

iglidur® PRT – polymer slewing rings

Completely maintenance-free

Easy to install and replaceable sliding elements

High wear resistance

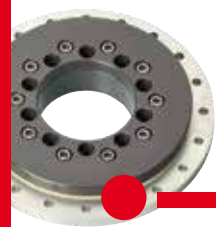
For high loads and high rigidity

Stainless steel versions available

Extensive accessories

Standard range from stock





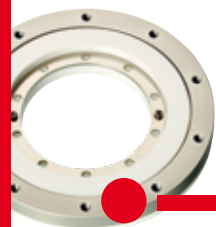
Type 01:
High torsional rigidity
▶ From page 638



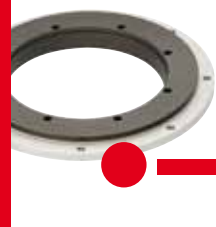
Type 01 with gear teeth:
With outer drive ring
▶ From page 639



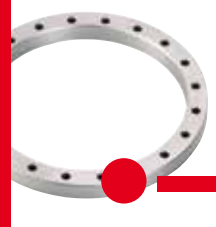
Type 02:
Lightweight
▶ From page 640



Type 03:
Cost-effective
▶ From page 641



Type 04:
Compact, lightweight
and cost-effective
▶ From page 642



Extensive accessories:
Special geometries
and accessories
▶ From page 648



Universal sliding elements:
Customise your own
slewing ring systems
▶ From page 654


Polymer slewing ring bearings


iglidur® PRT slewing rings are ready-to-install rotary joints for lubrication-free dry operation. The design is not based on metallic rollers or balls, but on maintenance-free sliding elements made of the proven tribologically optimised iglidur® materials in combination with rings made of lightweight anodised aluminium or stainless steel. These iglidur® materials are universally applicable. They can be used in applications with high temperatures, moisture or chemical contact, for example.


- Completely maintenance-free
- Easy to install and replaceable sliding elements
- High wear resistance
- For high loads and high rigidity
- Stainless steel versions available
- Extensive accessories


Typical application areas


- Conveyors and automation
- Stage and lighting technology
- Assembly stations


 **Available from stock**
Stainless steel version upon request
Detailed information about delivery time online.

 **Price breaks online**
No minimum order value. No minimum order quantity

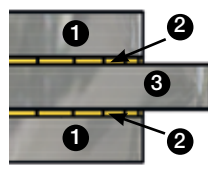
 **Max. +180°C**
Min. -50°C

 **4 types**
Ø 20–300mm

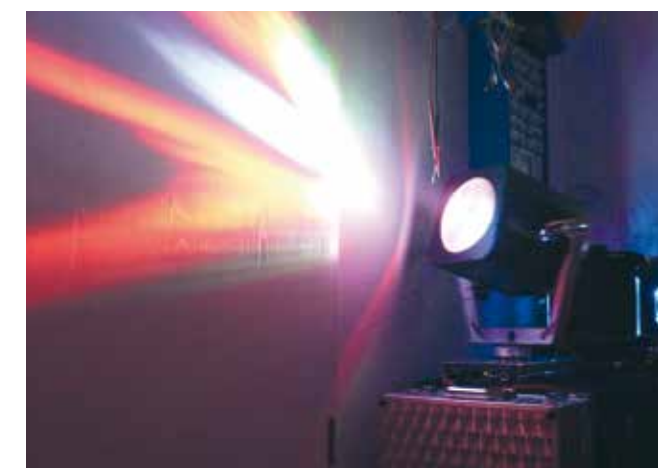
 **Service life calculation**
▶ www.igus.eu/prt-expert

 **Design slewing ring**

- 1 Type 01 and 04: Hard anodised aluminium, or 316 stainless steel
- 2 Type 01 and 04: iglidur® J or H1
- 3 Type 01, 02 and 04: Anodised aluminium or 316 stainless steel




iglidur® PRT-01-60 is used here in a handling/transport system for semiconductor carriers. Through a cylinder control, the PRT polymer slewing ring bearing provides a deflection at the end of the system's track.



A good example of the light weight and lubrication-free slewing ring being used in a rotating light, for discos.



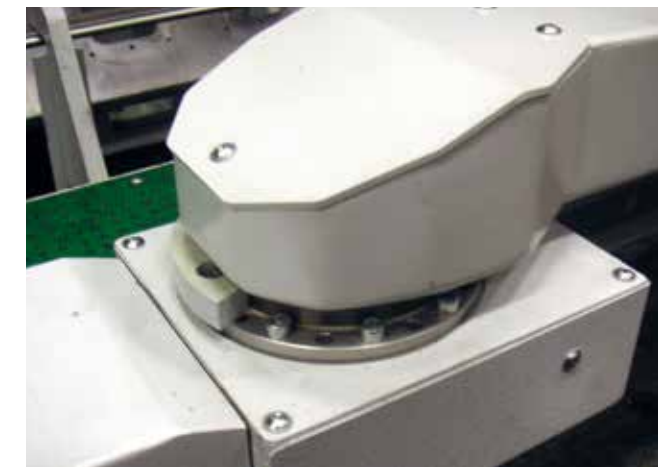
In this machine tool control panel, an iglidur® polymer slewing ring bearing is used due to its freedom from lubrication and maintenance.



The iglidur® PRT-01-100 slewing ring is used in an automatic welding plant in this application. It enables pivoting in the horizontal plane of the clamping device.



The lubrication-free iglidur® PRT slewing ring masters this job brilliantly, is lighter and in terms of purchasing is more affordable than a comparable metal rotary connector.



Lubrication and maintenance-free polymer slewing ring for moving the control panel. The low coefficient of friction ensures low actuating force during pivoting.

Slewing ring general properties

Type 01

Properties	Unit	-20	-30	-50	-60	-100	-150	-200	-300
Weight	kg	0.2	0.4	1.0	1.1	1.3	2.2	3.2	7.6
Axial load, static	N	15,000	27,000	40,000	50,000	55,000	80,000	100,000	150,000
Axial load, dynamic	N	4,000	7,000	10,000	15,000	16,000	25,000	30,000	90,000
Radial load, static	N	2,300	5,000	8,000	10,000	16,000	25,000	35,000	45,000
Radial load, dynamic	N	600	1,500	2,500	3,000	5,000	8,000	10,000	27,000
Rotating speed, dry operation	rpm	300	250	200	200	150	100	80	50
Max. perm. tilting moment	Nm	100	200	600	800	1,500	2,000	3,800	5,000

Type 02

Properties	Unit	-20-AL	-20-LC	-20-P	-30-AL	-30-LC	-30-P	-50-AL	-50-LC	-50-P	-60-AL
Weight	g	105	87	72	200	165	140	440	380	320	700
Axial load, static	N	13,000	13,000	13,000	25,000	25,000	25,000	35,000	35,000	35,000	45,000
Axial load, dynamic	N	4,000	4,000	4,000	7,000	7,000	7,000	9,000	9,000	9,000	12,000
Radial load, static	N	2,000	2,000	2,000	2,500	2,500	2,500	5,000	5,000	5,000	10,000
Radial load, dynamic	N	500	500	500	700	700	700	1,200	1,200	1,200	2,800
Rotating speed, dry operation	rpm	250	250	250	200	180	180	120	120	120	120
Max. permissible tilting moment	Nm	60	40	40	100	50	50	120	100	100	200

Type 03

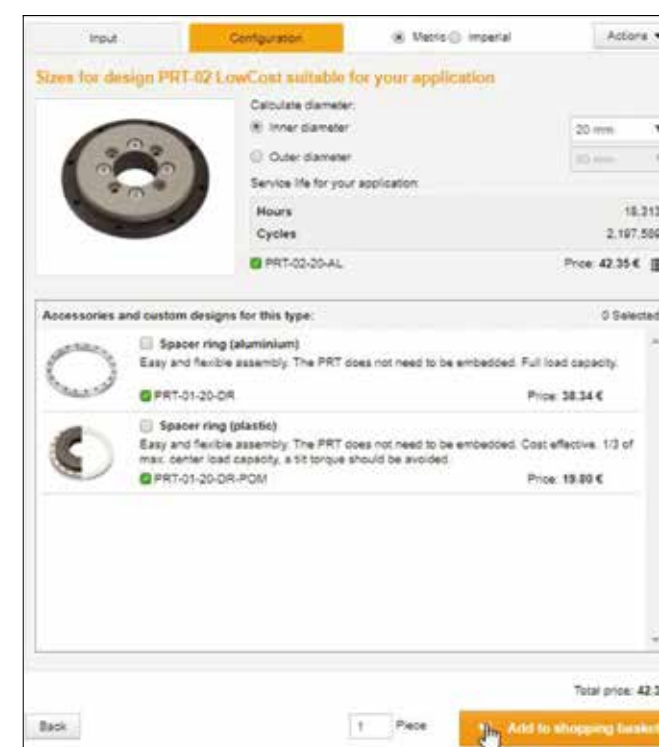
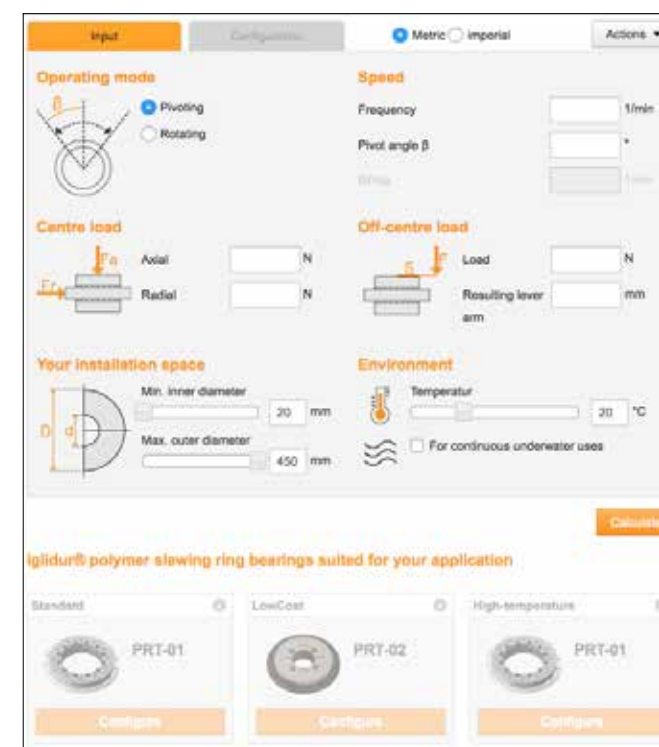
Properties	Unit	-80
Weight	kg	0.47
Axial load, static (compressive force direction)	N	45,000
Axial load, static (tensile force direction) ¹⁵⁴⁾	N	5,000
Axial load, dynamic (compressive force direction)	N	12,000
Axial load, dynamic (tensile force direction) ¹⁵⁴⁾	N	1,200
Radial load, static	N	4,000
Radial load, dynamic	N	1,000
Rotating speed, dry operation	rpm	120
Max. permissible tilting moment ¹⁵⁴⁾	Nm	120

Axial clearance 0.7mm, radial clearance 0.9mm

¹⁵⁴⁾ Only when the PRT is fitted onto a flat, stable surface

Type 04

Properties	Unit	-50	-60	-100	-150	-200	-300
Weight	g	225	250	370	530	680	990
Axial load, static	N	12,000	14,000	20,000	27,000	35,000	48,000
Axial load, dynamic	N	3,000	4,000	5,000	7,500	9,000	12,000
Radial load, static	N	2,500	3,000	5,500	6,500	8,000	10,000
Radial load, dynamic	N	750	900	1,500	1,900	2,500	3,500
Rotating speed, dry operation	rpm	200	190	135	100	80	50
Max. perm. tilting moment	Nm	200	250	450	650	875	1,200



Configurator for slewing rings

The most common criteria for selecting an iglidur® PRT slewing ring bearing are firstly the loads and torques to be supported and secondly the installation space available and the minimum central implementation distance required. The suitable sizes and types are selected on the basis of this data and the speed and their service life is calculated.

