

## According to DIN EN 45545 – iglidur® RW370

Complies with the European fire protection  
standard DIN EN 45545

Flame-retardant

High wear resistance

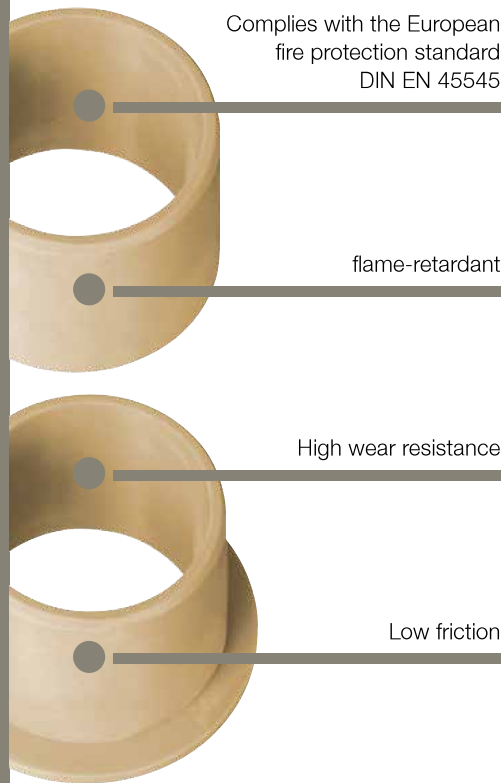
Low friction

Lubrication and maintenance-free

Standard range from stock



Wear-resistant for rail technology



The first iglidur® material that fulfils the European fire safety standard for rail vehicles is suitable for many wear-stressed applications in railway technology due to its complete property profile.



When to use it?

- For applications in rail technology where suitability according to DIN EN 45545 is required
- For highest wear resistance at low to medium pressures
- Low coefficient of friction in dry operation
- Low moisture absorption



When not to use?

- When high pressure loads occur and suitability according to DIN EN 45545 is not needed
  - ▶ iglidur® G, page 79
  - ▶ iglidur® W300, page 153
- When short-term temperatures occur that are higher than +190 °C
  - ▶ iglidur® G, page 79
  - ▶ iglidur® Z, page 255
- When a cost-effective bearing for occasional movements is necessary
  - ▶ iglidur® G, page 79

Typical application areas

- Door guides and hinges
- Rotating joint
- Entrance staircases
- Seat table mechanisms



Available from stock

Detailed information about delivery time online.



Block pricing online

No minimum order value. From batch size 1.



Max. +170 °C  
Min. -50 °C



Ø 6–20 mm

More dimensions upon request



Online product finder

▶ [www.igus.eu/iglidur-finder](http://www.igus.eu/iglidur-finder)

Material properties

General properties	Unit	iglidur® RW370	Testing method
Density	g/cm <sup>3</sup>	1.34	DIN EN ISO 1183-1
Colour		beige	
Max. moisture absorption at +23 °C/50 % r.h.	% weight	0.25	ISO 175
Max. water absorption	% weight	1.2	ISO 62
Coefficient of sliding friction, dynamic, against steel	μ	0.13–0.17	
pv value, max. (dry)	MPa · m/s	1.2	
Mechanical properties			
Flexural modulus	MPa	2,997	DIN EN ISO 178
Flexural strength at +20 °C	MPa	100	DIN EN ISO 178
Compressive strength	MPa	129	
Max. recommended surface pressure (+20 °C)	MPa	75	
Shore-D hardness		80	DIN 53505
Physical and thermal properties			
Max. long-term application temperature	°C	+170	
Max. short-term application temperature	°C	+190	
Min. long-term application temperature	°C	-50	
Heat conductivity	W/m · K	0.22	ASTM C 177
Coefficient of thermal expansion (at +23 °C)	K <sup>-1</sup> · 10 <sup>-5</sup>	5	DIN 53752
Electrical properties			
Specific contact resistance	Ωcm	> 10 <sup>12</sup>	DIN IEC 93
Surface resistance	Ω	> 10 <sup>12</sup>	DIN 53482

Table 01: Material properties table

Radiation resistance

Plain bearings made from iglidur® RW370 are resistant to radiation up to an intensity of applications 3 · 10<sup>2</sup> Gy.

UV resistance

When subjected to UV radiation, iglidur® RW370 plain bearings change colour. However, hardness, compressive strength and the wear resistance of the material do not change.

