

FAG Rolling Bearing Cages

Designation · Design · Material



Contents

Cage types and Cage designs	3
Cage suffixes for ball and roller bearings	4
Allocation of the standard cage designs	5
FAG Cages for ball and roller bearings	9

Cage types and Cage designs

This publication provides an overview of the rolling bearing cages that can be produced by FAG (several of these cages are not included in our catalogue). It also shows an allocation of the various standard cages to the individual bearing types, series and sizes.

The cage is an important component of a rolling bearing:

- it keeps the rolling elements apart to prevent mutual contact
- it keeps the rolling elements evenly spaced to ensure a more even load distribution
- it guides the rolling elements in the unloaded bearing zones
- it prevents the rolling elements from falling out of separable and slewable bearings, thereby facilitating bearing mounting.

There are pressed cages as well as solid cages:

Pressed cages are usually made from sheet steel, but sometimes also from brass sheet. They offer the advantages of a light weight and low material cost. If manufactured in large numbers, they are economic in spite of the expensive manufacturing tools.

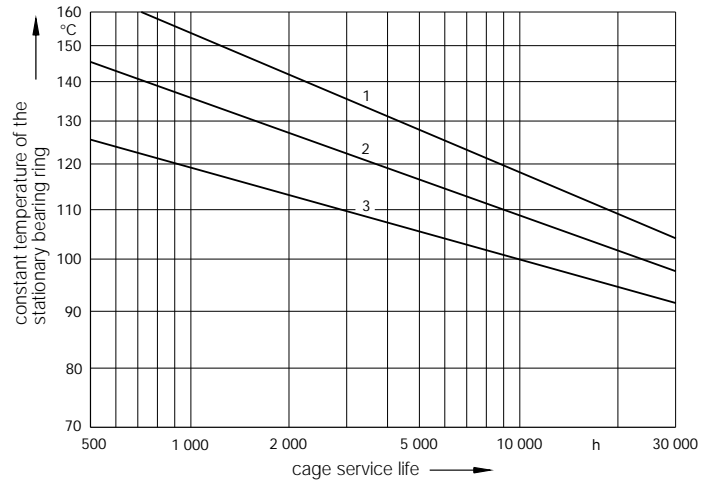
Solid cages are made from brass, steel, light metal or textile-laminated phenolic resin. They are manufactured either by machining, by injection moulding of plastic materials or by sintering metals.

Solid cages, especially those made from brass or steel, are suitable for small series and – for strength reasons – for large bearings subjected to high loads.

Solid cages made from light metal or textile-laminated phenolic resin have relatively low body forces; outer-ring riding solid cages are often used in high-speed bearings.

Cages made from glass-fibre reinforced polyamide PA66-GF25 are now used in numerous large-series bearings. A high degree of elasticity, a low weight as well as good sliding and dry-running properties have a positive effect on the bearing service life.

Glass-fibre reinforced polyamide cages are suitable for extended use at operating temperatures of up to 120 °C. In oil-lubricated bearings, however, additives contained in the oil may lead to a reduction of the cage service life, see diagram.



Curve 1 - Rolling bearing lubricating grease K in accordance with DIN 51825, motor- or machine lubrication oil

Curve 2 - gear oil

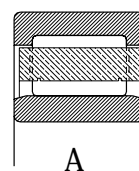
Curve 3 - hypoid oil

The curves relate to constant temperatures. If the bearings are not subjected to such high temperatures all the time, the cage service life will be longer.

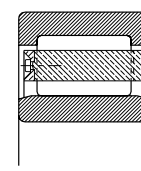
At increased temperatures aged oil can also have an impact on the cage service life; it is, therefore, important that the oil change intervals are observed.

The cost-effective standard cages are, as a rule, suitable for normal operating conditions. Special operating conditions require a specifically selected special cage. This explains the diversity of cage designs shown in this Technical Information.

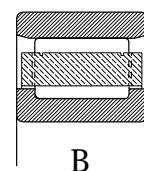
Another distinctive feature of a cage is the type of guidance. Most cages are guided by the rolling elements. This type of cage guidance is not specified in the code. By contrast, cage guidance by the outer ring (outer ring riding) and by the inner ring (inner ring riding) is indicated by the suffixes A and B, respectively.



guidance by the outer ring



guidance by the rolling elements



guidance by the inner ring

Cage suffixes for ball and roller bearings

Pressed steel cages

J	rolling element riding
JH	snap-type cage; rolling element riding
JN	rivet-type cage; rolling element riding
JP	window-type cage; rolling element riding
JP1	window-type cage; rolling element riding
JPA	window-type cage; guidance by the inner ring (supporting ring)
JPB	window-type cage; guidance by the inner ring

Pressed brass cages

YPB	window-type cage; guidance by the inner ring
-----	--

Machined steel cages

F	rolling element riding
FA	guidance by the outer ring (housing washer, housing)
FB	guidance by the inner ring (shaft washer, shaft)
FP	window-type cage; rolling element riding

Machined light metal cages

LA	guidance by the outer ring (housing)
LB	guidance by the inner ring (shaft)
LPA	window-type cage; guidance by the outer ring (housing)
LPB	window-type cage; guidance by the inner ring (shaft)

