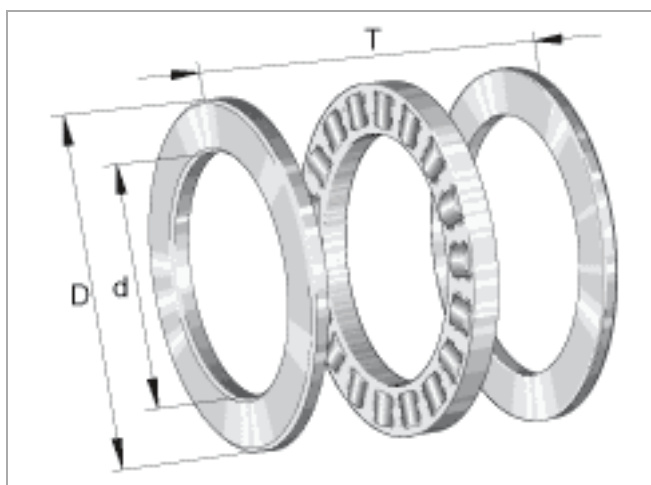




Axial cylindrical roller bearings 811

single direction, comprising K811, GS, WS

The datasheet is only an overview of dimensions and basic load ratings for the selected series. Please ensure that you note all the guidance in these overview pages. Further information is given on many products under the menu item "Description". You can also obtain comprehensive information material via Catalogue selection (<http://www.ina.de/content.ina.de/en/services/mediathek/library/library.jsp>), by e-mail (kataloge@de.ina.com) or telephone +49 (91 32) 82 - 28 97.

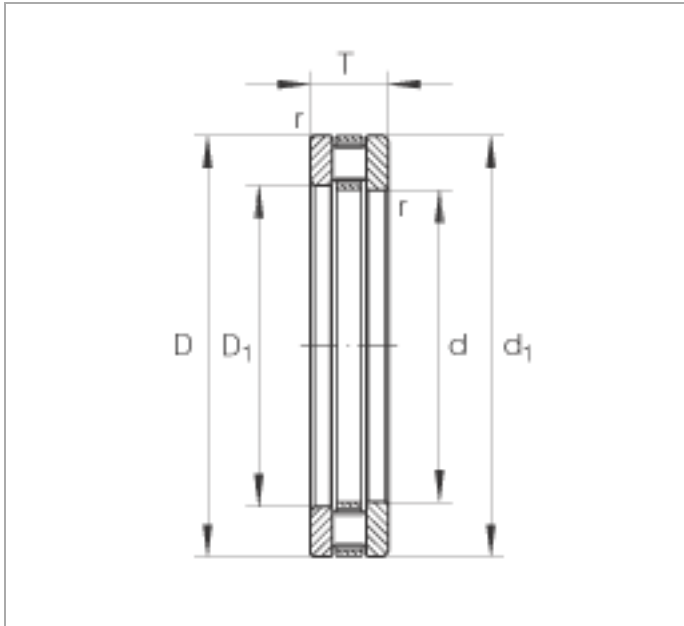


	mm	d mm	D mm	T mm	
81102-TV		15		28	9
81103-TV			17	30	9
81104-TV			20	35	10
81105-TV			25	42	11
81106-TV			30	47	11
81107-TV			35	52	12
81108-TV			40	60	13
81109-TV			45	65	14
81110-TV			50	70	14
81111-TV			55	78	16
81112-TV			60	85	17
81113-TV			65	90	18
81114-TV			70	95	18
81115-TV			75	100	19
	mm	d mm	D mm	T mm	



	mm	d mm	D mm	T mm	
81116-TV			80	105	19
81117-TV			85	110	19
81118-TV			90	120	22
81120-TV			100	135	25
81122-TV			110	145	25
81124-TV			120	155	25
81126-TV			130	170	30
81128-TV			140	180	31
81130-TV			150	190	31
81132-TV			160	200	31
81134-TV			170	215	34
81136-M			180	225	34
81138-M			190	240	37
81140-M			200	250	37
81144-M			220	270	37
81148-M			240	300	45
81152-M			260	320	45
81156-M			280	350	53
81160-M			300	380	62
81164-M			320	400	63
	mm	d mm	D mm	T mm	

