

igubal® Pillow Block Bearings



Maintenance-free, dry-running

High tensile strength

High endurance strength

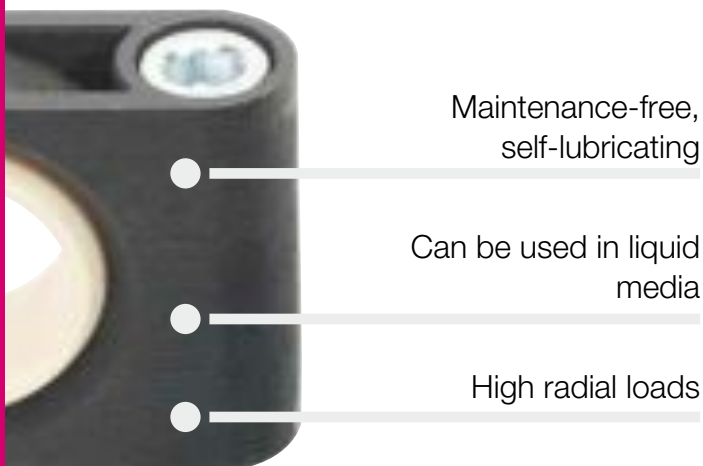
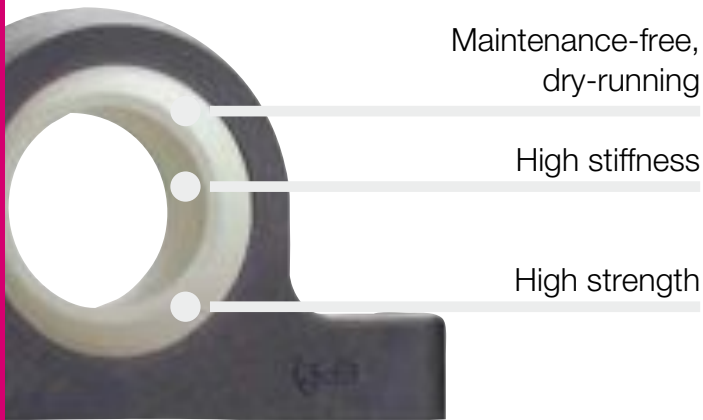
Lubrication-free

Chemical-resistant

High radial loads

igubal® Pillow Block Bearings

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



When to use it?

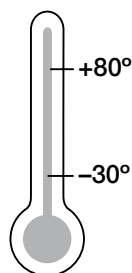
- If chemical resistance is required
- If a cost-effective option is requested
- If you need dirt-resistant bearings
- To adjust misalignment
- If you need splitting components



When not to use it?

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

Temperature



Product Range

6 types
Ø 5–50 mm



igubal® Pillow Block Bearings | Application Examples

Typical sectors of industry and application areas

- Plant construction
- Machine building
- Packaging etc.



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► www.igus.eu/igubal-applications



Stone processing



► www.igus.eu/solar



Paper industry



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Advantages

- Maintenance-free, dry running
- High stiffness
- High strength under impact loads
- Compensation for alignment errors
- Compensation for edge loads
- Corrosion-free
- Chemically resistant
- Vibration damping
- Suitable for rotating, oscillating and linear movements
- Light weight
- High radial loads
- Can be used in liquid media
- Space-saving design
- Easy to install
- Predictable lifetime
- Maintenance-free, lubrication-free

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.

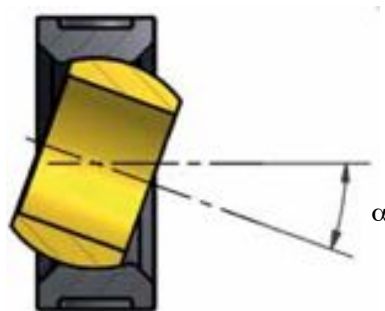
Fitting

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 are available in the dimensional series K and E for shaft diameters from 5 to 50 mm. The dimensional series K is available in imperial dimensions. More dimensions on request.

