



These definitions/descriptions are for the Product Specifications listed on the acme screw pages. Additional technical information on the following pages is designed to help in selecting an acme

screw and nut that is best for your application. For additional assistance please contact our Application Engineers at 800-321-7800.

INCH ACME SCREW AND NUT TECHNICAL DATA

1/4" ACME THREAD

LEAD ACCURACY: ±0.0003 in./in

Lead Accuracy Measured in inch/inch or µm/25mm. See page 12 for additional screw lead accuracy specifications.

Load Capacity Measured in lbs. or N, this is the dynamic and static load rating of the nut.

Nut Materials See page 13 for additional specifications for BRONZ/AC and PLAST/AC nuts.

Lead The distance the nut advances in one revolution (lead = pitch x number of starts).

Pitch The distance along the screw axis from a point on one thread to a corresponding point on the adjacent thread.

Starts The integral number of helical thread elements on the screw shaft.

Lash Maximum axial free travel of the nut relative to the screw when new.

Root Diameter The diameter of the screw at the bottom of the thread groove.

Thread Code Used to build the "Reference Number". See page 15.

Form This describes the accuracy and geometry of the screw and nut.

Standard Screw Threads, Lengths and Materials All screws are available in sizes that have a right hand thread and many sizes that have a left hand thread.

Standard cut lengths are 36", 72", 144" and 240" (depending on screw size), custom cut screws up to 240" (depending on screw size) in length are available. Custom length screws over 144" can be manufactured, based on material availability. See the Reference Number Configurator on page 15 for additional explanation on specifying a custom length screw.

Standard length part number product or unmachined cut to length material may have approximately one inch of lead in taper on one or both ends.

LOAD CAPACITY (lbs.)	DYNAMIC	STATIC
BRONZE NUT	312	1.000
PLASTIC NUT	156	156

PRODUCT SPECIFICATIONS		SC		
Lead		.333	.250	
Pitch		.083	.062	
Starts		4	4	
Threads Per Inch		12	16	
Lash (Maximum Axial)		.005	.007	
"A" - Root Diameter (min.)		.192	.162	
Weight (lbs./ft.)		.13	.13	
Thread Code		025	024	
Form		Stub	2C	
36" Standard Length Part No. *	RH	4140	11025	—
		Stainless	91025	910
72" Standard Length Part No. *	LH	4140	—	—
		Stainless	—	—
72" Standard Length Part No. *	RH	4140	12025	—
		Stainless	92025	920
72" Standard Length Part No. *	LH	4140	—	—
		Stainless	—	—

* Custom Lengths Available - See Reference Number Configurator

Bronze Nut Material See page 13 for additional specifications.

Efficiency The ratio of work output to work input. These are calculated as lubricated efficiencies.

Torque to Raise A linearly scalable value measured in in.-lb./lb. or N•m/kN. This is the torque required to keep one pound or one N of load in motion.

Plastic Nut Material See page 13 for additional specifications.

Flange Made of steel and black oxidized. These flanges are manufactured to be pinned to the nut.

BRONZ/AC BRONZE NUT		
Efficiency		73%
Torque to Raise 1 lb. (in.-lb.)		.073
Weight (lbs.)		.13
Part No.	RH	20025
	LH	—
PLAST/AC PLASTIC NUT		
Efficiency		82%
Torque to Raise 1 lb. (in.-lb.)		.065
Weight (lbs.)		.06
Part No.	RH	30025
	LH	—
FLANGE - STEEL		
Weight (lbs.)		.23
Part No.		70160

