



xirodur® B180 cage, stainless steel balls  
Type 6000PP3



xirodur® B180 cage, stainless steel balls  
Type 608P6

Order key

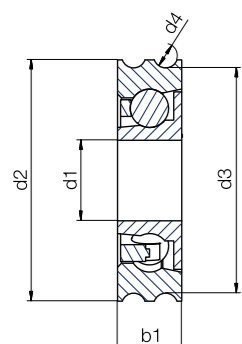
Type	Material	Design
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**BB-608 P6-B180-30-ES-C**

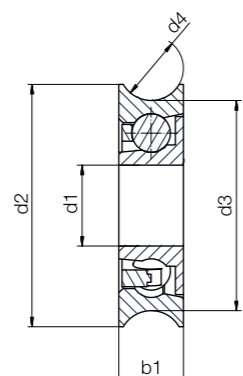
Ball bearings	Dimensions according to DIN 625-1	Profile P6	Race material	Cage material	Ball material	With shield
				30 = xirodur® B180	ES = Stainless steel	C = Shield on one side

- One-piece design
- Replaces several components

Example "Profile PP3"



Example "Profile P8"



Technical data

Installation size	Radial load capacity		Max. speed [rpm]	Weight B180/ES [g]
	stat. [N]			
608P6	80		2,200	3.96
608P8	140		1,800	23.37
6000P8	110		2,200	7.14
6000PP3	110		2,200	7.86
6201P9	160		1,600	27.05

Dimensions [mm]

Inner Ø d1	Outer Ø d2	Base Ø d3	Groove Ø d4	Width b1	Part No.
8	24	20.5	6	7	BB-608P6-B180-30-ES-C
8	48	32	8	14	BB-608P8-B180-30-ES
10	30	26	8	8	BB-6000P8-B180-30-ES-C
10	30	28	3	8	BB-6000PP3-B180-30-ES-C
12	60	43.5	9	12	BB-6201P9-B180-30-ES



Order example:

**BB-608P6-B180-30-ES** = Radial deep groove ball bearing, profile P6 with race material xirodur® B180, xirodur® B180 cage and stainless steel balls



Available from stock



xirodur® B180 races PA cage, stainless steel balls



xirodur® B180 races PA cage, glass balls

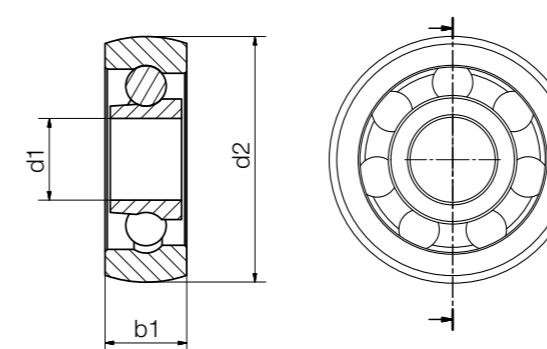
Order key

Type	Material
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**BB-608SO-B180-10-ES**

Ball bearings	Dimensions according to DIN 625-1	Spherical outer Ø	Race material	Cage material	Ball material
				10 = PA	ES = Stainless steel

- Use in skewed/curved/twisted profiles
- Prevents edge stress



Technical data

Installation size	Radial load capacity		Max. speed [rpm]	Weight	
	stat. [N]	dyn. [N]		PA/ES [g]	PA/GL [g]
608	80	94	2,200	4.63	3.34
6000	110	130	1,900	7.86	5.70
6001	138	147	1,750	13.51	11.10

Dimensions [mm]

Inner Ø d1	Outer Ø d2	Width b1	Width b2	Cage/ball material combination		Part No.
				PA/ES	PA/GL	
8	24.00	8	7	●	●	BB-608SO-B180-10- <input type="checkbox"/>
10	28.96	10	8	●	●	BB-6000SO-B180-10- <input type="checkbox"/>
12	35.56	12	8	●	●	BB-6001SO-B180-10- <input type="checkbox"/>



Order example:

**BB-608SO-B180-10-ES** = Ball bearing with spherical outer diameter, race material xirodur® B180, PA cage and stainless steel balls



Available from stock

Races made from xirodur® B180



PA cage,  
stainless steel or  
glass balls

- Higher loads
- More cost-effective than two comparable bearings



Order key

Type	Material	Design
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BB-6000-B180-10-ES-D

Ball bearings	Dimensions according to DIN 625-1	Face material	Cage material	Ball material	Double row
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Cage material

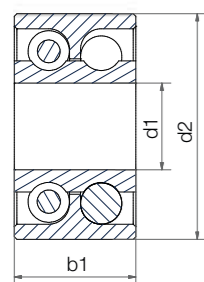
10 = PA

Options:

Ball material

ES = Stainless steel

GL = Glass



## Technical data

Installation size	Radial load capacity		Max. speed [rpm]	Weight	
	stat. [N]	dyn. [N]		PA/ES [g]	PA/GL [g]
6000	200	240	1,000	11.23	6.90
6004	420	470	650	35.60	22.55

## Dimensions [mm]

Inner Ø d1	Outer Ø d2	Width b1	Cage/ball material combination		Part No.
			PA/ES	PA/GL	
10	26	14	●	●	BB-6000-B180-10- <span style="border: 1px solid black; padding: 0 2px;"> </span> -D
20	42	20	●	●	BB-6004-B180-10- <span style="border: 1px solid black; padding: 0 2px;"> </span> -D



Order example:

BB-6000-B180-10-ES-D = double row ball bearing with race material xirodur® B180, PA cage and stainless steel balls



Available  
from stock

Races made from xirodur® B180



PP balls

- For rotary and linear motions



Order key

Type	Material
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BB-MB-1633-11-B180-PP

Ball bearings	Multi-axis bearing	Inner Ø (d1)	Outer Ø (d2)	Width (b)	Housing material	Ball material
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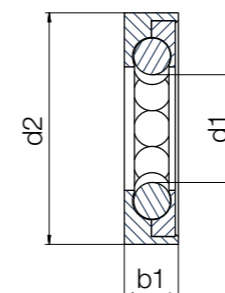
Housing material

B180 =

xirodur® B180

Ball material

PP = Polypropylene



## Technical data

Type	Radial load capacity		Max. speed [rpm]	Weight B180/PP [g]
	stat. [N]	dyn. [N]		
BB-MB	55	70	500	6.86

## Dimensions [mm]

Inner Ø d1	Outer Ø d2	Width b1	Part No.
16.3	33	11	BB-MB-1633-11-B180-PP



Order example:

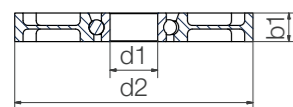
BB-MB-1633-11-B180-PP = Multi-axis bearing with race material xirodur® B180, B180 housing and PP balls



Available  
from stock

PA cage,  
stainless steel ballsPA cage,  
glass balls

- Larger outer diameter for smaller shafts
- Also used as roller in profiles



Order key

Type	Material
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BB-6004SW100-B180-10-ES

Ball bearings	Dimensions according to DIN 625-1	Skate wheel	Outer Ø	Race material	Cage material	Ball material
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Cage material

10 = PA

Options:

Ball material

ES = Stainless steel

GL = Glass

## Technical data

Installation size	Radial load capacity		Max. speed [rpm]	Weight	
	stat. [N]	dyn. [N]		PA/ES [g]	PA/GL [g]
6004	245	294	1,400	58.81	58.81

## Dimensions [mm]

Inner Ø d1	Outer Ø d2	Width b1	Part No.
20	100	12	BB-6004SW100-B180-10- <input type="text"/>



Order example:

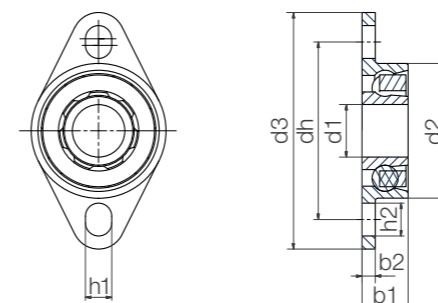
BB-6004SW100-B180-10-ES = xiros® skate wheel with race material xirodur® B180. 100mm outer diameter, PA cage and stainless steel balls

