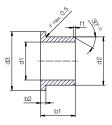
Bearing technology | Plain bearing | iglidur® H1

Flange bearing (form F)





2) Thickness < 0.6mm: Chamfer = 20°

Chamfer in relation to d1

d1 [mm] Ø1-6 | Ø6-12 | Ø12-30 | Ø > 30 f1 [mm] 0.3 | 0.5 | 0.8 | 1.2



Dimensions according to ISO 3547-1 and special dimensions



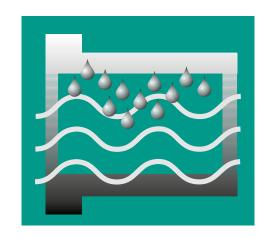
Order example: H1FM-0304-05 – no minimum order quantity.

H1 iglidur® material F Flange bearing M Metric 03 Inner Ø d1 04 Outer Ø d2 05 Total length b1

d1 d1 Tolerance* d2 d13* b1 b2 Part No. [mm] [mm							
3.0 +0.006 +0.046 4.5 7.5 5.0 0.75 H1FM-0304-05 5.0 +0.010 +0.058 7.0 11.0 5.0 1.00 H1FM-0507-05 6.0 +0.013 +0.071 8.0 12.0 4.0 1.00 H1FM-0608-04 6.0 +0.010 +0.058 8.0 12.0 6.0 1.00 H1FM-0608-06 6.0 +0.054 8.0 12.0 8.0 1.00 H1FM-0608-06 8.0 12.0 8.0 1.00 H1FM-0608-08 10.0 1.00 H1FM-0608-08 8.0 12.0 10.0 1.00 H1FM-0608-10 10.0 15.0 5.5 1.00 H1FM-0608-10 8.0 10.0 15.0 5.5 1.00 H1FM-0810-05 10.0 15.0 1.00 H1FM-0810-07 8.0 +0.013 10.0 15.0 7.5 1.00 H1FM-0810-07 10.0 15.0 1.00 H1FM-0810-07 8.0 +0.071 12.0 18.0 7.0 1.00 H1FM-0810-07 10.0 10.0 1.00 H1FM-0810-07 10.0 1.00 H1FM-0810-07 10.0 1.00 H1FM-0810-07	d1	~ .	d2		~ .	~-	Part No.
3.0 +0.046 4.5 7.5 5.0 0.75 H1FM-0304-05 5.0 +0.010 +0.058 7.0 11.0 5.0 1.00 H1FM-0507-05 6.0 +0.013 +0.071 8.0 12.0 4.0 1.00 H1FM-0608-04 6.0 +0.010 +0.058 8.0 12.0 6.0 1.00 H1FM-0608-06 8.0 +0.054 8.0 12.0 8.0 1.00 H1FM-0608-08 8.0 12.0 10.0 1.00 H1FM-0608-10 10.0 15.0 5.5 1.00 H1FM-0608-10 8.0 10.0 15.0 5.5 1.00 H1FM-0810-05 10.0 15.0 5.5 1.00 H1FM-0810-05 8.0 +0.013 10.0 15.0 5.5 1.00 H1FM-0810-07 10.0 15.0 9.5 1.00 H1FM-0810-07 8.0 +0.071 12.0 18.0 7.0 1.00 H1FM-0810-07 10.0 10.0 15.0 1.00 H1FM-0810-07 10.0 10.0 12.0 18.0 1.00 H1FM-0810-07 10.0 10.0 1.00 H1FM-0810-07 10.0	[mm]		[mm]	[mm]	[mm]	[mm]	
5.0 +0.058 7.0 11.0 5.0 1.00 H1FM-0507-05 6.0 +0.013 8.0 12.0 4.0 1.00 H1FM-0608-04 6.0 +0.010 8.0 12.0 6.0 1.00 H1FM-0608-06 8.0 +0.058 8.0 12.0 8.0 1.00 H1FM-0608-08 8.0 10.0 15.0 5.5 1.00 H1FM-0608-10 8.0 10.0 15.0 5.5 1.00 H1FM-0810-05 8.0 10.0 15.0 6.5 1.00 H1FM-0810-065 8.0 +0.013 10.0 15.0 7.5 1.00 H1FM-0810-07 8.0 +0.071 12.0 18.0 7.0 1.00 H1FM-0810-09 10.0 15.0 15.0 10.0 1.00 H1FM-0810-09 10.0 12.0 18.0 7.0 1.00 H1FM-0810-09 10.0 12.0 18.0 7.0 1.00 H1FM-0810-09 10.0 12.0 18.0 7.0 1.00 H1FM-0810-09 10.0 12.0 18.0	3.0		4.5	7.5	5.0	0.75	H1FM-0304-05
6.0 +0.071 8.0 12.0 4.0 1.00 H1FM-0608-04 6.0 +0.010 8.0 12.0 6.0 1.00 H1FM-0608-06 6.0 +0.058 8.0 12.0 8.0 1.00 H1FM-0608-08 8.0 10.0 15.0 5.5 1.00 H1FM-0608-10 8.0 10.0 15.0 5.5 1.00 H1FM-0810-05 8.0 10.0 15.0 6.5 1.00 H1FM-0810-07 8.0 +0.013 10.0 15.0 9.5 1.00 H1FM-0810-09 8.0 +0.071 12.0 18.0 7.0 1.00 H1FM-0810-10 10.0 10.0 15.0 10.0 1.00 H1FM-0810-10 10.0 12.0 18.0 7.0 1.00 H1FM-0810-10 10.0 12.0 18.0 7.0 1.00 H1FM-1012-07 10.0 12.0 18.0 1.0 H1FM-1012-10 10.0 12.0 18.0 1.0 H1FM-1012-17 12.0 18.0 17.0 1.00 H1FM-1012-17	5.0		7.0	11.0	5.0	1.00	H1FM-0507-05
