

FBJ

BEARINGS

ベアリング

Premium Quality Series

Angular contact ball bearings

FBJ[®]

Angular contact ball bearings

UG Series



New FBJ angular contact bearings UG series for universal duplex mounting developed in collaboration with representatives of refineries and is a high quality product for use in units and in wide range of equipment. The bearings are designed for universal duplex installation and any of the combinations – “back-to-back” (DB), “face-to-face” (DF), “tandem” (DT) - is available for application. Bearings for universal duplex installation permit to omit the spacer rings to create a guaranteed axial clearance (or preload) in the bearings during mounting. Each of the new bearing series is packed in individual package, which allows either a duplex or a separate mounting.

Features

	<p>Single UG series angular contact ball bearing for separate mounting</p>
	<p>Duplex mounting of UG series angular contact ball bearing can be combined according to DB, DF or DT arrangement</p>

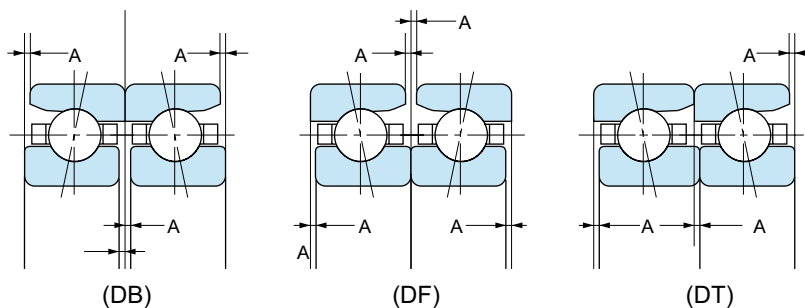
Combinations

Any combination for duplex mounting provides guaranteed axial clearance, facilitating installation of the bearings.

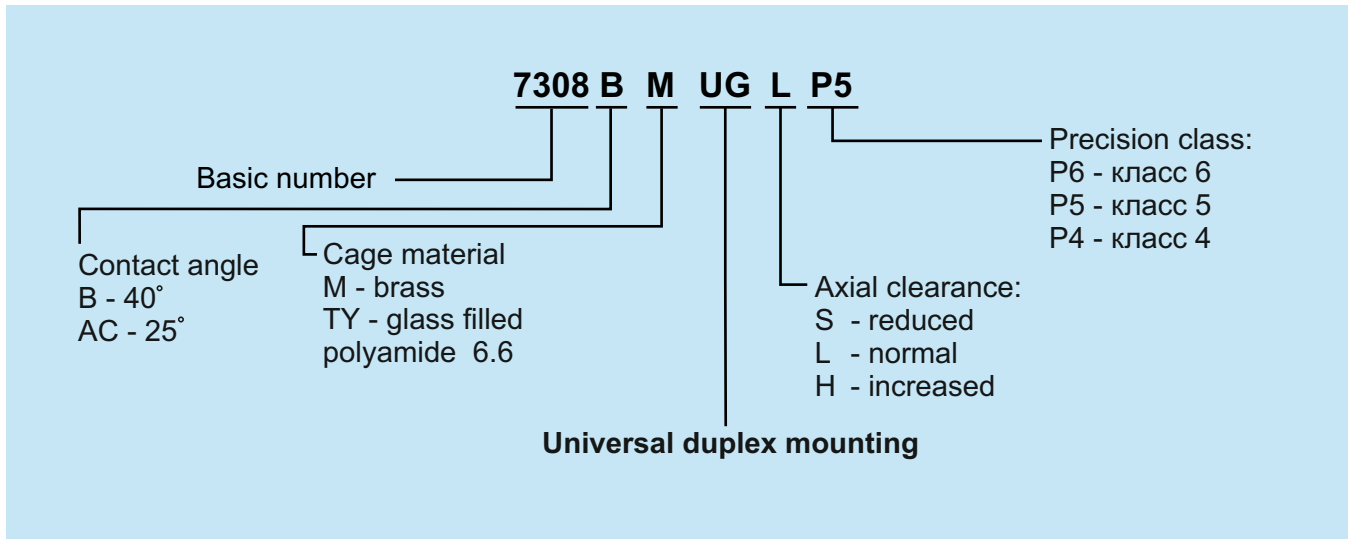
There are three basic combinations:

- Back-to-back (DB)
- Face-to-face (DF)
- Tandem (DT)

Any universal duplex mounting does not require spacer rings and can be selected in any combination.