Medium	Resistance
Alcohol	+ to 0
Hydrocarbons	-
Greases, oils without additives	+
Fuels	+ to 0
Diluted acids	+
Strong acids	-
Diluted alkalines	+
Strong alkalines	-

+ resistant 0 conditionally resistant – not resistant

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

Table 02: Chemical resistance

▶ Chemical table, page 1432

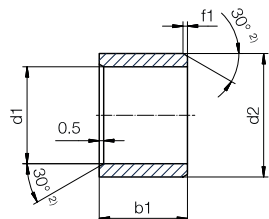
Installation tolerances

iglidur® RW370 plain bearings are standard bearings for shafts with h-tolerance (recommended minimum h9). The bearings are designed for pressfit 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

Diameter d1 [mm]	Shaft h9 [mm]	iglidur® RW370 F10 [mm]	Housing H7 [mm]
up to 3	0–0.025	+0.006 +0.046	0 +0.010
> 3 to 6	0–0.030	+0.010 +0.058	0 +0.012
> 6 to 10	0–0.036	+0.013 +0.071	0 +0.015
> 10 to 18	0–0.043	+0.016 +0.086	0 +0.018
> 18 to 30	0–0.052	+0.020 +0.104	0 +0.021
> 30 to 50	0–0.062	+0.025 +0.125	0 +0.025
> 50 to 80	0–0.074	+0.030 +0.150	0 +0.030

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



Order key

Type	Dimensions [mm]
<b>RW370 S M-0608-06</b>	
iglidur® material	
Form S	
Metric	
Inner-Ø d1	
Outer-Ø d2	
Length b1	

**i** Dimensions according to ISO 3547-1 and special dimensions

<sup>2)</sup> Thickness < 1 mm: chamfer = 20°

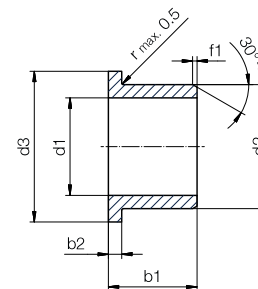
Chamfer in relation to the d1

d1 [mm]:	Ø 1-6	Ø 6-12	Ø 12-30	Ø > 30
f [mm]:	0.3	0.5	0.8	1.2

#### Dimensions [mm]

d1	d1-Tolerance <sup>3)</sup>	d2	b1 h13	Part No.
6.0	+0.010 +0.058	8.0	6.0	<b>RW370SM-0608-06</b>
8.0	+0.013 +0.071	10.0	10.0	<b>RW370SM-0810-10</b>
10.0	+0.013 +0.071	12.0	10.0	<b>RW370SM-1012-10</b>
12.0	+0.016 +0.086	14.0	12.0	<b>RW370SM-1214-12</b>
16.0	+0.016 +0.086	18.0	15.0	<b>RW370SM-1618-15</b>
20.0	+0.020 +0.104	23.0	20.0	<b>RW370SM-2023-20</b>

<sup>3)</sup> After press-fit. Testing methods ► Page 57



Order key

Type	Dimensions [mm]
<b>RW370 F M-0608-08</b>	
iglidur® material	
Form F	
Metric	
Inner-Ø d1	
Outer-Ø d2	
Length b1	

**i** Dimensions according to ISO 3547-1 and special dimensions

<sup>2)</sup> Thickness < 1 mm: chamfer = 20°

Chamfer in relation to the d1

d1 [mm]:	Ø 1-6	Ø 6-12	Ø 12-30	Ø > 30
f [mm]:	0.3	0.5	0.8	1.2

#### Dimensions [mm]

d1	d1-Tolerance <sup>3)</sup>	d2	d3 d13	b1 h13	b2 -0.14	Part No.
6.0	+0.010 +0.058	8.0	12.0	8.0	1.0	<b>RW370FM-0608-08</b>
8.0	+0.013 +0.071	10.0	15.0	9.5	1.0	<b>RW370FM-0810-09</b>
10.0	+0.013 +0.071	12.0	18.0	9.0	1.0	<b>RW370FM-1012-09</b>
12.0	+0.016 +0.086	14.0	20.0	12.0	1.0	<b>RW370FM-1214-12</b>
16.0	+0.016 +0.086	18.0	24.0	12.0	1.0	<b>RW370FM-1517-12</b>
20.0	+0.020 +0.104	23.0	30.0	21.5	1.5	<b>RW370FM-2023-21</b>

<sup>3)</sup> After press-fit. Testing methods ► Page 57



Couldn't find your size?

Do you need another length, other dimensions or tolerances? You need a particular design or alternative for your application? Please call us. igus® listens to your needs and provides you a solution very quickly.