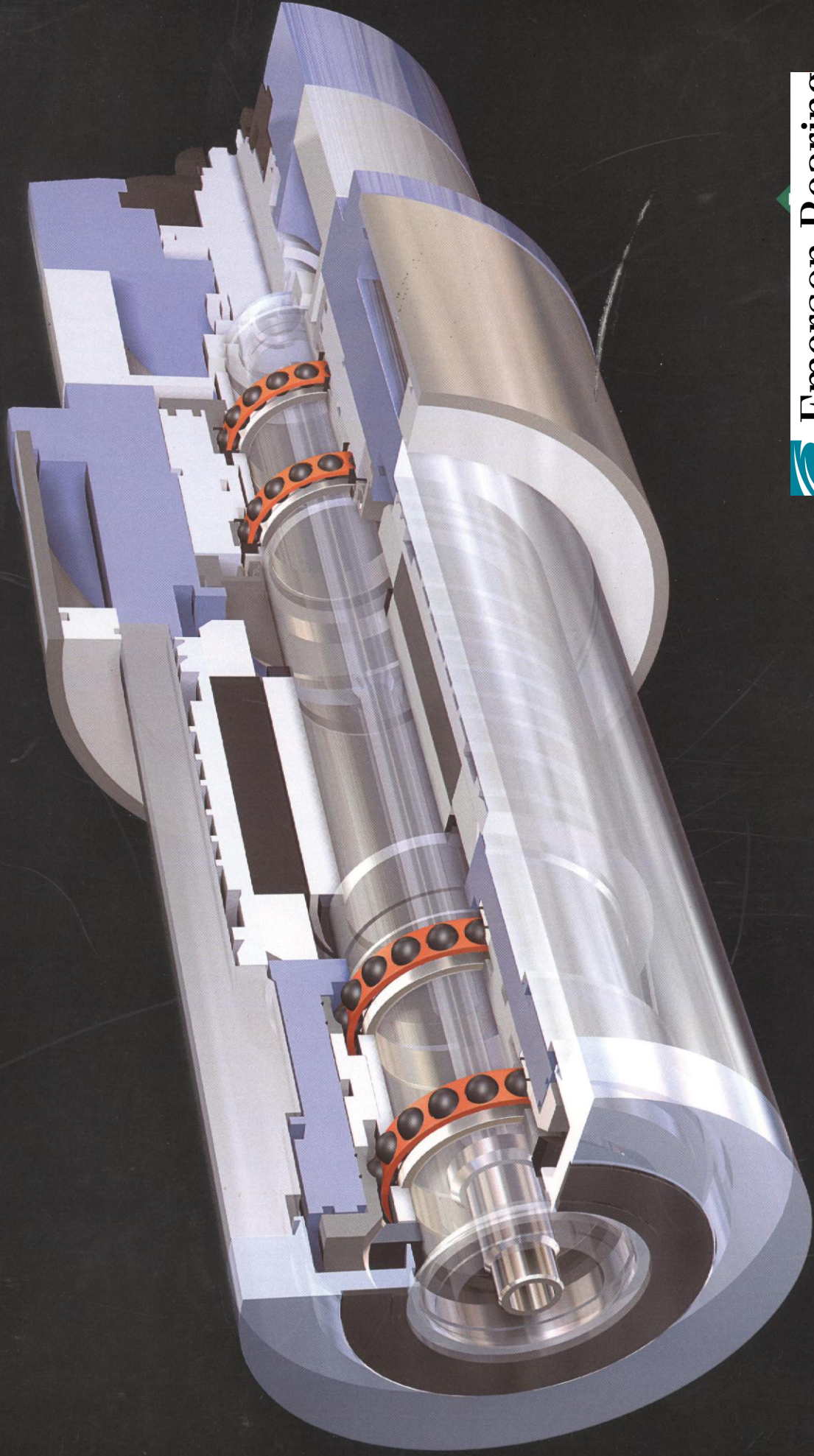


# SPINDLE BEARING INTERCHANGE



 **Emerson Bearing**  
Service. Inventory. Solutions.

# Spindle Bearings

	Barden	Fafnir	GIMN	Koyo	NSK Old	NSK	NTN	RHP	SKF	SNFA	FAG
<b>Series</b>	19xx 1xx 2xx	93xx WI 91xx WI 2xx WI	S619xx S60xx S62xx	79xx 70xx 72xx	79xx 70xx 72xx	79xx 70xx 72xx	79xx 70xx 72xx	79xx 70xx 72xx	719xx 70xx 72xx	SEBxx EXX E2xx	B719xx B70xx B72xx
<b>Contact Angle</b>											
15°	C	2*	C	C	C	C	C	C	CD	1	C
25°	E	3*	E	-	A5	A5	-	E	ACD	3	E
30°	E***	-	-	Blank†	A	A	Blank†	A	-	-	E***
<b>Cage</b>											
Phenolic	H	CR	TA	FT	T	TR	T1	T/ET	Blank†	CE	T
Polyamide	-	-	-	-	TY	TYN	T2	-	-	-	-
<b>Precision</b>											
ABEC 9 = P2	-	MMX*	P2	P2	P2	P2	P2	P2	PA9A	9	-
ABEC 7 / 9 = P4S	Blank†	MMV*	P4 or HG	-	P3	P3	-	P3	P4A	-	P4S
ABEC 7 = P4	-	MM*	-	P4	P4	P4Y	P4	P4	-	7	-
<b>Material</b>											
Ceramic Balls	C*	C*	HY*	-	SN24	SN24	5S*	S	H	/NS	HC*
