



Hi-Lok® Installation Tools and Roller Ratchets®

Unique aircraft fasteners require specialized tooling for proper installation. Omega Technologies' extensive line of installation hand tools is unparalleled, and the Omega brand is rapidly becoming the industry standard.

We are particularly adept at tools used for "Broached Pin" installation. This includes Hi-Lok®, Hi-Lite®, Hi-Tigue®, and Torque Controlled fasteners. Omega also produces gauges to determine the correct fastener length for a hole, and to check the pin protrusion of the completed installation.

Omega is committed to further innovation and increased productivity in this ever-changing market. Our staff is available to help with recommendations and develop solutions to unique needs. We welcome input, and strive to help our customers increase efficiency and lower costs.

Roller Ratchets®

Box Ratchets

Hand Ratchets

The "Tight Squeeze" Hand Tool

Sockets

Hex Keys

ATHA & ATHR Assemblies

Pin Protrusion Gauges

Grip Scales

Roller Ratchets®

Roller Ratchets® were developed in response to the need for very small ratchet wrenches that could be used in extremely tight areas where handle 'swing' was limited by obstructions, and the need to have a ratchet that would engage with very little handle movement. The Roller Ratchet® satisfies both of these requirements, and this modular tool is now widely used in the aerospace community worldwide.



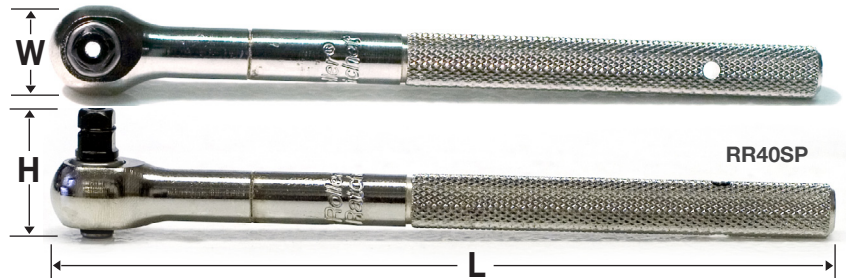
Omega Technologies Inc. has been at the forefront of continued research and development to improve the variety of tools available. With particular emphasis on strength, durability, and quality, we maintain the functionality and cost-effectiveness of the entire line of tools.

The Roller Ratchet® functions as a hand ratchet, yet its size greatly increases its versatility by allowing it to be used in tighter areas. The incorporation of a special 'toothless' clutch eliminates all lost motion, allowing even the slightest movement to engage the tool. The modular platform allows for multiple configurations. A through-hole also makes the tool compatible with Hi-Lok®, Hi-Lite®, and Eddie Bolt® systems.

- Small design allows for use in tight areas
- Modular platform provides versatility
- Through-hole permits use with Hi-Lok®, Hi-Lite®, and Eddie Bolt®
- Revolutionary clutch design
- Torque ratings from 150-600 lb-in.

Standard Roller Ratchet®

The standard Roller Ratchet® comes in a wide range of sizes and strengths. Its reversible spindle allows the tool to be used in any application for installation or removal.



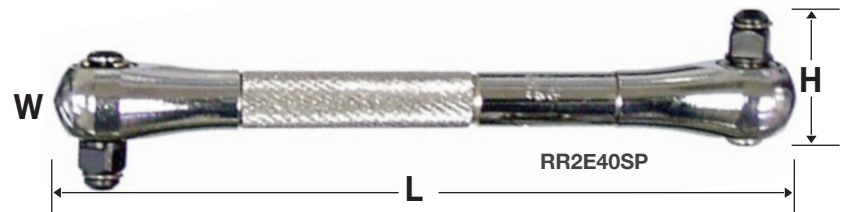
Standard Roller Ratchets®

PART NUMBER	MAX TORQUE (lb/in.)	SQUARE DRIVE	HEIGHT (H)	WIDTH (W)	LENGTH (L)
RR40S-SP*	150	1/4	0.91	0.65	3.5
RR40SP*	150	1/4	0.91	0.65	5.5
RR80SP	200	1/4	1.37	0.60	6.25
RR130SP	250	1/4	0.92	0.87	7.2
RR250SP	400	3/8	1.21	1.00	7.9
RR400SP	600	3/8	1.21	1.31	8.7

*Furnished with reversible spindle

Double-Ended Roller Ratchet®

The Double-Ended Roller Ratchet® eliminates the need for a reversible spindle, reducing the occurrence of foreign object damage, thus increasing efficiency.

