







Zero cage creep

High acceleration (up to 15G)

Compact & cost saving design

Integrated in crossed roller bearing design (All metal design)

Also available for stainless steel with integrated rack machined by Electrical Chemical Machining often called ECM (UHV compatible)



ACC include a robust brass rack attached in the bottom of the groove.

### THE PROBLEM CREEPING OF THE CAGE

Shorter production times constantly push machine designers to reach higher speeds, decrease the size and weight of their designs, while increasing machine travel and positio-ning accuracy to its limits.

Cage creep can occur in non-recirculating linear bearing applications where vibrations, improper mounting, very high-acceleration and de-acceleration, inadequate toleran-ces on the mounting surfaces, uneven preloading or moment loading is present.

As the cage creeps out from original position there is an increase of friction, reduction of travel length and prematu-re wear of the linear bearings. This shortens the lifetime and can lead to premature failures. ACCI anti-cage creep technology for stainless steel rails, made by ECM. Is on request available in selected rail types.

## **OUR SOLUTION = THE ACC-SOLUTION**

Our engineers refreshed a superior solution for use in hightech and extreme dynamic applications. The ACC solution has proven its ability for decades to prevent cage creep in the most demanding applications and under the most seve-re environment conditions. The ACC system is integrated in the design of the linear bearing without influencing the external boundary or mounting dimensions. This allows you to replace the bearings in existing problem applications with the ACC solution.

### THE TEST RESULT PROVE

- No increase of friction
- No reduction of accuracy
- No influence of lubrication
- Increase operational life to its limits
- Zero cage creeping
- For all mounting orientations
- Easy to assemble



The ACC system is the best and most effective solution avai-lable. Precision rail with ACC option are currently available with the RSDE-series in all accuracy grades.

# **FRICTION FORCE**

The ACC solution is designed and manufactured with the greatest care. Therefore, as you can see on the graph below, the force that must be applied to overcome friction is essentially unchanged.



## **APPLICATIONS**

The ACC solution is well suited for the high speed, high pre-cision demands of the electronics and semiconductor indus-try for applications like wire bonding stages and pick-and place units



## **OPERATING TEMPERATURE**

Linear bearings with ACC solution can operate under tem-peratures of -40°C up to +80°C. This is a significant advan-tage over similar systems using plastic components.

### **ACCELERATION**

Max. acceleration 150 m/s<sup>2</sup>(15G)

Standard linear bearing rail set with ACC solution consist of:

- 4 pcs. rail type RSDE with ACC
- 2 pcs. roller cages type KRE(V) with ACC (rollers retained)

End screws not necessary

### Optional:

End screws GB and mountingscrews GD

Leading global manufacturers have chosen the PM ACC







One set consist of: 4 rails + 2 roller cages, b	ooth with ACC option
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	Main dimensions					Mounting holes							End pieces		
RSDE-ACC Kit	Α	В	C	E	D	f	g	h	k	m	р	r	m1	S	t
RSDE-3050x8KRE-ACC	50						1x25								
RSDE-3075x12KRE-ACC	75						2x25								
RSDE-3100x18KRE-ACC	100						3x25								
RSDE-3125x22KRE-ACC	125						4x25								
RSDE-3150x28KRE-ACC	150						5x25								
RSDE-3175x34KRE-ACC	175	18	8	8.6	3	12.5	6x25	$3.5^{\pm0.2}$	3.2	M4	6	3.2	M3	4.1	5.5
RSDE-3200x40KRE-ACC	200						7x25								
RSDE-3225x46KRE-ACC	225						8x25								
RSDE-3250x52KRE-ACC	250						9x25								
RSDE-3275x54KRE-ACC	275						10x25								
RSDE-3300x60KRE-ACC	300						11x25								
RSDE-4080x10KRE-ACC	80						1x40								
RSDE-4120x16KRE-ACC	120						2x40								
RSDE-4160x22KRE-ACC	160						3x40								
RSDE-4200x28KRE-ACC	200						4x40								
RSDE-4240x36KRE-ACC	240	22	11	10.6	4	20	5x40	$4.5^{\pm 0.2}$	4.3	M5	7.5	4.1	M3	5	7
RSDE-4280x42KRE-ACC	280						6x40								
RSDE-4320x48KRE-ACC	320						7x40								
RSDE-4360x54KRE-ACC	360						8x40								
RSDE-4400x60KRE-ACC	400						9x40								