Figure 1



81102-TV

	15 mm	
D	28 mm	
T	9 mm	
D ₁	16 mm	
d ₁	28 mm	
r _{min}	0,3 mm	
m	0,024 kg	Mass
C _a	14400 N	Basic dynamic load rating, axial
C _{0a}	28500 N	Basic static load rating, axial
C _{ua}	4000 N	Fatigue limit load
n _G	13600 1/min	Limiting speed
n _B	6400 1/min	Reference speed
	K81102-TV	Allocated axial cylindrical roller and cage assembly
	GS81102	Allocated housing locating washer
	WS81102	Allocated shaft locating washer
	LS1528	Allocated bearing washer

81103-TV

d	17 mm	
D	30 mm	
T	9 mm	
D ₁	18 mm	
d ₁	30 mm	
r _{min}	0,3 mm	
m	0,027 kg	Mass
C _a	15900 N	Basic dynamic load rating, axial
C _{0a}	33500 N	Basic static load rating, axial
C _{ua}	4650 N	Fatigue limit load
n _G	12400 1/min	Limiting speed
n _B	5500 1/min	Reference speed
	K81103-TV	Allocated axial cylindrical roller and cage assembly
	GS81103	Allocated housing locating washer
	WS81103	Allocated shaft locating washer
	LS1730	Allocated bearing washer

81104-TV

d	20 mm	
D	35 mm	
T	10 mm	
D ₁	21 mm	
d ₁	35 mm	
r _{min}	0,3 mm	
m	0,037 kg	Mass
C _a	24900 N	Basic dynamic load rating, axial
C _{0a}	53000 N	Basic static load rating, axial
C _{ua}	7300 N	Fatigue limit load
n _G	10500 1/min	Limiting speed
n _B	4300 1/min	Reference speed
	K81104-TV	Allocated axial cylindrical roller and cage assembly
	GS81104	Allocated housing locating washer
	WS81104	Allocated shaft locating washer
	LS2035	Allocated bearing washer

81105-TV

d	25 mm	
D	42 mm	
T	11 mm	
D ₁	26 mm	
d ₁	42 mm	
r _{min}	0,6 mm	
m	0,053 kg	Mass
C _a	33500 N	Basic dynamic load rating, axial
C _{0a}	76000 N	Basic static load rating, axial
C _{ua}	7100 N	Fatigue limit load
n _G	8600 1/min	Limiting speed
n _B	3500 1/min	Reference speed
	K81105-TV	Allocated axial cylindrical roller and cage assembly
	GS81105	Allocated housing locating washer
	WS81105	Allocated shaft locating washer
	LS2542	Allocated bearing washer

81106-TV

d	30 mm	
D	47 mm	
T	11 mm	
D ₁	32 mm	
d ₁	47 mm	
r _{min}	0,6 mm	
m	0,057 kg	Mass
C _a	35500 N	Basic dynamic load rating, axial
C _{0a}	86000 N	Basic static load rating, axial
C _{ua}	8000 N	Fatigue limit load
n _G	7500 1/min	Limiting speed
n _B	3050 1/min	Reference speed
	K81106-TV	Allocated axial cylindrical roller and cage assembly
	GS81106	Allocated housing locating washer
	WS81106	Allocated shaft locating washer
	LS3047	Allocated bearing washer

81107-TV

d	35 mm	
D	52 mm	
T	12 mm	
D ₁	37 mm	
d ₁	52 mm	
r _{min}	0,6 mm	
m	0,073 kg	Mass
C _a	39000 N	Basic dynamic load rating, axial
C _{0a}	101000 N	Basic static load rating, axial
C _{ua}	9500 N	Fatigue limit load
n _G	6600 1/min	Limiting speed
n _B	2600 1/min	Reference speed
	K81107-TV	Allocated axial cylindrical roller and cage assembly
	GS81107	Allocated housing locating washer
	WS81107	Allocated shaft locating washer
	LS3552	Allocated bearing washer

81108-TV

d	40 mm	
D	60 mm	
T	13 mm	
D ₁	42 mm	
d ₁	60 mm	
r _{min}	0,6 mm	
m	0,105 kg	Mass
C _a	56000 N	Basic dynamic load rating, axial
C _{0a}	148000 N	Basic static load rating, axial
C _{ua}	14500 N	Fatigue limit load
n _G	5800 1/min	Limiting speed
n _B	2190 1/min	Reference speed
	K81108-TV	Allocated axial cylindrical roller and cage assembly
	GS81108	Allocated housing locating washer
	WS81108	Allocated shaft locating washer
	LS4060	Allocated bearing washer

