



Haydon
Motion Solutions



TM

Precision Linear Motion Products Catalog and Design Guide



Leadscrews



Anti-Backlash Nuts



Custom Leadscrew Assemblies



Can-Stack Linear Actuators



Hybrid Linear Actuators



LRS™ Motorized Linear Rail Systems



ScrewRail® Assemblies



RGS® Rapid Guide Screws



Spline Shafts, Slides and Linear Guides

Kerk® Rapid Guide Screw Linear Slides

The **Kerk® RGS® Rapid Guide Screw** is a screw-driven slide that offers exceptional linear speed, accurate positioning, and long life in a compact, value-priced assembly. The length and speed of the RGS is not limited by critical screw speed, allowing high RPM and linear speeds, even over long spans.

Standard leads include .100-in, .200-in, .500-in and 1.00-in (2.54, 5.08, 12.7 and 25.4 mm) travel per revolution. Many optional leads, both inch and metric based, offer everything from high efficiency to non-backdriving leads for vertical applications, eliminating the need for brakes. With HaydonKerk Motion Solutions™ wide range of available leads, speeds of more than 60 inches per second (1.5 meters per second) are possible, rivaling belts and cables while offering superior positioning accuracy, repeatability and axial stiffness.

The Kerk RGS slide includes a precision aluminum guide and carriage and is driven by a precision rolled stainless steel lead screw. The moving surfaces include Kerkite® high performance polymers running on Kerkote® TFE coating.

The RGS slide has a unique, compact profile that provides exceptional torsional stiffness and stability for its size and weight. The integral mounting base allows support over the entire length if desired. Lengths up to 8 feet (2.4 meters) can readily be built, and longer lengths are possible on a special order basis.

RGS slides come standard with a wear-compensating, anti-backlash driven carriage. Additional driven or passive carriages can be added, along with application specific customization. Linear guides, without the drive screw, are also available.



Standard
Kerk RGS

Haydon™ MotoRGS™ linear slide
integrated with Size 17 stepper motor
linear actuator.

Identifying the part number codes when ordering Rapid Guide Screw Slides

RG	W	06	K	R	M	43	0100	12	XXX
Prefix: RG = Rapid Guide Screw	Frame Style S = Standard W = Wide sensor mount capability	Frame Size: Load 04 = 15 lbs (not available with W (wide) Frame Style) 06 = 35 lbs 08 = 50 lbs 10 = 100 lbs	Coating K = Kerkote® X = Special (ex: Kerkote with grease)	Thread R = Right hand L = Left hand N = No screw	Drive/Mounting A = None B = No motor, in-line motor mount M = Motorized	Motor Frame 00 = No motor 43 = Size 17 Stepper Motor	Nominal Thread Lead Code (inches) Code numbers in Part Number Selector Chart	Stroke (in inches rounded up) 07 = 7-in 08 = 8-in 12 = 12-in (up to 40-in max.)	Unique Identifier Number assigned by HaydonKerk Motion Solutions (for added features such as custom configurations, etc.)

EXAMPLE:

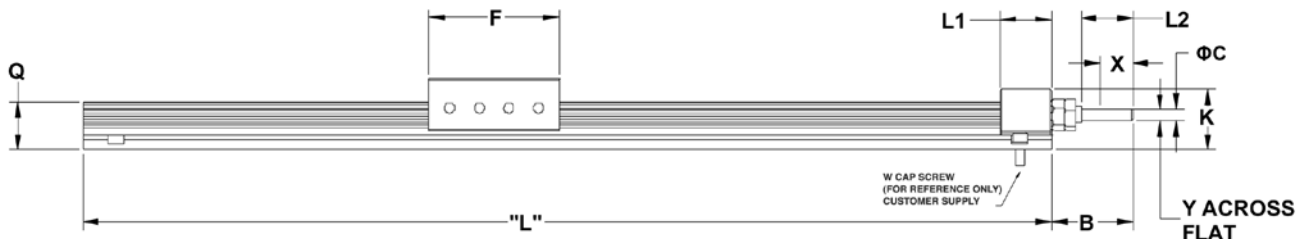
RGW06KR-M43-0100-12-xxx = RGS®, wide frame style for sensor mounting, for 35 lb load, leadscrew with Kerkote® TFE coating, right hand thread, motorized with Size 17 stepper motor, 0.1-in (2.54 mm) leadscrew diam., 12-in stroke with no added features.

For assistance or order entry, call the HaydonKerk Motion Solutions™ Rapid Guide Screw technical advisors at 603.465.7227. Other systems and styles may be available. Visit www.HaydonKerk.com for recent updates.

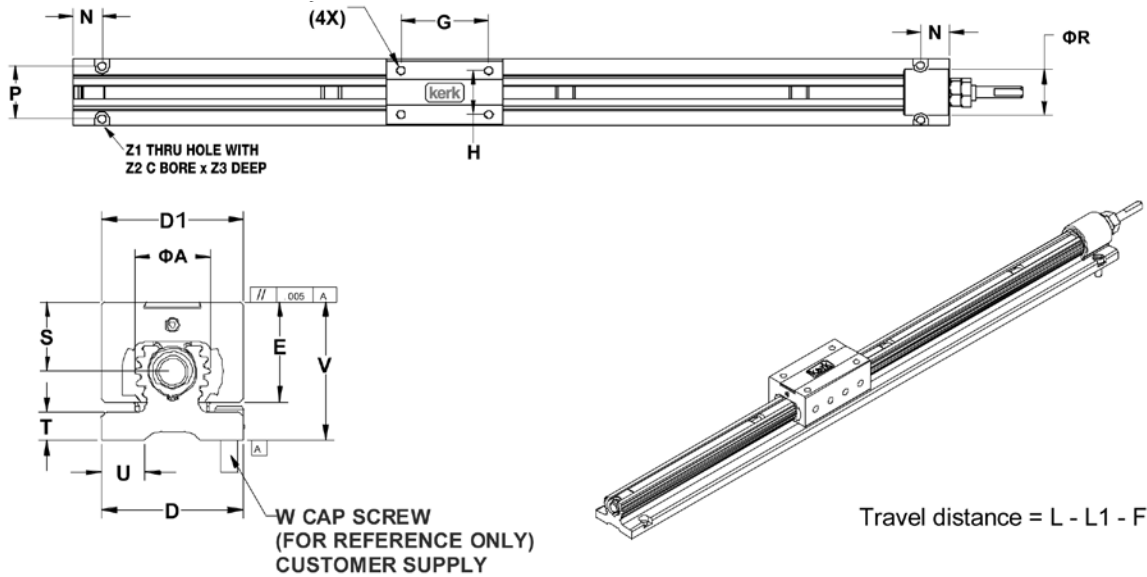
RGS Linear Slide: Standard Series

Rapid Guide Screw	A inch (mm)	B inch (mm)	C inch (mm)	D inch (mm)	D1 inch (mm)	E inch (mm)	F inch (mm)	G inch (mm)	H inch (mm)	I	K inch (mm)	L1 inch (mm)	L2 inch (mm)	N inch (mm)
RGS 04	.40 (10.2)	.83 (21.1)	.1250 (3.175)	.75 (19.1)	.750 (19.1)	.53 (13.5)	1.4 (36)	1.000 (25.40)	.500 (12.7)	4-40 UNC	.6 (15)	.53 (13.5)	.47 (11.9)	.375 (9.53)
RGS 06	.60 (15.2)	1.25 (31.8)	.1875 (4.762)	1.13 (28.6)	1.125 (28.6)	.79 (20.1)	2.0 (51)	1.500 (38.10)	.750 (19.1)	6-32 UNC	.9 (23)	.80 (20.3)	.80 (20.3)	.500 (12.70)
RGS 08	.80 (20.3)	1.50 (38.1)	.2500 (6.350)	1.60 (40.6)	1.60 (40.6)	1.06 (26.9)	2.7 (69)	1.750 (44.45)	1.000 (25.4)	10-24 UNC	1.3 (33)	1.09 (27.7)	.77 (19.6)	.625 (15.88)
RGS 10	1.00 (25.4)	1.75 (44.5)	.3125 (7.938)	2.00 (50.8)	2.000 (50.8)	1.32 (33.5)	3.3 (83)	2.250 (57.15)	1.250 (31.8)	1/4-20 UNC	1.6 (41)	1.30 (33.0)	1.30 (33.0)	.750 (19.05)

