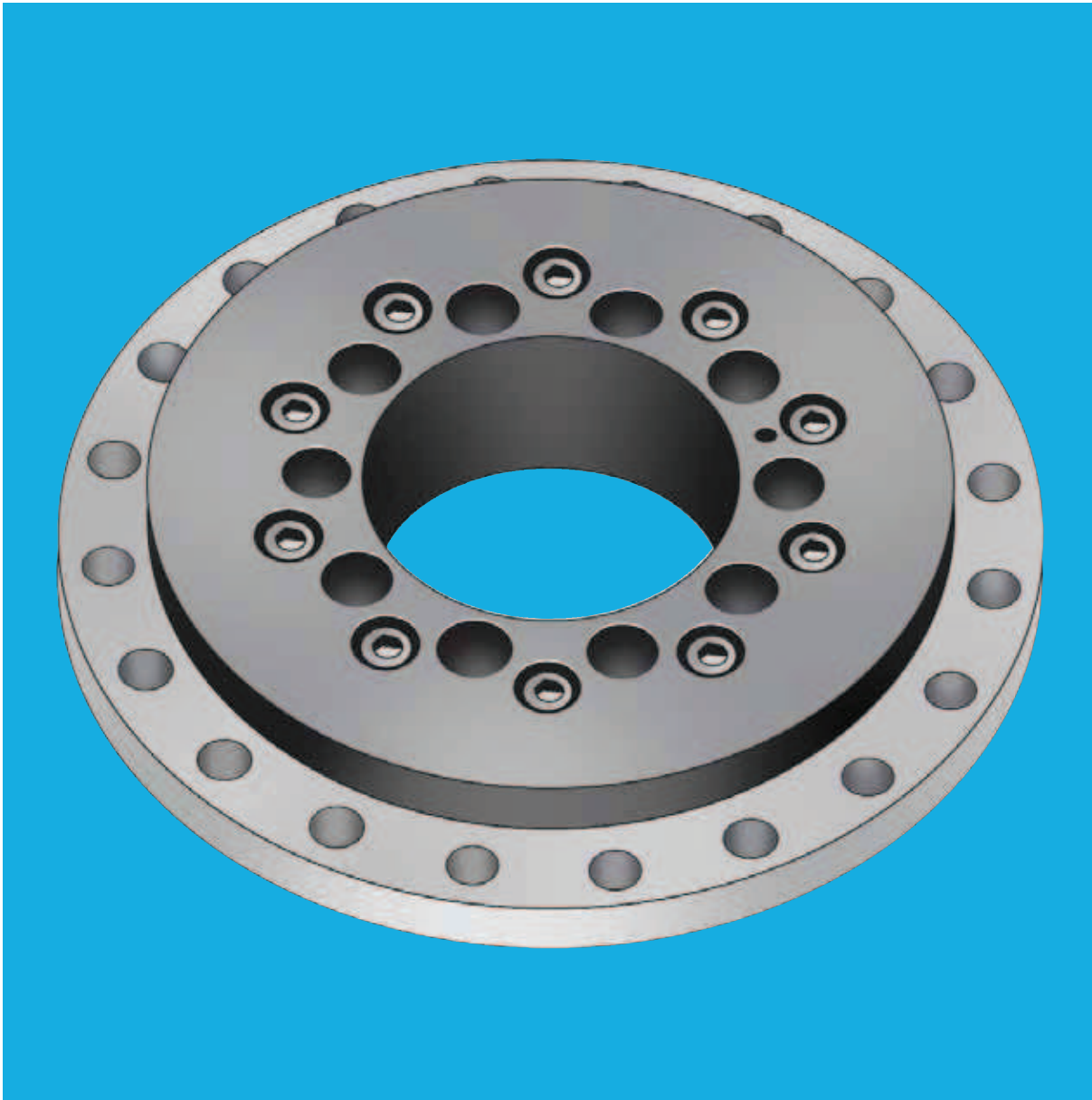




igidur® PRT – Slewing Ring Bearing



Completely maintenance-free

High stiffness

Easy installation

Interchangeable sliding pads

High wear resistance

High load capacity

igidur® PRT

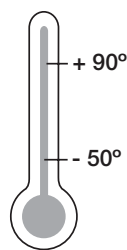
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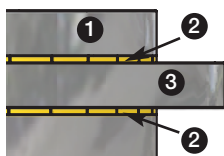


iglidur® PRT | Slewing Ring Bearing

The iglidur® J sliding pads are completely free from maintenance and lubrication. All the housing components are aluminium (exception style 02, which has iglidur® J4 head rings), and all the parallel surfaces of iglidur® J sliding elements are hard anodized. All the fixing screws are stainless steel. The PRT slewing rings are available on request with all metal parts in stainless steel.