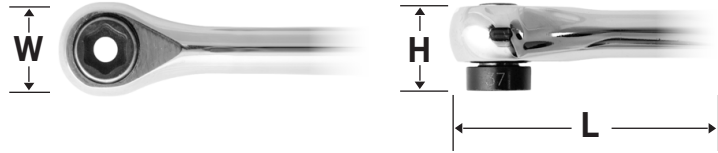


Double Ended Roller Ratchets®

PART NUMBER	MAX TORQUE (lb/in.)	SQUARE DRIVE	HEIGHT (H)	WIDTH (W)	LENGTH (L)
RR2E40S-SP	150	1/4	0.91	0.65	4.5
RR2E40SP	150	1/4	0.91	0.65	6.5
RR2E80SP	200	1/4	1.37	0.60	6.7
RR2E130SP	250	1/4	0.92	0.87	6.6
RR2E250SP	400	3/8	1.21	1.00	8.9
RR2E400SP	600	3/8	1.21	1.31	8.9

Integrated Socket Roller Ratchet®

The Integrated Socket Roller Ratchet® incorporates a low-profile socket and comes in a wide range of sizes. Available fixed or reversible.



RR40A34



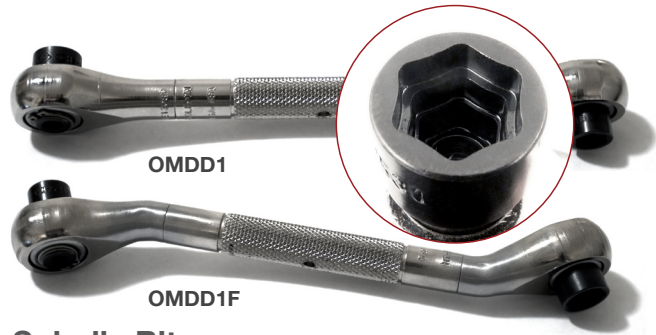
RR40SKT5

Roller Ratchets® with Built-in Socket

Socket Hex Opening	150 lb-in Max Torque	150 lb-in Max Torque	200 lb-in Max Torque	250 lb-in Max Torque	400 lb-in Max Torque
	H = .76 L = 3.5	H = .76 L = 5.5	H = 1.23 L = 6.25	H = .78 & 1.01 L = 7.25	H = 1.16 L = 7.9
3/16	RR40A18S	RR40A18			
7/32	RR40A21S	RR40A21			
1/4	RR40A25S	RR40A25	RR80A25	RR130A25	
9/32	RR40A28S	RR40A28	RR80A28	RR130A28	
5/16	RR40A31S	RR40A31	RR80A31	RR130A31	
11/32	RR40A34S	RR40A34	RR80A34	RR130A34	
3/8	RR40A37S	RR40A37		RR130A37	
7/16	RR40A43S	RR40A43		RR130A43	
1/2					RR250A50

The OMDD with Stepped Sockets

The OMDD series roller ratchets incorporate five integral sockets into a single wrench, allowing the installation of collar hex sizes 7/32, 1/4, 5/16, 11/32, and 5/8 inch. This one wrench covers most -5, -6, -8, -10, and -12 collars. Available straight (OMDD1) or offset 15° (OMDD1F)..



OMDD1

OMDD1F

Bit Holders

The Bit Holder Roller Ratchet® is fitted with a 1/4" bit holder, making it compatible with any hex insert screwdriver bit.



RR40S-BH

RRQC-BH1/4

Spindle Bits

The integrated spindle bit allows the wrench to accept the bit directly. The exclusion of the lengthier bit holder allows greater clearance, while still maintaining easy reversible capability.



RR40A-P1 (shown)

Phillips

Hex

Torq-Set®

The RRQC-BH1/4 quick change replacement for the 1/4" square drive spindle accommodates multiple insert bits

Box Ratchets

Perfect for installing Hi-Lok® fasteners, our box ratchets are made of high quality, heat-treated steel and finished with a nickel-chrome plating. The result is a durable, long-lasting tool.