Pivot angle



igubal® Pillow Block Bearings | Product Overview



KSTM/KSTI
Series K
standard version

► page 680



KSTM-GT
Series K
split housing

► page 682



ESTM
Series E
standard version

► page 683



ESTM-GT
Series E
split housing

► page 684



ESTM-SL
Series E
slim line

► page 685



AD-01-ESTM
Adapter for series E
standard version

► page 686

Pillow block bearing KSTM and KSTI



- Maintenance-free, dry-running
- High stiffness
- High strength under impact loads
- Compensation of misalignment and edge loads
- Corrosion- and chemical-resistant
- High vibration-dampening
- Suitable for rotating, oscillating and linear movements
- Light weight
- Dimensional series K according to standard DIN ISO 12240

Technical Data

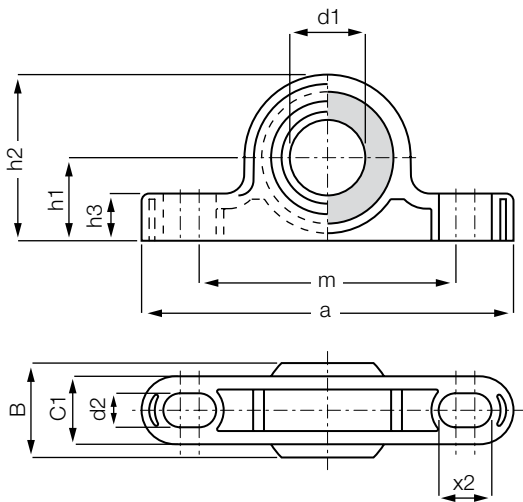
Part number	Max. static tensile strength		Max. axial static compressive strength	Max. torque for longitudinal holes	Weight
	Short term	Long term			
	[N]	[N]			
KSTM-05	700	350	300	0.6	1.7
KSTM-06	1,100	550	300	1.3	2.9
KSTM-08	1,300	650	400	1.3	4.6
KSTM-10	1,500	750	500	2.5	8.6
KSTM-12	2,200	1,100	600	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
KSTM-22	6,100	3,050	1,400	10.5	54
KSTM-25	6,600	3,300	1,600	10.5	75.3
KSTM-30	8,100	4,050	2,100	21.5	116.8

Technical Data

Part number	Max. static tensile strength		Max. axial static compressive strength	Max. torque for longitudinal holes	Weight
	Short term	Long term			
	[N]	[N]			
KSTI-03	550	275	300	0.6	1.7
KSTI-04	600	300	300	0.6	2.8
KSTI-05	800	400	400	0.8	4.5
KSTI-06	1,000	500	500	1.3	7.5
KSTI-07	1,100	550	600	2.5	9.7
KSTI-08	1,200	600	600	2.5	13.5
KSTI-10	2,100	1,050	800	2.5	21.5
KSTI-12	3,100	1,550	1,200	4.5	33.4
KSTI-16	5,400	2,700	1,600	10.5	85.8

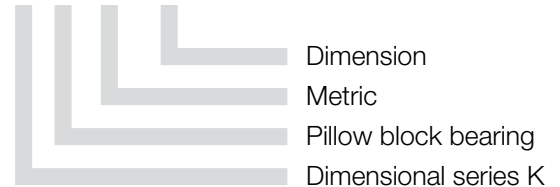
The maximum torques for longitudinal holes correspond to the permissible torque of the fixing screws (fixing category 5.8).

Pillow block bearing KSTM and KSTI



Order key

KSTM-05



Material:

Housing: **igumid G** ► page 1127

Spherical ball: **iglidur® W300** ► page 727

Dimensions [mm]

Part number	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	3.3	5	30°
KSTM-06	6	9	7.0	10	18	33	43	5.5	4.5	6	29°
KSTM-08	8	12	9.0	10	20	33	47	6	4.5	7	25°
KSTM-10	10	14	10.5	14	26	46	62	7.5	5.5	8	25°
KSTM-12	12	16	12.0	14	28	46	65	8.5	5.5	9	25°
KSTM-14	14	19	13.5	18	34	60	82	9.5	6.6	11	23°
KSTM-16	16	21	15.0	18	36	60	86	10.5	6.6	12	23°
KSTM-18	18	23	16.5	22	42	68	93	11.5	9.0	13	23°
KSTM-20	20	25	18.0	22	44	68	98	13	9.0	14	23°
KSTM-22	22	28	20.0	24	48	74	108	14	9.0	16	22°
KSTM-25	25	31	22.0	27	54	86	124	16	9.0	17	22°
KSTM-30	30	37	25.0	32	64	96	139	17	11.0	20	22°