Designation



Preload and internal clearance

Internal clearance in single row angular contact ball bearings is only obtained after mounting and is dependent on adjustment against a second bearing, which provides axial location in the opposite direction. As part of a universal set, bearings can be installed in any combination. Universal mounted FBJ angular contact ball bearing manufactured in different groups of clearance and preload.

The values of preload during the installation of DB or DF arrangement

Bore Diameter, d		Preload, group L		
more	including	min	max	max
mm		µm		
10	18	+4	-4	80
18	30	+4	-4	120
30	50	+4	-4	160
50	80	+6	-6	380
80	120	+6	-6	410
120	180	+6	-6	540
180	250	+8	-8	940

The values of the axial internal clearance for Installation of DB or DF arrangement

Bore Diameter, d		Axial internal clearance, group					
more	including	S		L		H	
min	max	min	max	min	max	min	max
mm		µm					
10	18	5	13	15	23	24	32
18	30	7	15	18	26	32	40
30	50	9	17	22	30	40	48
50	80	11	23	26	38	48	60
80	120	14	26	32	44	55	67
120	180	17	29	35	47	62	74
180	250	21	37	45	61	74	90

UG Series

Bearing number	Dimensions, mm			Dynamic load, C _r (H)	Static load, C _{0r} (H)	Limiting speed, Rev/m	
	d	D	B			Grease	Oil
7206 ACMUGL P5	30	62	16	21100	13400	17600	28800
7207 ACMUGL P5	35	72	17	27800	18200	15200	25600
7208 ACMUGL P5	40	80	18	29200	20700	13600	22400
7209 ACMUGL P5	45	85	19	37500	26400	12000	19200
7210 ACMUGL P5	50	90	20	38900	29300	11200	17600
7211 ACMUGL P5	55	100	21	48000	36500	10400	16000
7212 ACMUGL P5	60	110	22	49900	40800	9600	15200
7213 ACMUGL P5	65	120	23	61400	49900	8800	14400
7214 ACMUGL P5	70	125	24	62300	53800	8000	13600
7215 ACMUGL P5	25	130	25	69300	57600	7600	12800
7216 ACMUGL P5	80	140	26	84500	70500	7200	12000
7217 ACMUGL P5	85	150	28	87800	76800	6400	10400
7218 ACMUGL P5	90	160	30	111400	96000	6000	96000
7219 ACMUGL P5	95	170	32	117000	103600	5600	8800
7220 ACMUGL P5	100	180	34	144000	123800	5360	8000
7222 ACMUGL P5	110	200	38	146800	137200	4800	7200
7306 ACMUGL P5	30	72	19	32100	21400	17600	25600
7307 ACMUGL P5	35	80	21	38400	23000	16560	23700
7308 ACMUGL P5	40	90	23	45100	33600	14000	20000
7309 ACMUGL P5	45	100	25	59300	44100	11760	16800
7310 ACMUGL P5	50	110	27	69300	52400	10640	15200
7311 ACMUGL P5	55	120	29	79700	55700	9800	14200
7312 ACMUGL P5	60	130	31	84000	61700	9500	13600
7313 ACMUGL P5	65	140	33	96000	68800	8900	12800
7314 ACMUGL P5	70	150	35	100800	76000	7800	11200
7315 ACMUGL P5	75	160	37	110400	85600	7700	11100
7316 ACMUGL P5	80	170	39	120000	100000	6700	9600
7317 ACMUGL P5	85	180	47	123200	100800	6400	9200
7318 ACMUGL P5	90	190	43	138400	116800	6000	8500
7319 ACMUGL P5	95	200	45	148000	134400	5500	7800
7320 ACMUGL P5	100	215	47	170400	158400	4900	7000
7322 ACMUGL P5	110	240	50	191200	185600	4400	6300
7409 ACMUGL P5	45	120	29	74400	48800	9000	15100
7410 ACMUGL P5	50	130	31	88800	59200	8000	13600
7412 ACMUGL P5	60	150	35	105600	76800	7700	12200
7414 ACMUGL P5	70	180	40	611200	104000	5800	9800
7416 ACMUGL P5	80	200	48	158400	136800	5600	9300
7418 ACMUGL P5	90	225	54	186400	172800	4500	7600

