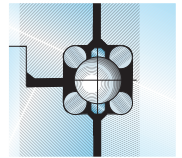
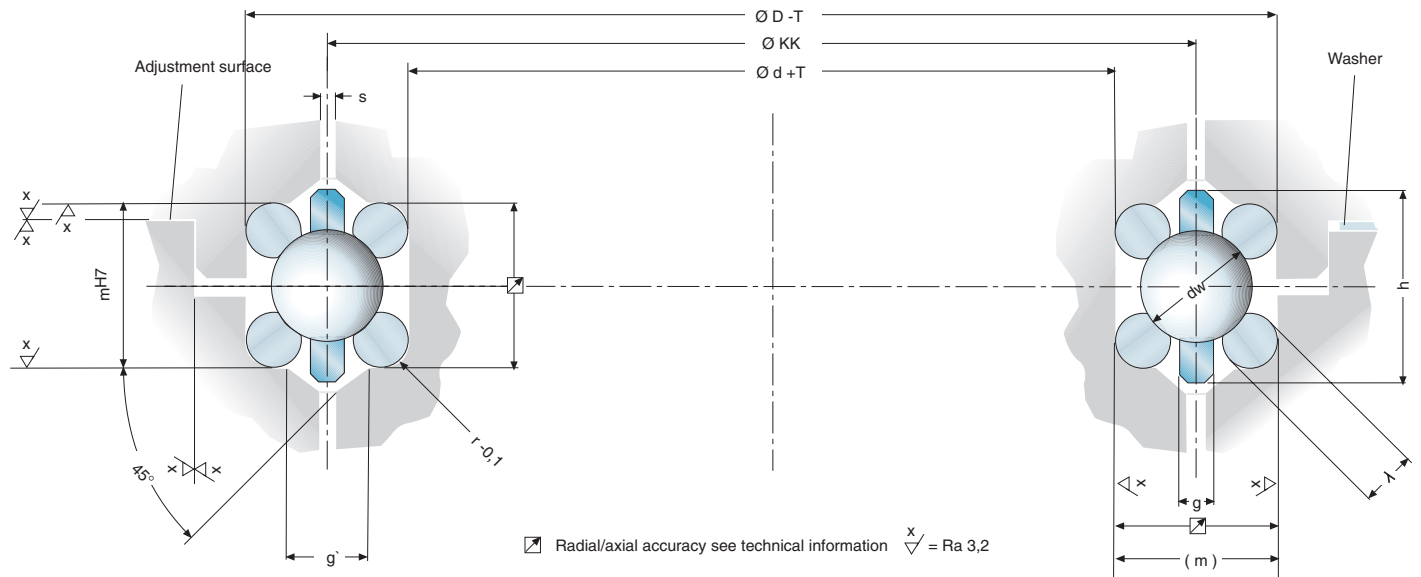


# Bearing elements

## with ground raceways



### Series LEL



$\varnothing KK$	$d_w$	$\lambda$	$m$	$r$	$g$	$h$	$g'$	$s$	Tolerance T
70 - 145	5	1,5	5,9	0,65	1,5	7,6	-	2,6	$KK\ \varnothing \leq 500\ \text{mm}\ T = (IT6^*)$ $KK\ \varnothing \geq 500\ \text{mm}\ T = (IT7^*)$
150 - 220	6	2,0	7,4	0,90	1,6	8,6	-	2,6	
225 - 295	8	2,5	9,2	1,15	2,0	10,6	4,0	1,4	
300 - 390	9	3,0	10,6	1,40	2,5	11,6	3,6	1,6	
400 - 790	12	4,0	14,1	1,90	2,5	15,0	4,5	2,0	
800 - 1180	16	5,0	18,4	2,40	3,0	19,6	5,5	2,0	
1200 - 1500	20	6,0	22,6	2,90	3,5	24,2	6,5	3,0	

Dimensions [mm], \* DIN ISO 286

#### Consist of:

- Four ball race rings with ground raceways
- Segmented strip cage with retained balls

#### Features:

- Direct integration into your mating structure
- Free selection of ball pitch
- Smallest mounting space and high precision
- Best radial and axial accuracy
- Calculation programme to find the most suitable bearing

#### Ball race rings:

Standard diameters from 1,5 to 6mm

Special diameters up to 22 mm

For special applications other race ring diameters or race rings

- without raceways are also available. Please consult us.