6.0 +0.010 8.0 12.0 8.0 1.00 H1FM-0608-08 8.0 12.0 1.00 1.00 H1FM-0608-10 8.0 10.0 15.0 5.5 1.00 H1FM-0810-05 8.0 10.0 15.0 5.5 1.00 H1FM-0810-065 8.0 10.0 15.0 7.5 1.00 H1FM-0810-07 8.0 +0.013 10.0 15.0 9.5 1.00 H1FM-0810-09 8.0 +0.071 12.0 18.0 7.0 1.00 H1FM-0810-10 10.0 10.0 15.0 10.0 1.00 H1FM-0810-10 10.0 12.0 18.0 7.0 1.00 H1FM-1012-07 10.0 12.0 18.0 9.0 1.00 H1FM-1012-10 10.0 12.0 18.0 1.0 H1FM-1012-12 10.0 12.0 18.0 1.0 H1FM-1012-17 12.0 18.0 17.0 1.00 H1FM-1012-17 12.0 18.0 17.0 1.00 H1FM-1014-07 12.0 14.0 20.0	6.0		8.0	12.0	4.0	1.00	H1FM-0608-04
6.0 +0.058 8.0 12.0 8.0 1.00 HIFM-0608-08 8.0 12.0 10.0 1.00 HIFM-0608-10 8.0 10.0 15.0 5.5 1.00 HIFM-0810-05 8.0 10.0 15.0 6.5 1.00 HIFM-0810-065 8.0 10.0 15.0 7.5 1.00 HIFM-0810-09 8.0 +0.013 10.0 15.0 10.0 10.0 HIFM-0810-10 10.0 +0.071 12.0 18.0 7.0 1.00 HIFM-1012-07 10.0 12.0 18.0 7.0 1.00 HIFM-1012-09 10.0 12.0 18.0 10.0 1.00 HIFM-1012-10 10.0 12.0 18.0 12.0 10.0 HIFM-1012-12 10.0 12.0 18.0 17.0 1.00 HIFM-1012-17 12.0 18.0 17.0 1.00 HIFM-1012-17 12.0 14.0 20.0 7.0 1.00 HIFM-1214-09 12.0 +0.086 14.0 20.0 7.0	6.0	.0.010	8.0	12.0	6.0	1.00	H1FM-0608-06
8.0 12.0 10.0 1.00 HFM-0608-10 8.0 10.0 15.0 5.5 1.00 HFM-0810-05 8.0 10.0 15.0 6.5 1.00 HFM-0810-065 8.0 10.0 15.0 7.5 1.00 HFM-0810-07 8.0 +0.013 10.0 15.0 10.0 10.0 HFM-0810-10 10.0 +0.071 12.0 18.0 7.0 1.00 HFM-1012-07 10.0 12.0 18.0 7.0 1.00 HFM-1012-09 10.0 12.0 18.0 10.0 10.0 HFM-1012-10 10.0 12.0 18.0 12.0 10.0 HFM-1012-12 10.0 12.0 18.0 17.0 10.0 HFM-1012-12 12.0 18.0 17.0 1.00 HFM-1012-17 12.0 14.0 20.0 7.0 1.00 HFM-1214-07 12.0 +0.016 14.0 20.0 9.0 1.00 HFM-1214-09 12.0 +0.086 14.0 20.0 12.0 10.0 HFM-1214-12 12.0 +0.086 14.0 20.0 12.0 10.0 HFM-1214-12	6.0		8.0	12.0	8.0	1.00	H1FM-0608-08
8.0 10.0 15.0 6.5 1.00 H1FM-0810-065 8.0 10.0 15.0 7.5 1.00 H1FM-0810-07 8.0 +0.013 10.0 15.0 10.0 1.00 H1FM-0810-10 10.0 +0.071 12.0 18.0 7.0 1.00 H1FM-1012-07 10.0 12.0 18.0 9.0 1.00 H1FM-1012-09 10.0 12.0 18.0 10.0 1.00 H1FM-1012-10 10.0 12.0 18.0 12.0 1.00 H1FM-1012-17 12.0 12.0 18.0 17.0 1.00 H1FM-1012-17 12.0 14.0 20.0 7.0 1.00 H1FM-1214-07 12.0 +0.016 14.0 20.0 9.0 1.00 H1FM-1214-09 12.0 +0.086 14.0 20.0 12.0 H1FM-1214-12 12.0 +0.086 14.0 20.0 12.0 H1FM-1214-12 12.0 +0.086 14.0 20.0 12.0 H1FM-1214-12	6.0	+0.000	8.0	12.0	10.0	1.00	H1FM-0608-10
8.0 +0.013 10.0 15.0 7.5 1.00 H1FM-0810-07 8.0 +0.013 10.0 15.0 9.5 1.00 H1FM-0810-10 10.0 +0.071 12.0 18.0 7.0 1.00 H1FM-1012-07 10.0 12.0 18.0 9.0 1.00 H1FM-1012-09 10.0 12.0 18.0 10.0 1.00 H1FM-1012-10 10.0 12.0 18.0 12.0 1.00 H1FM-1012-12 10.0 12.0 18.0 17.0 1.00 H1FM-1012-17 12.0 14.0 20.0 7.0 1.00 H1FM-1214-07 12.0 +0.016 14.0 20.0 9.0 1.00 H1FM-1214-09 12.0 +0.086 40.086 12.0 12.0 10.0 H1FM-1214-12	8.0		10.0	15.0	5.5	1.00	H1FM-0810-05
8.0 +0.013 10.0 15.0 9.5 1.00 H1FM-0810-09 8.0 +0.013 10.0 15.0 10.0 1.00 H1FM-0810-10 10.0 +0.071 12.0 18.0 7.0 1.00 H1FM-1012-07 10.0 12.0 18.0 9.0 1.00 H1FM-1012-10 10.0 12.0 18.0 10.0 1.00 H1FM-1012-12 10.0 12.0 18.0 17.0 1.00 H1FM-1012-17 12.0 14.0 20.0 7.0 1.00 H1FM-1214-07 12.0 +0.016 14.0 20.0 9.0 1.00 H1FM-1214-19 12.0 +0.086 14.0 20.0 12.0 10.0 H1FM-1214-12 12.0 +0.086 14.0 20.0 12.0 10.0 H1FM-1214-12	8.0		10.0	15.0	6.5	1.00	H1FM-0810-065
