

xirodur® A500 Polymer Ball Bearings | Product Range

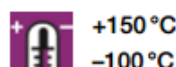
Radial deep-groove ball bearings



Made of xirodur® A500

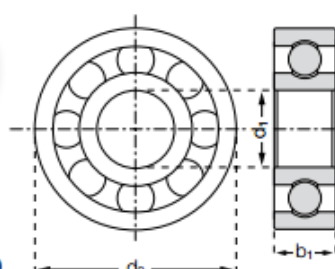
PEEK cage

stainless steel balls



+150 °C

-100 °C



Order key

BB-623-A500-70-ES



Ball material

ES = stainless steel

Cage material

70 = PEEK

Race material

A500 = xirodur® A500

Dimensions acc. to

DIN 625-1

Ball bearing

xiros® polymer ball bearings open up new application areas for plastic roller bearings. After the 2007 market launch, the life-time of the high-temperature option with xirodur® A500 inner and outer rings could be clearly raised by up to factor 5.

- Lubrication- and maintenance-free
- For high temperatures up to +150°C
- Corrosion-resistant

- Non-magnetic and washable
- Chemical resistant
- Low weight
- Inner-, outer races and cages made from FDA-compliant polymers
- Predictable lifetime
- For shaft diameter 3–20 mm
- Electrically insulating



PEEK cages, inner- and outer races made from FDA-compliant polymers

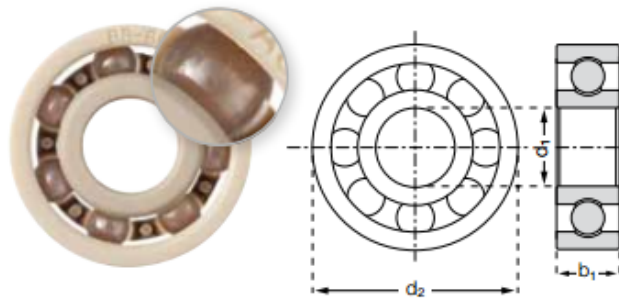
Dimensions [mm]

Part number	Race	Cage	Ball	Inner-Ø d1	Outer-Ø d2	Width b1
BB-623-A500-70-ES	A500	PEEK	1.4401	3	10	4
BB-626-A500-70-ES	A500	PEEK	1.4401	6	19	6
BB-608-A500-70-ES	A500	PEEK	1.4401	8	22	7
BB-6000-A500-70-ES	A500	PEEK	1.4401	10	26	8
BB-6004-A500-70-ES	A500	PEEK	1.4401	20	42	12

Technical Data


Part number	Max. static bearing load axial [N]	Static bearing load [N]	Dynamic bearing load [N]	Max. speed [rpm]	Weight [g]
BB-623-A500-70-ES	40	30	40	5,000	0.4
BB-626-A500-70-ES	125	60	81	3,200	2.3
BB-608-A500-70-ES	220	72	97	2,700	3.7
BB-6000-A500-70-ES	380	102	137	2,100	6.0
BB-6004-A500-70-ES	650	250	350	1,300	19.7

Radial deep-groove ball bearings

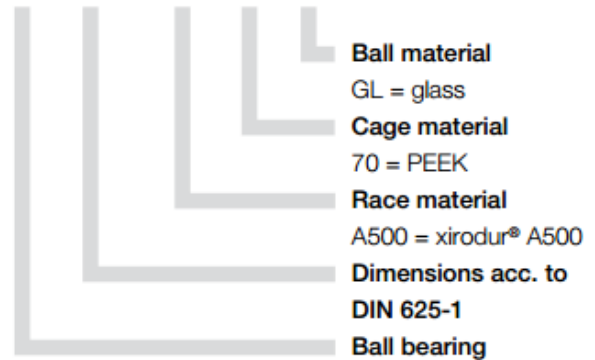


Made of xirodur® A500
PEEK cage
glass balls

 +150°C
-100°C

 Order key

BB-623-A500-70-GL



xirodur® A500 polymer ball bearings with combination of PEEK cage and Glass balls are often used in environments, where high chemical resistance is necessary and it should be dispense entirely of stainless steel components.

- Lubrication- and maintenance-free
- For high temperatures up to +150°C
- Corrosion-resistant
- Non-magnetic and washable
- Chemical resistant
- Predictable lifetime

- Low weight
- For shaft diameter 3–20 mm
- Electrically insulating

Dimensions [mm]

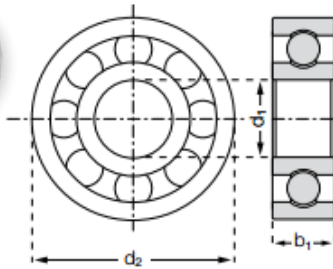
Part number	Race	Cage	Ball	Inner-Ø d1	Outer-Ø d2	Width b1
BB-623-A500-70-GL	A500	PEEK	Glass	3	10	4
BB-626-A500-70-GL	A500	PEEK	Glass	6	19	6
BB-608-A500-70-GL	A500	PEEK	Glass	8	22	7
BB-6000-A500-70-GL	A500	PEEK	Glass	10	26	8
BB-6004-A500-70-GL	A500	PEEK	Glass	20	42	12

