

Products seems to be identical, if you used them you find out they are not.

## HIGH PRECISION ECB-CROSSED ROLLER BEARINGS

See the difference – test us



**ECB-SX** series

**ECB-RB** series

**ECB-RE** series

**ECB-RU** series

**ECB-RA** series

**ECB-RA-C** series

**ECB-CRHB** series

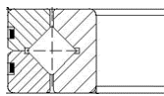
## Product overview

Our ECB- **CROSSED ROLLER BEARINGS** are bearings for high-precision applications.

The X arrangement of the crossed cylindrical rollers in the bearings support axial forces from all directions as well as radial forces, tilting moment loads and any combination of loads.

Crossed roller bearings are very rigid, have a high running accuracy and they are available in normal clearance, low clearance or preload, sealed or unsealed.

The Selection of the different ECB-Crossed Roller bearing series types:

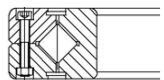


ECB-SX series

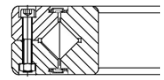
for inner ring rotation, ultrathin.

Inner - Diameter 70mm to 500mm.

More information, see page:



ECB-RB series

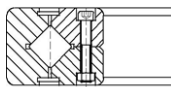


ECB-RB-UU series (sealed types)

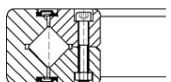
for inner ring rotation.

Inner - Diameter 20mm to 1250mm.

More information, see page:



ECB-RE series

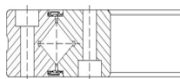


ECB-RE-UU series (sealed types)

for outer ring rotation.

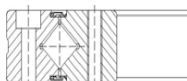
Inner - Diameter 20mm to 600mm.

More information, see page:



ECB – RU series -U,-UU,-UT (sealed types)

for inner + outer ring rotation.



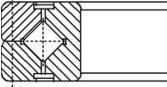
ECB – RUG + RUX series (sealed types)

for inner + outer ring rotation.

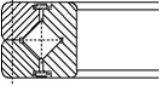
Inner - Diameter 10mm to 350mm.

More information, see page :

# Product overview



ECB-RA series



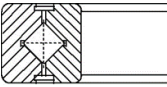
ECB-RA -UU series (sealed series)

Inner - Diameter 50mm to 200mm.

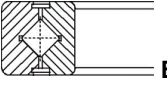
for inner ring rotation, ultrathin.

More information, seepage:

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ECB-RAC series



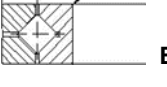
ECB-RAC-UU series (sealed series)

Inner - Diameter 50mm to 200mm.

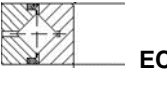
for inner + outer ring rotation ultrathin.

More information, see page:

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ECB-CRBH series



ECB- CRHB-UU series (sealed series)

Inner - Diameter 20mm to 250mm.

for inner + outer ring rotation ultrathin.

More information, see page:

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## Information + Table of contents

### Important Information

The offered Crossed Roller bearings which are shown in this catalogue are produced in China. We are the retailer for these bearings.

Each bearing we deliver is tested and delivered with test report. We are testing the precision of each bearing, the data of the test is shown in the test report.

Each bearing is signed with a serial no, which is also documented in the test report.

We do not take any responsibility about the function, life time, chosen type and lubrication etc. of the delivered bearings in your application. In case you are unsure, if you can use our bearings in your application and environment, please contact us.

Please take care that you read the information about the design of the attachment parts and whose tolerances.

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## Who we are?



### **German and Chinese**

Senior and Chinese experts, especially for Machine Tool + Textile Machine application.

21 years Barmag AG, 2 years Barmag do Brasil as Technical Leader, Factory Manager + Process Planning Manager, 30 years Schaeffler Germany as Technical Sales in Germany, 6 years as Market Sector Manager in Italy and from 2003 – 2007 as Senior Manager Engineering in China, Korea + Japan (Production Machinery Asia Pacific).

2007 – 2009 Consultant for Schaeffler Group Industrial, Production Machinery Asia Pacific.

2010 foundation of Excellent Bearing (Shanghai) Trading Co., Ltd.

### **Retailer since 10 years in Germany + China**

for Chinese and German high tech products. We import and export especially to China and Germany.

**Developer since 1965**, mainly for Textile Machine - Machine Tool - and car application.

Meanwhile exist ~120 patent application, ~75 are applied together with Schaeffler KG, the rest of it after retirement in China, mainly for Machine Tool for mineral cast application and car application in Germany, China and worldwide.

### **Expert**

for high tech - Mineralcast products, we are able to consult especially for Machine Tool base and complete machines in highest precision, e.g. we delivered a base surface of 1m x 3m in a surface precision of < 0,005mm.

### **Consultant from 2007,**

for companies (e.g. German + Chinese) which like to have mutual cooperation, or technical support.

### **Owner**

of CnC / R+D Machinery GmbH / Germany + Excellent Bearing (Shanghai) Trading Co.,Ltd  
(both are 100%)

Were the bearings are produced



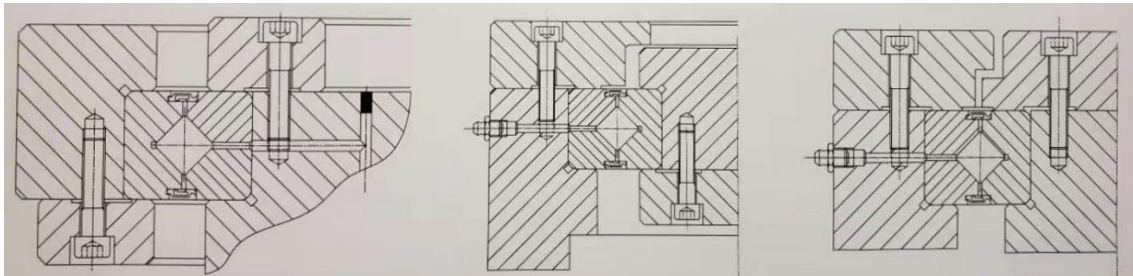
## Information to assemble the Crossed Roller Bearings + to use them

### Lubrication:

To use the right lubrication of Crossed Roller bearings is the basic for their long life time. That the lubrication can do it's work inside the bearings,

- the bearings should be sealed to hold the lubrication inside the bearing + nothing can go from outside in the bearings.
- Grease lubrication is reducing the noise and bearings which need to run faster should have oil lubrication to guide the heat better out of the bearings.
- Crossed Roller Bearings can be lubricated with grease or oil, the application decides which kind of lubrication need to be used.
- In case you are not sure which lubrication should be used, please ask the lubrication producer.
- Our Crossed Roller Bearings will be delivered greased with the following grease: Mineral grease according DIN 51825 KP2N-25, for temperature -30°C to + 150°C. (Shell S2V2202)

### Design examples to do the lubrication of the bearing



Outer ring rotation

Inner ring rotation

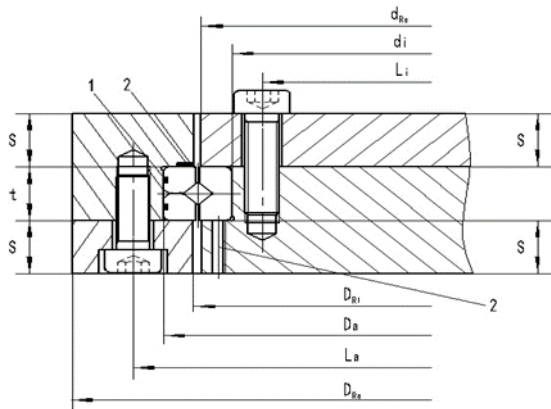
Same side fixation

### Design of attachment parts:

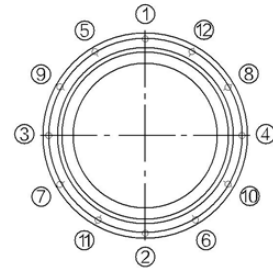
- Our Crossed Roller Bearings have a very high mechanical load capacity. Aboute their X-arrangement of the rolling elements the bearings can carry:
  - o Axial loads from both direction
  - o Radial loads
  - o Tilting moments + any combination of moments and loads
- To have all these advantages of the bearings in your application, it is necessary to make the attachment parts stiff enough.
  - o Please see our information for attachment parts for each bearing type in the end of their charts.

Torque moments for screws for use of torque wrench							
Screw	Torque moment in Nm			Screw	Torque moment in Nm		
dimention	8.8	10.9	12.9	dimention	8.8	10.9	12.9
M3	2,0	2,8	3,4	M12	66,5	98,0	114,0
M4	2,3	3,3	3,9	M14	107,0	156,0	183,0
M5	4,6	6,8	8,0	M16	168,0	246,0	288,0
M6	7,8	11,5	13,5	M18	229,0	336,0	394,0
M8	19,0	28,0	33,0	M20	327,0	481,0	562,0
M10	38,0	56,0	65,0	M22	450,0	661,0	773,0

## Information to assemble the Crossed Roller Bearings + to use them



Please use the way to fix the screws as shown below



- 1 These rings does not carry any force !
- 2 Prepare nut's or thread, in case you need to disassemble the bearing

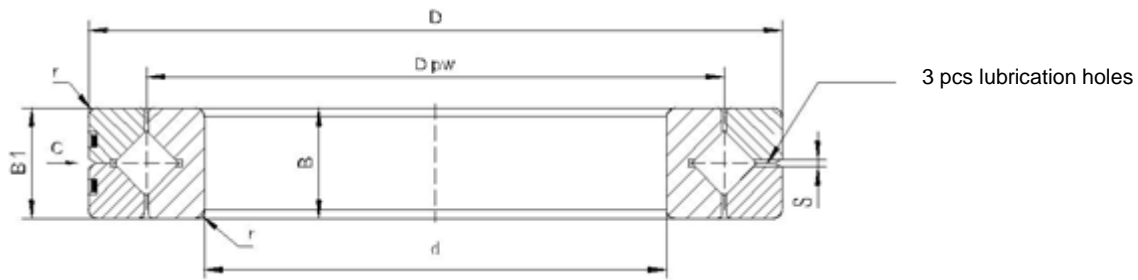
The fit tolerances for ECB-RB, ECB-RE, ECB-RA series				
Preload /		condition		
Clearance		of loads	di	Da
<b>C0</b>	inner ring rotation	normal	h5	H7
<b>C0</b>	inner ring rotation	massiv	h5	H7
<b>C0</b>	outer ring rotation	normal	g5	Js7
<b>C0</b>	outer ring rotation	massiv	g5	Js7
<b>C1</b>	inner ring rotation	normal	j5	H7
<b>C1</b>	inner ring rotation	massiv	k5	Js7
<b>C1</b>	outer ring rotation	normal	g6	Js7
<b>C1</b>	outer ring rotation	massiv	h5	K7
<b>Preload CC0</b>			g5	H7