Several design aspects make these box ratchets ideal for use in tight areas. Even without line of sight, the head fits easily onto a collar, while the shoulder ring prevents the collar from slipping through the socket. An optional collar ejector pin quickly discards the removed collar.

Box ratchets are available flat or offset 20°, with or without collar ejectors.

- Durable
- Perfect for tight areas
- Shoulder ring inside socket
- Optional collar ejector pin
- Available straight or offset 20°



**Offset (20°) Box Ratchet
with Collar-Stop
ATBRO3134**



**Offset (20°) Box Ratchet
with Collar-Stop and Ejector Buttons
ATBRO3134E**



**Flat Box Ratchet
with Collar-Stop
ATBR3134**



**Flat Box Ratchet
with Collar-Stop and Ejector Buttons
ATBR3134E**

Box Ratchets

HEX 1	HEX 2	FLAT	FLAT WITH EJECTOR	OFFSET	OFFSET WITH EJECTOR
7/32	1/4	ATBR2125	ATBR2125E	ATBRO2125	ATBRO2125E
1/4	9/32	ATBR2528	ATBR2528E	ATBRO2528	ATBRO2528E
1/4	5/16	ATBR2531	ATBR2531E	ATBRO2531	ATBRO2531E
9/32	5/16	ATBR2831	ATBR2831E	ATBRO2831	ATBRO2831E
5/16	11/32	ATBR3134	ATBR3134E	ATBRO3134	ATBRO3134E
5/16	3/8	ATBR3137	ATBR3137E	ATBRO3137	ATBRO3137E
7/16	1/2	ATBR4350	ATBR4350E	ATBRO4350	ATBRO4350E

Larger sizes available on request

Hand Ratchets

Manufactured from high quality materials and nickel-plated for durability, these ratchets are available in a variety of sizes and are suitable for a wide range of installations, including Hi-Lok® systems.

The square drive provides versatility and gets into tight places. A through-hole in the head of the ratchet makes it appropriate for use with Hi-Lok® systems. By increasing the number of teeth in the head (as many as 72 teeth, depending on size), the ratchet engages with less movement. Finally, an ergonomic thumb switch changes the direction of the ratchet, allowing it to be used for installation or removal.

- Versatility of use
- Durable
- Easily reversible
- Compatible with Hi-Lok® system
- Engages with minimal movement



Hand Ratchets

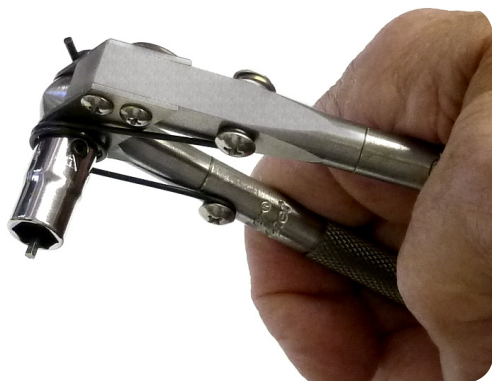
PART NUMBER	SQUARE DRIVE	THROUGH HOLE DIAMETER	HEAD WIDTH	SIDE TO CENTER	HEAD HEIGHT	OVERALL LENGTH	WEIGHT (LBS.)
ATHR-MINI	1/4	0.11	0.92	0.46	0.40	4.60	0.20
ATHR250	1/4	0.11	1.08	0.50	0.44	5.50	0.35
ATHR-TILT	1/4	0.11	0.90	0.45	0.40	6.25	0.30
ATHR375	3/8	0.21	1.40	0.70	0.60	7.85	0.85
ATHR500	1/2	0.29	1.74	0.87	0.75	10.35	1.50

The "Tight Squeeze" Hand Tool

One of the newest innovations from Omega Technologies, the Tight Squeeze is a full function hand tool for Hi-Lok® and Hi-Lite® fasteners. The tool's unique profile allows for one-handed operation in tight spots, blind areas, and around corners. The operation is identical to pneumatic installation tools, but is more affordable and versatile.