8.0 +0.013 10.0 15.0 10.0 1.00 H1FM-0810-10 10.0 +0.071 12.0 18.0 7.0 1.00 H1FM-1012-07 10.0 12.0 18.0 9.0 1.00 H1FM-1012-09 10.0 12.0 18.0 10.0 1.00 H1FM-1012-10 10.0 12.0 18.0 12.0 1.00 H1FM-1012-12 12.0 12.0 18.0 17.0 1.00 H1FM-1012-17 12.0 14.0 20.0 7.0 1.00 H1FM-1214-07 12.0 +0.016 14.0 20.0 9.0 1.00 H1FM-1214-19 12.0 +0.086 14.0 20.0 12.0 10.0 H1FM-1214-12 12.0 +0.086 14.0 20.0 12.0 10.0 H1FM-1214-12	8.0		10.0	15.0	7.5	1.00	H1FM-0810-07
10.0 +0.071 12.0 18.0 7.0 1.00 H1FM-1012-07 10.0 12.0 18.0 9.0 1.00 H1FM-1012-09 10.0 12.0 18.0 10.0 1.00 H1FM-1012-10 10.0 12.0 18.0 12.0 1.00 H1FM-1012-12 12.0 12.0 18.0 17.0 1.00 H1FM-1012-17 12.0 14.0 20.0 7.0 1.00 H1FM-1214-07 12.0 +0.016 14.0 20.0 9.0 1.00 H1FM-1214-19 12.0 +0.086 14.0 20.0 12.0 10.0 H1FM-1214-12 12.0 +0.086 14.0 20.0 12.0 10.0 H1FM-1214-12	8.0		10.0	15.0	9.5	1.00	H1FM-0810-09
10.0 12.0 18.0 9.0 1.00 H1FM-1012-09 10.0 12.0 18.0 10.0 1.00 H1FM-1012-10 10.0 12.0 18.0 12.0 1.00 H1FM-1012-12 10.0 12.0 18.0 17.0 1.00 H1FM-1012-17 12.0 14.0 20.0 7.0 1.00 H1FM-1214-07 12.0 40.016 14.0 20.0 9.0 1.00 H1FM-1214-09 12.0 40.086 14.0 20.0 12.0 1.00 H1FM-1214-12 12.0 14.0 20.0 17.0 1.00 H1FM-1214-17	8.0	+0.013	10.0	15.0	10.0	1.00	H1FM-0810-10
10.0 12.0 18.0 10.0 1.00 H1FM-1012-10 10.0 12.0 18.0 12.0 1.00 H1FM-1012-12 10.0 12.0 18.0 17.0 1.00 H1FM-1012-17 12.0 14.0 20.0 7.0 1.00 H1FM-1214-07 12.0 40.016 14.0 20.0 9.0 1.00 H1FM-1214-09 12.0 40.086 14.0 20.0 12.0 1.00 H1FM-1214-12 12.0 14.0 20.0 17.0 1.00 H1FM-1214-12	10.0	+0.071	12.0	18.0	7.0	1.00	H1FM-1012-07
10.0 12.0 18.0 12.0 1.00 H1FM-1012-12 10.0 12.0 18.0 17.0 1.00 H1FM-1012-17 12.0 14.0 20.0 7.0 1.00 H1FM-1214-07 12.0 40.016 14.0 20.0 9.0 1.00 H1FM-1214-09 12.0 40.086 14.0 20.0 12.0 1.00 H1FM-1214-12 12.0 14.0 20.0 17.0 1.00 H1FM-1214-17	10.0		12.0	18.0	9.0	1.00	H1FM-1012-09
10.0 12.0 18.0 17.0 1.00 H1FM-1012-17 12.0 14.0 20.0 7.0 1.00 H1FM-1214-07 12.0 40.016 20.0 9.0 1.00 H1FM-1214-09 12.0 40.086 14.0 20.0 12.0 1.00 H1FM-1214-12 12.0 14.0 20.0 17.0 1.00 H1FM-1214-17	10.0		12.0	18.0	10.0	1.00	H1FM-1012-10
12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	10.0		12.0	18.0	12.0	1.00	H1FM-1012-12
12.0 12.0 12.0 12.0 14.0 20.0 9.0 1.00 H1FM-1214-09 14.0 20.0 12.0 1.00 H1FM-1214-12 14.0 20.0 17.0 1.00 H1FM-1214-17	10.0		12.0	18.0	17.0	1.00	H1FM-1012-17
12.0 12.0 +0.086 14.0 20.0 12.0 1.00 H1FM-1214-12 14.0 20.0 17.0 1.00 H1FM-1214-17	12.0		14.0	20.0	7.0	1.00	H1FM-1214-07
12.0 +0.086 14.0 20.0 12.0 1.00 H1FM-1214-17 12.0 1.00 H1FM-1214-17	12.0	- 10.016	14.0	20.0	9.0	1.00	H1FM-1214-09
12.0 14.0 20.0 17.0 1.00 H1FM-1214-17	12.0		14.0	20.0	12.0	1.00	H1FM-1214-12
12.0 14.0 20.0 20.0 1.00 H1FM-1214-20	12.0	+0.000	14.0	20.0	17.0	1.00	H1FM-1214-17
	12.0		14.0	20.0	20.0	1.00	H1FM-1214-20

