

# xiros® radial deep groove ball bearings with flange

xirodur® B180 or xirodur® F180

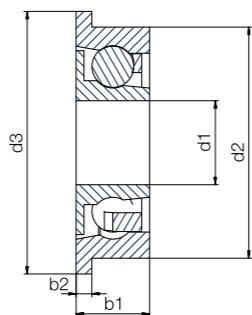
## Single flange with shield



xirodur® B180, PA cage, stainless steel balls



xirodur® S180, PA cage, stainless steel balls



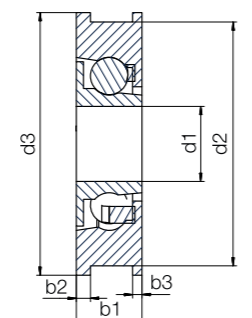
## Double flange with shield



xirodur® B180 races PA cage, stainless steel or glass balls



xirodur® F180 races PA cage, stainless steel balls



## Technical data

Installation size	Double flange	Radial load capacity		Max. speed [rpm]	Weight					
		stat. [N]	dyn. [N]		B180			F180		S180
					PA/ES [g]	PA/GL [g]	B180/ES [g]	PA/ES [g]	PA/ES [g]	
<b>Radial deep groove ball bearing with single flange with shield for guide roller</b>										
626	-	60	62	3,200	-	-	-	-	1.32	
688	-	39	41	3,000	-	-	-	-	0.66	
608	-	80	94	2,400	-	-	-	-	2.00	
608	-	80	94	2,200	5.55	-	-	-	-	
6000	-	110	130	1,900	7.55	-	-	-	-	
6000	-	110	130	1,900	10.06	-	-	-	-	
6001	-	130	147	1,750	7.53	5.09	-	-	-	
6001	-	130	147	1,750	12.02	-	-	-	-	
6002	-	140	150	1,600	11.44	-	-	-	-	
6003	-	160	220	1,550	11.42	-	-	-	-	
6004	-	250	320	1,400	-	-	16.36	-	-	
6004	-	250	320	1,400	-	-	29.60	-	-	
<b>Radial deep groove ball bearing with single or double flange and shields</b>										
608	-	80	94	2,200	5.69	4.47	-	5.49	-	
608	●	80	94	2,200	5.82	5.93	-	5.61	-	



### Order example:

BB-6000F2830-B180-10-ES = Radial deep groove ball bearing with single flange for system solution BBT (guide roller), race material xirodur® B180 with PA cage and stainless steel balls

## Product range



Order key with single flange

Type	Material
Ball bearings	Dimensions according to DIN 625-1
Single flange	Outer Ø [mm]
Race material	Cage material
Ball material	



Also available as complete system solution ▶ Page 912



Order key with double flange

Type	Material	Design
Ball bearings	Dimensions according to DIN 625-1	Double flange
Race material	Cage material	Ball material
Double shield		

### Flange

F = Single flange  
FF = Double flange  
Race material  
F180 = xirodur® F180  
B180 = xirodur® B180  
S180 = xirodur® S180

### Cage material

10 = PA  
30 = xirodur® B180  
Ball material  
ES = Stainless steel  
GL = Glass  
Shield  
C = With shield  
CC = Double shield