The fit tolerances for ECB-RA-C series			
Preload /			
Clearance	Condition	di	Da
<b>CC0</b>	inner ring rotation	h5	J7
<b>CC0</b>	outer ring rotation	g5	Js7
<b>C0</b>	inner ring rotation	j5	J7
<b>C0</b>	outer ring rotation	g5	K7

The fit tolerances for ECB-RU + CRBC series			
Preload /			
Clearance	Condition	di	Da
<b>CC0 / C0</b>	inner ring rotation	h7	H7
<b>T1 / C1 / C2</b>	inner ring rotation	h7	H7
<b>CC0 / C0</b>	outer ring rotation	h7	H7
<b>T1 / C1 / C2</b>	outer ring rotation	h7	H7



## ECB-SX series Crossed Roller Bearings



ECB-SX series standard measurement chart							Axial load ratings		Radial load ratings		Limited Speed				
ECB-SX Typ	d	D	Dpw	B + B1	r <sub>min</sub>	S	Cr	Cor	Cr	Cor	kg	with clearance		with preload	
							kN	kN	kN	kN		nG oil 1/min	nG grease 1/min	nG oil 1/min	nG grease 1/min
SX01 1814	70	90	80	10	0,6	1,2	18	60	12	30	0,30	1910	955	955	475
SX01 1818	90	115	102	13	1	1,2	26	96	17	47	0,40	1500	750	750	375
SX01 1820	100	125	112	13	1	1,2	28	106	18	52	0,50	1360	680	680	340
SX01 1824	120	150	135	16	1	1,5	41	153	26	75	0,80	1130	565	565	280
SX01 1828	140	175	157	18	1,1	1,5	64	237	41	116	1,10	975	485	485	240
SX01 1832	160	200	180	20	1,1	1,5	69	272	44	133	1,70	850	425	425	210
SX01 1836	180	225	202	22	1,1	2	98	381	63	187	2,30	755	375	375	185
SX01 1840	200	250	225	24	1,5	2	106	425	68	208	3,10	680	340	340	170
SX01 1848	240	300	270	28	2	2	149	612	95	300	5,30	565	280	280	140
SX01 1860	300	380	340	38	2,1	2,5	245	1027	156	504	12,00	450	225	225	110
SX01 1868	340	420	380	38	2,1	2,5	265	1148	167	563	13,50	400	200	200	100
SX01 1880	400	500	450	46	2,1	2,5	385	1699	244	833	24,00	340	170	170	85
SX01 18/500	500	620	560	56	3	2,5	560	2538	355	1244	44,00	275	135	1345	65

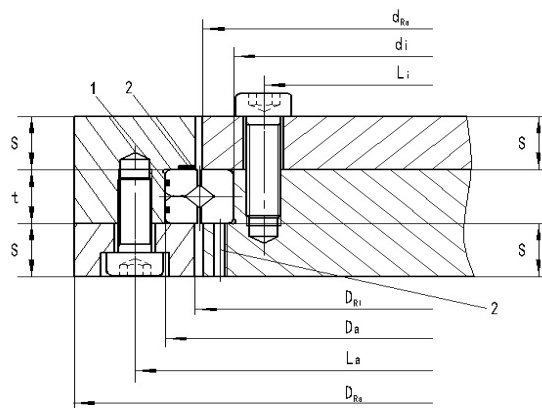
ECB-SX series tolerances / runout										Inner ring		Inner ring	
ECB- Typ	Inner diameter		Outer diameter		Inner ring high		Assembling high		radial runout		axial runout		
	d		D		B		B1			Kia		Sia	
	ym	ym	ym	ym	ym	ym	ym	ym		ym		ym	
SX011814	4	-15	0	-22	0	-10	60	-60		10		10	
SX011818	4	18	0	-22	0	-10	60	-60		10		10	
SX011820	4	-18	0	-25	0	-10	60	-60		10		10	
SX011824	4	-18	0	-25	0	-10	60	-60		10		10	
SX011828	4	-21	0	-25	0	-10	60	-60		15		10	
SX011832	4	-21	0	-29	0	-25	100	-100		15		10	
SX011836	4	-21	0	-29	0	-25	100	-100		15		10	
SX011840	4	-24	0	-29	0	-25	100	-100		15		10	
SX011848	5	-24	0	-32	0	-25	100	-100		20		10	
SX011860	5	-27	0	-36	0	-50	140	-140		20		10	
SX011868	7	-29	0	-40	0	-50	140	-140		25		10	
SX011880	7	-29	0	-40	0	-50	150	-150		30		10	
SX0118/500	8	-32	0	-44	0	-50	160	-160		40		10	

**In case you need higher precision, please contact us**

## ECB-SX series Crossed Roller Bearings

**In case you need higher precision, please contact us**

ECB-SX series : normal clearance / clearance-preload (RLO) / preload (VSP)								
ECB- Typ	Clearance		preload		clearance		preload	
	radial	axial	RLO		VSP			
	ym	ym	ym	ym	ym	ym	ym	ym
SX011814	3	15	6	30	-6	3	-15	-3
SX011818	3	25	6	30	-6	3	-15	-3
SX011820	5	20	10	40	-8	4	-20	-5
SX011824	5	20	10	40	-8	4	-20	-5
SX011828	5	20	10	40	-8	4	-20	-5
SX011832	5	20	10	40	-8	4	-25	-5
SX011836	5	25	10	50	-10	5	-25	-5
SX011840	5	25	10	50	-10	5	-25	-5
SX011848	10	30	20	60	-10	5	-25	-5
SX011860	10	40	20	80	-10	5	-25	-5
SX011868	10	40	20	80	-10	5	-25	-5
SX011880	10	50	20	100	-10	5	-25	-5
SX0118/500	15	60	30	120	-12	6	-30	-5

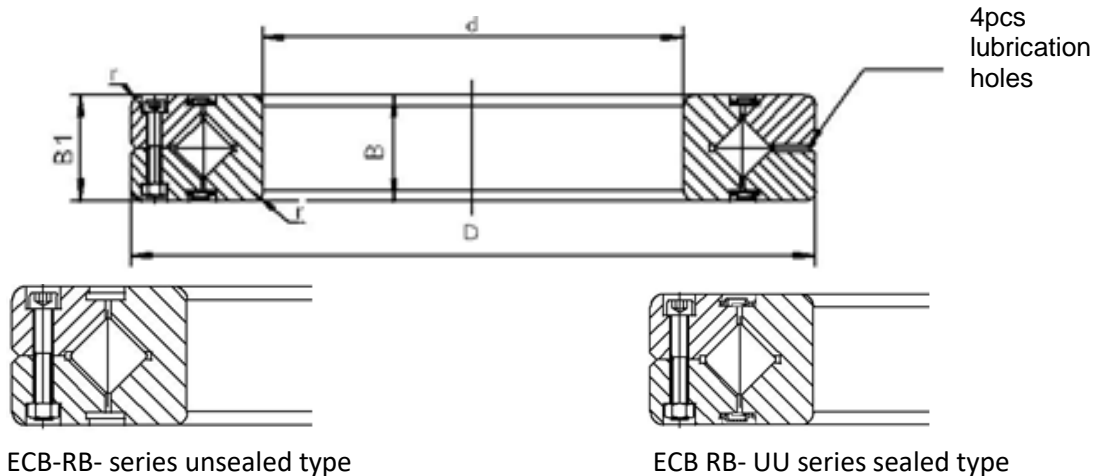


### Attached parts

- 1 These rings does not carry any force !
- 2 Prepare nut's or thread, in case you need to disassemble the bearing

ECB-SX series design for attachment parts											
ECB-SX Typ	di	Da	t	s min	dRa	DRi	Li max.	La min.	screws	Quantity	
	h7 (6)	K7 (K6)	mm	mm	mm	mm	mm	mm	mm	10.9	
SX01 1814	70	90	10	-0,005/-0,0015	8	78	82	60	100	M5	18
SXo1 1818	90	115	13	-0,005/-0,0020	10	100	104	80	125	M5	24
SX01 1820	100	125	13	-0,005/-0,0020	10	110	114	90	135	M5	24
SX01 1824	120	150	16	-0,005/-0,0025	12	132	138	108	162	M6	24
SX01 1828	140	175	18	-0,005/-0,0030	14	154	160	124	191	M8	24
SX01 1832	160	200	20	-0,020/-0,0050	15	177	183	144	216	M8	24
SX01 1836	180	225	22	-0,020/-0,0050	17	199	205	160	245	M10	24
SX01 1840	200	250	24	-0,020/-0,0060	18	221	229	180	270	M10	24
SX01 1848	240	300	28	-0,020/-0,0060	21	266	274	216	324	M12	24
SX01 1860	300	380	38	-0,040/-0,0100	29	335	345	268	412	M16	24
SX01 1868	340	420	38	-0,040/-0,0100	29	375	385	308	452	M16	24
SX01 1880	400	500	46	-0,040/-0,0101	35	445	455	360	540	M20	24
SX01 18/500	500	620	56	-0,040/-0,0101	42	554	566	452	668	M24	24

