

Crossed Roller Linear Bearing Railsets

RSDE – ACC type

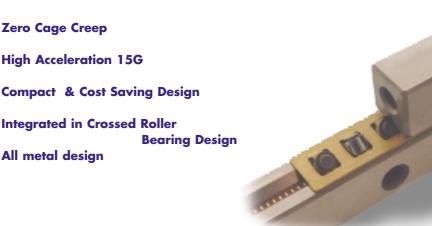


Linear Bearings

PM - BEARINGS







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 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 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

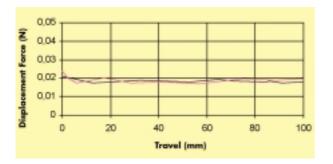




The **ACC** system is the best and most effective solution available. Precision rails with **ACC** option are currently available with the RSDE-series in all accuracy grades.

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.



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



For more information

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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/s^2 (15G)



Standard linear bearing railset with ACC solution consists of:

4 pcs. Guideways type **RSDE** with **ACC**

 ${\bf 2}$ pcs. Rollercages type ${\bf RE}$ with ${\bf ACC}$ (rollers retained) End screws not necessary

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

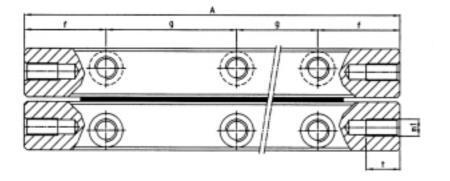
World leading manufacturers have selected the **ACC**-system as the best anti cage creep solution available in the market. Our all metal design provides dependable service in the most demanding applications where other designs that contain plastic components may fail.

Singapore PM – PBA Pte. Ltd.

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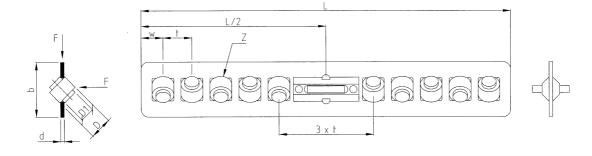


(one set consists of: 4 guideways + 2 roller cages, both with ACC option)

D	Main d			F			ing holes	1					Endholes		
Part no.	A	В	С	E	D	f	g	h	k	m	р	r	ml	S	t
RSDE- 3050 x 6RE - ACC RSDE- 3075 x 8RE - ACC	50 75						1 x 25 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 × 30RE – ACC RSDE- 3250 × 34RE – ACC	225 250						8 x 25 9 x 25								
RSDE- 3275 x 36RE - ACC	275						9 x 25 10 x 25								
RSDE- 3300×40 RE - ACC	300						10 x 25								
RSDE- 4080 x 6RE – ACC	80						1 x 40								
RSDE- 4120 x 10RE - ACC	120						2 × 40								
RSDE- 4160 × 14RE – ACC	160						3 x 40								
RSDE- 4200 x 18RE - ACC	200	00		10.4	4	20	4 × 40	1 E+0.2	4.0		7 5	4 1		F	7
RSDE- 4240 × 22RE – ACC RSDE- 4280 × 26RE – ACC	240 280	22	11	10.6	4	20	5 x 40 6 x 40	4.5 ^{±0.2}	4.Z	C/VI	C. /	4.1	M3	С	7
RSDE- 4320 x 30RE - ACC	320						7 x 40								
RSDE- 4360 × 34RE – ACC	360						8 x 40								
RSDE- 4400 x 38RE - ACC	400						9 x 40								





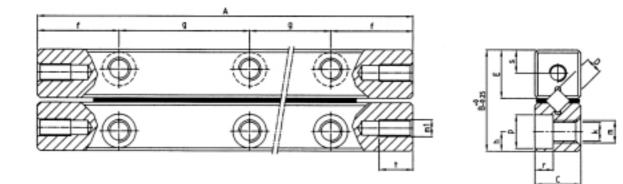


ing F (N) b d D1 t w Z L Stroke Part no. 116 4704 - - 6 40 20 RSDE 3050 x 6RE - ACC 210 9408 - 12 70 60 RSDE 3100 x 12RE - ACC 259 10976 - 14 80 90 RSDE 3150 x 18RE - ACC 310 14112 7 0.5 2 5 2.5 18 100 100 RSDE 3150 x 18RE - ACC 365 17248 - 22 120 110 RSDE 3150 x 18RE - ACC 405 20384 - - 26 140 120 RSDE 3150 x 18RE - ACC 507 26556 - - 30 160 130 RSDE 3225 x 36RE - ACC 605 31360 - - 36 190 170 RSDE 3225 x 36RE - ACC 630 21980 - - 36 190 170 RSDE 4080 x 6R	Weight	Dyn. load rating	Rolle	er cage							
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1 mm = 0.039 Inch 1 N = 0.102 kgf



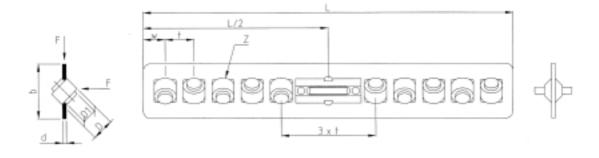




Part no.	Main A	dime B	nsions C	E E	D	Moi f	unting holes g	h	k	m	р	r	Endh m 1		t
RSDE-6100 × 6RE-ACC RSDE-6150 × 10RE-ACC RSDE-6200 × 12RE-ACC RSDE-6250 × 16RE-ACC RSDE-6300 × 20RE-ACC RSDE-6350 × 24RE-ACC RSDE-6400 × 28RE-ACC RSDE-6400 × 32RE-ACC RSDE-6450 × 32RE-ACC RSDE-6500 × 36RE-ACC	100 150 200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







Weight	Dyn. load rating	Roller	cages							
in g	F (N)	b	d	D1	t	W	Ζ	L	Stroke	Part no.
Ŭ							no. of rol	lers		
650	21180						6	75	56	RSDE- 6100 × 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 × 8RE-ACC
4162	103560	10	,	7	1.4	0	12	200	208	RSDE- 9300 x 12RE-ACC
5547	138080	19]	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
										Units: mm
										1 mm - 0.039 Inch

1 mm = 0.039 Inch 1 N = 0.102 kgf