#### Rolling elements:

Steel balls DIN5401, class III

#### Strip cage:

- Ball guided polyamide ball cage divided into segments
- The segmented strip cage runs very smoothly and silently and compensates length differences caused by high temperatures. The number of segments refers to the ball pitch diameter. For special applications and temperatures higher than 120° C we recommend ball cages made of non-corrosive steel or brass.

#### Lubrication:

with ball bearing grease. For more information see page 34.

#### Temperature:

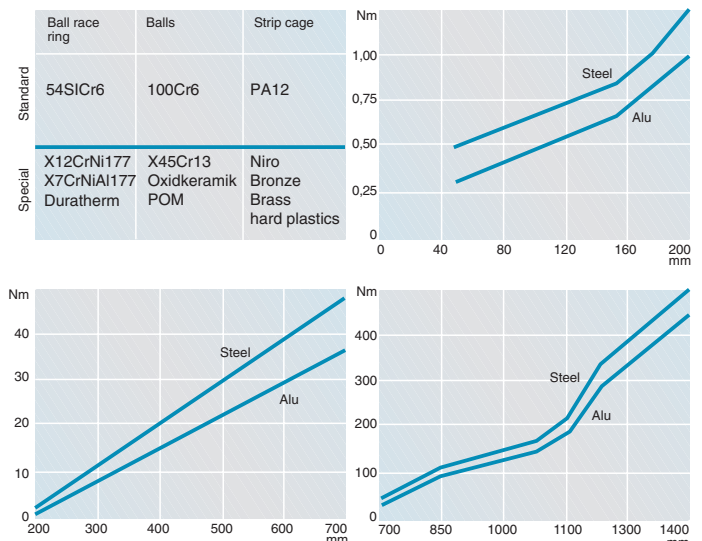
- Continuous operation: -40° C to +100° C, short time operation max. 120° C
- Other temperatures on request

#### Adjustment:

- By plane surface
  - By washers (see page 31)
- The preload is adjusted correctly when the rotational resistance without seal corresponds to table 1 (temperature range -40° C to +100° C).