81109-TV

d	45 mm	
D	65 mm	
T	14 mm	
D ₁	47 mm	
d ₁	65 mm	
r _{min}	0,6 mm	
m	0,13 kg	Mass
C _a	59000 N	Basic dynamic load rating, axial
C _{0a}	163000 N	Basic static load rating, axial
C _{ua}	16000 N	Fatigue limit load
n _G	5300 1/min	Limiting speed
n _B	1980 1/min	Reference speed
	K81109-TV	Allocated axial cylindrical roller and cage assembly
	GS81109	Allocated housing locating washer
	WS81109	Allocated shaft locating washer
	LS4565	Allocated bearing washer

81110-TV

d	50 mm	
D	70 mm	
T	14 mm	
D ₁	52 mm	
d ₁	70 mm	
r _{min}	0,6 mm	
m	0,14 kg	Mass
C _a	61000 N	Basic dynamic load rating, axial
C _{0a}	177000 N	Basic static load rating, axial
C _{ua}	17400 N	Fatigue limit load
n _G	4800 1/min	Limiting speed
n _B	1810 1/min	Reference speed
	K81110-TV	Allocated axial cylindrical roller and cage assembly
	GS81110	Allocated housing locating washer
	WS81110	Allocated shaft locating washer
	LS5070	Allocated bearing washer

81111-TV

d	55 mm	
D	78 mm	
T	16 mm	
D ₁	57 mm	
d ₁	78 mm	
r _{min}	0,6 mm	
m	0,218 kg	Mass
C _a	90000 N	Basic dynamic load rating, axial
C _{0a}	300000 N	Basic static load rating, axial
C _{ua}	31000 N	Fatigue limit load
n _G	4300 1/min	Limiting speed
n _B	1330 1/min	Reference speed
	K81111-TV	Allocated axial cylindrical roller and cage assembly
	GS81111	Allocated housing locating washer
	WS81111	Allocated shaft locating washer
	LS5578	Allocated bearing washer

81112-TV

d	60 mm	
D	85 mm	
T	17 mm	
D ₁	62 mm	
d ₁	85 mm	
r _{min}	1 mm	
m	0,266 kg	Mass
C _a	103000 N	Basic dynamic load rating, axial
C _{0a}	315000 N	Basic static load rating, axial
C _{ua}	32000 N	Fatigue limit load
n _G	4000 1/min	Limiting speed
n _B	1360 1/min	Reference speed
	K81112-TV	Allocated axial cylindrical roller and cage assembly
	GS81112	Allocated housing locating washer
	WS81112	Allocated shaft locating washer
	LS6085	Allocated bearing washer

81113-TV

d	65 mm	
D	90 mm	
T	18 mm	
D ₁	67 mm	
d ₁	90 mm	
r _{min}	1 mm	
m	0,31 kg	Mass
C _a	107000 N	Basic dynamic load rating, axial
C _{0a}	340000 N	Basic static load rating, axial
C _{ua}	34000 N	Fatigue limit load
n _G	3700 1/min	Limiting speed
n _B	1260 1/min	Reference speed
	K81113-TV	Allocated axial cylindrical roller and cage assembly
	GS81113	Allocated housing locating washer
	WS81113	Allocated shaft locating washer
	LS6590	Allocated bearing washer

81114-TV

d	70 mm	
D	95 mm	
T	18 mm	
D ₁	72 mm	
d ₁	95 mm	
r _{min}	1 mm	
m	0,332 kg	Mass
C _a	111000 N	Basic dynamic load rating, axial
C _{0a}	365000 N	Basic static load rating, axial
C _{ua}	36500 N	Fatigue limit load
n _G	3500 1/min	Limiting speed
n _B	1170 1/min	Reference speed
	K81114-TV	Allocated axial cylindrical roller and cage assembly
	GS81114	Allocated housing locating washer
	WS81114	Allocated shaft locating washer
	LS7095	Allocated bearing washer