## ECB-RB series Crossed Roller Bearings



ECB-RB series standard measurement chart						Axial load ratings		Radial load ratings		
						Cr	Cor	Cr	Cor	
ECB-RB Typ	d	D	Dpw	B + B1	r <sub>min</sub>	kN	kN	kN	kN	kg
ECB-RB 2008	20	36	27,0	8	0,5	4,522	6,200	3,230	3,100	0,04
ECB-RB 2509	25	41	32,0	8	0,5	5,082	7,660	3,630	3,830	0,05
ECB-RB 3010	30	55	41,5	10	0,6	10,290	16,720	7,350	8,360	0,12
ECB-RB 3510	35	60	46,5	10	0,6	10,696	18,240	7,640	9,120	0,13
ECB-RB 4010	40	65	51,5	10	0,6	11,662	21,200	8,330	10,600	0,16
ECB-RB 4510	45	70	56,5	10	0,6	12,068	22,600	8,620	11,300	0,17
ECB-RB 5013	50	80	64,0	13	0,6	23,380	41,800	16,700	20,900	0,27
ECB-RB 6013	60	90	74,0	13	0,6	25,200	48,600	18,000	24,300	0,30
ECB-RB 7013	70	100	84,0	13	0,6	27,160	55,400	19,400	27,700	0,35
ECB-RB 8016	80	120	98,0	16	0,6	42,140	84,200	30,100	42,100	0,70
ECB-RB 9016	90	130	108,0	16	1,0	43,960	90,600	31,400	45,300	0,75
ECB-RB 10016	100	140	119,3	16	1,0	44,380	97,200	31,700	48,600	0,83
ECB-RB 10020	100	150	123,0	20	1,0	46,340	101,800	33,100	50,900	1,45
ECB-RB 11012	110	135	212,8	12	0,6	17,500	48,200	12,500	24,100	0,40
ECB-RB 11015	110	145	126,5	15	0,6	33,180	83,000	23,700	41,500	0,75
ECB-RB 11020	110	160	133,0	20	1,0	47,600	108,000	34,000	54,000	1,56
ECB-RB 12016	120	150	134,2	16	0,6	33,880	86,400	24,200	43,200	0,72
ECB-RB 12025	120	180	148,7	25	1,5	93,660	200,000	66,900	100,000	2,62
ECB-RB 13015	130	160	144,5	15	0,6	35,000	93,400	25,000	46,700	0,72
ECB-RB 13035	130	190	158,0	25	1,5	97,300	214,000	69,500	107,000	2,82
ECB-RB 14016	140	175	154,8	16	1,0	36,260	100,200	25,900	50,100	1,00
ECB-RB 14025	140	200	168,0	25	1,5	104,720	424,000	74,800	212,000	2,96
ECB-RB 15013	150	180	164,0	13	0,6	37,800	107,200	27,000	53,600	0,68
ECB-RB 15025	150	210	178,0	25	1,5	107,520	256,000	76,800	128,000	3,16
ECB-RB 15030	150	230	188,0	30	1,5	140,000	312,000	100,000	156,000	5,30
ECB-RB 16025	160	220	188,6	25	1,5	114,380	270,000	81,700	135,000	3,14
ECB-RB 17020	170	220	191,0	20	1,5	40,600	124,200	29,000	62,100	2,21
ECB-RB 18025	180	240	210,0	25	1,5	117,600	286,000	84,000	143,000	3,44
ECB-RB 19025	190	240	211,9	25	1,0	58,380	165,800	41,700	82,900	2,99

## ECB-RB series Crossed Roller Bearings

ECB-RB series standard measurement chart						Axial load ratings		Radial load ratings		
ECB-RB Typ	d	D	Dpw	B + B1	r <sub>min</sub>	Cr kN	Cor kN	Cr kN	Cor kN	kg
ECB-RB 20025	200	260	230,0	25	2,0	117,880	314,000	84,200	157,000	4,00
ECB-RB 20030	200	280	240,0	30	2,0	159,600	400,000	114,000	200,000	6,70
ECB-RB 20035	200	295	247,7	35	2,0	211,400	504,000	151,000	252,000	9,60
ECB-RB 22025	220	280	250,1	25	2,0	129,220	342,000	92,300	171,000	4,10
ECB-RB 24025	240	300	269,0	25	2,5	95,620	290,000	68,300	145,000	4,50
ECB-RB 25025	250	310	277,5	25	2,5	97,020	300,000	69,300	150,000	5,00
ECB-RB 25030	250	330	287,5	30	2,5	176,400	488,000	126,000	244,000	8,10
ECB-RB 25040	250	355	300,7	40	2,5	273,000	696,000	195,000	348,000	14,80
ECB-RB 30025	300	360	328,0	25	2,5	106,820	356,000	76,300	178,000	5,90
ECB-RB 30035	300	395	345,0	35	2,5	256,200	734,000	183,000	367,000	13,40
ECB-RB 30040	300	405	351,6	40	2,5	296,800	818,000	212,000	409,000	17,20
ECB-RB 35020	350	400	373,4	20	2,5	75,740	286,000	54,100	143,000	3,90
ECB-RB 40035	400	480	440,3	35	2,5	218,400	740,000	156,000	370,000	14,50
ECB-RB 40040	400	510	453,4	40	2,5	337,400	1062,000	241,000	531,000	23,50
ECB-RB 45025	450	500	474,0	25	1,0	86,380	364,000	61,700	182,000	6,60
ECB-RB 50025	500	550	524,2	25	1,0	91,700	402,000	65,500	201,000	7,30
ECB-RB 50040	500	600	548,8	40	2,5	334,600	1214,000	239,000	607,000	26,00
ECB-RB 50050	500	625	561,6	50	2,5	373,800	1306,000	267,000	653,000	41,70
ECB-RB 60040	600	700	659,0	40	3,0	369,600	1442,000	264,000	721,000	29,00
ECB-RB 70045	700	815	753,5	45	3,0	393,400	1672,000	281,000	836,000	46,00
ECB-RB 80070	800	950	868,1	70	4,0	655,200	2660,000	468,000	1330,000	105,00
ECB-RB 90070	900	1050	969,0	70	4,0	691,600	2980,000	494,000	1490,000	120,00
ECB-RB 1000110	1000	1250	1114,0	110	5,0	1708,000	6440,000	1220,000	3220,000	360,00
ECB-RB 1250110	1250	1500	1365,8	110	5,0	1890,000	7940,000	1350,000	3970,000	440,00

Tolerances of bearing inner diameter typ :						
ECB- RB series						
d	classification					
from - to	P0	P6	P5	P4	P2	
mm	ym	ym	ym	ym	ym	
18-30	0-10	0-8	0-6	0-5	0-5	
30-50	0-12	0-10	0-8	0-6	0-6	
50-80	0-15	0-12	0-9	0-7	0-7	
80-120	0-20	0-15	0-10	0-8	0-8	
120-150	0-25	0-18	0-13	0-10	0-10	
150-180	0-25	0-18	0-13	0-10	0-10	
180-250	0-30	0-22	0-15	0-12	0-12	
250-315	0-35	0-25	0-18	x	x	
315-400	0-40	0-30	0-23	x	x	
400-500	0-45	0-35	x	x	x	
500-630	0-50	0-40	x	x	x	
630-800	0-75	x	x	x	x	
800-1000	0-100	x	x	x	x	
1000-1250	0-125	x	x	x	x	

Tolerances of bearing outer diameter typ :						
ECB- RB series						
d	classification					
from - to	P0	P6	P5	P4	P2	
mm	ym	ym	ym	ym	ym	
30-50	0-11	0-9	0-7	0-6	0-6	
50-80	0-13	0-11	0-9	0-7	0-7	
80-120	0-15	0-13	0-10	0-8	0-8	
120-150	0-18	0-15	0-11	0-9	0-9	
150-180	0-25	0-18	0-13	0-10	0-10	
180-250	0-30	0-20	0-15	0-11	0-11	
250-315	0-35	0-25	0-18	0-13	0-13	
315-400	0-40	0-28	0-20	0-15	0-15	
400-500	0-45	0-33	0-23	x	x	
500-630	0-50	0-38	0-28	x	x	
630-800	0-75	0-45	0-35	x	x	
800-1000	0-100	x	x	x	x	
1000-1250	0-125	x	x	x	x	
1250-1600	0-160	x	x	x	x	

**In case you need higher precision, please contact us**

## ECB-RB series Crossed Roller Bearings

ECB-RB series inner ring rotation accuracy										
d	Inner ring radial runout					Inner ring axial runout				
from - to	P0	P6	P5	P4	P2	P0	P6	P5	P4	P2
mm	ym	ym	ym	ym	ym	ym	ym	ym	ym	ym
18-30	13	8	4	3	2,5	13	8	4	3	2,5
30-50	15	10	5	4	2,5	15	10	5	4	2,5
50-80	20	10	5	4	2,5	20	10	5	4	2,5
80-120	25	13	6	5	2,5	25	13	6	5	2,5
120-150	30	18	8	6	2,5	30	18	8	6	2,5
150-180	30	18	8	6	5	30	18	8	6	5
180-250	40	20	10	8	5	40	20	10	8	5
250-315	50	25	13	10	x	50	25	13	10	x
315-400	60	30	15	12	x	60	30	15	12	x
400-500	65	35	18	14	x	65	35	18	14	x
500-630	70	40	20	16	x	70	40	20	16	x
630-800	80	x	x	x	x	80	x	x	x	x
800-1000	90	x	x	x	x	90	x	x	x	x
1000-1250	100	x	x	x	x	100	x	x	x	x

**In case you need higher precision, please contact us**

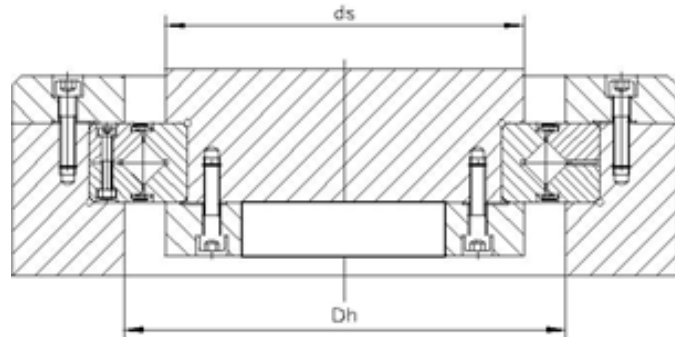
Radial Preload / Clearance of ECB-RB series:						
Dpw	CC0		C0		C1	
mm	ym	ym	ym	ym	ym	ym
18-30	-8	0	0	15	15	35
30-50	-8	0	0	25	25	50
50-80	-10	0	0	30	30	60
80-120	-10	0	0	40	40	70
120-140	-10	0	0	40	40	80
140-160	-10	0	0	40	40	90
160-180	-10	0	0	50	50	100
180-200	-10	0	0	50	50	110
200-225	-10	0	0	60	60	1210
225-250	-10	0	0	60	60	130
250-280	-15	0	0	80	80	150
280-315	-15	0	30	100	100	170
315-355	-15	0	30	110	110	190
355-400	-15	0	30	120	120	210
400-450	-20	0	30	130	130	230
450-500	-20	0	30	130	130	250
500-560	-20	0	30	150	150	280
560-630	-20	0	40	170	170	310
630-710	-20	0	40	190	190	350
710-800	-30	0	40	210	210	390
800-900	-30	0	40	230	230	430
900-1000	-30	0	50	260	260	480
100-1120	-30	0	60	290	290	530
1120-1250	-30	0	60	320	320	580
1250-1400	-30	0	70	350	350	630

