

APEX[®]

ASSEMBLY & FABRICATION TOOLS

2017-2018



TM

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PREMIUM INDUSTRIAL-GRADE FASTENER DRIVE TOOLS

FROM MANUFACTURING TO CRITICAL REPAIR OPERATIONS,
COMPANIES DEMAND DRIVE TOOLS THAT ARE

HIGH PRECISION, RELIABLE, AND DURABLE.

SIGNIFICANT COST SAVINGS AND PRODUCTIVITY ENHANCEMENTS CAN
BE REALIZED BY USING SCREWDRIVER BITS, SOCKETS, AND UNIVERSAL
WRENCHES THAT LAST LONGER, FIT BETTER, AND OFFER A SUPERIOR
RETURN ON INVESTMENT.



APEX: GLOBAL LEADER IN FASTENER DRIVE TOOLS SINCE 1933

Since 1933, APEX has been delivering high quality, robust solutions for both assembly and MRO applications. We take pride in our capability to provide customers with innovative, robust tools that increase productivity, operating efficiencies, and operator safety. APEX understands that it is all about durability and consistency. Hence our tools are designed to fit and perform better, and significantly last longer than competitive tools.

**THE APEX LINE OF PRECISION
MACHINED, INDUSTRIAL-
GRADE FASTENER DRIVE TOOLS
HAS EVOLVED INTO THE BRAND
OF CHOICE FOR ALL LEADING
ASSEMBLY AND MRO PLANTS
AROUND THE WORLD.**

THE APEX ADVANTAGE

APEX quality begins with our **superior raw materials**. Only carefully chosen, mostly proprietary, industrial grade tool steel is used.

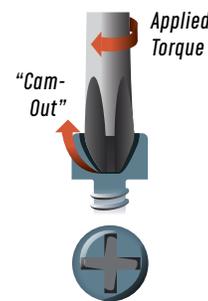
Each tool is **engineered to the highest specifications** in the industry. APEX bits are specified to meet the most stringent government and military specifications where applicable. Our sockets, nutsetters, and universal wrenches have hex tolerances that are on average 45% tighter than ASME (B107.17) and 42% tighter than DIN 475 standards.

Almost all APEX tools are **manufactured in our state-of-the-art facility in Dayton, Ohio**. Our tools are machined, not forged, which produces consistent, precision fit tools that have the tightest tolerances for straightness and concentricity in the industry.

APEX

VS

BRAND X



Precision fit of APEX tools eliminates "camout" and premature bit failure.

High grade alloy steel for improved tool life

Precision fit exceeds industry standards for extended tool and fastener life



Salt-bath Heat Treat process for improved consistency and strength

Precision machined tools run true

Advanced engineering specifications lead to tighter tolerances

TOOLS THAT RUN TRUE, PERFORM BETTER AND LAST LONGER.

THE APEX ADVANTAGE

Each APEX tool is tempered with *our proprietary salt-bath heat treat process*, the most advanced treatment available on the market. Salt bath process minimizes surface oxidation and carburization, and provides our tools with significantly improved consistency and strength. If needed, we have the capability to customize the heat treatment on a tool to meet the requirements of your particular application.

Our *Quality Management System is certified to ISO 9001*. All tools must pass our strict quality control standards. This ensures that we only provide you with the highquality tool that you have come to expect from APEX.



APEX ADVANTAGE

- Globally recognized leader in industrial-grade fastener drive tools
- Superior product durability and consistency because of proprietary materials and consistent manufacturing process
- Greater torque transfer to the fastener due to precision fit design and tighter tolerances
- Diverse offering of more than 10,000 parts available
- Custom solutions capability with quick turnaround times

SIGNIFICANTLY REDUCED TOTAL COST OF OWNERSHIP



SELECTING THE PROPER HEAT TREAT FOR BITS

Choosing the proper heat treat is important in achieving long tool life. Different applications, different operators, and different power tools require different heat treats. APEX offers a choice of three heat treat hardness levels in many of our screwdriver bits to match the particular customer's application. These heat treats are specified by a letter suffix as follows:

- X - The hardest heat treat in the industry
- I - Intermediate hardness
- R - Lowest hardness

Selecting the heat treat best suited for a particular application may require some trial and error. The proper heat treat depends on the failure mode. If the bit breaks or shatters, select a bit with less hardness. If the failure mode is wear, select a harder bit. Many times both breakage and wear may occur within the same application. This can be due to a number of factors such as different operators, different torque values, and different power tool settings.

In general, high torque applications require "R" heat treats to withstand twisting and resist breakage. The "X" heat treat is most suitable for low torque applications, particularly if hardened screws are used.

If a failure occurs, a change in hardness may result in better service. The "X" heat treat is most common and should be selected unless the specifics of an application or an existing problem would suggest using "I" or "R" hardness. To specify a particular heat treat, add a letter suffix to the part number. For example, to specify "X" hardness in a #2 Phillips insert, the part number would be 440-2X. Not all APEX bits are available in all heat treats. Special heat treats can be supplied for a particular application. Contact your APEX representative for specific recommendations.

Since "X" hardness is the most popular with our customers, it is our default product where "X" designation may be omitted from the part number. For all other hardness designations, the product packaging will be marked with the appropriate hardness designation letter.

APEX



BRAND X



APEX bits and sockets last significantly longer than most of our competitors.

UNSURPASSED OFFERING

This catalog contains 5,000+ of the most frequently requested bits, sockets, universal wrenches, and fastening accessories. Our entire active offering approaches 10,000 sellable part numbers. If the tool you need does not appear in this catalog, please give us a call. The odds are, we may have what you need as a non-catalog item. If not, our experienced staff of tooling experts can design and manufacture custom solutions to meet the needs of your specific applications. This flexibility has helped make APEX the only manufacturer which is a market and technology leader in all of the following industrial product categories: Bits & Bit Holders, Impact Sockets, Extensions and Universal Wrenches.

AVAILABILITY & SERVICE

APEX has approximately 2,000 authorized distributor locations globally to provide product off-the-shelf as well as knowledgeable service and support. APEX stocks over 1,000 part numbers and a multitude of blanks to manufacture several thousand more in order to support our strong global distribution network.





HIGH-PRECISION SCREWDRIVER BITS: INSERT AND POWER DRIVE



// MANUFACTURED FROM PROPRIETARY INDUSTRIAL GRADE STEEL. CUTTING EDGE MACHINING PROCESS AND ADVANCED HEAT TREATMENT PROVIDES A BETTER, CONSISTENT FIT TO THE FASTENER AND YIELDS GREATER STRENGTH AND LONGER BIT LIFE.

INSERT AND POWER DRIVE BITS

AVAILABLE FASTENER DRIVE STYLES:

- ⊕ Phillips®
- ⊕ Torx Plus® Tamper Resistant
- ⊕ B.N.A.E
- ⊕ MorTorq® Super
- ⊖ Slotted
- ⊕ Pozidriv®
- Socket Head
- ⊕ Tri-Wing®
- ⊕ Torx®
- ⊕ Sel-o-fit™
- Square Recess
- ⊖ Hi-Torque®
- Torx Plus®
- ⊕ Quadrex®
- ⊕ Torq-Set®
- Triple Square
- ⊕ Torx® Tamper Resistant
- ⊕ Frearson
- ⊕ MorTorq®

⊕ PHILLIPS BITS

1/4" HEX INSERT BITS

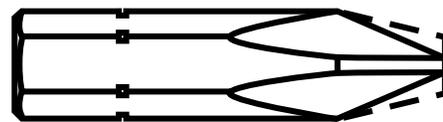


Part Number	Point Size	Overall Length IN. MM.	Bit Notes
440-1X	1	1 25	
440-1I	1	1 25	
440-115X	1	1 1/2 38	
440-12X	1	2 51	
440-125X	1	2 1/2 64	
440-13X	1	3 76	
440-2X	2	1 25	
440-2I	2	1 25	
440-2R	2	1 25	
440-215X	2	1 1/2 38	
440-22X	2	2 51	
440-225X	2	2 1/2 64	
440-23X	2	3 76	
440-24X	2	4 101	
440-255X	2	5 1/2 140	
440-26X	2	6 152	
440-27X	2	1 25	For Shallow Screw Recesses
440-3X	3	1 25	
440-3I	3	1 25	
440-3BNX	3	1 1/4 32	Large Body
440-3I25X	3	1 1/4 32	
440-32X	3	2 51	
440-325X	3	2 1/2 64	
440-33X	3	3 76	
440-34X	3	4 101	
440-4X	4	1 5/16 33	