**Bold** = Short lead time item

 $\label{eq:Regular} \mbox{Regular} = \mbox{Long lead time item - please request for price and delivery time}$ 







Snap On

				Roller c					
C <sub>dyn</sub> in (N)	D	t	t1	w	w1	Z	L	Stroke	Туре
3136						8	35.1	25	RSDE-3050x10KRE-ACC
4704						12	48.3	50	RSDE-3075x12KRE-ACC
7056						18	68.1	60	RSDE-3100x18KRE-ACC
2744						22	81.3	85	RSDE-3125x22KRE-ACC
10976	3	3.3	10.9	2.2	2.95	28	101.1	95	RSDE-3150x28KRE-ACC
13328						34	124.6	100	RSDE-3175x34KRE-ACC
15680						40	144.4	110	RSDE-3200x40KRE-ACC
18032						46	164.2	120	RSDE-3225x46KRE-ACC
20384						52	184	130	RSDE-3250x52KRE-ACC
21168						54	190.6	160	RSDE-3275x54KRE-ACC
23520						60	210.4	175	RSDE-3300x60KRE-ACC
7850						10	54	50	RSDE-4080x10KRE-ACC
12560						16	80.4	75	RSDE-4120x16KRE-ACC
17270						22	106.8	100	RSDE-4160x22KRE-ACC
21980						28	133.2	120	RSDE-4200x28KRE-ACC
28260	4	4.4	13.2	2.8	3.85	36	173	130	RSDE-4240x36KRE-ACC
32970						42	199.4	160	RSDE-4280x42KRE-ACC
37680						48	225.8	185	RSDE-4320x48KRE-ACC
42390						54	252.8	210	RSDE-4360x54KRE-ACC
47100						60	278.6	240	RSDE-4400x60KRE-ACC
	C <sub>dyn</sub> in (N) 3136 4704 7056 2744 10976 13328 15680 18032 20384 21168 23520 7850 12560 17270 21980 28260 32970 37680 42390 47100	C <sub>dyn</sub> in (N) D   3136 4704   7056 3   2744 3   10976 3   13328 3   15680 3   18032 20384   20384 2   23520 7850   12560 17270   21980 4   32970 37680   42390 47100	C <sub>dyn</sub> in (N) D t   3136 4704 4704   7056 3 3.3   10976 3 3.3   13328 3 3.3   13328 4 4   10976 3 3.3   13328 4 4   10976 3 3.3   13328 4 4   20384 4 4   21168 4 4   23520 4 4.4   32970 37680 4   42390 47100 4	C <sub>dyn</sub> in (N) D t t1   3136 4704 4704 47056 4704 47056 47056 47056 47056 47056 47056 47056 47056 47056 47056 4716 47056 4716 47056 4716	C <sub>dyn</sub> in (N) D t t1 w   3136 4704 4704 47056 4704 47056 4704 47056 4704 47056 4704 47056 4704 47056 4704 47056 47056 4714 47056 4714 47056 4714 4710 4714 4710 4714 4710 4710 4714 4710 4714 4710 471110 <td>C<sub>4yn</sub> in (N) D t t1 w w1   3136 A704 A</td> <td>Cdyn In (N) D t t1 w w1 Z   3136 A704 A704 A704 A7056 A704 A7056 A704 A7056 A704 A7056 A704 A7056 A704 A7056 A7056</td> <td>C<sub>4n</sub> in (N) D t t1 w w1 Z L   3136 4704 8 35.1 12 48.3   4704 4704 4704 48.3 12 48.3   7056 48.3 12 48.3 18 68.1   2744 3 3.3 10.9 2.2 2.95 28 101.1   13328 3 3.3 10.9 2.2 2.95 28 101.1   13328 34 124.6 40 144.4 14.4<td>Company D t 11 w w1 Z L Stroke   3136 4704 8 35.1 25 4704 12 48.3 50   7056 12 48.3 50 12 48.3 50   2744 3 3.3 10.9 2.2 2.95 28 101.1 95   13328 3.3 10.9 2.2 2.95 28 101.1 95   13328 34 124.6 100 144.4 110 1802 22 81.3 85   1032 - - - - - - 22 81.3 100   15680 - - - - - - - - - - 100 - - - - - - - - - - - - - - - - - - -</td></td>	C <sub>4yn</sub> in (N) D t t1 w w1   3136 A704 A	Cdyn In (N) D t t1 w w1 Z   3136 A704 A704 A704 A7056 A704 A7056 A704 A7056 A704 A7056 A704 A7056 A704 A7056	C <sub>4n</sub> in (N) D t t1 w w1 Z L   3136 4704 8 35.1 12 48.3   4704 4704 4704 48.3 12 48.3   7056 48.3 12 48.3 18 68.1   2744 3 3.3 10.9 2.2 2.95 28 101.1   13328 3 3.3 10.9 2.2 2.95 28 101.1   13328 34 124.6 40 144.4 14.4 <td>Company D t 11 w w1 Z L Stroke   3136 4704 8 35.1 25 4704 12 48.3 50   7056 12 48.3 50 12 48.3 50   2744 3 3.3 10.9 2.2 2.95 28 101.1 95   13328 3.3 10.9 2.2 2.95 28 101.1 95   13328 34 124.6 100 144.4 110 1802 22 81.3 85   1032 - - - - - - 22 81.3 100   15680 - - - - - - - - - - 100 - - - - - - - - - - - - - - - - - - -</td>	Company D t 11 w w1 Z L Stroke   3136 4704 8 35.1 25 4704 12 48.3 50   7056 12 48.3 50 12 48.3 50   2744 3 3.3 10.9 2.2 2.95 28 101.1 95   13328 3.3 10.9 2.2 2.95 28 101.1 95   13328 34 124.6 100 144.4 110 1802 22 81.3 85   1032 - - - - - - 22 81.3 100   15680 - - - - - - - - - - 100 - - - - - - - - - - - - - - - - - - -