## ECB-RB series Crossed Roller Bearings

Tolerances of the height of bearing typ :				
ECB-RB series :				
d	ECB-RB inner ring		ECB-RB outer ring	
from - to	ECB-RE outer rings		ECB- RE inner ring	
mm	ym	ym	ym	ym
18-30	0	-75	0	-100
30-50	0	-75	0	-100
50-80	0	-75	0	-100
80-120	0	-75	0	-100
120-150	0	-100	0	-120
150-180	0	-100	0	-120
180-250	0	-100	0	-120
250-315	0	-120	0	-150
315-400	0	-150	0	-200
400-500	0	-150	0	-200
500-630	0	-150	0	-200
630-800	0	-150	0	-200
800-1000	0	-300	0	-400
1000-1250	0	-300	0	-400

### Attached parts

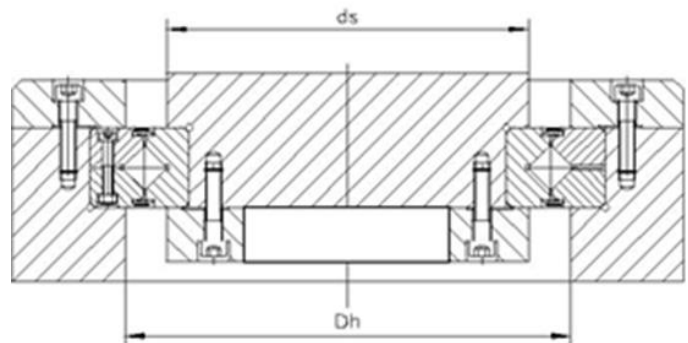
ECB-RB series attachment parts		
Typ	attachment parts	
	ds	Dh
ECB-RB 2008	23,5	30,5
ECB-RB 2509	28,5	35,5
ECB-RB 3010	37	47
ECB-RB 3510	41	51,5
ECB-RB 4010	47,5	57,5
ECB-RB 4510	51	61,5
ECB-RB 5013	57,4	72
ECB-RB 6013	68	82
ECB-RB 7013	78	92
ECB-RB 8016	91	111
ECB-RB 9016	98	118
ECB-RB 10016	109	129
ECB-RB 10020	113	133
ECB-RB 11012	117	127
ECB-RB 11015	122	136
ECB-RB 11020	120	143
ECB-RB 12016	127	141
ECB-RB 12025	133	164



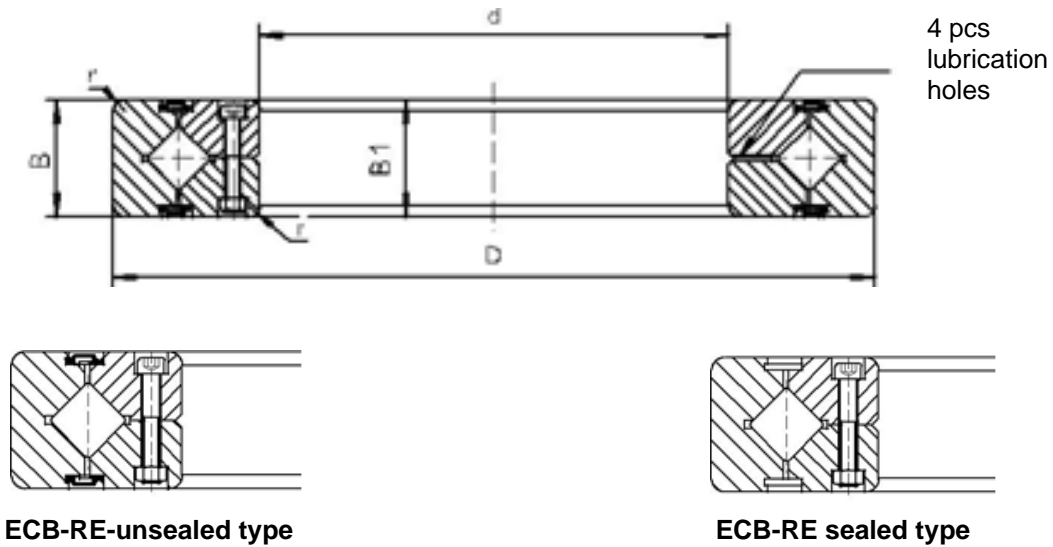
## ECB-RB series Crossed Roller Bearings

### Attached parts

ECB-RB series attachment parts		
Typ	attachment parts	
	ds	Dh
ECB-RB 13015	137	152
ECB-RB 13035	143	174
ECB-RB 14016	147	162
ECB-RB 14025	154	185
ECB-RB 15013	157	1782
ECB-RB 15025	164	194
ECB-RB 15030	173	211
ECB-RB 16025	173	204
ECB-RB 17020	184	198
ECB-RB 18025	195	225
ECB-RB 19025	202	222
ECB-RB 20025	215	245
ECB-RB 20030	221	258
ECB-RB 20035	225	270
ECB-RB 22025	235	265
ECB-RB 24025	256	281
ECB-RB 25025	265	290
ECB-RB 25030	269	306
ECB-RB 25040	275	326
ECB-RB 30025	315	340
ECB-RB 30035	322	368
ECB-RB 30040	326	377
ECB-RB 35020	363	383
ECB-RB 40035	422	459
ECB-RB 40040	428	479
ECB-RB 45025	464	484
ECB-RB 50025	514	534
ECB-RB 50040	526	572
ECB-RB 50050	536	587
ECB-RB 60040	627	673
ECB-RB 70045	731	777
ECB-RB 80070	836	900
ECB-RB 90070	937	1001
ECB-RB 1000110	1057	1171
ECB-RB 1250110	1308	1423



## ECB-RE series Crossed Roller Bearings



ECB-RE series standard measurement chart						Axial load ratings		Radial load ratings		
						Cr	Cor	Cr	Cor	
ECB-RE Typ	d	D	Dpw	B + B1	r <sub>min</sub>	kN	kN	kN	kN	kg
ECB-RE2008	20	36	29,0	8	0,5	4,522	6,200	3,230	3,100	0,04
ECB-RE2508	25	41	32,0	8	0,5	5,082	7,660	3,630	3,830	0,05
ECB-RE3010	30	55	41,5	10	0,6	10,290	16,720	7,350	8,360	0,12
ECB-RE3510	35	60	46,5	10	0,6	10,696	18,240	7,640	9,120	0,13
ECB-RE4010	40	65	51,5	10	0,6	11,662	21,200	8,330	10,600	0,16
ECB-RE4510	45	70	56,5	10	0,6	12,068	22,600	8,620	11,300	0,17
ECB-RE5013	50	80	64,0	13	0,6	23,380	41,800	16,700	20,900	0,27
ECB-RE6013	60	90	74,0	13	0,6	25,200	48,600	18,000	24,300	0,30
ECB-RE7013	70	100	84,0	13	0,6	27,160	55,400	19,400	27,700	0,35
ECB-RE8016	80	120	98,0	16	0,6	42,140	84,200	30,100	42,100	0,70
ECB-RE9016	90	130	108,0	16	1,0	43,960	90,600	31,400	45,300	0,75
ECB-RE10016	100	140	119,3	16	1,0	44,380	97,200	31,700	48,600	0,83
ECB-RE10020	100	150	123,0	20	1,0	46,340	101,800	33,100	50,900	1,45
ECB-RE11012	110	135	212,8	12	0,6	17,500	48,200	12,500	24,100	0,40
ECB-RE11015	110	145	126,5	15	0,6	33,180	83,000	23,700	41,500	0,75
ECB-RE11020	110	160	133,0	20	1,0	47,600	108,000	34,000	54,000	1,56
ECB-RE12016	120	150	134,2	16	0,6	33,880	86,400	24,200	43,200	0,72
ECB-RE12025	120	180	148,7	25	1,5	93,660	200,000	66,900	100,000	2,62
ECB-RE13015	130	160	144,5	15	0,6	35,000	93,400	25,000	46,700	0,72
ECB-RE13025	130	190	158,0	25	1,5	97,300	214,000	69,500	107,000	2,82
ECB-RE14016	140	175	154,8	16	1,0	36,260	100,200	25,900	50,100	1,00
ECB-RE14025	140	200	168,0	25	1,5	104,720	424,000	74,800	212,000	2,96
ECB-RE15013	150	180	164,0	13	0,6	37,800	107,200	27,000	53,600	0,68
ECB-RE15025	150	210	178,0	25	1,5	107,520	256,000	76,800	128,000	3,16
ECB-RE15030	150	230	188,0	30	1,5	140,000	312,000	100,000	156,000	5,30
ECB-RE16025	160	220	188,6	25	1,5	114,380	270,000	81,700	135,000	3,14
ECB-RE17020	170	220	191,0	20	1,5	40,600	124,200	29,000	62,100	2,21
ECB-RE18025	180	240	210,0	25	1,5	117,600	286,000	84,000	143,000	3,44
ECB-RE19025	190	240	211,9	25	1,0	58,380	165,800	41,700	82,900	2,99



