



## Specialist for oscillating, rolling applications and more

Low coefficient of friction and wear on almost every shaft

### iglide® P210



#### When to use it?

- When a universal plain bearing for use in a moist environment is required
- When a wear-resistant plain bearing for oscillating applications at medium loads is required
- When edge loads and shocks occur
- When the surface pressure of iglide® J is insufficient



#### When not to use?

- When a universal plain bearing with the largest possible range of dimensions is required  
*iglide® G*
- When a plain bearing for highly loaded pivoting applications is required  
*iglide® Q, iglide® Q2*
- When temperatures are higher than +212°F  
*iglide® G, iglide® J350*



Ø  
4.0 – 50mm  
1/8 - 2 1/4 in.

● Material available as:



Bar stock, round bar  
Page 761



Bar stock, plate  
Page 783



tribo-tape liner  
Page 791



Piston rings  
Page 685



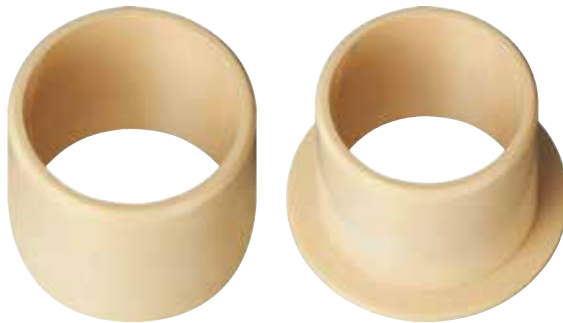
Two hole flange bearings  
Page 709



Molded special parts  
Page 721



igubal® spherical balls  
Page 965



## Specialist for oscillating, rolling applications and more

### Low coefficient of friction and wear on almost every shaft

This versatile material has already proven its worth in many customer-specific solutions and as a bar stock material. Clip-on or preloaded designs as well as vehicle interior applications are possible. Now available in a standard size range from stock.

- Low moisture absorption
- Versatile: performance on many different shafts
- Suitable for high edge pressures
- Self-lubricating
- Maintenance-free

#### Typical application areas

- Agricultural machines
- Furniture/Industrial design
- Textile industry
- Doors and gates
- Mechanical engineering



#### Available from stock

Detailed information about delivery time online.



#### Online ordering

Including delivery times, prices, online tools

#### Descriptive technical specifications

Wear resistance at +73°F	-	<div style="width: 80%; background-color: #0070C0;"></div>	+
Wear resistance at +194°F	-	<div style="width: 80%; background-color: #0070C0;"></div>	+
Wear resistance at +302°F	-	<div style="width: 60%; background-color: #0070C0;"></div>	+
Low coefficient of friction	-	<div style="width: 100%; background-color: #0070C0;"></div>	+
Low moisture absorption	-	<div style="width: 80%; background-color: #0070C0;"></div>	+
Wear resistance under water	-	<div style="width: 60%; background-color: #0070C0;"></div>	+
High media resistance	-	<div style="width: 60%; background-color: #0070C0;"></div>	+
Resistant to edge pressures	-	<div style="width: 100%; background-color: #0070C0;"></div>	+
Suitable for shock and impact loads	-	<div style="width: 100%; background-color: #0070C0;"></div>	+
Resistant to dirt	-	<div style="width: 80%; background-color: #0070C0;"></div>	+



Online product finder  
[www.igus.com/iglifinder](http://www.igus.com/iglifinder)



Online service life calculation  
[www.igus.com/iglide-expert](http://www.igus.com/iglide-expert)

General properties			Testing method
Density	g/cm <sup>3</sup>	1.40	
Color		yellow	
Max. moisture absorption at +73°F and 50% r.h.	% weight	0.3	DIN 53495
Max. moisture absorption	% weight	0.5	
Coefficient of friction, dynamic, against steel	μ	0.07 – 0.19	
pv value, max. (dry)	psi · fpm	11,500	
Mechanical properties			
Flexural modulus	psi	362,594	DIN 53457
Flexural strength at +68°F	psi	10,153	DIN 53452
Compressive strength	psi	7,252	
Max. recommended surface pressure (+68°F)	psi	7,252	
Shore D hardness		75	DIN 53505
Physical and thermal properties			
Max. application temperature long-term	°F	+212	
Max. application temperature short-term	°F	+320	
Min. application temperature	°F	-40	
Thermal conductivity	W/m · K	0.25	ASTM C 177
Coefficient of thermal expansion (at +73°F)	K <sup>-1</sup> · 10 <sup>-5</sup>	8	DIN 53752
Electrical properties			
Specific contact resistance	Ωcm	> 10 <sup>12</sup>	DIN IEC 93
Surface resistance	Ω	> 10 <sup>11</sup>	DIN 53482



-40°F up to +266°F



7,252psi



**Table 01: Material properties**

iglide® P210 plain bearings provide the user with versatile all-round bearings, which have proven to have above average service life, primarily in pivoting applications at medium loads of up to 2,901psi.

### Moisture absorption

Under standard climatic conditions, the moisture absorption of iglide® P210 plain bearings is approximately 0.3% weight. The saturation limit in water is 0.5% weight. This low moisture absorption is well below the values of iglide® G.

### Vacuum

In vacuum, any present moisture is released as vapor. The use in vacuum is only possible to a limited extent.

### Radiation resistance

Plain bearings made from iglide® P210 have limited use under radioactive radiation. They are resistant to radiation up to an intensity of 3 · 10<sup>2</sup>Gy.

