

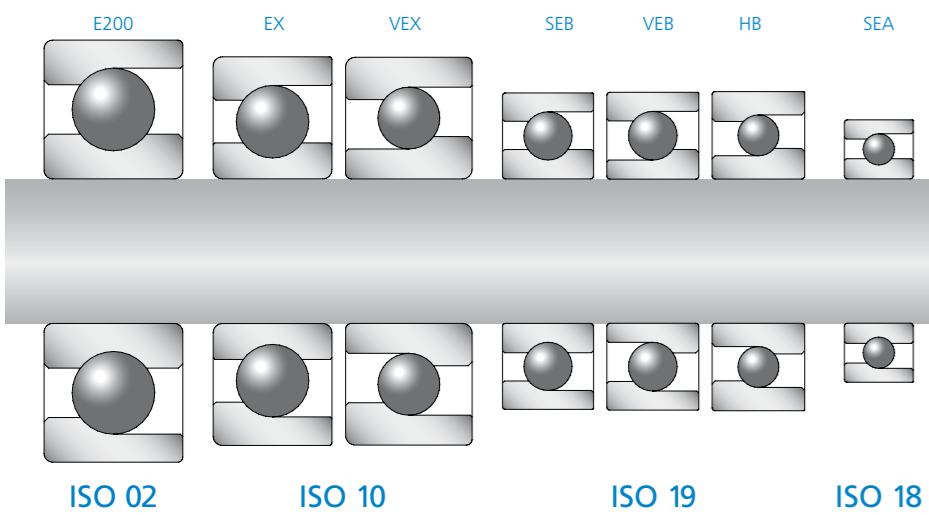
SNFA offers a wide range of Super Precision Angular Contact Ball Bearings in the ISO-dimensions 18, 19, 10 and 02. This guide will help you to find the correct bearing for your need, with references to designation systems used by other manufacturers.

Work flow to crossover Super Precision Bearing designations:

- 1 Determine the manufacturer and designation of the bearing. This is normally found on the side face of the bearing.
- 2 Use the tables to identify the characteristics and features of the bearing, by identifying the prefix or suffix.
- 3 Use the page to the left to construct the complete SNFA designation of the bearing.

If the bearing designation is not recognisable or incomplete, please contact the SNFA technical department or SKF Application Engineering with as much information as possible regarding:

- External dimensions
- Bearing type
- Cage, ball and ring material
- Number of rolling elements
- Matching, preload
- Manufacturer of the machine



A correct crossover of Super Precision Bearings will assure that you get a similar bearing with same ISO-dimensions and basic properties. However, it will not result in an identical bearing, and differences in shoulder diameter, number of balls or cage location may vary.



**UNITED KINGDOM**

SKF (U.K.) Ltd, SNFA Super Precision Bearings, Oldends Lane, Stonehouse, Gloucestershire GL10 3RH, United Kingdom  
Telephone: +44 1453 852570 Fax: +44 1453 852598  
Email: sales@snfa-bearings.co.uk

**GERMANY**

SNFA G.m.b.H, Julius-Hölder-Strasse 4, DE-70597 Stuttgart-Degerloch, Germany  
Telephone: +49 711 7586510 Fax: +49 711 758651 99  
Email: snfa@snfa.de

**FRANCE**

SNFA SA, Zone Industrielle No 2 - Batterie 900 59309 VALENCIENNES CEDEX, France  
Telephone: +33 327235212 Fax: +33 327235297  
Email: info@snfa.com

**ITALY**

SOMECAT s.p.A, Via Savonera-Druento 15 - 10044 PIANEZZA (TO), Italy  
Telephone: +39 011 9941407 Fax: +39 011 9845804  
Email: info@somecat.com

**SWITZERLAND**

SNFA S.A., Fribourg, Route du Platy 5a, P.O. Box 34 - CH-1752 Villars-Sur-Glâne 1, Switzerland  
Telephone: +41 26 4097146 Fax: +41 26 4020614  
Email: info@snfa.ch

**ALL OTHER COUNTRIES**

For inquiries in all other countries, please contact your local SKF Sales Unit, or an authorised SKF Distributor.