## ECB-RE series Crossed Roller Bearings

ECB-RE series standard measurement chart						Axial load ratings		Radial load ratings		
						Cr	Cor	Cr	Cor	
ECB-RE Typ	d	D	Dpw	B + B1	r <sub>min</sub>	kN	kN	kN	kN	kg
ECB-RE20025	200	260	230,0	25	2,0	117,880	314,000	84,200	157,000	4,00
ECB-RE20030	200	280	240,0	30	2,0	159,600	400,000	114,000	200,000	6,70
ECB-RE20035	200	295	247,7	35	2,0	211,400	504,000	151,000	252,000	9,60
ECB-RE22025	220	280	250,1	25	2,0	129,220	342,000	92,300	171,000	4,10
ECB-RE24025	240	300	269,0	25	2,5	95,620	290,000	68,300	145,000	4,50
ECB-RE25025	250	310	277,5	25	2,5	97,020	300,000	69,300	150,000	5,00
ECB-RE25030	250	330	287,5	30	2,5	176,400	488,000	126,000	244,000	8,10
ECB-RE25040	250	355	300,7	40	2,5	273,000	696,000	195,000	348,000	14,80
ECB-RE30025	300	360	328,0	25	2,5	106,820	356,000	76,300	178,000	5,90
ECB-RE30035	300	395	345,0	35	2,5	256,200	734,000	183,000	367,000	13,40
ECB-RE30040	300	405	351,6	40	2,5	296,800	818,000	212,000	409,000	17,20
ECB-RE35020	350	400	373,4	20	2,5	75,740	286,000	54,100	143,000	3,90
ECB-RE40035	400	480	440,3	35	2,5	218,400	740,000	156,000	370,000	14,50
ECB-RE40040	400	510	453,4	40	2,5	337,400	1062,000	241,000	531,000	23,50
ECB-RE45025	450	500	474,0	25	1,0	86,380	364,000	61,700	182,000	6,60
ECB-RE50025	500	550	524,2	25	1,0	91,700	402,000	65,500	201,000	7,30
ECB-RE50040	500	600	548,8	40	2,5	334,600	1214,000	239,000	607,000	26,00
ECB-RE50050	500	625	561,6	50	2,5	373,800	1306,000	267,000	653,000	41,70
ECB-RE60040	600	700	659,0	40	3,0	369,600	1442,000	264,000	721,000	29,00

Tolerances of bearing inner diameter typ :						
ECB- RE series						
d	classification					
from - to	P0	P6	P5	P4	P2	
mm	ym	ym	ym	ym	ym	
18-30	0-10	0-8	0-6	0-5	0-5	
30-50	0-12	0-10	0-8	0-6	0-6	
50-80	0-15	0-12	0-9	0-7	0-7	
80-120	0-20	0-15	0-10	0-8	0-8	
120-150	0-25	0-18	0-13	0-10	0-10	
150-180	0-25	0-18	0-13	0-10	0-10	
180-250	0-30	0-22	0-15	0-12	0-12	
250-315	0-35	0-25	0-18	x	x	
315-400	0-40	0-30	0-23	x	x	
400-500	0-45	0-35	x	x	x	
500-630	0-50	0-40	x	x	x	
630-800	0-75	x	x	x	x	
800-1000	0-100	x	x	x	x	
1000-1250	0-125	x	x	x	x	

Tolerances of bearing outer diameter typ :						
ECB- RE series						
d	classification					
from - to	P0	P6	P5	P4	P2	
mm	ym	ym	ym	ym	ym	
30-50	0-11	0-9	0-7	0-6	0-6	
50-80	0-13	0-11	0-9	0-7	0-7	
80-120	0-15	0-13	0-10	0-8	0-8	
120-150	0-18	0-15	0-11	0-9	0-9	
150-180	0-25	0-18	0-13	0-10	0-10	
180-250	0-30	0-20	0-15	0-11	0-11	
250-315	0-35	0-25	0-18	0-13	0-13	
315-400	0-40	0-28	0-20	0-15	0-15	
400-500	0-45	0-33	0-23	x	x	
500-630	0-50	0-38	0-28	x	x	
630-800	0-75	0-45	0-35	x	x	
800-1000	0-100	x	x	x	x	
1000-1250	0-125	x	x	x	x	
1250-1600	0-160	x	x	x	x	

**In case you need higher precision, please contact us**

## ECB-RE series Crossed Roller Bearings

ECB-RE series outer ring rotation accuracy										
D	Outer Ring radial runout					Outer Ring axial runout				
from - to	P0	P6	P5	P4	P2	P0	P6	P5	P4	P2
mm	ym	ym	ym	ym	ym	ym	ym	ym	ym	ym
30-50	20	10	7	5	2,5	20	10	7	5	2,5
50-80	25	13	8	5	4	25	13	8	5	4
80-120	35	18	10	6	5	35	18	10	6	5
120-150	40	20	11	7	5	40	20	11	7	5
150-180	45	23	13	8	5	45	23	13	8	5
180-250	50	25	15	10	7	50	25	15	10	7
250-315	60	30	18	11	7	60	30	18	11	7
315-400	70	35	20	13	8	70	35	20	13	8
400-500	80	40	23	15	x	80	40	23	15	x
500-630	100	50	25	16	x	100	50	25	16	x
630-800	120	60	30	20	x	120	60	30	20	x
800-1000	120	75	x	x	x	120	75	x	x	x
1000-1250	120	x	x	x	x	120	x	x	x	x
1250-1600	120	x	x	x	x	120	x	x	x	x

**In case you need higher precision, please contact us**

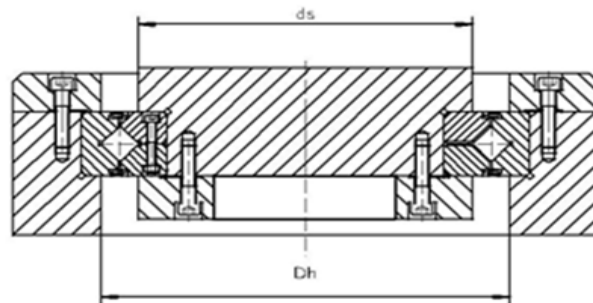
Radial Preload / Clearance of ECB-RE series:						
Dpw	CC0		C0		C1	
mm	ym	ym	ym	ym	ym	ym
18-30	-8	0	0	15	15	35
30-50	-8	0	0	25	25	50
50-80	-10	0	0	30	30	60
80-120	-10	0	0	40	40	70
120-140	-10	0	0	40	40	80
140-160	-10	0	0	40	40	90
160-180	-10	0	0	50	50	100
180-200	-10	0	0	50	50	110
200-225	-10	0	0	60	60	1210
225-250	-10	0	0	60	60	130
250-280	-15	0	0	80	80	150
280-315	-15	0	30	100	100	170
315-355	-15	0	30	110	110	190
355-400	-15	0	30	120	120	210
400-450	-20	0	30	130	130	230
450-500	-20	0	30	130	130	250
500-560	-20	0	30	150	150	280
560-630	-20	0	40	170	170	310
630-710	-20	0	40	190	190	350
710-800	-30	0	40	210	210	390
800-900	-30	0	40	230	230	430
900-1000	-30	0	50	260	260	480
100-1120	-30	0	60	290	290	530
1120-1250	-30	0	60	320	320	580
1250-1400	-30	0	70	350	350	630

## ECB-RE series Crossed Roller Bearings

Tolerances of the hight of bearing typ :				
ECB-RE series :				
d	ECB-RB inner ring		ECB-RB outer ring	
from - to	ECB-RE outer rings		ECB- RE inner ring	
mm	ym	ym	ym	ym
18-30	0	-75	0	-100
30-50	0	-75	0	-100
50-80	0	-75	0	-100
80-120	0	-75	0	-100
120-150	0	-100	0	-120
150-180	0	-100	0	-120
180-250	0	-100	0	-120
250-315	0	-120	0	-150
315-400	0	-150	0	-200
400-500	0	-150	0	-200
500-630	0	-150	0	-200
630-800	0	-150	0	-200
800-1000	0	-300	0	-400
1000-1250	0	-300	0	-400

### Attached Parts

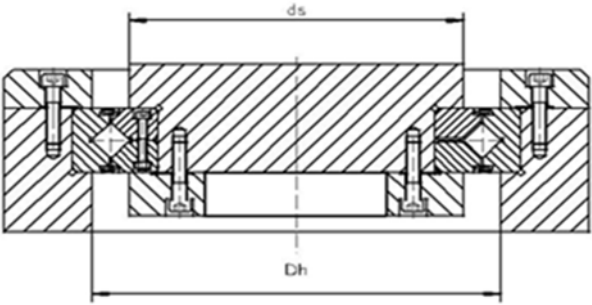
ECB-RE series attachment parts		
ECB-RE Typ	attachment parts	
	ds	Dh
ECB-RE2008	23,5	30,5
ECB-RE2508	28,5	35,5
ECB-RE3010	37	47
ECB-RE3510	41	51,5
ECB-RE4010	47,5	57,5
ECB-RE4510	51	61,5
ECB-RE5013	57,4	72
ECB-RE6013	68	82
ECB-RE7013	78	92
ECB-RE8016	91	111
ECB-RE9016	98	118
ECB-RE10016	109	129
ECB-RE10020	113	133
ECB-RE11012	117	127
ECB-RE11015	122	136
ECB-RE11020	120	143
ECB-RE12016	127	141
ECB-RE12025	133	164



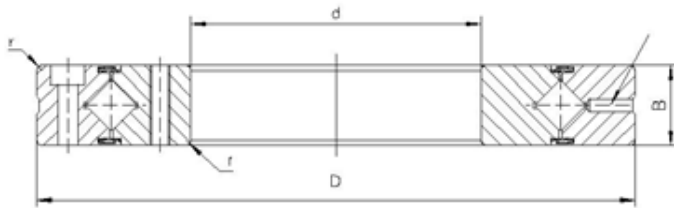
# ECB-RE series Crossed Roller Bearings

## Attached parts

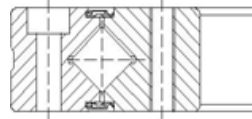
ECB-RE series attachment parts		
	attachment parts	
ECB-RE13015	137	152
ECB-RE13025	143	174
ECB-RE14016	147	162
ECB-RE14025	154	185
ECB-RE15013	157	1782
ECB-RE15025	164	194
ECB-RE15030	173	211
ECB-RE16025	173	204
ECB-RE17020	184	198
ECB-RE18025	195	225
ECB-RE19025	202	222
ECB-RE20025	215	245
ECB-RE20030	221	258
ECB-RE20035	225	270
ECB-RE22025	235	265
ECB-RE24025	256	281
ECB-RE25025	265	290
ECB-RE25030	269	306
ECB-RE25040	275	326
ECB-RE30025	315	340
ECB-RE30035	322	368
ECB-RE30040	326	377
ECB-RE35020	363	383
ECB-RE40035	422	459
ECB-RE40040	428	479
ECB-RE45025	464	484
ECB-RE50025	514	534
ECB-RE50040	526	572
ECB-RE50050	536	587
ECB-RE60040	627	673



