



Crossed Roller Linear Bearing Railsets

RSDE – ACC type



Linear Bearings

PM - BEARINGS



Zero Cage Creep

High Acceleration 15G

Compact & Cost Saving Design

**Integrated in Crossed Roller
Bearing Design**

All metal design



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 positioning 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 tolerances 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 premature wear of the linear bearings. This shortens the lifetime and can lead to premature failures.

Our Solution

= the ACC-Solution

Our engineers refreshed a superior solution for use in high-tech 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 severe 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 results prove:

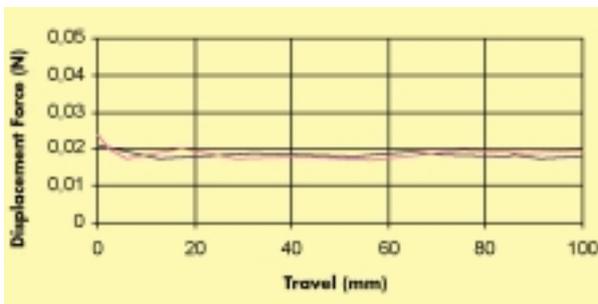
- No increase of friction
- No reduction of accuracy
- No influence of lubrication
- Increase operational life to its limits
- Zero cage creeping
- For all mounting orientations
- Easy to assemble



The **ACC** system is the best and most effective solution available. Precision rails 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.



Operating Temperature

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

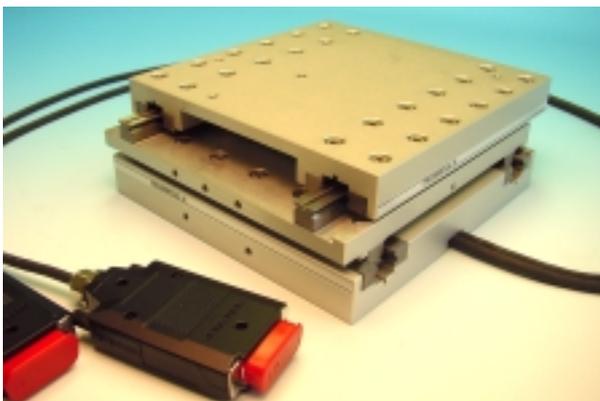
Acceleration

Max. acceleration = 150 m/s² (15G)



Applications

The **ACC** solution is well suited for the high speed, high precision demands of the electronics and semiconductor industry for applications like wire bonding stages and pick-and-place units



Standard linear bearing railset with ACC solution consists of:
4 pcs. Guideways type **RSDE** with **ACC**
2 pcs. Roller cages type **RE** with **ACC** (rollers retained)
End screws not necessary

Optional:
End screws GA (catalog linear bearings, RSDE type)
Attachment screws GD

World leading manufacturers have selected the **ACC**-system as the best anti cage creep solution available in the market. Our all metal design provides dependable service in the most demanding applications where other designs that contain plastic components may fail.

For more information

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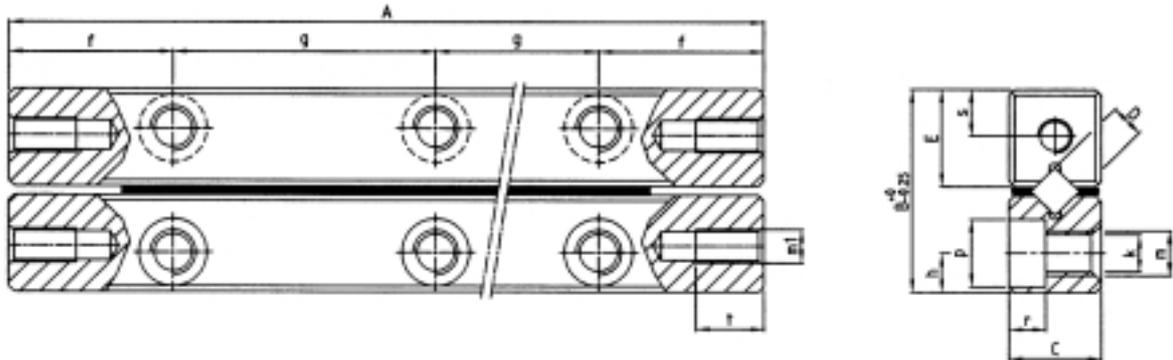
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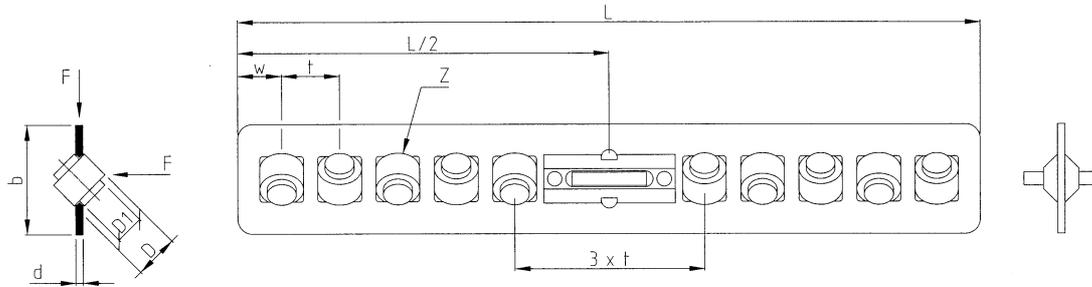
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(one set consists of: 4 guideways + 2 roller cages, both with ACC option)

