM-18	3,500	1,750	1,200	10.5	32.2
KSTM-20	4,700	2,350	1,300	10.5	40.0
KSTM-22	6,100	3,050	1,400	10.5	54.0
KSTM-25	6,600	3,300	1,600	10.5	75.3
KSTM-30	8,100	4,050	2,100	21.5	116.8

¹⁴⁴⁾ To achieve the max. tightening torque, we recommend the use of washers.

Pillow block bearings: KSTM




 Order key

Type Size [mm]

K S T M -05

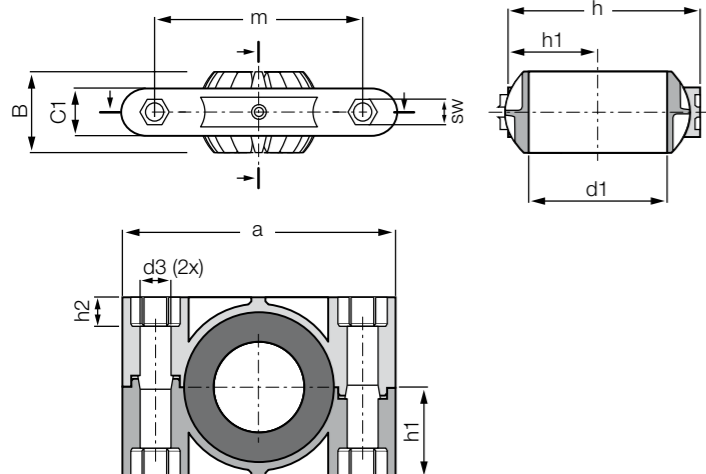
K series	Pillow block bearing	Metric	Inner Ø
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 Material:
Housing: igumid G ▶ Page 1654
Spherical ball: iglidur® W300 ▶ Page 171

Dimensions [mm]

Part No.	d1 E10	B	C1	h1	h2	m	a	h3	d2	x2	Max. pivot angle
KSTM-05	5	8	6.0	7	14	25	34	4.0	3.3	4.6	30°
KSTM-06	6	9	7.0	10	18	33	43	5.5	4.5	6.0	29°
KSTM-08	8	12	9.0	10	20	33	47	6.0	4.5	7.0	25°
KSTM-10	10	14	10.5	14	26	46	62	7.5	5.5	8.0	25°
KSTM-12	12	16	12.0	14	28	46	65	8.5	5.5	9.0	25°
KSTM-14	14	19	13.5	18	34	60	82	9.5	6.6	11.0	23°
KSTM-16	16	21	15.0	18	36	60	86	10.5	6.6	12.0	23°
KSTM-18	18	23	16.5	22	42	68	93	11.5	9.0	13.0	23°
KSTM-20	20	25	18.0	22	44	68	98	13.0	9.0	14.0	23°
KSTM-22	22	28	20.0	24	48	74	108	14.0	9.0	16.0	22°
KSTM-25	25	31	22.0	27	54	86	124	16.0	9.0	17.0	22°
KSTM-30	30	37	25.0	32	64	96	139	17.0	11.0	20.0	22°

Pillow block bearings with split housing: KSTM-GT



Order key

Type	Size [mm]	Version
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K S T M - G T 40 - G T

K series	Pillow block bearing	Metric	Split housing	Inner Ø	Split ball
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Material:
 Housing: RN33 ▶ Page 1657
 Spherical ball: iglidur® J ▶ Page 159

Service life calculation online
 ▶ www.igus.eu/igubal-expert

- Fitting is easy and does not require shaft removal
- Maintenance-free, dry operation
- For high static loads
- Mounting: M12

- Low installation space and lightweight
- High stiffness and durability
- Predictable service life
- Dimensional K series according to DIN ISO 12240