► www.igus.eu/prt-expert

Type 01

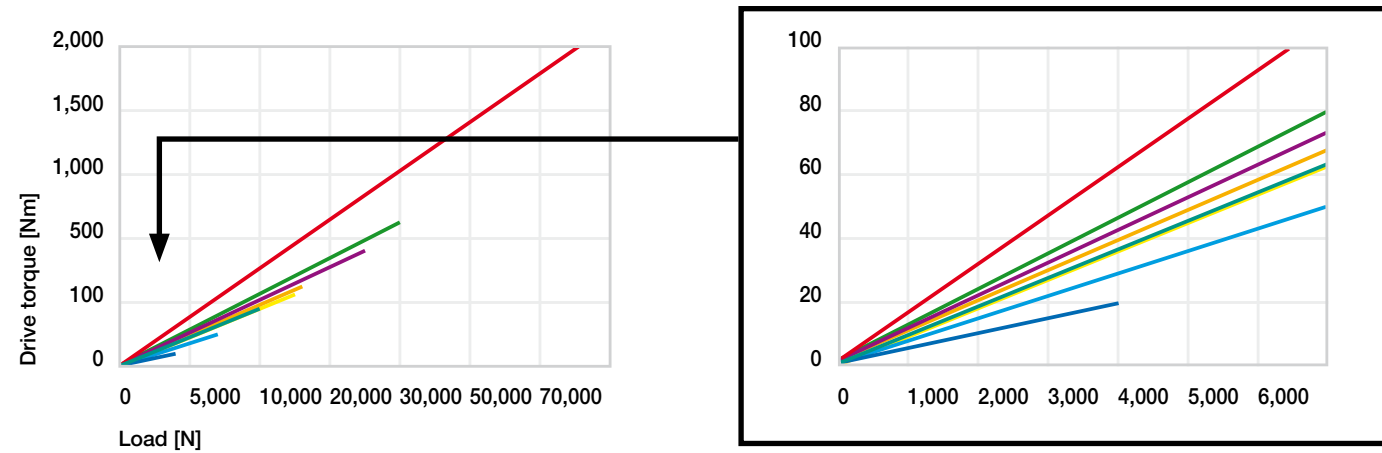


Diagram 01: Required drive torque versus applied load

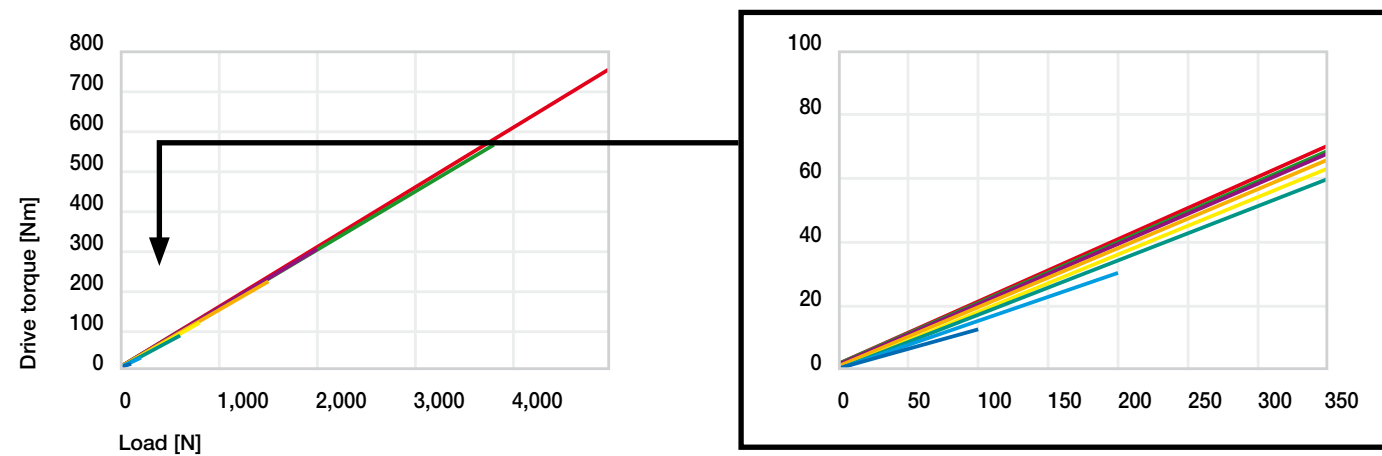


Diagram 02: Required drive torque versus applied moment

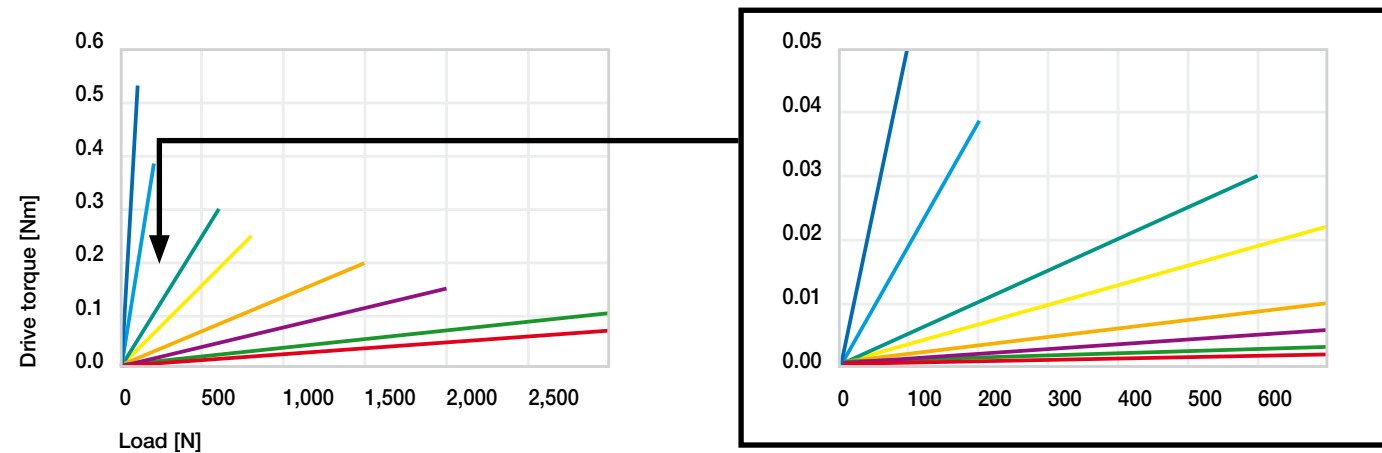


Diagram 03: Deflection versus applied tilting moment

- PRT-01-20 M4, min. 6 screws
- PRT-01-30 M4, min. 8 screws
- PRT-01-50 M6, min. 12 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

i All load values assume the PRT is assembled with cap head screws (strength class 8.8) on the outer PCD of the collar clamp. For the assembly (using strength class 8.8 screws) of the PRT, the screws have to be inserted to a minimum thread depth of 2xd in every hole location in the outer ring. All data can be used for both lateral and horizontal assembly (including overhead installation).