Please visit [www.skf.com](http://www.skf.com) to find your local contact.



A trademark of the SKF Group

Although every effort has been made to ensure the accuracy of the information contained in the publication, no liability can be accepted by SNFA for loss or damage due to omissions that may have occurred.



**SUPER PRECISION ANGULAR CONTACT BALL BEARINGS**

**EQUIVALENTS DATA 2008**



A trademark of the SKF Group

SNFA DESIGNATION SYSTEM

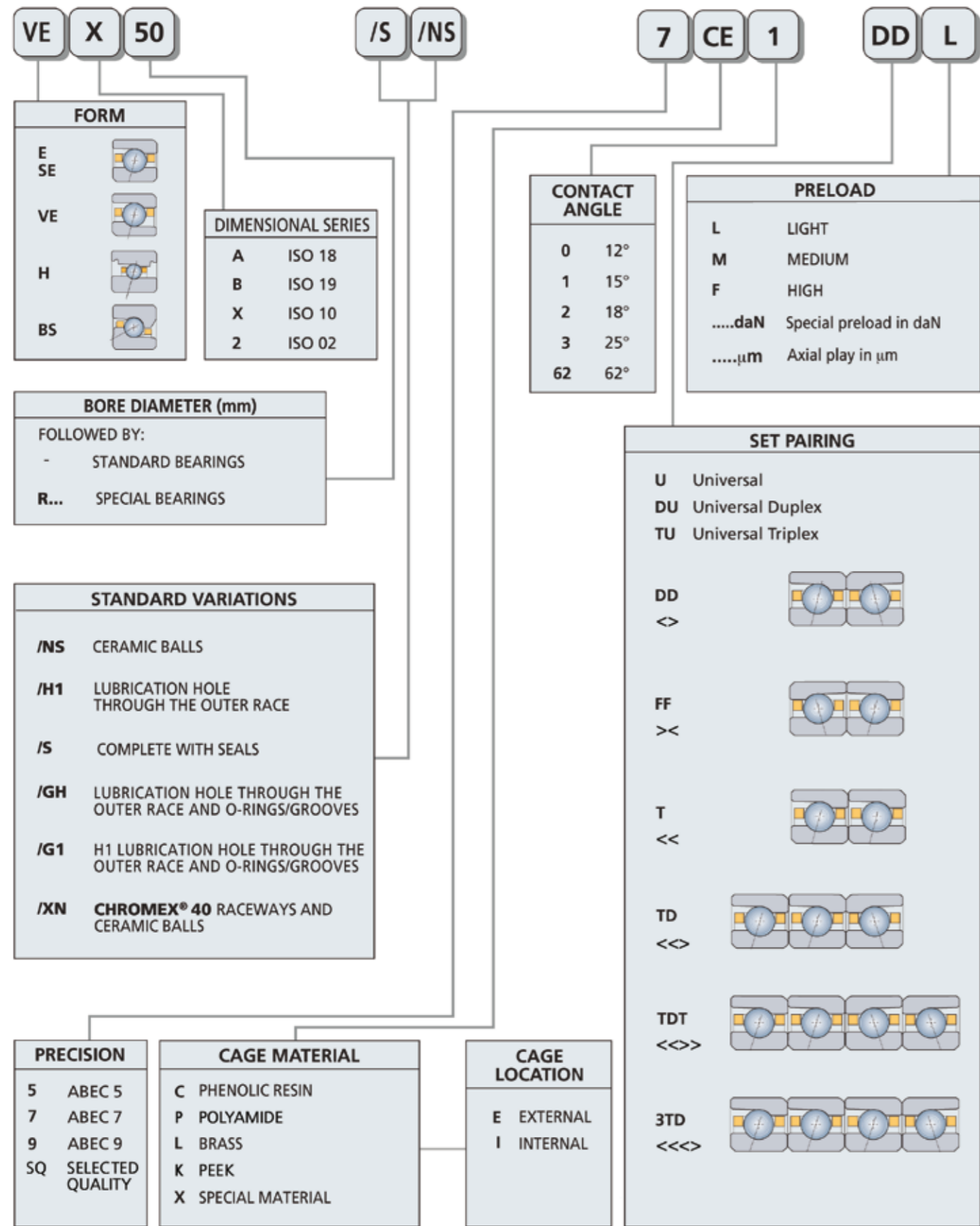


TABLE OF EQUIVALENTS

	ISO	SNFA	SKF	TIMKEN / FAFNIR	FAG	IBC	BARDEN	NSK	RHP	GMN	NTN	KOYO	SNR	
SERIES	ISO 18	SEAaa	-	-	B718##	-	-	-	-	S 618##	78## C	-	-	
	ISO 19	SEBaa	719## ..D	93## WI	B719##	719##	19## H	79##	B79##	S 619##	79## U	79##	719##	
	ISO 19 / HS	VEBaa	719## ..E	93## HX	-	-	-	aa BNC19	T79##	-	HSE9##	HAC9##	ML 719##	
	ISO 19 / HS	HBaa	719## ..B	-	HS719##	H719##	-	aa B..R19	-	-	KH 619##	BNS9##	HAR9##	-
	ISO 10	EXaa	70## ..D	91## WI	B70##	70##	1## H	70##	B70##	S 60##	70##	70##	70##	
	ISO 10 / HS	VEXaa	70## ..E	-	-	-	-	aa BC10	T70##	SM 60##	HSE0##	HAC0##	ML 70##	
	ISO 10 / HS	HXaa	70## ..B	991## WN	HS70##	H70##	CZB1## J	aa B..R10	-	KH 60##	HSF0##	HAR0##	-	
ISO 02	E2aa	72## ..D	2## WI	B72##	72##	2## H	72##	B72##	S 62##	72## C	72##	72##		
ISO 02	BS2aa	BSA 2##	## BS	## BS	76020##	BSaaM	BSB##	BSB	BSB0aa	-	BNT2##	-	-	
RING MATERIAL	Chromex	/XN	V*	-	XC*	-	XC*	X	-	-	-	-	N*	
CERAMIC	Hybrid Bearings	/NS	HC, C*	C	HC*	CB*	C*	SN24/H	S	HY*	5S*	3NC*	CH*	
SEALS	Both Sides	/S	S*	V V	S* / 2RSD	2RSZ	RR	V1V	-	2RZ	LLB	-	E*	
