

Selection Options for Angular Contact Bearings

① Material	-	Bearings made of bearing steel have no prefix
	M	Bearings made of high temperature steel ¹
	N	Bearings made from high nitrogen steel ¹
	HY	Balls made of Silicon Nitride, rings made of bearing steel
② Series	S	Standard bearing series, single relief on outer ring
	SM	High speed large ball series, similar but higher speed to S series
	KH	Small ball high speed series, with optional seals
	BNT	Separable bearing, similar to S series performance
	BHT	Separable bearing, similar to SM series performance
③ Direct Lubrication	-	Standard
	A	Oil lubrication hole through outer ring on open side
	AB	Oil lubrication hole through outer ring on closed side
	L	Oil lubrication hole through outer ring on open side, outer ring oil groove with O-ring seals
	LB	Oil lubrication hole through outer ring on closed side, outer ring oil groove with O-ring seals
	AG	Grease lubrication hole through outer ring on open side
④ Bearing size	6002	Designation of dimension series and bore diameter
⑤ Seals	2RZ	Seals on both sides (For KH series)
⑥ Contact angle	C	15°
	E	25°
	18°	Custom contact angle
⑦ Cage	TA	Laminated phenolic resin cage guided on outer ring (Standard)
	TXM	Molded plastic cage guided on outer ring, ball retaining ²
⑧ Precision	P4+	Corresponds to P4S per DIN 628-6, tighter than but similar to P4 (ABEC 7) ³ See P4+ tolerance sheet for further explanation (www.gmnbt.com/downloads.htm)
	P2	European tolerance class P2, similar to ABEC 9 ³
	A9	ABEC 9 per ABMA standards, similar to P2 ³
	HG	GMN high precision according to GMN specification, higher than P4, but lower than UP ³
	UP	GMN ultra precision according to GMN specification, higher than HG, but lower than P2 ³
⑨ High point marking	R	High point mark for radial runout for both inner and outer rings
	R _i	Similar to R, but only for inner ring
	R _a	Similar to R, but only for outer ring
⑩ Grading	X	Grading of bore and outer diameter ⁴
⑪ Bearing sets	-	1 bearing
	D	2 bearings
	T	3 bearings
	Q	4 bearings
⑫ Matching	U	Universal
	F	Face-to-Face
	B	Back-to-Back
⑬ Preload	T	Tandem
	L	Light
	M	Medium
	H	Heavy
⑭ Heat treatment	V	Special
	S1	Operating temperature up to 200° C ¹
	S2	Operating temperature up to 250° C ¹
⑮ Lubrication	S3	Operating temperature up to 300° C ¹
	-	No lubrication
	T274	Lubrication identifier, ex. Turmogrease HS L252 (See Grease Codes Sheet)

1. Available on request
2. Other cages available on request
3. Precision specifications can be found in the GMN Ball Bearing Catalog
4. For more information, please contact GMN USA engineers