Technical Data

Part number	Max. static bearing load axial [N]	Static bearing load [N]	Dynamic bearing load [N]	Max. speed [rpm]	Weight [g]
BB-623-A500-70-GL	40	30	40	5,000	0.3
BB-626-A500-70-GL	125	60	81	3,200	1.6
BB-608-A500-70-GL	220	72	97	2,700	2.4
BB-6000-A500-70-GL	380	102	137	2,100	3.8
BB-6004-A500-70-GL	650	250	350	1,300	13.2

xirodur® A500 Polymer Ball Bearings | Product Range

Radial deep-groove ball bearings



Made of xirodur® A500

PA cage

stainless steel balls



+150 °C

-40 °C



Order key

BB-623-A500-10-ES



Ball material

ES = stainless steel

Cage material

10 = PA

Race material

A500 = xirodur® A500

Dimensions acc. to

DIN 625-1

Ball bearing

xirodur® A500 polymer ball bearings with combination of PA cage and stainless steel balls are the economic alternative of xirodur® A500 product range, when temperature is merely up to +150 °C and no chemicals are in use.

- Lubrication- and maintenance-free
- For high temperatures +150 °C
- Corrosion-resistant
- Non-magnetic and washable
- Electrically insulating

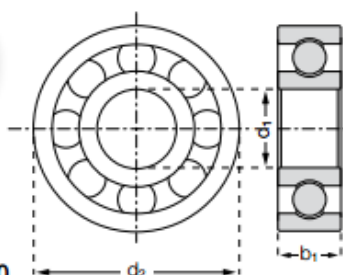
Dimensions [mm]

Part number	Race	Cage	Ball	Inner-Ø d1	Outer-Ø d2	Width b1
BB-623-A500-10-ES	A500	PA	1.4401	3	10	4
BB-626-A500-10-ES	A500	PA	1.4401	6	19	6
BB-608-A500-10-ES	A500	PA	1.4401	8	22	7
BB-6000-A500-10-ES	A500	PA	1.4401	10	26	8
BB-6004-A500-10-ES	A500	PA	1.4401	20	42	12

Technical Data

Part number	Max. static bearing load axial [N]	Static bearing load [N]	Dynamic bearing load [N]	Max. speed [rpm]	Weight [g]
BB-623-A500-10-ES	40	30	40	5,000	0.4
BB-626-A500-10-ES	125	60	81	3,200	2.3
BB-608-A500-10-ES	220	72	97	2,700	3.7
BB-6000-A500-10-ES	380	102	137	2,100	6.0
BB-6004-A500-10-ES	650	250	350	1,300	19.4

Radial deep-groove ball bearings



Made of xirodur® A500
PEEK cage
PAI balls

+150 °C
-100 °C

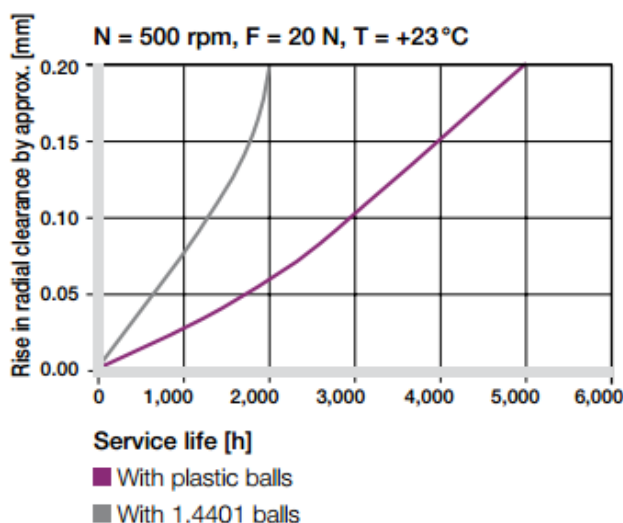


Order key

BB-626-A500-70-PAI



Ball material
PAI = plastic
Cage material
70 = PEEK
Race material
A500 = xirodur® A500
Dimensions acc. to
DIN 625-1
Ball bearing



xirodur® A500 polymer ball bearings are also available with plastic balls. At low loads the wear resistance can be improved by a factor of 3.

- Lubrication- and maintenance-free
- Corrosion and chemical resistant
- For temperatures up to +150 °C
- Non-magnetic and washable
- Predictable lifetime
- Low weight
- Electrically insulating

Dimensions [mm]

Part number	Race	Cage	Ball	Inner-Ø d1	Outer-Ø d2	Width b1
BB-626-A500-70-PAI	A500	PEEK	PAI	6	19	6
BB-608-A500-70-PAI	A500	PEEK	PAI	8	22	7
BB-6000-A500-70-PAI	A500	PEEK	PAI	10	26	8
BB-6004-A500-70-PAI	A500	PEEK	PAI	20	42	12

Technical Data

Part number	Max. static bearing load axial [N]	Static bearing load [N]	Dynamic bearing load [N]	Max. speed [rpm]	Weight [g]
BB-626-A500-70-PAI	30	15	20	3,200	1.4
BB-608-A500-70-PAI	55	18	25	2,700	2.2
BB-6000-A500-70-PAI	95	25	34	2,100	3.4
BB-6004-A500-70-PAI	160	62	88	1,300	11.7