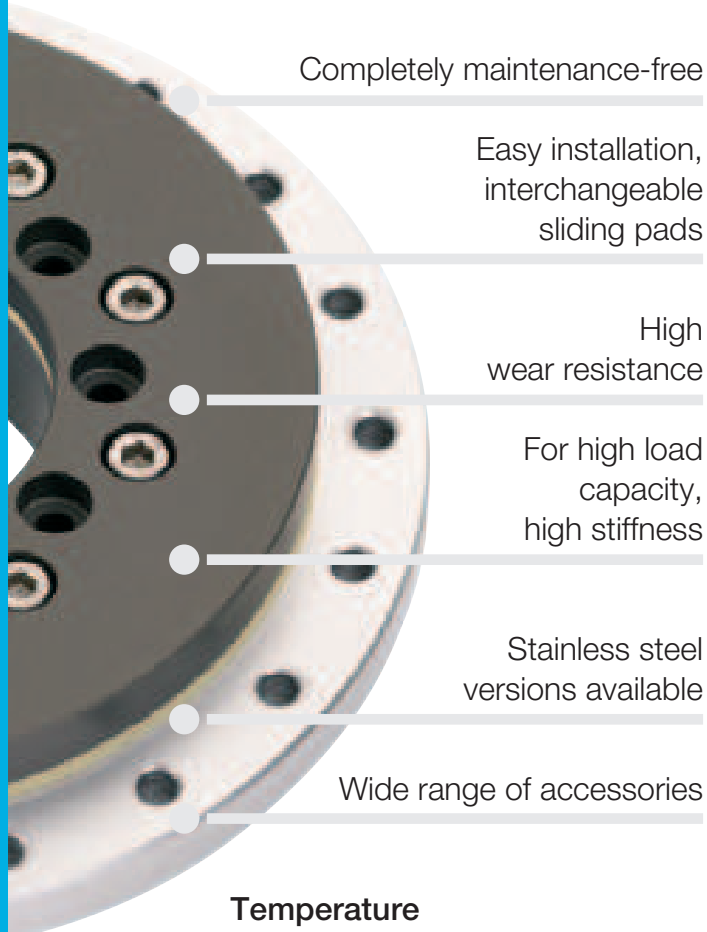


# iglidur® PRT

iglidur® PRT is a Slewing Ring Bearing with the proven advantages of the igus® polymer bearings. The sliding pads made from iglidur® high-performance polymers are completely free from maintenance and lubrication. All the housing components are made from anodized aluminum or stainless steel, the surfaces which mate with the iglidur® sliding pads are all hard anodized. All the fixing screws are stainless steel.



Completely maintenance-free

Easy installation,  
interchangeable  
sliding pads

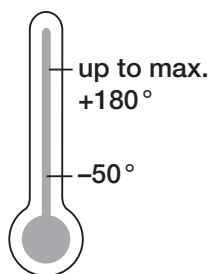
High  
wear resistance

For high load  
capacity,  
high stiffness

Stainless steel  
versions available

Wide range of accessories

**Temperature**  
dependant of type



## When to use it?

- 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
- When a lubrication and maintenance free Slewing Ring Bearing is needed
- For slow to medium speed

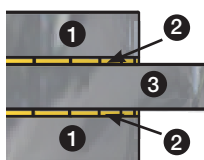


## When not to use it?

- For fast rotations
- With temperatures over +180 °C
- When there is not enough driving torque at high loads
- When highest precision is needed