Technical data

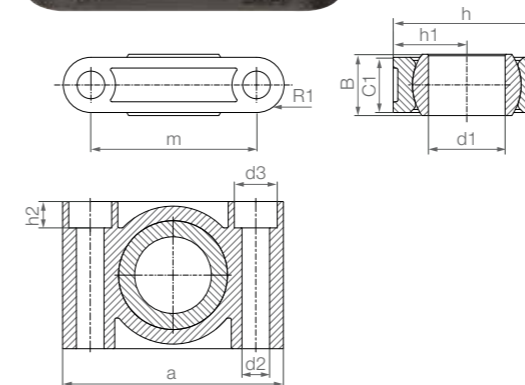
Part No.	Max. radial tensile/compressive strength		Max. axial tensile/compressive strength		Max. tightening torque through ball fixing holes		Weight [g]
	Short-term [N]	Long-term [N]	Short-term [N]	Long-term [N]	[Nm]	[Nm]	
KSTM-GT35 ²³⁾	11,000	5,500	2,500	1,250	5	15	250.3
KSTM-GT40	11,000	5,500	2,500	1,250	5	15	235.0
KSTM-GT40-GT ²⁴⁾	11,000	5,500	2,500	1,250	5	15	235.0
KSTM-GT45 ²³⁾	15,000	7,500	3,000	1,500	5	20	405.2
KSTM-GT50	15,000	7,500	3,000	1,500	5	20	389.2
KSTM-GT50-GT ²⁴⁾	15,000	7,500	3,000	1,500	5	20	389.2

Dimensions [mm]

Part No.	d1 E10	d3	h	h1	h2	SW	a	m	C1	B	Max. pivot angle
KSTM-GT35 ²³⁾	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-GT40-GT ²⁴⁾	40.0	13.5	79.0	39.5	12.6	19.0	120.5	91.0	29.5	48.5	24°
KSTM-GT45 ²³⁾	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-GT50-GT ²⁴⁾	50.0	13.5	100.0	50.0	12.6	19.0	149.0	114.0	35.0	60.0	24°

²³⁾ Diameter reduced by plain bearing; ²⁴⁾ Split housing and split ball

Pillow block bearings: ESTM



Order key

Type	Size [mm]
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E S T M - 08

E series	Pillow block bearing	Metric	Inner Ø
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Material:
 Housing: igumid G ▶ Page 1654
 Spherical ball: iglidur® W300 ▶ Page 171
 Combination with xiros® ball bearings
 ▶ From page 934

- High radial loads
- Media-resistant
- Space-saving design, easy to fit
- Predictable service life
- Maintenance and lubrication-free

- Dimensional E series according to DIN ISO 12240
- Adapter available ▶ Accessories, page 862

Technical data

Part No.	Max. radial tensile force		Max. radial compressive strength		Max. axial strength		Max. tightening torque fixing holes [Nm]	Weight [g]
	Short-term [N]	Long-term [N]	Short-term [N]	Long-term [N]	Short-term [N]	Long-term [N]		
ESTM-08	2,500	1,250	4,300	2,150	600	300	1.3	5.0
ESTM-10	3,400	1,700	5,300	2,650	700	350	2.5	7.1
ESTM-12	4,500	2,250	6,500	3,250	750	375	2.5	9.0
ESTM-16	6,700	3,350	8,500	4,250	1,100	550	4.5	17.5
ESTM-20	8,500	4,250	11,000	5,750	1,400	700	4.5	27.4
ESTM-25	13,500	6,750	18,500	9,250	2,300	1,150	10.5	50.8
ESTM-30 ²⁵⁾	10,000	5,000	16,500	8,250	2,500	1,250	10.5	79.7

²⁵⁾ Lower values loads due to different manufacturing method

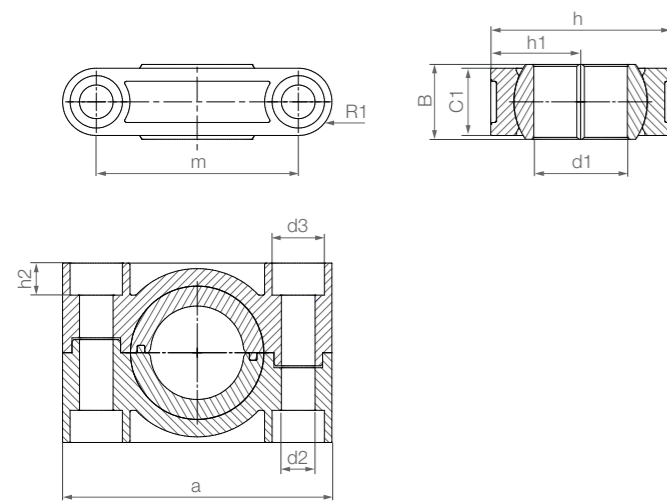
Dimensions [mm]