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Type 04

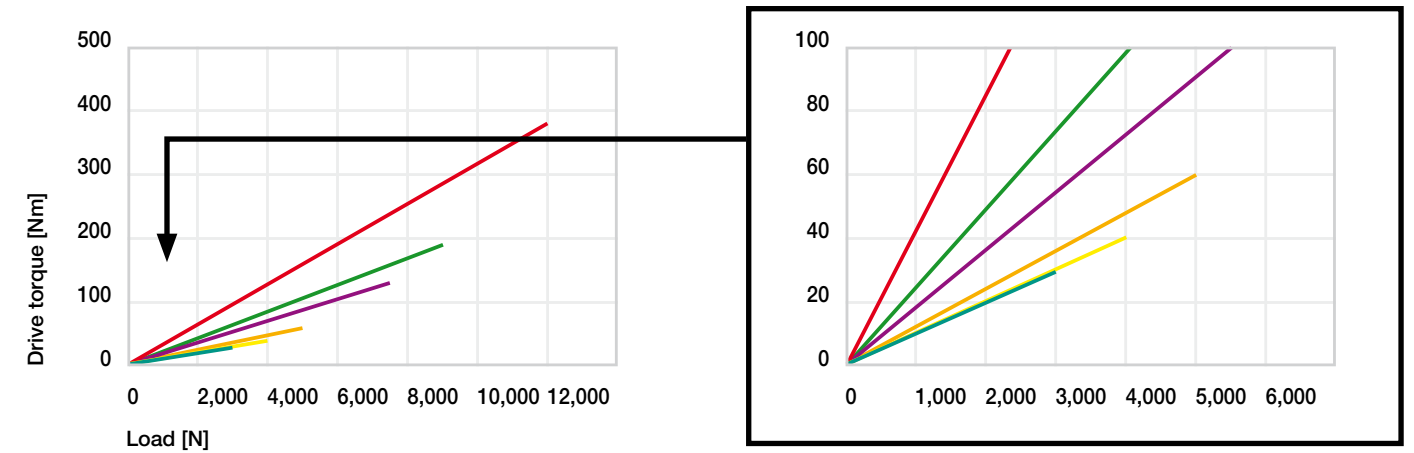


Diagram 01: Required drive torque versus applied load

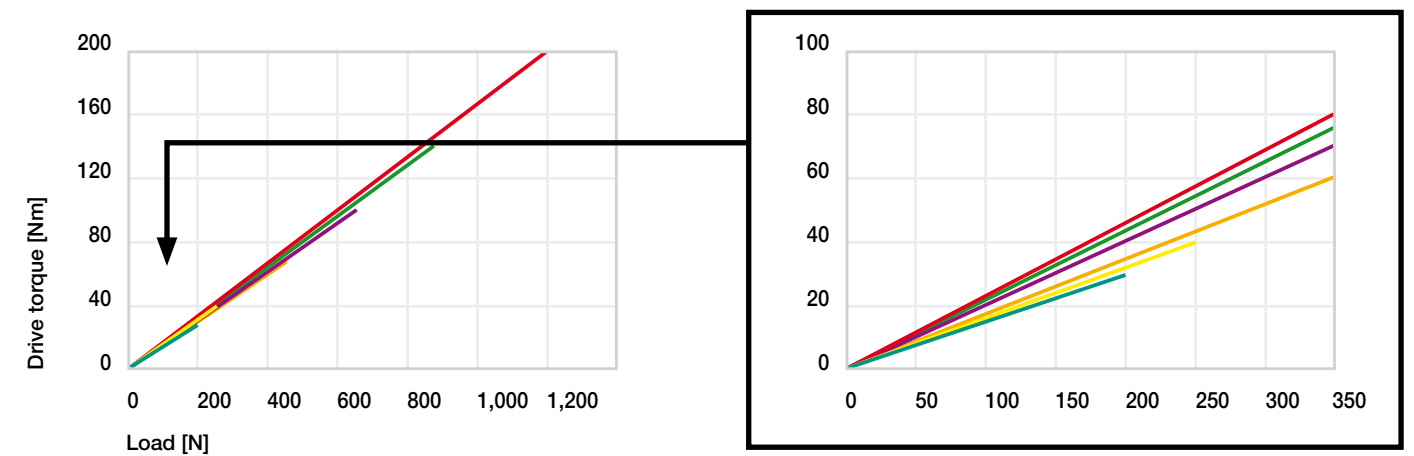


Diagram 02: Required drive torque versus applied moment

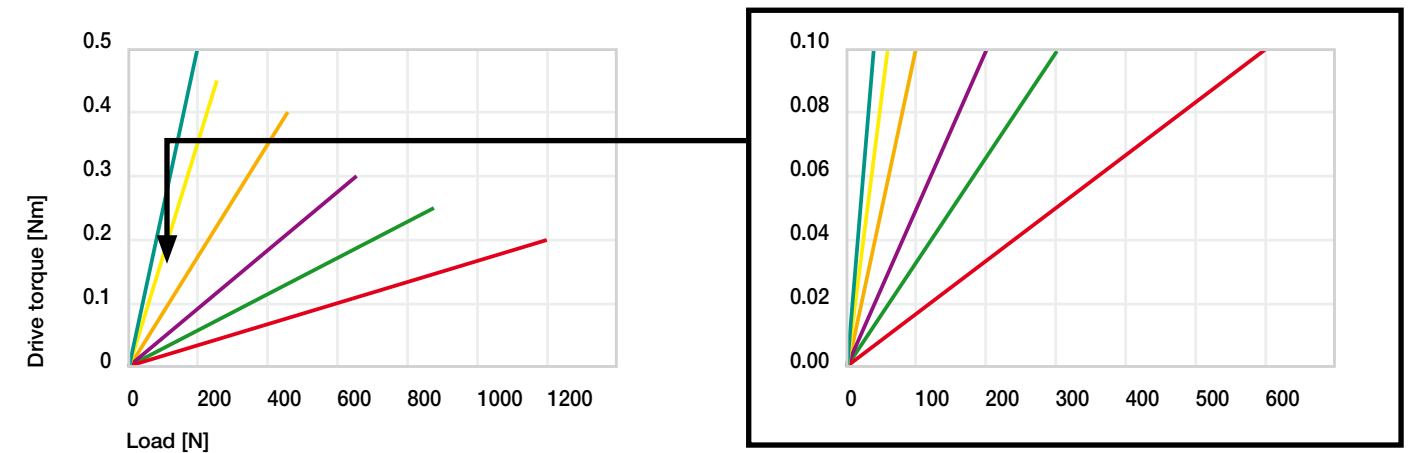


Diagram 03: Deflection versus applied tilting moment

- PRT-04-50 M6, min. 12 screws
- PRT-04-60 M5, min. 10 screws
- PRT-04-100 M5, min. 12 screws
- PRT-04-150 M5, min. 12 screws
- PRT-04-200 M6, min. 12 screws
- PRT-04-300 M8, min. 12 screws

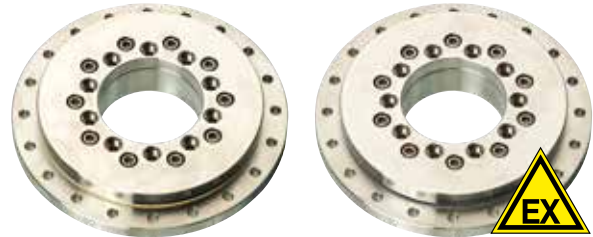


3D CAD files, prices and delivery time online ► www.igus.eu/prt 637



Standard

High temperature
up to +180°C

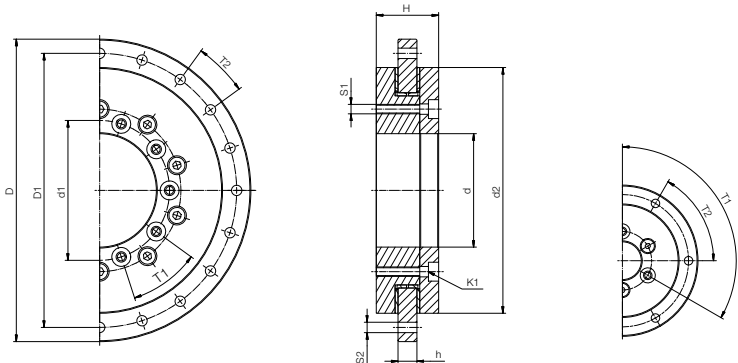


Stainless steel version

ESD-compliant

- Aluminium or stainless steel body (upon request)
- Replaceable maintenance-free sliding elements made of iglidur® J (Standard) ► Page 159, iglidur® H1 (for temperatures up to +180°C) ► Page 333, iglidur® F2 (ESD-compliant) ► Page 493 or iglidur® A180 (FDA-compliant) ► Page 401

i Accessories
► From page 652



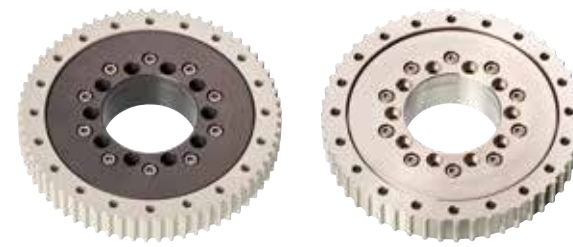
Dimensions [mm]

D ¹⁾	D1	d1	d	d2	H	h	T1	T2	S1	S2	K1	R1	R2	B	Part No.	
				±0.2							for screw					
80	70	31	20	60	24	8	3 x 120°	6 x 60°	M4	4.5	DIN 7984 M4	M4	30	20	3.5	PRT-01-20-...
100	91	42.5	30	82	29	10	4 x 90°	8 x 45°	M4	4.5	DIN 7984 M4	M4	41	29	4.5	PRT-01-30-...
150	135	65	50	120	33	10	8 x 45°	16 x 22.5°	M6	6.6	ISO 4762 M6	M6	60	46.5	4.5	PRT-01-50-...
160	145	74	60	130	33	10	10 x 36°	20 x 18°	M5	5.5	ISO 4762 M5	M5	65	51.5	4.5	PRT-01-60-...
185	170	112	100	160	34	12	12 x 30°	16 x 22.5°	M5	5.5	ISO 4762 M5	M5	80	69	5.5	PRT-01-100-...
250	235	165	150	220	35	12	12 x 30°	16 x 22.5°	M5	5.5	ISO 4762 M5	M5	110	96.5	5.5	PRT-01-150-...
300	285	215	200	274	38	15	12 x 30°	16 x 22.5°	M6	6.6	ISO 4762 M6	M6	137	124	7.0	PRT-01-200-...
450	430	320	300	410	42	15	12 x 30°	16 x 22.5°	M8	9.0	DIN 7984 M8	M8	205	186.6	7.0	PRT-01-300-...

¹⁾ Tolerance according to DIN ISO 2768 mK

All stainless steel versions upon request

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Standard

Stainless steel version

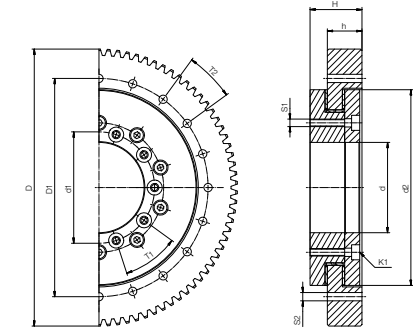
- 4 standards for outer rings are available
 - A classic spur gear according to DIN3967
 - Commercially available belt profiles: T10, AT10, HTD8M
- The inner ring is fixed and the outer ring driven
- The outer ring carries the item to be moved
- Outer ring available in stainless steel as an option (suffix "-ES")

Dimensions [mm]

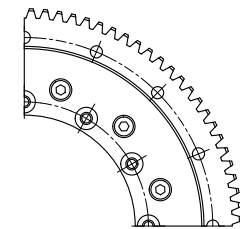
D1	d1	d	d2	h	T1	T2	S1	S2	K1	R1	R2	B	H	Part No.
									for screw					
70	31.0	20	60	18	6x60°	6x60°	M4	4.5	DIN 7984 M4	M4	30	20.0	3.5	(26.0) PRT-01-20-TO-...
91	42.5	30	82	21	8x45°	8x45°	M4	4.5	DIN 7984 M4	M4	41	29.0	4.5	(30.5) PRT-01-30-TO-...
135	65.0	50	120	10	8x45°	16x22.5°	M6	6.6	ISO 4762 M6	M6	60	46.5	4.5	(33.0) PRT-01-50-TO-...
145	74.0	60	130	23	10x36°	20x18°	M5	5.5	ISO 4762 M5	M5	65	51.5	4.5	(34.5) PRT-01-60-TO-...
170	112.0	100	160	25	12x30°	16x22.5°	M5	5.5	ISO 4762 M5	M5	80	69.0	5.5	(36.0) PRT-01-100-TO-...
235	165.0	150	220	25	12x30°	16x22.5°	M5	5.5	ISO 4762 M5	M5	110	96.5	5.5	(36.5) PRT-01-150-TO-...
285	215.0	200	274	30	12x30°	16x22.5°	M6	7.0	ISO 4762 M6	M6	137	124.0	7.0	(41.5) PRT-01-200-TO-...
430	320.0	300	410	30	12x30°	16x22.5°	M8	9.0	DIN 7984 M8	M8	205	186.5	8.5	(43.5) PRT-01-300-TO-...