<b>Sealing</b>											
High Speed Seals	RR	VV	-	-	V1V	V1V	-	-	S*	/S	2RSD
<b>Bearing Set</b>											
"Single, flush ground"	U	S	U	G	S	S	G	SU	G	G	U
Set of 2 - Duplex	D	D	D	-	D	D	GD2	DU	D	D	D
Set of 3 - Triplex	T	T	T	-	T	T	-	3U	T	T	T
Set of 4 - Quad	Q	Q	Q	-	Q	Q	-	QU	Q	Q	Q
<b>Universal Ground</b>	U	U	-	-	U	U	-	U	G	U	U
<b>Arrangement</b>											
Back to Back	DB	DB	DB	DB	DB	DB	DB	DB	DB	DD	DB
Face to Face	DF	DF	DF	DF	DF	DF	DF	DF	DF	FF	DF
Tandem	DT	DT	DT	DT	DT	DT	DT	DT	DT	T	DT
Tandem - 0	TBT	-	TDB	DBD	DBD	DBD	DBT	DBD	TBT	TD	TBT
Tandem 0 - Tandem	QBC	-	QDB	DBB	DBB	DBB	DBTT	DBB	QBC	TDT	QBC
<b>Preload</b>											
Extra Light	-	X	-	S	EL	EL	GL	X	-	-	-
Light	L	L	L	L	L	L	GN	L	A	L	L
Medium	M	M	M	M	M	M	GM	M	B	M	M
Heavy	H	H	S	H	H	H	GH	H	C	F	H
Special	‡	-	-	-	CP	CP	-	G	G	-	‡

\* Indicates prefix    \*\*\* Closest equivalent    † Indicates no suffix denoted    ‡ Special preloads available upon request