Interchangeable hex keys and sockets fit an entire range of pin/collar combinations. We have also incorporated our toothless ratcheting system from the Roller Ratchet® which allows the slightest movement to engage the tool. This elegant solution turns impossible jobs into routine work.

- Single-Handed operation
- Zero backlash or "toothless" ratchet
- Cost-effective



PATENT PENDING
TSQ25-312-079

"Tight Squeeze"

COMPLETE TOOL PART NUMBER	SOCKET SIZE	SOCKET PART NUMBER	HEX KEY SIZE	HEX KEY PART NUMBER
TSQ25-218-062	7/32	ATHS218	1/16	TSQ-062
TSQ25-250-062	1/4	ATHS250	1/16	TSQ-062
TSQ25-281-062	9/32	ATHS281	1/16	TSQ-062
TSQ25-312-062	5/16	ATHS312	1/16	TSQ-062
TSQ25-281-079	9/32	ATHS281	5/64	TSQ-079
TSQ25-312-079*	5/16	ATHS312	5/64	TSQ-079
TSQ25-343-079*	11/32	ATHS343	5/64	TSQ-079
TSQ25-437-079	7/16	ATHS437A	5/64	TSQ-079
TSQ25-312-094	5/16	ATHS312	3/32	TSQ-094
TSQ25-343-094	11/32	ATHS343	3/32	TSQ-094
TSQ25-437-094	7/16	ATHS437A	3/32	TSQ-094

*Most popular

Sockets (ATHS) • Hex Keys

Sockets (ATHS)

Anti-FOD Sockets are manufactured to fit conventional square drives. They feature a generous through-hole to enable the use of hex keys when necessary for Hi-Lok®, Hi-Lite®, and Hi-Tigue® installations. A set screw is provided to positively retain the sockets onto the square drives as an anti-FOD measure.



ATHS437



Anti-Fod Hex Sockets

Socket (ATHS) Measurements

PART NUMBER	HEX OPENING (6-POINT)	SQUARE DRIVE-SIZE	NOSE DIAMETER	OVERALL LENGTH
ATHS156	5/32	1/4	0.280	0.86
ATHS187	3/16	1/4	0.312	0.86
ATHS218	7/32	1/4	0.312	0.86
ATHS250	1/4	1/4	0.375	0.88
ATHS281	9/32	1/4	0.410	0.88
ATHS312	5/16	1/4	0.467	0.88
ATHS343	11/32	1/4	0.508	0.88
ATHS375	3/8	3/8	0.560	1.00
ATHS375A	3/8	1/4	0.560	0.88
ATHS437	7/16	3/8	0.640	1.00
ATHS437A	7/16	1/4	0.600	0.86
ATHS500	1/2	3/8	0.710	1.00

Hex Keys

Hex keys for hand-tool applications, and replacement tips for most popular air-tool systems.

Hex Keys and Replacement Tips

Hand-Held Hex Keys			Replacement Tips			
HEX KEY SIZE	PLASTIC HANDLE	T-HANDLE	HI-SHEAR® STANDARD	HI-SHEAR® SUPER KEY	VOI-SHAN KWIK-KEY®	LOK-FAST QRS®
1/16 (0.062)	ATHK062		HLT140-062	HLT140K062	KK101-06	QRK5
5/64 (0.079)	ATHK079		HLT140-078	HLT140K078	KK101-07	QRK6
3/32 (0.094)	ATHK094	ATHK094T	HLT140-094	HLT140K094	KK101-09	QRK8
1/8 (0.125)	ATHK125	ATHK125T	HLT140-125	HLT140K125		QRK10
5/32 (0.156)		ATHK156T	HLT140-156	HLT140K156		QRK12
3/16 (0.187)		ATHK187T	HLT140-187	HLT140K187		
7/32 (0.218)		ATHK218T				
1/4 (0.250)		ATHK250T				

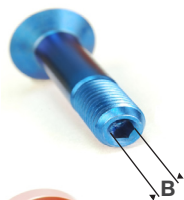


Through Hole Extensions

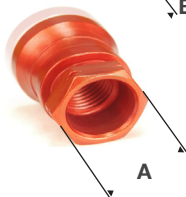
Available in 2" and 4" lengths



Hex-Key Hex



Socket Hex



This is a hand tool assembly for the installation of the Hi-Lok® or Hi-Lite® fastening systems. The ATHA Series consists of a hand ratchet wrench (ATHR250) with a through hole, a socket, and a plastic handle Allen® wrench.