#### Circumferential speed:

- with grease lubrication max. 10 m/s
- with oil lubrication max. 12 m/s

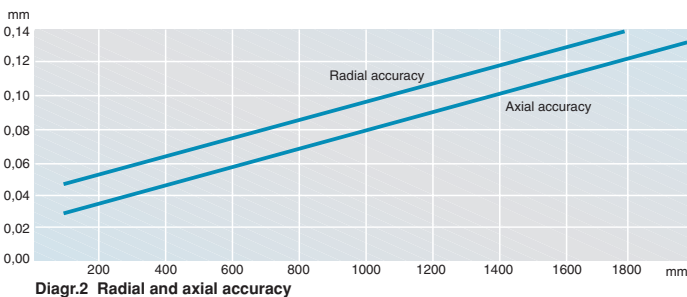


Intermediate diameters  
on request



Ball pitch Ø KK [mm]	Load rating		Weight [kg]	Order number
	C [KN]	Co [KN]		
70	4	5	0,03	71001A
75	4	5	0,03	71003A
80	4	6	0,03	71005A
85	4	6	0,03	71007A
90	4	6	0,04	71009A
95	4	7	0,04	71011A
100	4	7	0,04	71013A
105	4	7	0,04	71015A
110	4	8	0,04	71017A
115	4	8	0,04	71019A
120	4	9	0,04	71021A
125	4	9	0,05	71023A
130	5	9	0,05	71025A
135	5	10	0,05	71027A
140	5	10	0,05	71029A
145	5	10	0,06	71031A
150	9	19	0,09	71033A
155	9	19	0,09	71035A
160	10	20	0,09	71037A
165	10	20	0,09	71039A
170	10	21	0,10	71041A
175	10	22	0,10	71043A
180	10	23	0,10	71045A
185	10	23	0,10	71047A
190	10	24	0,11	71049A
195	10	24	0,11	71051A
200	10	25	0,12	71053A
205	10	26	0,12	71055A
210	10	26	0,12	71057A
215	11	27	0,13	71059A
220	11	28	0,14	71061A
225	16	49	0,22	71063A
230	16	51	0,22	71065A
235	16	52	0,22	71067A
240	16	53	0,22	71069A
245	17	54	0,22	71071A
250	17	55	0,23	71073A
255	17	56	0,23	71075A
260	17	58	0,23	71077A
265	17	59	0,24	71079A
270	17	59	0,24	71081A
275	17	60	0,25	71083A
280	17	62	0,25	71085A
285	17	63	0,26	71087A
290	18	64	0,27	71089A
295	18	66	0,29	71091A
300	23	93	0,42	71093A
310	23	97	0,50	71095A
320	24	100	0,50	71097A
330	24	104	0,50	71099A
340	24	106	0,60	71101A
350	25	109	0,60	71103A
360	25	113	0,70	71105A
370	25	116	0,70	71107A
380	25	119	0,80	71109A
390	26	122	0,90	71111A
400	43	161	1,00	71113A
410	44	165	1,02	71115A
420	44	170	1,00	71117A
430	44	174	1,10	71119A
440	45	178	1,10	71121A
450	45	182	1,10	71123A

Ball pitch Ø KK [mm]	Load rating		Weight [kg]	Order number
	C [KN]	Co [KN]		
460	46	186	1,10	71125A
470	46	191	1,10	71127A
480	46	195	1,20	71129A
490	47	199	1,20	71131A
500	47	203	1,20	71133A
510	47	207	1,20	71135A
520	48	211	1,30	71137A
530	48	216	1,30	71139A
540	49	220	1,30	71141A
550	49	222	1,30	71143A
560	49	226	1,40	71145A
570	49	230	1,40	71147A
580	50	234	1,40	71149A
590	50	239	1,50	71151A
600	50	243	1,50	71153A
610	51	245	1,50	71155A
620	51	251	1,50	71157A
630	51	255	1,60	71159A
640	51	259	1,60	71161A
650	52	264	1,60	71163A
660	52	268	1,70	71165A
670	52	272	1,70	71167A
680	53	276	1,70	71169A
690	53	280	1,80	71171A
700	53	285	1,80	71173A
710	54	289	1,80	71175A
720	54	293	1,90	71177A
730	54	297	1,90	71179A
740	54	301	2,00	71181A
750	55	305	2,00	71183A
760	55	310	2,00	71185A
770	55	314	2,10	71187A
780	56	318	2,10	71189A
790	56	322	2,10	71191A
800	83	426	3,40	71193A
810	83	433	3,50	71195A
820	84	437	3,50	71197A
830	84	444	3,60	71199A
840	84	447	3,60	71201A
850	85	454	3,70	71203A
860	85	461	3,80	71205A
870	85	464	3,80	71207A
880	86	471	3,90	71209A
890	86	474	4,00	71211A
900	87	481	4,00	71213A
920	87	492	4,10	71215A
940	88	502	4,20	71217A
960	89	512	4,20	71219A
980	89	523	4,30	71221A
1000	90	536	4,40	71223A
1020	91	547	4,50	71225A
1040	91	557	4,50	71227A
1060	92	567	4,60	71229A
1080	93	578	4,70	71231A
1100	93	588	4,80	71233A
1120	94	598	4,80	71235A
1140	95	612	4,90	71237A
1160	95	622	5,00	71239A
1180	96	633	5,00	71241A
1200	121	748	7,50	71243A
1220	122	764	7,60	71245A
1240	123	774	7,80	71247A
1260	124	790	7,90	71249A
1280	124	800	8,00	71251A
1300	125	816	8,20	71253A
1320	126	826	8,30	71255A
1340	126	837	8,50	71257A
1360	127	852	8,60	71259A
1380	128	863	8,80	71261A
1400	129	878	8,90	71263A
1420	129	889	9,10	71265A
1440	130	899	9,20	71267A
1460	130	915	9,40	71269A
1480	131	926	9,60	71271A
1500	132	941	9,60	71273A