Available  
from stock

FDA

xirodur® B180 cage  
Stainless steel balls

- For less precise holding fixtures



Order key

Type	Material
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BB-FL-608-B180-30-ES

Ball bearings	Fixed flange ball bearing	Dimensions according to DIN 625-1	Housing material	Cage material	Ball material
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Cage material

30 = xirodur® B180

Ball material

ES = Stainless steel

## Technical data

Installation size	Radial load capacity		Max. speed [rpm]	Weight B180/ES [g]
	stat. [N]	dyn. [N]		
626	60	62	3,200	2.89
608	80	92	2,200	3.65
6000	110	130	2,200	6.49
6001	130	147	2,000	7.68
6003	160	220	1,600	11.13
6004	250	320	1,400	25.06

## Dimensions [mm]

d1	d2	d3	b1	b2	dh	h1	h2	Part No.
6	19	33.5	6	2	25	3	4.5	BB-FL-626-B180-30-ES
8	20.7	35.8	7	2	26.8	4	5	BB-FL-608-B180-30-ES
10	26	41	8	2	32	4	5	BB-FL-6000-B180-30-ES
12	28	44	8	2	35	4	5	BB-FL-6001-B180-30-ES
17	35	54	10	2.5	44	4	6	BB-FL-6003-B180-30-ES
20	42	84	12	4	63	8	12	BB-FL-6004-B180-30-ES



Order example:

BB-FL-608-B180-30-ES = Fixed flange ball bearing with xirodur® B180 housing, xirodur® B180 cage and stainless steel balls

Available  
from stock



Order key

Type Material

BB-522B-B180-POM

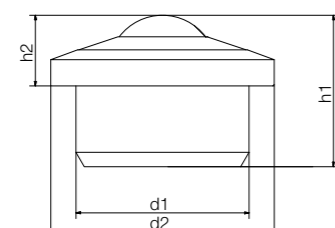
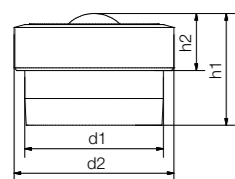


Polymer ball transfer unit

POM = POM (ball transfer unit)

Option

B = New generation



BB-505(B)-B180-POM

BB-515(B)-B180-POM  
BB-522(B)-B180-POM

## Technical data and dimensions [mm]

Installation size	Max. stat. load capacity axial [N]	Inner Ø		Height		Weight [g]	Part No.
		d1	d2	h1	h2		
505	35	10.4	12.0	8.4	4.3	0.88	BB-505-B180-POM
515	80	24.0	31.0	21.0	9.8	10.73	BB-515-B180-POM
522	110	36.0	45.0	30.0	9.8	28.80	BB-522-B180-POM

## Technical data and dimensions [mm]

Installation size	Max. stat. load capacity axial [N]	Inner Ø		Height		Weight [g]	Part No.
		d1	d2	h1	h2		
505B	150	10.4	12.0	8.4	4.3	0.92	BB-505B-B180-POM
515B	300	24.0	31.0	21.0	9.8	11.19	BB-515B-B180-POM
522B	500	36.0	45.0	30.0	9.8	29.97	BB-522B-B180-POM
530B	1000	45.0	55.0	37.0	13.8	67.40	BB-530B-B180-POM <b>New</b>



## Recommended tolerances

We recommend the following hole tolerances for the ball transfer units housings:

## Installation size

505 ▶ 10.40mm H7

515/515A ▶ 24mm H7

522/522A ▶ 36mm H7

In general: The height tolerance of all installation sizes is ± 0.2mm



## Order example:

BB-505-B180-POM = Polymer ball transfer unit with housing material xirodur® B180 and POM ball transfer unit