Machined brass cages

M	rolling element riding
M1	rolling element riding (crosspiece riveted)
M1A	guidance by the outer ring (crosspiece riveted)
M1B	guidance by the inner ring (crosspiece riveted)
M3 ¹⁾	modified design; rolling element riding
M3A ¹⁾	modified design; guidance by the outer ring
M3B ¹⁾	modified design; guidance by the inner ring

MA	guidance by the outer ring (housing washer, housing)
MAS	guidance by the outer ring; with lubricating grooves
MB	guidance by the inner ring (shaft washer, shaft)
MBS	guidance by the inner ring; with lubricating grooves
MP	window-type cage; rolling element riding
MP1	window-type cage; rolling element riding
MPA	window-type cage; guidance by the outer ring (housing)
MPB	window-type cage; guidance by the outer ring (Welle)

Machined textile laminated phenolic cages

TA	guidance by the outer ring
TB	guidance by the inner ring
THB	snap-type cage; guidance by the inner ring
TPA ²⁾	window-type cage; guidance by the outer ring
TPB	window-type cage; guidance by the inner ring

Moulded polyamide cages (PA66)

TNP	window-type cage; rolling element riding
-----	--

Moulded polyamide cages (PA66-GF25)

TV	rolling element riding
TVA	guidance by the outer ring
TVB	guidance by the inner ring
TVH	snap-type cage; rolling element riding
TVHB ²⁾	snap-type cage; guidance by the inner ring
TVP	window-type cage; rolling element riding
TVP2	window-type cage; rolling element riding
TVP3 ³⁾	window-type cage; rolling element riding
TVPB	window-type cage; guidance by the inner ring
TVPB1	window-type cage; guidance by the inner ring

¹⁾ In the order designation the cage suffix is M1.

²⁾ In the order designation the cage suffix is T.

³⁾ In the order designation the cage suffix is TVP2.

Allocation of the standard cage designs

FAG rolling bearings can be fitted with various types of cages. However, for every bearing only one cage type is specified as the standard design. The following tables list the standard design cages; they can be pressed cages as well as solid cages of brass, steel, light metal or synthetic materials.

Specification of the cage in the bearing codes

Generally, standard pressed cages are not specifically specified in the bearing codes.

The cage code is always included in the bearing codes in the following cases:

- bearings with pressed cages that are not specified as the standard design;
- all solid cages, whether or not specified as the standard cage.

Example: The standard cage of a deep groove ball bearing FAG 6205 is a J-design cage. If, however, the bearing is to be equipped with a JN-cage, the code for this cage has to be included in the bearing code (6205JN).

Cages of glass-fibre reinforced polyamide:

Cages of polyamide PA66-GF25 are suffixed T in the product numbers of deep groove ball bearings and barrel roller bearings.

Example: The standard cage design for deep groove ball bearings is a TVHB-design cage but the product number is 61815T.

Bearing size / range	Cage	Bearing size / range	Cage	Bearing size / range	Cage
FAG Deep groove ball bearings, single row		- sealed		FAG Deep groove ball bearings, single row, stainless steel, design open or sealed (.2RSR)	
60864 - 608/1400	M	623.2Z - 627.2Z	J	S6000.W203B - S6004.W203B	J ¹⁾
- sealed		623.2RS - 627.2RSJ		S6005.W203B - S6012.W203B	JN ¹⁾
608.2RS, .2Z	J	629.2RSR - 6216.2RSR	JN	S6200.W203B - S6206.W203B	J ¹⁾
618/6	J	629.2ZR - 6216.2ZR	JN	S6207.W203B - S6212.W203B	JN ¹⁾
61800 - 61828	TVHB *)	62200 - 62206	J	S6300.W203B - S6311.W203B	JN ¹⁾
61830 - 61856	JN	62207 - 62215	JN		
61860 - 618/850	M	- sealed		FAG Deep groove ball bearings, double row	
60952 - 609/670	M	62200.2RSR - 62210.2RSR	JN	4200B - 4216B	TVH
61900 - 61903	J	634, 635	J	4302B - 4312B	TVH
61904 - 61948	JN	6300 - 6324	JN		
61952	M	6326 - 63/500	M	FAG Angular contact ball bearings, single row	
61956	JN	- sealed		7200B - 7220B	TVP
61960 - 619/1900	M	634.2RS, 635.2RS	J	7221B	MP
16002 - 16008	J	634.2Z, 635.2Z	J	7222B - 7226B	TVP
16009 - 16052	JN	6300.2RSR - 6314.2RSR	JN	7228B - 7276B	MP
16056 - 16076	M	6300.2ZR - 6322.2ZR	JN	7280B - 72/500B	MPB
16100, 16101	J	62302.2RSR - 62310.2RSR	JN	7300B - 7320B	TVP
607 - 6004	J	6403 - 6414	JN	7321B	MP
6005 - 6030	JN	6415 - 6418	M	7322B - 7326B	TVP
6032	M	FAG Deep groove ball bearings, single row, E-design		7328B - 7364B	MP
6034	JN	6000E - 6020E	TVH	7368B - 73/500B	MPB
6036 - 6072	M	6200E - 6220E	TVH	FAG Angular contact ball bearings, double row	
- sealed		6300E - 6320E	TVH	3200B - 32216B	TVH
609.2RSR - 6015.2RSR	J	6403E - 6408E	TVH	3302B - 3313B	TVH
609.2ZR - 6016.2ZR	J				
623 - 6206	J				
6207 - 6230	JN				
6232 - 6256	M				