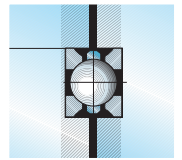


Antifriction wire race bearings

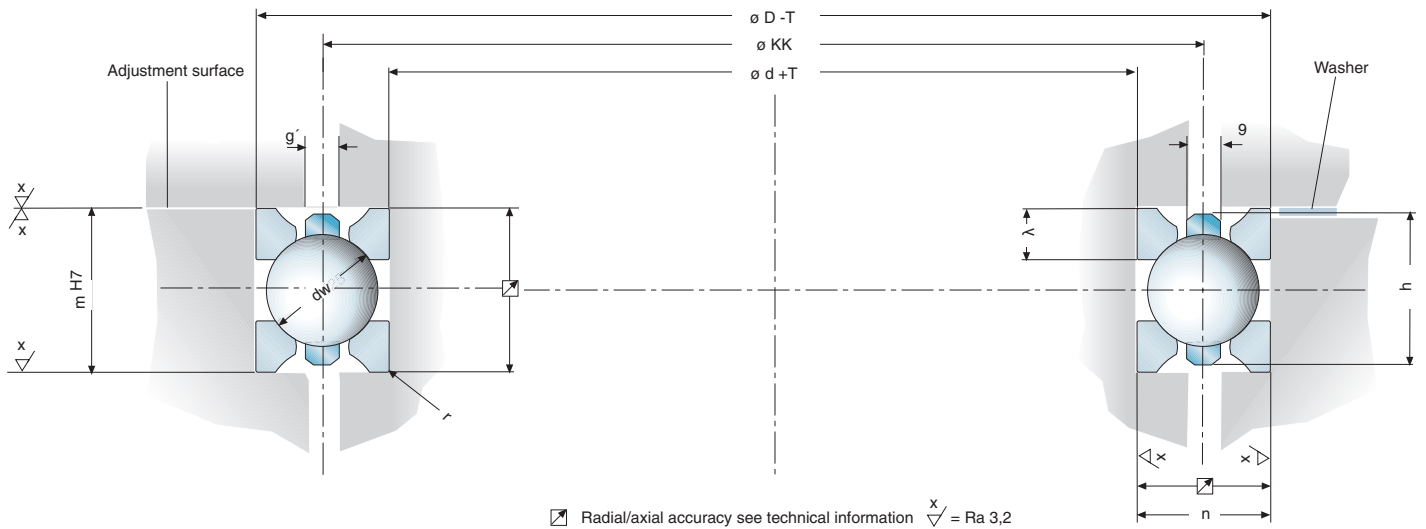
max. Ø 7000 mm

# Bearing elements

## Rectangular profile with drawn races



### Series LER



$\emptyset$ KK	dw	$\lambda$	m	n	r max	g	h	g'	Tolerance
100 - 1500	9,525	4 x 3	13	11	0,3	2,5	12,6	3	KK $\emptyset \leq 500$ mm T = IT6* KK $\emptyset > 500$ mm T = IT7*

Dimensions [mm], \* DIN ISO 286

#### Consist of:

- Four ball race rings with drawn raceways
- Segmented strip cage with retained balls

#### Features:

- Direct integration into your mating structure
- Free selection of ball pitch
- Small mounting space and high precision
- Easy machining of the mating structure
- Calculation programme to find the most suitable bearing

#### Ball race rings:

- Rectangular profile 4 x 3 mm
- Drawn raceways
- For special applications other race ring diameters are also available.
- Please consult us.