### Resistance to weathering

iglide® P210 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 iglide® P210 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 iglide® P210 at radial loads. At the maximum recommended surface pressure of 7,252psi at room temperature the deformation is less than 3%.

► Surface pressure, **Page 50**

### Permissible surface speeds

Plain bearings made from iglide® P210 are maintenance-free, they are developed for low to medium surface speeds. The maximum values given in table 03 can only be achieved at a very low surface pressure. The maximum speed given is the speed at which an increase up to the continuous use temperature occurs due to friction.

► Surface speed, **Page 44**

## Temperature

Due to its maximum long-term application temperature of +212°F, iglide® P210 is suitable for a wide range of applications. If even higher temperatures are required, iglide® G is also available with a max. long-term application temperature of +266°F. The temperatures prevailing in the bearing system also have an influence on the wear. The wear rises with increasing temperatures. For temperatures over +122°F an additional securing is required.

- ▶ Application temperatures, **Page 48**
- ▶ Additional securing, **Page 48**

## Friction and wear

Similar to wear resistance, the coefficient of friction  $\mu$  also changes with the surface speed and load (diagrams O4 and O5).

- ▶ Coefficient of friction and surfaces, **Page 47**
- ▶ Wear resistance, **Page 50**

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

All information given at room temperature [+68°F]

### Table 02: Chemical resistance

- ▶ Chemical table, **Page 1762**

## Installation tolerances

iglide® P210 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 E10 tolerances. For particular dimensions the tolerance differs depending on the wall thickness (please see product range table).

- ▶ Testing methods, **Page 57**
- ▶ Tolerance table, **Page 58**

For Inch Size Bearings		
Length Tolerance (b1)		Length of Chamfer (f) Based on d1
Length (inches)	Tolerance (h13) (inches)	
0.1181 to 0.2362	-0.0000 /-0.0071	f = .012 → d <sub>1</sub> .040" - .236"
0.2362 to 0.3937	-0.0000 /-0.0087	f = .019 → d <sub>1</sub> > .236" - .472"
0.3937 to 0.7086	-0.0000 /-0.0106	f = .031 → d <sub>1</sub> > .472" - 1.18"
0.7086 to 1.1811	-0.0000 /-0.0130	f = .047 → d <sub>1</sub> > 1.18"
1.1811 to 1.9685	-0.0000 /-0.0154	
1.9685 to 3.1496	-0.0000 /-0.0181	

## Shaft materials

Diagram O6 shows results of testing different shaft materials with plain bearings made from iglide® P210. For rotational movements at radial loads below 145psi, iglide® P210 has generally very low wear. Wear is only significantly higher in combination with HR carbon steel shafts. Generally, rotational wear will be higher than for a pivoting application of equal load. This is only reversed at loads above 3,626psi (diagram O7).

- ▶ Shaft materials, **Page 52**

		Rotating	Oscillating	linear
long-term	fpm	197	138	591
short-term	fpm	394	276	787

Table 03: Maximum surface speeds

	Dry	Greases	Oil	Water
Coefficient of friction $\mu$	0.07 - 0.19	0.09	0.04	0.04

Table 04: Coefficient of friction against steel (Ra = 1  $\mu$ m, 50HRC)

$\varnothing$ d1 [mm]	Housing		Plain bearing		Shaft	
	H7 [mm]	E10 [mm]	E10 [mm]	h9 [mm]		
0 - 3	+0.000	+0.010	+0.014	+0.054	-0.025	+0.000
> 3 - 6	+0.000	+0.012	+0.020	+0.068	-0.030	+0.000
> 6 - 10	+0.000	+0.015	+0.025	+0.083	-0.036	+0.000
> 10 - 18	+0.000	+0.018	+0.032	+0.102	-0.043	+0.000
> 18 - 30	+0.000	+0.021	+0.040	+0.124	-0.052	+0.000
> 30 - 50	+0.000	+0.025	+0.050	+0.150	-0.062	+0.000
> 50 - 80	+0.000	+0.030	+0.060	+0.180	-0.074	+0.000
> 80 - 120	+0.000	+0.035	+0.072	+0.212	-0.087	+0.000
> 120 - 180	+0.000	+0.040	+0.085	+0.245	-0.100	+0.000

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

For Metric Size Bearings		
Length Tolerance (b1)		Length of Chamfer (f) Based on d1
Length (mm)	Tolerance (h13) (mm)	
1 to 3	-0 /-140	f = 0.3 → d <sub>1</sub> 1 - 6 mm
> 3 to 6	-0 /-180	f = 0.5 → d <sub>1</sub> > 6 - 12 mm
> 6 to 10	-0 /-220	f = 0.8 → d <sub>1</sub> > 12 - 30 mm
>10 to 18	-0 /-270	f = 1.2 → d <sub>1</sub> > 30 mm
>18 to 30	-0 /-330	
>30 to 50	-0 /-390	
>50 to 80	-0 /-460	

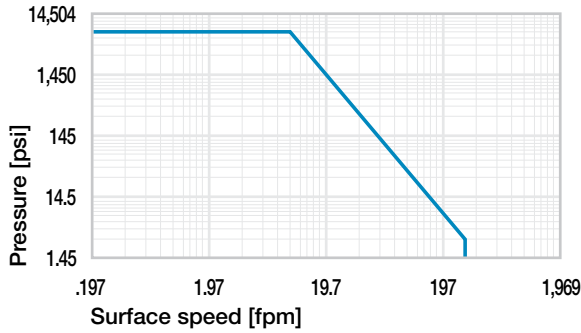


Diagram 01: Permissible pv values for iglide® P210 plain bearings with a wall thickness of 1mm, dry operation against a steel shaft, at +68°F, mounted in a steel housing