The through hole in the ratchet allows for the insertion of an Allen® key. While any Allen® key style may be used in conjunction with the ratchet, a plastic handle or a "T" handle Allen® wrench with a replaceable blade is furnished. The socket is held to the square drive with a set screw, eliminating FOD.

This entire assembly is completely interchangeable with the Hi-Shear equivalent (see cross reference table on back of catalogue).

Standard Ratchet Assembly (ATHA Series)



Roller Ratchet® Assembly (ATRR Series)



Integral Socket Assembly (RRXXA Series)



ATHA, ATRR, and RRXXA Assembly

Normal Pin Diameter			Part Numbers		
SOCKET HEX WIDTH (A)	HEX KEY WIDTH (B)	SQUARE DRIVE SIZE*	STANDARD RATCHET 3-PIECE ASSEMBLY**	ROLLER RATCHET 3-PIECE ASSEMBLY	INTEGRAL SOCKET 2-PIECE ASSEMBLY
3/16 (0.187)	1/16 (0.062)	1/4	ATHA1	ATRR1	RR40A187-062
7/32 (0.218)	1/16 (0.062)	1/4	ATHA2	ATRR2	RR40A218-062
1/4 (0.250)	1/16 (0.062)	1/4	ATHA3	ATRR3	RR40A250-062
9/32 (0.281)	1/16 (0.062)	1/4	ATHA4	ATRR4	RR40A281-062
5/16 (0.312)	1/16 (0.062)	1/4	ATHA5	ATRR5	RR40A312-062
11/32 (0.343)	1/16 (0.062)	1/4	ATHA6	ATRR6	RR40A343-062
7/32 (0.218)	5/64 (0.078)	1/4	ATHA7	ATRR7	RR40A218-078
1/4 (0.250)	5/64 (0.078)	1/4	ATHA8	ATRR8	RR40A250-078
9/32 (0.281)	5/64 (0.078)	1/4	ATHA9	ATRR9	RR40A281-078
5/16 (0.312)	5/64 (0.078)	1/4	ATHA10	ATRR10	RR40A312-078
11/32 (0.343)	5/64 (0.078)	1/4	ATHA11	ATRR11	RR40A343-078
3/8 (0.375)	5/64 (0.078)	1/4	ATHA12	ATRR12	RR40A375-078
5/16 (0.312)	3/32 (0.094)	1/4	ATHA13	ATRR13	RR130A312-094
11/32 (0.343)	3/32 (0.094)	1/4	ATHA14	ATRR14	RR130A343-094
3/8 (0.375)	3/32 (0.094)	1/4	ATHA15	ATRR15	RR130A375-094
7/16 (0.437)	3/32 (0.094)	3/8	ATHA16	ATRR16	RR130A437-094
1/2 (0.500)	3/32 (0.094)	3/8	ATHA21	ATRR21	RR250A500-094
3/8 (0.375)	1/8 (0.125)	3/8	ATHA17	ATRR17	RR130A375-125
7/16 (0.437)	1/8 (0.125)	3/8	ATHA18	ATRR18	RR130A437-125
1/2 (0.500)	1/8 (0.125)	3/8	ATHA22	ATRR22	RR250A500-125
7/16 (0.437)	5/32 (0.156)	3/8	ATHA19	ATRR19	RR130A437-156
1/2 (0.500)	5/32 (0.156)	3/8	ATHA20	ATRR20	RR250A500-156

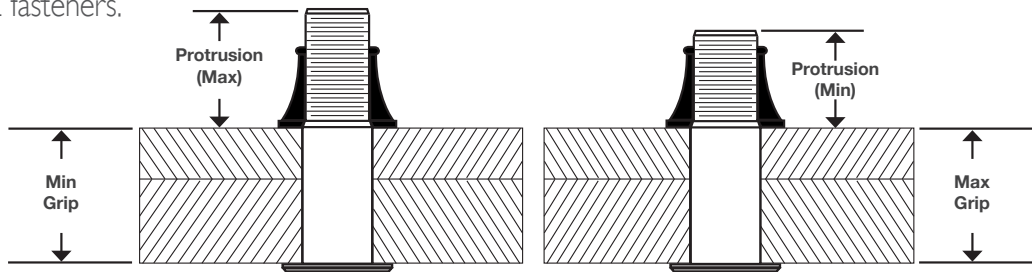
*Square Drive size does not apply to Roller Ratchet assemblies, as socket is built in.