Dimensions [Inch]

Part number	d1 E10	B	C1	h1	h2	m	a	h3	d2	X2	Max. pivot angle
KSTI-03	.1900	.312	.234	.290	.566	1.000	1.4000	.165	.137	.200	25°
KSTI-04	.2500	.375	.250	.390	.705	1.250	1.7500	.205	.137	.250	25°
KSTI-05	.3125	.437	.312	.430	.824	1.350	1.9500	.236	.150	.280	25°
KSTI-06	.3750	.500	.359	.550	1.022	1.800	2.4000	.376	.180	.300	22°
KSTI-07	.4375	.562	.406	.570	1.082	1.850	2.5000	.315	.205	.330	22°
KSTI-08	.5000	.625	.453	.600	1.191	2.000	2.8000	.354	.205	.380	22°
KSTI-10	.6250	.750	.484	.700	1.409	2.300	3.3500	.413	.205	.470	22°
KSTI-12	.7500	.875	.593	.860	1.687	2.700	3.7500	.472	.270	.530	22°
KSTI-16	1.0000	1.375	1.005	1.100	2.163	3.500	5.0000	.630	.520	.680	20°

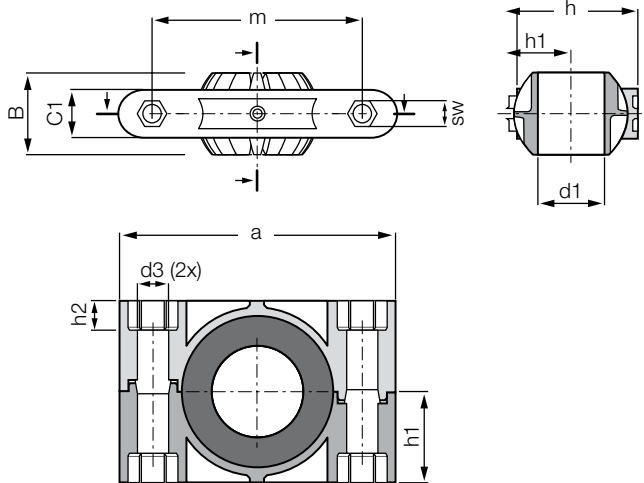


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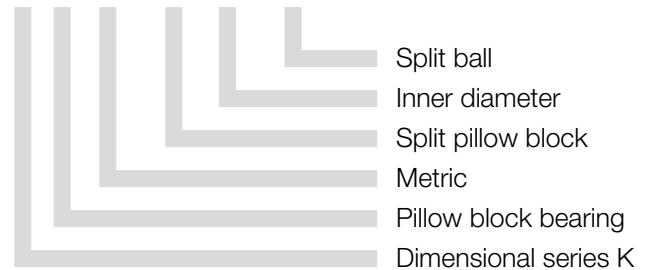
prices price list online
www.igus.eu/eu/kstm

Pillow block bearing with split housing: KSTM-GT



Order key

KSTM-GT40-GT



Material:

Housing: **RN33** ► page 1128

Spherical ball: **iglidur® J** ► page 730

- Fitting is easy and does not require shaft removal
- Maintenance-free, dry-running
- For high static loads
- Space- and weight-saving design
- Mounting: M12
- High stiffness and fatigue strength
- Predictable lifetime
- Dimensional series K accord. to standard DIN ISO 12240

Technical Data

Part number	Max. radial tensile strength		Max. axial tensile strength		Max. torque		Weight [g]
					through ball	fixing holes	
	Short term [N]	Long term [N]	Short term [N]	Long term [N]	[Nm]	[Nm]	
KSTM-GT35*	11,000	5,500	2,500	1,250	20	15	250.3
KSTM-GT40	11,000	5,500	2,500	1,250	20	15	235
KSTM-GT40-GT**	11,000	5,500	2,500	1,250	20	15	235
KSTM-GT45*	15,000	7,500	3,000	1,500	20	20	405.2
KSTM-GT50	15,000	7,500	3,000	1,500	20	20	389.2
KSTM-GT50-GT**	15,000	7,500	3,000	1,500	20	20	389.2