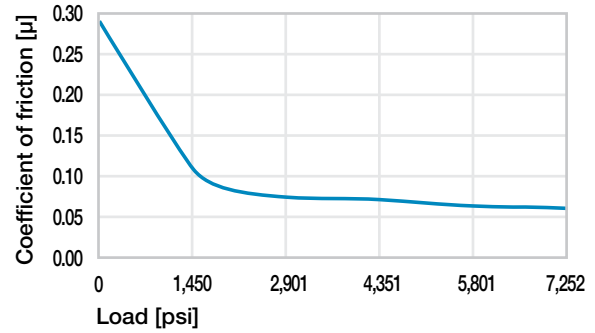


Diagram 05: Coefficient of friction as a function of the load,  $v = 1.97\text{fpm}$

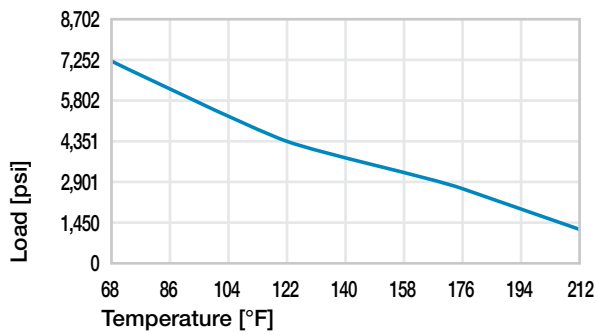


Diagram 02: Maximum recommended surface pressure as a function of temperature (7,252psi at +68°F)

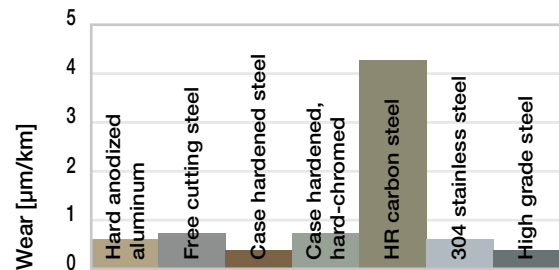


Diagram 06: Wear, rotating with different shaft materials, pressure,  $p = 145\text{psi}$ ,  $v = 59\text{fpm}$

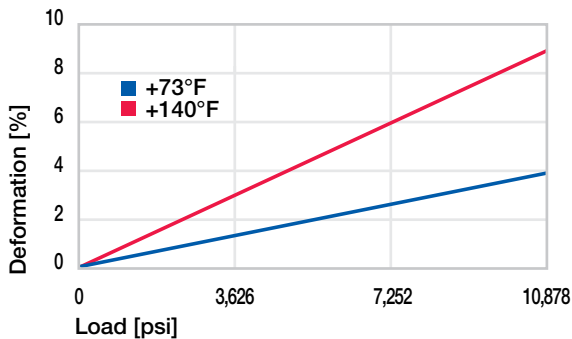


Diagram 03: Deformation under pressure and temperature

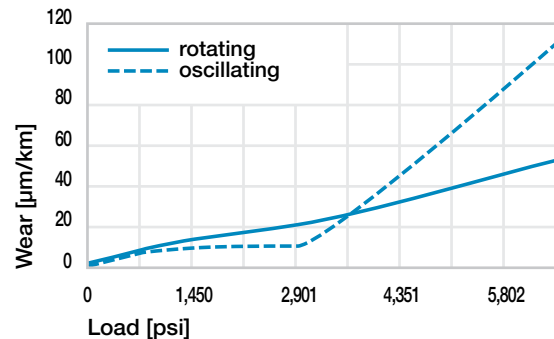


Diagram 07: Wear for oscillating and rotating applications with shaft material case hardened and ground steel, as a function of the load

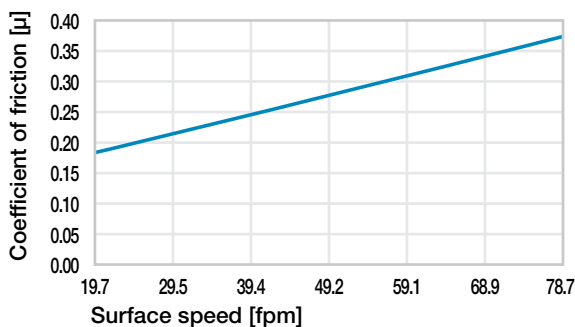
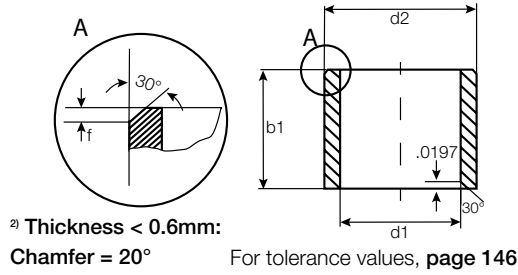


Diagram 04: Coefficient of friction as a function of the surface speed,  $p = 145\text{psi}$

# Bearing technology | Plain bearing | iglide® P210

## Sleeve bearing (form S), inch



Order key

Type	Dimensions
<b>P210 S I -04 05-04</b>	
iglide® material	Form S (sleeve)
Inch	Inner Ø d1 (mm)
	Outer Ø d2 (mm)
	Length b1 (mm)