# High Speed Spindle Bearings

	Barden	Fafnir	GMN	Koyo	NSK Old	NSK	NTN	RHP	SKF	SKF Old	SNFA	FAG
<b>Series</b>	ZSB19xx ZSB1xx	93xx WN or HX 91xx WN or HX	SM619xx SM60xx	HAR9 HAR0	xxBNC19 xxBNC10	xxBNR19§ xxBNR10	HSB9 HSB0	X79 X70	719xxB 70xxB	719xx 70xx	VB VEX	HS719 HS70
<b>Contact Angle</b>	C C*** E E***	2* - 3* -	C - E -	C - Blank† -	Blank† - - -	- Blank† - -	C - - Blank†	C - E A	C F AC or D -	CE - ACE -	1 2 3 -	C C*** E E***
<b>Cage</b>	H -	CR -	TA -	FT -	T TY	TR TYN	T1 T2	T/ET -	Blank† -	Blank† -	CE -	T -
<b>Precision</b>	-	MMX* MMV* MM*	P2 P4 or HG -	P2 - P4	P2 P3 P4	P2 P3 P4Y	P2 - P4	P2 P3 P4	PA9A P4A -	PA9A P4A -	9 - 7	- P4S -
<b>Material</b>	C*	C*	HY*	3NC*	SN24	H	5S*	S	C*	HC	/NS	C*
<b>Ceramic Balls</b>												
<b>Sealing</b>	RR	VV	2RZ**	-	V1V	V1V	-	-	S*	-	/S	S*
<b>High Speed Seals</b>												
<b>Bearing Set</b>	U D T Q	S D T Q	U D T Q	G - - -	S D T Q	S D T Q	G GD2 - -	SU DU 3U QU	G D T Q	G D T Q	G D T Q	U D T Q
<b>Universal Ground</b>	U	U	-	-	U	U	-	U	G	G	U	U
<b>Arrangement</b>	DB DF DT TBT QBC	DB DF DT - -	DB DF DT TDB QDB	DB DF DT DBD DBB	DB DF DT DBD DBB	DB DF DT DBB	DB DF DT DBT DBTT	DB DF DT DBD DBB	DB DF DT TBT QBC	DB DF DT TBT QBC	DD FF T TD TDT	DB DF DT TBT QBC
<b>Back to Back</b>												
<b>Face to Face</b>												
<b>Tandem</b>												
<b>Tandem - 0</b>												
<b>Tandem 0 - Tandem</b>												
<b>Preload</b>	L L M H ‡	X L M H -	- L M S -	S L M H -	EL L M -	EL L M -	GL GN GM GH -	X L M H G	- A B C G	- A B C G	- L M F -	L L M H ‡
<b>Extra Light</b>												
<b>Light</b>												
<b>Medium</b>												
<b>Heavy</b>												
<b>Special</b>												

\* Indicates Prefix    \*\* For KH Series    \*\*\* Closest Equivalent    † Indicates no suffix denoted    ‡ Special preloads available upon request    § BER Series indicates 25° contact angle