Dimensions [mm]

Part number	d1	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-GT40-GT**	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-GT50-GT**	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



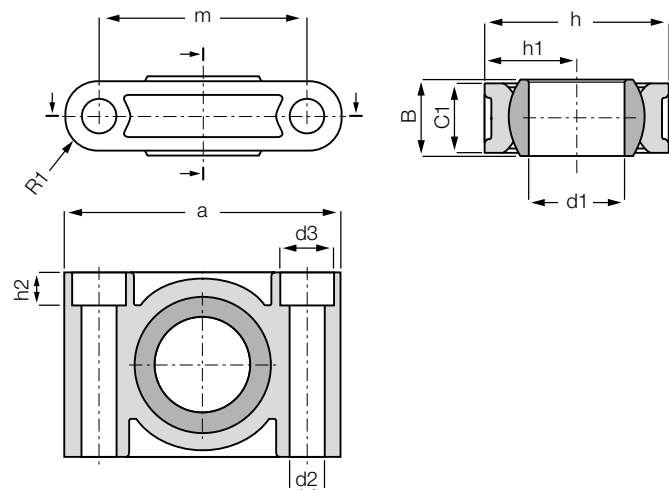
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igubal® Pillow Block Bearing | Product Range

Pillow block bearing ESTM

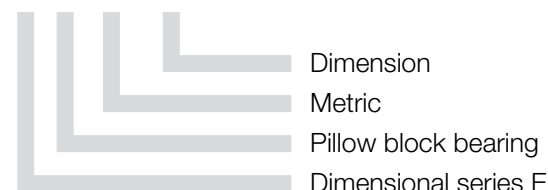


- High radial loads
- Can be used in liquid media



Order key

ESTM-08



Material:

Housing: **igumid G** ► page 1127

Spherical ball: **iglidur® W300** ► page 727

- Space-saving design, easy to fit
- Predictable lifetime
- Maintenance-free, self-lubricating
- Dimensional series E acc. to standard DIN ISO 12240
- Adapter available ► page 686

Technical Data

Part number	Max. radial tensile strength		Max. radial compressive strength		Max. axial strength		Max. 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
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
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*	10,000	5,000	16,500	8,250	2,500	1,250	10.5	79.7

* Due to the different manufacturing method, the load values are lower

Dimensions [mm]

Part number	d1, E10	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°

Spherical ball materials to choose ► page 723



J4VEM:
clearance-free,
preloaded



JEM: low
moisture
absorption

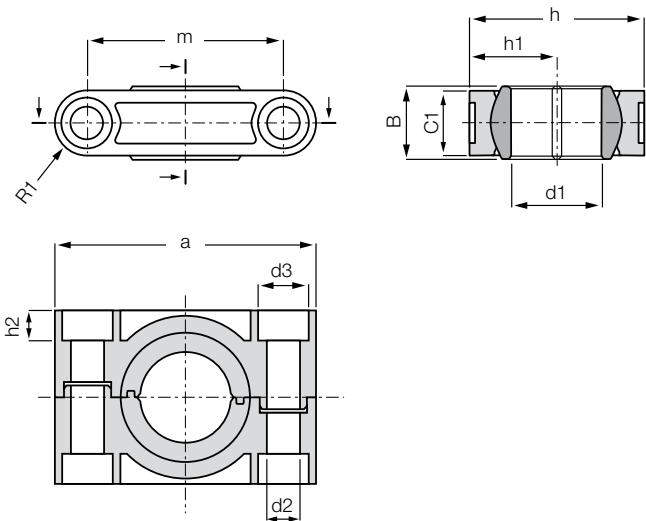


REM:
low-cost



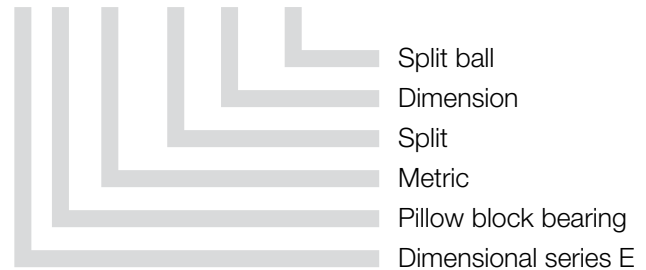
J4EM: low-cost
and low moisture
absorption