Chamfer in relation to d1

\*Based on steel housing bore

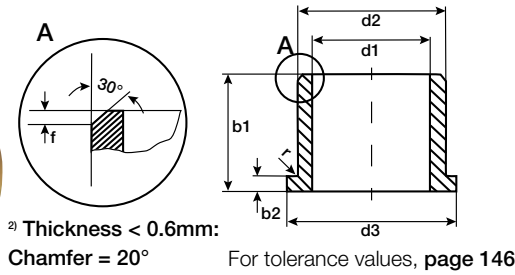
d1 [inch]	Ø .040-.236	Ø >.236-.472	Ø >.472-1.18	Ø > 1.18
f [inch]	.012	.019	.031	.047

Part Number	d1	d2	b1	I.D. After Pressfit*		Housing Bore		Shaft Size	
				Min.	Max.	Min.	Max.	Min.	Max.
P210SI-0203-03	1/8	3/16	3/16	.1251	.1269	.1873	.1878	.1236	.1243
P210SI-0304-04	3/16	1/4	1/4	.1873	.1892	.2497	.2503	.1858	.1865
P210SI-0304-06	3/16	1/4	3/8			.2497	.2503	.1858	.1865
P210SI-0405-06	1/4	5/16	3/8	.2498	.2521	.3122	.3128	.2481	.2490
P210SI-0405-08	1/4	5/16	1/2			.3122	.3128	.2481	.2490
P210SI-0506-04	5/16	3/8	1/4	.3125	.3148	.3747	.3753	.3106	.3115
P210SI-0506-06	5/16	3/8	3/8			.3747	.3753	.3106	.3115
P210SI-0506-08	5/16	3/8	1/2			.3747	.3753	.3106	.3115
P210SI-0607-04	3/8	15/32	1/4	.3750	.3773	.4684	.4691	.3731	.3740
P210SI-0607-06	3/8	15/32	3/8			.4684	.4691	.3731	.3740
P210SI-0607-08	3/8	15/32	1/2			.4684	.4691	.3731	.3740
P210SI-0607-10	3/8	15/32	5/8			.4684	.4691	.3731	.3740
P210SI-0607-12	3/8	15/32	3/4			.4684	.4691	.3731	.3740
P210SI-0708-08	7/16	17/32	1/2			.4379	.4406	.5309	.5316
P210SI-0708-12	7/16	17/32	3/7	.5309	.5316			.4355	.4365
P210SI-0809-04	1/2	19/32	1/4	.5003	.5030	.5934	.5941	.4980	.4990
P210SI-0809-06	1/2	19/32	3/8			.5934	.5941	.4980	.4990
P210SI-0809-08	1/2	19/32	1/2			.5934	.5941	.4980	.4990
P210SI-0809-10	1/2	19/32	5/8			.5934	.5941	.4980	.4990
P210SI-0809-12	1/2	19/32	3/4			.5934	.5941	.4980	.4990
P210SI-0809-16	1/2	19/32	1			.5934	.5941	.4980	.4990
P210SI-0910-08	9/16	21/32	1/2	.5627	.5655	.6559	.6566	.5605	.5615
P210SI-0910-10	9/16	21/32	5/8			.6559	.6566	.5605	.5615
P210SI-0910-12	9/16	21/32	3/4			.6559	.6566	.5605	.5615
P210SI-1011-08	5/8	23/32	1/2	.6253	.6280	.7184	.7192	.6230	.6240
P210SI-1011-12	5/8	23/32	3/4			.7184	.7192	.6230	.6240
P210SI-1011-16	5/8	23/32	1			.7184	.7192	.6230	.6240
P210SI-1214-08	3/4	7/8	1/2	.7505	.7541	.8747	.8755	.7479	.7491
P210SI-1214-12	3/4	7/8	3/4			.8747	.8755	.7479	.7491
P210SI-1214-16	3/4	7/8	1			.8747	.8755	.7479	.7491
P210SI-1416-08	7/8	1	1/2	.8757	.8791	.9997	1.0050	.8729	.8741
P210SI-1416-12	7/8	1	3/4			.9997	1.0050	.8729	.8741
P210SI-1416-16	7/8	1	1			.9997	1.0050	.8729	.8741
P210SI-1618-08	1	1 1/8	1/2	1.0007	1.0041	1.1247	1.1255	.9979	.9991

Part Number	d1	d2	b1	I.D. After Pressfit*		Housing Bore		Shaft Size	
				Min.	Max.	Min.	Max.	Min.	Max.
P210SI-1618-12	1	1 1/8	3/4	1.0007	1.0041	1.1247	1.1255	.9979	.9991
P210SI-1618-16	1	1 1/8	1			1.1247	1.1255	.9979	.9991
P210SI-1820-12	1 1/8	1 9/32	3/4	1.1254	1.1288	1.2808	1.2818	1.1226	1.1238
P210SI-1820-16	1 1/8	1 9/32	1			1.2808	1.2818	1.1226	1.1238
P210SI-1820-20	1 1/8	1 9/32	1 1/4			1.2808	1.2818	1.1226	1.1238
P210SI-2022-12	1 1/4	1 13/32	3/4	1.2508	1.2548	1.4058	1.4068	1.2472	1.2488
P210SI-2022-16	1 1/4	1 13/32	1			1.4058	1.4068	1.2472	1.2488
P210SI-2022-20	1 1/4	1 13/32	1 1/4			1.4058	1.4068	1.2472	1.2488
P210SI-2426-16	1 1/2	1 21/32	1	1.5008	1.5048	1.6558	1.6568	1.4972	1.4988
P210SI-2426-24	1 1/2	1 21/32	1 1/2			1.6558	1.6568	1.4972	1.4988
P210SI-2629-16	1 5/8	1 25/32	1	1.6258	1.6297	1.7808	1.7818	1.6222	1.6238
P210SI-2629-24	1 5/8	1 25/32	1 1/2			1.7808	1.7818	1.6222	1.6238
P210SI-2831-16	1 3/4	1 15/16	1	1.7507	1.7547	1.9371	1.9381	1.7471	1.7487
P210SI-2831-32	1 3/4	1 15/16	2			1.9371	1.9381	1.7471	1.7487
P210SI-3033-16	1 7/8	2 1/16	1	1.8757	1.8796	2.0621	2.0633	1.8721	1.8737
P210SI-3033-32	1 7/8	2 1/16	2			2.0621	2.0633	1.8721	1.8737
P210SI-3235-16	2	2 3/16	1	2.0011	2.0057	2.1871	2.1883	1.9969	1.9981
P210SI-3235-32	2	2 3/16	2			2.1871	2.1883	1.9969	1.9981
P210SI-3640-16	2 1/4	2 1/2	1	2.2524	2.2571	2.5000	2.5012	2.2471	2.2500

