

Angular Contact Bearings with Housings

Overview

Angular Contact Bearings with Housings

Angular Contact Back-to-Back Combination - Flanged

Angular Contact Bearings with Housings

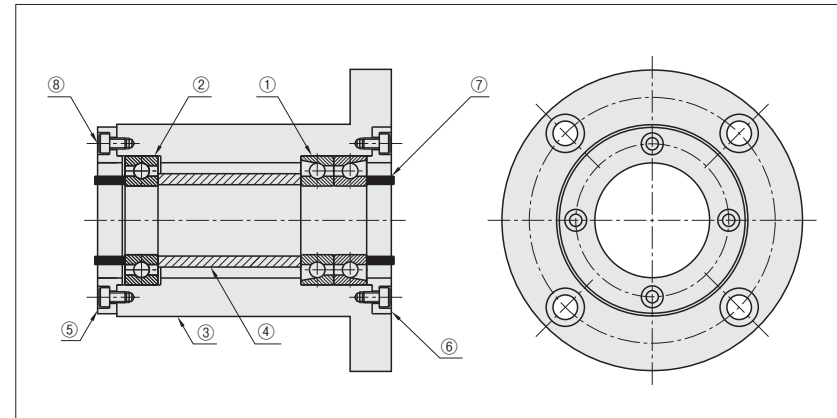
■ Features

The Angular Contact Bearings with Housing set is a unit holder which includes Back-to-Back Bearings.

■ Application

Suitable for heavy load applications with both radial and axial load.

■ Construction Diagram

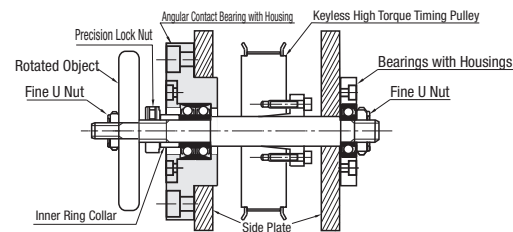


- ① Angular Contact Back-to-Back Combination
- ② Deep Groove Ball Bearing
- ③ Housing Body
- ④ Inner Ring Spacer
- ⑤ Standard Cover
- ⑥ Standard Cover **N**
- Oil Seal Cover **S**
- O-Ring Cover **R** Selectable
- ⑦ Collar for Inner Ring (2 pcs.)
- ⑧ Screw for Cover (8 pcs.)

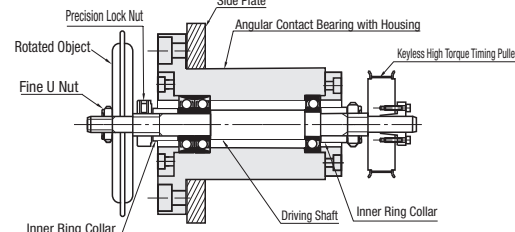
■ Product Lineup and Application

Two New types, the flanged type and the pilot type have been added to Angular Contact Back-to-Back Combination + Deep Groove Ball Bearing Type.
A compact Angular Contact Back-to-Back Combination Type that can be combined with other bearing housings has also been newly added.

App. Example① (Angular Contact Back-to-Back Combination)



App. Example② (Angular Contact Back-to-Back Combination + Deep Groove Ball Bearing)



■ Cautions on Angular Contact Bearings with Housings Selection

- MISUMI angular contact bearings are designed for grease lubrication.
- Angular contact bearings are not pre-greased at the time of shipment. Please apply grease before use.
- An outer ring cover for grease splash prevention is included with the angular contact bearings.
- For grease splash prevention, an outer ring fixing cover can be selected from type S (for oil seal) and type R (for O-ring). An oil seal and O-ring are included as standard.
- An inner ring collar is included for use with bearing lock nuts. (The collar is not necessary on stepped shafts.)

For Back-to-Back Combination Type (ABGEB, ABGE)

When the rotary shaft is long, it can be used in combination with the regular bearing with housings for deep groove ball bearings. (Refer to App. Example)

For Back-to-Back Combination + Deep Groove Type (ABGCB, ABGC, ABGYB, ABGY)

- A standard cover for outer ring fixing is included with the radial bearing (deep groove ball bearing side).
- Outer ring of the radial bearing is not fixed in thrust direction.
- A spacer for the inner ring is included as an accessory that can be used to axially tie the inner ring of the angular contact bearing and the deep groove ball bearing together.

■ Mounting Procedures for Angular Contact Bearings with Housings

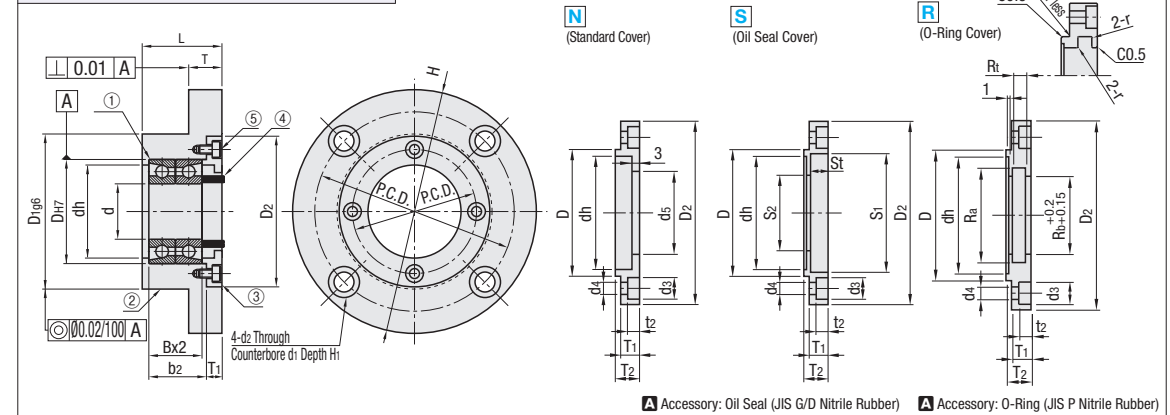
1. Apply grease on an angular contact bearings.
2. Put the bearings together in a back-to-back combination.
3. Insert the rotary shaft into the angular contact bearings set.
4. Insert the shaft into the inner ring spacer.
5. Insert the angular contact bearings into the holder.
6. Install the deep groove ball bearing on the shaft, and then into the holder.
7. Mount the outer ring cover with the screws by tightening them evenly.
8. Install the inner ring collar on the shaft with a bearing nut.
9. Verify whether the shaft rotates smoothly.