Order key

Type	Size [mm]	Options
PRT-01-	30	- TO - ... - ES
Slewing ring	Design	Inner Ø
		Outer drive ring
		Tooth profile type
		Stainless steel version

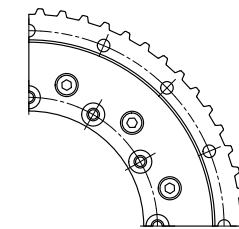


Spur gearing
DIN3967



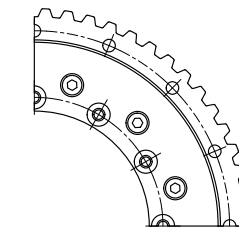
D	m	z	Part No. add-on
(88)	–	42	...-ST
(112)	2	54	...-ST
(160)	2	78	...-ST
(184)	2	90	...-ST
(196)	2	96	...-ST
(256)	2	126	...-ST
(308)	2	152	...-ST
(462)	3	152	...-ST

Toothed belt profile
AT10



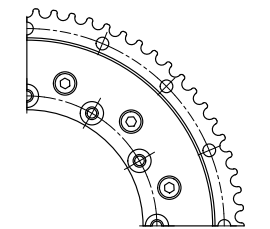
D	z	Part No. add-on
(87.25)	28	...-AT10
(106.4)	34	...-AT10
(157.3)	50	...-AT10
(163.8)	52	...-AT10
(189.2)	60	...-AT10
(252.9)	80	...-AT10
(303.9)	96	...-AT10
(456.7)	144	...-AT10

Toothed belt profile
T10



D	z	Part No. add-on
(87.25)	28	...-T10
(106.4)	34	...-T10
(157.3)	50	...-T10
(163.8)	52	...-T10
(189.2)	60	...-T10
(252.9)	80	...-T10
(303.9)	96	...-T10
(456.7)	144	...-T10

Toothed belt profile
HTD5M (-20)/HTD8M



D	z	Part No. add-on
(81.25)	52	...-HTD5M
(110.7)	44	...-HTD8M
(161.6)	64	...-HTD8M
(166.7)	66	...-HTD8M
(187.1)	74	...-HTD8M
(253.3)	100	...-HTD8M
(304.3)	120	...-HTD8M
(457.1)	180	...-HTD8M



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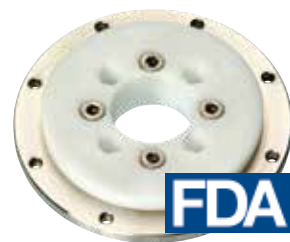
Standard

Stainless steel version



Low-cost version

All plastic version



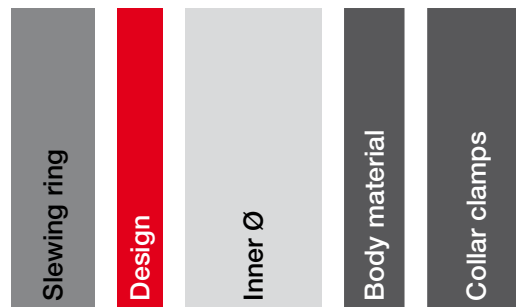
FDA-compliant

- Slewing rings with extremely light weight
- Outer ring made from anodised aluminium, 316 stainless steel (upon request) or iguton G
- Collar clamps made from iglidur® J4 or FDA-compliant iglidur® A180
- 30% lighter with plastic screws

Order key

Type	Size [mm]	Options
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PRT-02- 20 -AL-A180



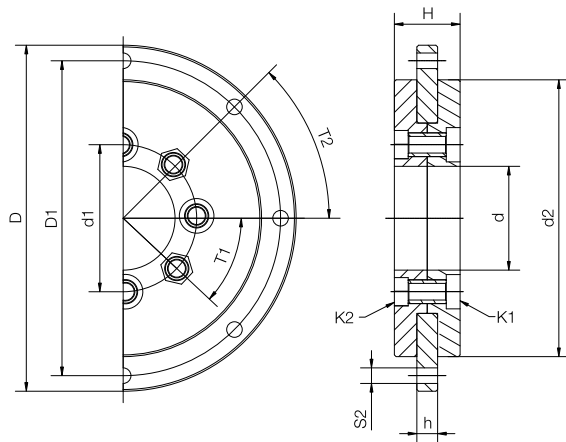
Options:

Body material

- AL: Aluminium
- ES: 316 stainless steel
- LC: Low-cost
- P: Solid plastic

Collar clamps

- Blank: iglidur® J4
- A180: iglidur® A180, FDA-compliant



Dimensions [mm]

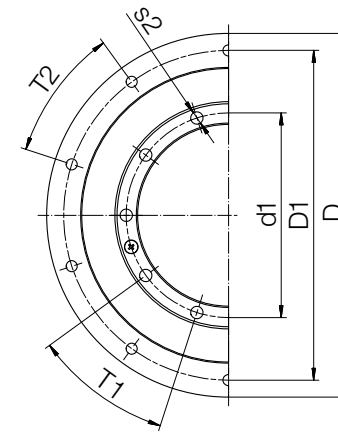
D	D1	d1	d	d2	H	h	T1	T2	S2	K1 for screw	K2 for screw nut	Part No.
80	70	31	20	60	16	5	3 x 120°	6 x 60°	4.5	DIN 6912 M5	ISO 4035 M5	PRT-02-20- <input type="checkbox"/>
100	91	42.5	30	80	19	6	4 x 90°	8 x 45°	4.5	DIN 7984 M5	ISO 4035 M5	PRT-02-30- <input type="checkbox"/>
150	135	65	50	120	20	6	16 x 22.5°	8 x 45°	6.6	Through-hole 6.5mm		PRT-02-50- <input type="checkbox"/>
160	145	86.0	60	130	30	10	12 x 30°	20 x 18°	5.5	Counterbore Ø16 and 6.5 deep		PRT-02-60- <input type="checkbox"/> ¹¹⁶⁾

¹¹⁶⁾ Only available with body made from aluminium and stainless steel

Please add suffix "-A180" for FDA-compliant version

All stainless steel versions upon request

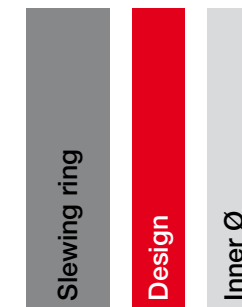
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Order key

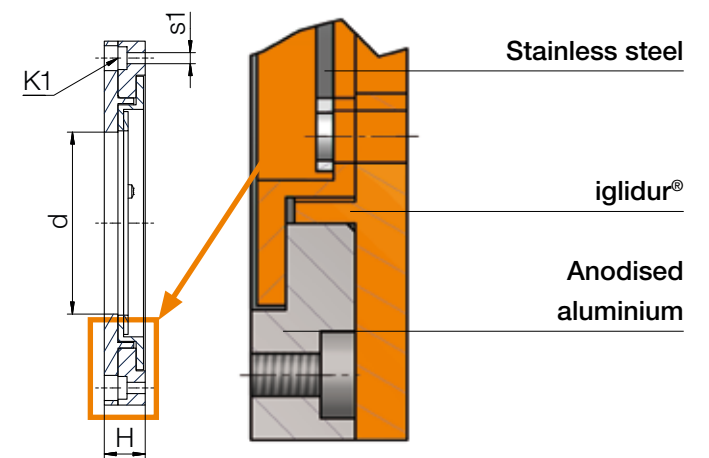
Type	Size [mm]
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PRT-03-80



iglidur® PRT slewing rings in a low-cost design. Through consistent downsizing, an additional design has been created that relies even more on plastic.

- Maintenance and lubrication-free
- Cost-effective and lightweight
- Reduced space requirement
- Ready-to-fit
- For temperatures from 0 to +60°C



Dimension [mm]

D	D1	d1	d	H	T1	T2	s1	s2	K1 for screw	Part No.
160	145	90	80	18	10 x 36°	10 x 36°	M6	5.5	DIN 7984 M6	PRT-03-80

3D CAD files, prices and delivery time online ► www.igus.eu/prt 641

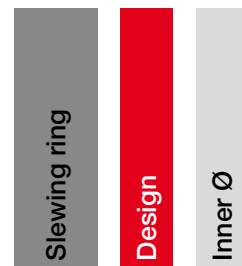




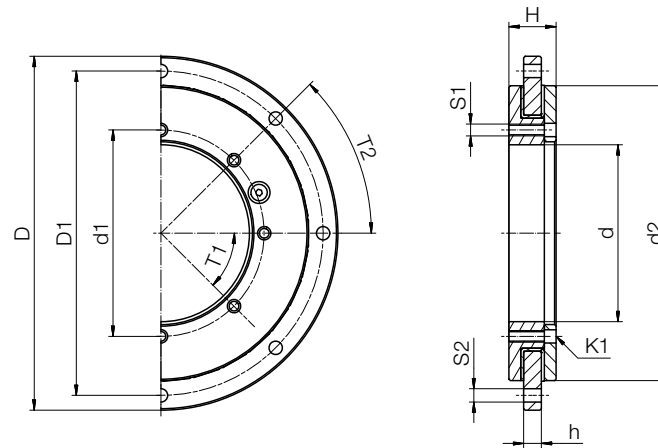
Order key

Type Size [mm]

PRT-04-50



- Available with diameters from 50mm to 300mm
- 60% lighter and 50% more compact compared to PRT-01
- 20% more cost-effective compared to PRT-01
- Wear-resistant, lubrication-free and maintenance-free iglidur® sliding elements



Dimension [mm]

D	D1	d1	d	d2	H	h	T1	T2	S1	S2	K1	Part No.
												for screw
110	100	60	50	90	16	6	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-50
120	110	70	60	100	16	6	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-60
160	150	110	100	140	16	6	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-100
210	200	160	150	190	16	6	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-150
260	250	210	200	240	16	6	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-200
360	350	310	300	340	16	6	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-300