## Product range

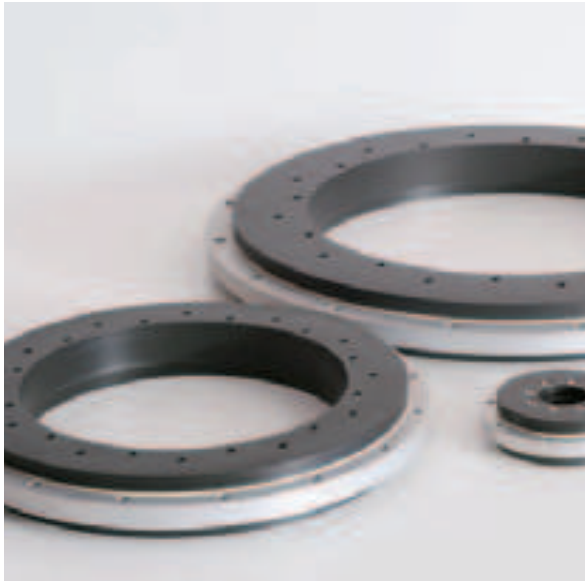
3 types  
42 dimensions  
Ø 20–300 mm



- ① **Type 01:**  
Aluminum, hard anodized,  
or Stainless steel V4A
- Type 02:**  
iglidur® J4 or A180
- ② **Type 01:**  
iglidur® J or H1
- ③ **Type 01 and 02:**  
Aluminum, anodized,  
or Stainless steel V4A



# iglidur® PRT | Application Examples



## Typical sectors of industry and application areas

- Conveyors ● Automation
- Assembly stations ● Theatre/Stage and lighting technology ● Renewable energy etc.

Improve technology and reduce costs – 310 exciting examples for iglidur® plain bearings online

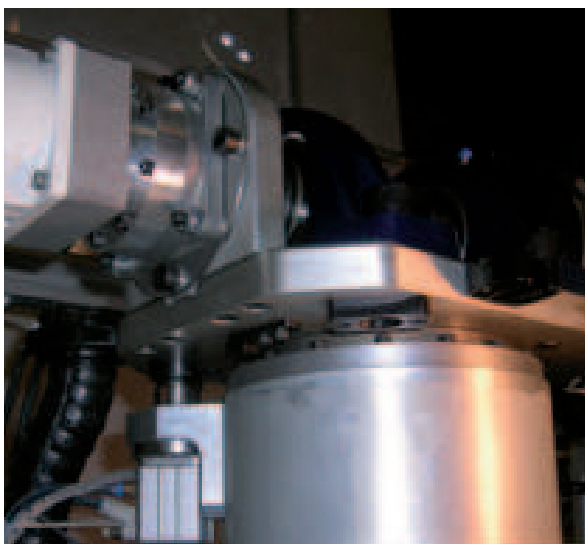
► [www.igus.eu/eu/iglidur-applications](http://www.igus.eu/eu/iglidur-applications)



Handling and conveyance system for semiconductor transport/box.



► [www.igus.eu/movinghead](http://www.igus.eu/movinghead)

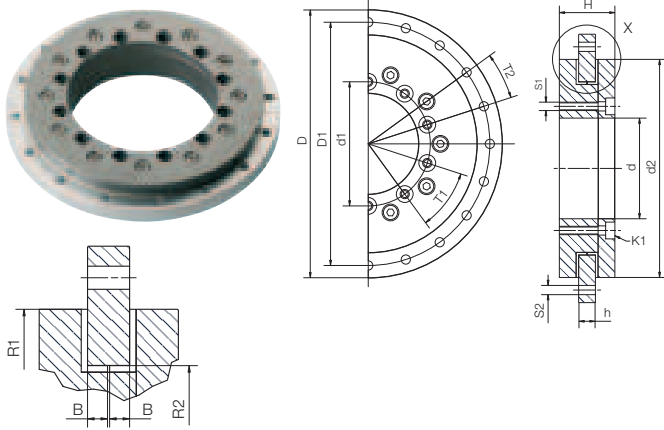


► [www.igus.eu/welding-plant](http://www.igus.eu/welding-plant)



► [www.igus.eu/cnc-machining](http://www.igus.eu/cnc-machining)

## Slewing ring bearing



### Order key

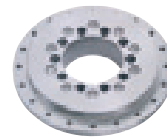
**PRT-01-30-ES-H1**



blank = iglidur® J  
Sliding pads from iglidur® H1  
Blank: Aluminium  
ES: Stainless steel V4A  
Inner-Ø  
Type  
Slewing Ring

### Special properties

- Slewing ring with high stiffness
- Easy to fit
- High wear resistance
- Maintenance-free sliding pads made of iglidur® J ► [page 89](#)
- Available in aluminium or stainless steel V4A



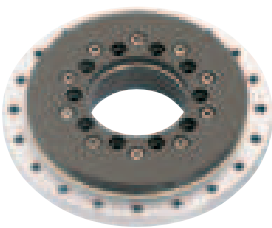
Available in stainless steel

### Dimensions [mm]

Part Number	D*	D1	d1	d	d2	H	h	T1	T2	S1	S2	K1	R1	R2	B
					±0,2							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
PRT-01-300	450	430	320	300	410	42	15	12 x 30°	16 x 22.5°	M8	9.0	DIN 7984 M8	205	186.6	7.0

