

## DTB (Driven Tool Bearing)

IBC is proud to present its new DTB (Driven Tool Bearings) precision bearing series. As the name indicates, the contact angle, inner geometry and running accuracy of this type of precision angular contact ball bearing have been specially optimised for driven tools. The use of such bearings has a number of advantages for the operator, chiefly among them more accurate machining results and enhanced machine tool productivity.

Basic dimensions			Designation	Stiffness		Designation	Stiffness	
d	D mm	B		S <sub>a</sub>	S <sub>r</sub>		S <sub>a</sub>	S <sub>r</sub>
				N/μm			N/μm	
17	30	7	DTB 03/19.E.2RSZ	65	130	DTB 03/19.A.2RSZ	90	120
20	37	9	DTB 04/19.E.2RSZ	80	160	DTB 04/19.A.2RSZ	110	145
25	42	9	DTB 05/19.E.2RSZ	100	200	DTB 05/19.A.2RSZ	140	180
30	47	9	DTB 06/19.E.2RSZ	120	240	DTB 06/19.A.2RSZ	170	220
35	55	10	DTB 07/19.E.2RSZ	140	280	DTB 07/19.A.2RSZ	200	250
40	62	12	DTB 08/19.E.2RSZ	160	320	DTB 08/19.A.2RSZ	225	290
45	68	12	DTB 09/19.E.2RSZ	180	360	DTB 09/19.A.2RSZ	250	330
50	72	12	DTB 10/19.E.2RSZ	200	400	DTB 10/19.A.2RSZ	280	360
55	80	13	DTB 11/19.E.2RSZ	220	440	DTB 11/19.A.2RSZ	310	400
75	105	16	DTB 15/19.E.2RSZ	300	600	DTB 15/19.A.2RSZ	420	540

Production series /19

Basic dimensions			Designation	Stiffness		Designation	Stiffness	
d	D mm	B		S <sub>a</sub>	S <sub>r</sub>		S <sub>a</sub>	S <sub>r</sub>
				N/μm			N/μm	
17	35	10	DTB 03/10.E.2RSZ	65	130	DTB 03/10.A.2RSZ	85	110
20	42	12	DTB 04/10.E.2RSZ	75	150	DTB 04/10.A.2RSZ	105	135
25	47	12	DTB 05/10.E.2RSZ	95	190	DTB 05/10.A.2RSZ	130	170
30	55	13	DTB 06/10.E.2RSZ	110	220	DTB 06/10.A.2RSZ	150	200
35	62	14	DTB 07/10.E.2RSZ	130	260	DTB 07/10.A.2RSZ	210	270

Production series /10

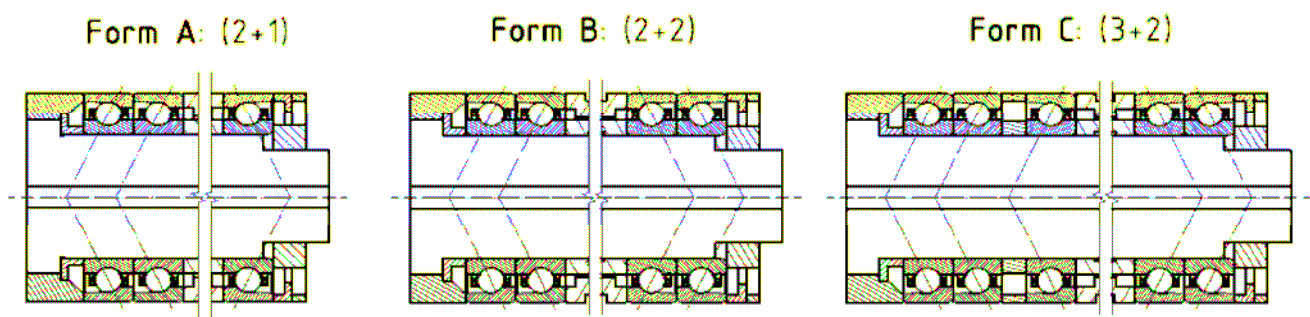
### Characteristics of the different executions:

- Production series /10 and /19
- Contact angle of 25° (E) or 30° (A)
- High axial load capacity and stiffness
- Tolerance class P4
- Preloads are matched to actual loading
- Bearings may be mounted in any kind of arrangement
- Greased and sealed as standard



The new DTB (Driven Tool Bearings) precision bearing series has been specially designed for driven tools that carry out turning and milling work in state-of-the-art high precision machine tools. This sort of work is typically performed in a confined installation space under conditions that include short cycle times and large machining forces. It is therefore essential in today's precision machining environment that the bearing provides great stiffness, very high running accuracy and the ability to operate with high rotational speed. Only then can the operator achieve high-precision machining results, increased cutting performance as well as increased system availability with the minimum of maintenance.

### Examples of mounting



*Short spindle designs*

You can save even more time, and increase reliability further, by choosing the sealed execution of the bearing: the lubricant is optimised for the planned usage with regard to lubricant type, quantity and insertion method, and the bearing is instantly ready for assembly. Every time you change tools, your machine will go through numerous pivoting movements. It is therefore of added importance that the lubricant is kept in rolling contact, which is an additional advantage of sealed bearings with a special cage design.