1/4" HEX INSERT BITS – ACR®



Part Number	Point Size	Overall Length IN. MM.	Bit Notes
440-1-ACR1-RX	1	1 25	
440-1-ACR1-DX	1	1 25	
440-1-ACR1X	1	1 25	
440-2-ACR2-RX	2	1 25	
440-2-ACR2-RI	2	1 25	
440-2-ACR2-DX	2	1 25	
440-2-ACR2X	2	1 25	
446-2-ACR2-DX	2	1 25	Limited Clearance
446-2-ACR2X	2	1 25	Limited Clearance
440-22-ACR2-RX	2	2 51	
440-22-ACR2-DX	2	2 51	
440-22-ACR2X	2	2 51	
440-3-ACR3-DX	3	1 25	
440-3-ACR3-RX	3	1 25	
440-3-ACR3X	3	1 25	



ADVANTAGE OF 27 SERIES BITS:

A 27 Series bits are ideal for poorly recessed Phillips screws. A wider tip design fills out an inexact recess to make better contact.

PHILLIPS BITS

1/4" HEX INSERT BITS LIMITED CLEARANCE



Part Number	Point Size	Overall Length		Turned Length (A)		Turned OD (B)	
		IN.	MM.	IN.	MM.	IN.	MM.
446-0X	0	1	25	7/16	11	0.17	4.06
446-1X	1	1	25	7/16	11	0.17	4.06
446-12X	1	2	51	7/16	11	0.17	4.06
SD-1055-A	1	2	51	1 3/8	35	0.17	4.06
446-2I	2	1	25	7/16	11	0.17	4.06
446-2X	2	1	25	7/16	11	0.17	4.06
446-27X*	2	1	25	7/16	11	0.17	4.06
446-215T	2	1 1/2	38	1	25	0.17	4.06
446-215X	2	1 1/2	38	7/16	11	0.17	4.06
446-22TX	2	2	51	1 1/2	38	0.17	4.06
446-22X	2	2	51	7/16	11	0.17	4.06
446-225T	2	2 1/2	64	1 3/4	44	0.17	4.06
446-23T	2	3	76	2 1/4	57	0.17	4.06
446-3X	3	1	25	7/16	11	0.24	6.1

* For shallow screw recess

5/16" HEX INSERT BITS



Part Number	Point Size	Overall Length		Bit Notes
		IN.	MM.	
480-1X	1	1 1/4	32	
480-2X	2	1 1/4	32	
480-2I	2	1 1/4	32	
480-22X	2	2	51	
480-225X	2	2 1/2	64	
480-24X	2	4	101	
480-3X	3	1 1/4	32	
480-3I	3	1 1/4	32	
480-325X	3	2 1/2	64	
480-34X	3	4	101	
480-4X	4	1 1/4	32	
480-4BNX	4	1 1/2	38	Large Body
480-425X	4	2 1/2	64	

5/16" SQUARE INSERT BITS



Part Number	Point Size	Overall Length	
		IN.	MM.
830-1X	1	1 1/8	29
830-2X	2	1 1/8	29
830-2R	2	1 1/8	29
830-3X	3	1 1/8	29
830-4X	4	1 1/8	29



ADVANTAGE OF REDUCED DIAMETER BITS:

Reduced diameter bits are ideal for driving screws below the surface of drywall.

5/16" HEX INSERT BITS – ACR®



Part Number	Point Size	Overall Length	
		IN.	MM.
480-2-ACR2-RX	2	1 1/4	32
480-2-ACR2X	2	1 1/4	32
480-3-ACR3X	3	1 1/4	32
480-4-ACR4X	4	1 1/4	32

Part Number Suffix - R		Part Number Suffix -D		No Part Number Suffix	
For removal		For driving		For both removal and driving	

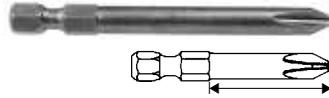


ADVANTAGE OF APEX ACR® BITS:

Painted, coated or corroded fasteners can present special problems. APEX® ACR® insert bits' special wing-face ribs grip screw recesses to reduce stripping and cam-out which can result in damage to the surrounding workpiece. Choose from bits ribbed for screw removal, driving or both. They're also available in both insert bits and power drives.

PHILLIPS BITS

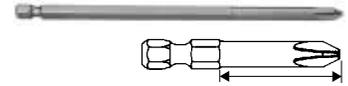
1/4" HEX POWER DRIVE



Part Number	Point Size	Overall Length		Body Dia.		Turned Length	
		IN.	MM.	IN.	MM.	IN.	MM.
4910-BX	0	3 1/2	89	1/8	3.2	2 3/4	70
4910-AX	0	2 3/4	70	1/8	3.2	2	51
4910-CX	0	6	152	1/8	3.2	2	51
4910X	0	1 15/16	49	1/8	3.2	1 1/4	32
491-AX	1	2 3/4	70	3/16	4.8	2	51
491-BX	1	3 1/2	89	3/16	4.8	2 3/4	70
491-CCX	1	6	152	3/16	4.8	5 1/4	133
491-CX	1	6	152	3/16	4.8	2	51
491X	1	1 15/16	49	3/16	4.8	2	32
492-200MM	2	7 13/16	200	1/4	6.4	7	178
492-27X	2	1 15/16	49	1/4	6.4	1 1/4	32
492-4X	2	4	102	1/4	6.4	3 1/4	83
492-A-27X*	2	2 3/4	70	1/4	6.4	2	51
492-AI	2	2 3/4	70	1/4	6.4	2	51
492-AX	2	2 3/4	70	1/4	6.4	2	51
492-B-27X*	2	3 1/2	89	1/4	6.4	2 3/4	70
492-BI	2	3 1/2	89	1/4	6.4	2 3/4	70
492-BX	2	3 1/2	89	1/4	6.4	2 3/4	70
492-C-27X*	2	6	152	1/4	6.4	2	51
492-CC-27X*	2	6	152	1/4	6.4	5 1/4	133
492-CCX	2	6	152	1/4	6.4	5 1/4	133
492-CI	2	6	152	1/4	6.4	2	51
492-CX	2	6	152	1/4	6.4	2	51
492I	2	1 15/16	49	1/4	6.4	1 1/4	32
492X	2	1 15/16	49	1/4	6.4	1 1/4	32
SD-1474-D	2	4 1/2	114	1/4	6.4	3 3/4	95
SD-1975-B	2	3 1/2	89	.151	3.8	2 3/4	70
SD-2052-10	2	10	254	9/32	7.1	9	229
SD-2052-8	2	8	203	9/32	7.1	7	178
SD-4429	2	1 15/16	49	.170	4.3	7/16	11
SD-4496-2	2	6	152	.120	3.0	2 3/4	70
SD-5206	2	6	152	.170	4.3	5 1/4	133
SD-5413	2	2	51	.170	4.3	7/16	11
4930-AX	3	2 3/4	70	1/4	6.4	2	51
4930-BX	3	3 1/2	89	1/4	6.4	2 3/4	70
4930-CCX	3	6	152	1/4	6.4	5 1/4	133
4930-CX	3	6	152	1/4	6.4	2	51
4930X	3	1 15/16	49	1/4	6.4	1 1/4	32
493-AI	3	2 3/4	70	5/16	7.9	1 3/4	44
493-AR	3	2 3/4	70	5/16	7.9	1 3/4	44
493-AX	3	2 3/4	70	5/16	7.9	1 3/4	44
493-BX	3	3 1/2	89	5/16	7.9	2 1/2	64
493-CX	3	6	152	5/16	7.9	5	127
493X	3	1 15/16	49	5/16	7.9	1	25
494X	4	1 15/16	49	3/8	9.5	1	25