Rapid Guide Screw	P inch (mm)	Q inch (mm)	R inch (mm)	S inch (mm)	T inch (mm)	U inch (mm)	V inch (mm)	W	X inch (mm)	Y inch (mm)	Z1 inch (mm)	Z2 inch (mm)	Z3 inch (mm)
RGS 04	.600 (15.24)	.50 (12.7)	.52 (13.2)	.37 (9.4)	.15 (3.8)	.23 (5.8)	.73 (18.5)	4-40 SHCS	.38 (9.7)	.115 (2.92)	.11 (2.8)	.20 (5.1)	.09 (2.3)
RGS 06	.900 (22.86)	.74 (18.8)	.80 (20.3)	.55 (14.0)	.22 (5.6)	.35 (8.9)	1.10 (27.9)	6-32 SHCS	.50 (12.7)	.170 (4.32)	.14 (3.6)	.25 (6.4)	.13 (3.3)
RGS 08	1.250 (31.75)	1.00 (25.4)	1.04 (26.4)	.74 (18.8)	.30 (7.6)	.51 (13.0)	1.47 (37.3)	10-24 SHCS	.70 (17.8)	.220 (5.59)	.20 (5.1)	.33 (8.4)	.19 (4.8)
RGS 10	1.500 (38.10)	1.25 (31.8)	1.30 (33.0)	.92 (23.4)	.375 (9.5)	.64 (16.3)	1.83 (46.5)	1/4-20 SHCS	.88 (22.4)	.280 (7.11)	.26 (6.6)	.50 (12.7)	.22 (5.6)



RGS Linear Slide: Standard Series



Rapid Guide Screw	Inch Lead	Thread Lead Code	Nominal Rail Diam.	Nominal Screw Diam.	Typical Drag Torque	Life @ 1/4 Design Load	Torque-to-Move Lead	Design Load	Screw Inertia
	inch (mm)		inch (mm)	inch (mm)	oz - in (NM)	inch (cm)	oz-in/lb (NM/Kg)	lbs (Kg)	oz-in sec ² /in (KgM ² /M)
RGS 04	.100 (2.54)	0100	0.4 (10.2)	1/4" (6.4)	3.0 (.02)	100,000,000 (254,000,000)	1.0 (.016)	15 (7)	.3 x 10 ⁻⁵ (6.5 x 10 ⁻⁶)
RGS 04	.200 (5.08)	0200	0.4 (10.2)	1/4" (6.4)	4.0 (.03)	100,000,000 (254,000,000)	1.5 (.023)	15 (7)	.3 x 10 ⁻⁵ (6.5 x 10 ⁻⁶)
RGS 04	.500 (12.70)	0500	0.4 (10.2)	1/4" (6.4)	5.0 (.04)	100,000,000 (254,000,000)	2.5 (.039)	15 (7)	.3 x 10 ⁻⁵ (6.5 x 10 ⁻⁶)
RGS 04	1.000 (25.40)	1000	0.4 (10.2)	1/4" (6.4)	6.0 (.04)	100,000,000 (254,000,000)	4.5 (.070)	15 (7)	.3 x 10 ⁻⁵ (6.5 x 10 ⁻⁶)
RGS 06	.100 (2.54)	0100	0.6 (15.2)	3/8" (9.5)	4.0 (.03)	100,000,000 (254,000,000)	1.0 (.016)	35 (16)	1.5 x 10 ⁻⁵ (4.2 x 10 ⁻⁶)
RGS 06	.200 (5.08)	0200	0.6 (15.2)	3/8" (9.5)	5.0 (.04)	100,000,000 (254,000,000)	1.5 (.023)	35 (16)	1.5 x 10 ⁻⁵ (4.2 x 10 ⁻⁶)
RGS 06	.500 (12.70)	0500	0.6 (15.2)	3/8" (9.5)	6.0 (.04)	100,000,000 (254,000,000)	2.5 (.039)	35 (16)	1.5 x 10 ⁻⁵ (4.2 x 10 ⁻⁶)
RGS 06	1.000 (25.40)	1000	0.6 (15.2)	3/8" (9.5)	7.0 (.05)	100,000,000 (254,000,000)	4.5 (.070)	35 (16)	1.5 x 10 ⁻⁵ (4.2 x 10 ⁻⁶)
RGS 08	.100 (.254)	0100	0.8 (20.3)	1/2" (12.7)	5.0 (.04)	100,000,000 (254,000,000)	1.1 (.018)	50 (22)	5.2 x 10 ⁻⁵ (20.0 x 10 ⁻⁶)
RGS 08	.200 (5.08)	0200	0.8 (20.3)	1/2" (12.7)	6.0 (.04)	100,000,000 (254,000,000)	1.7 (.027)	50 (22)	5.2 x 10 ⁻⁵ (20.0 x 10 ⁻⁶)
RGS 08	.500 (12.70)	0500	0.8 (20.3)	1/2" (12.7)	7.0 (.05)	100,000,000 (254,000,000)	3.0 (.047)	50 (22)	5.2 x 10 ⁻⁵ (20.0 x 10 ⁻⁶)
RGS 08	1.000 (25.40)	1000	0.8 (20.3)	1/2" (12.7)	8.0 (.06)	100,000,000 (254,000,000)	6.0 (.096)	50 (22)	5.2 x 10 ⁻⁵ (20.0 x 10 ⁻⁶)
RGS 10	.100 (2.54)	0100	1.0 (25.4)	5/8" (15.9)	5.0 (.04)	100,000,000 (254,000,000)	1.3 (.020)	100 (46)	14.2 x 10 ⁻⁵ (3.9 x 10 ⁻⁵)
RGS 10	.200 (5.08)	0200	1.0 (25.4)	5/8" (15.9)	6.5 (.05)	100,000,000 (254,000,000)	2.0 (.031)	100 (46)	14.2 x 10 ⁻⁵ (3.9 x 10 ⁻⁵)
RGS 10	.500 (12.70)	0500	1.0 (25.4)	5/8" (15.9)	7.0 (.05)	100,000,000 (254,000,000)	3.0 (.047)	100 (46)	14.2 x 10 ⁻⁵ (3.9 x 10 ⁻⁵)
RGS 10	1.000 (25.40)	1000	1.0 (25.4)	5/8" (15.9)	8.5 (.06)	100,000,000 (254,000,000)	6.5 (.101)	100 (46)	14.2 x 10 ⁻⁵ (3.9 x 10 ⁻⁵)

*RGS® assemblies with lengths over 3 feet and/or leads higher than .5-in will likely have higher drag torque than listed values.

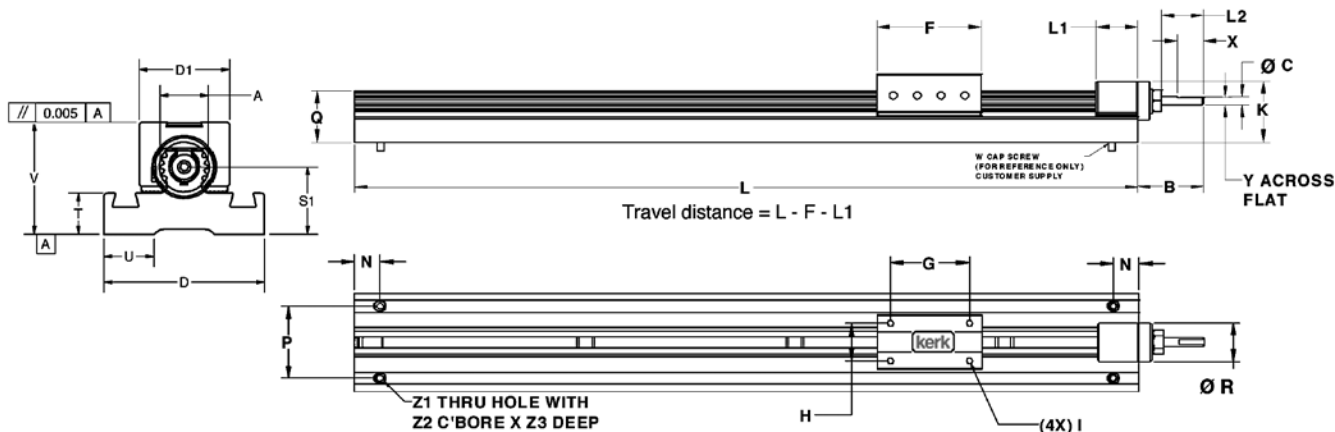
Kerk® RGW Linear Slide Series and RGM Motor Mount – wider style with mounting slots and brackets

The RGW Series configurations of the Rapid Guide Screw Linear Slide simplify motor and limit switch sensor mounting. Both versions include slots for sensor brackets and mounting provisions for a flag on the carriage, while the RGM Motor Mount series also includes a bracket for motor mounting. The motor, coupling and sensors are not provided, but a sensor mounting kit for a common optical sensor is available from HaydonKerk Motion Solutions (see Sensor Mount Kit).