*) In the order designation: suffix T

¹⁾ Cage material is stainless steel X 45 Cr Ni 18 9 (mat.-no. 1.4301)

Bearing size / range	Cage	Bearing size / range	Cage	Bearing size / range	Cage
FAG Angular contact ball bearings, single row		- sealed		FAG Cylindrical roller bearings, single row	
- with split inner ring		HCS71900C - HCS71926C	TPA *)	HCS71900E - HCS71926E	TPA *)
3305DA TVH		HCS7000C - HCS7026C	TPA *)	N1860 - N18/950	M1
3306DA, 3307DA	JP	HCS7000E - HCS7026E	TPA *)	NJ1860 - NJ18/950	M1
3308DA MA		FAG Self-aligning ball bearings		NU1860 - NU18/950	M1
3309DA JP		108	TV	NUP1860 - NUP18/950	M1
3310DA, 3311DA	MA	126 - 1218	TV	<hr/>	
3312DA - 3314DA	JP	1219 - 1230	M	N2840 - N28/850	M1
- with filling grooves		2200 - 2213	TV	NJ2840 - NJ28/850	M1
3217, 3218	J	2214	M	NU2840 - NU28/850	M1
3219	M	2215, 2216	TV	NUP2840 - NUP28/850	M1
3220	J	2217	M	<hr/>	
3221 - 3222	M	2218	TV	N1909 - N19/670	M1
3300 - 3316	J	2219 - 2222	M	NJ1909 - NJ19/670	M1
3317	M	135	TV	NU1909 - NU19/670	M1
3318	J	1303 - 1313	TV	<hr/>	
3319 - 3322	M	1314 - 1322	M	N2926 - N29/1180	M1
FAG Spindle bearings		2300, 2301	M	NJ2926 - NJ29/1180	M1
B71900C - B71948C	TPA *)	2302 - 2313	TV	NU2926 - NU29/1180	M1
B71900E - B71948E	TPA *)	2314 - 2360	M	NUP2926 - NUP29/1180	M1
B7000C - B7048C	TPA *)	11204 - 11212	TV	<hr/>	
B7000E - B7048E	TPA *)	11305 - 11311	TV	N1005 - N10/560	M1
B7200C - B7244C	TPA *)	- sealed		NJ1005	M1
B7200E - B7244E	TPA *)	2200.2RS - 2214.2RS	TV	NJ1006	JP
HS71900C - HS71926C	TPA *)	2303.2RS - 2311.2RS	TV	NJ1007 - NJ10/560	M1
HS71900E - HS71926E	TPA *)	FAG Four-point bearings		NU1005	M1
HS7000C - HS7026C	TPA *)	QJ205 - QJ207	MPA	NU1006	JP
HS7000E - HS7026E	TPA *)	QJ208, QJ209	TVP	NU1007 - NU10/560	M1
- sealed		QJ2010	MPA	<hr/>	
HSS71900C - HSS71926C	TPA *)	QJ211, QJ212	TVP	N202E - N226E	TVP2
HSS71900E - HSS71926E	TPA *)	QJ213	MPA	N228E - N268E	M1
HSS7000C - HSS7026C	TPA *)	QJ214, QJ215	TVP	N272 - N2/900	M1
HSS7000E - HSS7026E	TPA *)	QJ216 - QJ2/500	MPA	<hr/>	
FAG Hybrid-Spindle bearings (steel rings, ceramic balls)		QJ304	MPA	NJ202E - NJ226E	TVP2
HC71900C - HC71926C	TPA *)	QJ305 - QJ309	TVP	NJ228E - NJ268E	M1
HC71900E - HC71926E	TPA *)	QJ310 - QJ3/500	MPA	NJ272 - NJ2/900	M1
HC7000C - HC7026C	TPA *)	FAG Four-point bearings		NU202E - NU226E	TVP2
HC7000E - HC7026E	TPA *)	QJ205 - QJ207	MPA	NU228E - NU268E	M1
HCB71900C - HCB71926C	TPA *)	QJ208, QJ209	TVP	NU272 - NU2/900	M1
HCB71900E - HCB71926E	TPA *)	QJ2010	MPA	<hr/>	
HCB7000C - HCB7026C	TPA *)	QJ211, QJ212	TVP	NUP202E - NUP226E	TVP2
HCB7000E - HCB7026E	TPA *)	QJ213	MPA	NUP228E - NUP268E	M1
HCB7200C - HCB7226C	TPA *)	QJ214, QJ215	TVP	NUP272 - NUP2/900	M1
HCB7200E - HCB7226E	TPA *)	QJ216 - QJ2/500	MPA	<hr/>	
		QJ304	MPA	N1244 - N1284	M1
		QJ305 - QJ309	TVP	N1288	M
		QJ310 - QJ3/500	MPA	N1292 - N12/500	M1

