
ABC bearing

09/18



Technical Information

2015

Since more than 75 Jahren Eich Rollenlager has been a popular and renowned specialist for particular cylindrical bearing.

Eich types BR and ABC the so called flexible bush bearings are a specific kind the rings of which are not made of solid steel, as usual, but of specific wound strip steel.

Advantages of Eich flexible bush bearings:

- Qualified for high operating temperatures
- Low contaminants susceptibility
- Allows the use of small diameters in strand guiding rolls due to low design height
- Their modular system makes possible the adaption of the components to our customers' requirements

This qualifies the flexible bush bearings especially for challenging operating conditions.

The latest generation of flexible bush bearings has been designed with a special roller cage assembly that is enabled to better absorb emerging torsion.

In addition, this new concept of roller cage assembly offers a better allotment of the emerging forces. It affords the reduction of the peak load while raising the load rating. Depending from the requirements, the bearing can be fixed in place by hardened thrust rings. In CCP the flexible bush bearings are normally designed as floating bearing.

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Basic components ABC bearings

Flexible outer bush & Flexible inner bush

The flexible bushes made of wound strip steel are used particularly as inner and outer bushes/races. The mounting of them can be executed easily. They have a less wall thickness than a solid bush.

Flexible bushes fit on the shaft and/or in the bore due their defined pre-tension. Under temperature the bushes grow with their surrounding construction.

It will not be necessary to grind the shafts or the bores.

Flexible bushes must not be forced axially.



Flexible outer bush



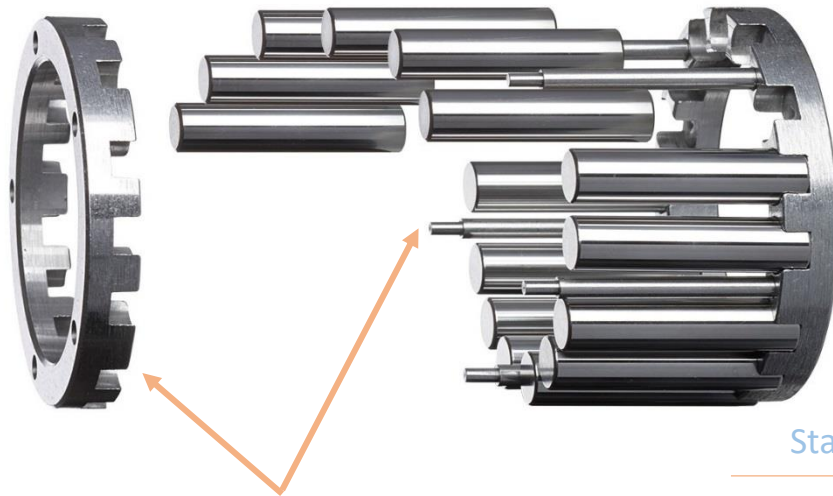
Flexible inner bush

Solid roller cage

The solid roller cage assembly is providing higher load capacities than the flexible roller cage assembly. For this reason, it is suitable especially for high dynamic and static loads, first and foremost on only low shock loads. In combination with the flexible bushes it is forming a bearing unit that has been designed for being applied in continuous casting machines.

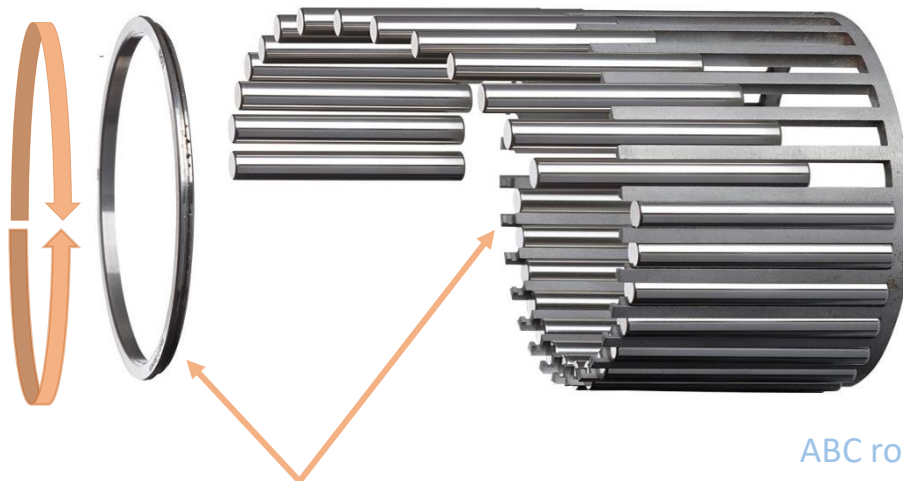


Difference to the standard roller cage assembly type RM



Standard (RM)