# Bearing technology | Plain bearing | iglide® P210

## Flange bearing (form F), inch



### Order key

Type	Dimensions
<b>P210 F I -06 08-04</b>	
iglide® material	Inner Ø d1 (mm)
Form F (flange)	Outer Ø d2 (mm)
Inch	Length b1 (mm)

#### Chamfer in relation to d1

\*Based on steel housing bore

d1 [inch]	Ø .040-.236	Ø >.236-.472	Ø >.472-1.18	Ø > 1.18
f [inch]	.012	.019	.031	.047

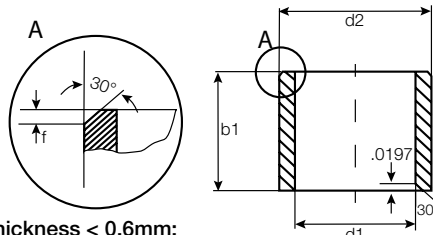
Part Number	d1	d2	b1	d3	b2	I.D. After Pressfit*		Housing Bore		Shaft Size	
						Min.	Max.	Min.	Max.	Min.	Max.
P210FI-0203-03	1/8	3/16	3/16	.312	.0320	.1251	.1269	.1873	.1878	.1236	.1243
P210FI-0304-04	3/16	1/4	1/4	.375	.0320	.1873	.1892	.2497	.2503	.1858	.1865
P210FI-0405-06	1/4	5/16	3/8	.430	.0320	.2498	.2521	.3122	.3128	.2481	.2490
P210FI-0405-08	1/4	5/16	1/2	.500	.0320			.3122	.3128	.2481	.2490
P210FI-0506-04	5/16	3/8	1/4	.500	.0320	.3125	.3148	.3747	.3753	.3106	.3115
P210FI-0506-06	5/16	3/8	3/8	.500	.0320			.3747	.3753	.3106	.3115
P210FI-0506-08	5/16	3/8	1/2	.500	.0320			.3747	.3753	.3106	.3115
P210FI-0607-04	3/8	15/32	1/4	.687	.0460	.3750	.3773	.4684	.4691	.3731	.3740
P210FI-0607-06	3/8	15/32	3/8	.687	.0460			.4684	.4691	.3731	.3740
P210FI-0607-08	3/8	15/32	1/2	.687	.0460			.4684	.4691	.3731	.3740
P210FI-0607-12	3/8	15/32	3/4	.687	.0460			.4684	.4691	.3731	.3740
P210FI-0708-08	7/16	17/32	1/2	.750	.0460	.4379	.4406	.5309	.5316	.4355	.4365
P210FI-0809-04	1/2	19/32	1/4	.875	.0460	.5003	.5030	.5934	.5941	.4980	.4990
P210FI-0809-06	1/2	19/32	3/8	.875	.0460			.5934	.5941	.4980	.4990
P210FI-0809-08	1/2	19/32	1/2	.875	.0460			.5934	.5941	.4980	.4990
P210FI-0809-12	1/2	19/32	3/4	.875	.0460			.5934	.5941	.4980	.4990
P210FI-0809-16	1/2	19/32	1	.875	.0460			.5934	.5941	.4980	.4990
P210FI-1011-08	5/8	23/32	1/2	.937	.0460	.6253	.6280	.7184	.7192	.6230	.6240
P210FI-1011-12	5/8	23/32	3/4	.937	.0460			.7184	.7192	.6230	.6240
P210FI-1011-16	5/8	23/32	1	.937	.0460			.7184	.7192	.6230	.6240
P210FI-1214-08	3/4	7/8	1/2	1.125	.0620	.7505	.7541	.8747	.8755	.7479	.7491
P210FI-1214-12	3/4	7/8	3/4	1.125	.0620			.8747	.8755	.7479	.7491
P210FI-1214-16	3/4	7/8	1	1.125	.0620			.8747	.8755	.7479	.7491
P210FI-1416-08	7/8	1	1/2	1.250	.0620	.8757	.8791	.9997	1.0005	.8729	.8741
P210FI-1416-12	7/8	1	3/4	1.250	.0620			.9997	1.0005	.8729	.8741
P210FI-1416-16	7/8	1	1	1.250	.0620			.9997	1.0005	.8729	.8741
P210FI-1618-08	1	1 1/8	1/2	1.375	.0620	1.0007	1.0041	1.1247	1.1255	.9979	.9991
P210FI-1618-12	1	1 1/8	3/4	1.375	.0620			1.1247	1.1255	.9979	.9991
P210FI-1618-16	1	1 1/8	1	1.375	.0620			1.1247	1.1255	.9979	.9991
P210FI-2022-16	1 1/4	1 13/32	1	1.687	.0780	1.2508	1.2548	1.4058	1.4068	1.2472	1.2488
P210FI-2022-20	1 1/4	1 13/32	1 1/4	1.687	.0780			1.4058	1.4068	1.2472	1.2488
P210FI-2426-16	1 1/2	1 21/32	1	2.000	.0780	1.5008	1.5048	1.6558	1.6568	1.4972	1.4988
P210FI-2426-24	1 1/2	1 21/32	1 1/2	2.000	.0780			1.6558	1.6568	1.4972	1.4988
P210FI-2831-32	1 3/4	1 15/16	2	2.375	.0930	1.7507	1.7547	1.9381	1.9371	1.7471	1.7487
P210FI-3235-32	2	2 3/16	2	2.625	.0930	2.0011	2.0057	2.1871	2.1883	1.9969	1.9981