**ATHA1-ATHA15 assemblies come with the ATHR-250 hand ratchet. To substitute a smaller hand ratchet (ATHR-MINI), add "M" to part number, i.e. "ATHA10M"

Pin Protrusion Gauges

Pin Protrusion Gauges are manufactured for use on all types of frangible and torque-control fasteners. These gauges determine if the correct length pin has been installed by determining if the pin's protrusion is between the allowable minimum and maximum limits shown on the gauge.

Gauges are available for Hi-Lok®, Hi-Lite®, and Hi-Tigue® systems. To select the correct gauge for the fastener, select the one that corresponds to the appropriate pin diameter. If the pin falls short of the minimum limit or exceeds the maximum, it must be removed, and a more appropriate size selected. Exceeding the maximum limit requires a shorter pin, and falling short the minimum limit requires a longer pin. The correct pin will lie between the maximum and minimum limitations giving a proper ratio of grip to protrusion. These are complete sets that include gauges for -5 to -12 fasteners.



Pin Protrusion Gauging

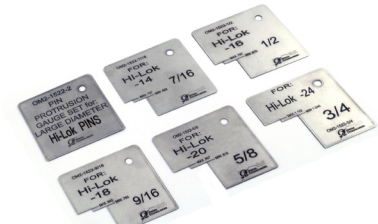
Hi-Lok® Standard Protrusion Gauges (OM2-1522)



Hi-Lok® Aerospace "B" Gauge Set (OM2-1522-B)



Hi-Lok® Large Diameter Gauge Set (OM2-1522-2, OM2-1522-B-2)



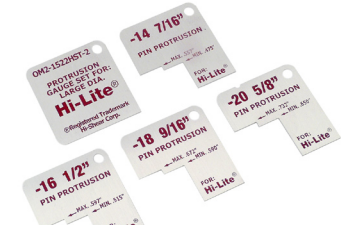
Hi-Lite® Standard Protrusion Gauges (OM2-1522 HST)



Hi-Lite® Aerospace "B" Gauge Set (OM2-1522HST-B)



Hi-Lite® Large Diameter Gauge Set (OM2-1522HST-2)