With outer spacing ring

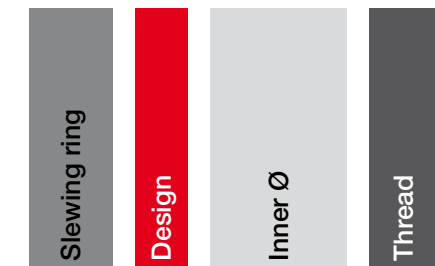


With large outer support ring

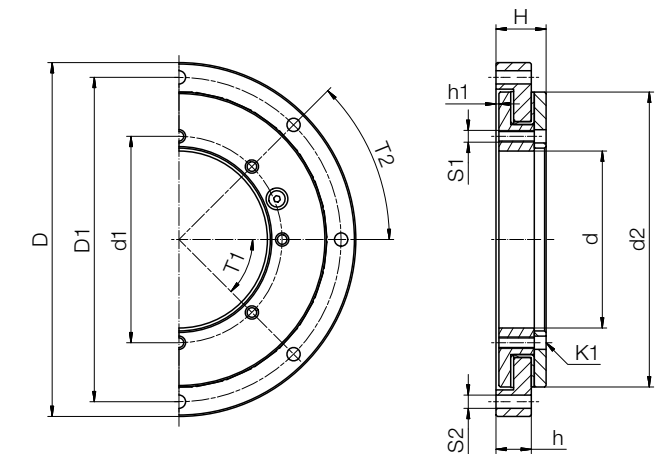
Order key

Type Size [mm] Options

PRT-04- 50 -M4



- Available for PRT-01 and PRT-04
- Maintenance-free and wear-resistant
- Easy to fit
- Replaceable sliding elements



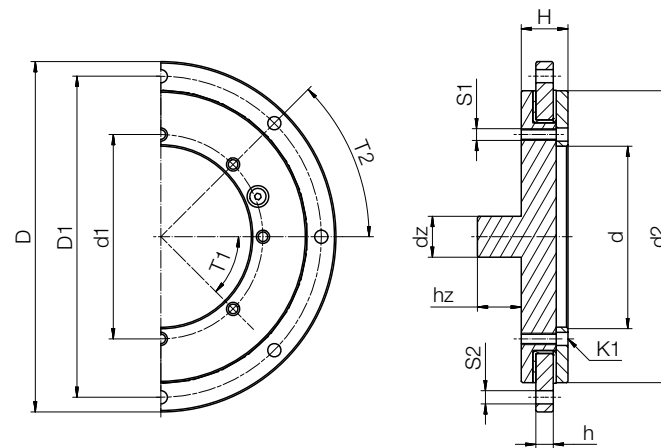
Dimension [mm]

D	D1	d1	d	d2	H	h1	h	T1	T2	S1	S2	K1	Part No.
													for screw
With M4 thread in outer ring													
110	100	60	50	90	16	-	6	8 × 45°	8 × 45°	M4	M4	Ø 4.5	PRT-04-50-M4
120	110	70	60	100	16	-	6	8 × 45°	8 × 45°	M4	M4	Ø 4.5	PRT-04-60-M4
160	150	110	100	140	16	-	6	8 × 45°	8 × 45°	M4	M4	Ø 4.5	PRT-04-100-M4
210	200	160	150	190	16	-	6	16 × 22.5°	16 × 22.5°	M4	M4	Ø 4.5	PRT-04-150-M4
260	250	210	200	240	16	-	6	16 × 22.5°	16 × 22.5°	M4	M4	Ø 4.5	PRT-04-200-M4
360	350	310	300	340	16	-	6	16 × 22.5°	16 × 22.5°	M4	M4	Ø 4.5	PRT-04-300-M4
With enlarged outer ring													
150	135	60	50	90	16	-	6	8 × 45°	16 × 22.5°	M4	Ø 6.6	Ø 4.5	PRT-04-50-G
160	160	70	60	100	16	-	6	8 × 45°	20 × 18°	M4	Ø 5.5	Ø 4.5	PRT-04-60-G
185	185	110	100	140	16	-	6	8 × 45°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-100-G
250	250	160	150	190	16	-	6	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-150-G
300	300	210	200	240	16	-	6	16 × 22.5°	16 × 22.5°	M4	Ø 5.5	Ø 4.5	PRT-04-200-G
450	450	310	300	340	16	-	6	16 × 22.5°	16 × 22.5°	M4	Ø 9.0	Ø 4.5	PRT-04-300-G
With outer spacing ring													
110	100	60	50	90	17	1	12	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-50-DRI
120	110	70	60	100	17	1	12	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-60-DRI
160	150	110	100	140	17	1	12	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-100-DRI
210	200	160	150	190	17	1	12	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-150-DRI
260	250	210	200	240	17	1	12	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-200-DRI
360	350	310	300	340	17	1	12	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-300-DRI



Order key

Type	Size [mm]	Options
PRT-04-	50	-DP
Slewing ring	Design	Inner Ø Drive pin



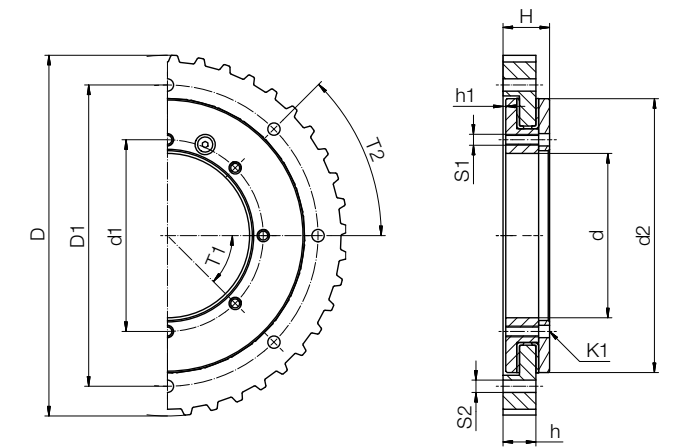
- Easy replacement and extension: modular construction kit design
- Easy drive pin for couplings
- Adjustable with manual clamps

Dimension [mm]

D	D1	d1	d	d2	dz	hz	H	h	T1	T2	S1	S2	K1	Part No.	
														for screw	
With DrivePin															
110	100	60	52	90	14	h6	15	16	6	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-50-DP
120	110	70	62	100	14	h6	15	16	6	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-60-DP
160	150	110	102	140	14	h6	15	16	6	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-100-DP
210	200	160	152	190	14	h6	15	16	6	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-150-DP
260	250	210	202	240	14	h6	15	16	6	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-200-DP
360	350	310	302	340	14	h6	15	16	6	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-300-DP

Order key

Type	Size [mm]	Options
PRT-04-	50	-TO - ...
Slewing ring	Design	Inner Ø Outer drive ring Tooth profile type

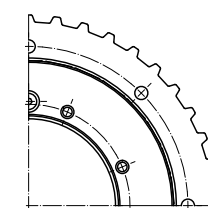


- Easy replacement and extension: modular construction kit design
- Driving the easy way with gear profiles
- Adjustable with manual clamps

Dimension [mm]

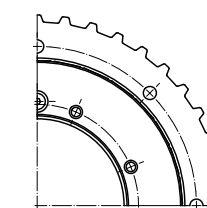
D1	d1	d	d2	H	h1	h	T1	T2	S1	S2	K1	Part No.
												for screw
With gear profile												
100	60	50	90	17	1	12	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-50-TO-...
110	70	60	100	17	1	12	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-60-TO-...
150	110	100	140	17	1	12	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-100-TO-...
200	160	150	190	17	1	12	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-150-TO-...
250	210	200	240	17	1	12	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-200-TO-...
350	310	300	340	17	1	12	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-300-TO-...

Toothed belt profile AT10



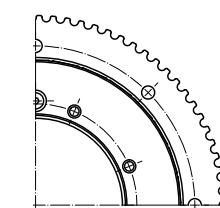
D	z	Part No. add-on
118.9	38	...-AT10
131.7	42	...-AT10
169.9	54	...-AT10
220.8	70	...-AT10
271.7	86	...-AT10
370.4	117	...-AT10

Toothed belt profile T10



D	z	Part No. add-on
118.9	38	...-T10
131.7	42	...-T10
169.9	54	...-T10
220.8	70	...-T10
271.7	86	...-T10
370.4	117	...-T10

Toothed belt profile HTD5M



D	z	Part No. add-on
120	76	...-HTD5M
131	83	...-HTD5M
170.9	108	...-HTD5M
221.8	140	...-HTD5M
271.2	171	...-HTD5M
371.4	234	...-HTD5M



- High wear resistance
- Replaceable sliding elements
- For high loads and high rigidity

Order key

Type	Size [mm]	Options
PRT-04-	50	-ES-H1
Slewing ring	Design	Inner Ø Body material Sliding elements

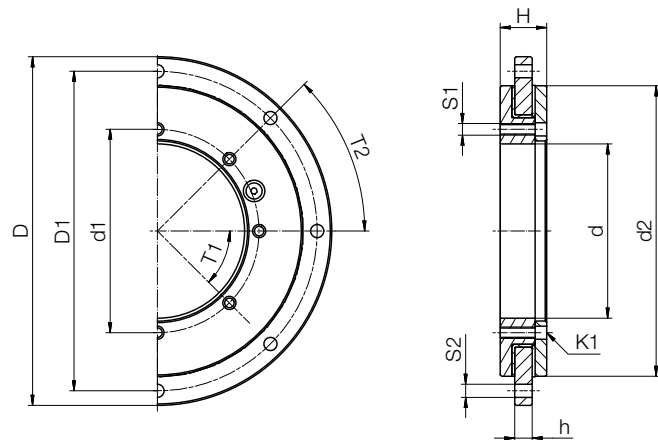
Options:

Body material

Blank: Aluminium
ES: 316 stainless steel

Sliding elements

Blank: iglidur® J
H1: iglidur® H1, high temperature
F2: iglidur® F2, ESD-compliant (only in conjunction with stainless steel)
A180: iglidur® A180, FDA-compliant



Dimension [mm]