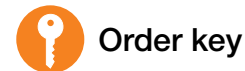
# Bearing technology | Plain bearing | iglide® P210

iglide®  
P210

## Sleeve bearing (form S), metric



<sup>2)</sup> Thickness < 0.6mm:  
Chamfer = 20°  
For tolerance values, page 146



Order key

Type **P210** Dimensions **S M -04 05 -04**

- iglide® material
- Form S (sleeve)
- Metric
- Inner Ø d1 (mm)
- Outer Ø d2 (mm)
- Length b1 (mm)

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

### Chamfer in relation to d1

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

\*Based on steel housing bore

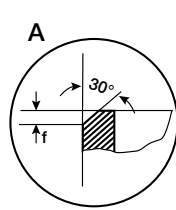
Part Number	d1	d2	b1	I.D. After Pressfit*		Housing Bore		Shaft Size	
				Min.	Max.	Min.	Max.	Min.	Max.
P210SM-0405-04	4.0	5.5	4.0	4.020	4.068	5.500	5.512	3.970	4.000
P210SM-0405-06	4.0	5.5	6.0			5.500	5.512	3.970	4.000
P210SM-0507-05	5.0	7.0	5.0	5.020	5.068	7.000	7.015	4.970	5.000
P210SM-0507-10	5.0	7.0	10.0			7.000	7.015	4.970	5.000
P210SM-0608-06	6.0	8.0	6.0	6.020	6.068	8.000	8.015	5.970	6.000
P210SM-0608-08	6.0	8.0	8.0			8.000	8.015	5.970	6.000
P210SM-0608-10	6.0	8.0	10.0			8.000	8.015	5.970	6.000
P210SM-0810-08	8.0	10.0	8.0	8.025	8.083	10.000	10.015	7.964	8.000
P210SM-0810-10	8.0	10.0	10.0			10.000	10.015	7.964	8.000
P210SM-0810-12	8.0	10.0	12.0			10.000	10.015	7.964	8.000
P210SM-1012-08	10.0	12.0	8.0	10.025	10.083	12.000	12.018	9.964	10.000
P210SM-1012-10	10.0	12.0	10.0			12.000	12.018	9.964	10.000
P210SM-1012-12	10.0	12.0	12.0			12.000	12.018	9.964	10.000
P210SM-1012-15	10.0	12.0	15.0			12.000	12.018	9.964	10.000
P210SM-1012-20	10.0	12.0	20.0			12.000	12.018	9.964	10.000
P210SM-1214-04	12.0	14.0	4.0	12.032	12.102	14.000	14.018	11.957	12.000
P210SM-1214-10	12.0	14.0	10.0			14.000	14.018	11.957	12.000
P210SM-1214-12	12.0	14.0	12.0			14.000	14.018	11.957	12.000
P210SM-1214-15	12.0	14.0	15.0			14.000	14.018	11.957	12.000
P210SM-1214-20	12.0	14.0	20.0			14.000	14.018	11.957	12.000
P210SM-1315-10	13.0	15.0	10.0	13.032	13.102	15.000	15.018	12.957	13.000
P210SM-1315-20	13.0	15.0	20.0			15.000	15.018	12.957	13.000
P210SM-1416-15	14.0	16.0	15.0	14.032	14.102	16.000	16.018	13.957	14.000
P210SM-1416-20	14.0	16.0	20.0			16.000	16.018	13.957	14.000
P210SM-1416-25	14.0	16.0	25.0			16.000	16.018	13.957	14.000
P210SM-1517-15	15.0	17.0	15.0	15.032	15.102	17.000	17.018	14.957	15.000
P210SM-1517-20	15.0	17.0	20.0			17.000	17.018	14.957	15.000
P210SM-1517-25	15.0	17.0	25.0			17.000	17.018	14.957	15.000
P210SM-1618-15	16.0	18.0	15.0	16.032	16.102	18.000	18.018	15.957	16.000
P210SM-1618-20	16.0	18.0	20.0			18.000	18.018	15.957	16.000
P210SM-1618-25	16.0	18.0	25.0			18.000	18.018	15.957	16.000
P210SM-1820-15	18.0	20.0	15.0	18.032	18.102	20.000	20.021	17.957	18.000
P210SM-1820-20	18.0	20.0	20.0			20.000	20.021	17.957	18.000
P210SM-1820-25	18.0	20.0	25.0			20.000	20.021	17.957	18.000

