

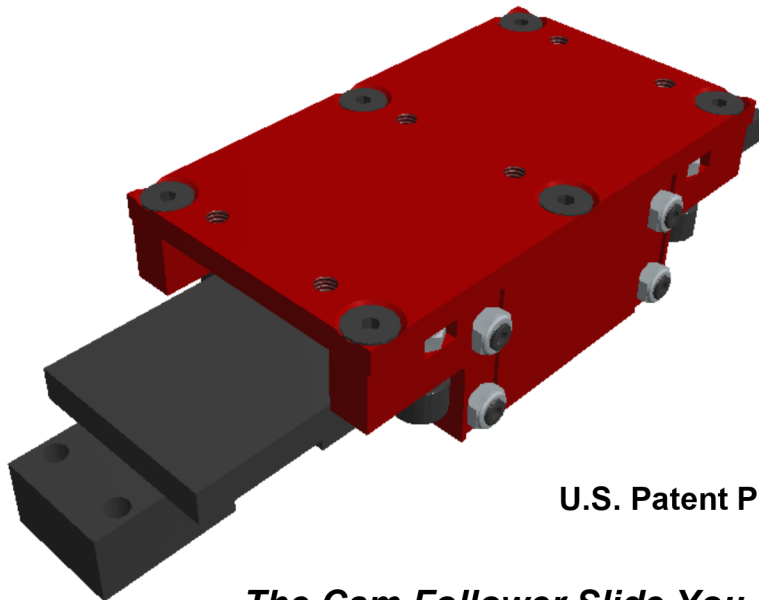


rpGatta inc

custom engineered machinery and automation ■

HD Slides

*Heavy Duty Low Maintenance High Capacity Slides
for Harsh Environments*



U.S. Patent Pending

*The Cam Follower Slide You Have
Been Looking For!*

Heavy Duty, low maintenance, high capacity slides for harsh environments that do not require precision mounting surfaces. Slides are constructed of hardened and ground rail, and high strength aluminum saddles with durable heavy load carrying needle roller bearings.

Slides will perform equally as well in any orientation and when the saddle or the rail is the traveling component. Versatile mounting holes are provided on both the saddles and the rails. Applications requiring high cantilevered loads are well suited for these high moment capacity slides. HD Slides will outperform profile or shaft type anti-friction slides in high production assembly and heavy manufacturing operations where machine up time is a must.

HD Slides

Why HD Slides are Superior:

Bearing contamination causes bearing failures. The HD Slide's design inherently separates contaminants that will collect on the rail in manufacturing environments from the cam follower's bearing needles because the outer race of the sealed needle bearing is what engages the rail. On profile rail and shaft type anti-friction slides, the bearing balls engage directly with the profile rail and shafting. When contaminants get past the seals, the bearings are corrupted.

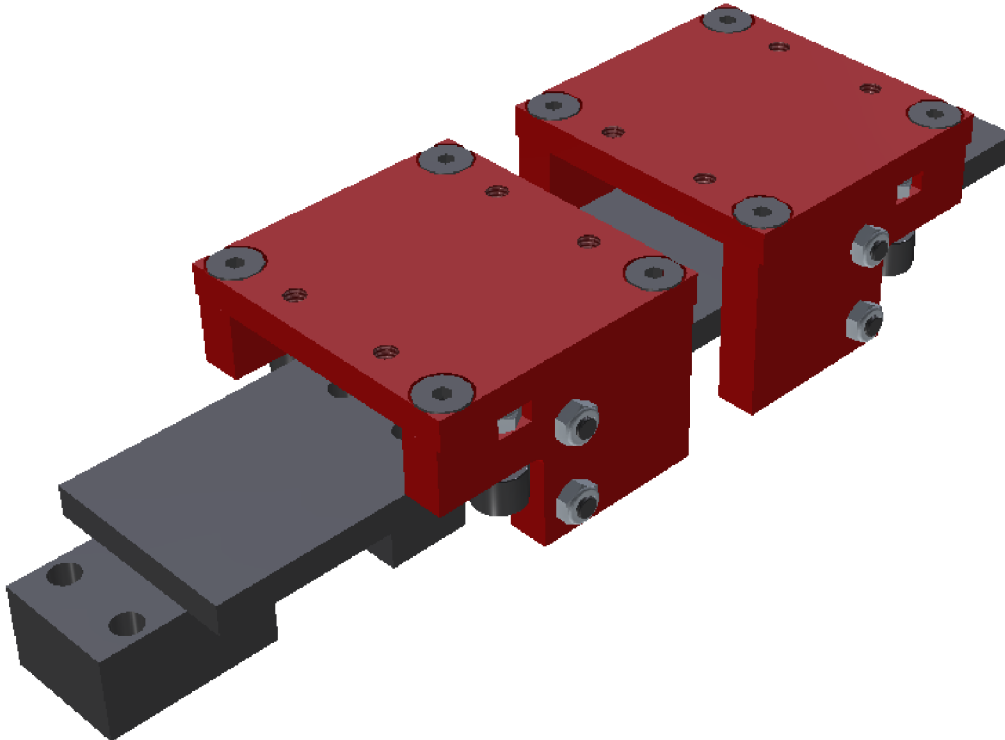
Because HD Slides do not require precision mounting surfaces, milling of mounting surfaces are not required. The elimination of machining not only significantly saves money, but provides design flexibility, particularly on large welded frames.