*) In the order designation: suffix T

Bearing size / range	Cage	Bearing size / range	Cage	Bearing size / range	Cage
NJ1244 - NJ1284	M1	NJ2304E - NJ2356E	M1	FAG Tapered roller bearings	
NJ1288	M	NJ2324E - NJ2356E	M1	32919 - 32960	JP
NJ1292 - NJ12/500	M1	NJ2360 - NJ2364	M1	32004X - 32064X	JP
NU1244 - NU1284	M1	NJ2368 - NJ2376	M	33009 - 33022	JP
NU1288	M	NJ2380 - NJ2396	M1	33111 - 33122	JP
NU1292 - NU12/500	M1	NJ23/500	M	30202 - 30244A	JP
NUP1244 - NUP1284	M1	NU2304E - NU2356E	M1	32203A - 32252	JP
NUP1288	M	NU2324E - NU2356E	M1	33205 - 33217	JP
NUP1292 - NUP12/500	M1	NU2360 - NU2364	M1	30302A - 30332A	JP
N2203E, N2204E	M1A	NU2368 - NU2376	M	31304 - 31330X	JP
N2205E - N2268E	M1	NU2380 - NU2396	M1	32303A - 32252	JP
N2272 - N22/500	M1	NU23/500	M	FAG Tapered roller bearings, single and double row, inch dimensions	
N22/530	M	NUP2304E - NUP2356E	M1	alle Lagerausführungen	JP
NJ2203E - NJ2226E	TVP2	NUP2324E - NUP2356E	M1	FAG Barrel roller bearings	
NJ2228E - NJ2268E	M1	NUP2360 - NUP2364	M1	20204 - 20216	TVP *)
NJ2272 - NJ22/500	M1	NUP2368 - NUP2376	M	20217 - 20264	MB
NJ22/530	M	NUP2380 - NUP2396	M1	20304 - 20312	TVP *)
NJ22/560 - NJ22/630	M1	NUP23/500	M	20313 - 20356	MB
NU2203E - NU2226E	TVP2	N404 - N409	M1	20404 - 20406	TVP *)
NU2228E - NU2268E	M1	N410	JP	20407 - 20448	MB
NU2272 - NU22/500	M1	N411	M1	FAG Spherical roller bearings	
NU22/530	M	N412, N413	JP	23936S - 23944S	MB
NU22/560 - NU22/630	M1	N414 - N448	M1	23948 - 239/1000	MB
NUP2203E - NUP2226E	TVP2	NJ404 - NJ06	M1	23022ES - 23040ES	TVPB
NUP2228E - NUP2268E	M1	NJ407 - NJ411	JP	23022EAS - 23040EAS	M
NUP2272 - NUP22/500	M1	NJ412	M1	23044 - 230/1000	MB
NU22/530	M	NJ413 - NJ415	JP	24024ES - 24032ES	TVPB
NU22/560 - NU22/630	M1	NJ416 - NJ421	M1	24024S - 24040BS	MB
N305E - N316E	TVP2	NJ422	JP	24044B - 240/850	MB
N317E - N356E	M1	NJ424 - NJ448	M1	23120ES - 23136ES	TVPB
N360 - N3/670	M1	NU404 - NU406	M1	23138E	TVPB
NJ303E - NJ320E	TVP2	NU407 - NU411	JP	23120EAS - 23136EAS	M
NJ321	M1	NU412	M1	23138EA	M
NJ322E - NJ328E	TVP2	NU413 - NU415	JP	23140B - 231/1000	MB
NJ330E - NJ356E	M1	NU416 - NU421	M1	24122ES - 24128ES	TVPB
NJ360 - NJ3/670	M1	NU422	JP	24120BS - 24136BS	YPB
NU303E - NU320E	TVP2	NU424 - NU448	M1	24138B - 24188B	YPB
NU321E	M1	NUP404 - NUP406	M1	24192B - 241/710B	MB
NU322E - NU328E	TVP2	NUP407 - NUP411	JP	22205E - 22236E	JPA
NU330E - NU356E	M1	NUP412	M1	22238B - 22264	MB
NU360 - NU3/670	M1	NUP413 - NUP415	JP	FAG Cylindrical roller bearings, single and double row for machine tools	
NUP303E - NUP320E	TVP2	NUP416 - NUP421	M1	N1006K - N10/500K	M1
NUP321E	M1	NUP422	JP	NNU4920SK - NNU49/500SK	M
NUP322E - NUP328E	TVP2	NUP424 - NUP448	M1	NN3006ASK - NN30/500ASK	M
NUP330E - NUP356E	M1	FAG Tapered roller bearings, single and double row, inch dimensions		22205E - 22236E	JPA
NUP360 - NUP3/670	M1	FAG Barrel roller bearings		22238B - 22264	MB
N2304E - N2356E	M1	FAG Spherical roller bearings		24122ES - 24128ES	TVPB
N2324E - N2356E	M1	FAG Cylindrical roller bearings, single and double row for machine tools		24120BS - 24136BS	YPB
N2360 - N2364	M1	FAG Tapered roller bearings, single and double row, inch dimensions		24138B - 24188B	YPB
N2368 - N2376	M	FAG Barrel roller bearings		24192B - 241/710B	MB
N2380 - N2396	M1	FAG Spherical roller bearings		22205E - 22236E	JPA
N23/500	M	FAG Cylindrical roller bearings, single and double row for machine tools		22238B - 22264	MB