* For shallow screw recess

1/4" HEX POWER DRIVE – ACR®



Part Number	Point Size	Overall Length		Body Dia.		Turned Length	
		IN.	MM.	IN.	MM.	IN.	MM.
491-ACR1-DX	1	1 15/16	49	3/16	4.8	1 1/4	32
491-ACR1-RX	1	1 15/16	49	3/16	4.8	1 1/4	32
491-ACR1X	1	1 15/16	49	3/16	4.8	1 1/4	32
491-A-ACR1X	1	2 3/4	70	3/16	4.8	2	51
492-ACR2-DX	2	1 15/16	49	1/4	6.4	1 1/4	32
492-ACR2-RX	2	1 15/16	49	1/4	6.4	1 1/4	32
492-ACR2X	2	1 15/16	49	1/4	6.4	1 1/4	32
492-A-ACR2-DX	2	2 3/4	70	1/4	6.4	2	51
492-A-ACR2X	2	2 3/4	70	1/4	6.4	2	51
492-B-ACR2-DX	2	3 1/2	89	1/4	6.4	2 3/4	70
492-B-ACR2X	2	3 1/2	89	1/4	6.4	2 3/4	70
492-C-ACR2-DX	2	6	152	1/4	6.4	2	51
493-ACR3X	3	1 15/16	49	5/16	7.9	1	25

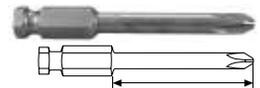
Part Number Suffix - R  Part Number Suffix -D  No Part Number Suffix 
 For removal For driving For both removal and driving

1/4" HEX POWER DRIVE WITH FINDER SLEEVE



Part Number	Point Size	Overall Length		Sleeve Dia.	
		IN.	MM.	IN.	MM.
SD-556-A	2	3 1/2	89	7/16	11.1
SD-556	2	6	152	7/16	11.1

7/16" HEX POWER DRIVE



Part Number	Point Size	Overall Length		Body Dia.		Turned Length	
		IN.	MM.	IN.	MM.	IN.	MM.
482X	2	3 1/2	89	1/4	6.4	2 1/4	57
483X	3	3 1/2	89	5/16	7.9	2 1/4	57
484X	4	3 1/2	89	3/8	9.5	2 1/4	57



SELECTING A BIT:

Take the guesswork out of bit selection. APEX Phillips and Torx® ring gauges help you find the right bit for your fasteners. Order SD-3749 for Phillips and SD-4064-G for Torx®.

PHILLIPS BITS

9/32" NO. 130A YANKEE DRIVE



Part Number	Point Size	Overall Length IN. MM.	Body Dia. IN. MM.
451X	1	3 1/4 83	3/16 4.8
452X	2	3 1/4 83	9/32 7.1
453X	3	3 1/4 83	5/16 7.9

10-32 SCREW SHANK DRIVE



Part Number	Point Size	Overall Length IN. MM.	Body Dia. IN. MM.
501X	1	1 1/2 38	3/16 4.8
501-AX	1	1 13/16 46	3/16 4.8
SD-4739	2	1 1/2 38	3/16 4.3
502X	2	1 1/2 38	1/4 6.4
502-ACR2X*	2	1 1/2 38	1/4 6.4
SD-1342-2	2	1 3/4 45	1/4 6.4
502-AX	2	1 13/16 46	1/4 6.4
503X	3	1 1/2 38	5/16 7.9

* Features ACR® Anti-camout ribs; see tool tip on page 10.

12-24 SCREW SHANK DRIVE



Part Number	Point Size	Overall Length IN. MM.	Body Dia. IN. MM.
551X	1	1 3/16 30	.30 7.6
552X	2	1 3/16 30	.30 7.6
552I	2	1 3/16 30	.30 7.6
553X	3	1 3/16 30	.30 7.6

1/4"-24 SCREW SHANK DRIVE



Part Number	Point Size	Overall Length IN. MM.	Body Dia. IN. MM.
401X	1	1 1/2 38	3/16 4.8
402X	2	1 1/2 38	1/4 6.4
403X	3	1 1/2 38	5/16 7.9
403I	3	1 1/2 38	5/16 7.9

8-32 SCREW SHANK DRIVE



Part Number	Point Size	Overall Length IN. MM.	Body Dia. IN. MM.
591X	1	1 3/16 30	7/32 5.6
592X	2	1 3/16 30	7/32 5.6

FEMALE SQUARE SERVICE DRIVE



Part Number	Point Size	Female Square Drive IN.	Overall Length IN. MM.	Body Dia. IN. MM.
821	1	1/4	2 51	1/4 6.4
822	2	1/4	2 51	1/4 6.4
832	2	3/8	2 5/8 67	5/16 7.9
833	3	3/8	2 5/8 67	5/16 7.9
834	4	3/8	2 5/8 67	5/16 7.9
852	2	1/2	2 7/8 73	5/16 7.9
853	3	1/2	2 7/8 73	5/16 7.9
854	4	1/2	2 7/8 73	3/8 9.5

MORTORQ® BITS



Part Number	Driver/Size Type IN.	MorTorq Size	Overall Length IN. MM.
440-MT-00	1/4 Hex Insert	00	1 25
440-MT-0	1/4 Hex Insert	0	1 25
440-MT-1	1/4 Hex Insert	1	1 25
440-MT-2	1/4 Hex Insert	2	1 25
480-MT-3	5/16 Hex Insert	3	1 1/4 32
AM-MT-0	1/4 Hex Power	0	1 15/16 49
AM-MT-1	1/4 Hex Power	1	1 15/16 49
AM-MT-2	1/4 Hex Power	2	1 15/16 49
AN-MT-3	7/16 Hex Power	3	1 1/4 32
AN-MT-4	7/16 Hex Power	4	1 1/4 32

MORTORQ® SUPER

5/16" HEX INSERT BITS



Part Number	Mortorq Super Size	Overall Length IN. MM.
480-MTS-2	2	1 1/4 32



DIFFERENCE BETWEEN INSERT & POWER BIT:

Insert bits are commonly used with a bit holder in power tool applications. This combination is economical, provides flexibility and allows a fastener to be magnetically held by the bit. Power bits are placed directly into the power tool chuck. See pages 34-36 for a complete listing of APEX bit holders.

TYPES OF HEADS

Note: When ordering slotted bits, please remember that head sizes and slot widths of hardened, self tapping, and sheet metal screws do not conform to the same specifications as standard wood or machine screws described in the chart below. Also, because of variations in these dimensions among screws from different manufacturers, bits should be ordered to head and slot size rather than screw size.

⊖ SLOTTED SCREW SIZES

Screw Sizes	Diameter of Head						Width of Slot			
	Flat / Oval Head		Round Head		Truss Head	Binding Head		Fillister Cap Mach.	Pan Head	
	Wood	Mach.	Wood	Mach.				Cap		
1	.146	.146	.138	.138	-	-	-	.118	-	.026
	.130	.130	.122	.122	-	-	-	.104	-	.019
2	.172	.172	.162	.162	.194	.181	-	.140	.167	.031
	.156	.156	.146	.146	.180	.171	-	.124	.155	.023
3	.199	.199	.187	.187	.226	.208	-	.161	.193	.035
	.181	.181	.169	.169	.211	.197	-	.145	.180	.027
4	.225	.225	.211	.211	.257	.235	-	.183	.219	.039
	.207	.207	.193	.193	.241	.223	-	.166	.205	.031
5	.252	.252	.236	.236	.289	.263	-	.205	.245	.043
	.232	.232	.217	.217	.272	.249	-	.187	.231	.035
6	.279	.279	.260	.260	.321	.290	-	.226	.270	.048
	.257	.257	.240	.240	.303	.275	-	.208	.256	.039
7	.305	-	.285	-	.352	-	-	-	.296	.048
	.283	-	.264	-	.333	-	-	-	.281	.039
8	.332	.332	.309	.309	.384	.344	-	.270	.322	.054
	.308	.308	.287	.287	.364	.326	-	.250	.306	.045
9	.358	-	.334	-	-	-	-	-	-	.054
	.334	-	.311	-	-	-	-	-	-	.045
10	.385	.385	.359	.359	.448	.339	-	.313	.373	.060
	-	.359	.334	.334	.425	.378	-	.292	.357	.050
12	.438	.438	.408	.408	.511	.454	-	.357	.425	.067
	.410	.410	.382	.382	.487	.430	-	.334	.407	.056
14	.491	-	.457	-	-	-	-	-	-	.075
	.461	-	.424	-	-	-	-	-	-	.064
1/4"	-	.507	-	.472	.573	.513	.375	.414	.492	.075
	-	.477	-	.443	.546	.488	.363	.389	.473	.064
16	.544	-	.506	-	-	-	-	-	-	.075
	.512	-	.476	-	-	-	-	-	-	.064
18	.597	-	.555	-	-	-	-	-	-	.084
	.563	-	.523	-	-	-	-	-	-	.072
5/16"	-	.635	-	.590	.698	.641	.437	.518	.615	.084
	-	.600	-	.557	.666	.609	.424	.490	.594	.072
20	.650	-	.604	-	-	-	-	-	-	.084
	.614	-	.570	-	-	-	-	-	-	.072
24	.756	-	.702	-	-	-	-	-	-	.094
	.716	-	.664	-	-	-	-	-	-	.081
3/8"	-	.762	-	.708	.823	.769	.562	.622	.740	.094
	-	.722	-	.670	.787	.731	.547	.590	.716	.081