Type	① Angular Contact Bearings (Back-to-Back Combination)	② Housing	④ Inner Ring Collar	⑤ Cover Mounting Screw	
	Material	Material	Surface Treatment	Material	Surface Treatment
ABGEB	SUJ2	S45C Equivalent	Black Oxide	SCM435	Black Oxide
ABGE			Electroless Nickel Plating	SUS304	-

Bearing Accuracy (Angular Contact Bearings) JIS B 1514 Class 4 * Contact Angle 15°

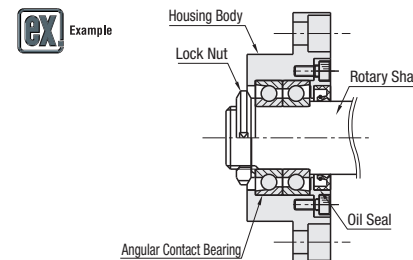
- ① The Angular Contact Bearings with Housings is delivered with the parts unassembled to the holder body.
- ② Make sure that bearing outer rings and inner rings are firmly fixed by the covers and bearing nuts before use.
- ③ Contact with O-Ring may generate some friction.



Part Number	Type	Bearing No.	③ Cover Type Selection	L	d	DH7	Tolerance	B	b2	H	D2	T	dh	D1g6	Tolerance	P.C.D.	d1	d2	H1
ABGEB (Black Oxide)	N	7002	Standard	29	15	32	+0.025 0	9	20	75	48	12	28	50	-0.009 -0.025	62	11	6.6	6.5
		7003		31	17	35		10	22	36	60	75	14	9		8.5			
		7004		36	20	42		12	26	92	58	36	60	80		9	8.5		
		7005		38	25	47		13	28	120	78	41	65	98		106	10.5		
		7006		40	30	55		14	30	126	84	48	80	106		122	12.5		
		7007		43	35	62		15	32	140	92	55	86	116		122	12.5		
ABGE (Electroless Nickel Plating)	R	7008	O-Ring	46	40	68	+0.030 0	15	32	140	92	20	60	95	-0.012 -0.034	116	17.5	11	10.5
		7009		48	45	75		16	34	145	98	69	100	122		12.5			
		7010		50	50	80		16	34	147	101	74	105	122		12.5			

No.	D	D2	dh	T1	T2	P.C.D.	d3	d4	t2	③ Cover Details										⑤ Cover Mounting Screw			④ Collar Details		
										N Standard Cover	S Oil Seal Cover				R O-Ring Cover		Accessory Oil Seal	Ra	Rb	Rt	r	Accessory O-Ring	O.D.	I.D.	Thickness
7002	32	48	28	6	8	40	6.5	3.5	3.1	21	32	22	5	G20325	24	20	3.2	0.4	P20	M3-8	20	15	8.5		
7003	35	51	31	7	9	43	7.0	4.0	3.5	24	35	25	6	D25356	31	25	3.5	0.5	P25	M4-10	25	20	9.5		
7004	42	58	36	8	10	48	8.0	4.5	4.0	31	40	32	7	D30407	36	30	4.0	0.6	P30	M5-12	30	25	10.5		
7005	47	63	41	9	11	53	9.0	5.0	4.5	36	45	37	8	D35458	41	35	4.5	0.7	P35	M6-14	35	30	11.5		
7006	55	78	48	10	12	64	10.5	5.5	5.0	41	50	42	9	D40506.5	46	40	5.0	0.8	P40	M8-16	40	35	13.5		
7007	62	84	55	11	13	72	12.0	6.0	5.5	46	55	47	10	D45609	51	45	5.5	0.9	P45	M10-18	45	40	15.5		
7008	68	92	60	12	14	78	13.0	6.5	6.0	51	60	52	11	D50659	56	50	6.0	1.0	P50	M12-20	50	45	17.5		
7009	75	98	69	13	15	85	14.5	7.0	6.5	56	70	57	12	D55709	61	55	6.5	1.1	P55	M14-22	55	50	19.5		
7010	80	101	74	14	16	88	16.0	7.5	7.0	61	75	62	13	D60759	70	60	7.0	1.2	P60	M16-24	60	50	21.5		

Ordering Example	Part Number	Cover
Type	Bearing	
ABGE	7003	- S



No.	ABGEB			ABGE		
	Cover N	Cover S	Cover R	Cover N	Cover S	Cover R
Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price
7002	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.
7003	2-4 pcs.	2-4 pcs.	2-4 pcs.	2-4 pcs.	2-4 pcs.	2-4 pcs.
7004						
7005						
7006						
7007						
7008						
7009						
7010						