Bearing size / range	Cage	Bearing size / range	Cage	Bearing size / range	Cage
23218ES - 23234ES 23236E	TVPB TVPB	FAG Thrust ball bearings, double direction		FAG S-type bearings, metrical and inch dimensions	
23218EAS - 23234EAS 23236EA	M M	52202 - 52228	JP	16203/12 - 16212	JN
23238B - 232/750	MB	52230 - 52244	MP	16203.008 - 16212.207	JN
24220BS - 24226S	YPB	54205 - 54220	JP	36204 - 36218	JN
24228S - 24234S	MB	54230 - 54244	MP	36204.012 - 36218.308	JN
24236B - 242/710	MB	52305 - 52320	JP	56204 - 56218	JN
21304E - 21322E	TVPB	52322 - 52330	MP	56204.012 - 56218.308	JN
22308E - 22328E	JPA	52332 - 52340	M	76203.2RSR - 76212.2RSR	JN
22330E	JPA	54305 - 54320	JP		
22332B - 223/560B	MB	54322, 54324	MP	FAG Cylindrical roller bearings for wheelset bearings	
FAG Spherical roller bearings for vibrating machines		52405 - 52411	J	WJ80x140	TVP
22308E.T41A - 22330E.T41A	JPA	52412 - 52430	FP	WJP80x140P	TVP
22332A.T41A - 22344A.T41A	MA	52432 - 52436	M	WJ90x160	TVP
23320AS.T41A - 22328AS.T41A	MA	54405 - 54411	J	WJP90x160P	TVP
23330A.T41A - 23340A.T41A	MA	54412 - 54430	FP	WJ100x180	TVP
FAG Thrust ball bearings, single direction		FAG Angular contact thrust ball bearings for machine tools -single direction		WJP100x180P	TVP
51000 - 510/600	MP	7602080 - 7602100	TVP	WJ100x200	M
51100 - 51128	JP	7603080 - 7603100	TVP	WJP100x200P	M
51130 - 51168	FP	BSB020047 - BSB100150	TVP *)	WJ110x215	M1
51172 - 511/560	MP	-double direction, preloaded		WJP110x215P	M1
51200 - 51228	JP	234406 - 234480	M	WJ120x215	TVP
51230 - 51256	MP	234706 - 234780	M	WJP120x215P	TVP
51260 - 512/500	M	FAG Cylindrical roller thrust bearings, single direction		WJ120x240	TVP
53200 - 53228	JP	81102, 81103	LPB	WJP120x240P	TVP
53230 - 53256	MP	81104, 81105	TVPB	WJ130x240	TVP
53260 - 532/500	M	81106	TVPB1	WJP130x240P	TVP
51305 - 51320	JP	81107 - 81114	TVPB	WJ130x240	TVP
51322 - 51330	MP	81115 - 81122	LPB	WJP130x240P	TVP
51332 - 513/500	M	81124 - 81156	MPB	581171 (130x250x80)	M1
53305 - 53320	JP	81160 - 811/500	MB	581172 (130x250x80)	M1
53322 - 53330	MP	81206 - 81211	TVPB	WJ130x260	M1
53332 - 53340	M	81212 - 81220	LPB	WJP130x260P	M1
51405 - 51411	J	81222 - 81244	MPB	WJ150x300	M1
51412 - 51430	FP	81248 - 81276	MB	WJP150x300P	M1
51432 - 514/500	M	FAG Spherical roller thrust bearings		514115 (180x320x75)	M1
53405 - 53411	J	29240E - 292/800E	MB	514116 (180x320x75)	M1
53412 - 53430	FP	29317E - 29364E	JP	NF2220E - NF2222E	TVP
53432 - 53436	M	29368E - 293/850E	MB	NF2224E	M1
		29412E - 29468E	JP	NJ2230E	M1
		29472E - 294/800E	MB	NU2230E + angle ring HJ	M1
				NJ2316E - NJ2318E	TVP2
				NJP2316ED - NJP2318ED	TVP2
				NJ2320E	M1
				NJP2320ED	M1
				NJ2326E	M1
				NJP2326ED	M1
				NU2326E + angle ring HJ	M1

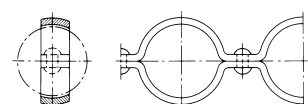
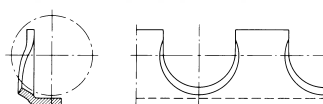
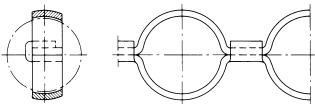
*) Im Bestellkurzzeichen wird T
angeschrieben.

FAG Cage designs for rolling bearings

FAG Deep groove ball bearings, single row

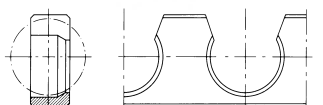
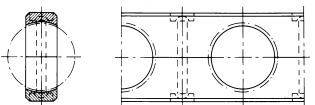
Pressed cage

J	Steel	JH	Steel	JN	Steel
---	-------	----	-------	----	-------



Machined or moulded cage

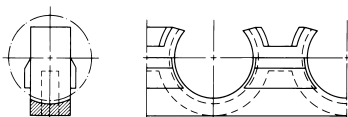
F · FA · FB	Steel	THB	Textil laminated phenolic	TVH	Polyamide PA66-GF25
M · MA · MB	Brass			TVHB	
TA · TB	Textile laminated phenolic				
TV · TVA · TVB	Polyamide PA66-GF25				