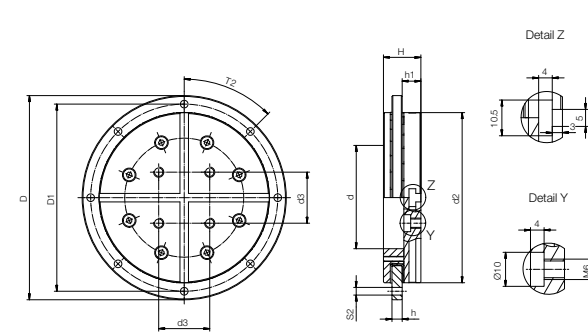
D	D1	d1	d	d2	H	h	T1	T2	S1	S2	K1	Part No.
												for screw
110	100	60	50	90	16	6	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-50-ES
120	110	70	60	100	16	6	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-60-ES
160	150	110	100	140	16	6	8 × 45°	8 × 45°	M4	Ø 4.5	Ø 4.5	PRT-04-100-ES
210	200	160	150	190	16	6	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-150-ES
260	250	210	200	240	16	6	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-200-ES
360	350	310	300	340	16	6	16 × 22.5°	16 × 22.5°	M4	Ø 4.5	Ø 4.5	PRT-04-300-ES



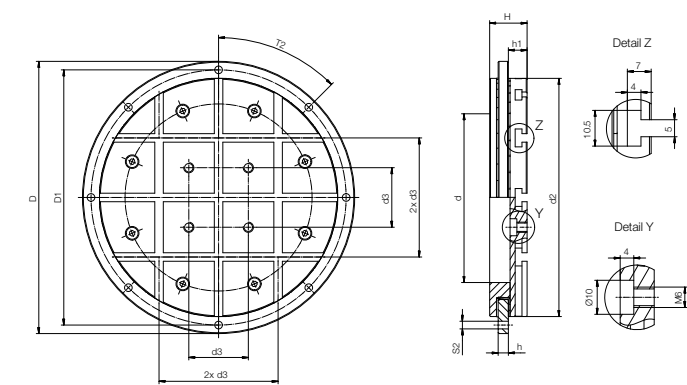
Order key

Type	Size [mm]	Options
PRT-04-	50	-T
Slewing ring	Design	Inner Ø Slot nuts

- Available for PRT-01 and PRT-04
- Fast assembly
- Easy positioning with no additional holes



Slot nut profile up to size 60



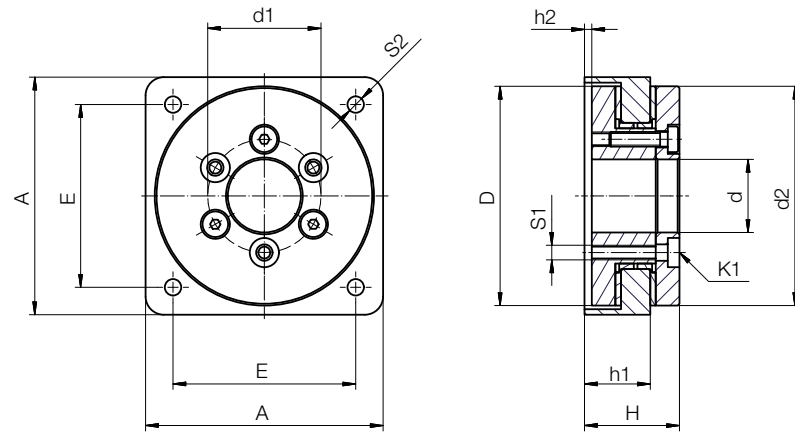
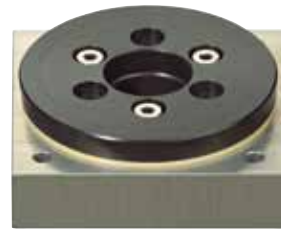
Slot nut profile from size 100

Dimension [mm]

D	D1	d1	d	d2	H	h	h1	T2	S2	Part No.
110	100	60	50	90	22	6	11	8 × 45°	Ø 4.5	PRT-04-50-T
120	110	70	60	100	22	6	11	8 × 45°	Ø 4.5	PRT-04-60-T
160	150	110	100	140	22	6	11	8 × 45°	Ø 4.5	PRT-04-100-T
210	200	160	150	190	22	6	11	16 × 22.5°	Ø 4.5	PRT-04-150-T
260	250	210	200	240	22	6	11	16 × 22.5°	Ø 4.5	PRT-04-200-T
360	350	310	300	340	22	6	11	16 × 22.5°	Ø 4.5	PRT-04-300-T

Type 01

Slewing rings with square flange for direct mounting on flat surfaces

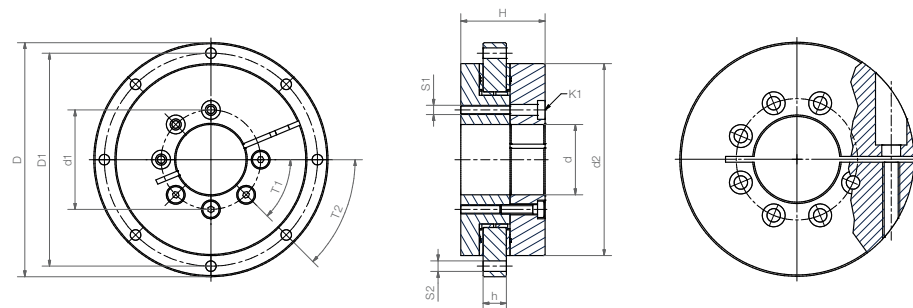


- No through-hole necessary
- No separate spacing ring
- Fix with only 4 screws

Dimensions [mm]

d	d1	d2	D	A	E	H	h1	h2	T1	S1	S2	K1 for screw	Part No.
20	31.0	60	62	65	50	26.0	18	2.0	6 x 60°	M4	4.5	DIN 7984 M4	PRT-01-20-SQ
30	42.5	82	84	85	65	30.5	21	1.5	8 x 45°	M4	4.5	DIN 7984 M4	PRT-01-30-SQ
50	65.0	120	122	125	100	34.5	23	1.5	8 x 45°	M6	6.6	ISO 4762 M6	PRT-01-50-SQ

Slewing rings with collar clamp



Slewing ring with PRT-01-30-C collar clamp

Collar clamp for PRT-01-30-C

Slewing ring PRT-01-30 with collar clamp for 30h7 tolerance shafts.

- For simple handling designs
- Quick and easy assembly
- Max. tightening torque: 5Nm

Dimensions [mm]

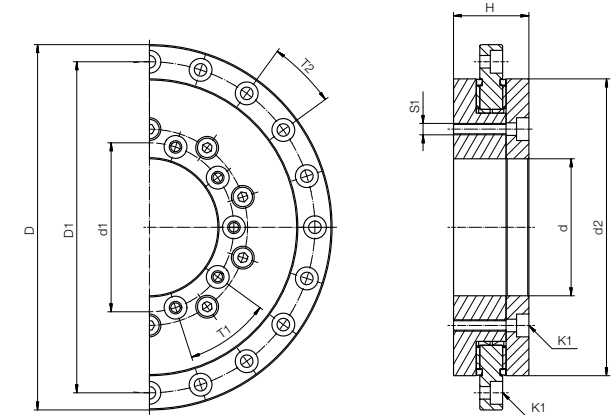
D	D1	d1	d	d2	H	h	T1	T2	S1	S2	K1 for screw	Part No.
80	70	31	20	60	33	8	4 x 60°	6 x 60°	M4	4.5	DIN 7984 M4	PRT-01-20-C New
100	91	42.5	30	82	36	10	6 x 45°	8 x 45°	M4	4.5	DIN 7984 M4	PRT-01-30-C

648 Online tools and more information ► www.igus.eu/prt



Type 01

Slewing rings with seal (-D: one-sided, -DD: both-sided)

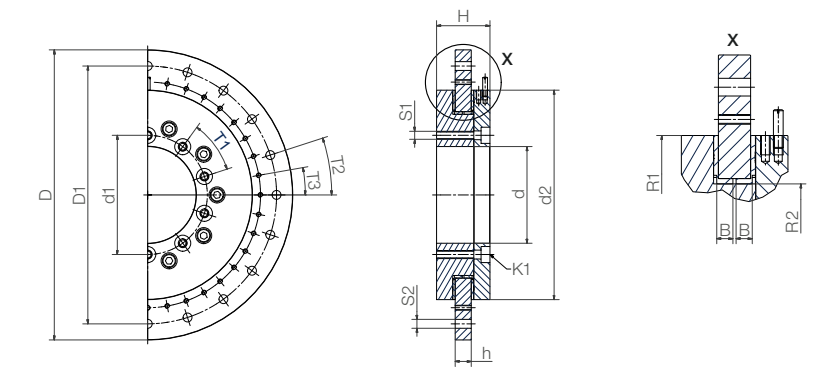
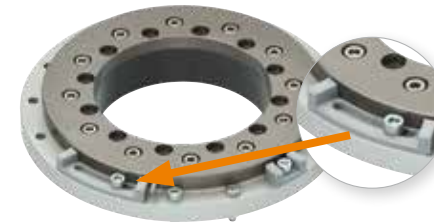


Dimensions [mm]

D ¹⁰⁾	D1	d1	d	d2	H	h	T1	T2	S1	S2	K1 for screw	R1	R2	B	Part No.
160	145	74	60	130	33	10	10 x 36°	20 x 18°	M5	5.5	ISO 4762 M5	65	51.5	4.5	PRT-01-60-D/DD
185	170	112	100	160	34	12	12 x 30°	16 x 22.5°	M5	5.5	ISO 4762 M5	80	69	5.5	PRT-01-100-D/DD

¹⁰⁾ Tolerance according to DIN ISO 2768 mK

Slewing rings with angle stop – easily adjustable



- Quick adjustment of the stop
- Load ratings identical to standard type 01

Dimensions [mm]

D ¹⁰⁾	D1	d1	d	d2	H	h	T1	T2	S1	S2	K1 for screw	R1	R2	B	Part No.
80	70	31.0	20	60	24	8	6 x 60°	6 x 60°	M4	4.5	DIN 7984 M4	30	20	3.5	PRT-01-20-AA
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-01-30-AA
150	135	65.0	50	120	33	10	8 x 45°	16 x 22.5°	M6	6.6	ISO 4762 M6	60	46.5	4.5	PRT-01-50-AA
160	145	74.0	60	130	33	10	10 x 36°	20 x 18°	M5	5.5	ISO 4762 M5	65	51.5	4.5	PRT-01-60-AA
185	170	112.0	100	160	34	12	12 x 30°	16 x 22.5°	M5	5.5	ISO 4762 M5	80	69	5.5	PRT-01-100-AA
250	235	165.0	150	220	35	12	12 x 30°	16 x 22.5°	M5	5.5	ISO 4762 M5	110	96.5	5.5	PRT-01-150-AA
300	285	215.0	200	274	38	15	12 x 30°	16 x 22.5°	M6	6.6	ISO 4762 M6	137	124	7.0	PRT-01-200-AA
450	430	320.0	300	410	42	15	12 x 30°	16 x 22.5°	M8	9.0	DIN 7984 M8	205	186.6	7.0	PRT-01-300-AA