From a heavy manufacturing environment's practical perspective, the mounting holes provided in the profile rail and linear shaft slides are too small. The smallest size mounting hole you will find in an HD Slide is for a 1/4" diameter bolt.

When removing the HD Slide saddle from the rail, all components remain attached. With a profile type slide, if you remove the saddle, the bearing balls will release from the saddle bearing and are easily lost. When these balls are not replaced when the saddle is reassembled to the rail, the bearing life is significantly reduced.

HD Slides components are available in a number of different materials to meet your equipment requirements. The slide saddles are available in both steel and high strength aluminum. The rails are available in hardened and ground steel for high duty cycle applications or cold rolled steel standard bar stock for low duty cycle and lower budget applications. Moreover, Stainless Steel HD Slide Assemblies are available when corrosion resistant machine components are specified.

HD Slides have a Two Year Limited Warranty.

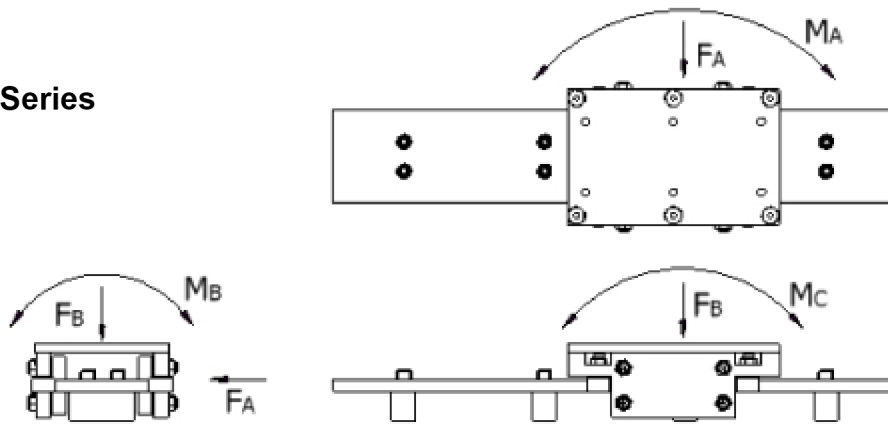


4000 Series vs 5000 Series:

The 4000 Series has one integral saddle that includes all twelve cam followers where the 5000 Series has two split saddles each having six of the twelve cam followers. For applications where a compact self-contained saddle and a single rail are preferred, the 4000 Series is recommended. When applications require a longer mounting surface, a better slide aspect ratio with two parallel HD Slides, and/or higher moment capacities; the 5000 Series is recommended.