RGW Series

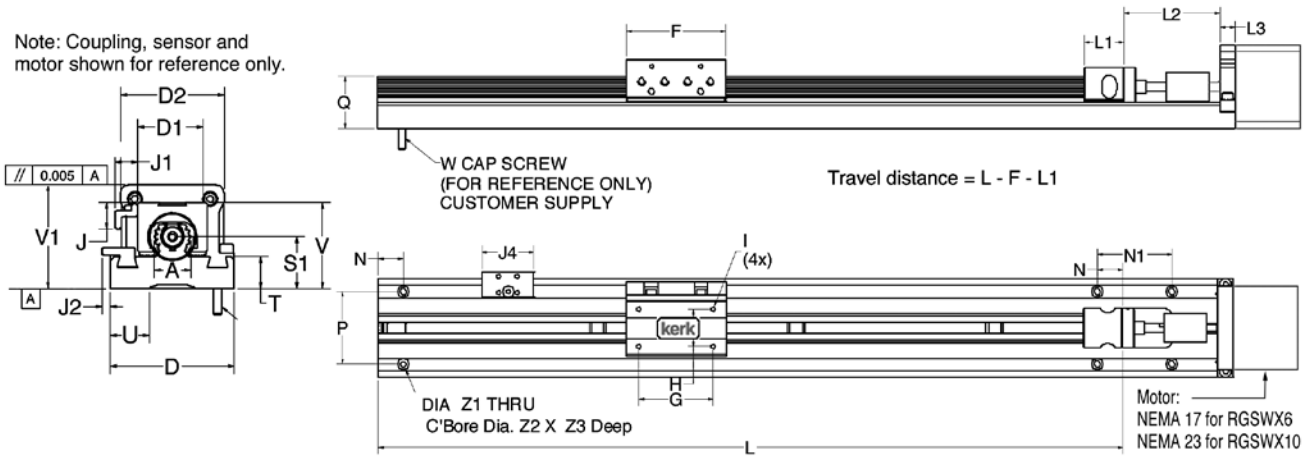
Wide Rapid Guide Screw	A inch (mm)	B inch (mm)	C inch (mm)	D inch (mm)	D1 inch (mm)	F inch (mm)	G inch (mm)	H inch (mm)	I inch (mm)	K inch (mm)	L1 inch (mm)	L2 inch (mm)	N inch (mm)
RGW 06	.60 (15.2)	1.25 (31.8)	.1875 (4.762)	2.00 (50.8)	1.13 (28.6)	2.0 (51)	1.500 (38.10)	.750 (19.05)	6-32 (UNC)	1.2 (30)	.80 (20.3)	.80 (20.3)	.500 (12.70)
RGW 10	1.00 (25.4)	1.75 (44.5)	.3125 (7.938)	3.38 (85.7)	2.00 (50.8)	3.3 (83)	2.250 (57.15)	1.250 (31.75)	1/4-20 (UNC)	1.9 (48)	1.30 (33.0)	1.30 (33.0)	.750 (19.05)
	P inch (mm)	Q inch (mm)	S1 inch (mm)	T inch (mm)	U inch (mm)	V inch (mm)	W inch (mm)	X inch (mm)	Y inch (mm)	Z1 inch (mm)	Z2 inch (mm)	Z3 inch (mm)	
RGW 06	1.460 (37.08)	1.04 (26.4)	.83 (21.2)	.51 (13.0)	.63 (16.0)	1.39 (35.3)	6-32 SHCS	.50 (12.7)	.170 (4.32)	.14 (3.7)	.25 (6.4)	.14 (3.6)	
RGW 10	2.600 (66.04)	1.56 (39.6)	1.22 (31.0)	.69 (17.5)	1.33 (33.8)	2.15 (54.6)	1/4-20 SHCS	.88 (22.4)	.280 (7.11)	.26 (6.6)	.40 (10.2)	.43 (10.9)	



RGM Motor Mount Series

Wide, Motor Mount Rapid Guide Screw	A	D	D1	D2	F	G	H	I	J	J1	J2	J4	L1	L2
	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)		inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)
RGM 06	.60 (15.2)	2.00 (50.8)	1.13 (28.6)	1.67 (42.2)	2.0 (51)	1.500 (38.10)	.750 (19.05)	6-32 UNC	.43 (10.9)	.36 (9.2)	.14 (3.5)	1.1 (28)	.80 (20.3)	1.93 (48.9)
RGM 10	1.00 (25.4)	3.38 (85.7)	2.00 (50.8)	2.22 (56.4)	3.3 (83)	2.250 (57.15)	1.250 (31.75)	1/4-20 UNC	.63 (16.0)	.36 (9.2)	NA	1.1 (28)	1.30 (33.0)	2.16 (54.9)

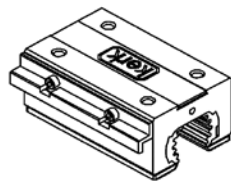
Wide, Motor Mount Rapid Guide Screw	L3	N	N1	P	Q	S1	T	U	V	V1	Z1	Z2	Z3
	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)
RGM 06	.31 (7.9)	.500 (12.70)	1.50 (38.1)	1.460 (37.08)	1.04 (26.4)	.83 (21.2)	.51 (13.0)	.63 (16.0)	1.39 (35.3)	1.67 (42.4)	.14 (3.6)	.25 (6.4)	.14 (3.6)
RGM 10	.50 (12.7)	.750 (19.05)	1.50 (38.1)	2.600 (66.04)	1.56 (39.6)	1.22 (31.0)	.69 (17.5)	1.33 (33.8)	2.15 (54.6)	2.34 (59.3)	.26 (6.6)	.40 (10.2)	.43 (10.9)



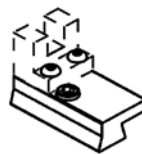
Sensor Mounting Kit

Sensor mounting kits, based on a U-channel optical sensor, are available for the RGSW and RGSWX series. Each kit includes one flag, three sensor mounts, and all mounting hardware. Sensors are not included in the kit and must be ordered separately from sensor manufacturer. One recommended sensor is Sunx part number PM-L24.

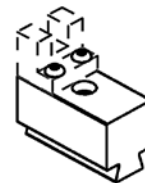
Part Numbers: **RGSW06SK** Sensor kit for RGSW6000 or RGSWX6000
RGSW10SK Sensor kit for RGSW10000 or RGSWX10000



Flag
Mounts to side of carriage



RGSW6 Sensor Mount
Mounts in slot on RGS base



RGSW10 Sensor Mount
Mounts in slot on RGS base

Kerk® RGS® Linear Guide Series

Kerk RGS Linear Guides provide a strong, stable platform for a variety of linear motion applications. The RGS Linear Guide is designed to easily mount to any flat surface, or bridge free spans, with a convenient, easy-access carriage. The splined aluminum profile, with Kerkote® TFE coating, combines low friction linear guidance with torsional stability. The Linear Guides can be configured in lengths up to 8 feet without special tooling, with one or more carriages, in standard or custom configurations. The wide linear guide series features a wider base for even greater stability. Kerk® RGS Linear Guides are constructed of high strength, extruded aluminum and Kerkite® composite polymer with Kerkote TFE on all critical surfaces. This proven combination of materials assures exceptionally long life without the need for adjustment, lubrication or maintenance. The simplicity of the RGS Linear Guide makes it both easy to use and a great value. Similar to other HaydonKerk Motion Solutions products, it can be easily modified to custom configurations to suit most applications. The Kerk® RGS Linear Guides are perfect companions to the Kerk® RGS series of screw-driven linear slides. All Kerk® RGS Series products share the same rail and carriage geometry and simplify equipment design and reduce part counts, and are equally suitable for use with Kerk® leadscrews or any other type of drive or actuator.



Identifying the part number codes when ordering RGS Linear Guides

RG	S	06	K	N	A	00	0000	12	XXX
Prefix: RG = RG Compatible Linear Guide	Frame Style S = Standard W = Wide sensor mount capability	Carriage Guide Width 04 = 0.4-in (10.2) 06 = 0.6-in (15.2) 10 = 1.0-in (25.4)	Coating K = Kerkote® X = Custom	Thread N = No screw	Drive/ Mounting A = None	Motor Frame 00 = No motor	Screw 0000 = No screw	Stroke (in inches rounded up) 07 = 7-in 08 = 8-in 12 = 12-in (up to 40-in max.)	Unique Identifier Number assigned by Hay- donKerk Motion Solutions (for added features such as custom configura- tions, etc.)