⊖ SLOTTED BITS

1/4" HEX INSERT BITS LIMITED CLEARANCE



Part Number	Screw Size	Overall Length		Blade Thickness		Blade Width	
		IN.	MM.	IN.	MM.	IN.	MM.
445-000X	1F-2R	1	25	.021	0.53	.125	3.2
445-00X	2F-3R	1	25	.025	0.64	.140	3.6
445-0X	3F-4R	1	25	.030	0.76	.154	3.9
445-10X	4F-5R	1	25	.034	0.86	.185	4.7
445-20X	5F-6R	1	25	.036	0.91	.216	5.5
445-30X	6R-7R	1	25	.038	0.97	.248	6.3
445-00-15X	2F-3R	1 1/2	38	.028	0.71	.138	3.5
445-0-15X	3F-4R	1 1/2	38	.032	0.81	.154	3.9
445-10-15X	4F-5R	1 1/2	38	.034	0.86	.185	4.7
445-20-15X	5F-6R	1 1/2	38	.036	0.91	.216	5.5
445-30-15X	6R-7R	1 1/2	38	.038	0.97	.248	6.3

1/4" HEX INSERT BITS



Part Number	Screw Size	Overall Length		Blade Thickness		Blade Width	
		IN.	MM.	IN.	MM.	IN.	MM.
445-1X	4F-5R	1	25	0.034	0.86	3/16	4.8
445-2X	6F-8R	1	25	.040	1.02	7/32	5.6
445-3X	8F-10R	1	25	.042	1.07	1/4	6.4
445-4X	10F-12R	1	25	.046	1.17	9/32	7.1
445-5X	12R-14R	1 1/2	38	.050	1.27	5/16	7.9
445-6X	14F-16R	1 1/2	38	.050	1.40	23/64	9.1
445-1-15X	4F-5R	1 1/2	38	.034	0.86	3/16	4.8
445-2-15X	6F-8R	1 1/2	38	.040	1.02	7/32	5.6
445-3-15X	8F-10R	1 1/2	38	.042	1.07	1/4	6.4
445-4-15X	10F-12R	1 1/2	38	.046	1.17	9/32	7.1

5/16" HEX INSERT BITS



Part Number	Screw Size	Overall Length		Blade Thickness		Blade Width	
		IN.	MM.	IN.	MM.	IN.	MM.
485-1X	4F-5R	1 1/2	38	.034	0.86	.188	4.8
485-2X	6F-8R	1 1/2	38	.040	1.02	.219	5.6
485-3X	8F-10R	1 1/2	38	.042	1.07	.25	6.4
485-4X	10F-12R	1 1/2	38	.046	1.17	.296	7.52
485-5X	12F-14R	1 1/2	38	.050	1.27	.328	8.33
485-6X	14F-16R	1 1/2	38	.055	1.40	.328	8.33
485-7X	16F-18R	1 3/4	45	.060	1.52	.50	12.7

5/16" HEX POWER DRIVE



Part Number	Screw Size	Overall Length		Blade Thickness		Blade Width	
		IN.	MM.	IN.	MM.	IN.	MM.
635-6X	10F-12R	2 1/4	57	0.046	1.17	0.36	9.14
635-7X	12F-14R	2 1/4	57	0.050	1.27	0.395	10.03
635-8X	14F-16R	2 1/4	57	0.055	1.40	0.457	11.61
635-9X	16F-20R	2 1/4	57	0.060	1.52	0.503	12.78
635-10X	20F-22R	2 1/4	57	0.062	1.57	0.545	13.84

10-32 SCREW SHANK DRIVE



Part Number	Screw Size	Overall Length		Blade Thickness		Blade Width	
		IN.	MM.	IN.	MM.	IN.	MM.
103-00X	2F-3R	1 1/2	38	0.026	0.66	0.14	3.56
103-1X	4F-5R	1 1/2	38	0.034	0.86	0.187	4.75
103-2X	5F-6R	1 1/2	38	0.036	0.91	0.225	5.72
103-3X	6F-7R	1 1/2	38	0.038	0.97	0.25	6.35
103-4X	7F-8R	1 1/2	38	0.040	1.02	0.275	7.24
103-5X	8F-10R	1 1/2	38	0.042	1.07	0.296	7.52
103-6X	10F-12R	1 1/2	38	0.046	1.17	0.309	7.24

1/4"-24 SCREW SHANK DRIVE



Part Number	Screw Size	Overall Length		Blade Thickness		Blade Width	
		IN.	MM.	IN.	MM.	IN.	MM.
309-000X	1F-2R	1 1/2	38	0.022	0.56	0.125	3.18
309-00X	2F-3R	1 1/2	38	0.026	0.66	0.14	3.56
309-1X	4F-5R	1 1/2	38	0.034	0.86	0.187	4.75
309-2X	5F-6R	1 1/2	38	0.036	0.91	0.225	5.72
309-3X	6F-7R	1 1/2	38	0.038	0.97	0.25	6.35
309-4X	7F-8R	1 1/2	38	0.040	1.02	0.285	7.24
309-5X	8F-10R	1 1/2	38	0.042	1.07	0.296	7.52
309-6X	10F-12R	1 1/2	38	0.046	1.17	0.315	8
309-8X	14F-16R	1 1/2	38	0.055	1.40	0.361	9.17

⊖ SLOTTED BITS

1/4" HEX POWER DRIVE



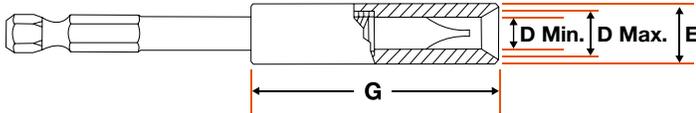
Part Number	Screw Size	Overall Length		Blade Width		Blade Thickness	
		IN.	MM.	IN.	MM.	IN.	MM.
320-000X	1F-2R	1 15/16	49	.022	.56	.122	3.10
326-000X	1F-2R	2 3/4	70	.022	.56	.122	3.10
323-000X	1F-2R	3	76	.022	.56	.122	3.10
327-000X	1F-2R	3 1/2	89	.022	.56	.122	3.10
324-000X	1F-2R	4	102	.022	.56	.122	3.10
325-000X	1F-2R	5	127	.022	.56	.122	3.10
328-000X	1F-2R	6	152	.022	.56	.122	3.10
320-00X	2F-3R	1 15/16	49	.026	.66	.134	3.40
326-00X	2F-3R	2 3/4	70	.026	.66	.134	3.40
323-00X	2F-3R	3	76	.026	.66	.134	3.40
327-00X	2F-3R	3 1/2	89	.026	.66	.134	3.40
324-00X	2F-3R	4	102	.026	.66	.134	3.40
325-00X	2F-3R	5	127	.026	.66	.134	3.40
328-00X	2F-3R	6	152	.026	.66	.134	3.40
320-0X	3F-4R	1 15/16	49	.030	.76	.151	3.84
326-0X	3F-4R	2 3/4	70	.030	.76	.151	3.84
323-0X	3F-4R	3	76	.030	.76	.151	3.84
327-0X	3F-4R	3 1/2	89	.030	.76	.151	3.84
324-0X	3F-4R	4	102	.030	.76	.151	3.84
325-0X	3F-4R	5	127	.030	.76	.151	3.84
328-0X	3F-4R	6	152	.030	.76	.151	3.84
320-1X	4F-5R	1 15/16	49	.034	.86	.187	4.75
326-1X	4F-5R	2 3/4	70	.034	.86	.187	4.75
323-1X	4F-5R	3	76	.034	.86	.187	4.75
327-1X	4F-5R	3 1/2	89	.034	.86	.187	4.75
324-1X	4F-5R	4	102	.034	.86	.187	4.75
325-1X	4F-5R	5	127	.034	.86	.187	4.75
328-1X	4F-5R	6	152	.034	.86	.187	4.75
320-20X	5F-6R	1 15/16	49	.036	.91	.215	5.46
326-20X	5F-6R	2 3/4	70	.036	.91	.215	5.46
323-20X	5F-6R	3	76	.036	.91	.215	5.46
327-20X	5F-6R	3 1/2	89	.036	.91	.215	5.46
324-20X	5F-6R	4	102	.036	.91	.215	5.46
325-20X	5F-6R	5	127	.036	.91	.215	5.46
328-20X	5F-6R	6	152	.036	.91	.215	5.46
320-2X	5F-6R	1 15/16	49	.036	.91	.250	6.35
326-2X	5F-6R	2 3/4	70	.036	.91	.250	6.35
323-2X	5F-6R	3	76	.036	.91	.250	6.35
327-2X	5F-6R	3 1/2	89	.036	.91	.250	6.35
324-2X	5F-6R	4	102	.036	.91	.250	6.35
328-2X	5F-6R	6	152	.036	.91	.250	6.35
320-3X	6F-8R	1 15/16	49	.038	.97	.250	6.35
326-3X	6F-8R	2 3/4	70	.038	.97	.250	6.35
323-3X	6F-8R	3	76	.038	.97	.250	6.35

