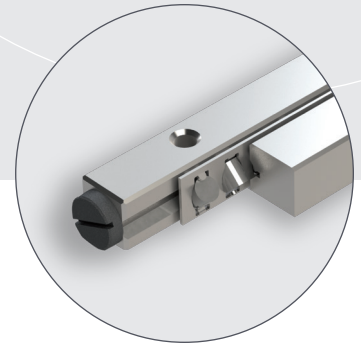
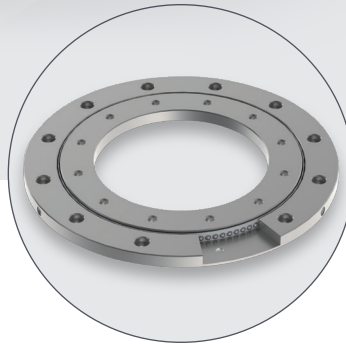
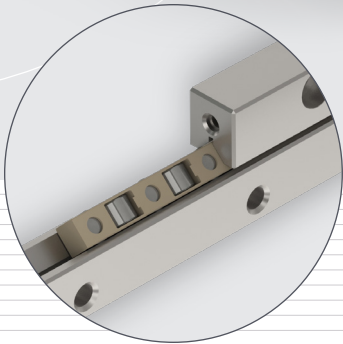
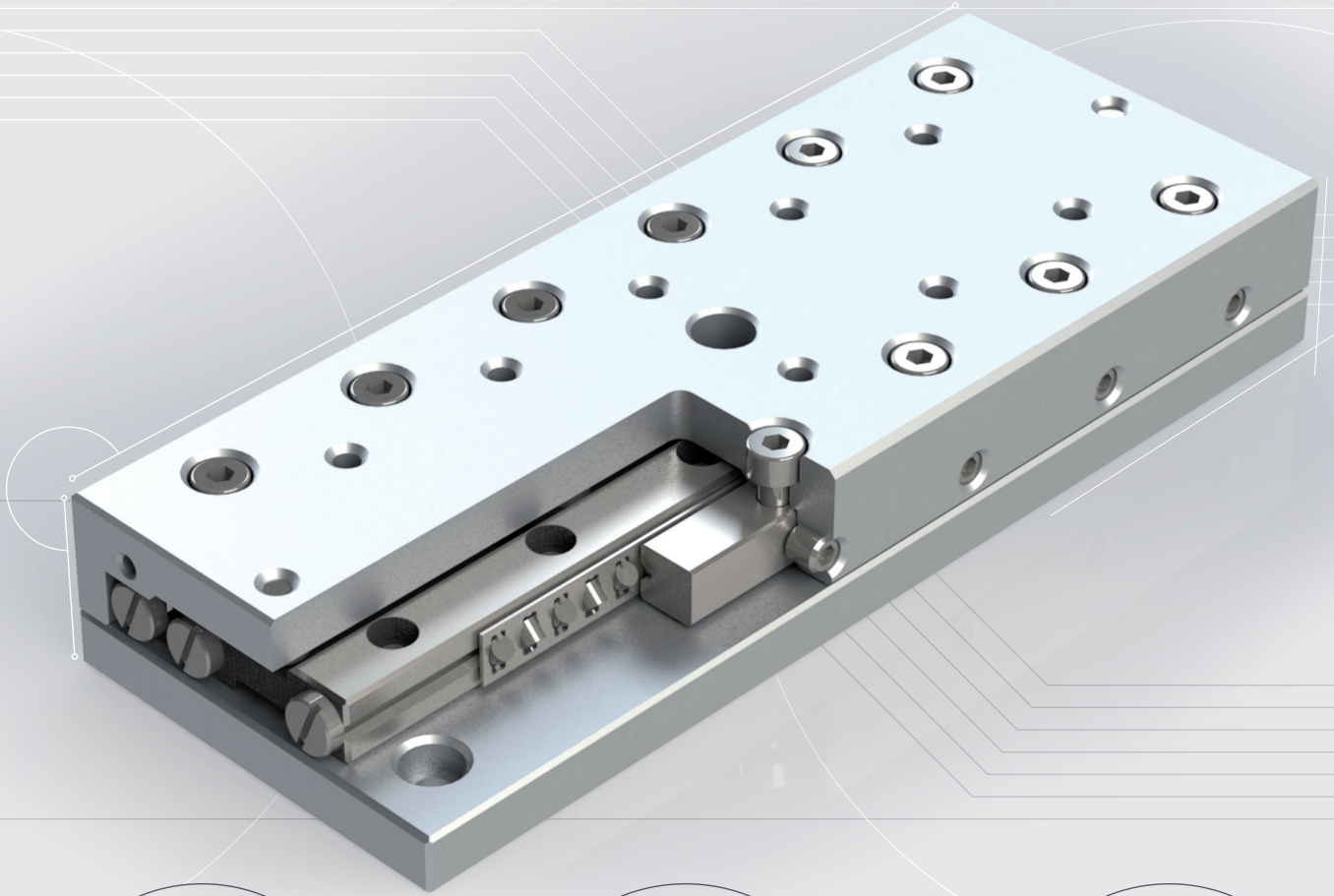