\* Tolerance according to DIN ISO 2768 mK

## High temperature slewing ring bearing



### Special properties

- Suitable up to +180 °C, high chemical resistance
- For all 5 standard dimensions of style 01
- Body in aluminium or stainless steel,
- Sliding pads in iglidur® H1 ► [page 337](#)

### Dimensions [mm]

Part Number	D*	D1	d1	d	d2	H	h	T1	T2	S1	S2	K1	R1	R2	B
					±0,2							for screw			
PRT-01-30-H1	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-H1	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-H1	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-H1	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-H1	300	285	215	200	274	38	15	12 x 30°	16 x 22.5°	M6	7.0	DIN 912 M6	137	124	7.0
PRT-01-300-H1	450	430	320	300	410	42	15	12 x 30°	16 x 22.5°	M8	9.0	DIN 7984 M8	205	186.6	7.0

\* Tolerance according to DIN ISO 2768 mK



**delivery** available  
**time** from stock



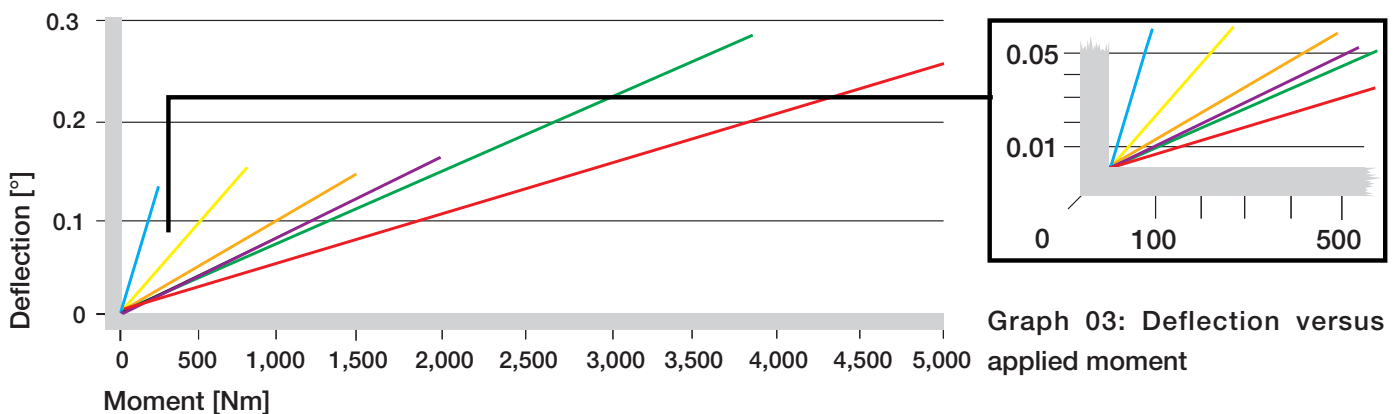
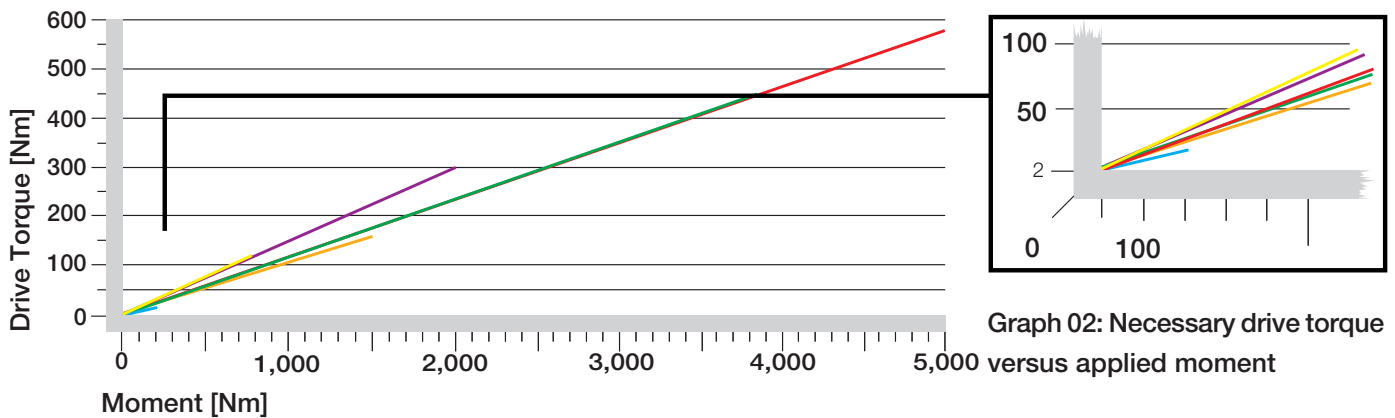
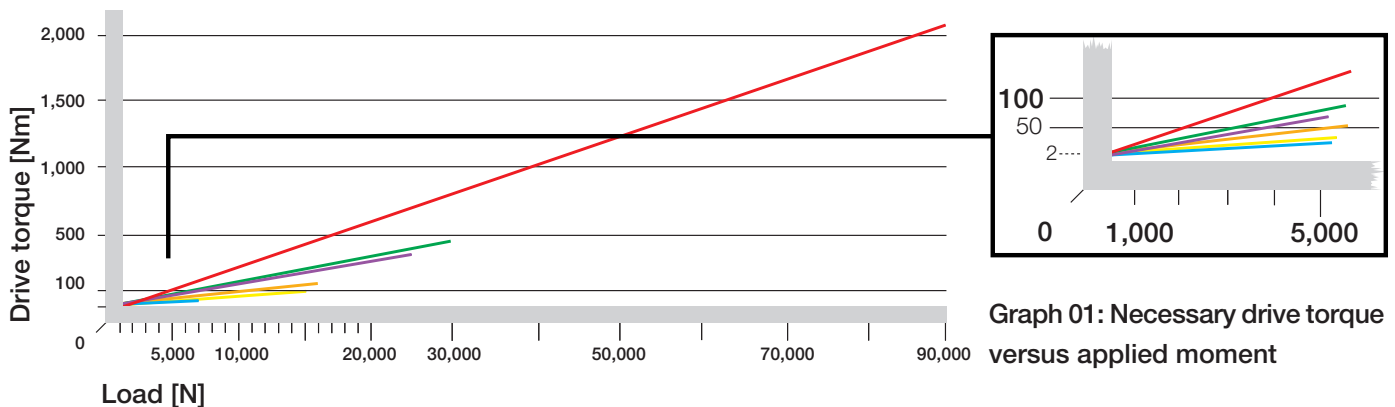
**prices** price list online  
[www.igus.eu/pt](http://www.igus.eu/pt)