Part Number	Screw Size	Overall Length		Blade Width		Blade Thickness	
		IN.	MM.	IN.	MM.	IN.	MM.
327-3X	6F-8R	3 1/2	89	.038	.97	.250	6.35
324-3X	6F-8R	4	102	.038	.97	.250	6.35
325-3X	6F-8R	5	127	.038	.97	.250	6.35
328-3X	6F-8R	6	152	.038	.97	.250	6.35
320-4X	8F-10R	1 15/16	49	.042	1.07	.275	6.99
326-4X	8F-10R	2 3/4	70	.042	1.07	.275	6.99
323-4X	8F-10R	3	76	.042	1.07	.275	6.99
327-4X	8F-10R	3 1/2	89	.042	1.07	.275	6.99
324-4X	8F-10R	4	102	.042	1.07	.275	6.99
325-4X	8F-10R	5	127	.042	1.07	.275	6.99
328-4X	8F-10R	6	152	.042	1.07	.275	6.99
320-5X	10F-12R	1 15/16	49	.046	1.17	.312	7.92
326-5X	10F-12R	2 3/4	70	.046	1.17	.312	7.92
323-5X	10F-12R	3	76	.046	1.17	.312	7.92
327-5X	10F-12R	3 1/2	89	.046	1.17	.312	7.92
324-5X	10F-12R	4	102	.046	1.17	.312	7.92
325-5X	10F-12R	5	127	.046	1.17	.312	7.92
328-5X	10F-12R	6	152	.046	1.17	.312	7.92
320-6X	12F-14R	1 15/16	49	.050	1.27	.360	9.14
326-6X	12F-14R	2 3/4	70	.050	1.27	.360	9.14
323-6X	12F-14R	3	76	.050	1.27	.360	9.14
327-6X	12F-14R	3 1/2	89	.050	1.27	.360	9.14
324-6X	12F-14R	4	102	.050	1.27	.360	9.14
325-6X	12F-14R	5	127	.050	1.27	.360	9.14
328-6X	12F-14R	6	152	.050	1.27	.360	9.14

If the tool you need does not appear in this catalog, give us a call. The odds are, we may have what you need as a non-catalog item. If not, our experienced staff of tooling experts can design and manufacture "custom solutions" to meet the needs of your specific application.

⊖ SLOTTED POWER BITS WITH FINDER SLEEVES

Each finder sleeve assembly part number begins with a letter prefix that denotes the particular sleeve used with that assembly. The chart below gives complete dimensional data for each finder sleeve.



Part Number	Screw Size	D Max IN.	D Max MM.	D Min IN.	D Min MM.	Sleeve Length G IN.	Sleeve Length G MM.	Sleeve Dia. E IN.	Sleeve Dia. E MM.
L	5F-6R	.260	6.60	.233	5.92	1 7/8	47.6	3/8	9.5
M	6F-6R	.309	7.85	.261	6.63	1 7/8	47.6	7/16	11.1
P	8F-6R	.368	9.35	.310	7.87	1 7/8	47.6	1/2	12.7
NP*	8F-10R	.368	9.35	.310	7.87	1 7/8	47.6	7/16	11.1
R	10F-12R	.415	10.54	.369	9.37	2	50.8	9/16	14.3
S	12F-14R	.478	12.14	.416	10.57	2	50.8	5/8	15.9
T	14F-16R	.522	13.26	.479	12.17	2 1/8	54.0	11/16	17.5
U	16F-20R	.621	15.77	.523	13.28	2 1/8	54.0	3/4	19.1
W	20F-22R	.665	16.89	.622	15.80	2 1/16	52.4	13/16	20.3
Y	24F-24R	.715	18.16	.666	16.92	2 1/32	51.6	15/16	23.8

* Sleeve NP is a cup type sleeve.

1/4" HEX POWER DRIVE



Part No. Complete Assembly	Part No. Bit Only	Screw Size	Bit Length IN.	Bit Length MM.	Blade Thickness IN.	Blade Thickness MM.	Bit Body Dia. IN.	Bit Body Dia. MM.
NOL-320X	320-LX	5F-6R	3 1/2	89	.036	.91	0.193	4.9
L-320X	320-LX	5F-6R	3 3/4	95	.036	.91	0.193	4.9
M-320X	320-MX	6F-8R	3 3/4	95	.038	.97	0.241	6.12
NM-320X	320-MX	6F-8R	3 1/2	89	.038	.97	0.241	6.12
P-320X	320-PX	8F-10R	3 3/4	95	.042	1.07	0.290	7.37
R-320X	320-RX	10F-12R	3 3/4	95	.046	1.17	0.350	8.89
S-320X	320-SX	12F-14R	3 7/8	98	.050	1.27	0.395	10.03
T-320X	320-TX	14F-16R	4 1/8	105	.055	1.40	0.457	11.61



ADVANTAGE OF USING FINDER SLEEVES



A finder sleeve makes it easy to engage slotted fasteners with the bit. It guides the bit so there is less "searching" for the proper alignment between blade and slot.

1/4" HEX POWER DRIVE – LONG SERIES



Part No. Complete Assembly	Part No. Bit Only	Screw Size	Bit Length IN.	Bit Length MM.	Blade Thickness IN.	Blade Thickness MM.	Bit Body Dia. IN.	Bit Body Dia. MM.
L-328X	328-LX	5F-6R	6 1/2	165	0.036	0.91	0.193	4.9
M-328X	328-MX	6F-8R	6 1/2	165	0.038	0.97	0.241	6.12
P-328X	328-PX	8F-10R	6 1/2	165	0.042	1.07	0.290	7.37
R-328X	328-RX	10F-12R	6 1/2	165	0.046	1.17	0.350	8.89
S-328X	328-SX	12F-14R	6 1/2	165	0.050	1.27	0.395	10.03

1/4" HEX POWER DRIVE – EXTRA SHORT SERIES



Part No. Complete Assembly	Part No. Bit Only	Screw Size	Bit Length IN.	Bit Length MM.	Blade Thickness IN.	Blade Thickness MM.	Bit Body Dia. IN.	Bit Body Dia. MM.
000L-322X	322-000LX	2F-3R	2 3/32	53	.026	0.66	0.138	3.50
00L-322X	322-00LX	3F-4R	2 3/32	53	.030	0.76	0.154	3.91
0L-322X	322-0LX	4F-5R	2 3/32	53	.034	0.86	0.185	4.70
L-322X	322-LX	5F-6R	2 3/32	53	.036	0.91	0.185	4.70
M-322X	322-MX	6F-8R	2 3/32	53	.040	1.02	0.248	6.30
P-322X	322-PX	8F-10R	2 3/32	53	.042	1.07	0.283	7.19
R-322X	322-RX	10F-12R	2 3/32	53	.046	1.17	0.283	7.19