FAG Deep groove ball bearings, double row

Moulded cage

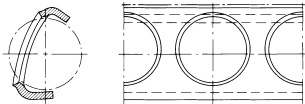
TVH	Polyamide PA66-GF25
-----	------------------------



FAG Angular contact ball bearings, single row

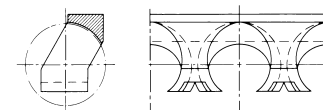
Pressed cage

JP	Steel
-----------	-------



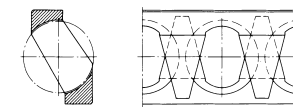
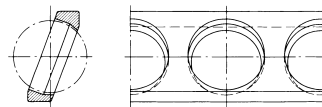
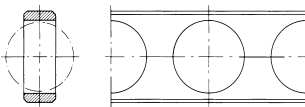
Moulded cage

TVH	Polyamide PA66-GF25
------------	------------------------



Machined or moulded cage

MPA · MPB	Brass	MP	Brass	TVP	Polyamide PA66-GF25
TPA · TPB	Textile laminated phenolic				

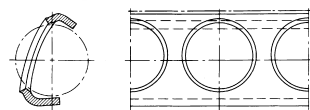
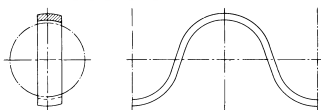


FAG Angular contact ball bearings, double row

Pressed cage

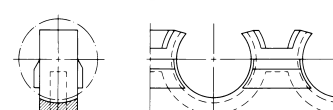
J	Steel
----------	-------

JP	Steel
-----------	-------



Moulded cage

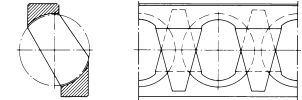
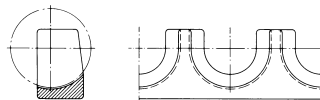
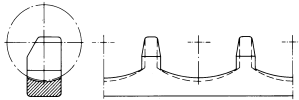
TVH	Polyamide PA66-GF25
------------	------------------------



FAG Angular contact ball bearings, double row

Machined or moulded cage

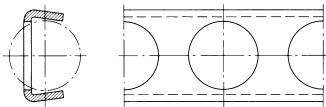
F	Steel	MA	Brass	TVP	aus Polyamide PA66-GF25
M	Brass				



FAG Four-point bearings

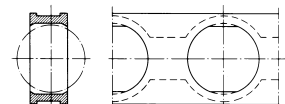
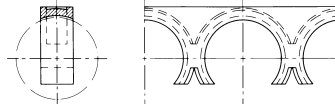
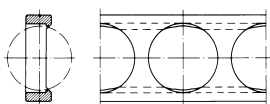
Pressed cage

JP	Steel
-----------	-------



Machined or moulded cage

MPA · MPB	Brass	TVH	Polyamide PA66-GF25	TNP	Polyamide PA66
TPA · TPB	Textile laminated phenolic			TVP	Polyamide PA66-GF25



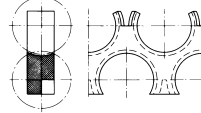
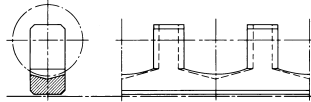
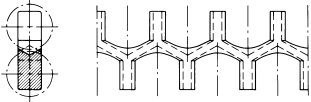
FAG Self-aligning ball bearings

Machined or moulded cage

F	Steel	F	Steel	TV	Polyamide PA66-GF25
M	Brass	M	Brass		

Series 12 and 13

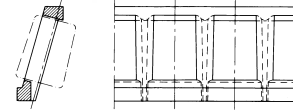
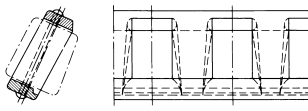
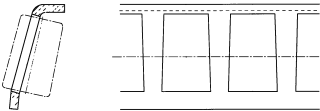
Series 22 and 23



FAG Tapered roller bearings




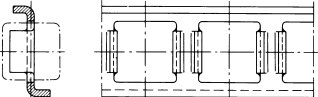
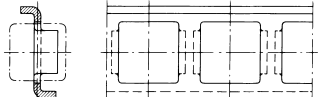
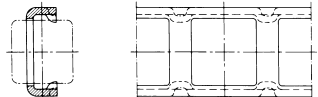
Pressed cage

JP	Steel	M	Brass	TVP	Polyamide PA66-GF25
-----------	-------	----------	-------	------------	------------------------



FAG Cylindrical roller bearings, single row and in E-design




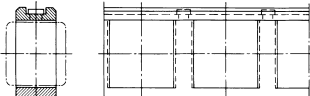
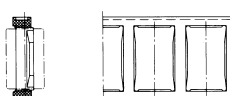
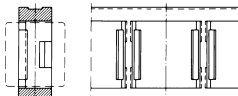
Pressed cage

JP	Steel	JP	Steel	JP1	Steel
-for designs with two lip boards on inner ring		-for designs with two lip boards on outer ring		-for designs with two lip boards on outer ring	
					
					

Machined cage

F · FA · FB	Steel	MPA	Bress	MPB	Bress
M · MA · MB	Bress	LPA	Light metal	LPB	Light metal
			-for designs with two lip boards on outer ring		-for designs with two lip boards on inner ring
					
					