## Dimensions [mm]

Inner Ø	Outer Ø	Width	Cage/ball material combination							Part No.
			B180		F180		S180			
			PA/ES	PA/GL	B180/ES	PA/ES	PA/ES	PA/ES	PA/ES	
d1	d2	d3	b1	b2	PA/ES	PA/GL	B180/ES	PA/ES	PA/ES	
6.0	19.0	22.0	6.0	1.5	-	-	-	-	●	BB-626F-S180-10-ES-C
8.0	16.0	18.0	5.0	1.0	-	-	-	-	●	BB-688F-S180-10-ES-C
8.0	22.0	25.0	7.0	1.5	-	-	-	-	●	BB-608F-S180-10-ES-C
8.0	28.0	30.0	7.0	2.0	●	-	-	-	-	BB-608F2830-B180-10-ES
10.0	28.0	30.0	9.0	2.0	●	-	-	-	-	BB-6000F2830-B180-10-ES
10.0	35.0	38.0	9.0	2.0	●	-	-	-	-	BB-6000F3538-B180-10-ES
12.0	28.0	30.0	9.0	2.0	●	-	-	-	-	BB-6001F2830-B180-10-ES
12.0	35.0	38.0	9.0	2.0	●	-	-	-	-	BB-6001F3538-B180-10-ES
15.0	35.0	38.0	9.0	2.0	●	-	-	-	-	BB-6002F3538-B180-10-ES
17.0	35.0	38.0	10.0	2.0	●	-	-	-	-	BB-6003F3538-B180-10-ES
20.0	46.0	50.0	12.0	2.0	-	-	●	-	-	BB-6004F4650G-B180-30-ES
20.0	56.0	60.0	12.0	2.0	-	-	●	-	-	BB-6004F5660G-B180-30-ES
8.0	26.0	28.0	8.5	1.5	●	●	-	●	-	BB-608F-□-10-□-CC
8.0	26.0	28.0	7.0	1.5/1.0 (b3)	●	●	-	●	-	BB-608FF-□-10-□-CC

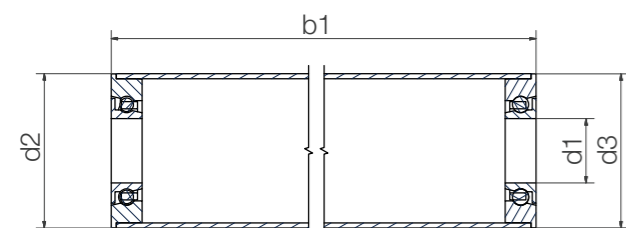


Available from stock



Aluminium tube with xirodur® B180 ball bearing

- Suitable for contact with food



### Order key

Type	Material
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### BBT-AC 38-6000-B180-10-ES

Ball bearing guide roller	Aluminium tube	Outer Ø	Dimensions according to DIN 625-1	Face material	Cage material	Ball material
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- Radial deep groove ball bearings with flange also available as individual parts** ▶Page 910
- Cage material**  
10 = PA  
30 = xirodur® B180
- Ball material**  
ES = Stainless steel

### Dimensions [mm]

Inner Ø d1	Outer Ø d2	Flange Ø d3	Length b1	Part No.
6	20	19.9	50–500	BBT-AC20-606-B180-30-ES <b>New</b>
8	20	19.9	50–500	BBT-AC20-688-B180-30-ES <b>New</b>
8	30	29.9	50–1,500	BBT-AC30-608-B180-10-ES
10	30	29.9	50–1,500	BBT-AC30-6000-B180-10-ES
12	30	29.9	50–1,500	BBT-AC30-6001-B180-10-ES
10	38	37.9	50–1,500	BBT-AC38-6000-B180-10-ES
12	38	37.9	50–1,500	BBT-AC38-6001-B180-10-ES
15	38	37.9	50–1,500	BBT-AC38-6002-B180-10-ES
17	38	37.9	50–1,500	BBT-AC38-6003-B180-10-ES
20	50	49.9	50–1,500	BBT-AC50-6004-B180-30-ES
20	60	59.9	50–1,500	BBT-AC60-6004-B180-30-ES



Online configurator for xiros® system solutions  
▶ [www.igus.eu/xirosAlu](http://www.igus.eu/xirosAlu)



**Order example:**  
BBT-AC38-6000-B180-10-ES, L=500mm = Aluminium tube with 2 ball bearings with race material xirodur® B180, PA cage and stainless steel balls, total length 500mm