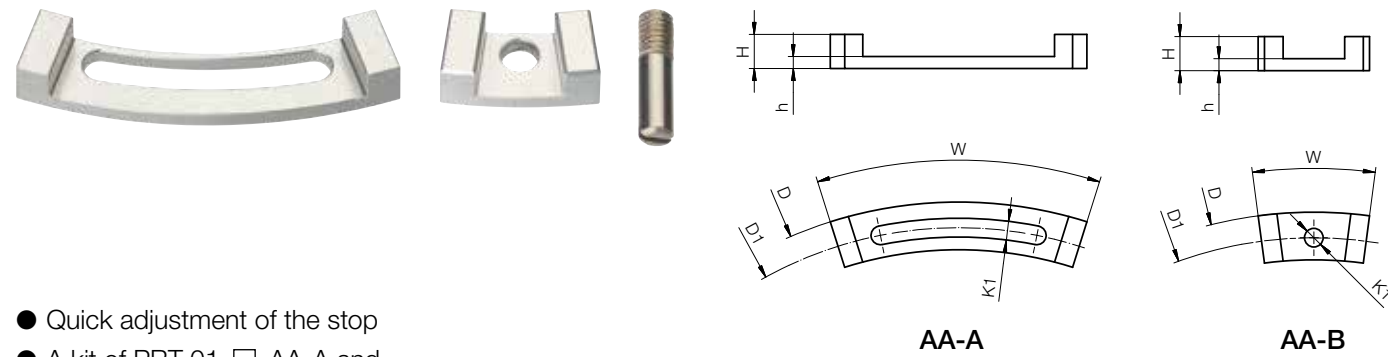
¹⁰⁾ Tolerance according to DIN ISO 2768 mK



3D CAD files, prices and delivery time online ► www.igus.eu/prt 649

Type 01

Angle limit kit



- Quick adjustment of the stop
- A kit of PRT-01-□-AA-A and PRT-01-□-AA-B

Dimensions [mm]

D	D1	H	h	K1	W	Part No.	Part No. kit
∅	∅			∅	[°]		
80	70	6.5	2.8	4.5	90.0	PRT-01-20-AA-A	PRT-01-20-AA-KIT
80	70	6.5	2.8	4.5	30.0	PRT-01-20-AA-B	
100	91	8.0	2.8	4.5	70.0	PRT-01-30-AA-A	PRT-01-30-AA-KIT
100	91	8.0	2.8	4.5	25.0	PRT-01-30-AA-B	
150	135	10.0	4.0	6.6	45.0	PRT-01-50-AA-A	PRT-01-50-AA-KIT
150	135	10.0	4.0	6.6	25.0	PRT-01-50-AA-B	
160	145	10.0	3.5	5.5	35.0	PRT-01-60-AA-A	PRT-01-60-AA-KIT
160	145	10.0	3.5	5.5	20.0	PRT-01-60-AA-B	
185	170	9.5	3.5	5.5	37.5	PRT-01-100-AA-A	PRT-01-100-AA-KIT
185	170	9.5	3.5	5.5	15.0	PRT-01-100-AA-B	
250	235	10.0	3.5	5.5	35.0	PRT-01-150-AA-A	PRT-01-150-AA-KIT
250	235	10.0	3.5	5.5	15.0	PRT-01-150-AA-B	
300	285	10.0	4.0	6.6	35.0	PRT-01-200-AA-A	PRT-01-200-AA-KIT
300	285	10.0	4.0	6.6	15.0	PRT-01-200-AA-B	
450	430	12.0	5.0	6.6	35.0	PRT-01-300-AA-A	PRT-01-300-AA-KIT
450	430	12.0	5.0	6.6	15.0	PRT-01-300-AA-B	

Slewing rings for manual adjustment **New**



- With hand wheel for easy adjustment
- Optional manual clamp and position indicator available
- Ideal for fast and secure positioning

Dimensions [mm]

∅T	∅S	∅P	∅F	L1	L2	B1	B2	B3	H1	S1	S2	G1	G2	Part No.
30	10	82	42.5	100.5	12	45	19.5	6	110.5	55	20	M4	8 x M4	PRT-01-50 HK-PA-HR

650 Online tools and more information ► www.igus.eu/prt



Type 01

Slewing rings with enlarged outer ring

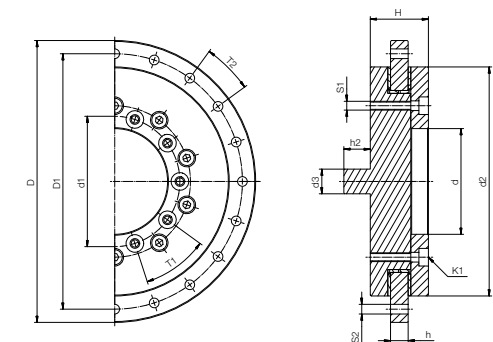


Dimensions [mm] – other dimensions similar to standard type PRT-01 ► Page 638

D	D1	S2	Part No. ¹¹⁾
205	185	5.5	PRT-01-100-M-ARG
205	185	M6	PRT-01-100-M-ARGG
205	185	5.5	PRT-01-100-M-ARGS
320	300	7.0	PRT-01-200-M-ARG
320	300	M8	PRT-01-200-M-ARGG
320	300	7.0	PRT-01-200-M-ARGS

¹¹⁾ Ending: -G standard hole, -GG threaded hole or -GS counterbore

PRT with assembled drive pin



Dimensions [mm]

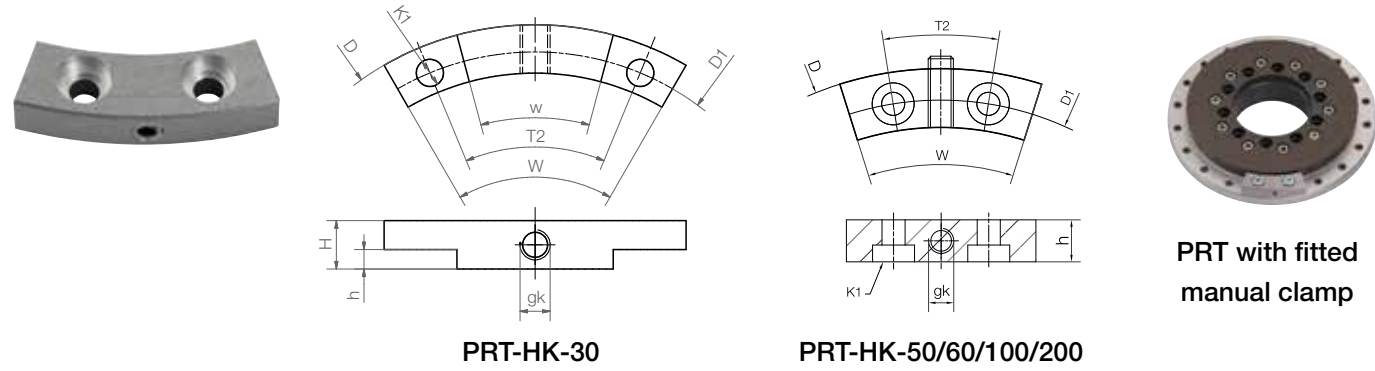
D	D1	d1	d	d2	d2-	H	h	T1	T2	S1	S2	K1	R1	R2	B	h2	Part No.
					tolerance												
160	145	74	60	130	±0,2	33	10	10 x 36°	20 x 18°	M5	5,5	M5	65	51,5	4,5	15	PRT-01-60-DP



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For type 01

Manual clamp



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

Dimensions [mm]

D	D1	T2	K1 for screw	H	h	gk	W	Part No.
100	91	45°	Ø 4.5	8	3.2	M5	60°	PRT-HK-30
150	135	22.5°	ISO 4762 M6	–	10	M6	40°	PRT-HK-50
160	145	18°	DIN 7984 M5	–	10	M6	35°	PRT-HK-60
205	185	22.5°	DIN 7984 M5	–	10	M6	40°	PRT-HK-100 ¹²⁾
320	300	22.5°	DIN 7984 M6	–	10	M6	40°	PRT-HK-200 ¹²⁾

¹²⁾ To be connected only with enlarged outer ring

Manual clamp

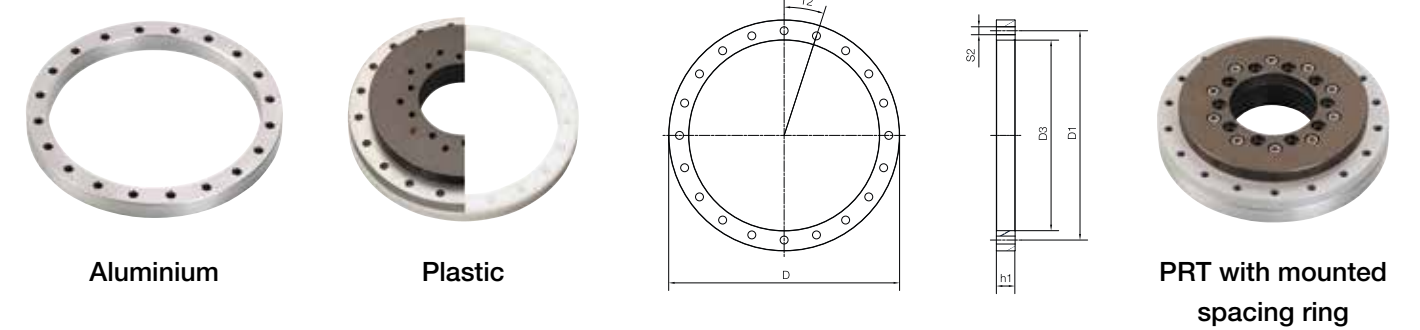


- For type 01, size 60

Part No.
PRT-HK-60-K

For type 01

Spacing rings made from anodised aluminium or polymer (POM)

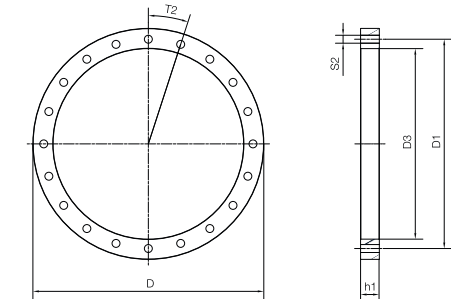


Dimensions [mm]