#### Rolling elements:

- Steel balls DIN5401, class III

#### Strip cage:

- Ball guided polyamide ball cage divided into segments
- The segmented strip cage runs very smoothly and silently and compensates length differences caused by high temperatures. The number of segments refers to the ball pitch diameter. For special applications and temperatures higher than 120° C we recommend ball cages made of non-corrosive steel or brass.

#### Lubrication:

- with ball bearing grease. For more information see page 34.

#### Temperature:

- Continuous operation: -40° C to +100° C, short time operation max. 120° C
- Other temperatures on request

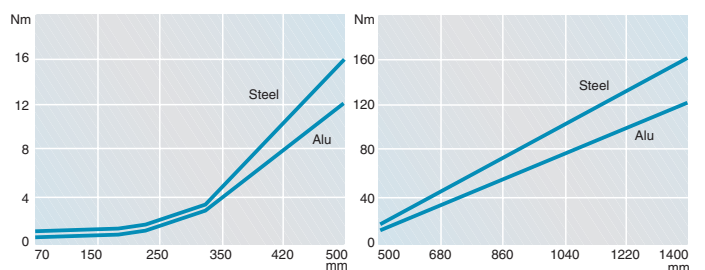
#### Adjustment:

- By plane surface
  - By washers (see page 31)
- The preload is adjusted correctly when the rotational resistance without seal corresponds to table 1 (temperature range -40° C to +100° C).

#### Circumferential speed:

- with grease lubrication max. 10 m/s
- with oil lubrication max. 12 m/s

	54SiCr6 Ball race ring	100Cr6 Balls	PA12 Strip cage
Standard	Corrotect ATC-Beschichtung	Messing- Flachkäfig	X45Cr13
Special			