OVER  
**50**  
YEARS  
*of success*



## Low profile slides type RTS



## TECHNISCHE DATEN

### ASSEMBLY

The mounting holes of each type are drilled to a standard configuration in slide-top and -base and permit the user a quick attachment into the application. Thread holes in the table parterre according to ISO-standard. Dimensions in this catalogue are in mm.

Pm linear slides are precision devices and require proper mounting to perform at rated specifications. They have to be mounted on rigid and fine-machined, preferable by fine-milling, flat surfaces and supported over their entire base length. Hereby the characters qualities of PM linear slide will be shown to full advantage

### LOADS AND MOMENTS

The slides listed in this catalogue are able to carry loads and moments in any direction. The load ratings are based on the fundamentals established by ISO and DIN for the calculation of roller bearings (ISO standard 281, for miniature slide type PMM DIN 636, part 3).

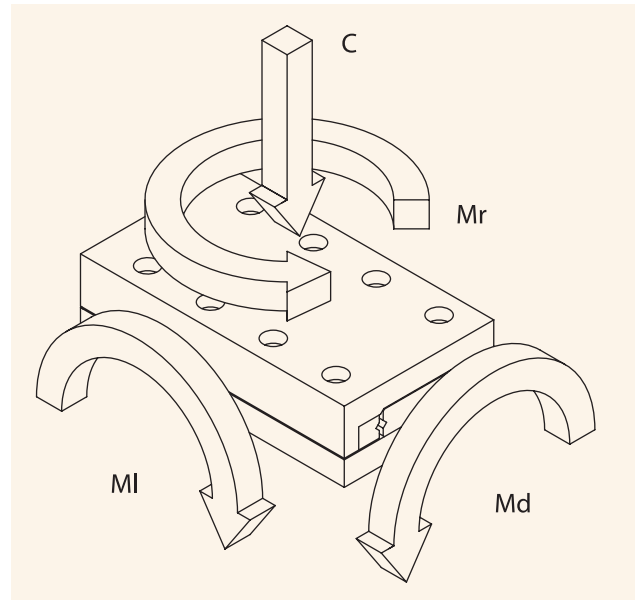
To ensure the high running accuracy and to prevent against play, vibration and overloads have to be avoided. The load capacity  $C$ , defined in ISO76-1987, is the maximum downward load or force located in the center of the upper part in horizontal zero-position.

$M_I$  = Pitch moment: when a load is cantilevered (not symmetrically mounted) off the end of an axis, parallel to the direction of travel.

$M_d$  = Roll moment: Wenn a load is cantilevered off the side of an axis, perpendicular to the direction of travel.

$M_r$  = Yaw moment: when a force causes a rotation moment about the center of an axis.

Exceeding of the listed moment ratings may reduce the life of the bearings and can degrade accuracy. Please feel free to contact one of our product specialists for more information.