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



Order key

ESTM-GT16-GT



Material:

Housing: **RN33** ▶ [page 1128](#)

Spherical ball: **iglidur® J** ▶ [page 730](#)

- Save time during assembly and disassembly of shafts
- Low installation space and low weight
- High stiffening and fatigue strength
- Spherical ball material iglidur® J for low moisture absorption
- Ideal for outdoor use
- Dimensional series E according to standard DIN ISO 12240
- Adapter available ▶ [page 686](#)

Technical Data

Part number	max. static radial load		max. static radial compressive force		Weight [g]
	Short term	Long term	Short term	Long term	
	[N]	[N]	[N]	[N]	
ESTM-GT16-GT	2,500	1,250	4,000	2,000	18
ESTM-GT20-GT	3,500	1,750	6,000	3,000	28
ESTM-GT25-GT	5,000	2,500	7,000	3,500	52
ESTM-GT30-GT	5,500	2,750	10,000	5,000	84

Dimensions [mm]

Part number	d1	d2	d3	h	h1	h2	a	m	C1	B	R1	Max. pivot angle
ESTM-GT16-GT	16.0 E10	6,6	10.6	34.0	17.0	6.4	50.0	37.0	13.0	13.0	6.5	22°
ESTM-GT20-GT	20.0	9,0	14.0	40.0	20.0	8.6	62.0	46.0	16.0	16.0	8.0	22°
ESTM-GT25-GT	25.0	9,0	14.0	48.0	24.0	8.6	72.0	54.0	18.0	20.0	9.0	22°
ESTM-GT30-GT	30.0	11,0	17.0	56.0	28.0	10.6	86.0	64.0	22.0	22.0	11.0	22°

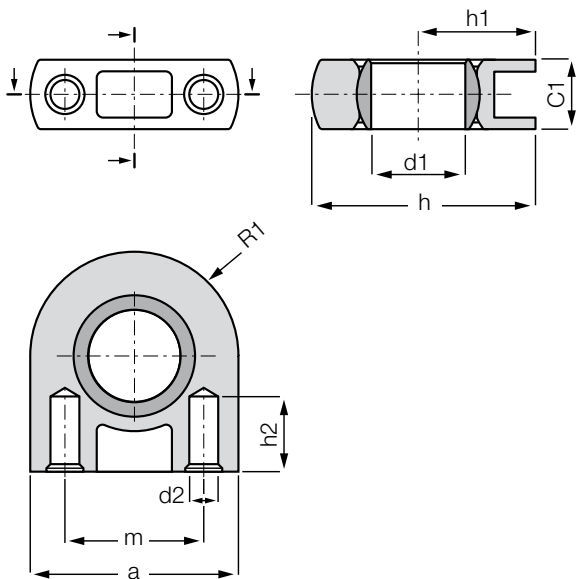
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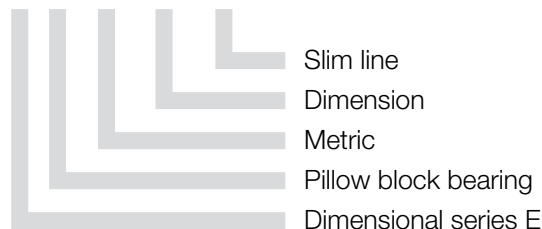
igubal® Pillow Block Bearing | Product Range

Pillow block bearing Slim line: ESTM SL



Order key

ESTM-05 SL



Material:

Housing: **igumid G** ► page 1127

Spherical ball: **iglidur® J** ► page 730

- Light weight
- Extremely space saving
- Low-cost
- Predictable lifetime
- Maintenance- and lubricant-free
- With M3 thread, e.g. ESTM-10-SL-M3
- For spax screw with outer diameter 3.5 mm
- Dimensional series E according to standard DIN ISO 12240