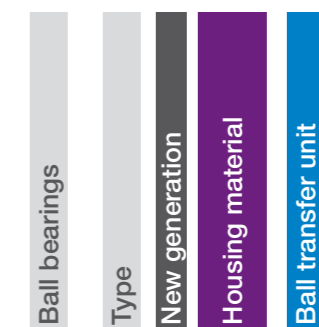
Available from stock



Order key

Type Material

BB-522B-ES



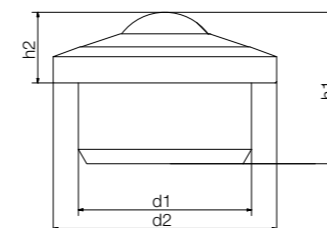
Ball transfer unit

ES =

Stainless steel

With stainless steel balls

Electrostatically dissipative



## Technical data and dimensions [mm]

Installation size	Max. stat. load capacity axial [N]	Inner Ø		Height		Weight stainless steel [g]	Part No.
		d1	d2	h1	h2		
515	300	24.0	31.0	21.0	9.8	22.8	BB-515B-B180-ES
515	300	24.0	31.0	21.0	9.8	22.8	BB-515B-F182-ES
522	500	36.0	45.0	30.0	9.8	66.6	BB-522B-B180-ES

## Technical data and dimensions [mm]

Installation size	Max. stat. load capacity axial [N]	Inner Ø		Height		Weight [g]	Part No.
		d1	d2	h1	h2		
515B	300	24.0	31.0	21.0	9.8	11.19	BB-515B-B180-ES
522B	500	36.0	45.0	30.0	9.8	29.97	BB-522B-B180-ES



## Recommended tolerances

We recommend the following hole tolerances for the ball transfer units housings:

## Installation size

515/515A ▶ 24mm H7

522/522A ▶ 36mm H7

In general: The height tolerance of all installation sizes is ± 0,2mm



## Order example:

BB-515-B180-ES = Polymer ball transfer unit with housing material xirodur® B180 and stainless steel ball transfer unit



Available from stock

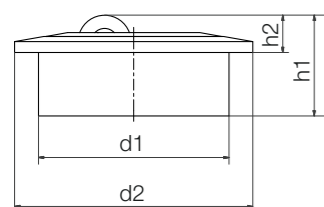
Axial polymer ball transfer unit made from xirodur® B180



For high loads (HH)



With soft roller made from xirodur® D180 (HS)



Order key

Type	Material
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**BB-522A-B180-HS**



Options

Ball transfer unit

HH (Hard roller) =

xirodur® B180

HS (Soft roller) =

xirodur® D180

BB-515A-B180-HH/-HS

BB-522A-B180-HH/-HS

### Technical data and dimensions [mm]

Installation size	Max. stat. load capacity axial [N]	Inner Ø		Height		Weight		Part No.
		d1	d2	h1	h2	HS [g]	HH [g]	
515A	150	24.0	31.0	14.3	5.3	9.96	9.99	BB-515A-B180-□
522A	300	36.0	45.0	19.2	7.05	24.69	24.71	BB-522A-B180-□



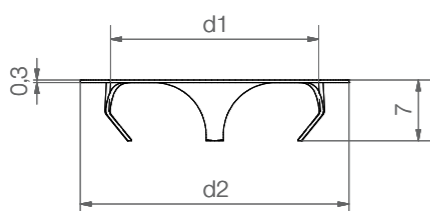
Order example:

BB-515A-B180-HS = Axial polymer ball transfer unit with housing material xirodur® B180 and soft roller made from xirodur® D180



Available from stock

### Accessories: Clamping rings for xiros® polymer ball transfer units



xiros® clamping rings made of stainless steel offer the possibility to install xiros® polymer ball transfer units in another orientation than the standard horizontal position. Easy assembly and disassembly.

### Dimensions [mm]

For ball transfer unit	d1	d2	Housing hole	Weight [g]	Part No.
BB-515-B180-POM/BB-515A-B180-□	24	31	25H7	0.91	BB-515-CR
BB-522-B180-POM/BB-522A-B180-□	36	41	37H7	1.61	BB-522-CR



Available from stock