HD Slides

4000 Series



Model	Load Capacity			
	F _A		F _B	
	LBS	N	LBS	N
4050	205	911.9	410	1,823.8
4062	300	1,334	600	2,668
4075	410	1,824	820	3,648
4100	685	3,047	1,370	6,094
4125	1,025	4,559	2,050	9,118
4150	1,440	6,405	2,880	12,810
4200	2,730	12,144	5,460	24,288

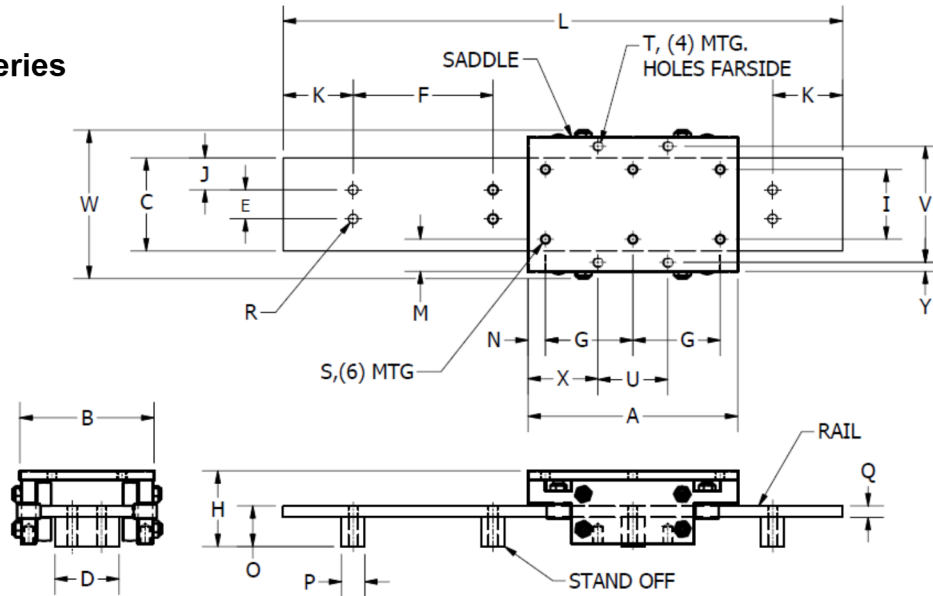
Model	Moment Capacity					
	M _A		M _B		M _C	
	FT-LBS	N-M	FT-LBS	N-M	FT-LBS	N-M
4050	26	25	20	27	34	46
4062	61	83	52	71	87	118
4075	93	126	87	118	128	173
4100	179	242	209	284	243	329
4125	339	460	399	542	429	581
4150	533	723	658	892	658	892
4200	1,374	1,864	1,179	1,598	1,599	2,169

NOTE:

- For Corrosion Resistant HD Slides, use 90% & 50% of above Load and Moment Capacities, Respectively
- Non-Hardened Rail has 60% of R_c 32 Hardened Rail Capacity

HD Slides

4000 Series



DIMENSIONAL DATA (IN)

Model	A	B	C	D	E	F	G	H	I	J	K	L _{MIN}	M	N
4050	4.62	2.50	1.50	0.69	0.38	3.00	2.00	1.81	1.00	0.56	3.00	12.00	0.75	0.31
4062	7.00	3.75	2.50	1.50	1.00	6.00	3.13	2.63	1.38	0.75	3.00	12.00	1.19	0.38
4075	8.00	4.50	3.00	1.75	1.25	6.00	3.50	2.81	2.00	0.88	3.00	12.00	1.25	0.50
4100	9.00	5.75	4.00	2.75	1.25	6.00	3.75	3.25	3.00	1.38	3.00	12.00	1.38	0.75
4125	11.50	7.25	5.00	3.50	2.00	8.00	5.00	4.56	3.75	1.50	3.00	14.00	1.75	0.75
4150	13.00	8.50	6.00	3.50	2.00	10.00	5.50	4.81	4.50	2.00	5.00	20.00	2.00	1.00
4200	18.00	9.50	6.00	3.50	2.00	10.00	8.00	6.63	5.00	2.00	5.00	20.00	2.25	1.00