D	D1	T2	S2	D3	h1	Part No. ³⁹⁾
80	70	6 x 60°	4.5	62	10	PRT-01-20-DR
100	91	8 x 45°	4.5	84	11	PRT-01-30-DR
150	135	16 x 22.5°	6.6	122	13	PRT-01-50-DR
160	145	20 x 18°	5.5	132	13	PRT-01-60-DR
185	170	16 x 22.5°	5.5	162	13	PRT-01-100-DR
250	235	16 x 22.5°	5.5	222	13	PRT-01-150-DR
300	285	16 x 22.5°	7.0	276	13	PRT-01-200-DR
450	430	16 x 22.5°	9.0	412	15	PRT-01-300-DR

³⁹⁾ Please add suffix "-POM" for plastic version (not available for sizes 150 and 300)

Spacing ring for heavy duty applications **New**



- Steel version to avoid distortion during installation
- Dimensional range of 20mm to 300mm inner diameters
- iglidur® PRT modular system: can be combined with all sizes

- High corrosion resistance
- Lubrication and maintenance-free

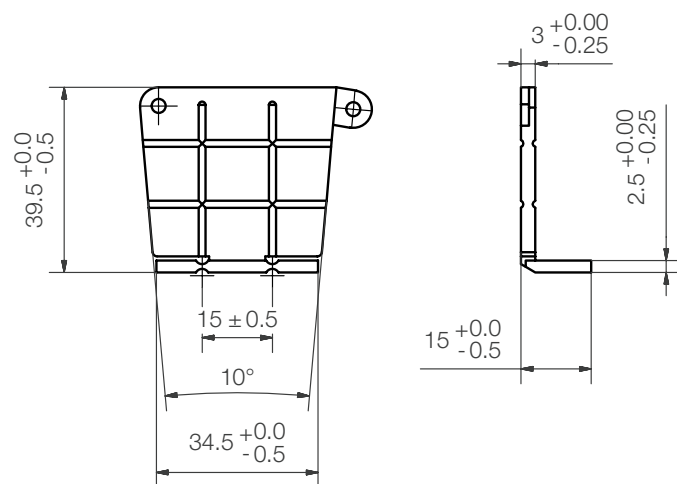
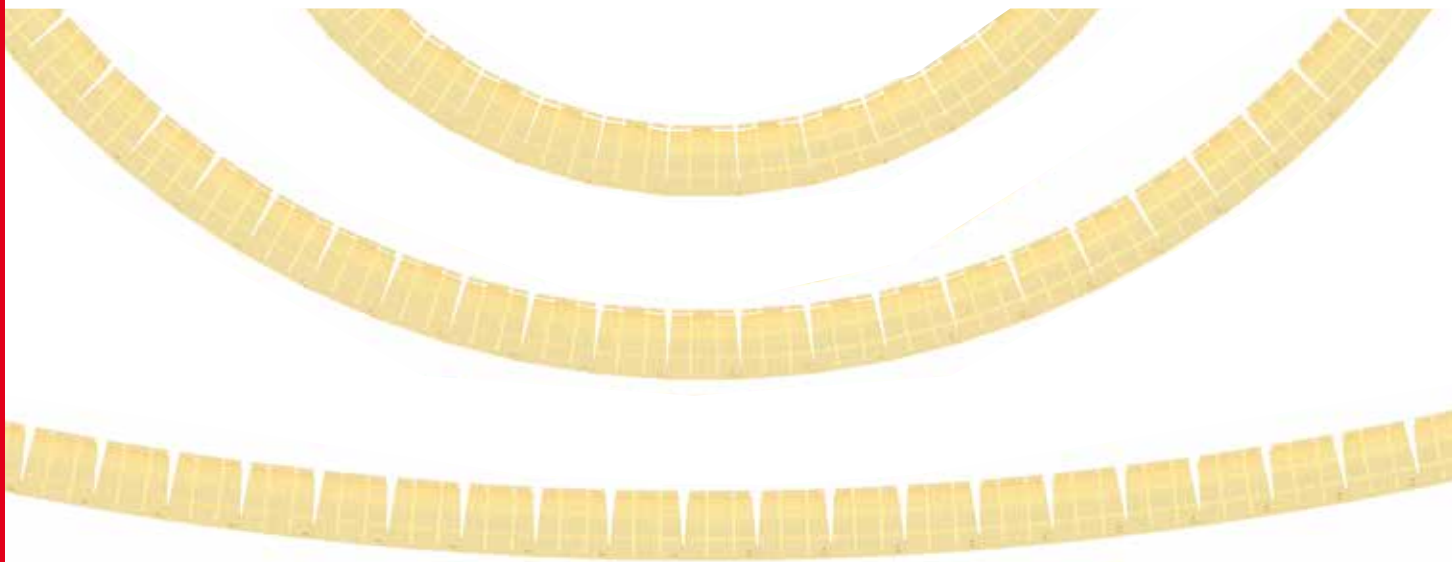
Dimensions [mm]

D	D1	T2	S2	D3 ±0.2	h1	Part No.
80	70	6 x 60°	4.5	62	20	PRT-01-20-DR-HD
100	91	8 x 45°	4.5	84	22	PRT-01-30-DR-HD
150	135	16 x 22.5°	6.6	122	26	PRT-01-50-DR-HD
160	145	20 x 18°	5.5	132	26	PRT-01-60-DR-HD
185	170	16 x 22.5°	5.5	162	26	PRT-01-100-DR-HD
250	235	16 x 22.5°	5.5	222	26	PRT-01-150-DR-HD
300	285	16 x 22.5°	7.0	276	26	PRT-01-200-DR-HD
450	430	16 x 22.5°	9.0	412	30	PRT-01-300-DR-HD

Universal sliding elements

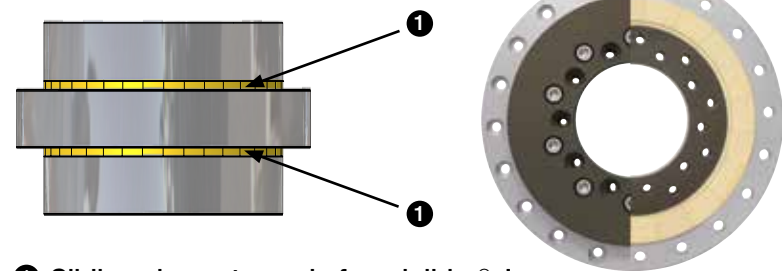
Customise your own slewing ring systems

Using the versatile iglidur® PRT universal sliding elements, large slewing ring systems can be tailored to the type 01. Depending on the number of elements, slewing ring systems are possible with inner diameters from 0.5 to 5m. We will happily support you with the design and detailed layout.



- Made from the proven iglidur® J ► Page 159
- Slewing ring systems possible from 0.5 up to 5m
- Low wear
- Robust, resistant to dirt
- Corrosion-free and resistant to liquids
- Lubrication and maintenance-free

Basic structure of type 01:



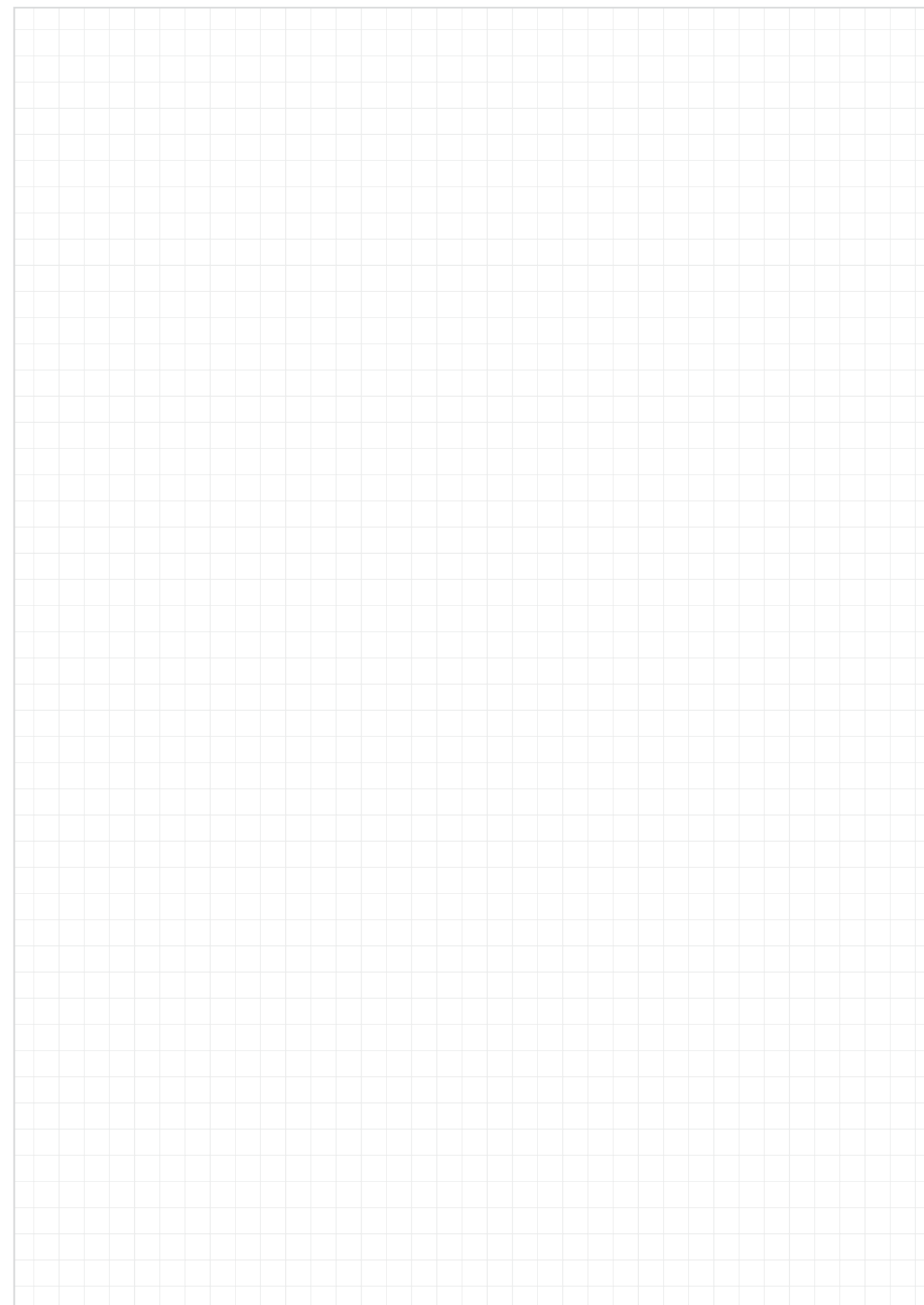
- 1 Sliding elements made from iglidur® J

Part No.
JRS-500S/45S

654 Online tools and more information ► www.igus.eu/prt



My sketches



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