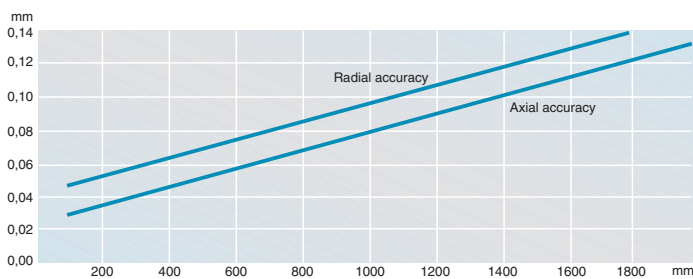
Intermediate diameters  
on request



Ball pitch Ø KK [mm]	Load rating		Weight [kg]	Order number
	C [KN]	Co [KN]		
100	17	25	0,20	68460A
105	17	26	0,20	68461A
110	18	28	0,20	68462A
115	18	29	0,20	68463A
120	18	30	0,20	68464A
125	19	33	0,20	68465A
130	19	34	0,20	68466A
135	20	35	0,20	68467A
140	20	36	0,20	68468A
145	20	37	0,20	68469A
150	20	39	0,30	74060A
155	20	40	0,30	74061A
160	20	41	0,30	74062A
165	21	43	0,30	74063A
170	21	45	0,30	74064A
175	21	46	0,30	74065A
180	22	47	0,30	74066A
185	22	48	0,30	74067A
190	22	49	0,30	74068A
195	22	51	0,30	74069A
200	23	52	0,30	74070A
205	23	54	0,30	74071A
210	23	55	0,30	74072A
215	23	57	0,30	74073A
220	24	58	0,40	74074A
225	24	59	0,40	74075A
230	24	60	0,40	74076A
235	24	61	0,40	74077A
240	24	63	0,40	74078A
245	24	64	0,40	74079A
250	25	66	0,40	74080A
255	25	67	0,40	74081A
260	25	69	0,40	74082A
265	25	70	0,40	74083A
270	25	71	0,40	74084A
275	26	72	0,50	74085A
280	26	73	0,50	74086A
285	26	75	0,50	74087A
290	26	77	0,50	74088A
295	26	78	0,50	74089A
300	27	79	0,50	74090A
310	27	82	0,50	74091A
320	27	84	0,50	74092A
330	28	88	0,60	74093A
340	28	90	0,60	74094A
350	28	92	0,60	74095A
360	28	95	0,60	74096A
370	29	98	0,60	74097A
380	29	100	0,60	74098A
390	29	103	0,60	74099A
400	29	106	0,70	74100A
410	30	109	0,70	74101A
420	30	112	0,70	74102A
430	30	114	0,70	74103A
440	31	116	0,70	74104A
450	31	119	0,70	74105A
460	31	122	0,80	74106A
470	31	125	0,80	74107A
480	32	127	0,80	74108A
490	32	130	0,80	74109A
500	32	133	0,80	74110A

Ball pitch Ø KK [mm]	Load rating		Weight [kg]	Order number
	C [KN]	Co [KN]		
510	32	136	0,80	74111A
520	33	138	0,90	74112A
530	33	140	0,90	74113A
540	33	144	0,90	74114A
550	33	146	0,90	74115A
560	33	149	1,00	74116A
570	34	151	1,00	74117A
580	34	155	1,00	74118A
590	34	157	1,00	74119A
600	34	159	1,10	74120A
610	34	162	1,10	74121A
620	35	165	1,10	74122A
630	35	168	1,10	74123A
640	35	170	1,20	74124A
650	35	173	1,20	74125A
660	36	176	1,20	74126A
670	36	179	1,20	74127A
680	36	181	1,30	74128A
690	36	183	1,30	74129A
700	36	187	1,30	74130A
710	36	189	1,40	74131A
720	37	192	1,40	74132A
730	37	194	1,40	74133A
740	37	198	1,50	74134A
750	37	200	1,50	74135A
760	37	203	1,50	74136A
770	38	205	1,50	74137A
780	38	209	1,60	74138A
790	38	211	1,60	74139A
800	38	213	1,60	74140A
810	38	216	1,60	74141A
820	39	219	1,70	74142A
830	39	222	1,70	74143A
840	39	224	1,70	74144A
850	39	226	1,70	74145A
860	39	229	1,80	74146A
870	39	232	1,80	74147A
880	40	235	1,80	74148A
890	40	237	1,90	74149A
900	40	240	1,90	74150A
920	40	246	1,90	74151A
940	40	250	1,90	74152A
960	41	256	2,00	74153A
980	41	261	2,00	74154A
1000	41	267	2,00	74155A
1020	42	272	2,10	74156A
1040	42	278	2,10	74157A
1060	42	283	2,10	74158A
1080	43	289	2,20	74159A
1100	43	293	2,20	74160A
1120	43	299	2,20	74161A
1140	43	304	2,30	74162A
1160	44	310	2,30	74163A
1180	44	315	2,40	74164A
1200	44	321	2,40	74165A
1220	45	326	2,40	74166A
1240	45	332	2,50	74167A
1260	45	337	2,50	74168A
1280	45	343	2,50	74169A
1300	46	347	2,60	74170A
1320	46	353	2,60	74171A
1340	46	358	2,70	74172A
1360	46	364	2,70	74173A
1380	47	369	2,80	74174A
1400	47	375	2,80	74175A
1420	47	377	2,80	74176A
1440	47	386	2,90	74177A
1460	48	390	2,90	74178A
1480	48	396	3,00	74179A
1500	48	401	3,00	74180A

Antifriction wire race bearings



Diagr.2 Radial and axial accuracy