**order** part number  
**example** PRT-01-30

# iglidur® PRT | Technical Data Type 01

Properties	Unit	PRT-01-30	PRT-01-60	PRT-01-100	PRT-01-150	PRT-01-200	PRT-01-300
Weight	kg	0.4	1.1	1.3	2.2	3.2	7.6
Max. axial load, static	N	27,000	50,000	55,000	80,000	100,000	150,000
Max. axial load, dynamic	N	7,000	15,000	16,000	25,000	30,000	90,000
Max. radial load, static	N	5,000	10,000	16,000	25,000	35,000	45,000
Max. radial load, dynamic	N	1,500	3,000	5,000	8,000	10,000	27,000
Max. rotat. speed dry running	1/min	250	200	150	100	80	50
Rigidity, axial	N/μm	100	300	400	450	500	500
Rigidity, radial	N/μm	50	65	65	65	65	65
Max. perm. tilting moment	Nm	200	800	1,500	2,000	3,800	5,000

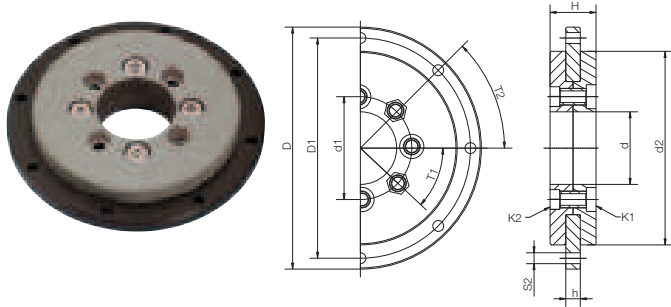


- PRT-01-30  
M4, min.  
8 screws
- PRT-01-60  
M5, min.  
10 screws
- PRT-01-100  
M5, min.  
12 screws
- PRT-01-150  
M5, min.  
12 screws
- PRT-01-200  
M6, min.  
12 screws
- PRT-01-300  
M8, min.  
12 screws

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 2xd in every bore location in the outer ring. All data can be used for both lateral and horizontal assembly.