2 Styles
5 Dimensions
Ø 30–200 mm



- 1 Style 01:**
Aluminium, hard anodized or stainless steel
- Style 02:**
iglidur® J4 ► page 70.7
- 2 Style 01:**
iglidur® J ► chapter 3
- 3 Style 01 and 02:**
Aluminium, anodized or stainless steel



Phone +49 - 22 03 - 96 49-145
Fax +49 - 22 03 - 96 49-334

iglus® GmbH
51147 Cologne

Internet www.igus.de
E-mail info@igus.de

Price index



Polymer-Slewing Ring Bearing



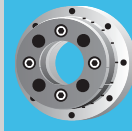
When to use iglidur® PRT:

- When a ready-to-install fit solution is needed
- As a robust and corrosion resistant bearing unit for high loads
- For high tilting moments
- For use with different surrounding media
- For maintenance-free applications without lubrication
- For slow to medium speed



When not to use iglidur® PRT:

- For fast rotations
- When there is not enough driving torque at high loads
- When highest precision is needed

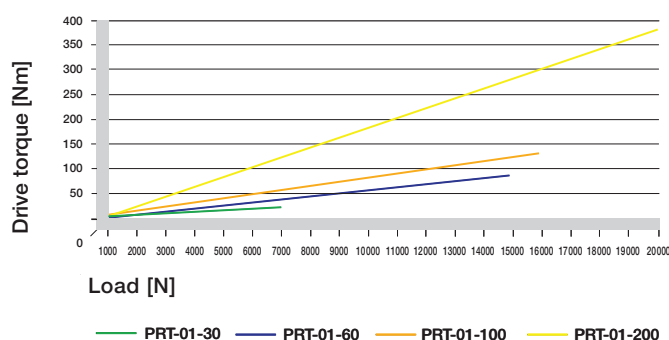


Properties	Unit	PRT-01-30	PRT-01-60	PRT-01-100	PRT-01-150	PRT-01-200	PRT-02-30
Weight	kg	0,4	1,1	1,3	2,2	3,2	0,2
Max. axial load, static	N	27 000	50 000	55 000	80 000	100 000	25000
Max. axial load, dynamic	N	7000	15 000	16 000	25 000	30 000	7000
Max. radial load, static	N	5000	10 000	16 000	25 000	35 000	2500
Max. radial load, dynamic	N	1500	3 000	5 000	8 000	10 000	700
Max. rotat. speed, dry running	rpm	250	200	150	100	80	200
Rigidity, axial	N/μm	100	300	400	450	500	-
Rigidity, radial	N/μm	50	65	65	65	65	-
Max. permissible tilting moment	Nm	200	800	1500	2 000	3800	100

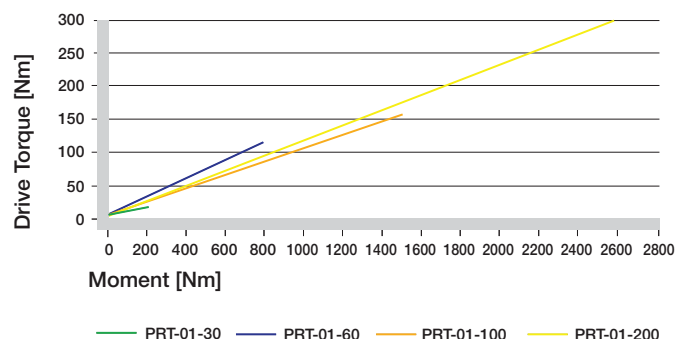


Picture 38.1: Handling- and transportsystem for Semiconductor-Carrier/-Box. The complete system is suitable for the use in cleanrooms, lubrication- and maintenance-free

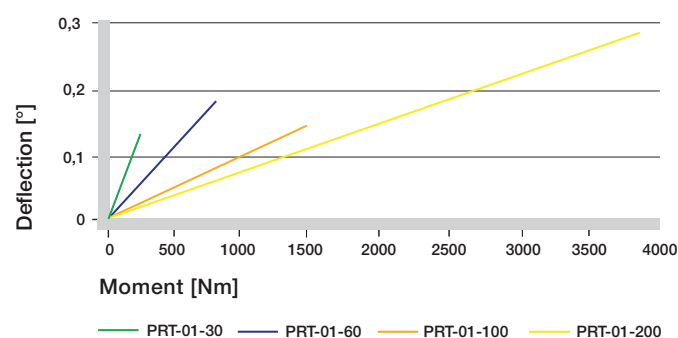
Necessary drive torque versus applied central load



Necessary drive torque versus applied moment



Deflection versus applied moment



All load values assume the PRT is assembled with socket head screws (strength class 8.8) on the outside pitch circle diameter. For the assembly of the PRT the screws have to be inserted to a minimum thread depth of 10 mm.