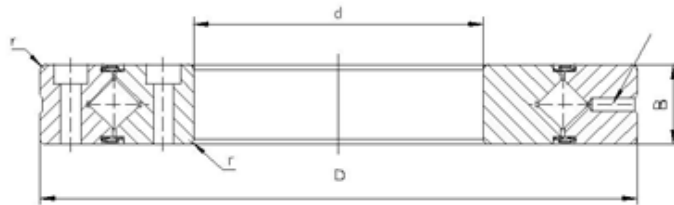
# ECB-RU series Crossed Roller Bearings



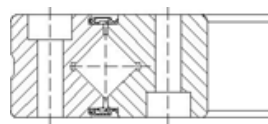
2 lubrication holes



ECB-RUX type



2 lubrication holes



ECB-RU type

ECB-RUG type

ECB-RU series standard measurement chart						Axial load ratings		Radial load ratings		
ECB-RU Typ	d	D	Dpw	B + B1	r <sub>min</sub>	Cr kN	Cor kN	Cr kN	Cor kN	kg
ECB-RU28	10	52	28	8	0,3	4,060	4,800	2,900	2,400	0,12
ECB-RU42	20	70	41,4	12	0,6	10,290	16,700	7,350	8,350	0,29
ECB-RU66	35	95	66	15	0,6	24,500	44,600	17,500	22,300	0,62
ECB-RU85	55	120	85	15	0,6	28,420	59,000	20,300	29,500	1,00
ECB-RU124 G	80	165	124	22	1	46,340	101,800	33,100	50,900	2,60
ECB-RU124 X	80	165	124	22	1	46,340	101,800	33,100	50,900	2,60
ECB-RU148 G	90	210	147,5	25	1,5	68,740	153,600	49,100	76,800	4,90
ECB-RU148X	90	210	147,5	25	1,5	68,740	153,600	49,100	76,800	4,90
ECB-RU178 G	115	240	178	28	1,5	112,420	270,000	80,300	135,000	6,80
ECB-RU178 X	115	240	178	28	1,5	112,420	270,000	80,300	135,000	6,80
ECB-RU228 G	160	295	227,5	35	2	145,600	346,000	104,000	173,000	11,40
ECB-RU228 X	160	295	227,5	35	2	145,600	346,000	104,000	173,000	11,40
ECB-RU297 G	210	380	297,3	40	2,5	218,400	562,000	156,000	281,000	21,30
ECB-RU297 X	210	380	297,3	40	2,5	218,400	562,000	156,000	281,000	21,30
ECB-RU445 G	350	540	445,4	45	2,5	310,800	946,000	222,000	473,000	35,40
ECB-RU445 X	350	540	445,4	45	2,5	310,800	946,000	222,000	473,000	35,40

Tolerances of bearing inner diameter typ :						
ECB- RU series						
d	classification					
from - to	P0	P6	P5	P4	P2	
mm	ym	ym	ym	ym	ym	
18-30	0-10	0-8	0-6	0-5	0-5	
30-50	0-12	0-10	0-8	0-6	0-6	
50-80	0-15	0-12	0-9	0-7	0-7	
80-120	0-20	0-15	0-10	0-8	0-8	
120-150	0-25	0-18	0-13	0-10	0-10	
150-180	0-25	0-18	0-13	0-10	0-10	
180-250	0-30	0-22	0-15	0-12	0-12	
250-315	0-35	0-25	0-18	x	x	
315-400	0-40	0-30	0-23	x	x	
400-500	0-45	0-35	x	x	x	
500-630	0-50	0-40	x	x	x	
630-800	0-75	x	x	x	x	
800-1000	0-100	x	x	x	x	
1000-1250	0-125	x	x	x	x	

Tolerances of bearing outer diameter typ :						
ECB- RU series						
d	classification					
from - to	P0	P6	P5	P4	P2	
mm	ym	ym	ym	ym	ym	
30-50	0-11	0-9	0-7	0-6	0-6	
50-80	0-13	0-11	0-9	0-7	0-7	
80-120	0-15	0-13	0-10	0-8	0-8	
120-150	0-18	0-15	0-11	0-9	0-9	
150-180	0-25	0-18	0-13	0-10	0-10	
180-250	0-30	0-20	0-15	0-11	0-11	
250-315	0-35	0-25	0-18	0-13	0-13	
315-400	0-40	0-28	0-20	0-15	0-15	
400-500	0-45	0-33	0-23	x	x	
500-630	0-50	0-38	0-28	x	x	
630-800	0-75	0-45	0-35	x	x	
800-1000	0-100	x	x	x	x	
1000-1250	0-125	x	x	x	x	
1250-1600	0-160	x	x	x	x	

**In case you need higher precision, please contact us**

## ECB-RU series Crossed Roller Bearings

ECB-RU series outer ring rotation accuracy						
Typ	Outer Ring radial runout			Outer Ring axial runout		
	P5	P4	P2	P5	P4	P2
ECB-RU...	ym	ym	ym	ym	ym	ym
ECB-RU28	7	5	2,5	7	5	2,5
ECB-RU42	8	5	4	8	5	4
ECB-RU66	10	6	5	10	6	5
ECB-RU85	10	6	5	10	6	5
ECB-RU124 (G+X)	13	8	5	13	8	5
ECB-RU148 (G+X)	15	10	7	15	10	7
ECB-RU178 (G+X)	15	10	7	15	10	7
ECB-RU228 (G+X)	18	11	7	18	11	7
ECB-RU297 (G+X)	20	13	8	20	13	8
ECB-RU445 (G+X)	25	16	10	25	16	10

ECB-RU series inner ring rotation accuracy						
Typ	Inner Ring radial runout			Inner Ring axial runout		
	P5	P4	P2	P5	P4	P2
ECB-RU...	ym	ym	ym	ym	ym	ym
ECB-RU28	4	3	2,5	4	3	2,5
ECB-RU42	4	3	2,5	4	3	2,5
ECB-RU66	5	4	2,5	5	4	2,5
ECB-RU85	5	4	2,5	5	4	2,5
ECB-RU124 (G+X)	5	4	2,5	5	4	2,5
ECB-RU148 (G+X)	6	5	2,5	6	5	2,5
ECB-RU178 (G+X)	6	5	2,5	6	5	2,5
ECB-RU228 (G+X)	8	6	5	8	6	5
ECB-RU297 (G+X)	10	8	5	10	8	5
ECB-RU445 (G+X)	15	12	7	15	12	7

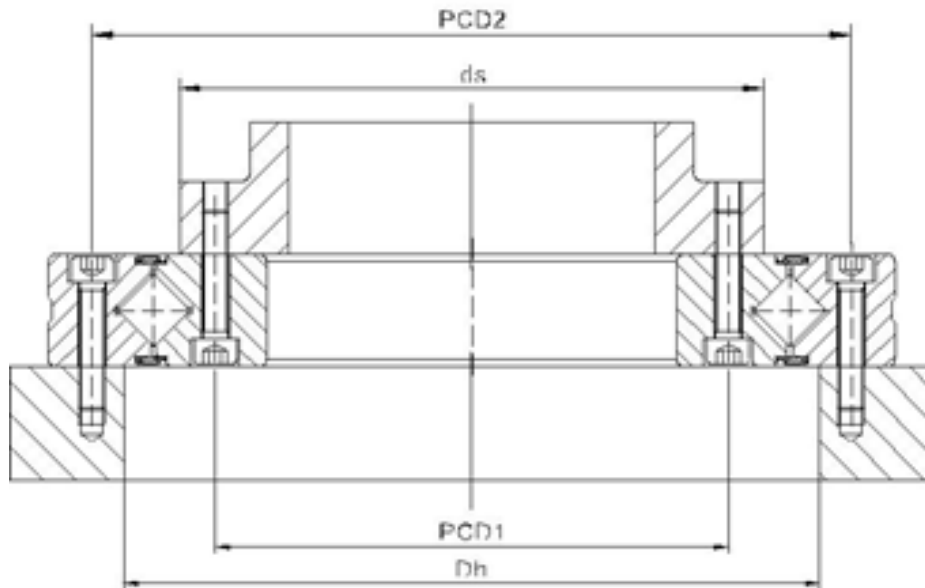
**In case you need higher precision, please contact us**

Radial Clearance + Starting torque of ECB-RU series:				
Series Typ	CC0		C0	
	Starting Torque	Radial clearance	ym	ym
ECB-RU28	0,1	0,5	0	25
ECB-RU42	0,1	0,5	0	25
ECB-RU66	0,3	2,2	0	30
ECB-RU85	0,4	3	0	40
ECB-RU124 (G+X)	1	6	0	40
ECB-RU148 (G+X)	1	10	0	40
ECB-RU178 (G+X)	3	15	0	50
ECB-RU228 (G+X)	5	20	0	60
ECB-RU297 (G+X)	10	35	0	70
ECB-RU445 (G+X)	20	55	0	100

Tolerances of the hight of bearing typ :				
ECB- RU series :				
Typ	ECB - RU outer rings		ECB- RU inner ring	
	ym	ym	ym	ym
ECB-RU28	0	-75	0	-75
ECB-RU42	0	-75	0	-75
ECB-RU66	0	-75	0	-75
ECB-RU85	0	-75	0	-75
ECB-RU124 (G+X)	0	-75	0	-75
ECB-RU148 (G+X)	0	-75	0	-75
ECB-RU178 (G+X)	0	-100	0	-100
ECB-RU228 (G+X)	0	-100	0	-100
ECB-RU297 (G+X)	0	-100	0	-100
ECB-RU445 (G+X)	0	-100	0	-100