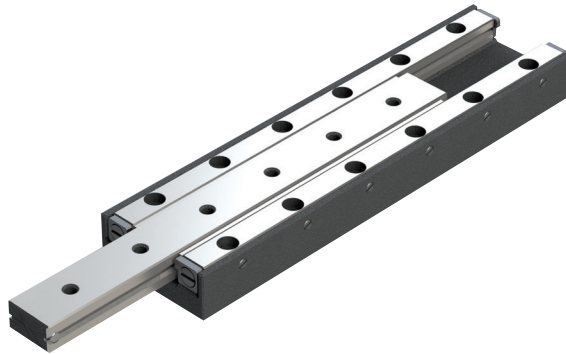


### VACUUM AND CLEANROOM COMPATIBLE SLIDES

Most of the PM slides can be prepared for use in (ultra-high) vacuum or cleanroom environments. Special care has to be taken for example with the selection of the low outgassing materials, special lubricants, surface finishings, vented stainless steel fasteners for use in blind tapped holes, special ball- or crossed roller cages and with the selection of switches and wires. For the assembly of the tables we use modern cleanroom cells unto ISO/FDIS 14644-1 class 5 with clean spots class 3.

With over 50 years experience in this field we are ready to meet the most challenging requirements.

For more information please consult PM.



*Frictionless low profile slides model RTS are fine preloaded linear motion units, ready for mounting. This low profile type offers an excellent running motion accuracy and is able to carry medium loads and moments in every direction.*

### MATERIAL TABLE BODIES

Steel, black oxide finish

### FEATURES AND SPECIFICATIONS

- 3 sizes
- Incorporates pre-loaded linear bearings type RSD and double-sided center rail which act as slide-base (through hardened), including roller cages
- Slide-top and -base have equal lengths
- Can be mounted in horizontal and vertical direction
- Roller cage made of brass
- All mounting surfaces are precision ground.  
*one flank of the slide ( the side opposite to the adjustment screws) is ground parallel to the linear bearings to serve as a Reference Face*
- The slide-top and base are equipped with tapped attachment holes, drilled to a standard configuration offering simple mounting
- Running accuracies are shown on page 128

### OPTIONS

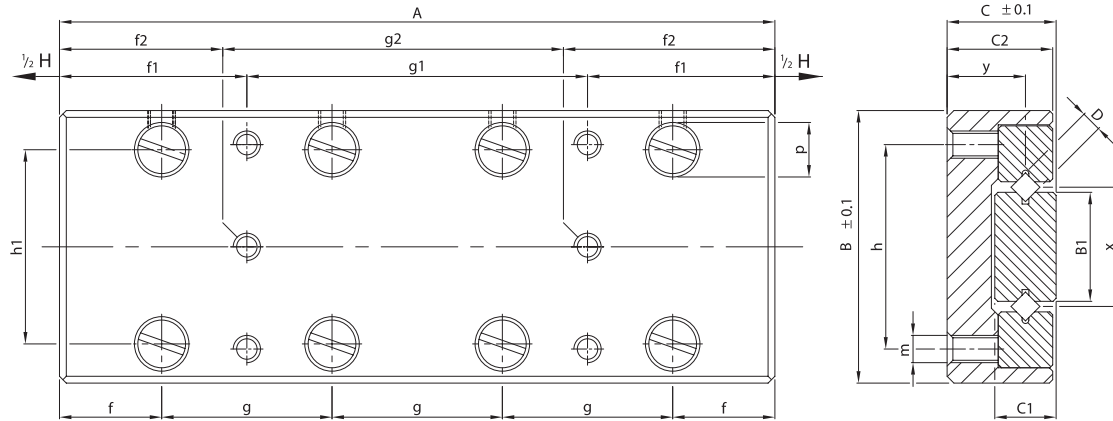
- Selected slides can be supplied with a height tolerance of  $\pm 0.01$  mm
- Cages can be replaced by plastic crossed roller type KZR or type KKLK fitted with balls
- Higher accuracy grade slides
- Stainless steel version
- SF finishing for linear bearings for smooth and ultra-precise operation
- UHV compatible version

### Notes by ordering

When ordering please specify the following:

- Model no. and quantity

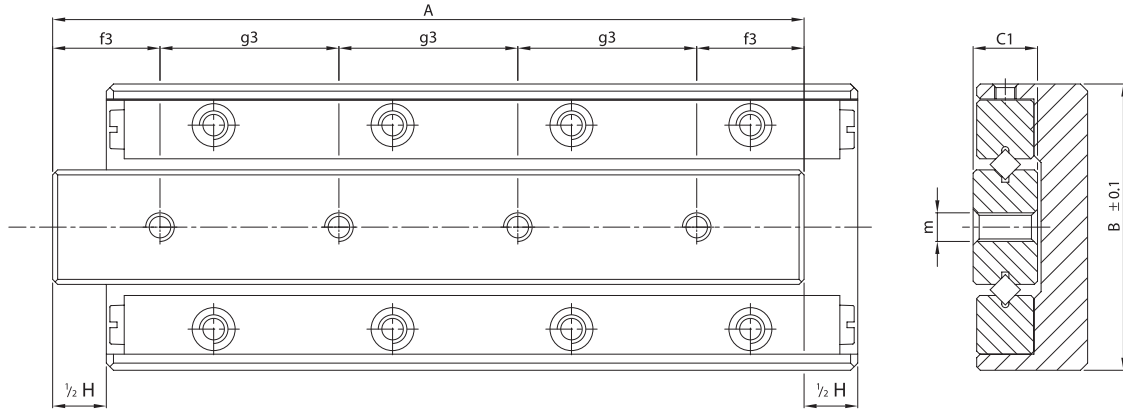
Example: 1 piece slide type RTS-2065



Type					Stroke H										
	A	B	C	D		B1	C1	C2	f	f1	f2	f3	g	g1	
<b>RTS-1525</b>	25				12					3.5	3.5	5	1x10	1x18	
<b>RTS-1535</b>	35				18					3.5	7.5		2x10	1x28	
<b>RTS-1545</b>	45				25					12.5	8.5		3x10	1x20	
<b>RTS-1555</b>	55	20	8	1.5	32	7	5	7.5	7.5	12.5	12.5	7.5	4x10	1x30	
RTS-1565	65				40					12.5	-		5x10	2x20	
RTS-1575	75				45					22.5	-		6x10	1x30	
RTS-1585	85				50					12.5	-		7x10	2x30	
<b>RTS-2035</b>	35				18					3.5	-	7.5	1x15	1x28	
<b>RTS-2050</b>	50				30					3.5	-		2x15	1x43	
<b>RTS-2065</b>	65				40					17.5	-		3x15	1x30	
<b>RTS-2080</b>	80	30	12	2	50	12	7	11.5	10	17.5	-	10	4x15	1x45	
<b>RTS-2095</b>	95				60					17.5	-		5x15	2x30	
RTS-2110	110				70					32.5	-		6x15	1x45	
RTS-2125	125				80					17.5	-		7x15	2x45	
<b>RTS-3055</b>	55				30					7.5	-	10	1x25	1x40	
<b>RTS-3080</b>	80				45					7.5	-		2x25	1x65	
<b>RTS-3105</b>	105				60					27.5	-		3x25	1x50	
RTS-3130	130	40	16	3	75	16	9	15.5	15	27.5	-	15	4x25	1x75	
RTS-3155	155				90					27.5	-		5x25	2x50	
RTS-3180	180				105					52.5	-		6x25	1x75	
RTS-3205	205				130					27.5	-		7x25	2x75	