PRT-01-30: M4, min. 8 screws
PRT-01-60: M5, min. 10 screws
PRT-01-100: M5, min. 12 screws
PRT-01-150: M5, min. 12 screws
PRT-01-200: M6, min. 12 screws

All data can be used for both lateral and horizontal assembly.





iglidur® PRT | Slewing Ring Bearing | Style 01

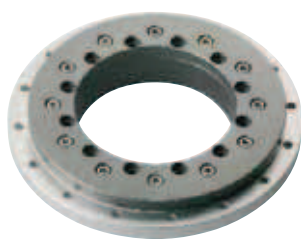
iglidur® PRT

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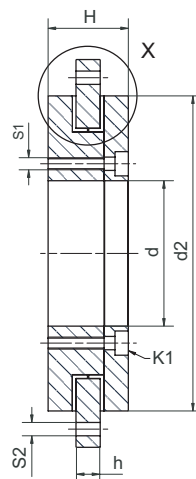
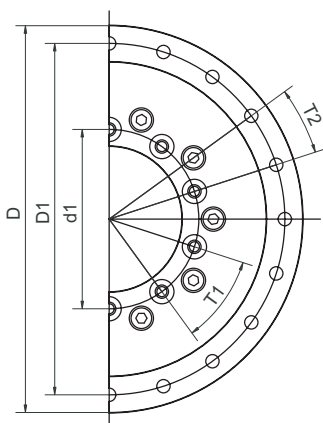
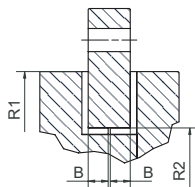
iglus® GmbH
51147 Cologne

Internet www.igus.de
E-mail info@igus.de

38.4



Detail: X



Data in mm

Structure - part. no.
PRT-01-30-ES



Available in stainless steel

Special properties

- Slewing ring with high stiffness
- Easy to install fit, interchangeable iglidur® J sliding pads
- High wear resistance
- Available in aluminium or stainless steel

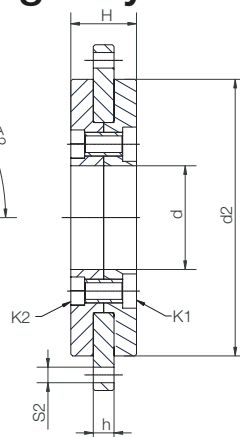
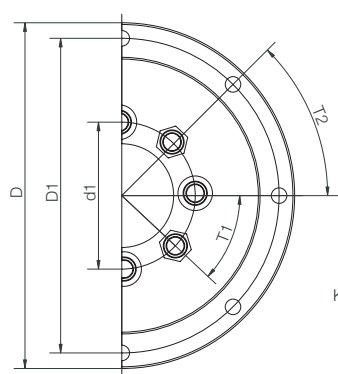
Dimensions [mm]

iglidur® Slewing Ring Bearing PRT

Part No.	D	D1	d1	d	d2	H	h	T1	T2	S1	S2	K1	R1	R2	B
												for screw			
PRT-01-30	100	91	42,5	30	82	29	10	8 x 45°	8 x 45°	M4	4,5	DIN 7984 M4	41	29	4,5
PRT-01-60	160	145	74	60	130	33	10	10 x 36°	20 x 18°	M5	5,5	DIN 912 M5	65	51,5	4,5
PRT-01-100	185	170	112	100	160	34	12	12 x 30°	16 x 22,5°	M5	5,5	DIN 912 M5	80	69	5,5
PRT-01-150	250	235	165	150	220	35	12	12 x 30°	16 x 22,5°	M5	5,5	DIN 912 M5	110	96,5	5,5
PRT-01-200	300	285	215	200	274	38	15	12 x 30°	16 x 22,5°	M6	7,0	DIN 912 M6	137	124	7,0

Please add "ES" to the Part No. for stainless steel

iglidur® PRT | Slewing Ring Bearing | Style 02 NEW!