Machined or moulded cage

M1 · M1A · M1B	Bress	TVP3	Polyamide PA66-GF25	TVP2	Polyamide PA66-GF25
M3 · M3A · M3B					
			-for designs with two lip boards on outer ring		-for designs with two lip boards on inner ring
					
					

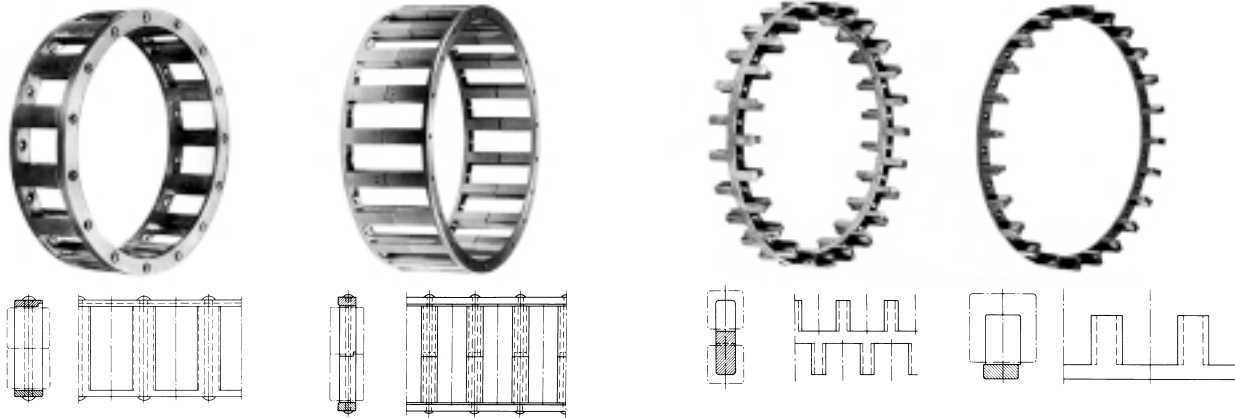
FAG Cylindrical roller bearings , double row

Machined cage

M · MA	Brass	F	Steel
MAS		M	Brass

-Series NU30
from bore 1060 mm

-Series NU60



FAG Barrel roller bearings

Pressed cage

J	Steel
----------	-------

Machined or moulded cage

M · MB	Brass
---------------	-------

TVP	Polyamide PA66-GF25
------------	------------------------



FAG Spherical roller bearings

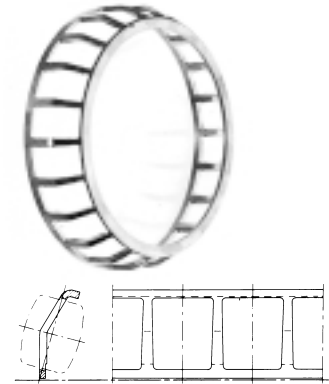
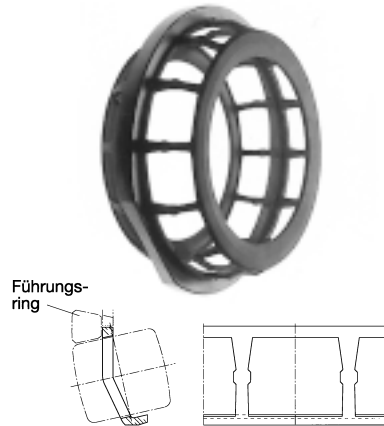
Pressed cage

J	Steel	JPA	Steel	JPB	Steel
				YPB	Brass

-Series 213

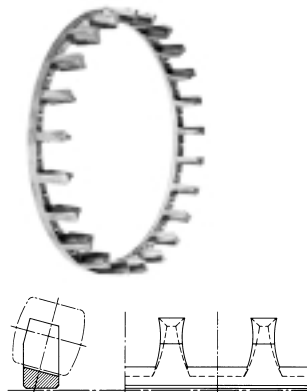
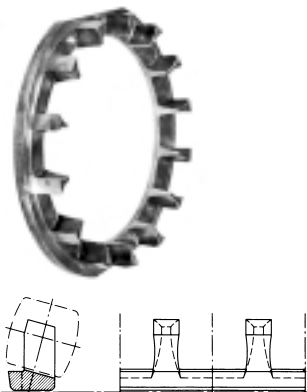


-Series 222E and 223E



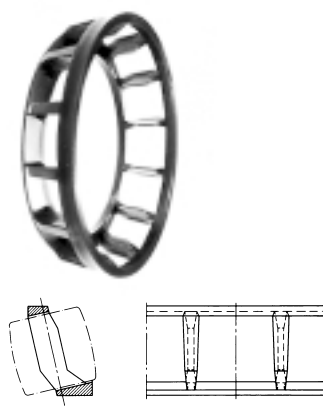
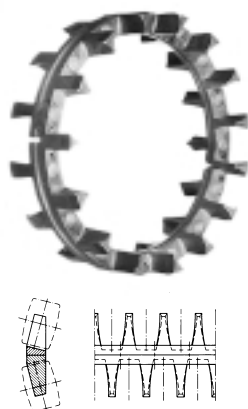
Machined cage

FA	Steel	FB	Steel	M	Brass
MA	Brass	MB	Brass		
LA	Light metal	LB	Light metal		



Machined or moulded cage

MB	Brass	TVPB	Polyamide PA66-GF25
-----------	-------	-------------	------------------------