d1	d1	d2	d3	b1	b2	Part No.
	Tolerance ³⁾		d13 ³⁾	h13	h13	
[mm]		[mm]	[mm]	[mm]	[mm]	
14.0		16.0	22.0	12.0	1.00	H1FM-1416-12
14.0		16.0	22.0	17.0	1.00	H1FM-1416-17
15.0		17.0	23.0	9.0	1.00	H1FM-1517-09
15.0		17.0	23.0	12.0	1.00	H1FM-1517-12
15.0	+0.016	17.0	23.0	17.0	1.00	H1FM-1517-17
16.0	+0.016	18.0	24.0	12.0	1.00	H1FM-1618-12
16.0	+0.000	18.0	24.0	17.0	1.00	H1FM-1618-17
16.0		18.0	24.0	25.0	1.00	H1FM-1618-25
18.0		20.0	26.0	12.0	1.00	H1FM-1820-12
18.0		20.0	26.0	17.0	1.00	H1FM-1820-17
18.0		20.0	26.0	22.0	1.00	H1FM-1820-22
20.0		23.0	30.0	11.5	1.50	H1FM-2023-11
20.0		23.0	30.0	16.5	1.50	H1FM-2023-16
20.0		23.0	30.0	21.5	1.50	H1FM-2023-21
20.0	+0.020	23.0	30.0	30.0	1.50	H1FM-2023-30
25.0	+0.020	28.0	35.0	11.5	1.50	H1FM-2528-11
25.0	+0.104	28.0	35.0	16.5	1.50	H1FM-2528-16
25.0		28.0	35.0	21.5	1.50	H1FM-2528-21
30.0		34.0	42.0	16.0	2.00	H1FM-3034-16
30.0		34.0	42.0	26.0	2.00	H1FM-3034-26
35.0		39.0	47.0	16.0	2.00	H1FM-3539-16
35.0	+0.025	39.0	47.0	26.0	2.00	H1FM-3539-26
40.0	+0.025	44.0	52.0	30.0	2.00	H1FM-4044-30
40.0	+0.120	44.0	52.0	40.0	2.00	H1FM-4044-40
45.0		50.0	58.0	50.0	2.00	H1FM-4550-50