Part No.	d1, E10	d2	d3	h	h1	h2	a	m	C1	B	R1	Max. pivot angle
ESTM-08	8	4.5	-	19	9.5	-	31	22	9	8	4.5	22°
ESTM-10	10	5.5	-	22	11.0	-	36	26	10	9	5.0	22°
ESTM-12	12	5.5	-	26	13.0	-	38	28	10	10	5.0	22°
ESTM-16	16	6.6	10.6	34	17.0	6.4	50	37	13	13	6.5	22°
ESTM-20	20	9.0	14.0	40	20.0	8.6	62	46	16	16	8.0	22°
ESTM-25	25	9.0	14.0	48	24.0	8.6	72	54	18	20	9.0	20°
ESTM-30	30	11.0	17.0	56	28.0	10.6	86	64	22	22	11.0	20°

Alternative spherical ball materials ▶ Page 841



Pillow block bearings with split housing and split ball: ESTM-GT...-GT



Order key

Type	Size [mm]	Version
E S T M - G T	16	-GT
E series	Pillow block bearing	Metric
	Split housing	
	Inner Ø	
	Split ball	

Material:
Housing: **RN33** ▶ Page 1657
Spherical ball: **iglidur® J** ▶ Page 159

- Save time during assembly and disassembly
- Low installation space and lightweight
- High stiffness and durability
- Spherical ball material iglidur® J for low moisture absorption
- Ideal for outdoor use
- Dimensional E series according to DIN ISO 12240
- Adapter available ▶ Accessories, page 862

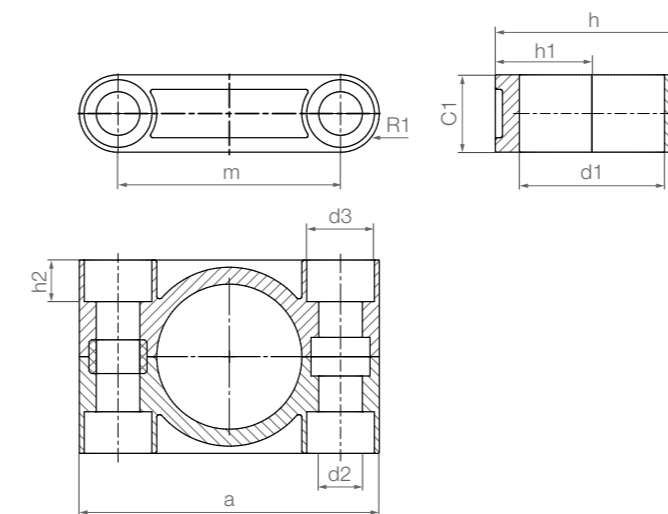
Technical data

Part No.	max. static radial tensile strain		Max. static radial compressive force		Max. tightening torque fixing holes	Weight [g]
	Short-term	Long-term	Short-term	Long-term		
	[N]	[N]	[N]	[N]		
ESTM-GT16-GT	2,500	1,250	8,500	4,250	4.5	18
ESTM-GT20-GT	5,000	2,500	11,000	5,750	4.5	28
ESTM-GT25-GT	5,000	2,500	18,500	9,250	10.5	52
ESTM-GT30-GT	5,000	2,500	16,500	8,250	10.5	84

Dimensions [mm]

Part No.	d1	d2	d3	h	h1	h2	a	m	C1	B	R1	Max. pivot angle
	E10											
ESTM-GT16-GT	16	6.6	10.6	34	17	6.4	50	37	13	13	6.5	22°
ESTM-GT20-GT	20	9.0	14.0	40	20	8.6	62	46	16	16	8.0	22°
ESTM-GT25-GT	25	9.0	14.0	48	24	8.6	72	54	18	20	9.0	22°
ESTM-GT30-GT	30	11.0	17.0	56	28	10.6	86	64	22	22	11.0	22°

Split housings with parallel holes: ESTM-GT



Order key

Type	Size	Version [mm]
E S T M - G T	16	-25
E series	Pillow block bearing	Metric
	Split housing	
	Dimension	
	Inner Ø	

Material:
igumid G ▶ Page 1654

- Easy to assemble and disassemble
- Ideal for outside applications
- High loads
- Dimensional E series according to DIN ISO 12240
- Adapter available ▶ Accessories, page 862