# iglidur® PRT | Product Range Type 02

## Slewing ring bearing



### Order key

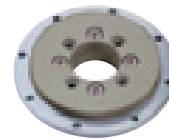
**PRT-02-20-AL**



AL: Aluminium  
ES: Stainless steel V4A  
Inner-Ø  
Type  
Slewing Ring

### Special properties

- Slewing ring with very low weight
- Outer ring made from hard anodized Aluminium or stainless steel (V4A)
- iglidur® J4 – head rings – sliding against the outer ring without lubrication
- Low cost



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

### Dimensions [mm]

Part number	D*	D1	d1	d	d2	H	h	T1	T2	S2	K1		K2	
											for screw	for screw	for screw	for screw
PRT-02-20-AL/ES	80	70	31	20	60	16	5	6 x 60°	6 x 60°	4,5	DIN 6912-A2 M5	DIN 439-A2 M5		
PRT-02-30-AL/ES	100	91	42,5	30	80	19	6	8 x 45°	8 x 45°	4,5	DIN 7984 M5	DIN 439-A2 M5		
PRT-02-60-AL	160	145	86,0	60	130	30	10	12 x 30°	20 x 18°	5,5	DIN 931 M5X25	DIN 934 M5		

## Slewing ring bearing, FDA compliant



### Special properties

- For use in the food technology with headrings made from FDA-conform material iglidur® A180
- The stainless steel outer ring and the material iglidur® A180 ► **page 371** are suitable for the direct contact with food, pharmaceuticals and humidity.
- Low profile and low weight
- Ready to fit

### Dimensions [mm]

Part Number	D*	D1	d1	d	d2	H	h	T1	T2	S2	K1		K2	
											for screw	for screw	for screw	for screw
PRT-02-30-ES-A180	100	91	42,5	30	80	19	6	8 x 45	8 x 45	4,5	DIN 7984 M5	DIN 439-A2 M5		

Properties	Unit	PRT-02-20	PRT-02-30	PRT-02-60
Weight	kg	0,1	0,2	0,7
Max. axial load, stat.	N	13,000	25,000	45,000
Max. axial load, dyn.	N	4,000	7,000	12,000
Max. radial load, stat.	N	2,000	2,500	10,000
Max. radial load, dyn.	N	500	700	2,800
Max. rotat. speed dry running	1/min	250	200	120
Max. permissible tilting moment	Nm	60	100	200



**delivery** available  
**time** from stock



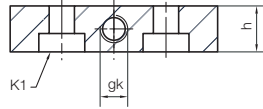
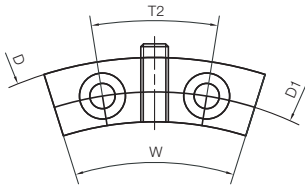
**prices** price list online  
www.igus.eu/eu/prt



**order** part number  
**example** PRT-02-20-AL/-ES

# iglidur® PRT | Product Range Accessories

## Hand clamp



Graph 04: PRT with fitted manual clamp

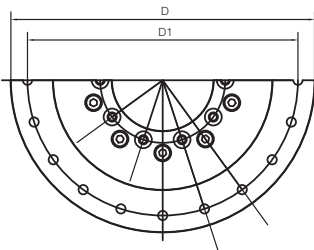
- With 1 Nm screw torque, a holding torque up to 10 Nm is possible
- Easy to screw onto outer ring

## Dimensions [mm]

Part number	D	D1	T2	K1	h	gk	W
PRT-HK-60	160	145	20 x 18°	DIN 7984 M5	10	M6	35°
PRT-HK-100*	205	185	16 x 22.5°	DIN 7984 M5	12	M6	40°
PRT-HK-200*	320	300	16 x 22.5°	DIN 7984 M6	15	M6	40°