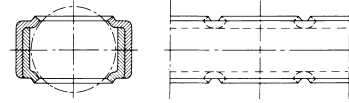
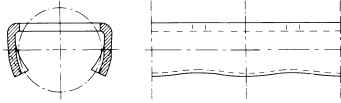
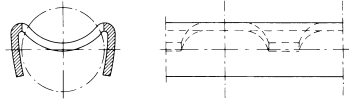


FAG Thrust ball bearings

Pressed cage

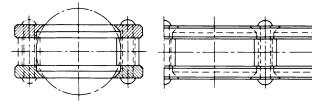
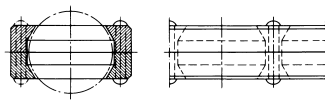
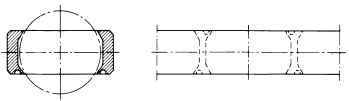
JP	Steel
----	-------

-Series 511 and 514



Machined cage

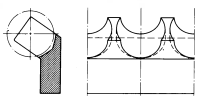
FP	Steel	F	Steel
MP	Brass	M	Brass



FAG Angular contact thrust ball bearings

Machined cage

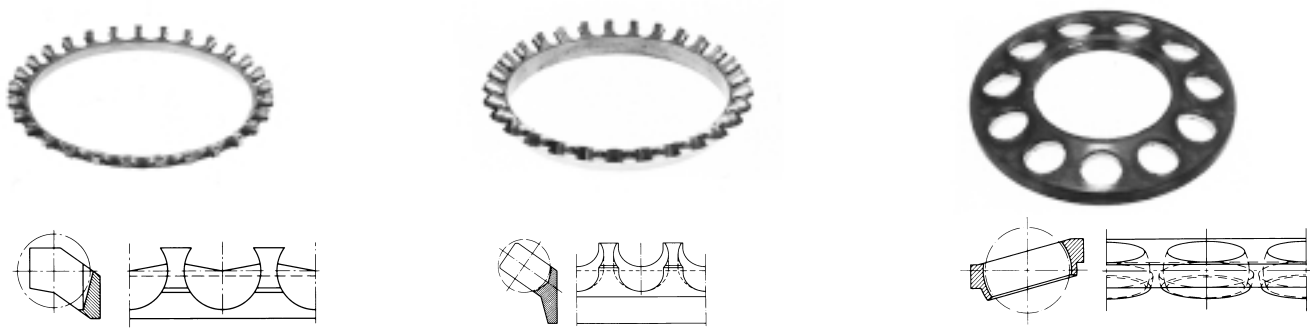
MA	Brass
----	-------



FAG Angular contact thrust ball bearings

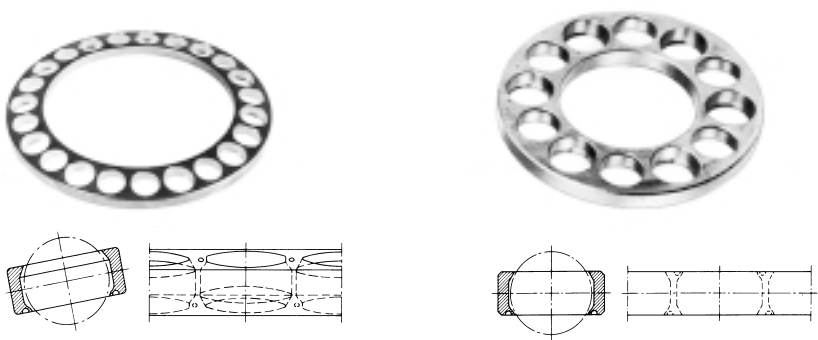
Machined or moulded cage

M	Brass	TVP	Polyamide PA66-GF25
---	-------	-----	------------------------



Machined cage

MP	Brass	MP1	Brass
----	-------	-----	-------



FAG Cylindrical roller thrust bearings

Pressed cage

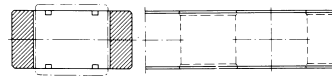
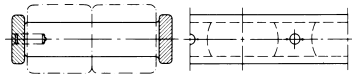
J	Steel	TVPB	Polyamide PA66-GF25
		TVPB1	



FAG Cylindrical roller bearings

Machined cage

MA · MB · MBS	Brass	MPA · MPB	Brass
FB	Steel		
LA · LB	Light metal		



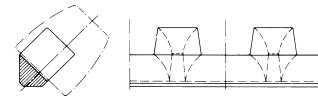
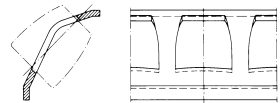
FAG Spherical roller thrust bearings

Pressed cage

JP	Steel
----	-------

Machined cage

MB	Brass
----	-------



FAG OEM und Handel AG

A company of the FAG Kugelfischer Group

P. O. Box 1260 · D-97419 Schweinfurt
Phone +49 9721 91-37 07 · Fax +49 9721 91-3133
E-mail: sales_promotion@fag.de
www.fag.de

FAG Rolling Bearing Cages

Designation · Design · Material

Every care has been taken to ensure the correctness of the information contained in this brochure but no liability can be accepted for any errors or omissions.

We reserve the right to make changes in the interest of technical progress.

© by FAG 1997 · This publication or parts thereof may not be reproduced without our permission.

TI Nr. WL 95-4 E · 8/00 · Printed in Germany