EXAMPLE:

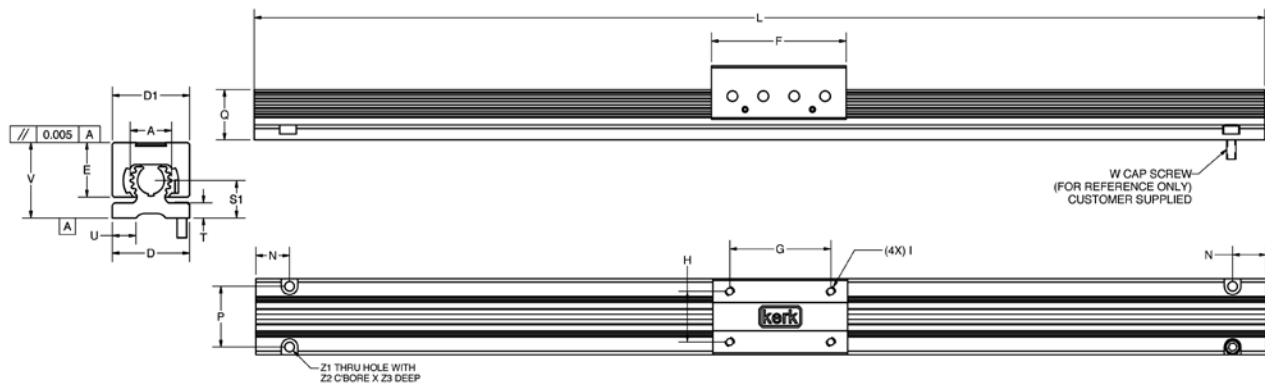
RGS06KN-A00-0000-12-xxx = Linear Guide, standard frame width, rail guide width 0.6-in, Kerkote® TFE coated surface areas, 12-in stroke with no added features.

For assistance or order entry, call the HaydonKerk Motion Solutions Linear Guide technical advisors at 603.465.7227. Other systems and styles may be available. Visit www.HaydonKerk.com for recent updates.

RGS® Linear Guide

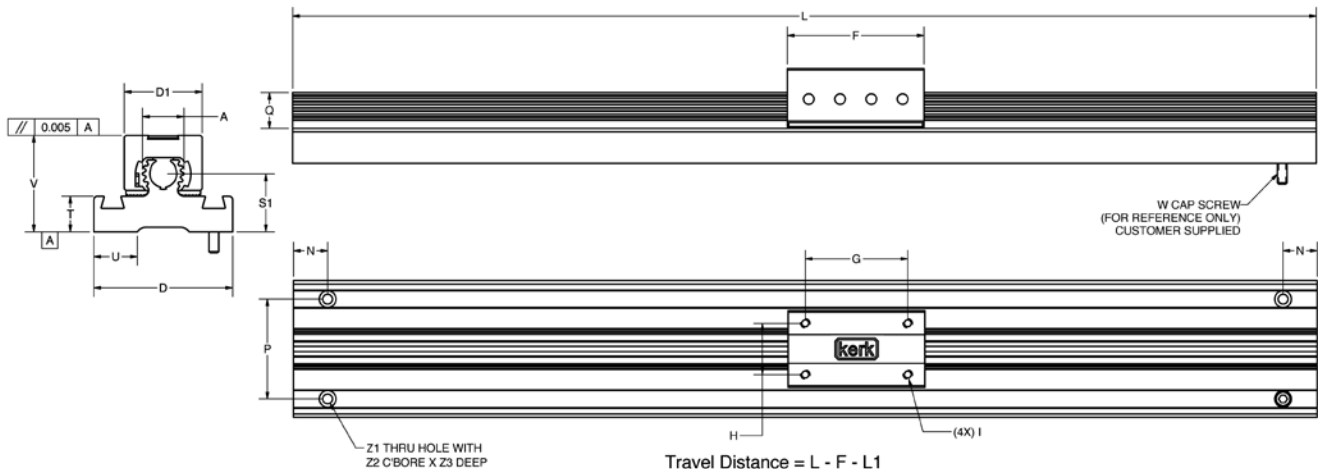
RGS Linear Guide: Standard Series

Linear Guide	A	D	D1	E	F	G	H	I	N	P	Q	S	T	U	V	W	Z1	Z2	Z3
	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)		inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)		inch (mm)	inch (mm)	inch (mm)
RGS 04	.40 (10.2)	.75 (19.1)	.75 (19.1)	.53 (13.5)	1.4 (36)	1.000 (25.40)	.500 (12.70)	4-40 UNC	.375 (9.53)	.600 (15.24)	.50 (12.7)	.37 (9.4)	.15 (3.8)	.23 (5.8)	.73 (18.5)	4.40 SHCS	.11 (2.8)	.20 (5.1)	.09 (2.3)
RGS 06	.60 (15.2)	1.13 (28.6)	1.13 (28.6)	.79 (200.1)	2.0 (51)	1.500 (38.10)	.750 (19.05)	6-32 UNC	.500 (12.70)	.900 (22.86)	.74 (18.8)	.55 (14.0)	.22 (5.6)	.35 (8.9)	1.10 (27.9)	6-32 SHCS	.14 (3.6)	.25 (6.4)	.13 (3.3)
RGS 10	1.00 (25.4)	2.00 (50.8)	2.00 (50.8)	1.32 (33.5)	3.3 (83)	2.250 (57.15)	1.250 (31.75)	1/4-20 UNC	.750 (19.05)	1.500 (38.10)	1.25 (31.8)	.92 (23.4)	.375 (9.5)	.64 (16.3)	1.83 (46.5)	1/4-20 SHCS	.26 (6.6)	.50 (12.7)	.22 (5.6)



RGW Linear Guide: Wide Series

Linear Guide	A	D	D1	F	G	H	I	N	P	Q	S1	T	U	V	W	Z1	Z2	Z3
	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)		inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)		inch (mm)	inch (mm)	inch (mm)
RGW 06	.60 (15.2)	2.00 (50.8)	1.13 (28.6)	2.0 (51)	1.500 (38.10)	.750 (19.05)	6-32 UNC	.500 (12.70)	1.460 (37.08)	1.04 (26.4)	.83 (21.2)	.51 (13.0)	.63 (16.0)	1.39 (35.3)	6-32 SHCS	.14 (3.6)	.25 (6.4)	.14 (3.6)
RGW 10	1.00 (25.4)	3.38 (85.7)	2.00 (50.8)	3.3 (83)	2.250 (57.15)	1.250 (31.75)	1/4-20 UNC	.750 (19.05)	2.600 (66.04)	1.56 (39.6)	1.22 (31)	.69 (17.5)	1.33 (33.8)	2.15 (54.6)	1/4-20 SHCS	.26 (6.6)	.40 (10.2)	.43 (10.9)



Haydon™ LRS™ – Linear Rail Systems slide technology



Haydon Linear Rail Systems (LRS) use a precision leadscrew assembly mechanism to provide controlled positioning along the axis of a robust aluminum linear slide. The LRS consists of a stationary base with a load bearing carriage that travels along a custom-extruded aluminum rail of varying lengths. The carriage is a small platform with sliding element linear bearings that glide within this specially configured extrusion. The leadscrew used in the system is provided with various leads and shaft end configurations that accommodate virtually any source of rotary power.