Long service life under water High media resistance iglidur[®] H370



When to use it?

- For underwater applications
- When high temperature resistance is required
- When high mechanical loading and wear resistance is required
- When good chemical resistance is required



When not to use?

- When mechanical reaming of the bore is necessary iglidur[®] M250
- When high wear resistance in temperatures is required iglidur[®] H1
- For use in dirty surroundings iglidur® Z
- When a cost-effective, large-volume solution is required iglidur[®] H2



³⁾ After press-fit. Testing methods, page 57

-40°C up to +200°C

75MPa

Bearing technology | Plain bearing | iglidur® H370



3.0 – 75.0mm



Also available as:



Bar stock, round bar Page 657

Bar stock.

Page 683



iglidur® H370 is the right solution for underwater applications. The bearings absorb extremely high loads, are resistant to chemicals and can be used at temperatures up to +200°C.

- Suitable for underwater applications
- Temperature-resistant from –40°C to +200°C
- High chemical resistance
- Lubrication-free
- Maintenance-free

Typical application areas ● Offshore



tribo-tape liner Page 691

- Ship building
- Fluid technology
- Packaging
- Plant construction



Piston rings Page 584



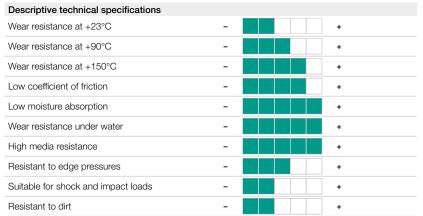
Two hole flange bearings Page 603



Moulded special parts Page 624







Online service life calculation www.igus.eu/iglidur-expert

Technical data

General properties			Testing method
Density	g/cm ³	1.66	
Colour		grey	
Max. moisture absorption at +23°C and 50% r.h.	% weight	0.1	DIN 53495
Max. moisture absorption	% weight	0.1	
Coefficient of friction, dynamic, against steel	μ	0.07 - 0.17	
pv value, max. (dry)	MPa · m/s	0.74	
Mechanical properties			
Flexural modulus	MPa	11,100	DIN 53457
Flexural strength at +20°C	MPa	135	DIN 53452
Compressive strength	MPa	79	
Max. recommended surface pressure (+20°C)	MPa	75	
Shore D hardness		82	DIN 53505
Physical and thermal properties			
Max. application temperature long-term	°C	+200	
Max. application temperature short-term	°C	+240	
Min. application temperature	°C	-40	
Thermal conductivity	W/m⋅K	0.50	ASTM C 177
Coefficient of thermal expansion (at +23°C)	K⁻¹ · 10⁻⁵	5	DIN 53752
Electrical properties ⁵⁾			
Specific contact resistance	Ωcm	< 105	DIN IEC 93
Surface resistance	Ω	< 105	DIN 53482

⁵⁾ The good conductivity of this material can favour the generation of corrosion on the metallic contact components.

Table 01: Material properties

iglidur® H370 is an advanced development of the iglidur® H series. The material is characterised by particularly low moisture absorption and clearly enhanced wear resistance. With regard to the mechanical and thermal characteristic values, iglidur® H370 shows the same features as iglidur® H.

Moisture absorption

Under standard climatic conditions, the moisture absorption of iglidur® H370 plain bearings is below 0.1% weight. The saturation limit in water is also below 0.1% weight. For this reason, iglidur® H370 plain bearings are often used for underwater applications.

Vacuum

In vacuum, any present moisture is released as vapour. The use in vacuum is generally possible.

Radiation resistance

iglidur® H370 withstands neutron and gamma particle radiation. Plain bearings made from iglidur® H370 are resistant up to a radiation intensity of $2 \cdot 10^2$ Gy.

Resistance to weathering

iglidur® H370 plain bearings are continuously resistant to weathering. The material properties are only slightly affected. Possible discolorations are only superficial.

Mechanical properties

With increasing temperatures, the compressive strength of iglidur® H370 plain bearings decreases. Diagram 02 shows this inverse relationship. The maximum recommended surface pressure is a mechanical material parameter. No conclusions regarding the tribological properties can be drawn from this.

Diagram 03 shows the elastic deformation of iglidur® H370 at radial loads. At the maximum recommended surface pressure of 75MPa at room temperature the deformation is less than 2.5%.

Surface pressure, page 41





Bearing technology | Plain bearing | iglidur® H370

Permissible surface speeds

The maximum permitted surface speed is dependent on whether the temperature at the bearing point becomes too high or not. iglidur® H370 is suitable for surface speeds of 1.2m/s (rotating) and 4.0m/s (linear) respectively. The maximum values stated in table 03 are valid only with minimum pressure loads and are often not attained in

Surface speed, page 44

Temperature

With increasing temperatures, the compressive strength of iglidur® H370 plain bearings decreases. The temperatures prevailing in the bearing system also have an influence on the wear. The wear rises with increasing temperatures. For temperatures over +100°C an additional securing is

Application temperatures, page 49 Additional securing, page 49

Friction and wear

The coefficient of friction alters only little, like the wear resistance with increasing load and surface speed (diagrams 04 and 05).

Coefficient of friction and surfaces, page 47 Wear resistance, page 50

Shaft materials

Diagrams 06 and 07 show the test results of iglidur® H370 plain bearings running against various shaft materials. For loads up to 2MPa in rotating applications, the hard-chromed shaft is the best material for the iglidur® H370 plain bearings. The high coefficient of wear with 304 stainless steel shafts, which due to their extremely ground surfaces are prone to the stick-slip effect, is striking. Despite same values in the lowest range, the HR carbon steel shaft shows already better values than Cf53 with loads of 2MPa. On the other hand, the 304 stainless steel shaft shows a clear advantage in pivoting movements.

Shaft materials, page 52

Installation tolerances

iglidur® H370 plain bearings are standard bearings for shafts with h tolerance (recommended minimum h9). The bearings are designed for press-fit into a housing machined to a H7 tolerance. After being assembled into a nominal size housing, in standard cases the inner diameter automatically adjusts to the F10 tolerances. For particular dimensions the tolerance differs depending on the wall thickness (please see product range table).