Model	O	P	Q	R	S	T	U	V	W	X	Y
4050	0.88	0.50	0.25	0.21	1/4-20	1/4-20	1.50	2.00	2.87	1.56	0.18
4062	1.38	1.00	0.38	0.34	5/16-18	5/16-18	2.13	3.13	4.13	2.13	0.25
4075	1.50	1.00	0.50	0.34	3/8-16	3/8-16	2.50	3.75	4.88	2.75	0.31
4100	1.75	1.00	0.50	0.41	7/16-14	7/16-14	3.00	5.00	6.38	3.00	0.38
4125	2.50	1.50	0.75	0.53	1/2-13	1/2-13	3.50	6.25	8.00	4.00	0.50
4150	2.50	1.50	0.75	0.53	5/8-11	5/8-11	3.50	7.50	9.50	4.75	0.50
4200	3.25	1.50	0.75	0.53	3/4-10	3/4-10	4.00	8.00	10.50	7.00	0.75

NOTE:

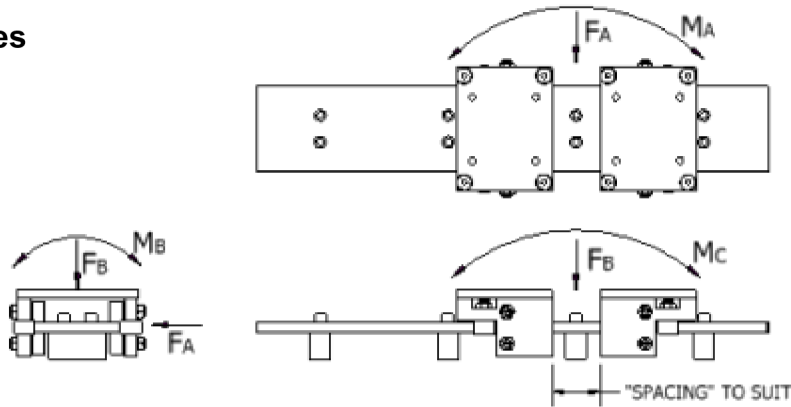
- All tapped holes are a minimum of one bolt diameter deep
- Dimensioning tolerance: +/- .020" except mounting hole to hole is +/- .010
- .001" to .005" and .001" to .012" running clearance between rollers and rail for hardened and not hardened rail respectively
- HD Slide rails are available through hardened (R_c 32) and ground or not hardened (for low duty cycle applications, approximately 10 cycles/day) where both options are machinable for alternate rail mounting holes and for mounting of mechanical stops, sensor brackets, etc.

SLIDE COMPONENT WEIGHTS

Model	Alum. Saddle (LBS)	Steel Saddle (LBS)	Rail (LBS / IN)	Stand Off (LBS)
4050	1.04	2.15	0.10	0.05
4062	2.70	8.10	0.26	0.39
4075	4.00	12.00	0.42	0.39
4100	6.31	18.93	0.56	0.93
4125	13.60	40.80	1.05	2.55
4150	20.75	62.25	1.30	3.00
4200	34.25	102.75	1.30	3.51

HD Slides

5000 Series



Model	Load Capacity			
	FA		FB	
	LBS	N	LBS	N
5050	205	911.9	410	1,823.8
5062	300	1,334	600	2,668
5075	410	1,824	820	3,648
5100	685	3,047	1,370	6,094
5125	1,025	4,559	2,050	9,118
5150	1,440	6,405	2,880	12,810
5200	2,730	12,144	5,460	24,288

Model	Moment Factor					
	KA		KB		KC	
	FT-LBS	N-M	FT-LBS	N-M	FT-LBS	N-M
5050	26	25	20	27	34	46
5062	61	83	52	71	87	118
5075	93	126	87	118	128	173
5100	179	242	209	284	243	329
5125	339	460	399	542	429	581
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5200	1,374	1,864	1,179	1,598	1,599	2,169

NOTE:

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5000 Series Moment Formulas:

$$M_A = (\text{SPACING})(F_A/2) + K_A$$

$$M_B = K_B$$

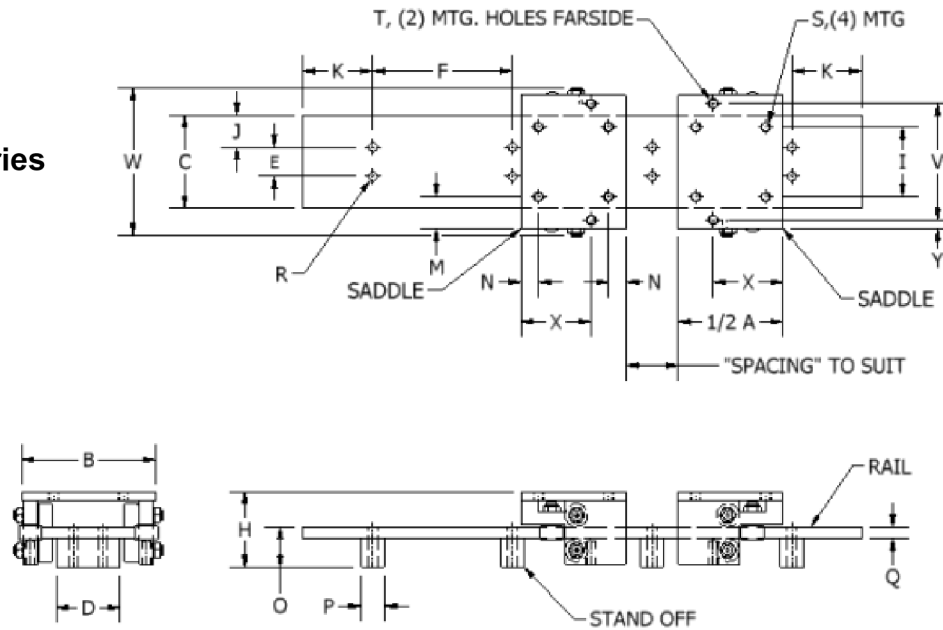
$$M_C = (\text{SPACING})(F_B/2) + K_C$$

NOTE:

The indicated moments and forces may occur simultaneously. Note that Fb, Mb and Mc affect the main guide cam follower set but Fa and Ma only affect the side guide cam follower set.

HD Slides

5000 Series



DIMENSIONAL DATA (IN)

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5050	4.62	2.50	1.50	1.50	1.00	6.00	3.13	2.63	1.38	0.75	3.00	12.00	1.19	0.38
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5200	18.00	9.50	6.00	3.50	2.00	10.00	8.00	6.63	5.00	2.00	5.00	20.00	2.25	1.00

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5125	2.50	1.50	0.75	0.53	1/2-13	1/2-13	3.50	6.25	8.00	4.00	0.50
5150	2.50	1.50	0.75	0.53	5/8-11	5/8-11	3.50	7.50	9.50	4.75	0.50
5200	3.25	1.50	0.75	0.53	3/4-10	3/4-10	4.00	8.00	10.50	7.00	0.75

NOTE:

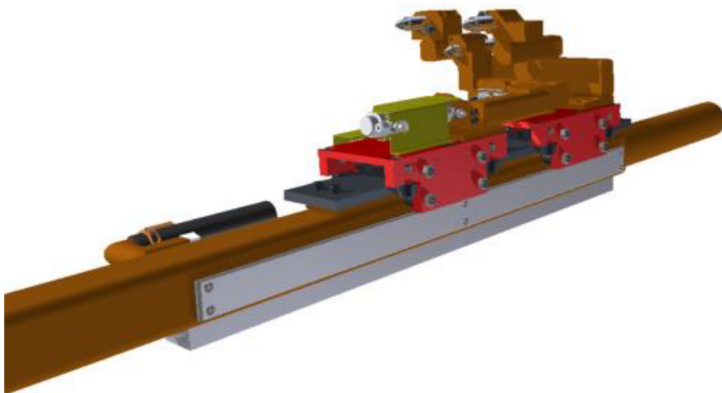
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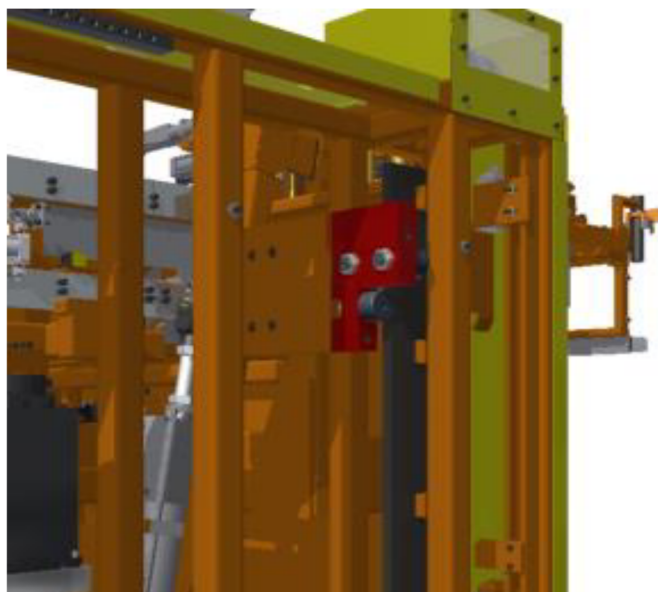
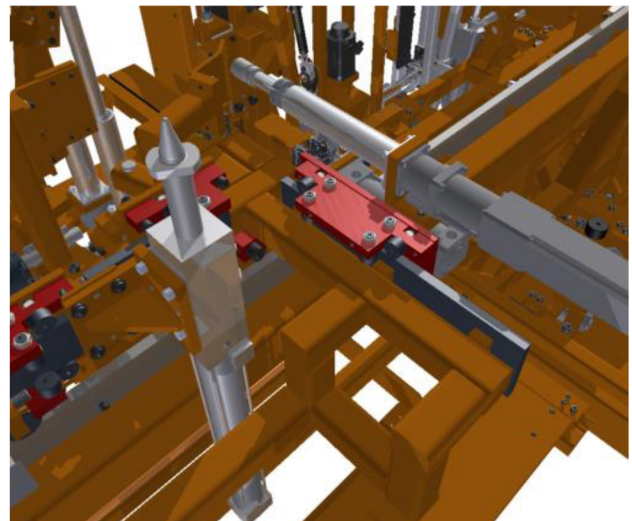
HD Slides

HD Slide Example Applications:



Cockpit Module Lift
Pin Slide

Fastening Equipment:
Horizontal Tool Slide

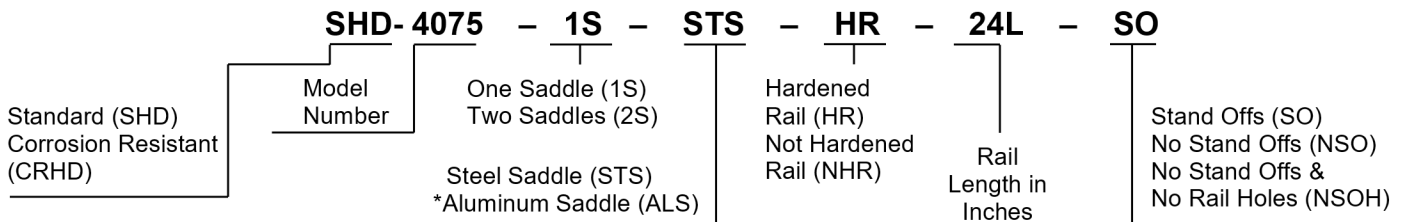


Vertical Lift Guide



How to Order:

Model Number Coding



Standard Rail Lengths = (z) F + 2K
 [Standard Rail Lengths up to 9 Feet Available]
 z = # of Mounting Bolt Hole Standard Spaces (F) to Suit Application
 F and K for each Model is found in the "DIMENSIONAL DATA" Chart on the previous page
 [Custom Lengths Available Upon Request]

*Aluminum Saddles are not available for Corrosion Resistant Slides

For a quotation and to order, please contact:

Bearings Distributors, Inc.

Call (800) 676-4765



435 Gentry Drive
Aurora, Ohio 44202

OFFICE (330) 562-2288 - FAX (330) 562-3223

E-mail: HDslides@rpgatta.com

www.rpgatta.com

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