Key Product Features

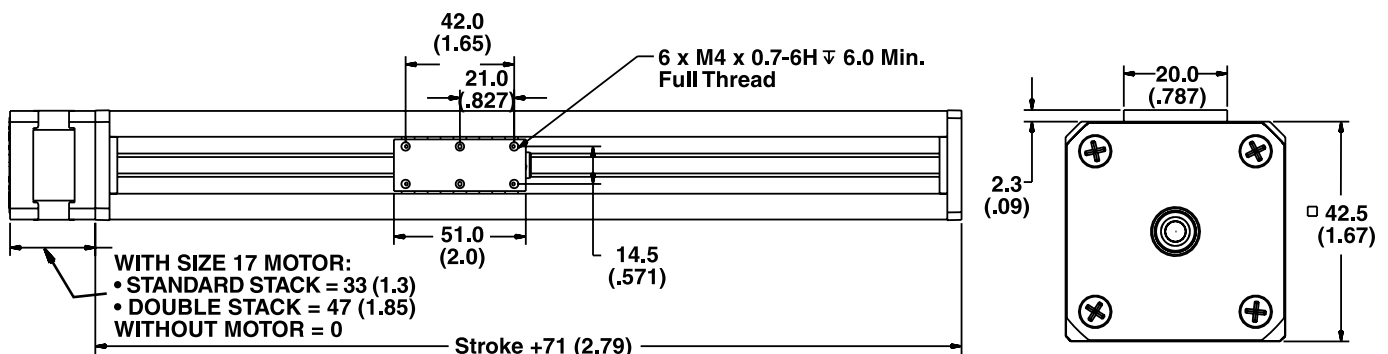
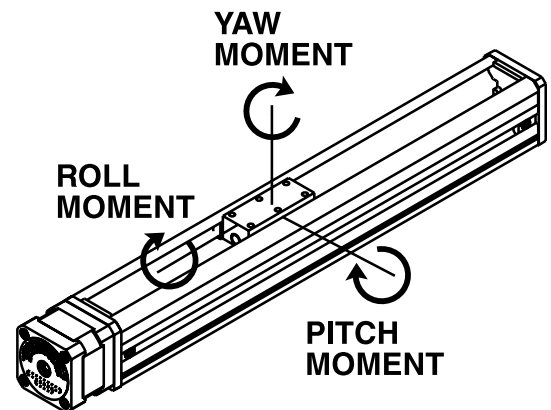
- “T” slots integrated into exterior rail bottom and sides that accommodate full length support and various mounting options.
- Loads easily attach to the compact, moving carriage with four or six M4 x 0.7 size screws.
- Load bearing carriage moves efficiently and smoothly within the internal rail geometry of this specially designed aluminum extrusion.
- Rail provides end-to-end axial stability and precise motion system accuracy.
- Automatic adjustments of slide bearing play with a patent pending “anti-backlash” linear bearing.
- Rated life equals that of the existing leadscrews of similar size.
- Leadscrew end configurations adapt to various rotary motion sources.
- Kerkote® or Black Ice™ TFE coatings on a 303 stainless steel leadscrew.
- Designed to Metric global engineering standards.
- For extreme control, LRS can be used with CMP or WDG high-precision anti-backlash nuts, as well as a freewheeling general purpose nut.

Performance Specifications

Width	Length of Stroke (max)	Speed (max)	Straight Line Accuracy	Twist
1-5/8-in square (4.3 cm square)	40-in (1000 mm)	20-in/sec (0.5 M/sec)	+/- 0.012-in/ft (+/- 1.0 mm/M)	+/- 0.25°/ft (+/- 0.75°/M)

Load Ratings (max)

Top Load “Z” Direction	Hanging / Gantry	Max. Pitch Moment	Max. Moment Roll	Max. Moment Yaw
50 lbs (225 N)	50 lbs (225 N)	75-in – lbs (8.5 N – M)	75-in – lbs (8.5 N – M)	75-in – lbs (8.5 N – M)



Identifying the part number codes when ordering

LR	W	04	B	R	M	43	0025	12	XXX
Prefix: LR = Linear Rail System (LRS)	Nut Style B = BFW nut W = WDG nut G = Guide only	Rail Frame Size: 04 = 50 lbs	Coating S = Uncoated B = Black Ice™ N = No screw	Thread R = Right hand L = Left hand N = No screw X = Custom	Drive/Mounting A = None B = No motor, in-line motor mount M = Motorized	Motor Frame 00 = No motor 43 = Size 17 Stepper Motor XX = Custom	Nominal Thread Lead Code (in inches) 0000 = No screw	Stroke (in inches rounded up) 07 = 7-in 08 = 8-in 12 = 12-in (up to 40-in max.)	Unique Identifier Number assigned by HaydonKerk Motion Solutions (for added features such as custom configurations, etc.)

Select from Lead Code Chart

Lead (inch)	Lead (mm)	Thread Lead Code
-------------	-----------	------------------

0.025	0.635	0025
0.03125	0.794	0031
0.0394	1.0	0039
0.05	1.27	0050
0.0625	1.588	0063
0.0787	2.0	0079
0.1	2.54	0100
0.125	3.175	0125
0.1969	5.0	0197
0.25	6.35	0250
0.3937	10.0	0394
0.5	12.7	0500
0.75	19.05	0750
1.0	25.4	1000

LRS™ - Linear Rail Systems powered slide technology

For optimum performance, the system can be fitted with the Haydon™ patented, Size 17 Hybrid Linear Actuators available in a wide variety of resolutions - from 0.001524 mm (0.00006-in) per step to 0.048768 mm (0.00192-in) per step, and delivers thrust of up to 222 N (50 lbs.). For greater performance Size 17 Hybrid Double Stack Linear Actuators provide 0.0158 mm (0.000625-in) per step to 0.127 mm (0.005-in) per step and delivers thrust of up to 337 N (75 lbs.).



- 42.5 cm (16-5/8 in.) x 4.3 cm (1-5/8 in.) sq., Black Ice™ PTF Leadscrew with Size 17 Hybrid Linear Actuator
- 27.5 cm (10-3/4 in.) x 4.3 cm (1-5/8 in.) sq., Black Ice™ Lead-screw, with Size 17 Double Stack Hybrid Linear Actuator



HOW TO ORDER EXAMPLES:

LRW04BR-M43-0025-12-XXX = Linear Rail System, WDG anti-backlash nut, standard linear rail, Black Ice TFE coated screw, right hand thread, motorized, Size 17 stepper motor, 0.025-in lead, 12-in stroke, with no additional unique feature

LRG04NN-A00-0000-12-XXX = Linear Rail System, guide only, standard linear rail, guide only (no screw), no motor, 12-in stroke, with no additional unique feature

For applications assistance or order entry, call the HaydonKerk Motion Solutions Linear Rails technical advisors at 203.756.7441.

Other systems may be available.

Visit www.HaydonKerk.com for recent updates.

Kerk® ScrewRail® Linear Actuators

Linear motion has traditionally required separate components to handle both drive and support/guidance. The patented Kerk® ScrewRail® combines both functions in a single, coaxial component. By eliminating the need for external rail-to-screw alignment, the ScrewRail simplifies the design, manufacture and assembly of motion systems. The ScrewRail's coaxial design saves as much as 80% of the space used by a two-rail system and is generally less expensive than the equivalent components purchased separately. The savings can be substantial due to lower component costs and reduced labor. An added benefit is the ability to get three-dimensional motion from a single ScrewRail.



The ScrewRail consists of a precision rolled lead screw, supported by sealed bearings and contained within a concentric steel guide rail, driving an integrated nut/bushing. Because all the alignment requirements are achieved within the ScrewRail, support and positioning of the ScrewRail is much less critical than with traditional slide assemblies. Kerkote® TFE coating and self-lubricating nut/bushing materials ensure long life without maintenance.



When mounted vertically, the ScrewRail can be used to simultaneously lift and rotate (Z-theta motion). With one motor driving the screw and a second rotating the rail, a compact, self-supporting pick and place mechanism can be created.

*Z-Theta
ScrewRail
Assembly*

Identifying the part number codes when ordering ScrewRail®

SR	Z	06	K	R	A	00	0100	08	XXX
Prefix: SR = ScrewRail®	Nut Style A = free-wheeling style nut Z = Anti-Backlash Nut	Nominal Rail Diam. 03= 3/8-in 04= 1/2-in 06= 3/4-in 08= 1-in (see SR specifications chart)	Coating S = Uncoated K = Kerkote®	Thread R = Right hand L = Left hand	Drive/Mounting A = Standard M = Motorized	Motor Frame 00 = No motor 43 = Size 17 Stepper Motor	Nominal Thread Lead Code (inches) 0000 = No screw Code numbers in ScrewRail® Selector Chart	Stroke (in inches rounded up) 07 = 7-in 08 = 8-in 12 = 12-in	Unique Identifier Number assigned by HaydonKerk Motion Solutions (for added features such as custom configurations, etc.)

EXAMPLES:

SRZ06KR-A00-0100-08-xxx = ScrewRail® with anti-backlash nut, 3/4-in nominal rail diameter, leadscrew with Kerkote® TFE coating, right hand thread, no motor, 0.1-in (2.54 mm) leadscrew diam., 8-in over all length with no added features.

SRA03SL-A00-0050-07-xxx = ScrewRail® with a conventional (without anti-backlash mechanism) nut, 3/8-in nominal rail diameter, uncoated leadscrew, left hand thread, no motor, 0.05-in (.127 mm) leadscrew diam., 7-in stroke with no added features.

For assistance or order entry, call the HaydonKerk Motion Solutions ScrewRail technical advisors at 603.465.7227. Other systems and styles may be available. Visit www.HaydonKerk.com for recent updates.

Identifying the part number codes when ordering ScrewRail® End Supports

SR	04	ES	Z00
Prefix: SR = ScrewRail®	Size 04= 1/2-in 06= 3/4-in 08= 1-in	ES = End Support	Identifier = Standard

Kerk® SRA Series General Purpose ScrewRail® Linear Actuators

A standard nut for general applications where anti-backlash compensation is not required.