81115-TV

d	75 mm	
D	100 mm	
T	19 mm	
D ₁	77 mm	
d ₁	100 mm	
r _{min}	1 mm	
m	0,393 kg	Mass
C _a	107000 N	Basic dynamic load rating, axial
C _{0a}	350000 N	Basic static load rating, axial
C _{ua}	35500 N	Fatigue limit load
n _G	3300 1/min	Limiting speed
n _B	1180 1/min	Reference speed
	K81115-TV	Allocated axial cylindrical roller and cage assembly
	GS81115	Allocated housing locating washer
	WS81115	Allocated shaft locating washer
	LS75100	Allocated bearing washer

81116-TV

d	80 mm	
D	105 mm	
T	19 mm	
D ₁	82 mm	
d ₁	105 mm	
r _{min}	1 mm	
m	0,4 kg	Mass
C _a	106000 N	Basic dynamic load rating, axial
C _{0a}	350000 N	Basic static load rating, axial
C _{ua}	35500 N	Fatigue limit load
n _G	3100 1/min	Limiting speed
n _B	1170 1/min	Reference speed
	K81116-TV	Allocated axial cylindrical roller and cage assembly
	GS81116	Allocated housing locating washer
	WS81116	Allocated shaft locating washer
	LS80105	Allocated bearing washer

81117-TV

d	85 mm	
D	110 mm	
T	19 mm	
D ₁	87 mm	
d ₁	110 mm	
r _{min}	1 mm	
m	0,42 kg	Mass
C _a	112000 N	Basic dynamic load rating, axial
C _{0a}	385000 N	Basic static load rating, axial
C _{ua}	39000 N	Fatigue limit load
n _G	2950 1/min	Limiting speed
n _B	1070 1/min	Reference speed
	K81117-TV	Allocated axial cylindrical roller and cage assembly
	GS81117	Allocated housing locating washer
	WS81117	Allocated shaft locating washer
	LS85110	Allocated bearing washer

81118-TV

d	90 mm	
D	120 mm	
T	22 mm	
D ₁	92 mm	
d ₁	120 mm	
r _{min}	1 mm	
m	0,62 kg	Mass
C _a	141000 N	Basic dynamic load rating, axial
C _{0a}	465000 N	Basic static load rating, axial
C _{ua}	40000 N	Fatigue limit load
n _G	2750 1/min	Limiting speed
n _B	1070 1/min	Reference speed
	K81118-TV	Allocated axial cylindrical roller and cage assembly
	GS81118	Allocated housing locating washer
	WS81118	Allocated shaft locating washer
	LS90120	Allocated bearing washer

81120-TV

d	100 mm	
D	135 mm	
T	25 mm	
D ₁	102 mm	
d ₁	135 mm	
r _{min}	1 mm	
m	0,95 kg	Mass
C _a	199000 N	Basic dynamic load rating, axial
C _{0a}	650000 N	Basic static load rating, axial
C _{ua}	59000 N	Fatigue limit load
n _G	2460 1/min	Limiting speed
n _B	920 1/min	Reference speed
	K81120-TV	Allocated axial cylindrical roller and cage assembly
	GS81120	Allocated housing locating washer
	WS81120	Allocated shaft locating washer
	LS100135	Allocated bearing washer

81122-TV

d	110 mm	
D	145 mm	
T	25 mm	
D ₁	112 mm	
d ₁	145 mm	
r _{min}	1 mm	
m	1,04 kg	Mass
C _a	207000 N	Basic dynamic load rating, axial
C _{0a}	700000 N	Basic static load rating, axial
C _{ua}	62000 N	Fatigue limit load
n _G	2260 1/min	Limiting speed
n _B	850 1/min	Reference speed
	K81122-TV	Allocated axial cylindrical roller and cage assembly
	GS81122	Allocated housing locating washer
	WS81122	Allocated shaft locating washer
	LS110145	Allocated bearing washer

81124-TV

d	120 mm	
D	155 mm	
T	25 mm	
D ₁	122 mm	
d ₁	155 mm	
r _{min}	1 mm	
m	1,12 kg	Mass
C _a	214000 N	Basic dynamic load rating, axial
C _{0a}	760000 N	Basic static load rating, axial
C _{ua}	65000 N	Fatigue limit load
n _G	2100 1/min	Limiting speed
n _B	780 1/min	Reference speed
	K81124-TV	Allocated axial cylindrical roller and cage assembly
	GS81124	Allocated housing locating washer
	WS81124	Allocated shaft locating washer
	LS120155	Allocated bearing washer