## Spindle Bearings

▼ BORE	Barden	Fafnir	GMIN	NSK	SNFA	SKF	FAG
<b>ISO 10</b>							
10 mm	100HCDUL	2MMV9100WICRDUL	S6000CTA P4DUL	7000CTRDULP4Y	EX10 CE1DUL	7000 CD P4A DGA	B7000C-T-P4S-DUL
20 mm	C104HCDUL	2MMVC9104WICRDUL	HYS6004CTA P4DUL	7004CSN24TRDULP4Y	EX20/NS CE1DUL	7004 CDHC P4A DGA	HC7004C-T-P4S-DUL
50 mm	110HEDUL	3MMV9110WICRDUL	S6010ETA P4DUL	7010A5TRDULP4Y	EX50 CE3DUL	7010 ACD P4A DGA	B7010E-T-P4S-DUL
70 mm	114HERRDUL	3MMV9114WIVVCRDUL	-	7014A5TRV1VDULP4Y	EX70/S CE3DUL	S7014 ACD P4A DGA	B7014E-2SRD-T-P4S-DUL
<b>ISO 02</b>							
10 mm	200HCDUL	2MMV200WICRDUL	S6200CTA P4DUL	7200CTRDULP4Y	E210 7CE1DUL	7200 CD P4A DGA	B7200C-T-P4S-DUL
20 mm	204HCRRDUL	2MMVC204WIVVCRDUL	-	7204CTR1VDULP4Y	E220/S 7CE1DUL	S7204 CD P4A DGA	B7204C-2RSD-T-P4S-DUL
50 mm	210HEDUL	3MMV210WICRDUL	S6210ETA P4DUL	7210A5TRDULP4Y	E250 7CE3DUL	7210 ACD P4A DGA	B7210E-T-P4S-DUL
70 mm	C214HEDUL	3MMVC214WICRDUL	HYS6210ETA P4DUL	7214A5SN24TRDULP4Y	E270/NS 7CE3DUL	7214 ACDHC P4A DGA	HC7214E-T-P4S-DUL
<b>ISO 19</b>							
10 mm	1900HEDUL	3MMV9300WICRDUL	S61900ETA P4DUL	7900A5TRDULP4Y	SEB10 7CE3DUL	71900 ACD P4A DGA	B71900E-T-P4S-DUL
20 mm	C1904HDL	2MMVC9304WICRDUL	HYS61904CTA P4DUL	7904CSN24TRDULP4Y	SEB20/NS 7CE1DUL	71904 CDHC P4A DGA	HC71904C-T-P4S-DUL
50 mm	1910HDL	2MMV9310WICRDUL	S61910CTA P4DUL	7910CTRDULP4Y	SEB50 7CE1DUL	71910 CD P4A DGA	B71910C-T-P4S-DUL
70 mm	1914HCRRDUL	2MMV9314WIVVCRDUL	-	7914CTR1VDULP4Y	SEB70/S 7CE1DUL	S71914 CD P4A DGA	B71914C-2RSD-T-P4S-DUL

## High Speed Spindle Bearings

▼ BORE	Barden	Fafnir	GMIN	NSK	SNFA	SKF	FAG
<b>ISO 10</b>							
10 mm	ZSB100CDUL	2MMV9100HXCRDUL	SM6000CTA P4 DUL	10BNR10TRDULP4Y*	VEX10 7CE1 DUL	7000CB P4A DGA	HS7000C-T-P4S-DUL
20 mm	CZSB104CDUL	2MMVC9104HXCRDUL	HYSM6004CTA P4 DUL	20BNR10HTRDULP4Y*	VEX20/NS 7CE1 DUL	C7004CB P4A DGA	HC7004C-T-P4S-DUL
50 mm	ZSB110EDUL	3MMV9110HXCRDUL	SM6010ETA P4 DUL	-	VEX50 7CE3 DUL	7010ACB P4A DGA	HS7010E-T-P4S-DUL
70 mm	ZSB114ERRDUL	3MMV9114HXVVCRDUL	KH60142RZETA P4 DUL	-	VEX70/S 7CE3 DUL	S7014ACB P4A DGA	HSS7014E-T-P4S-DUL
<b>ISO 19</b>							
10 mm	ZSB1900CDUL	2MMV9300HXCRDUL	KH619000CTA P4 DUL	-	VEB10 7CE1 DUL	71900CB P4A DGA	HS71900C-T-P4S-DUL
20 mm	CZSB1904ERRDUL	3MMVC9304HXVVCRDUL	HYKH619042RZETA P4 DUL	-	VEB10/S/NS 7CE3 DUL	SC71904ACB P4A DGA	HC71904E-T-P4S-DUL
50 mm	ZSB1910CDUL	2MMV9310HXCRDUL	KH61910CTA P4 DUL	50BNR19 TR DUL P4Y*	VEB10 7CE1 DUL	71910CB P4A DGA	HS71910C-T-P4S-DUL
70 mm	ZSB1914ERRDUL	3MMV9314HXVVCRDUL	KH619142RZETA P4 DUL	-	VEB10 7CE3 DUL	S71914ACB P4A DGA	HSS71914E-T-P4S-DUL

\*18 Degree Contact Angle

NOTE: Competitor interchanges are for information use only and do not in any way guarantee availability. Every attempt has been made to ensure the accuracy of the information provided in these tables. However, use of this information is the customer's responsibility. No liability will be assumed due to errors and omissions.



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