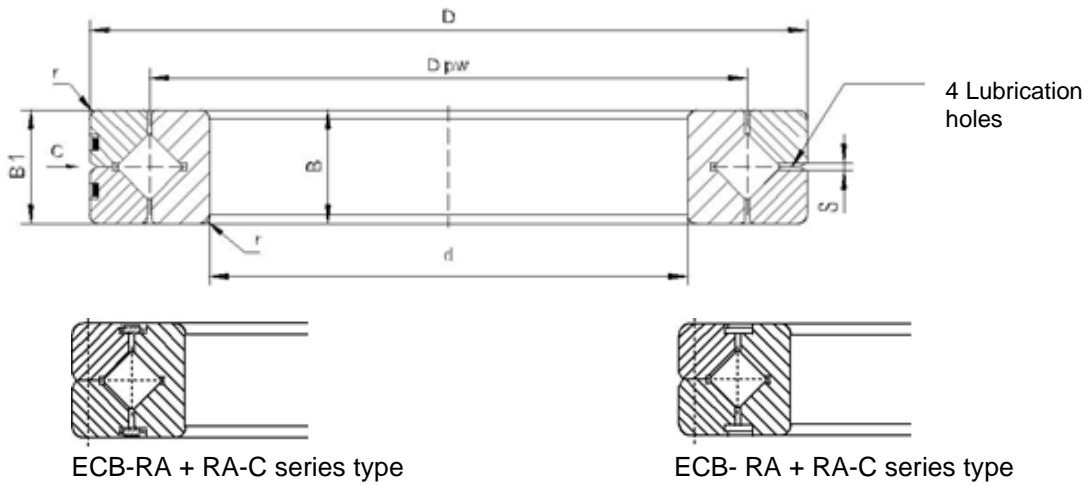
# ECB-RU series Crossed Roller Bearings

## Attached parts



ECB-RU series attachment parts						
			Inner Ring holes		Outer ring holes	
ECB-RU Typ	ds	Dh	PCD1	holes	PCD2	Holes
ECB-RU28	24	29,5	16	4 x M3	28	6 x M3
ECB-RU42	37	47	28	6 x M3	41,4	6 x M3
ECB-RU66	59	74	45	8 x M4	66	8 x M4
ECB-RU85	79	93	65	8 x M5	85	8 x M5
ECB-RU124 G	114	134	97	for 10 x M5 DIN 912	124	8 x M5
ECB-RU124 X	114	134	97	8 x M5	124	8 x M5
ECB-RU148 G	133	162	112	for 12 x M8 DIN 912	178	12 x M8
ECB-RU148X	133	162	112	12 x M8	227,5	12 x M8
ECB-RU178 G	161	195	139	for 12 x M8 DIN 912	297,3	12 x M8
ECB-RU178 X	161	195	139	12 x M8	445,4	12 x M8
ECB-RU228 G	208	246	184	for 12 x M10 DIN 912	124	12 x M10
ECB-RU228 X	208	246	184	12 x M10	147,5	12 x M10
ECB-RU297 G	272	320	240	for 16 x M12 DIN 912	178	16 x M12
ECB-RU297 X	272	320	240	16 x M12	227,5	16 x M12
ECB-RU445 G	417	473	385	for 24 x M12 DIN 912	297,3	24 x M12
ECB-RU445 X	417	473	385	24 x M12	445,4	24 x M12

## ECB-RA + ECB-RA-C series Crossed Roller Bearings



ECB-RA series standard measurement chart						Axial load ratings		Radial load ratings		
	d	D	Dpw	B + B1	r <sub>min</sub>	Cr	Cor	Cr	Cor	kg
ECB-RA5008	50	66	57	8	0,5	7,140	14,380	5,100	7,190	0,08
ECB-RA-C5008	50	66	57	8	0,5	7,140	14,380	5,100	7,190	0,08
ECB-RA6008	60	76	67	8	0,5	7,952	17,360	5,680	8,680	0,09
ECB-RA-C6008	60	76	67	8	0,5	7,952	17,360	5,680	8,680	0,09
ECB-RA7008	70	86	77	8	0,5	8,372	19,600	5,980	9,800	0,10
ECB-RA-C7008	70	86	77	8	0,5	8,372	19,600	5,980	9,800	0,10
ECB-RA8008	80	96	87	8	0,5	8,918	22,600	6,370	11,300	0,11
ECB-RA-C8008	80	96	87	8	0,5	8,918	22,600	6,370	11,300	0,11
ECB-RA9008	90	106	97	8	0,5	9,464	24,800	6,760	12,400	0,12
ECB-RA-C9008	90	106	97	8	0,5	9,464	24,800	6,760	12,400	0,12
ECB-RA10008	100	116	107	8	0,5	10,010	27,800	7,150	13,900	0,14
ECB-RA-C10008	100	116	107	8	0,5	10,010	27,800	7,150	13,900	0,14
ECB-RA11008	110	126	117	8	0,5	10,430	30,000	7,450	15,000	0,15
ECB-RA-C11008	110	126	117	8	0,5	10,430	30,000	7,450	15,000	0,15
ECB-RA12008	120	136	127	8	0,5	10,976	33,000	7,840	16,500	0,17
ECB-RA-C12008	120	136	127	8	0,5	10,976	33,000	7,840	16,500	0,17
ECB-RA13008	130	146	137	8	0,5	11,116	35,200	7,940	17,600	0,18
ECB-RA-C13008	130	146	137	8	0,5	11,116	35,200	7,940	17,600	0,18
ECB-RA14008	140	156	147	8	0,5	11,662	38,200	8,330	19,100	0,19
ECB-RA-C14008	140	156	147	8	0,5	11,662	38,200	8,330	19,100	0,19
ECB-RA15008	150	166	157	8	0,5	12,348	41,200	8,820	20,600	0,20
ECB-RA-C15008	150	166	157	8	0,5	12,348	41,200	8,820	20,600	0,20
ECB-RA16013	160	186	172	13	0,8	32,620	89,800	23,300	44,900	0,59
ECB-RA-C16013	160	186	172	13	0,8	32,620	89,800	23,300	44,900	0,59
ECB-RA17013	170	196	182	13	0,8	32,900	93,000	23,500	46,500	0,64
ECB-RA-C17013	170	196	182	13	0,8	32,900	93,000	23,500	46,500	0,64
RCB-RA18013	180	206	192	13	0,8	34,300	99,600	24,500	49,800	0,68
RCB-RA-C18013	180	206	192	13	0,8	34,300	99,600	24,500	49,800	0,68
ECB-RA19013	190	216	202	13	0,8	34,860	103,000	24,900	51,500	0,69
ECB-RA-C19013	190	216	202	13	0,8	34,860	103,000	24,900	51,500	0,69
ECB-RA20013	200	226	212	13	0,8	36,120	109,400	25,800	54,700	0,71
ECB-RA-C20013	200	226	212	13	0,8	36,120	109,400	25,800	54,700	0,71



## ECB-RA+ ECB-RA-C series Crossed Roller Bearings

Tolerances of bearing inner diameter typ :					
ECB- RA + RA-C series					
d	classification				
from - to	P0	P6	P5	P4	P2
mm	ym	ym	ym	ym	ym
18-30	0-10	0-8	0-6	0-5	0-5
30-50	0-12	0-10	0-8	0-6	0-6
50-80	0-15	0-12	0-9	0-7	0-7
80-120	0-20	0-15	0-10	0-8	0-8
120-150	0-25	0-18	0-13	0-10	0-10
150-180	0-25	0-18	0-13	0-10	0-10
180-250	0-30	0-22	0-15	0-12	0-12
250-315	0-35	0-25	0-18	x	x
315-400	0-40	0-30	0-23	x	x
400-500	0-45	0-35	x	x	x
500-630	0-50	0-40	x	x	x
630-800	0-75	x	x	x	x
800-1000	0-100	x	x	x	x
1000-1250	0-125	x	x	x	x

Tolerances of bearing outer diameter typ :					
ECB- RA + RA-C series					
d	classification				
from - to	P0	P6	P5	P4	P2
mm	ym	ym	ym	ym	ym
30-50	0-11	0-9	0-7	0-6	0-6
50-80	0-13	0-11	0-9	0-7	0-7
80-120	0-15	0-13	0-10	0-8	0-8
120-150	0-18	0-15	0-11	0-9	0-9
150-180	0-25	0-18	0-13	0-10	0-10
180-250	0-30	0-20	0-15	0-11	0-11
250-315	0-35	0-25	0-18	0-13	0-13
315-400	0-40	0-28	0-20	0-15	0-15
400-500	0-45	0-33	0-23	x	x
500-630	0-50	0-38	0-28	x	x
630-800	0-75	0-45	0-35	x	x
800-1000	0-100	x	x	x	x
1000-1250	0-125	x	x	x	x
1250-1600	0-160	x	x	x	x

**In case you need higher precision, please contact us**

Radial Preload / Clearance of ECB-RA+ -RA-C series:				
Dpw	CC0		C0	
mm	ym	ym	ym	ym
50-80	-8	0	0	15
80-120	-8	0	0	15
120-140	-8	0	0	15
140-160	-8	0	0	15
160-180	-10	0	0	20
180-200	-10	0	0	20
200-225	-10	0	0	20

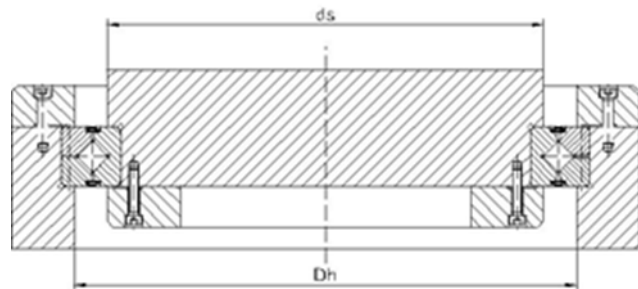
ECB-RA, RA-C series inner ring rotation accuracy		
d	Inner ring	Inner ring
from - to	radial runout	axial runout
mm	ym	ym
40-65	13	13
65-80	15	15
80-100	15	15
100-120	20	20
120-140	25	25
140-180	25	25
180-200	30	30

ECB-RA-C series outer ring rotation accuracy		
d	Outer ring	Outer ring
from - to	radial runout	axial runout
mm	ym	ym
65-80	13	13
80-100	15	15
100-120	15	15
120-140	20	20
140-180	25	25
180-200	25	25
200-250	30	30