81126-TV

d	130 mm	
D	170 mm	
T	30 mm	
D ₁	132 mm	
d ₁	170 mm	
r _{min}	1 mm	
m	1,67 kg	Mass
C _a	250000 N	Basic dynamic load rating, axial
C _{0a}	900000 N	Basic static load rating, axial
C _{ua}	79000 N	Fatigue limit load
n _G	1930 1/min	Limiting speed
n _B	760 1/min	Reference speed
	K81126-TV	Allocated axial cylindrical roller and cage assembly
	GS81126	Allocated housing locating washer
	WS81126	Allocated shaft locating washer
	LS130170	Allocated bearing washer

81128-TV

d	140 mm	
D	180 mm	
T	31 mm	
D ₁	142 mm	
d ₁	178 mm	
r _{min}	1 mm	
m	1,9 kg	Mass
C _a	260000 N	Basic dynamic load rating, axial
C _{0a}	960000 N	Basic static load rating, axial
C _{ua}	83000 N	Fatigue limit load
n _G	1800 1/min	Limiting speed
n _B	710 1/min	Reference speed
	K81128-TV	Allocated axial cylindrical roller and cage assembly
	GS81128	Allocated housing locating washer
	WS81128	Allocated shaft locating washer
	LS140180	Allocated bearing washer

81130-TV

d	150 mm	
D	190 mm	
T	31 mm	
D ₁	152 mm	
d ₁	188 mm	
r _{min}	1 mm	
m	2,2 kg	Mass
C _a	270000 N	Basic dynamic load rating, axial
C _{0a}	1020000 N	Basic static load rating, axial
C _{ua}	86000 N	Fatigue limit load
n _G	1700 1/min	Limiting speed
n _B	670 1/min	Reference speed
	K81130-TV	Allocated axial cylindrical roller and cage assembly
	GS81130	Allocated housing locating washer
	WS81130	Allocated shaft locating washer
	LS150190	Allocated bearing washer

81132-TV

d	160 mm	
D	200 mm	
T	31 mm	
D ₁	162 mm	
d ₁	198 mm	
r _{min}	1 mm	
m	2,12 kg	Mass
C _a	260000 N	Basic dynamic load rating, axial
C _{0a}	990000 N	Basic static load rating, axial
C _{ua}	82000 N	Fatigue limit load
n _G	1600 1/min	Limiting speed
n _B	670 1/min	Reference speed
	K81132-TV	Allocated axial cylindrical roller and cage assembly
	GS81132	Allocated housing locating washer
	WS81132	Allocated shaft locating washer
	LS160200	Allocated bearing washer

81134-TV

d	170 mm	
D	215 mm	
T	34 mm	
D ₁	172 mm	
d ₁	213 mm	
r _{min}	1,1 mm	
m	2,41 kg	Mass
C _a	360000 N	Basic dynamic load rating, axial
C _{0a}	1380000 N	Basic static load rating, axial
C _{ua}	116000 N	Fatigue limit load
n _G	1500 1/min	Limiting speed
n _B	570 1/min	Reference speed
	K81134-TV	Allocated axial cylindrical roller and cage assembly
	GS81134	Allocated housing locating washer
	WS81134	Allocated shaft locating washer

81136-M

d	180 mm	
D	225 mm	
T	34 mm	
D ₁	183 mm	
d ₁	222 mm	
r _{min}	1,1 mm	
m	3,3 kg	Mass
C _a	340000 N	Basic dynamic load rating, axial
C _{0a}	1300000 N	Basic static load rating, axial
C _{ua}	107000 N	Fatigue limit load
n _G	1420 1/min	Limiting speed
n _B	580 1/min	Reference speed
	K81136-M	Allocated axial cylindrical roller and cage assembly
	GS81136	Allocated housing locating washer
	WS81136	Allocated shaft locating washer

81138-M

d	190 mm	
D	240 mm	
T	37 mm	
D ₁	193 mm	
d ₁	237 mm	
r _{min}	1,1 mm	
m	4,74 kg	Mass
C _a	385000 N	Basic dynamic load rating, axial
C _{0a}	1500000 N	Basic static load rating, axial
C _{ua}	123000 N	Fatigue limit load
n _G	1330 1/min	Limiting speed
n _B	560 1/min	Reference speed
	K81138-M	Allocated axial cylindrical roller and cage assembly
	GS81138	Allocated housing locating washer
	WS81138	Allocated shaft locating washer