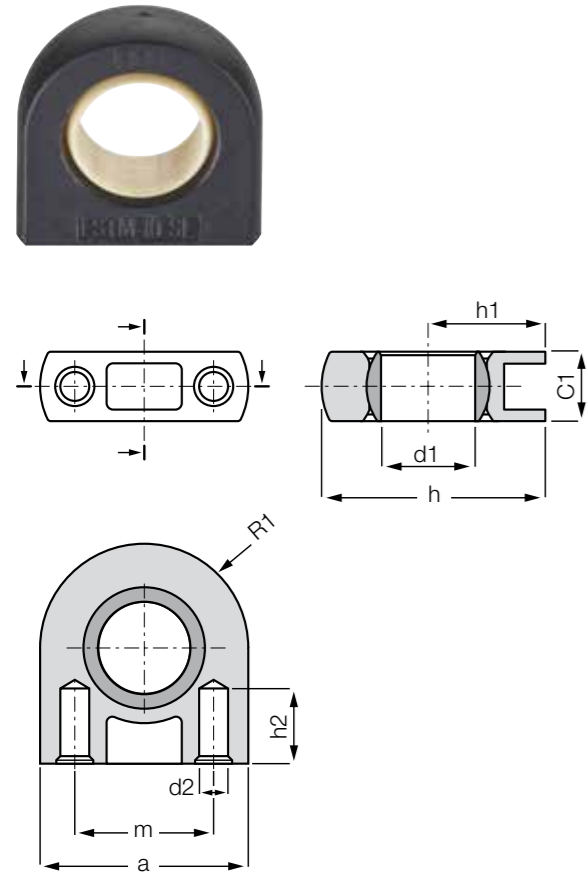
Technical data

Part No.	max. static radial tensile strain		Max. static radial compressive force		Max. tightening torque fixing holes	Weight [g]
	Short-term	Long-term	Short-term	Long-term		
	[N]	[N]	[N]	[N]		
ESTM-GT16-25	3,600	1,800	7,000	3,500	4.5	12.6
ESTM-GT20-30	4,800	2,400	9,000	4,500	4.5	21.1
ESTM-GT25-35	8,500	4,250	15,000	7,500	10.5	39.9
ESTM-GT30-40	9,500	4,750	18,500	9,250	10.5	66.5

Dimensions [mm]

Part No.	d1	d2	d3	h	h1	h2	a	m	C1	R1
	E10									
ESTM-GT16-25	25	6.6	10.6	34	14	6.4	50	37	13	6.5
ESTM-GT20-30	30	9.0	14.0	40	20	8.6	62	46	16	8.0
ESTM-GT25-35	35	9.0	14.0	48	24	8.6	72	54	18	9.0
ESTM-GT30-40	40	11.0	17.0	56	28	10.6	86	64	22	11.0

Pillow block bearings Slim Line:
ESTM SL



Order key

Type	Size [mm]	Version
E STM- 05 - SL - M3		
E series	Pillow block bearing	Metric
	Inner Ø	Slim Line

i Material:
Housing: igumid G ▶ Page 1654
Spherical ball: iglidur® J ▶ Page 159

- Extremely light
- Extremely space-saving
- Cost-effective
- Predictable service life
- Maintenance and lubrication-free
- With M3 thread, e. g. ESTM-10-SL-M3
- For self tapping screw with outer diameter 3.5mm
- Dimensional E series according to DIN ISO 12240

i Service life calculation online
▶ www.igus.eu/igubal-expert

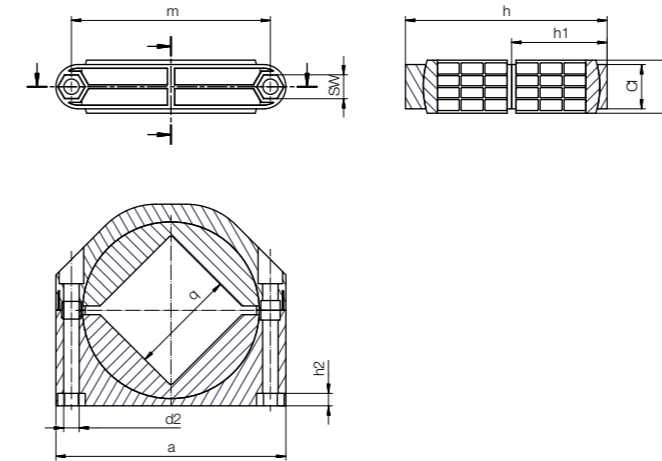
Technical data

Part No.	Max. radial tensile force		Max. radial compressive strength		Max. lateral strength		Max. axial strength		Weight [g]
	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-M3	1,500	750	1,400	700	900	450	150	75	1.6
ESTM-06-SL-M3	1,500	750	1,400	700	900	450	150	75	1.7
ESTM-08-SL-M3	1,600	800	1,400	700	950	475	100	50	1.7
ESTM-10-SL-M3	1,600	800	1,400	700	1,000	500	100	50	1.9