Technical Data

Part number	Max. radial tensile strength		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	1,500	750	1,400	700	900	450	150	75	1.6
ESTM-06 SL	1,500	750	1,400	700	900	450	150	75	1.7
ESTM-08 SL	1,600	800	1,400	700	950	475	100	50	1.7
ESTM-10 SL	1,600	800	1,400	700	1,000	500	100	50	1.9

Dimensions [mm]

Part number	d1 E10	d2	h	h1	h2	a	m	C1	R1	Max. pivot angle
ESTM-05 SL	5.0	2.5	18.0	10.0	6.5	16.0	10.0	6.0	8.0	17°
ESTM-06 SL	6.0	2.5	18.0	10.0	6.5	16.0	10.0	6.0	8.0	17°
ESTM-08 SL	8.0	2.5	19.0	10.0	6.5	18.0	12.0	6.0	9.0	17°
ESTM-10 SL	10.0	2.5	20.0	10.0	6.5	20.0	14.0	6.0	10.0	17°

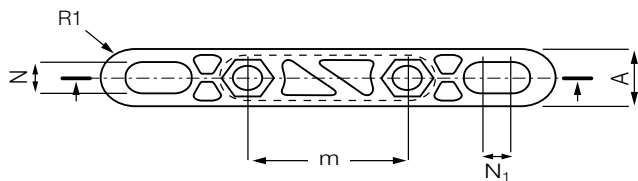
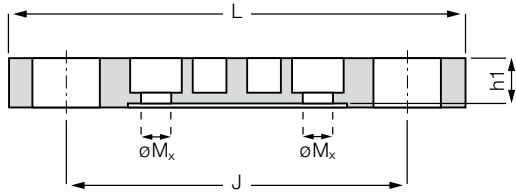


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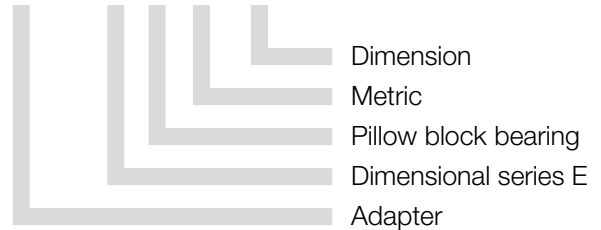
prices price list online
www.igus.eu/eu/estm-sl

Adapter for pillow block bearings of series E

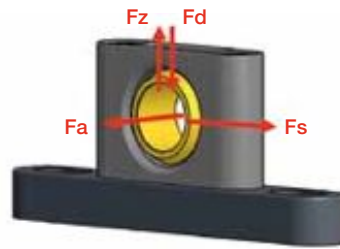


Order key

AD-01-ESTM-20



- Same depth gauge as metal pillow blocks
- Light weight
- For pillow block bearings of series E (ESTM, ESTM-GT)
- Corrosion- and chemical-resistant
- Fits directly
- Space-saving
- Same screws as for metallic versions



Technical Data

Part number	Max. radial tensile strength [Fz]		Max. radial compressive strength [Fd]		lateral strength [Fs]		Max. axial strength [Fa] (Tension/pression)		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]	
AD-01-ESTM-20*	2,400	1,200	10,000	5,000	3,000	1,500	1,200	600	29.8
AD-01-ESTM-25**	2,400	1,200	10,000	5,000	3,000	1,500	1,200	600	74
AD-01-ESTM-30**	2,400	1,200	10,000	5,000	3,000	1,500	1,200	600	124

Dimension [mm]

Part number	for ESTM-...	d1	L	A	R1	J	h1	N	N1	m	Mx
AD-01-ESTM-20*	ESTM-20	20	130	20	10.0	97	14.0	11	8	46	M8
AD-01-ESTM-25**	ESTM-25	25	130	20	10.0	102	12.5	11	9	54	M8
AD-01-ESTM-30**	ESTM-30	30	158	25	12.5	118	14.9	14	10	64	M10

* Material: plastic

** Material: aluminum

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time

prices price list online
www.igus.eu/eu/ad-01-estm