Outer ring available in stainless steel as an option. Headrings made from iglidur® J4

Special properties

- Slewing ring with very low weight (200g)
- Outer ring made from hard anodized Aluminium or stainless steel
- iglidur® J4 head rings – sliding against the outer ring without lubrication
- Low cost

Dimensions [mm]

iglidur® Slewing Ring Bearing PRT

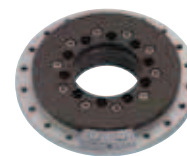
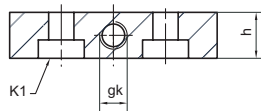
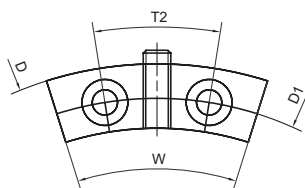
Part No.	D	D1	d1	d	d2	H	h	T1	T2	S2	K1	K2
											for screw	for screw
PRT-02-30-AL/ES	100	91	42,5	30	80	19	6	8x45	8x45	4,5	DIN 7984 M5	DIN 439 M5A2

Please add "ES" to the Part No. for stainless steel or "AL" for aluminium. For example: PRT-02-30-AL

Lifetime calculation, CAD files and much more support ► www.igus.de/en/prt



Hand clamp

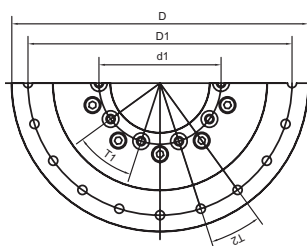


- With 1 Nm screw torque a holding torque up to 10 Nm is possible
- Easy to screw onto outer ring

Picture shows PRT with fitted manual clamp

Part No.	D[mm]	D1[mm]	T2[°]	K1	h[mm]	gk	W[°]
PRT-HK- 60	160	145	20x18	DIN 7984 M5	10	M6	35
PRT-HK-100*	205	185	16x22,5	DIN 7984 M5	12	M6	40
PRT-HK-200*	320	300	16x22,5	DIN 7984 M6	15	M6	40

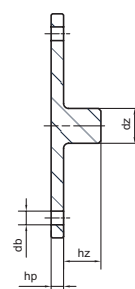
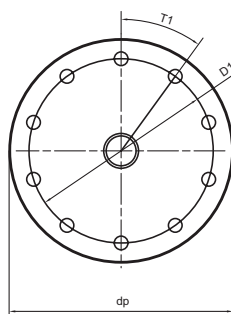
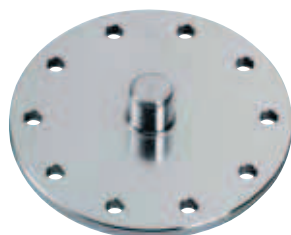
* Only available with large outer rings



Large outer ring

Part No.	D[mm]	D1[mm]	d1[mm]	T1[°]	T2[°]
PRT-01-100-ARG...	205	185	112	12 x 30	16 x 22,5
PRT-01-200-ARG...	320	300	215	12 x 30	16 x 22,5

Drive plate

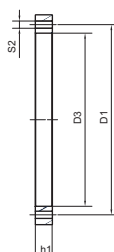
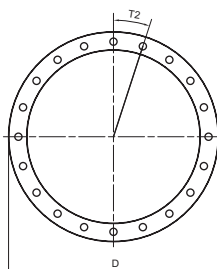
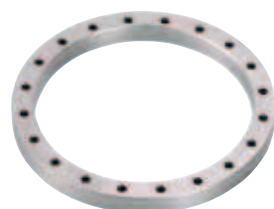


- For quick and easy drive coupling

Picture shows PRT with fitted drive plate

Part No.	dp[mm]	hp[mm]	dz[mm]	hz[mm]	D1[mm]	T1[°]	db[mm]
PRT-AZ-60	90	5	14	15	74	10x36	5,5

Distance rings



- Easier, more flexible mounting
- No bore in the mounting face necessary

Picture shows PRT with fitted distance ring

Part No.	D[mm]	D1[mm]	T2[°]	S2[mm]	D3[mm]	h1[mm]
PRT-01-30-DR	100	91	8x45	4,5	84	11
PRT-01-60-DR	160	145	20x18	5,5	132	13
PRT-01-100-DR	185	170	16x22,5	5,5	162	13
PRT-01-200-DR	300	285	16x22,5	7,0	276	13