7/16" HEX POWER DRIVE



Part Number	Screw Size	Bit Length IN.	Bit Length MM.	Blade Thickness IN.	Blade Thickness MM.	Bit Body Dia. IN.	Bit Body Dia. MM.
R-321X	10F-12R	3 7/8	98	.046	1.17	0.350	8.89
S-321X	12F-14R	3 7/8	98	.050	1.27	0.395	10.03
T-321X	14F-16R	4 1/8	105	.055	1.40	0.457	11.61
U-321X	16F-20R	4 1/8	105	.060	1.52	0.503	12.78
W-321X	20F-22R	4 1/8	105	.062	1.57	0.545	13.84
Y-321X	24F-24R	4 1/8	105	.065	1.65	0.595	15.11

TORX® BITS

1/4" HEX INSERT BITS



Part Number	Torxalign® Part Number	Driver Size	A	Overall Length IN. MM.
440-TX-05X	-	T-5	.055	1 25
440-TX-06X	-	T-6	.065	1 25
440-TX-07X	-	T-7	.077	1 25
440-TX-08X	-	T-8	.090	1 25
440-TX-09X	-	T-9	.097	1 25
440-TX-10X	440-TX-10-W	T-10	.107	1 25
440-TX-15X	440-TX-15-W	T-15	.128	1 25
440-TX-15-125	-	T-15	.128	1 1/4 32
440-TX-20X	440-TX-20-W	T-20	.151	1 25
440-TX-20-125	-	T-20	.151	1 1/4 32
440-TX-20-2	-	T-20	.151	2 51
440-TX-25X	440-TX-25-W	T-25	.173	1 25
440-TX-27X	440-TX-27-W	T-27	.195	1 25
440-TX-30X	440-TX-30-W	T-30	.216	1 25
440-TX-30I	440-TX-30-W	T-30	.216	1 25
440-TX-40X	440-TX-40-W	T-40	.260	1 25
440-TX-40I	440-TX-40-W	T-40	.260	1 25
440-TX-45X*	-	T-45	.306	1 1/4 32
440-TX-50X*	-	T-50	.346	1 1/4 32

* Hex will break before rated ultimate torque of the Torx® point is met.

1/4" HEX INSERT BITS ⊕ TAMPER RESISTANT



Part Number	Driver Size	A⊕	Overall Length IN. MM.
440-TX-07-H	T-7-H	.077	1 25
440-TX-08-H	T-8-H	.090	1 25
440-TX-09-H	T-9-H	.097	1 25
440-TX-10-H	T-10-H	.107	1 25
440-TX-15-H	T-15-H	.128	1 25
440-TX-20-H	T-20-H	.151	1 25
440-TX-25-H	T-25-H	.173	1 25
440-TX-27-H	T-27-H	.195	1 25
440-TX-30-H	T-30-H	.216	1 25
440-TX-40-H	T-40-H	.260	1 25



TAMPER RESISTANT

Tamper resistant Torx® screws feature a post in the center of the recess – this post will only fit into a tamper resistant Torx® bit.

5/16" HEX INSERT BITS



Part Number	Driver Size	A	Overall Length IN. MM.
480-TX-20X	T-20	.151	1 1/4 32
480-TX-25X	T-25	.173	1 1/4 32
480-TX-27X	T-27	.195	1 1/4 32
480-TX-30X	T-30	.216	1 1/4 32
480-TX-40X	T-40	.260	1 1/4 32
480-TX-40I	T-40	.260	1 1/4 32
480-TX-40-4X	T-40	.260	4 102
480-TX-45X	T-45	.306	1 1/4 32
480-TX-45-6	T-45	.306	6 152
480-TX-50X	T-50	.346	1 1/4 32
480-TX-55X	T-55	.440	1 1/4 32

5/16" HEX INSERT BITS ⊕ TAMPER RESISTANT



Part Number	Driver Size	A⊕	Overall Length IN. MM.
480-TX-40-H	T-40-H	.260	1 1/4 32
480-TX-45-H	T-45-H	.306	1 1/4 32
480-TX-50-H	T-50-H	.346	1 1/4 32
480-TX-55-H	T-55-H	.440	1 1/4 32

5/8" HEX INSERT BITS



Part Number	Hex Flat Type	Driver Size	A	Overall Length IN. MM.
SZ-TX-55-A	DP	T-55	.440	1 9/16 40
SZ-TX-60-A	DP	T-60	.520	1 9/16 40
SZ-TX-70-A	DP	T-70	.610	1 9/16 40
SZ-TX-70-A-3	TH	T-70	.610	3 76
SZ-TX-80-A*	TH	T-80	.689	1 9/16 40

* DP-Drill Point; TH-Thru Hole. 5/8: insert bits are used with SC and RP adapters found in this section.

7/8" HEX INSERT BITS



Part Number	Hex Flat Type	Driver Size	A	Overall Length IN. MM.
SZ-TX-90-A*	TH	T-90	.782	2 51
SZ-TX-100-A	TH	T-100	.870	2 51

* TH-Thru Hole. 7/8" insert bits are used with RP adapters found in this section.

TORX® BITS

1/4" HEX POWER DRIVE



Part Number	Driver Size	A	Body Dia. IN. MM.	Overall Length IN. MM.
49-TX-05	T-5	.055	.119 3	115/16 49
49-A-TX-05	T-5	.055	.119 3	2 3/4 70
49-B-TX-05	T-5	.055	.119 3	3 1/2 89
49-TX-06	T-6	.065	.119 3	115/16 49
49-A-TX-06	T-6	.065	.119 3	2 3/4 70
49-B-TX-06	T-6	.066	.119 3	3 1/2 89
49-TX-07	T-7	.077	.119 3	115/16 49
49-A-TX-07	T-7	.077	.119 3	2 3/4 70
49-B-TX-07	T-7	.077	.119 3	3 1/2 89
49-C-TX-07	T-7	.077	.119 3	6 152
49-TX-08	T-8	.090	.119 3	115/16 49
49-A-TX-08	T-8	.090	.119 3	2 3/4 70
49-B-TX-08	T-8	.090	.119 3	3 1/2 89
49-C-TX-08	T-8	.090	.119 3	6 152
49-TX-09	T-9	.097	.119 3	115/16 49
49-A-TX-09	T-9	.097	.119 3	2 3/4 70
49-B-TX-09	T-9	.097	.119 3	3 1/2 89
49-C-TX-09	T-9	.097	.119 3	6 152
49-TX-10	T-10	.107	.150 3.8	115/16 49
49-A-TX-10	T-10	.107	.150 3.8	2 3/4 70
49-B-TX-10	T-10	.107	.150 3.8	3 1/2 89
49-C-TX-10	T-10	.107	.150 3.8	6 152
49-TX-15	T-15	.128	.150 3.8	115/16 49
49-A-TX-15	T-15	.128	.150 3.8	2 3/4 70
49-B-TX-15	T-15	.128	.150 3.8	3 1/2 89
49-C-TX-15	T-15	.128	.150 3.8	6 152
49-TX-15-8	T-15	.128	.150 3.8	8 203
49-TX-20	T-20	.151	.171 4.3	115/16 49
49-A-TX-20	T-20	.151	.171 4.3	2 3/4 70
49-B-TX-20	T-20	.151	.171 4.3	3 1/2 89
49-TX-20-5	T-20	.151	.171 4.3	5 127
49-C-TX-20	T-20	.151	.171 4.3	6 152
49-TX-25	T-25	.173	.193 4.9	115/16 49
49-A-TX-25	T-25	.173	.193 4.9	2 3/4 70
49-B-TX-25	T-25	.173	.193 4.9	3 1/2 89
49-C-TX-25	T-25	.173	.193 4.9	6 152
49-TX-27	T-27	.195	.215 5.5	115/16 49
49-A-TX-27	T-27	.195	.215 5.5	2 3/4 70
49-B-TX-27	T-27	.195	.215 5.5	3 1/2 89
49-C-TX-27	T-27	.195	.215 5.5	6 152
49-TX-30	T-30	.216	.236 6	115/16 49
49-A-TX-30	T-30	.216	.236 6	2 3/4 70
49-B-TX-30	T-30	.216	.236 6	3 1/2 89
49-C-TX-30	T-30	.216	.236 6	6 152
49-TX-40	T-40	.260	.309 7.8	115/16 49
49-A-TX-40	T-40	.260	.309 7.8	2 3/4 70
49-B-TX-40	T-40	.260	.309 7.8	3 1/2 89
49-C-TX-40	T-40	.260	.309 7.8	6 152
49-TX-45	T-45	.304	.345 8.7	115/16 49
95-DG-TX40-75MM	T-40	.260	.25 6.4	2.952 75
95-TX-40	T-40	.260	.25 6.4	115/16 49
SD-4693	T-10	.107	.150 3.8	3 75
SD-5284	T-27	.195	.393 10	10 1/2 267