Dimensions [mm]

Part No.	d1	d2	h	h1	h2	a	m	C1	R1	Max. pivot angle
ESTM-05-SL-M3	5	2.5	18	10	6.5	16	10	6	8	17°
ESTM-06-SL-M3	6	2.5	18	10	6.5	16	10	6	8	17°
ESTM-08-SL-M3	8	2.5	19	10	6.5	18	12	6	9	17°
ESTM-10-SL-M3	10	2.5	20	10	6.5	20	14	6	10	17°

Split pillow block bearings for square profiles: ESQM



Order key

Type	Size [mm]
E SQ M-110	
E series	Pillow block bearing for square profiles
	Metric
	Edge length

i Material:
Housing: igumid G ▶ Page 1654
Spherical ball: iglidur® J4 ▶ Page 1652

- Profile 100 x 100mm, 110 x 110mm or 120 x 120mm
- Split version of housing and spherical balls
- Easy assembly and disassembly
- High loads
- Lightweight
- Compensation of misalignment errors
- Mounting: M16 screw
- Recommended tightening torque: 50Nm

Dimensions [mm]

Part No.	q	SW	d2	h	h1	h2	a	m	B	C1	Weight [g]
ESQM-100 New	100.5	24	17.5	228	108	13.6	260	225	60	50	1,295
ESQM-110	110.5	24	17.5	228	108	13.6	260	225	60	50	1,255
ESQM-120	120.0	24	17.5	228	108	13.6	260	225	60	50	1,210