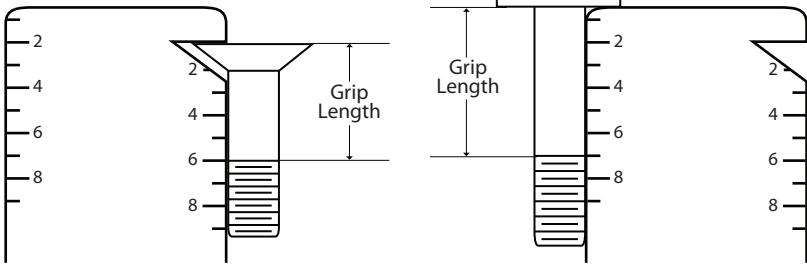
Protrusion Gauges

Dash Sizes	Nominal Pin Diameter		OM2-1522 Pin Protrusion Limits*		OM2-1522-B Pin Protrusion Limits**		OM2-1522 HST Pin Protrusion Limits*		OM2-1522 HST-B Pin Protrusion Limits**		
	DECIMAL	FRACTION	DECIMAL	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
-5		5/32"	0.1560	0.302	0.384	0.302	0.389	0.270	0.352	0.270	0.352
-6		3/16"	0.1875	0.315	0.397	0.315	0.402	0.280	0.362	0.280	0.362
-8		1/4"	0.2500	0.385	0.467	0.385	0.472	0.310	0.392	0.310	0.392
-10		5/16"	0.3125	0.490	0.572	0.490	0.577	0.370	0.452	0.370	0.452
-12		3/8"	0.3750	0.535	0.617	0.535	0.622	0.410	0.492	0.410	0.492
Dash Sizes	Nominal Pin Diameter		OM2-1522-2 Pin Protrusion Limits*		OM2-1522-B-2 Pin Protrusion Limits**		OM2-1522HST-2 Pin Protrusion Limits*		OM2-1522 HST-B-2 Pin Protrusion Limits**		
	DECIMAL	FRACTION	DECIMAL	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
-14		7/16"	0.4375	0.625	0.707	0.625	0.707	0.475	0.557	0.475	0.557
-16		1/2"	0.5000	0.675	0.757	0.675	0.757	0.515	0.597	0.515	0.597
-18		9/16"	0.5625	0.760	0.842	0.760	0.842	0.590	0.672	0.590	0.672
-20		5/8"	0.6250	0.815	0.897	0.815	0.897	0.650	0.732	0.630	0.712
-24		3/4"	0.7500	1.040	1.122	1.040	1.122	-	-	-	-

*OM2-1522 and OM2-1522 HST are interchangeable with Hi-Shear 2-1522 and 2-1522 HST respectively

**Values per BAC5004-2

Our grip scales serve two purposes: first, the thicker side is used to measure the “grip-length” of Hi-Lok® and Hi-Lite® pins, Shear Lockbolts, structural screws, and bolts; second, the thinner side is used to measure the thickness of materials to be fastened so that the proper length pin may be chosen.

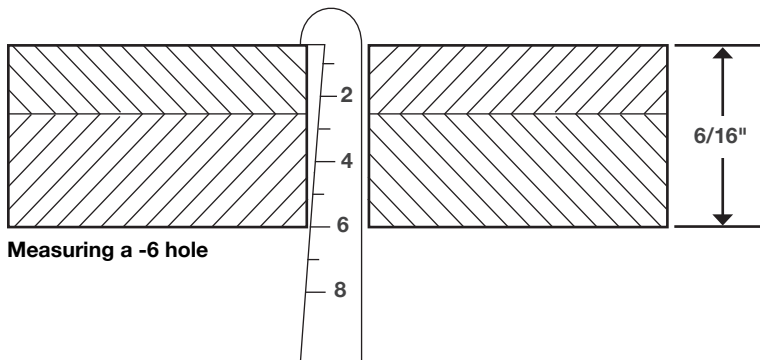
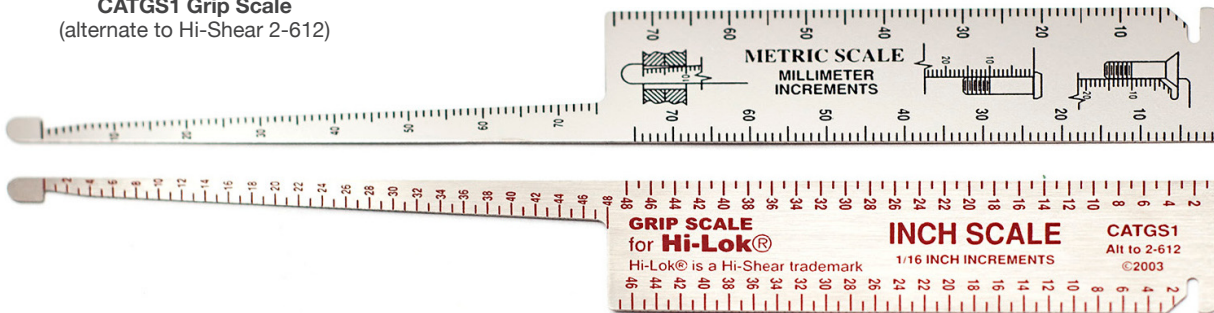


Measuring a -6 grip length countersink head pin

Measuring a -7 grip length protruding head pin

The scale is satin finished .018 stainless steel with inch (red) and metric (black) measurements. Our CATGS1 is equivalent to the Hi-Shear 2-612 Grip Scale.