1/4" HEX POWER DRIVE – TORXALIGN®



Part Number	Driver Size	A	Body Dia. IN. MM.	Overall Length IN. MM.
49-TX-08-W	T-8	.090	.119 3.0	115/16 49
49-TX-10-W	T-10	.107	.150 3.8	115/16 49
49-TX-15-W	T-15	.128	.150 3.8	115/16 49
49-A-TX-15-W	T-15	.128	.150 3.8	2 3/4 70
49-B-TX-15-W	T-15	.128	.150 3.8	3 1/2 89
49-TX-20-W	T-20	.151	.171 4.3	115/16 49
49-B-TX-20-W	T-20	.151	.171 4.3	3 1/2 89
49-TX-25-W	T-25	.173	.193 4.9	115/16 49
49-TX-27-W	T-27	.195	.215 5.5	115/16 49
49-TX-30-W	T-30	.216	.236 6.0	115/16 49
49-B-TX-30-W	T-30	.216	.236 6.0	3 1/2 89

1/4" HEX POWER DRIVE

⊕ TAMPER RESISTANT



Part Number	Driver Size	A	Body Dia. IN. MM.	Overall Length IN. MM.
49-TX-10-H	T-10-H	.107	.150 3.8	115/16 49
49-A-TX-10-H	T-10-H	.107	.150 3.8	2 3/4 70
49-B-TX-10-H	T-10-H	.107	.150 3.8	3 1/2 89
49-TX-15-H	T-15-H	.128	.150 3.8	115/16 49
49-A-TX-15-H	T-15-H	.128	.150 3.8	2 3/4 70
49-B-TX-15-H	T-15-H	.128	.150 3.8	3 1/2 89
49-C-TX-15-H	T-15-H	.128	.150 3.8	6 152
49-A-TX-20-H	T-20-H	.151	.171 4.3	2 3/4 70
49-B-TX-20-H	T-20-H	.151	.171 4.3	3 1/2 89
49-C-TX-20-H	T-20-H	.151	.171 4.3	6 152

1/4" HEX POWER DRIVE WITH FINDER SLEEVES



Part Number	Driver Size	Sleeve Number	A	Sleeve Dia. IN. MM.	Overall Length IN. MM.
M-32-TX-15	T-15	M	.128	0.437 12.1	3 1/2 89
M-32-TX-20	T-20	M	.151	0.437 12.1	3 1/2 89
NP-32-TX-25	T-25	NP	.173	0.437 12.1	3 3/4 95
R-32-TX-27	T-27	R	.195	0.563 14.3	3 5/8 92
S-32-TX-30	T-30	S	.216	0.625 15.9	3 7/8 98



TORXALIGN® BITS:

Torxalign® Bits “wedge” into the Torx® recess to firmly hold the fastener to the bit.

TORX® BITS

7/16" HEX POWER DRIVE



Part Number	Driver Size	A	Body Dia.		Overall Length	
			IN.	MM.	IN.	MM.
SD-5560	T-30	.215	.370	9.4	7 3/8	187
48-TX-40	T-40	.260	.277	7	3 1/2	89
48-TX-45	T-45	.306	.323	8.2	3 1/2	89
48-TX-50	T-50	.346	.363	9.2	3 1/2	89
48-50IP	50IP	.346	.354	9.0	3 1/2	89
48-TX-55	T-55	.440	.503	12.8	3 3/4	95
48-55IP	55IP	.440	.438	11	3 3/4	95

10-32 SCREW SHANK DRIVE



Part Number	Driver Size	A	Body Dia.		Overall Length	
			IN.	MM.	IN.	MM.
50-TX-08	T-8	.090	.125	3.2	1 1/2	38
50-TX-10	T-10	.107	.150	3.8	1 1/2	38
50-TX-15	T-15	.128	.150	3.8	1 1/2	38
50-TX-20	T-20	.151	.171	4.3	1 1/2	38

1" SQUARE DRIVE ADAPTERS WITH TORX® INSERT BIT



Part Number	Driver Size	A	Overall Length		Bit Length (B)	
			IN.	MM.	IN.	MM.
SZ-8L-TX-70	T-70	.610	3 19/32	91	0.90	23
SZ-TX-100	T-100	.870	3 19/32	91	1.130	29

12-24 SCREW SHANK DRIVE



Part Number	Driver Size	A	Body Dia.		Overall Length	
			IN.	MM.	IN.	MM.
55-TX-10	T-10	.107	.150	3.8	1 3/16	30
55-TX-15	T-15	.128	.150	3.8	1 3/16	30
SD-4048	T-15	.128	.309	7.8	1 3/16	30
55-TX-20	T-20	.151	.171	4.3	1 3/16	30
55-TX-25	T-25	.173	.193	4.9	1 3/16	30
55-TX-30	T-30	.216	.309	7.8	1 3/16	30

FEMALE SQUARE SERVICE DRIVE



Part Number	Driver Size	A	Square Drive	Body Dia.		Overall Length	
				IN.	MM.	IN.	MM.
834-TX-25	T-25	.173	3/8	.240	6.1	2 13/16	71
834-TX30-1.62	T-30	.216	3/8	.234	5.9	1 5/8	41
834-TX40-2.95	T-40	.260	3/8	.277	7.0	2 61/64	75
834-TX-45-1.62	T-45	.306	3/8	.323	8.2	1 5/8	41
834-TX-45-5	T-45	.306	3/8	.323	8.2	5	125
834-TX-50	T-50	.346	3/8	.363	9.2	2 5/8	66
834-TX50-1.62	T-50	.346	3/8	.373	9.4	1 1/4	41
854-55IP	55IP	.439	1/2	.456	11.6	2 7/8	73
854-TX-50	T-50	.346	1/2	.323	8.2	2 7/8	73
854-TX55-150M	T-55	.346	1/2	.363	9.2	5 7/8	150



DIFFERENCE BETWEEN TORX® & TORX PLUS® BITS:

Torx Plus® bits and fasteners feature a greater engagement area for higher torque transfer and reduced camout when driving Torx Plus® fasteners. They can provide up to 100% more drive cycles. Torx Plus® bits are not compatible with standard Torx® fasteners.

TORX PLUS® BITS

1/4" HEX INSERT BITS



Part Number	Driver Size		Overall Length IN. MM.	
440-91PX	9IP	.098	1	25
440-101PX	10IP	.107	1	25
440-151PX	15IP	.128	1	25
440-201PX	20IP	.151	1	25
440-251PSX	251PS	.173	1	25
440-251PX	25IP	.173	1	25
440-271PX	27IP	.195	1	25
440-301PX	30IP	.216	1	25
440-401PX	40IP	.260	1	25
440-451PX	45IP	.306	1 1/4	32

1/4" HEX INSERT BITS

 TAMPER RESISTANT



Part Number	Driver Size		Overall Length IN. MM.	
440-101PRX	10IPR	.107	1	25
440-151PRX	15IPR	.128	1	25
440-201PRX	20IPR	.151	1	25
440-251PRX	25IPR	.173	1	25
440-271PRX	27IPR	.195	1	25
440-301PRX	30IPR	.216	1	25
440-401PRX	40IPR	.260	1	25

5/16" HEX INSERT BITS



Part Number	Driver Size		Overall Length IN. MM.	
480-301PX	30IP	.216	1 1/4	32
480-401PX	40IP	.260	1 1/4	32
480-401P-CH	40IP	.260	1 1/4	32
480-451PX	45IP	.306	1 1/4	32
480-501PX	50IP	.346	1 1/4	32
480-551PX	55IP	.440	1 1/4	32