# Bearing technology | Plain bearing | iglide® P210

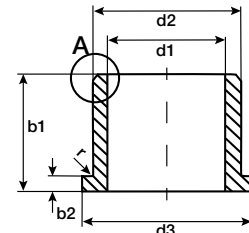
## Sleeve bearing (form S), metric

Part Number	d1	d2	b1	I.D. After Pressfit*		Housing Bore		Shaft Size	
				Min.	Max.	Min.	Max.	Min.	Max.
P210SM-2023-10	20.0	23.0	10.0	20.040	20.124	23.000	23.021	19.948	20.000
P210SM-2023-15	20.0	23.0	15.0			23.000	23.021	19.948	20.000
P210SM-2023-20	20.0	23.0	20.0			23.000	23.021	19.948	20.000
P210SM-2023-25	20.0	23.0	25.0			23.000	23.021	19.948	20.000
P210SM-2023-30	20.0	23.0	30.0	20.040	20.124	23.000	23.021	19.948	20.000
P210SM-2225-15	22.0	25.0	15.0	22.040	22.124	25.000	25.021	21.948	22.000
P210SM-2225-20	22.0	25.0	20.0			25.000	25.021	21.948	22.000
P210SM-2225-25	22.0	25.0	25.0			25.000	25.021	21.948	22.000
P210SM-2225-30	22.0	25.0	30.0			25.000	25.021	21.948	22.000
P210SM-2427-15	24.0	27.0	15.0	24.040	24.124	27.000	27.021	23.948	24.000
P210SM-2427-20	24.0	27.0	20.0			27.000	27.021	23.948	24.000
P210SM-2427-25	24.0	27.0	25.0			27.000	27.021	23.948	24.000
P210SM-2427-30	24.0	27.0	30.0			27.000	27.021	23.948	24.000
P210SM-2528-15	25.0	28.0	15.0	25.040	25.124	28.000	28.021	24.948	25.000
P210SM-2528-20	25.0	28.0	20.0			28.000	28.021	24.948	25.000
P210SM-2528-25	25.0	28.0	25.0			28.000	28.021	24.948	25.000
P210SM-2528-30	25.0	28.0	30.0			28.000	28.021	24.948	25.000
P210SM-2832-20	28.0	32.0	20.0	28.040	28.124	32.000	32.025	27.948	28.000
P210SM-2832-25	28.0	32.0	25.0			32.000	32.025	27.948	28.000
P210SM-2832-30	28.0	32.0	30.0			32.000	32.025	27.948	28.000
P210SM-3034-20	30.0	34.0	20.0	30.040	30.124	34.000	34.025	29.948	30.000
P210SM-3034-25	30.0	34.0	25.0			34.000	34.025	29.948	30.000
P210SM-3034-30	30.0	34.0	30.0			34.000	34.025	29.948	30.000
P210SM-3034-40	30.0	34.0	40.0			34.000	34.025	29.948	30.000
P210SM-3236-20	32.0	36.0	20.0	32.050	32.150	36.000	36.025	31.938	32.000
P210SM-3236-30	32.0	36.0	30.0			36.000	36.025	31.938	32.000
P210SM-3236-40	32.0	36.0	40.0			36.000	36.025	31.938	32.000
P210SM-3539-20	35.0	39.0	20.0	35.050	35.150	39.000	39.025	34.938	35.000
P210SM-3539-30	35.0	39.0	30.0			39.000	39.025	34.938	35.000
P210SM-3539-40	35.0	39.0	40.0			39.000	39.025	34.938	35.000
P210SM-3539-50	35.0	39.0	50.0			39.000	39.025	34.938	35.000
P210SM-4044-20	40.0	44.0	20.0			40.050	40.150	44.000	44.025
P210SM-4044-30	40.0	44.0	30.0	44.000	44.025			39.938	40.000
P210SM-4044-40	40.0	44.0	40.0	44.000	44.025			39.938	40.000
P210SM-4044-50	40.0	44.0	50.0	44.000	44.025			39.938	40.000
P210SM-4550-20	45.0	50.0	20.0	45.050	45.150	50.000	50.025	44.938	45.000
P210SM-4550-30	45.0	50.0	30.0			50.000	50.025	44.938	45.000
P210SM-4550-40	45.0	50.0	40.0			50.000	50.025	44.938	45.000
P210SM-4550-50	45.0	50.0	50.0			50.000	50.025	44.938	45.000
P210SM-5055-20	50.0	55.0	20.0	50.050	50.150	55.000	55.030	49.938	50.000
P210SM-5055-30	50.0	55.0	30.0			55.000	55.030	49.938	50.000
P210SM-5055-40	50.0	55.0	40.0	50.050	50.150	55.000	55.030	49.938	50.000
P210SM-5055-50	50.0	55.0	50.0			55.000	55.030	49.938	50.000
P210SM-5055-60	50.0	55.0	60.0			55.000	55.030	49.938	50.000

## Flange bearing (form F), metric



<sup>2)</sup> Thickness < 0.6mm:  
Chamfer = 20°



For tolerance values, page 146



### Order key

Type **P210** Dimensions **F M -06 08 -04**

iglide® material	Form F (flange)	Metric	Inner Ø d1 (mm)	Outer Ø d2 (mm)	Length b1 (mm)
------------------	-----------------	--------	-----------------	-----------------	----------------