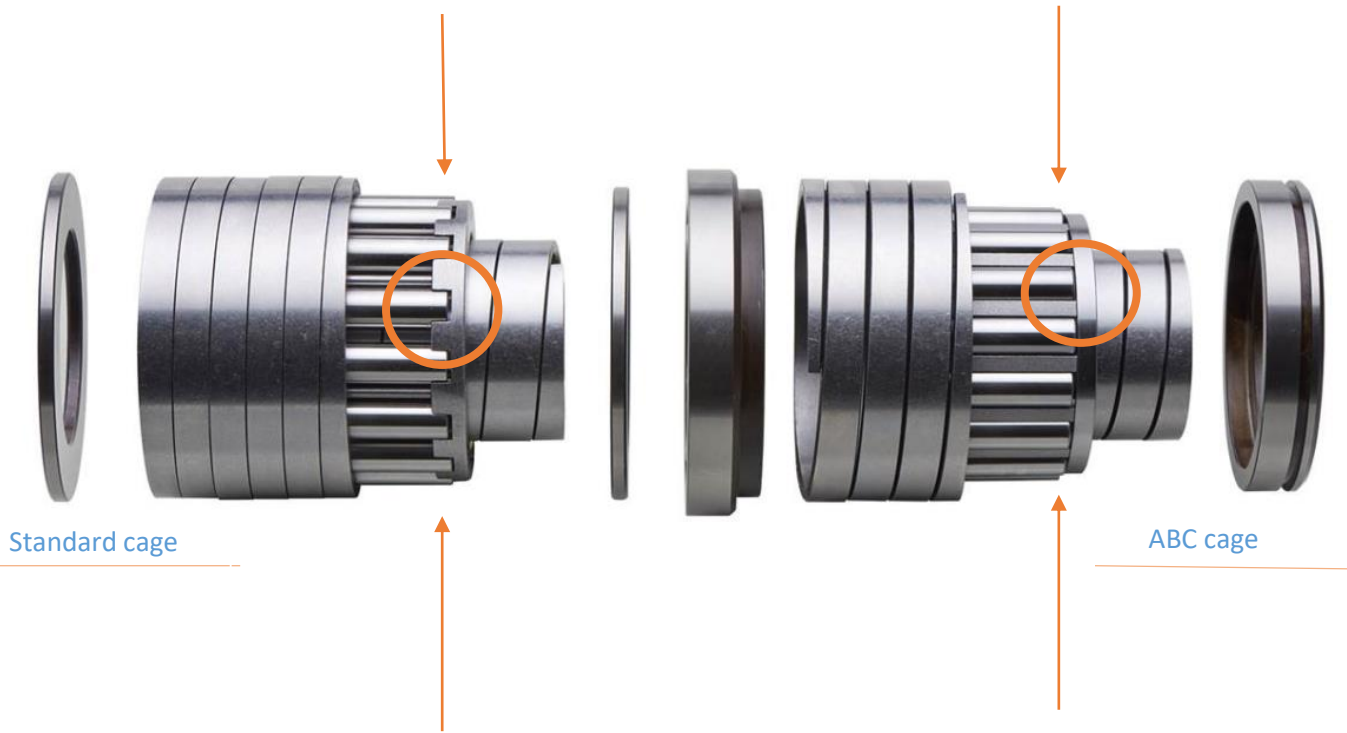
Standard roller cage assembly: its pins are riveted to the cage rings.



ABC roller cage

ABC roller cage assembly: one of its features is its motility of one cage ring due to the groove and tongue joint, which is in contrary to the previous one.

Difference to the standard Roller Cage Assembly (RM)



Unlike the standard cage the rolling element in the ABC-bearing is supported by the bar over its entire length.

ABC bearing with snap cage



Figure of an ABC bearing with snap cage. The bearing is consisting of the said cage and flexible bushes.

- Heat stabilized up to 350°C
- General operation environments are continuous casting machines.
- Particular resistivity against negative effects that may emerge by high temperature, high loads, lack of greasing, intruding media like as tinder, water, casting powder.
- Compared with the standard Flexible Bush Bearing, BR-type, the ABC Bearing is suited better to take axial trusts that may arise in the strand-guiding roll.

ABC-Bearings: Designs already in use

<u>Product code</u>	<u>dimensions</u>	<u>weight</u>	<u>Load static</u>	<u>Load dynamic</u>	<u>German</u>	<u>English</u>
10456e	45/80 mm x 80/70 mm	2,09	0	0	mit profilierten Wälzkörpern, mit 2 Ringen	with profiled rolling elements, with 2 rings
10455e	50/85 mm x 80/70 mm	2,24	0	0	mit profilierten Wälzkörpern, mit 2 Ringen	with profiled rolling elements, with 2 rings
8227e	50/95 mm x 85/50 mm	1,955	0	0	0	0
7565e	50/95 mm x 85/50 mm	2,96	0	0	modifizierte Version zu 010e	modified design of 010e (with 2 rings)
11166e	55/85 mm x 75/70 mm	1,775	0	0	mit 2 Ringen	with 2 rings
10203e	60/89 mm x 73/63 mm	1,605	0	0	mit Ringen	with rings
11167e	60/95 mm x 75/70 mm	2,29	0	0	mit 2 Ringen	with 2 rings
8545e	65/105 mm x 90/64 mm	2,225	0	0		
10227e	75/104 mm x 73/63 mm	1,9	0	0	0	0
11351e	75/105 mm 75/70 mm	2,33	0	0	antimagnetisch	anti-magnetic
11259e	75/105 mm 75/70 mm	2,255	0	0		
10236e	80/120 mm x 73/63 mm	3,045	0	0	mit Ringen	with rings
8546e	85/125 mm x 90/64 mm	2,725	0	0		
10317e	90/121 mm x 73/63 mm	2,41	0	0	0	0
10389e	90/121 mm x 73/63 mm	2,44	0	0	mit Ringen	with rings
11325e	95/130 mm x 75/70 mm	3,275	0	0		

Thank you for your kind attention

The ABC bearing dimensions cited in this brochure are only representative for the variety of dimensions and various shapes of side rings.

Eich as manufacturer of special designed bearings is in the position to offer you nearly every variation for your specific application.

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