\* Only available with large outer rings

## Slewing ring bearing with large outer ring



## Dimensions [mm]

Part number	D	D1
PRT-01-100-M-ARG*	205	185
PRT-01-100-M-ARGG*	205	185
PRT-01-100-M-ARGS*	205	185
PRT-01-200-M-ARG*	320	300
PRT-01-200-M-ARGG*	320	300
PRT-01-200-M-ARGS*	320	300

\* Ending: -G standard, -GG thread- or -GS counterbore

Other dimensions such as Standard type PRT-01 ► page 548



delivery available  
time from stock

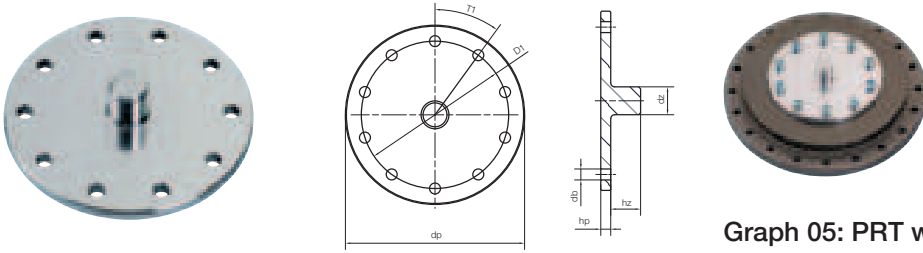


prices price list online  
www.igus.eu/eu/prt



order part number  
example PRT-HK-60  
PRT-01-100-M-ARG

## Drive pin

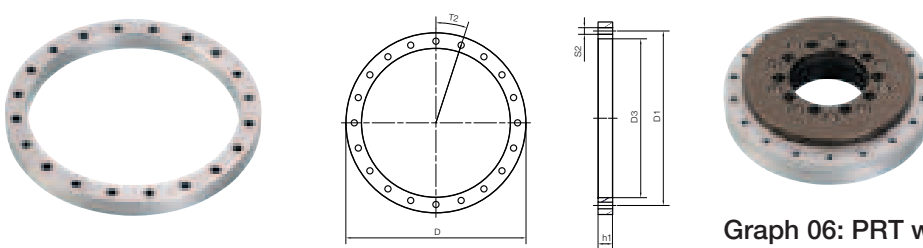


Graph 05: PRT with assembled drive pin

### Dimensions [mm]

Part number	dp	hp	dz	hz	D1	T1	db
PRT-AZ-30	55	5	10	15	42.5	8 x 45°	4.5
PRT-AZ-60	90	5	14	15	74	10 x 36°	5.5

## Spacing rings made from anodized aluminum

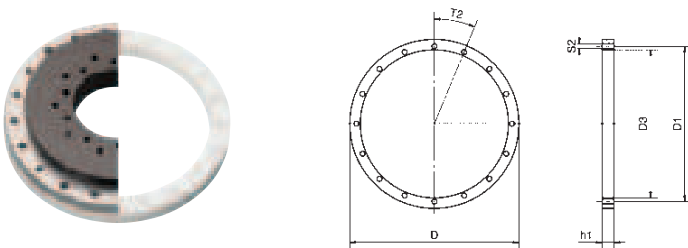


Graph 06: PRT with assembled spacing ring

### Dimensions [mm]

Part number	D	D1	T2	S2	D3	h1
PRT-01-30-DR	100	91	8 x 45°	4.5	84	11
PRT-01-60-DR	160	145	20 x 18°	5.5	132	13
PRT-01-100-DR	185	170	16 x 22,5°	5.5	162	13
PRT-01-150-DR	250	235	16 x 22.5°	5.5	222	13
PRT-01-200-DR	300	285	16 x 22.5°	7.0	276	13

## Spacing rings made from polymer



### Dimensions [mm]

Part number	D	D1	T2	S2	D3	h1
PRT-01-30-DR-POM	100	91	8 x 45°	4.5	84	11
PRT-01-60-DR-POM	160	145	20 x 18°	5.5	132	13
PRT-01-100-DR-POM	185	170	16 x 22.5°	5.5	162	13



delivery available  
time from stock



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



order part number  
example PRT-AZ-30

PRT-01-03-DR  
PRT-01-03-DR-POM