81140-M

d	200 mm	
D	250 mm	
T	37 mm	
D ₁	203 mm	
d ₁	247 mm	
r _{min}	1,1 mm	
m	4,95 kg	Mass
C _a	390000 N	Basic dynamic load rating, axial
C _{0a}	1550000 N	Basic static load rating, axial
C _{ua}	125000 N	Fatigue limit load
n _G	1270 1/min	Limiting speed
n _B	540 1/min	Reference speed
	K81140-M	Allocated axial cylindrical roller and cage assembly
	GS81140	Allocated housing locating washer
	WS81140	Allocated shaft locating washer

81144-M

d	220 mm	
D	270 mm	
T	37 mm	
D ₁	223 mm	
d ₁	267 mm	
r _{min}	1,1 mm	
m	5,22 kg	Mass
C _a	420000 N	Basic dynamic load rating, axial
C _{0a}	1730000 N	Basic static load rating, axial
C _{ua}	137000 N	Fatigue limit load
n _G	1170 1/min	Limiting speed
n _B	485 1/min	Reference speed
	K81144-M	Allocated axial cylindrical roller and cage assembly
	GS81144	Allocated housing locating washer
	WS81144	Allocated shaft locating washer

81148-M

d	240 mm	
D	300 mm	
T	45 mm	
D ₁	243 mm	
d ₁	297 mm	
r _{min}	1,5 mm	
m	8,45 kg	Mass
C _a	600000 N	Basic dynamic load rating, axial
C _{0a}	2500000 N	Basic static load rating, axial
C _{ua}	199000 N	Fatigue limit load
n _G	1050 1/min	Limiting speed
n _B	415 1/min	Reference speed
	K81148-M	Allocated axial cylindrical roller and cage assembly
	GS81148	Allocated housing locating washer
	WS81148	Allocated shaft locating washer

81152-M

d	260 mm	
D	320 mm	
T	45 mm	
D ₁	263 mm	
d ₁	317 mm	
r _{min}	1,5 mm	
m	9,08 kg	Mass
C _a	620000 N	Basic dynamic load rating, axial
C _{0a}	2650000 N	Basic static load rating, axial
C _{ua}	205000 N	Fatigue limit load
n _G	980 1/min	Limiting speed
n _B	385 1/min	Reference speed
	K81152-M	Allocated axial cylindrical roller and cage assembly
	GS81152	Allocated housing locating washer
	WS81152	Allocated shaft locating washer

81156-M

d	280 mm	
D	350 mm	
T	53 mm	
D ₁	283 mm	
d ₁	347 mm	
r _{min}	1,5 mm	
m	12,6 kg	Mass
C _a	860000 N	Basic dynamic load rating, axial
C _{0a}	3650000 N	Basic static load rating, axial
C _{ua}	285000 N	Fatigue limit load
n _G	900 1/min	Limiting speed
n _B	325 1/min	Reference speed
	K81156-M	Allocated axial cylindrical roller and cage assembly
	GS81156	Allocated housing locating washer
	WS81156	Allocated shaft locating washer

81160-M

d	300 mm	
D	380 mm	
T	62 mm	
D ₁	304 mm	
d ₁	376 mm	
r _{min}	2 mm	
m	19,4 kg	Mass
C _a	1060000 N	Basic dynamic load rating, axial
C _{0a}	4500000 N	Basic static load rating, axial
C _{ua}	355000 N	Fatigue limit load
n _G	840 1/min	Limiting speed
n _B	295 1/min	Reference speed
	K81160-M	Allocated axial cylindrical roller and cage assembly
	GS81160	Allocated housing locating washer
	WS81160	Allocated shaft locating washer

81164-M

d	320 mm	
D	400 mm	
T	63 mm	
D ₁	324 mm	
d ₁	396 mm	
r _{min}	2 mm	
m	20,7 kg	Mass
C _a	1100000 N	Basic dynamic load rating, axial
C _{0a}	4750000 N	Basic static load rating, axial
C _{ua}	370000 N	Fatigue limit load
n _G	790 1/min	Limiting speed
n _B	275 1/min	Reference speed
	K81164-M	Allocated axial cylindrical roller and cage assembly
	GS81164	Allocated housing locating washer
	WS81164	Allocated shaft locating washer