Bearing number	Dimensions, mm			Dynamic load, C _r (H)	Static load, C _{0r} (H)	Limiting speed, Rev/m	
	d	D	B			Grease	Oil
7206 BMUGL P5	30	62	16	23000	15000	9400	13500
7207 BMUGL P5	35	72	17	30000	20000	8000	11500
7208 BMUGL P5	40	80	18	35000	25000	7400	10500
7209 BMUGL P5	45	85	19	36000	27000	6700	9600
7210 BMUGL P5	50	90	20	38000	30000	6000	8600
7211 BMUGL P5	55	100	21	44000	34000	5400	7700
7212 BMUGL P5	60	110	22	58000	48000	5000	7200
7213 BMUGL P5	65	120	23	64000	52000	4500	6400
7214 BMUGL P5	70	125	24	69000	58000	4200	6000
7215 BMUGL P5	75	130	25	69000	58000	4000	5800
7216 BMUGL P5	80	140	26	82000	72000	3700	5400
7217 BMUGL P5	85	150	28	92000	80000	3500	5100
7218 BMUGL P5	90	160	30	103000	93000	3200	4600
7219 BMUGL P5	95	170	32	124000	113000	3200	4600
7220 BMUGL P5	100	180	34	130000	117000	2900	4100
7222 BMUGL P5	110	200	38	147000	137000	2500	3600
7306 BMUGL P5	30	72	19	34000	20000	8700	12500
7307 BMUGL P5	35	80	21	40000	25000	7400	10500
7308 BMUGL P5	40	90	23	48000	31000	6700	9600
7309 BMUGL P5	45	100	25	58000	39000	6000	8600
7310 BMUGL P5	50	110	27	72000	49000	5400	7700
7311 BMUGL P5	55	120	29	82000	58000	6100	6700
7312 BMUGL P5	60	130	31	100000	73000	4500	6400
7313 BMUGL P5	65	140	33	111000	83000	4200	6000
7314 BMUGL P5	70	150	35	122000	94000	3700	5400
7315 BMUGL P5	75	160	37	127000	100000	3600	5100
7316 BMUGL P5	80	170	39	137000	113000	3300	4800
7317 BMUGL P5	85	180	41	150000	127000	3200	4600
7318 BMUGL P5	90	190	43	159000	140000	3000	4300
7319 BMUGL P5	95	200	45	173000	156000	2900	4100
7320 BMUGL P5	100	215	47	207000	200000	2700	3800
7322 BMUGL P5	150	240	50	216000	215000	2300	3300
7409 BMUGL P5	45	120	29	82000	53000	4300	7200
7410 BMUGL P5	50	130	31	92000	61000	3800	6400
7412 BMUGL P5	60	150	35	114000	83000	2300	5400
7414 BMUGL P5	70	180	42	152000	122000	2700	4600
7416 BMUGL P5	80	200	48	170000	147000	2400	4100
7418 BMUGL P5	90	225	54	207000	192000	2100	3600

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