CATGS1 Grip Scale
(alternate to Hi-Shear 2-612)



Measuring a -6 hole

As shown here, when measuring material which is 6/16" thick, a -6 grip length fastener would be selected

OM2-651 Grip Scale and Slide Assembly
(alternate to Hi-Shear 2-651)



OM2-615 Grip Scale Slide
(alternate to Hi-Shear 2-615)



Tooling excellence for tomorrow's technology

Founded in 1983, Omega Technologies, Inc. has become one of the world's leading sources of aircraft tools, continually working to increase the variety of tools available, while researching and developing ways to improve their strength, durability, and functionality. Omega manufactures its own proprietary line of tools, and also distributes for a host of other highly respected tool producers. Products include a complete line of fastener installation and removal tools, drills, countersinks, clamps, reamers, grinders, and more.

Quality at Omega shows in our knowledgeable staff, the conscientious and responsive job we do, and in the continually evolving line of products we offer. We thrive on innovation and welcome new solutions to problems. If you have an invention, please give us a call.



John Schooland
Founder & President



31125 Via Colinas, Suite 905
Westlake Village, CA 91362

sales@omegatec.com

T 800.888.4005

T 818.264.7970

F 818.264.1414

©2011 Omega Technologies, Inc. This catalogue may not be reproduced (in whole or part) without written permission.



omegatec.com



info@omegatec.com

How to order from us

Our experienced staff is available Monday through Friday 7:30am - 5:00pm PST. Orders and inquiries can be made by phone, online, fax, or email.

Terms and Conditions

Payment: Upon credit approval, standard terms are 1%10, Net-30. Payment may be made electronically, by check, or by credit card (Omega accepts Master Card, Discover, American Express, and VISA). Government and Corporate cards are also honored. C.O.D. shipments may incur a small additional fee (charged by the carrier).



Shipping Policy: Unless otherwise requested, Omega ships via UPS, FED-EX or other common carrier. Standard shipping charges apply. Expedited shipping options are available. Orders under \$50.00 will be subject to a flat \$10.00 shipping and handling charge. Note: standard shipping charges are included in this fee.

Minimum Order: Omega has no minimum, but a flat \$10.00 shipping & handling fee will be added to orders less than \$50.00.

C.A.G.E. Code: For US Government customers, Omega Technology's Commercial and Government Entity code is: 9X250

Trademarks: All trademarks used in this catalog are the property of their respective owners and their use does not indicate approval or endorsement of Omega Technologies Inc. by the trademark owner. Trademarks include: Hi-Shear[®], VSI[®], Fairchild[®], Alcoa[®], ATI[®], Zephyr[®], and QRS[®].

Returns: Prior to the return of any goods, a Returned Goods Authorization (RGA) must be obtained from the Omega Sales Department. Returned goods should be sent to Omega for evaluation. Defective tools will be repaired, replaced in accordance with Warranty Terms and Conditions (see below). Special items including tools manufactured to customer specifications or special dimensions are not returnable under any circumstances.

Warranty: Omega Technologies Inc. products are warranted to be free of defects in material and workmanship. Products for which Return Goods Authorization (RGA) is requested should be returned, at buyer's cost, for evaluation to the address on the facing page. Please include the RGA# on the outside of the package.

This Warranty shall not apply to Products which have been misused, abused, damaged by accident or otherwise, repaired by an Authorized Repair Center or modified by anyone other than Omega and is in lieu of all other warranties whether express, implied, or statutory. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY EXCLUDED. Buyer's sole and exclusive remedy for breach of this Warranty is, at the opinion of Omega, repair or replacement of the defective product. IN NO EVENT WILL OMEGA BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES ARISING FROM BREACH OF THIS WARRANTY, EVEN IF OMEGA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Safety: All items are sold with the strict and specific understanding that they are to be used properly and with all necessary safety precautions, and that it is the user's responsibility to determine the suitability of the product for their intended use and assume all risk and liability in connection therewith. Common sense and various local, State, and Federal Laws require the constant use of safety equipment when working with any type of tool. Approved eye protection is always recommended when working with any cutting, rotary, or percussion device of any kind such as those listed within the contents of this catalog.

Customer Service: Our office is open to answer questions and take your order Monday through Friday, 7:30 am to 5:00 pm, Pacific Time (excluding holidays).