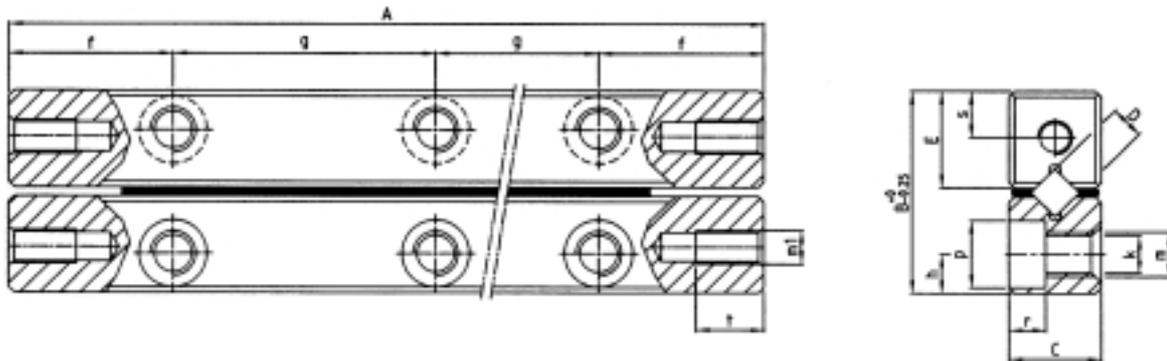
Part no.	Main dimensions					Mounting holes							Endholes		
	A	B	C	E	D	f	g	h	k	m	p	r	m	s	t
RSDE- 3050 x 6RE - ACC	50					1 x 25									
RSDE- 3075 x 8RE - ACC	75					2 x 25									
RSDE- 3100 x 12RE - ACC	100					3 x 25									
RSDE- 3125 x 14RE - ACC	125					4 x 25									
RSDE- 3150 x 18RE - ACC	150					5 x 25									
RSDE- 3175 x 22RE - ACC	175	18	8	8.6	3	12.5	6 x 25	3.5 ^{±0.2}	3.2	M4	6	3.2	M3	4.1	5.5
RSDE- 3200 x 26RE - ACC	200					7 x 25									
RSDE- 3225 x 30RE - ACC	225					8 x 25									
RSDE- 3250 x 34RE - ACC	250					9 x 25									
RSDE- 3275 x 36RE - ACC	275					10 x 25									
RSDE- 3300 x 40RE - ACC	300					11 x 25									
RSDE- 4080 x 6RE - ACC	80					1 x 40									
RSDE- 4120 x 10RE - ACC	120					2 x 40									
RSDE- 4160 x 14RE - ACC	160					3 x 40									
RSDE- 4200 x 18RE - ACC	200					4 x 40									
RSDE- 4240 x 22RE - ACC	240	22	11	10.6	4	20	5 x 40	4.5 ^{±0.2}	4.2	M5	7.5	4.1	M3	5	7
RSDE- 4280 x 26RE - ACC	280					6 x 40									
RSDE- 4320 x 30RE - ACC	320					7 x 40									
RSDE- 4360 x 34RE - ACC	360					8 x 40									
RSDE- 4400 x 38RE - ACC	400					9 x 40									



Weight in g	Dyn. load rating F (N)	Roller cage						Stroke	Part no.	
		b	d	D1	t	w	Z no. of rollers			
116	4704						6	40	20	RSDE- 3050 x 6RE - ACC
161	6272						8	50	50	RSDE- 3075 x 8RE - ACC
210	9408						12	70	60	RSDE- 3100 x 12RE - ACC
259	10976						14	80	90	RSDE- 3125 x 14RE - ACC
310	14112	7	0.5	2	5	2.5	18	100	100	RSDE- 3150 x 18RE - ACC
365	17248						22	120	110	RSDE- 3175 x 22RE - ACC
405	20384						26	140	120	RSDE- 3200 x 26RE - ACC
457	23520						30	160	130	RSDE- 3225 x 30RE - ACC
507	26656						34	180	140	RSDE- 3250 x 34RE - ACC
555	28224						36	190	170	RSDE- 3275 x 36RE - ACC
605	31360						40	210	180	RSDE- 3300 x 40RE - ACC
317	9420						6	57	48	RSDE- 4080 x 6RE - ACC
475	15700						10	85	72	RSDE- 4120 x 10RE - ACC
630	21980						14	113	96	RSDE- 4160 x 14RE - ACC
788	28260						18	141	120	RSDE- 4200 x 18RE - ACC
945	34540	9	0.5	3	7	4	22	169	144	RSDE- 4240 x 22RE - ACC
1112	40820						26	197	168	RSDE- 4280 x 26RE - ACC
1259	47100						30	225	192	RSDE- 4320 x 30RE - ACC
1416	53380						34	253	216	RSDE- 4360 x 34RE - ACC
1573	59660						38	281	240	RSDE- 4400 x 38RE - ACC