Testing methods, page 57

Chemicals	Resistance
Alcohols	+
Diluted acids	+ up to 0
Diluted alkalines	+
Fuels	+
Greases, oils without additives	+
Hydrocarbons	+
Strong acids	+ up to -
Strong alkalines	+

All information given at room temperature [+20°C]

Table 02: Chemical resistance Chemical table, page 1636

		Rotating	Oscillating	linear
long-term	m/s	1.2	0.8	4.0
short-term	m/s	1.5	1.1	5.0

Table 03: Maximum surface speeds

	Dry	Greases	Oil	Water
Coefficient of friction $\boldsymbol{\mu}$	0.07 – 0.17	0.09	0.04	0.04

Table 04: Coefficient of friction against steel (Ra = 1µm,

	Housing	Plain bearing	Shaft
Ø d1 [mm]	H7 [mm]	F10 [mm]	h9 [mm]
0-3	+0.000 +0.010	+0.006 +0.046	-0.025 +0.000
> 3 - 6	+0.000 +0.012	+0.010 +0.058	-0.030 +0.000
> 6 - 10	+0.000 +0.015	+0.013 +0.071	-0.036 +0.000
> 10 - 18	+0.000 +0.018	+0.016 +0.086	-0.043 +0.000
> 18 – 30	+0.000 +0.021	+0.020 +0.104	-0.052 +0.000
> 30 - 50	+0.000 +0.025	+0.025 +0.125	-0.062 +0.000
> 50 - 80	+0.000 +0.030	+0.030 +0.150	-0.074 +0.000
> 80 - 120	+0.000 +0.035	+0.036 +0.176	-0.087 +0.000
> 120 - 180	+0.000 +0.040	+0.043 +0.203	+0.000 +0.100

Table 05: Important tolerances for plain bearings according to ISO 3547-1 after press-fit

Technical data

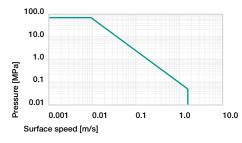


Diagram 01: Permissible pv values for iglidur® H370 plain bearings with a wall thickness of 1mm, dry operation against a steel shaft, at +20°C, mounted in a steel housing

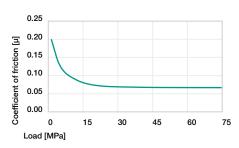


Diagram 05: Coefficient of friction as a function of the load, $v = 0.01 \,\text{m/s}$

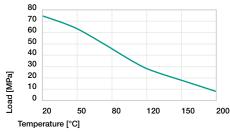


Diagram 02: Maximum recommended surface pressure as a function of temperature (75MPa at +20°C)

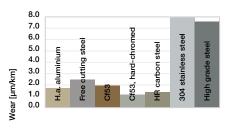


Diagram 06: Wear, rotating with different shaft materials, pressure, p = 1MPa, v = 0.3m/s

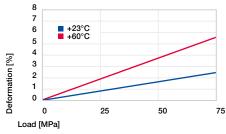


Diagram 03: Deformation under pressure and temperature

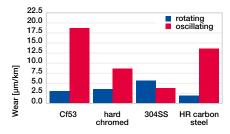


Diagram 07: Wear for rotating and oscillating applications with different shaft materials, p = 2MPa

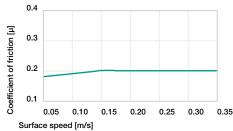


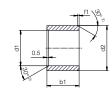
Diagram 04: Coefficient of friction as a function of the surface speed, p = 0.75MPa



Proc

Sleeve bearing (form S)





Bearing technology | Plain bearing | iglidur® H370

2) Thickness < 0.6mm: Chamfer = 20°

Chamfer in relation to d1

d1 [mm] Ø 1-6 Ø 6-12 | Ø 12-30 Ø > 30f1 [mm] 0.3 8.0 1.2

Dimensions according to ISO 3547-1 and special dimensions



Order example: H370SM-0304-03 - no minimum order quantity.

H370 iglidur® material S Sleeve bearing M Metric 03 Inner Ø d1 04 Outer Ø d2 03 Total length b1