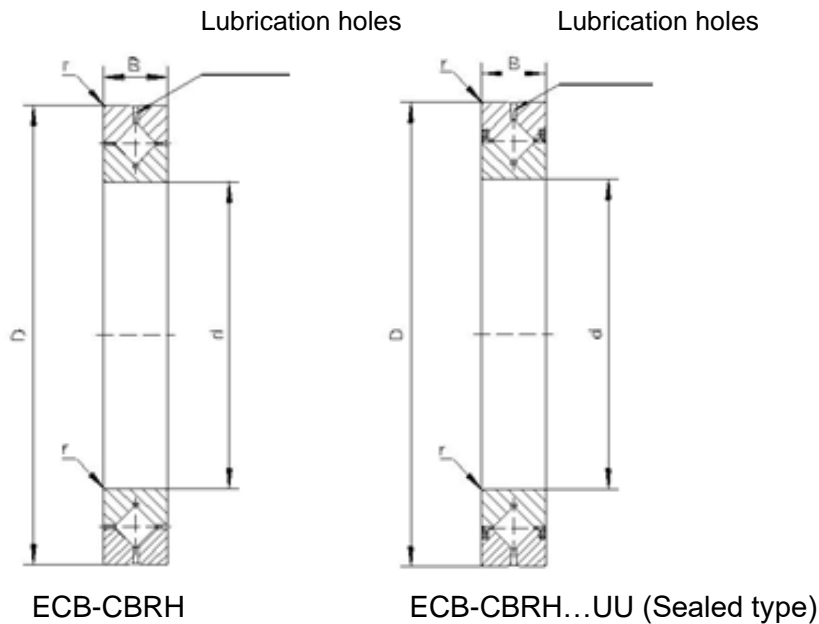
## ECB-RA+ ECB-RA-C series Crossed Roller Bearings

### Attached Parts

ECB-RA series attached part		
ECB-RA Typ	attachment parts	
	ds	Dh
ECB-RA5008	53,5	60,5
ECB-RA-C5008	53,5	60,5
ECB-RA6008	63,5	70,5
ECB-RA-C6008	63,5	70,5
ECB-RA7008	73,5	80,5
ECB-RA-C7008	73,5	80,5
ECB-RA8008	83,5	90,5
ECB-RA-C8008	83,5	90,5
ECB-RA9008	93,5	100,5
ECB-RA-C9008	93,5	100,5
ECB-RA10008	103,5	110,5
ECB-RA-C10008	103,5	110,5
ECB-RA11008	113,5	120,5
ECB-RA-C11008	113,5	120,5
ECB-RA12008	123,5	130,5
ECB-RA-C12008	123,5	130,5
ECB-RA13008	133,5	140,5
ECB-RA-C13008	133,5	140,5
ECB-RA14008	143,5	150,5
ECB-RA-C14008	143,5	150,5
ECB-RA15008	153,5	160,5
ECB-RA-C15008	153,5	160,5
ECB-RA16013	165	179
ECB-RA-C16013	165	179
ECB-RA17013	175	189
ECB-RA-C17013	175	189
RCB-RA18013	185	199
RCB-RA-C18013	185	199
ECB-RA19013	195	209
ECB-RA-C19013	195	209
ECB-RA20013	205	219
ECB-RA-C20013	205	219



## ECB- CRBH series Crossed Roller Bearings



ECB-CRBH series standard measurement chart						Axial load ratings		Radial load ratings		
ECB-CRBH Typ	d	D	Dpw	B + B1	r <sub>min</sub>	Cr kN	Cor kN	Cr kN	Cor kN	kg
ECB-CRBH208	20	36	26,6	8	0,3	30,660	4,800	21,900	2,400	0,04
ECB-CRBH258	25	41	31,1	8	0,3	4,340	5,600	3,100	2,800	0,05
ECB-CRBH3010	30	55	41,5	10	0,3	10,640	16,800	7,600	8,400	0,12
ECB-CRBH3510	35	60	46,5	10	0,3	11,060	18,200	7,900	9,100	0,13
ECB-CRBH4010	40	65	51,5	10	0,3	12,040	21,200	8,600	10,600	0,15
ECB-CRBH4510	45	70	56,5	10	0,5	12,460	22,600	8,900	11,300	0,16
ECB-CRBH5010	50	80	64	13	0,6	24,220	41,800	17,300	20,900	0,29
ECB-CRBH6013	60	90	74	13	0,6	26,320	48,600	18,800	24,300	0,33
ECB-CRBH7013	70	100	82,3	13	0,6	28,140	55,400	20,100	27,700	0,38
ECB-CRBH8013	80	120	100	13	0,6	44,940	86,800	32,100	43,400	0,74
ECB-CRBH9013	90	130	108	16	0,6	46,340	93,600	33,100	46,800	0,81
ECB-CRBH10020	100	150	122	16	0,6	71,260	144,400	50,900	72,200	1,45
ECB-CRBH11020	110	160	133	20	0,6	73,360	154,800	52,400	77,400	1,56
ECB-CRBH12035	120	180	148,3	20	1	102,760	216,000	73,400	108,000	2,62
ECB-CRBH13025	130	190	158	25	1	106,260	230,000	75,900	115,000	2,82
ECB-CRBH14025	140	200	168	25	1	114,660	260,000	81,900	130,000	2,96
ECB-CRBH15025	150	210	180	25	1	118,020	276,000	84,300	138,000	3,16
ECB-CRBH20025	200	260	230	25	1	129,220	338,000	92,300	169,000	4,00
ECB-CRBH25025	250	310	279,5	25	1,5	142,800	414,000	102,000	207,000	4,97

## ECB-CRBH series Crossed Roller Bearings

ECB-CRBH series inner ring accuracy													
Inner ring diameter tolerance					Hight			Radial + Axial runout					
from - to	P0	P6	P5	P4	P2	Tolerance			P0	P6	P5	P4	P2
mm	ym	ym	ym	ym	ym				ym	ym	ym	ym	ym
18-30	0-10	0-8	0-6	0-5	0-5	0		-75	13	8	4	3	2,5
30-50	0-12	0-10	0-8	0-6	0-6	0		-75	15	10	5	4	2,5
50-80	0-15	0-12	0-9	0-7	0-7	0		-75	20	10	5	4	2,5
80-120	0-20	0-15	0-10	0-8	0-8	0		-75	25	13	6	5	2,5
120-150	0-25	0-18	0-13	0-10	0-10	0		-100	30	18	8	6	2,5
150-180	0-25	0-18	0-13	0-10	0-10	0		-100	30	18	8	6	5
180-250	0-30	0-22	0-15	0-12	0-12	0		-100	40	20	10	8	5

**In case you need higher precision, please contact us**

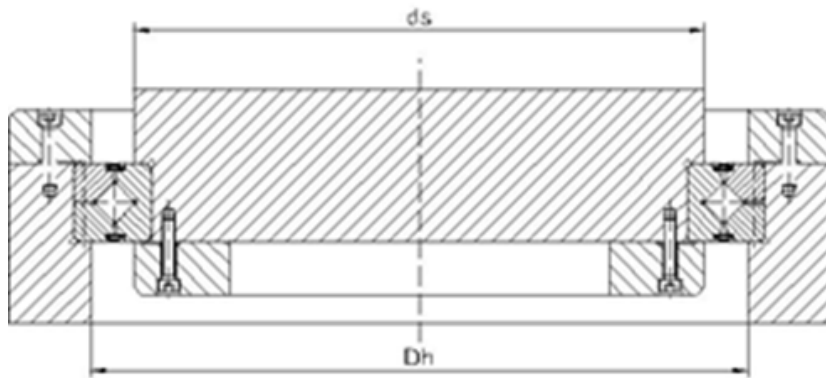
ECB-CRBH series outer ring accuracy													
D	Outer ring radial runout					Hight			Radial + Axial runout				
from - to	P0	P6	P5	P4	P2	Tolerance			P0	P6	P5	P4	P2
mm	ym	ym	ym	ym	ym				ym	ym	ym	ym	ym
30-50	0-11	0-9	0-7	0-6	0-6	0		75	20	10	7	5	2,5
50-80	0-13	0-11	0-9	0-7	0-7	0		75	25	13	8	5	4
80-120	0-15	0-13	0-10	0-8	0-8	0		75	35	18	10	6	5
120-150	0-18	0-15	0-11	0-9	0-9	0		75	40	20	11	7	5
150-180	0-25	0-18	0-13	0-10	0-10	0		-100	45	23	13	8	5
180-250	0-30	0-12	0-15	0-11	0-11	0		-100	50	25	15	10	7
250-315	0-35	0-25	0-18	0-13	0-13	0		-120	60	30	18	11	7

**In case you need higher precision, please contact us**

Radial Preload / Clearance of ECB-CRBH series:						
d	T1		C1		C2	
mm	ym	ym	ym	ym	ym	ym
18-30	-10	0	0	10	10	20
30-40	-10	0	0	10	10	20
40-50	-10	0	0	10	10	25
50-65	-10	0	0	10	10	25
65-80	-10	0	0	15	15	30
80-100	-10	0	0	15	15	35
100-120	-15	0	0	15	15	35
120-140	-15	0	0	20	20	45
140-160	-15	0	0	20	20	50
160-200	-15	0	0	20	20	50
200-250	-20	0	0	25	25	60
250-315	-20	0	30	25	25	60

## ECB-CRBH series Crossed Roller Bearings

### Attached parts



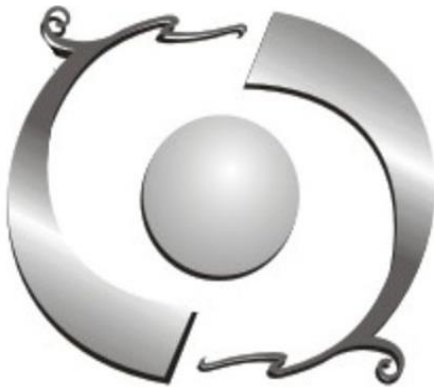
ECB-CRBH series attachment parts		
ECB-CRBH Typ	attachment parts	
	ds	Dh
ECB-CRBH208	24	31
ECB-CRBH258	29	36
ECB-CRBH3010	36,5	48,5
ECB-CRBH3510	41,5	53,5
ECB-CRBH4010	46,5	58,5
ECB-CRBH4510	51,8	63,5
ECB-CRBH5010	56	74
ECB-CRBH6013	66	84
ECB-CRBH7013	76	94
ECB-CRBH8013	88	112
ECB-CRBH9013	98	122
ECB-CRBH10020	110	140
ECB-CRBH11020	120	150
ECB-CRBH12035	132	168
ECB-CRBH13025	142	178
ECB-CRBH14025	152	188
ECB-CRBH15025	162	198
ECB-CRBH20025	212	248
ECB-CRBH25025	262	298

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