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

#### Chamfer in relation to d1

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

\*Based on steel housing bore

Part Number	d1 <sup>1)</sup>	d2	d3	b1	b2	I.D. After Pressfit*		Housing Bore		Shaft Size	
						Min.	Max.	Min.	Max.	Min.	Max.
P210FM-0405-06	4.0	5.5	9.5	6.0	0.8	4.020	4.068	5.500	5.512	3.970	4.000
P210FM-0608-04	6.0	8.0	12.0	4.0	1.0			8.000	8.015	5.970	6.000
P210FM-0608-06	6.0	8.0	12.0	6.0	1.0	6.020	6.068	8.000	8.015	5.970	6.000
P210FM-0608-08	6.0	8.0	12.0	8.0	1.0			8.000	8.015	5.970	6.000
P210FM-0810-05	8.0	10.0	15.0	5.5	1.0	8.025	8.083	10.000	10.015	7.964	8.000
P210FM-0810-07	8.0	10.0	15.0	7.5	1.0			10.000	10.015	7.964	8.000
P210FM-0810-09	8.0	10.0	15.0	9.5	1.0			10.000	10.015	7.964	8.000
P210FM-0810-10	8.0	10.0	15.0	10.0	1.0			10.000	10.015	7.964	8.000
P210FM-081016-15	8.0	10.0	16.0	15.0	1.5	10.025	10.083	10.000	10.015	7.964	8.000
P210FM-1012-07	10.0	12.0	18.0	7.0	1.0			12.000	12.018	9.964	10.000
P210FM-1012-09	10.0	12.0	18.0	9.0	1.0			12.000	12.018	9.964	10.000
P210FM-1012-10	10.0	12.0	18.0	10.0	1.0			12.000	12.018	9.964	10.000
P210FM-1012-12	10.0	12.0	18.0	12.0	1.0	12.032	12.102	12.000	12.018	9.964	10.000
P210FM-1012-17	10.0	12.0	18.0	17.0	1.0			12.000	12.018	9.964	10.000
P210FM-1214-07	12.0	14.0	20.0	7.0	1.0			14.000	14.018	11.957	12.000
P210FM-1214-09	12.0	14.0	20.0	9.0	1.0	14.032	14.102	14.000	14.018	11.957	12.000
P210FM-1214-12	12.0	14.0	20.0	12.0	1.0			14.000	14.018	11.957	12.000
P210FM-1214-17	12.0	14.0	20.0	17.0	1.0			14.000	14.018	11.957	12.000
P210FM-1416-12	14.0	16.0	22.0	12.0	1.0	15.032	15.102	16.000	16.018	13.957	14.000
P210FM-1416-17	14.0	16.0	22.0	17.0	1.0			16.000	16.018	13.957	14.000
P210FM-1517-09	15.0	17.0	23.0	9.0	1.0	16.032	16.102	17.000	17.018	14.957	15.000
P210FM-1517-12	15.0	17.0	23.0	12.0	1.0			17.000	17.018	14.957	15.000
P210FM-1517-17	15.0	17.0	23.0	17.0	1.0			17.000	17.018	14.957	15.000
P210FM-1618-12	16.0	18.0	24.0	12.0	1.0	18.032	18.102	18.000	18.018	15.957	16.000
P210FM-1618-17	16.0	18.0	24.0	17.0	1.0			18.000	18.018	15.957	16.000
P210FM-1820-12	18.0	20.0	26.0	12.0	1.0	20.040	20.124	20.000	20.021	17.957	18.000
P210FM-1820-17	18.0	20.0	26.0	17.0	1.0			20.000	20.021	17.957	18.000
P210FM-1820-22	18.0	20.0	26.0	22.0	1.0			20.000	20.021	17.957	18.000
P210FM-2023-11	20.0	23.0	30.0	11.5	1.5	25.040	25.124	23.000	23.021	19.948	20.000
P210FM-2023-16	20.0	23.0	30.0	16.5	1.5			23.000	23.021	19.948	20.000
P210FM-2023-21	20.0	23.0	30.0	21.5	1.5			23.000	23.021	19.948	20.000
P210FM-2528-11	25.0	28.0	35.0	11.5	1.5	28.000	28.021	28.000	28.021	24.948	25.000
P210FM-2528-16	25.0	28.0	35.0	16.5	1.5			28.000	28.021	24.948	25.000
P210FM-2528-21	25.0	28.0	35.0	21.5	1.5			28.000	28.021	24.948	25.000

# Bearing technology | Plain bearing | iglide® P210

## Flange bearing (form F), metric

Part Number	d1 <sup>1)</sup>	d2	d3	b1	b2	I.D. After Pressfit*		Housing Bore		Shaft Size	
			d13	h13	-0.14	Min.	Max.	Min.	Max.	Min.	Max.
P210FM-3034-16	30.0	34.0	42.0	16.0	2.0	30.040	30.124	34.000	34.025	29.948	30.000
P210FM-3034-26	30.0	34.0	42.0	26.0	2.0			34.000	34.025	29.948	30.000
P210FM-3539-16	35.0	39.0	47.0	16.0	2.0	35.050	35.150	39.000	39.025	34.938	35.000
P210FM-3539-26	35.0	39.0	47.0	26.0	2.0			39.000	39.025	34.938	35.000
P210FM-4044-30	40.0	44.0	52.0	30.0	2.0	40.050	40.150	44.000	44.025	39.938	40.000
P210FM-4044-40	40.0	44.0	52.0	40.0	2.0			44.000	44.025	39.938	40.000
P210FM-4550-50	45.0	50.0	58.0	50.0	2.5	45.050	45.150	50.000	50.025	44.938	45.000
P210FM-5055-10	50.0	55.0	63.0	10.0	2.0	50.050	50.150	55.000	55.025	49.938	50.000
P210FM-5055-50	50.0	55.0	63.0	50.0	2.0			55.000	55.025	49.938	50.000