LUBRICATION FEATURES OUTER RING	Two Holes	/H1	L1	-	-	-	-	-	-	SMA*	-	HAF*	L1	
	Holes + Grooves + O-Rings	/G1	-	-	-	-	-	-	-	-	-	-	-	
PRECISION	ABEC 7 / ISO 4	7	P4A/P7	MM*	P4S	P4	~	P4/PA7	EP7/P3	P4/A7	P4	P4	4/4S	
	ABEC 9 / ISO 2	9	PA9A/P9	MMX*	P2	P2A	ABEC9	P2/PA9	EP9/P2	P2/A9	P2	P2	2	
CAGE MATERIAL	Phenolic Resin	CE	~	~/CR	T/TX/TPA	T	~	T/TR	TA	TA	~/T1	FT	V/G1	
	Polyamide	PE	-	PRB	TV	-	-	TY/TYN	-	-	T2	FG	-	
	Brass	L	MA	MBR	MP	M	-	~	MA	-	L1A	FY	-	
	PEEK	K	TNH/~	-	-	K	-	-	-	-	-	-	-	
CONTACT ANGLE	15°C	1	C	2*	C	C	C	C	C/X2	C	C	C	C	
	18°C	2	F	-	-	-	-	N/G	~**	-	-	CA**	-	
	25°C	3	AC / D	3*	E	E	E	A5/E	E/X3	E	AD/~**	~**	H	
	62°C	62	~	62	-	BS*	-	-	-	-	-	-	-	
MATCHING	Universal (1-4)	U/DU/TU/4U	G/DG/TG/QG	SU/DU/TU/QU	U/DU/TU/QU	U	U/DU	SU/DU/DUD/QU	U/DU	DUV	G/GD2/GD3	G/Gx2/Gx3/Gx4	U/DU/TU/QU	
	<>	DD	DB	DB	DB	DB	DB	DB	DB	DB	DB	DB	DB	
	><	FF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	
	<<	T	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	
	<<>	TD	TBT	TR...	TBT	TBT	DBT	DBD	2TB	TBT	DBT	DBD	Q16	
	>><	TF	TFT	TR...	TFT	TFT	DFT	DFD	2TF	TFT	DFT	DFD	Q17	
	<<>>	TDT	QBC	TR...	QBC	QBC	DBDD	DBB	2TB2T	QBC	DTBT	DBB	Q21	
>><<	TFT	QFC	TR...	QFC	QFC	DFDD	DFD	2TF2T	QFC	DTFT	DFD	Q25		
PRELOAD	Extra Light	-	-	X	EL	X	-	EL	EL	-	GL	S	-	
	Light	L	A	L	L	L	L	L / 7	L	L	GN	L	J7	
	Medium	M	B	M	M	M	M	M / 8	M	M	GM	M	J8	
	Heavy	F	C	H	H	H	H	H / 9	H	S	GH	H	J9	
Special (daN)	...daN	G...	-	-	-	U...	-	G..	G..	V	G...	-	JX	
CLEARANCE	Clearance (µm)	... µm	-	-	-	A...	-	CA...	-	-	-	CS...	-	