d1	d1 Tolerance ³⁾	d2	b1 h13	Part No.	d1	d1 Tolerance ³⁾	d2	b1 h13	Part No.
[mm]		[mm]	[mm]		[mm]		[mm]	[mm]	
3.0	+0.006	4.5	3.0	H370SM-0304-03	15.0		17.0	20.0	H370SM-1517-20
	+0.046				15.0		17.0	25.0	H370SM-1517-25
4.0		5.5	4.0	H370SM-0405-04	16.0		18.0	15.0	H370SM-1618-15
4.0		5.5	6.0	H370SM-0405-06	16.0	+0.016	18.0	20.0	H370SM-1618-20
4.0		5.5	12.0	H370SM-0405-12	16.0	+0.086	18.0	25.0	H370SM-1618-25
5.0	+0.010	7.0	5.0	H370SM-0507-05	18.0		20.0	15.0	H370SM-1820-15
5.0	+0.058	7.0	10.0	H370SM-0507-10	18.0		20.0	20.0	H370SM-1820-20
6.0		8.0	6.0	H370SM-0608-06	18.0		20.0	25.0	H370SM-1820-25
6.0		8.0	8.0	H370SM-0608-08	20.0		23.0	10.0	H370SM-2023-10
6.0		8.0	10.0	H370SM-0608-10	20.0		23.0	15.0	H370SM-2023-15
8.0		10.0	8.0	H370SM-0810-08	20.0		23.0	20.0	H370SM-2023-20
8.0		10.0	10.0	H370SM-0810-10	20.0		23.0	25.0	H370SM-2023-25
8.0		10.0	12.0	H370SM-0810-12	20.0		23.0	30.0	H370SM-2023-30
8.0	+0.013	10.0	15.0	H370SM-0810-15	22.0		25.0	15.0	H370SM-2225-15
10.0	+0.013	12.0	8.0	H370SM-1012-08	22.0		25.0	20.0	H370SM-2225-20
10.0	+0.071	12.0	10.0	H370SM-1012-10	22.0		25.0	25.0	H370SM-2225-25
10.0		12.0	12.0	H370SM-1012-12	22.0		25.0	30.0	H370SM-2225-30
10.0		12.0	15.0	H370SM-1012-15	24.0	+0.020	27.0	15.0	H370SM-2427-15
10.0		12.0	20.0	H370SM-1012-20	24.0	+0.020	27.0	20.0	H370SM-2427-20
12.0		14.0	10.0	H370SM-1214-10	24.0	+0.104	27.0	25.0	H370SM-2427-25
12.0		14.0	12.0	H370SM-1214-12	24.0		27.0	30.0	H370SM-2427-30
12.0		14.0	15.0	H370SM-1214-15	25.0		28.0	15.0	H370SM-2528-15
12.0		14.0	20.0	H370SM-1214-20	25.0		28.0	20.0	H370SM-2528-20
13.0	+0.016	15.0	10.0	H370SM-1315-10	25.0		28.0	25.0	H370SM-2528-25
13.0	+0.086	15.0	20.0	H370SM-1315-20	25.0		28.0	30.0	H370SM-2528-30
14.0		16.0	15.0	H370SM-1416-15	28.0		32.0	20.0	H370SM-2832-20
14.0		16.0	20.0	H370SM-1416-20	28.0		32.0	25.0	H370SM-2832-25
14.0		16.0	25.0	H370SM-1416-25	28.0		32.0	30.0	H370SM-2832-30
15.0		17.0	15.0	H370SM-1517-15	30.0		34.0	20.0	H370SM-3034-20

³⁾ After press-fit. Testing methods, page 57

duct ra	ange
d1	d2
Tolerance ³⁾	

d1	d1 Tolerance ³⁾	d2	b1 h13	Part No.	d1	d1 Tolerance ³⁾	d2	b1 h13	Part No.
[mm]		[mm]	[mm]		[mm]		[mm]	[mm]	
30.0	+0.020	34.0	25.0	H370SM-3034-25	40.0		44.0	50.0	H370SM-4044-50
30.0	+0.020	34.0	30.0	H370SM-3034-30	45.0		50.0	20.0	H370SM-4550-20
30.0	+0.104	34.0	40.0	H370SM-3034-40	45.0		50.0	30.0	H370SM-4550-30
32.0		36.0	20.0	H370SM-3236-20	45.0		50.0	40.0	H370SM-4550-40
32.0		36.0	30.0	H370SM-3236-30	45.0	+0.025	50.0	50.0	H370SM-4550-50
32.0		36.0	40.0	H370SM-3236-40	50.0	+0.125	55.0	20.0	H370SM-5055-20
35.0		39.0	20.0	H370SM-3539-20	50.0		55.0	30.0	H370SM-5055-30
35.0	+0.025	39.0	30.0	H370SM-3539-30	50.0		55.0	40.0	H370SM-5055-40
35.0	+0.125	39.0	40.0	H370SM-3539-40	50.0		55.0	50.0	H370SM-5055-50
35.0		39.0	50.0	H370SM-3539-50	50.0		55.0	60.0	H370SM-5055-60
40.0		44.0	20.0	H370SM-4044-20	55.0	+0.030	60.0	26.0	H370SM-5560-26
40.0		44.0	30.0	H370SM-4044-30	60.0		65.0	60.0	H370SM-6065-60
40.0		44.0	40.0	H370SM-4044-40	75.0	+0.150	80.0	60.0	H370SM-7580-60

³⁾ After press-fit. Testing methods, page 57



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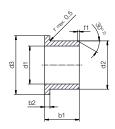




Bearing technology | Plain bearing | iglidur® H370

Flange bearing (form F)





2) Thickness < 0.6mm: Chamfer = 20°

Chamfer in relation to d1

Ø 6-12 | Ø 12-30 d1 [mm] Ø 1-6 Ø > 30f1 [mm] 0.3 1.2



Dimensions according to ISO 3547-1 and special dimensions

d2 d3 b1 b2 Part No.



Order example: H370FM-0405-04 - no minimum order quantity.