Pillow block bearings with cost-effective metallic housing: PP-JEM-SP

 Order key


Type Size [mm] Version

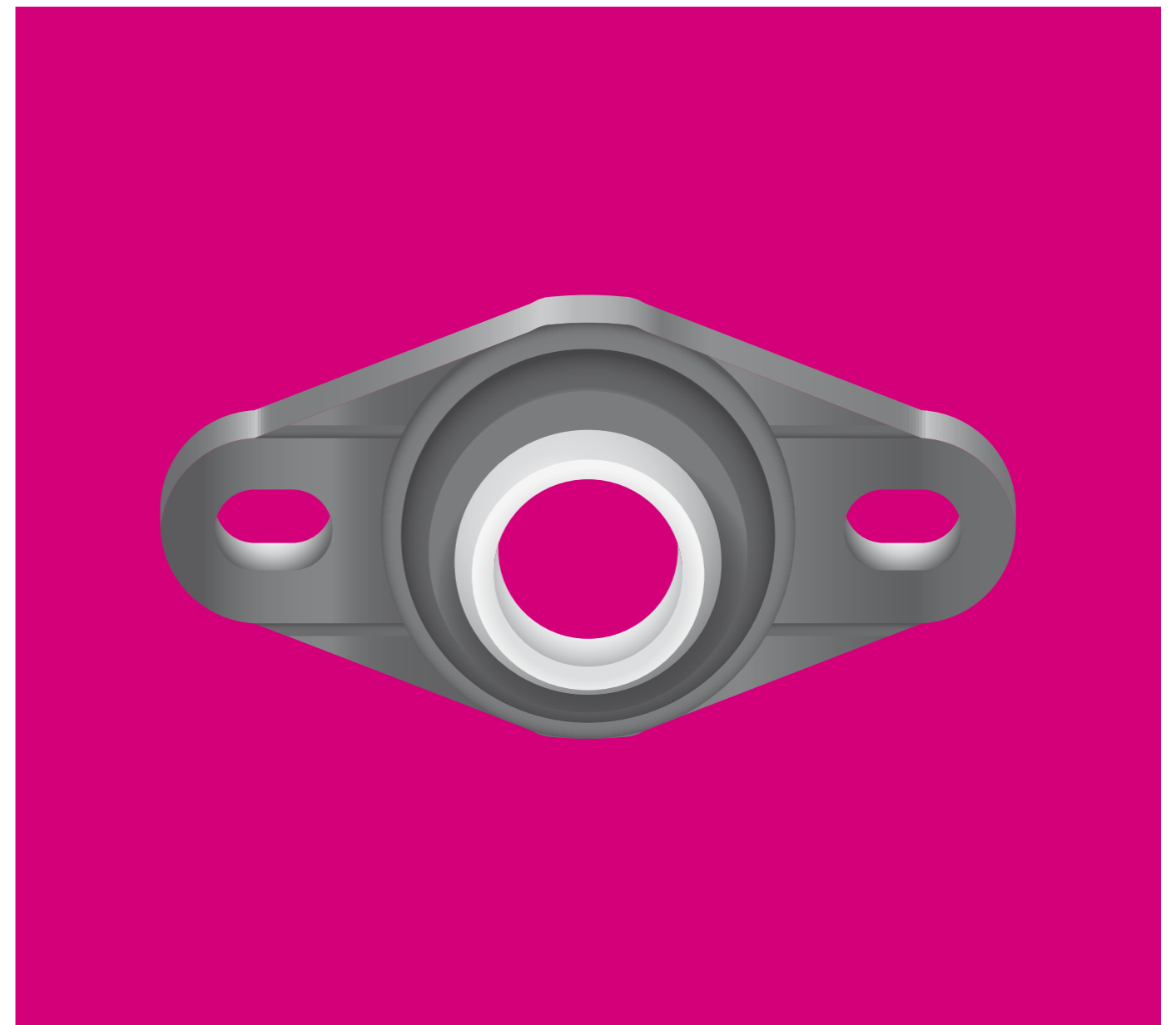
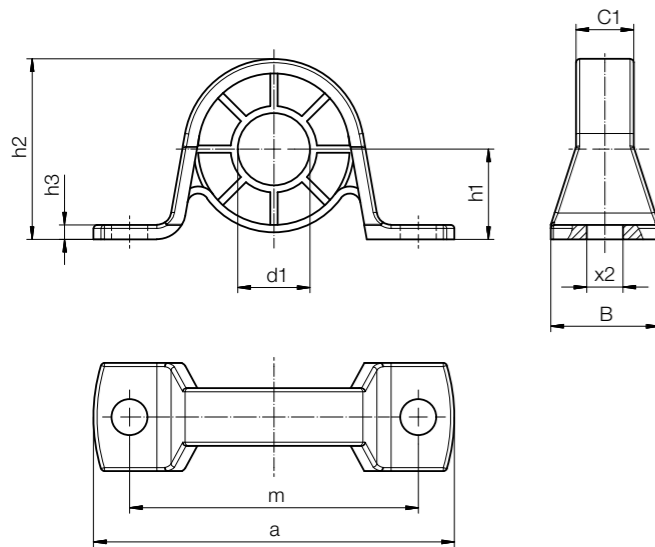
PP204- J E M- 20 - 14 - SP

Pillow block bearing	Spherical ball material	Dimensional series	Metric	Spherical ball inner Ø	Spherical ball width	Injection moulding
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- Lubrication and maintenance-free
- Cost-effective
- Resistant to dirt
- Cost-effective spherical ball material iglidur® J4 available (order example: PP204-J4EM-20-14-SP)

 **Material:**
Housing: Galvanised steel
 (stainless steel upon request)
Spherical ball: iglidur® J
 (alternative iglidur® J4)



Technical data

Part No.	max. static radial tensile strain		Max. static axial compressive force		Weight [g]
	Short-term	Long-term	Short-term	Long-term	
	[N]	[N]	[N]	[N]	
PP204-JEM-20-14-SP New	3,000	1,500	1,000	500	121.0
PP205-JEM-25-15-SP New	5,000	2,500	1,800	900	154.0
PP206-JEM-30-16-SP New	6,000	3,000	1,800	900	206.0

Dimensions [mm]

Part No.	d1	h1	h2	h3	a	m	C1	B	x2
PP204-JEM-20-14-SP New	E10	25.4	50.5	3	98	76	22.0	32	9.5
PP205-JEM-25-15-SP New	25	28.6	56.6	4	108	86	24.0	32	11.5
PP206-JEM-30-16-SP New	30	33.3	66.3	4	117	95	26.5	38	11.5

Can be combined with SRM fixing collars, page 858

igubal® fixed flange bearings

Maintenance-free dry operation

Robust

Durable

Compensation of misalignment errors

Resistant to edge loads

Lightweight