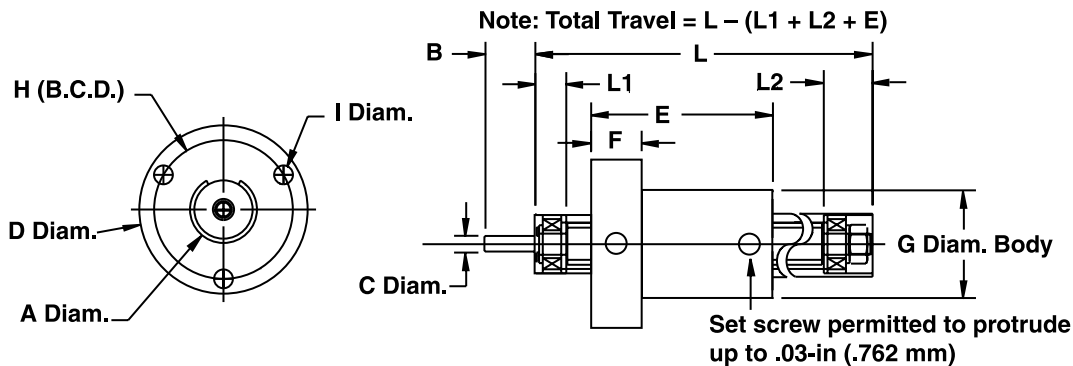
The SRA is recommended anywhere low drag and minimal free play is required.

Note: Right-hand/Left-hand ScrewRail® assemblies are also available.



ScrewRail®: SRA Series General Purpose

	A Diam. inch (mm)	B inch (mm)	C Diam. inch (mm)	D Diam. inch (mm)	E inch (mm)	F inch (mm)	G Diam. inch (mm)	H(B.C.D.) inch (mm)	I inch (mm)	L1 inch (mm)	L2 inch (mm)
SRA 03	.364/.367 (9.24/9.32)	.38 (9.56)	.1245/.1250 (3.16/3.18)	.98 (24.9)	1.1 (27.94)	.28 (7.2)	.562 (14.3)	.75 (19.1)	.094 (2.39)	.37 (9.4)	.38 (9.66)
SRA 04	.489/.492 (12.42/12.5)	0.62 (15.75)	.1870/.1875 (4.75/4.76)	1.31 (33.3)	1.4 (36)	.38 (9.5)	.750 (19.1)	1.03 (26.2)	0.140 (3.56)	0.26 (6.6)	0.36 (9.1)
SRA 06	.739/.742 (18.77/18.85)	0.75 (19.05)	.2490/.2495 (6.33/6.34)	1.81 (46.0)	2.0 (51)	.50 (12.7)	1.120 (28.4)	1.48 (37.6)	0.173 (4.39)	0.38 (9.7)	0.70 (17.8)
SRA 08	.989/.992 (25.12/25.2)	0.75 (19.05)	.2490/.2495 (6.33/6.34)	2.30 (58.4)	2.5 (64)	.63 (15.9)	1.495 (38.0)	1.92 (48.8)	0.200 (5.08)	0.48 (12.2)	0.77 (19.6)





**Kerk® SRZ Series Anti-Backlash
ScrewRail® Linear Actuators**

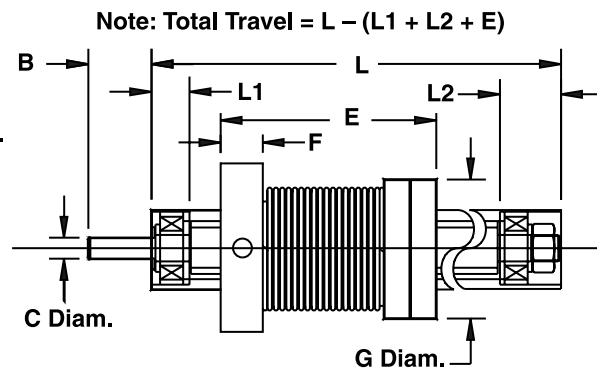
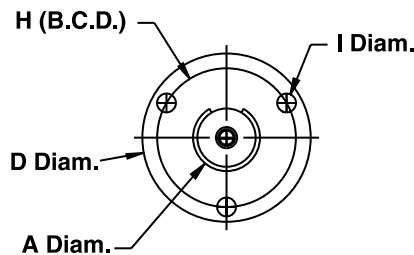
A nut designed and manufactured with our patented axial take-up mechanism providing continuous self-adjusting anti-backlash compensation.

Note: Right-hand/Left-hand ScrewRail® assemblies are also available.

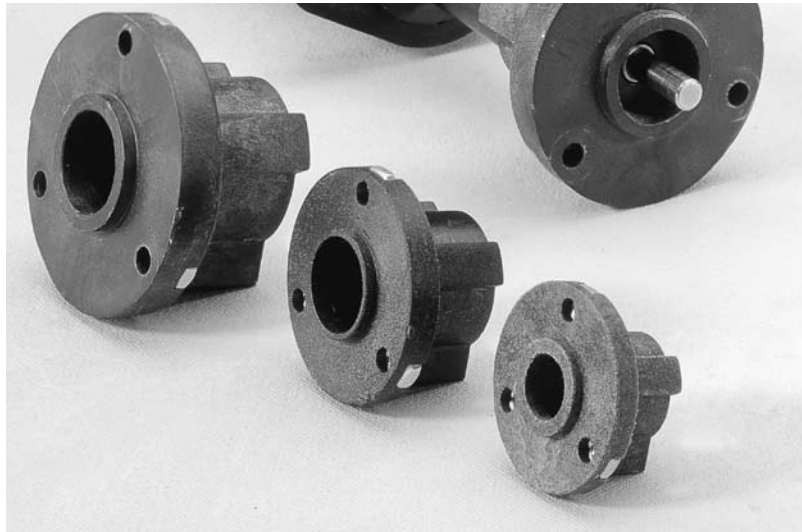
ScrewRail®: SRZ Series Anti-Backlash

	A Diam. inch (mm)	B inch (mm)	C Diam. inch (mm)	D Diam. inch (mm)	E inch (mm)	F inch (mm)	G Diam. inch (mm)	H(B.C.D.) inch (mm)	I inch (mm) (Brass Inserts)	L1 inch (mm)	L2 inch (mm)
SRZ 03	.364/.367 (9.24/9.32)	.38 (9.56)	.1245/.1250 (3.16/3.18)	.98 (24.9)	1.1 (27.94)	.28 (7.2)	.75 (19.1)	.75 (19.05)	#2-56 (*)	.37 (9.4)	.38 (9.66)
SRZ 04	.489/.492 (12.42/12.5)	0.62 (15.75)	.1870/.1875 (4.75/4.76)	1.31 (33.3)	1.4 (36)	.38 (9.5)	.097 (24.7)	1.03 (26.2)	#6-32 (*)	0.26 (6.6)	0.36 (9.1)
SRZ 06	.739/.742 (18.77/18.85)	0.75 (19.05)	.2490/.2495 (6.33/6.34)	1.81 (46.0)	2.0 (51)	.50 (12.7)	1.38 (35.1)	1.48 (37.6)	#10-32 (*)	0.38 (9.7)	0.70 (17.8)
SRZ 08	.989/.992 (25.12/25.2)	0.75 (19.05)	.2490/.2495 (6.33/6.34)	2.30 (58.4)	2.5 (64)	.63 (15.9)	1.72 (43.7)	1.92 (48.8)	#10-32 (*)	0.48 (12.2)	0.77 (19.6)

* metric available as requested



Note: Total Travel = L - (L1 + L2 + E)



**ScrewRail®
Linear Actuators:
End Supports**

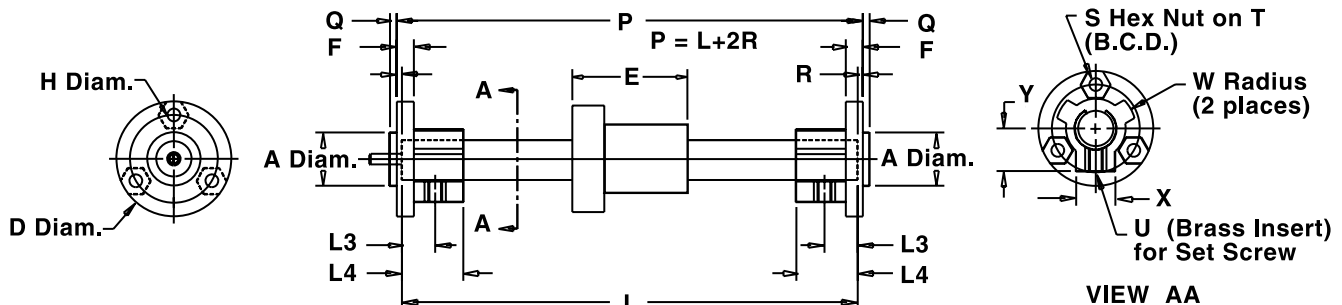
As an additional option for all Kerk® ScrewRails, standard End Supports offer the convenience of simple and compact mounting for the ScrewRail. The End Supports are designed to slide over the outside diameter of each end of the rail and “key” off the slot in the ScrewRail. The Kerkite® composite polymer End Supports come standard with three hex nuts that are captured in the flange for easy assembly. The End Supports are also supplied with a brass threaded insert and a set screw to fasten to the outside diameter of the rail.