H370 iglidur® material F Flange bearing M Metric 04 Inner Ø d1 05 Outer Ø d2 04 Total length b1

d1	d1 Tolerance ³	d2	d3 d13 ³⁾	b1 h13	b2 h13	Part No.
[mm]	TOTE AT ICE	[mm]	[mm]		[mm]	
4.0		5.5	9.5	4.0		H370FM-0405-04
5.0	-	7.0	11.0	5.0		H370FM-0507-05
6.0	+0.010	8.0	12.0	4.0		H370FM-0608-04
6.0	+0.058	8.0	12.0	6.0		H370FM-0608-06
6.0	-	8.0	12.0	8.0		H370FM-0608-08
8.0		10.0	15.0	5.5		H370FM-0810-05
8.0	-	10.0	15.0	6.0		H370FM-0810-06
8.0	-	10.0	15.0	7.5		H370FM-0810-07
8.0	_	10.0	15.0	9.5	1.00	H370FM-0810-09
8.0	-	10.0	15.0	10.0	1.00	H370FM-0810-10
8.0	-	10.0	15.0	15.0	1.00	H370FM-0810-15
10.0	+0.013	12.0	18.0	7.0	1.00	H370FM-1012-07
10.0	+0.071	12.0	18.0	9.0	1.00	H370FM-1012-09
10.0	_	12.0	18.0	10.0	1.00	H370FM-1012-10
10.0	_	12.0	18.0	12.0	1.00	H370FM-1012-12
10.0	_	12.0	18.0	14.5	1.00	H370FM-1012-145
10.0		12.0	18.0	17.0	1.00	H370FM-1012-17
10.0	_	12.0	18.0	20.0	1.00	H370FM-1012-20
12.0		14.0	20.0	7.0	1.00	H370FM-1214-07
12.0		14.0	20.0	9.0	1.00	H370FM-1214-09
12.0		14.0	20.0	12.0	1.00	H370FM-1214-12
12.0	+0.016	14.0	20.0	15.0	1.00	H370FM-1214-15
12.0	+0.086	14.0	20.0	17.0	1.00	H370FM-1214-17
12.0	_	14.0	20.0	20.0	1.00	H370FM-1214-20
14.0		16.0	22.0	12.0	1.00	H370FM-1416-12
14.0		16.0	22.0	17.0	1.00	H370FM-1416-17

٠.	~.	~-		~ .	~-	
	Tolerance ³⁾		d13 ³⁾	h13	h13	
[mm]		[mm]	[mm]	[mm]	[mm]	
15.0		17.0	23.0	9.0	1.00	H370FM-1517-09
15.0		17.0	23.0	12.0	1.00	H370FM-1517-12
15.0		17.0	23.0	17.0	1.00	H370FM-1517-17
16.0		18.0	24.0	10.0	1.00	H370FM-1618-10
16.0		18.0	24.0	12.0	1.00	H370FM-1618-12
16.0	+0.016	18.0	24.0	17.0	1.00	H370FM-1618-17
16.0	+0.016	18.0	24.0	25.0	1.00	H370FM-1618-25
16.0	+0.000	18.0	22.0	10.0	1.00	H370FM-161822-10
18.0	_	20.0	26.0	12.0	1.00	H370FM-1820-12
18.0	_	20.0	26.0	17.0	1.00	H370FM-1820-17
18.0		20.0	26.0	22.0	1.00	H370FM-1820-22
20.0	_	23.0	30.0	11.5	1.50	H370FM-2023-11
20.0	_	23.0	30.0	16.5	1.50	H370FM-2023-16
20.0		23.0	30.0	21.5	1.50	H370FM-2023-21
20.0		23.0	30.0	30.0	1.50	H370FM-2023-30
22.0	_	25.0	32.0	21.5	1.50	H370FM-222532-215
25.0	+0.020	28.0	35.0	11.5	1.50	H370FM-2528-11
25.0	+0.104	28.0	35.0	16.5	1.50	H370FM-2528-16
25.0	_	28.0	35.0	21.5	1.50	H370FM-2528-21
25.0		28.0	35.0	30.0	1.50	H370FM-2528-30
30.0		34.0	42.0	16.0	2.00	H370FM-3034-16
30.0		34.0	42.0	26.0	2.00	H370FM-3034-26
30.0		34.0	42.0	40.0	2.00	H370FM-3034-40
35.0	+0.025	39.0	47.0	16.0	2.00	H370FM-3539-16
35.0		39.0	47.0	26.0	2.00	H370FM-3539-26
40.0	10.120	44.0	52.0	30.0	2.00	H370FM-4044-30

Product range

d1	d1	d2	d3	b1	b2	Part No.
	Tolerance	g ³⁾	d13 ³⁾	h13	h13	
[mm	1]	[mm]	[mm]	[mm]	[mm]	
40.0) ,0.025	44.0	52.0	40.0	2.00	H370FM-4044-40
45.0	+0.020	50.0	58.0	50.0	2.00	H370FM-4044-40 H370FM-4550-50 H370FM-5055-50
50.0	+0.120	55.0	63.0	50.0	2.00	H370FM-5055-50

Part No.	b2	b1	d3	d2	d1	d1
	h13	h13	d13 ³⁾	,	Tolerance ³	
	[mm]	[mm]	[mm]	[mm]		[mm]
H370FM-6065-50	2.00	50.0	73.0	65.0	+0.030	60.0
H370FM-7075-50	2.00	50.0	83.0	75.0	+0.150	70.0



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³⁾ After press-fit. Testing methods, page 57

³⁾ After press-fit. Testing methods, page 57