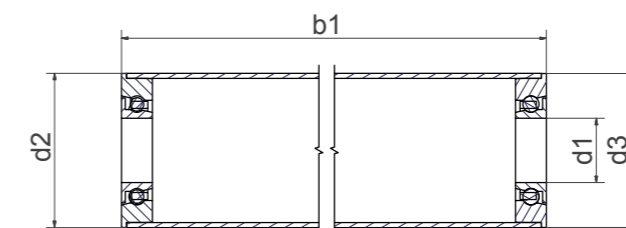


Available from stock



PVC tube with xirodur® B180 ball bearing

- Components for use in food in accordance with 10/2011/EU and 1935/2004/EG



### Order key

Type	Material
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### BBT-PVC 50-6004-B180-30-ES

Ball bearing guide roller	PVC tube	Outer Ø	Dimensions according to DIN 625-1	Face material	Cage material	Ball material
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- Cage material**  
30 = xirodur® B180
- Ball material**  
ES = Stainless steel

### Dimensions [mm]

Inner Ø d1	Outer Ø d2	Flange Ø d3	Length b1	Part No.
8	30	30	50–1,000	BBT-PVC30-608-B180-30-ES
10	30	30	50–1,000	BBT-PVC30-6000-B180-30-ES
10	40	40	50–1,000	BBT-PVC40-6000-B180-30-ES
12	40	40	50–1,000	BBT-PVC40-6001-B180-30-ES
15	40	40	50–1,000	BBT-PVC40-6002-B180-30-ES
17	40	40	50–1,000	BBT-PVC40-6003-B180-30-ES
20	50	50	50–1,000	BBT-PVC50-6004-B180-30-ES
20	63	63	50–1,000	BBT-PVC63-6004-B180-30-ES



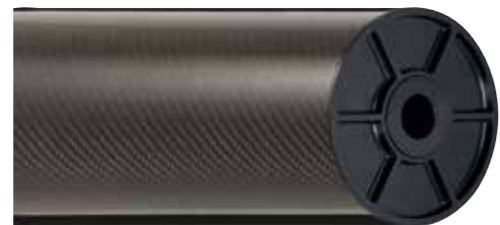
**Order example:**  
BBT-PVC50-6004-B180-30-ES, L=200mm = PVC tube with 2 ball bearings with race material xirodur® B180, xirodur® B180 cage and stainless steel balls, total length 200mm



Available from stock



Carbon fibre tube with xirodur® S180 ball bearing, available as ESD version (with xirodur® F180 ball bearing)



Carbon fibre tube with xirodur® F180 ball bearing

### Order key

Type Material

**BBT-CF 50-6004-□-30-ES**

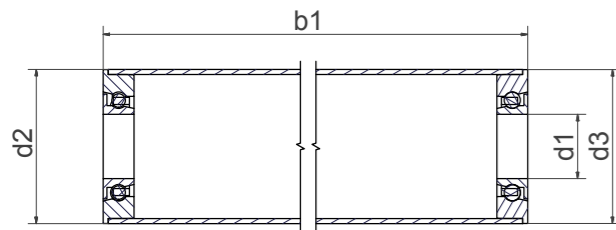
Ball bearing guide roller	Carbon fibre tube	Outer Ø	Dimensions according to DIN 625-1	Race material	Cage material	Ball material
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#### Cage material

30 = xirodur® B180

#### Ball material

ES = Stainless steel



### Dimensions [mm]

Inner Ø	Outer Ø	Flange Ø	Length	Part No.
d1	d2	d3	b1	
20	50	49.9	50–1,000	<b>BBT-CF50-6004-S180-30-ES</b>
20	100	100.0	50–1,000	<b>BBT-CF100-6004-F180-30-ES</b>



#### Order example:

**BBT-CF50-6004-S180-30-ES, L=200mm** = Carbon fibre tube with 2 ball bearings xirodur® S180, xirodur® B180 cage and stainless steel balls, total length 200mm



#### Delivery time: approximately 3 weeks

With xirodur® F180 as ESD version available upon request



Closed special solution with aluminium tube and polymer ball bearing for guide rollers and label rollers

### Order key

Type Material

**BBTG-AC 30-□-30-ES**

Ball bearing guide roller	Aluminium tube	Outer Ø	Length – upon request	Cage material	Ball material
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#### Cage material