With the End Supports, the Kerk ScrewRail can be easily mounted to your assembly. However, if the End Supports are not utilized it is recommended to center the clamping force on each end at the L3 dimension as shown in the drawing below.

ScrewRail®: End Support Styles

	A Diam. inch (mm)	D inch (mm)	F inch (mm)	H Diam. inch (mm)	L3 inch (mm)	L4 inch (mm)	Q inch (mm)	R inch (mm)	S inch (mm)	T (Hex Nut) inch (mm)	U inch (mm)	W Diam. (Brass Insert) inch (mm)	X inch (mm)	Y inch (mm)
SRA 04	.624/.626 (15.85/15.90)	1.35 (34.3)	0.200 (5.08)	0.150 (3.81)	0.390 (9.91)	.0720 (18.29)	0.080 (2.03)	0.060 (1.52)	#6-32 (*)	1.03 (26.2)	#8-32	0.47 (12.0)	0.460 (11.68)	0.500 (12.70)
SRA 06	.749/.751 (19.03/19.08)	1.60 (40.6)	0.250 (6.35)	0.173 (4.39)	0.603 (15.32)	0.900 (22.86)	0.100 (2.54)	0.100 (2.54)	#8-32 (*)	1.31 (33.3)	#10-32	0.60 (15.3)	0.594 (15.09)	0.645 (16.38)
SRA 08	.999/1.001 (25.38/25.43)	2.20 (55.9)	0.375 (9.53)	0.200 (5.08)	0.920 (23.37)	1.200 (30.48)	0.125 (3.18)	0.175 (4.45)	#10-32 (*)	1.82 (46.2)	#10-32	0.82 (20.9)	0.800 (20.32)	0.820 (20.83)

* metric available as requested



Dimensions E and L are referenced in the ScrewRail Dimensions
Note: Total Travel = L - (E + 2 [L4])

SRA Series Selector Chart ScrewRail® Linear Actuators

ScrewRail	Inch Lead ** inch (mm)	Thread Lead Code	Nominal Rail Diam. inch (mm)	Nominal Screw Diam. inch (mm)	Max. Drag Torque oz - in (NM)	Life @	Torque-to-Move Lead oz-in/lb (NM/Kg)	Design Load lbs (Kg)	Screw Inertia per unit length oz-in sec ² /in (KgM ² /M)	Equivalent Diam.* inch (mm)
						1/4 Design Loadx10 ⁵ (Non Anti-Backlash) inch (cm)				
SRA 03	.050 (1.27)	0050	3/8 (10)	3/16 (5)	1.5 (0.014)	100 to 150 (250 to 380)	0.5 (0.007)	10 (50)	.1 x 10 ⁻⁵ (.4 x 10 ⁻⁶)	.30 (7.6)
SRA 03	.100 (2.54)	0100	3/8 (10)	3/16 (5)	2.0 (0.018)	100 to 150 (250 to 380)	1.0 (0.016)	10 (50)	.1 x 10 ⁻⁵ (.4 x 10 ⁻⁶)	.30 (7.6)
SRA 03	.250 (6.35)	0250	3/8 (10)	3/16 (5)	2.5 (0.020)	100 to 150 (250 to 380)	1.25 (0.019)	10 (50)	.1 x 10 ⁻⁵ (.4 x 10 ⁻⁶)	.30 (7.6)
SRA 03	.375 (9.53)	0375	3/8 (10)	3/16 (5)	3.0 (0.025)	100 to 150 (250 to 380)	2.0 (0.030)	10 (50)	.1 x 10 ⁻⁵ (.4 x 10 ⁻⁶)	.30 (7.6)
SRA 04	0.050 (1.27)	0050	1/2 (13)	1/4 (6)	2.0 (0.015)	150 to 200 (380 to 500)	0.5 (0.007)	25 (10)	.3 x 10 ⁻⁵ (1.3 x 10 ⁻⁶)	.39 (9.9)
SRA 04	0.250 (6.35)	0250	1/2 (13)	1/4 (6)	3.0 (0.020)	150 to 200 (380 to 500)	1.5 (0.023)	25 (10)	.3 x 10 ⁻⁵ (1.3 x 10 ⁻⁶)	.39 (9.9)
SRA 04	0.500 (12.7)	0500	1/2 (13)	1/4 (6)	4.0 (0.030)	150 to 200 (380 to 500)	2.5 (0.039)	25 (10)	.3 x 10 ⁻⁵ (1.3 x 10 ⁻⁶)	.39 (9.9)
SRA 04	1.000 (25.40)	1000	1/2 (13)	1/4 (6)	5.0 (0.040)	150 to 200 (380 to 500)	4.5 (.070)	25 (10)	.3 x 10 ⁻⁵ (1.3 x 10 ⁻⁶)	.39 (9.9)
SRA 06	0.100 (2.54)	0100	3/4 (19)	3/8 (10)	3.0 (0.020)	180 to 280 (450 to 710)	1.0 (0.016)	50 (20)	1.5 x 10 ⁻⁵ (6.5 x 10 ⁻⁶)	.60 (15.2)
SRA 06	0.200 (5.08)	0200	3/4 (19)	3/8 (10)	4.0 (0.030)	180 to 280 (450 to 710)	1.5 (0.023)	50 (20)	1.5 x 10 ⁻⁵ (6.5 x 10 ⁻⁶)	.60 (15.2)
SRA 06	0.500 (12.70)	0500	3/4 (19)	3/8 (10)	5.0 (0.040)	180 to 280 (450 to 710)	2.5 (0.039)	50 (20)	1.5 x 10 ⁻⁵ (6.5 x 10 ⁻⁶)	.60 (15.2)
SRA 06	1.000 (25.4)	1000	3/4 (19)	3/8 (10)	6.0 (0.045)	180 to 280 (450 to 710)	4.5 (0.070)	50 (20)	1.5 x 10 ⁻⁵ (6.5 x 10 ⁻⁶)	.60 (15.2)
SRA 08	0.100 (2.54)	0100	1 (25)	1/2 (13)	4.0 (0.030)	280 to 320 (710 to 810)	1.0 (0.016)	100 (45)	5.2 x 10 ⁻⁵ (20.0 x 10 ⁻⁶)	.81 (20.5)
SRA 08	0.200 (5.08)	0200	1 (25)	1/2 (13)	5.0 (0.040)	280 to 320 (710 to 810)	1.5 (0.023)	100 (45)	5.2 x 10 ⁻⁵ (20.0 x 10 ⁻⁶)	.81 (20.5)
SRA 08	0.500 (12.70)	0500	1 (25)	1/2 (13)	6.0 (0.045)	280 to 320 (710 to 810)	2.5 (0.039)	100 (45)	5.2 x 10 ⁻⁵ (20.0 x 10 ⁻⁶)	.81 (20.5)
SRA 08	1.000 (25.40)	1000	1 (25)	1/2 (13)	8.0 (0.060)	280 to 320 (710 to 810)	4.5 (0.070)	100 (45)	5.2 x 10 ⁻⁵ (20.0 x 10 ⁻⁶)	.81 (20.5)

*ScrewRail® stiffness may be modeled using Classical Beam Deflection Theory with equivalent stainless steel beam of diameter given.