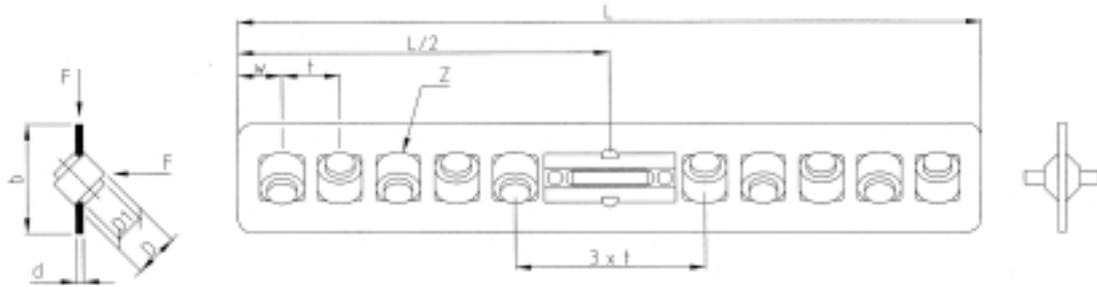
Units: mm

1 mm = 0.039 Inch
1 N = 0.102 kgf



(one set consists of: 4 guideways + 2 roller cages, both with ACC option)

Part no.	Main dimensions					Mounting holes								Endholes		
	A	B	C	E	D	f	g	h	k	m	p	r	m	l	s	t
RSDE-6100 x 6RE-ACC	100					1 x 50										
RSDE-6150 x 10RE-ACC	150					2 x 50										
RSDE-6200 x 12RE-ACC	200					3 x 50										
RSDE-6250 x 16RE-ACC	250					4 x 50										
RSDE-6300 x 20RE-ACC	300	31	15	14.9	6	25	5 x 50	6 ^{+0.2}	5.2	M6	9.5	5.2	M5	7	8.5	
RSDE-6350 x 24RE-ACC	350						6 x 50									
RSDE-6400 x 28RE-ACC	400						7 x 50									
RSDE-6450 x 32RE-ACC	450						8 x 50									
RSDE-6500 x 36RE-ACC	500						9 x 50									
RSDE-9200 x 8RE-ACC	200					1 x 100										
RSDE-9300 x 12RE-ACC	300					2 x 100										
RSDE-9400 x 16RE-ACC	400	44	22	21.3	9	50	3 x 100	9 ^{+0.2}	6.8	M8	11	6.2	M6	9.9	10	
RSDE-9500 x 22RE-ACC	500						4 x 100									
RSDE-9600 x 26RE-ACC	600						5 x 100									



Weight in g	Dyn. load rating F (N)	Roller cages							Stroke	Part no.
		b	d	D1	t	w	Z no. of rollers	L		
650	21180						6	75	56	RSDE- 6100 x 6RE-ACC
968	35300						10	111	84	RSDE- 6150 x 10RE-ACC
1291	42360						12	129	148	RSDE- 6200 x 12RE-ACC
1610	56480						16	165	176	RSDE- 6250 x 16RE-ACC
1936	70600	3.5	0.8	4.4	9	6	20	201	204	RSDE- 6300 x 20RE-ACC
2254	84720						24	237	232	RSDE- 6350 x 24RE-ACC
2578	98840						28	273	260	RSDE- 6400 x 28RE-ACC
2910	112960						32	309	288	RSDE- 6450 x 32RE-ACC
3218	127080						36	345	316	RSDE- 6500 x 36RE-ACC
2774	69040						8	144	120	RSDE - 9200 x 8RE-ACC
4162	103560						12	200	208	RSDE- 9300 x 12RE-ACC
5547	138080	19	1	7	14	9	16	256	296	RSDE- 9400 x 16RE-ACC
6933	189860						22	340	328	RSDE- 9500 x 22RE-ACC
8319	224380						26	396	416	RSDE- 9600 x 26RE-ACC

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