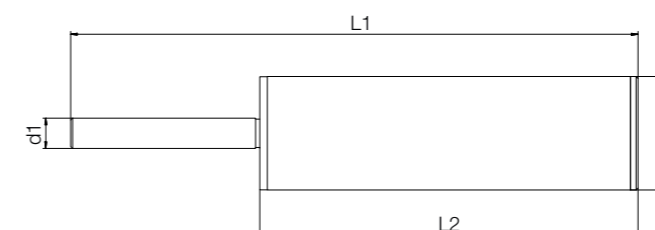
30 = xirodur® B180

#### Ball material

ES = Stainless steel



Ready-to-install complete systems with shaft to required size upon request



### Dimensions [mm]

Outer Ø	Length	Part No.
d2	L1	
30	According to customer request	<b>BBTG-AC30-XX-30-ES</b>



#### Order example:

**BBTG-AC30-200-30-ES, L=200mm** = Aluminium with 2 ball bearings with race material xirodur® S180, xirodur® B180 cage and stainless steel balls, total length 200mm



#### Available upon request

upon request



PA cage,  
stainless steel or  
glass balls



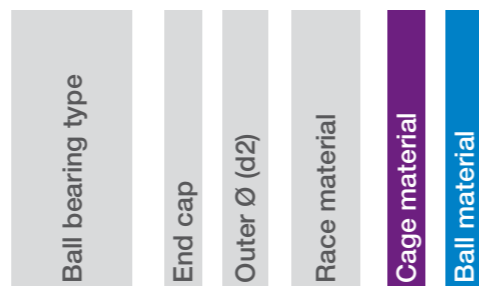
PA cage,  
stainless steel balls  
hexagon nut socket



### Order key

Type Material

**BB-6204EC44.5-B180-10-ES**



#### Cage material

10 = PA

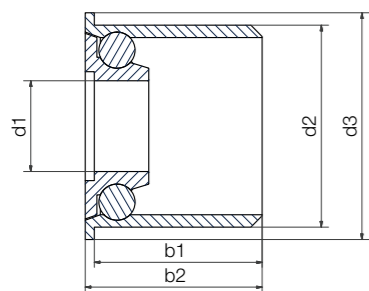
#### Options:

Ball material

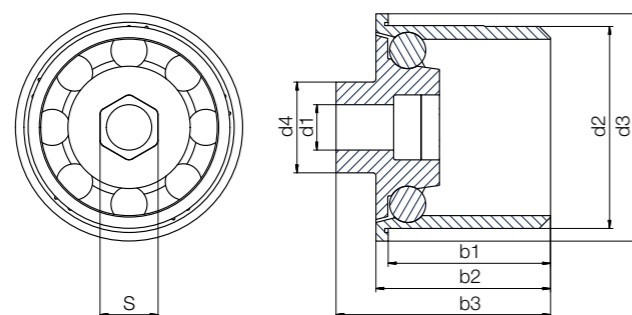
ES = Stainless steel

GL = Glass

#### Example "6204EC"



#### Example "6204ECM8"



### Technical data

Installation size	Radial load capacity		Max. speed [rpm]	Weight	
	stat. [N]	dyn. [N]		PA/ES [g]	PA/GL [g]
6204	245	294	1,800	41.66	29.85
6204	245	294	1,800	48.44	-

### Dimensions [mm]

Inner Ø	Outer Ø		Width			S	Cage/ball material combination		Part No.	
	d1	d2	d3	d4	b1		b2	b3		PA/ES
20	44.5	50	-	35.8	38.5	-	-	●	●	BB-6204EC44.5-B180-10-□
10	44.5	50	20	35.8	38.5	47.3	M8	●	-	BB-6204ECM8-B180-10-ES



#### Order example:

BB-6204EC44.5-B180-10-ES = End cap with race material xirodur® B180, with PA cage and stainless steel balls



Available from stock

## My sketches