**Bold** = Short lead time item

Regular = Long lead time item - please request for price and delivery time



g2	g3	h	h1	m	p	x	y	C <sub>dyn</sub> in N	Weight (KG)	Md in Nm	MI in Nm	Mr in Nm
1x18	2x7.5							208	0.03	0.8	0.6	0.8
1x20	2x10							364	0.04	1.4	2.5	1.5
1x28	3x10							468	0.05	1.8	3.7	2.0
1x30	4x10	14	12.6	M2.5	4.6	7.7	5.5	572	0.06	2.2	5.0	2.6
-	5x10							676	0.07	2.6	6.2	3.2
-	6x10							780	0.08	3.0	7.5	3.8
-	7x10							936	0.09	3.6	8.7	4.7
-	1x20							430	0.10	2.8	2.8	2.6
-	2x15							602	0.12	3.9	5.5	3.5
-	3x15							860	0.16	5.6	9.6	5.3
-	4x15	22	20	M3	6	13	8.5	1032	0.19	6.7	12.4	6.6
-	5x15							1290	0.23	8.4	16.5	8.6
-	6x15							1462	0.26	9.5	19.3	9.8
-	7x15							1720	0.29	11.2	23.4	11.9
-	1x35							952	0.10	8.3	10.9	7.2
-	2x25							1360	0.35	11.9	19.0	10.6
-	3x25							1904	0.47	16.7	29.9	15.7
-	4x25	30	28.5	M4	7.5	17.5	11.5	2312	0.59	20.2	38.1	19.6
-	5x25							2856	0.70	25.0	49.0	24.9
-	6x25							3264	0.82	28.6	57.1	29.0
-	7x25							3672	0.92	32.1	65.3	33.0



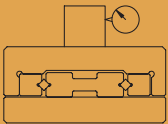
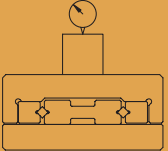
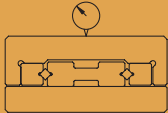
## RUNNING ACCURACIES AND TOLERANCES

PM slides are delivered with accuracies as mentioned in the table below. The checks on the slides are made in unloaded horizontal position. The shown values can also be used for 2-axis combinations. If so, please refer to the belonging slide-strokes. When more axis are used in a

combination it will be more complicated and we offer in these questions our experience.

On request the precision slides will be delivered with a certificate of compliance, measured with a HP laser accuracy equipment.

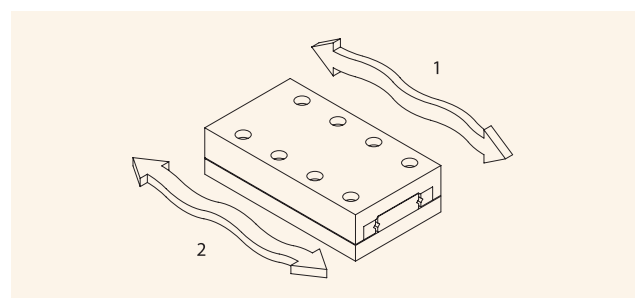
Special higher accuracy grade slides can be requested.

Type	A in mm	 Straight line accuracy in $\mu\text{m}$ over travellenght on the side	 Flatness accuracy in $\mu\text{m}$ over travellenght on the top	 Parallism in $\mu\text{m}$ , neutral position on side top
RT (RTN/RTL)	25-50	2	2	5
	55-95	3	2	6
	105-155	4	3	7
	160-305	4	3	8
	310-510	4	4	10
	510-710	5	4	13
	810-1010	5	5	15
RTA (RTNA/RTLA) Aluminum	25-50	2	2	5
	55-95	3	2	5
	105-155	4	3	8
	160-305	4	3	10
	310-510	4	4	15
	510-710	5	4	20
	810-1010	5	5	25
RTNG	52-91	2	2	5
	106-166	3	2	6
	171-314	3	3	7
	317-517	4	3	10
	524-817	4	4	13
	824-1028	5	5	15
RTS	25-45	3	3	2
	55-95	4	4	4
	105-155	5	5	5
PMM und PMMR	15-30	3	4	5
	35-50	4	4	6
	60-80	5	6	8

**1. STRAIGHT LINE ACCURACY:** this is the amount of error deviates from the ideal straight line of travel in the vertical plane.

**2. FLATNESS ACCURACY:** this is the amount of error deviates from the ideal straight line of travel in the horizontal plane.

**PARALLISM IN M, NEUTRAL POSITION ON SLIDE TOP:** the parallism of the table surfaces occurs unloaded on a flat, horizontal surface in zero-position.



# PM RESEARCH AND PRODUCTION FACILITY



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