F = Load direction according to picture.

Units: mm







o	C A 'I		
Une set consist	of: 4 rails -	+ 2 roller cages,	both with ACC option

	Main dir	nensio	ons		Mounting holes							End holes		
RSDE-ACC Kit A	A B	C	E	D	f	g	h	k	m	р	r	m1	S	t
RSDE-ACC Kit A   RSDE-6100x8KRE-ACC 10   RSDE-6150x14KRE-ACC 15   RSDE-6200x16KRE-ACC 20   RSDE-6250x22KRE-ACC 25   RSDE-6300x28KRE-ACC 30   RSDE-6350x32KRE-ACC 30   RSDE-6400x38KRE-ACC 40   RSDE-6450x44KRE-ACC 45   RSDE-6500x48KRE-ACC 50	B   00   50	15	E 14.9	6	f 25	g 1x50 2x50 3x50 4x50 5x50 6x50 7x50 8x50 9x50	h 6 <sup>±0.2</sup>	k 5.2	m M6	р 9.5	r 5.2	m1 M5	s 7	t 8.5

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Snap On

Weight					Roller c					
(g)	C <sub>dyn</sub> in (N)	D	t	t1	w	w1	Z	L	Stroke	Туре
650	14120						8	68	60	RSDE-6100x8KRE-ACC
968	24710						14	107.6	80	RSDE-6150x14KRE-ACC
1291	28240						16	120.8	150	RSDE-6200x16KRE-ACC
1610	38830						22	160.4	170	RSDE-6250x22KRE-ACC
1936	49448	6	6.7	19.8	4.3	6.3	28	200	200	RSDE-6300x28KRE-ACC
2254	56480						32	234.4	230	RSDE-6350x32KRE-ACC
2578	67070						38	274	250	RSDE-6400x38KRE-ACC
2910	77660						44	313.6	270	RSDE-6450x44KRE-ACC
3218	84720						48	340	310	RSDE-6500x48KRE-ACC

F = Load direction according to picture.

Units: mm