** Other leads available as custom orders.

SRZ Series Selector Chart ScrewRail® Linear Actuators

ScrewRail	Inch Lead**	Thread Lead Code	Nominal Rail Diam.	Nominal Screw Diam.	Max. Drag Torque	Life @	Torque-to-Move Lead	Design Load	Screw Inertia per unit length	Equivalent Diam.*
	inch (mm)					1/4 Design Load x 10 ⁶ (Non Anti-Backlash)				
SRZ 03	.050 (1.27)	0050	3/8 (10)	3/16 (5)	2.0 (0.014)	50 to 80 (130 to 200)	0.5 (0.007)	10 (50)	.1 x 10 ⁻⁵ (.4 x 10 ⁻⁶)	30 (7.6)
SRZ 03	.100 (2.54)	0100	3/8 (10)	3/16 (5)	2.5 (0.018)	50 to 80 (130 to 200)	1.0 (0.016)	10 (50)	.1 x 10 ⁻⁵ (.4 x 10 ⁻⁶)	30 (7.6)
SRZ 03	.250 (6.35)	0250	3/8 (10)	3/16 (5)	3.0 (0.020)	50 to 80 (130 to 200)	1.25 (0.019)	10 (50)	.1 x 10 ⁻⁵ (.4 x 10 ⁻⁶)	30 (7.6)
SRZ 03	.375 (9.53)	0375	3/8 (10)	3/16 (5)	3.5 (0.025)	50 to 80 (130 to 200)	2.0 (0.030)	10 (50)	.1 x 10 ⁻⁵ (.4 x 10 ⁻⁶)	30 (7.6)
SRZ 04	0.050 (1.27)	0050	1/2 (13)	1/4 (6)	3.0 (0.020)	75 to 100 (190 to 250)	0.5 (0.007)	25 (10)	.3 x 10 ⁻⁵ (1.3 x 10 ⁻⁶)	.39 (9.9)
SRZ 04	0.250 (6.35)	0250	1/2 (13)	1/4 (6)	4.0 (0.030)	75 to 100 (190 to 250)	1.5 (0.023)	25 (10)	.3 x 10 ⁻⁵ (1.3 x 10 ⁻⁶)	.39 (9.9)
SRZ 04	0.500 (12.7)	0500	1/2 (13)	1/4 (6)	5.0 (0.040)	75 to 100 (190 to 250)	2.5 (0.039)	25 (10)	.3 x 10 ⁻⁵ (1.3 x 10 ⁻⁶)	.39 (9.9)
SRZ 04	1.000 (25.40)	1000	1/2 (13)	1/4 (6)	6.0 (0.045)	75 to 100 (190 to 250)	4.5 (.0.70)	25 (10)	.3 x 10 ⁻⁵ (1.3 x 10 ⁻⁶)	.39 (9.9)
SRZ 06	0.100 (2.54)	0100	3/4 (19)	3/8 (10)	6.0 (0.045)	90 to 140 (230 to 350)	1.0 (0.016)	50 (20)	1.5 x 10 ⁻⁵ (6.5 x 10 ⁻⁶)	.60 (15.2)
SRZ 06	0.200 (5.08)	0200	3/4 (19)	3/8 (10)	6.5 (0.047)	90 to 140 (230 to 350)	1.5 (0.023)	50 (20)	1.5 x 10 ⁻⁵ (6.5 x 10 ⁻⁶)	.60 (15.2)
SRZ 06	0.500 (12.70)	0500	3/4 (19)	3/8 (10)	7.0 (0.050)	90 to 140 (230 to 350)	2.5 (0.039)	50 (20)	1.5 x 10 ⁻⁵ (6.5 x 10 ⁻⁶)	.60 (15.2)
SRZ 06	1.000 (25.4)	1000	3/4 (19)	3/8 (10)	7.5 (0.053)	90 to 140 (230 to 350)	4.5 (0.070)	50 (20)	1.5 x 10 ⁻⁵ (6.5 x 10 ⁻⁶)	.60 (15.2)
SRZ 08	0.100 (2.54)	0100	1 (25)	1/2 (13)	8.0 (0.057)	120 to 160 (350 to 410)	1.0 (0.016)	100 (45)	5.2 x 10 ⁻⁵ (20.0 x 10 ⁻⁶)	.81 (20.5)
SRZ 08	0.200 (5.08)	0200	1 (25)	1/2 (13)	8.5 (0.060)	120 to 160 (350 to 410)	1.5 (0.023)	100 (45)	5.2 x 10 ⁻⁵ (20.0 x 10 ⁻⁶)	.81 (20.5)
SRZ 08	0.500 (12.70)	0500	1 (25)	1/2 (13)	9.0 (0.064)	120 to 160 (350 to 410)	2.5 (0.039)	100 (45)	5.2 x 10 ⁻⁵ (20.0 x 10 ⁻⁶)	.81 (20.5)
SRZ 08	1.000 (25.40)	1000	1 (25)	1/2 (13)	9.5 (0.067)	120 to 160 (350 to 410)	4.5 (0.070)	100 (45)	5.2 x 10 ⁻⁵ (20.0 x 10 ⁻⁶)	.81 (20.5)

*ScrewRail® stiffness may be modeled using Classical Beam Deflection Theory with equivalent stainless steel beam of diameter given.

** Other leads available as custom orders.



**SS / SZ Series:
Spline Shafts**



**GR Series: Linear Rails
and Bushings**

Kerk® SS / SZ Series Spline Shafts

The Kerk® Spline Shaft (SS/SZ) series spline shaft system has been designed for light to moderate load applications, where low cost, low friction, and long life are primary design considerations.

Kerk Spline Shafts provide anti-rotation for one axis motion or a drive mechanism with rotation for two axes of motion. They are excellent alternatives for applications where hex shafts, square shafts and high-cost ball splines are typically used.

The assembly consists of a stainless steel spline shaft treated with HaydonKerk Motion Solutions™ proprietary low friction Kerkote® TFE coating, mated with a Kerkite® composite polymer bushing. The bushing is supplied with an integral brass collar to facilitate various mounting configurations without nut distortion.

Standard shaft straightness is .003-in (.08mm/30cm) per foot. Typical radial and torsional clearance between shaft and bushing for a basic assembly (SSA) is .002-in to .003-in (.05-.08mm). An anti-backlash assembly (SZA) is available for applications requiring minimum torsional play.

As with other Kerk® assemblies, special bushing configurations and end machining configurations are available upon request. Aluminum or carbon steel spline shafts are also available upon request.

Identifying the part numbers when ordering Spline Shafts and Guide Rails

SS	A	F	04	1	K	08	XXX
Prefix	Style	Mounting	Rail Diameter	Number of Bushings per Rail	Coating	Length in Inches (Rounded up)	Unique Identifier
SS = Spline Shaft SZ = Anti-Backlash Spline Shaft GR = Guide Rail	A = Assembly only B = Bushing only S = Shaft only	F = Flanged T = Threaded G = Snap ring groove P = Plain (no features) S = Shaft only	02 = 1/8-in 04 = 1/4-in 06 = 3/8-in 08 = 1/2-in 12 = 3/4-in	0 1 2 3 4 5 (Use "0" for shaft only and use "1" if bushing only)	S = Uncoated K = Kerkote® B = Black Ice™	06 = 6-in, 08 = 8-in 00 = Bushing only	Number assigned by HaydonKerk Motion Solutions (for added features such as custom configurations, etc.)

EXAMPLES:

SZAT041K-12-XXXX = Spline shaft with anti-backlash, shaft and threaded bushing assembly, 1/4-in shaft, 1 bushing per rail, Kerkote® coating, 12-in length, with no special features added.

GRBPO41N-00-XXXX = Guide rail, plain bushing only, 1/4-in shaft, with no special features added.

SS Series Spline Shafts

Rail Diameter Code	Shaft	Root Diameter	Tube I.D.	Bushing Outside	Bushing Length	Thread	Thread Length	Equivalent Diameter**	
	A in ± .002 (mm ± 0.05)	in ± .002 (mm ± 0.05)	in ± .002 (mm ± 0.05)	B in ± .001 (mm ± 0.025)	C in ± .01 (mm ± 0.25)	M	N in ± .002 (mm ± 0.05)		
SS/SZ	02	.125 (3.18)	.095 (2.41)	NA	0.375 (9.53)	0.500 (12.70)	3/8-24	0.250 (6.35)	.110 (2.79)
	04	0.250 (6.35)	.202 (5.13)	NA	0.500 (12.70)	0.75 (19.1)	7/16-20	0.250 (6.35)	.226 (5.74)
	06	0.375 (9.53)	.306 (7.77)	NA	0.625 (15.88)	1.00 (25.4)	9/16-20	0.375 (9.53)	.341 (8.65)
	08	0.500 (12.70)	4.19 (10.64)	NA	0.813 (20.65)	1.50 (38.1)	3/4-20	0.500 (12.70)	.458 (11.63)
	12	0.750 (19.05)	.630 (16.00)	NA	1.125 (28.58)	2.25 (57.2)	1-16	0.750 (19.05)	.690 (17.53)

MaximumTwist:
3°/ft about Spline Shaft axis

Torsional Clearance (SSA):
3° Bushing to Shaft

Spline Shaft stiffness may
be modeled as a round rod
with diameters given.

0.125-in rail size only
available in SSAP and
SSAT styles.