SEALED BEARINGS



DESIGNATION EXAMPLES

	STANDARD	CERAMIC	SEALED
	ISO 10 50 mm ABEC 7/ISO P4 15° Back-to-back Light	ISO 10 70 mm ABEC 9/ISO P2 25° Tandem with back-up bearing Medium	ISO 19 15 mm ABEC 9/ISO P2 15° Universal Heavy
SNFA	EX50 7CE1 DD L	VEX70 /NS 9CE3 TD M	VEB15/S 9CE1 UF
SKF	7010 CD/P4ADBA	7014 ACE /HC PA9A TBT B	S71902ACD GC /PA9A
TIMKEN/FAFNIR	2MM9110WICR DB L	3MMXC 99114WN CR TR M	2MMX 99302HX CR VV SU H
FAG	B7010 C.T.P4S.DBL	HC7014.E.T.P2.TBTM	HSS71902.C.T.P2.UH
IBC	7010.C.T.P4A.DBL	CB7014.E.T.P2A.TBTM	71902.C.T.2RSZ.P4A.UH
BARDEN	110H 7 CDB L	CZSB114JEABEC9 DBTM	C3ZSB102JCRRABEC9 UH
NSK	7010CTRDBL P4	X7014SN24A5TR DBDM P2	15BCR19CTV1VSUH P2
GMN	S6010CTA P4DBL	HYSH6014ETAP2 TBTM	-
NTN	7010UCDB/GL P4	5SHSE010T2ADDBTGM P2	HSE902LLBCDGGH P2
KOYO	7010CDBL FTP4	HAC010DBDM FTP2	HAR902GH FTP2
SNR	7010CDBL 4	CHML7014H Q16J82	MLE71902C UJ92

COLOUR CODES:

SERIES	HIGH SPEED	BORE	CERAMIC	PRECISION	CAGE & LOCATION	CONTACT ANGLE	SEALS	MATCHING	PRELOAD
Blue	Grey	Purple	Pink	Green	Light Green	Blue	Yellow	Orange	Light Orange

aa BEARING BORE IN MM ## BEARING BORE WITH SIZE CODE - 8=8MM, 9=9MM, 00=10MM, 01=12MM, 02=15MM, 03=17MM. FROM 04 AND UP X5=INNER BORE DIAMETER IN MM (06=30MM).  
 \* INDICATES THAT THIS IS USED AS PREFIX IN THE BEARING DESIGNATION, EX SKF S71905 IS A SEALED BEARING. \*\* NEAREST MATCH OF CONTACT ANGLE (20->18, 30->25)  
 - FEATURE IS STANDARD AND DOES NOT HAVE A PREFIX/SUFFIX.