5/8" HEX INSERT BITS



Part Number	Hex Flat Type	Driver Size		Overall Length IN. MM.	
SZ-551P-AX	DP	55IP	.440	1 1/2	38

1/4" HEX POWER DRIVE



Part Number	Driver Size		Overall Length IN. MM.	
49-B-51PX	5IP	.056	3 1/2	89
49-C-81PX	8IP	.090	6	152
49-101PX	10IP	.107	1 15/16	49
49-A-101PX	10IP	.107	2 3/4	70
49-B-101PX	10IP	.107	3 1/2	89
49-C-101PX	10IP	.107	6	152
49-151PX	15IP	.128	1 15/16	49
49-A-151PX	15IP	.128	2 3/4	70
49-B-151PX	15IP	.128	3 1/2	89
49-201PX	20IP	.151	1 15/16	49
49-A-201PX	20IP	.151	2 3/4	70
49-B-201PX	20IP	.151	3 1/2	89
49-C-201PX	20IP	.151	6	152
49-251PX	25IP	.173	1 15/16	49
49-A-251PX	25IP	.173	2 3/4	70
49-B-251PX	25IP	.173	3 1/2	89
49-271PX	27IP	.195	1 15/16	49
49-A-271PX	27IP	.195	2 3/4	70
49-B-271PX	27IP	.195	3 1/2	89
49-301PX	30IP	.216	1 15/16	49
49-A-301PX	30IP	.216	2 3/4	70
49-B-301PX	30IP	.216	3 1/2	89
49-401PX	40IP	.260	1 15/16	49
49-451PX	45IP	.306	1 15/16	49

1/4" HEX POWER DRIVE

 TAMPER RESISTANT



Part Number	Driver Size		Overall Length IN. MM.	
49-101PRX	10IPR	.107	1 15/16	49
49-151PRX	15IPR	.128	1 15/16	49
49-201PRX	20IPR	.151	1 15/16	49
49-251PRX	25IPR	.173	1 15/16	49
49-271PRX	27IPR	.195	1 15/16	49
49-301PRX	30IPR	.216	1 15/16	49
49-401PRX	40IPR	.260	1 15/16	49

10-32 SCREW SHANK DRIVE



Part Number	Driver Size		Overall Length IN. MM.	
SD-4984-10IP	10IP	.107	1 1/2	38

POZIDRIV® BITS

1/4" HEX INSERT BITS



Part Number	Point Size	Overall Length IN. MM.
440-1-PZDX	1	1 25
440-2-PZDX	2	1 25
440-215-PZDX	2	1 1/2 38
440-22-PZDX	2	2 51
440-3-PZDX	3	1 25
440-4-PZDX	4	1 1/4 32

1/4" HEX INSERT BITS LIMITED CLEARANCE



Part Number	Point Size	Overall Length IN. MM.	Turned Length (A) IN. MM.	Turned OD (B) IN. MM.
446-1-PZDX	1	1 25	7/16 11	0.18 4.6
446-2-PZDX	2	1 25	7/16 11	0.18 4.6

5/16" HEX INSERT BITS



Part Number	Point Size	Overall Length IN. MM.
480-1-PZDX	1	1 1/4 32
480-2-PZDX	2	1 1/4 32
480-3-PZDX	3	1 1/4 32

10-32 SCREW SHANK DRIVE



Part Number	Point Size	Overall Length IN. MM.	Body Dia. IN. MM.
502-PZDX	2	1 1/2 38	1/4 6.4
SD-1342-2-PZDX	2	1 3/4 45	1/4 6.4

1/4" HEX POWER DRIVE



Part Number	Point Size	Overall Length IN. MM.	Body Dia. IN. MM.	Turned Length IN. MM.
491-PZDX	1	1 15/16 49	3/16 4.8	1 1/4 32
491-A-PZDX	1	2 3/4 70	3/16 4.8	2 51
491-B-PZDX	1	3 1/2 89	3/16 4.8	2 3/4 70
491-C-PZDX	1	6 152	3/16 4.8	2 51
492-PZDX	2	1 15/16 49	1/4 6.4	1 1/4 32
492-A-PZDX	2	2 3/4 70	1/4 6.4	2 51
492-B-PZDX	2	3 1/2 89	1/4 6.4	2 3/4 70
492-C-PZDX	2	6 152	1/4 6.4	2 51
493-PZDX	3	1 15/16 49	5/16 7.9	1 25
493-A-PZDX	3	2 3/4 70	5/16 7.9	1 3/4 44
493-B-PZDX	3	3 1/2 89	5/16 7.9	2 1/4 57
493-C-PZDX	3	6 152	5/16 7.9	5 127

1/4"-24 SCREW SHANK DRIVE



Part Number	Point Size	Overall Length IN. MM.	Body Dia. IN. MM.
401-PZDX	1	1 1/2 38	3/16 4.8
402-PZDX	2	1 1/2 38	1/4 6.4
403-PZDX	3	1 1/2 38	5/16 7.9

8-32 SCREW SHANK DRIVE



Part Number	Point Size	Overall Length IN. MM.	Body Dia. IN. MM.
591-PZDX	1	1 13/16 30	7/32 5.6
592-PZDX	2	1 13/16 30	7/32 5.6



DIFFERENCE BETWEEN A PHILLIPS AND A POZIDRIV®:

The shallow "cross" indentation in the screw head identifies a Pozidriv® fastener. The Pozidriv® bit and recess design provides more surface contact than a standard Phillips for more torque with less possibility of camout.

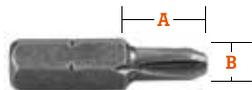
SEL-O-FIT BITS™

1/4" HEX INSERT BITS



Part Number	Driver Size	Overall Length IN. MM.
440-1-SFX	1	1 25
440-2-SFX	2	1 25
440-215-SFX	2	1 1/2 38
440-22-SFX	2	2 51
440-225-SFX	2	2 1/2 64
440-3-SFX	3	1 25

1/4" HEX INSERT BITS LIMITED CLEARANCE



Part Number	Point Size	Overall Length IN. MM.	Turned Length (A) IN. MM.	Turned OD (B) IN. MM.
446-2-SFX	2	1 25	7/16 11	0.18 4.6

5/16" HEX INSERT BITS



Part Number	Point Size	Overall Length IN. MM.
480-2-SFX	2	1 1/4 32

1/4" HEX POWER DRIVE



Part Number	Point Size	Overall Length IN. MM.	Body Dia. IN. MM.	Turned OD (B) IN. MM.
491-SFX	1	1 15/16 49	3/16 5	1 1/4 32
491-A-SFX	1	2 3/4 70	3/16 5	2 51
491-B-SFX	1	3 1/2 89	3/16 5	2 3/4 70
491-C-SFX	1	6 152	3/16 5	2 51
492-SFX	2	1 15/16 49	1/4 6	1 1/4 32
492-A-SFX	2	2 3/4 70	1/4 6	2 51
492-B-SFX	2	3 1/2 89	1/4 6	2 3/4 70
492-C-SFX	2	6 152	1/4 6	2 51

QUADREX® BITS

1/4" HEX INSERT BITS



Part Number	Point Size	Overall Length IN. MM.
950-QD-2	2	1 25

1/4" HEX POWER DRIVE



Part Number	Point Size	Overall Length IN. MM.	Body Dia. IN. MM.
95-QD-2	2	1 15/16 49	1/4 6.4
95-A-QD-2	2	2 3/4 70	1/4 6.4
95-B-QD-2	2	3 1/2 89	1/4 6.4
95-QD-3	3	1 15/16 49	5/16 7.9



SEL-O-FIT™ BITS

Sel-O-Fit™ bits are designed to provide a more efficient means of driving Pozidriv® screws. The Sel-O-Fit™ bit places torque on the strongest and most mechanically advantageous portion of the driver tip. This allows more torque to be applied while minimizing the possibility of breakage and camout.

+ FREARSON BITS

1/4" HEX INSERT BITS



Part Number	Point Size	Overall Length IN. MM.
440-FX	All	1 25
446-FX	All	1 25

5/16" HEX INSERT BIT



Part Number	Point Size	Overall Length IN. MM.
480-FX	All	13/8 35

1/4" HEX POWER DRIVE



Part Number	Screw Size	Overall Length IN. MM.	Body Dia. IN. MM.	Turned Length IN. MM.
491-FX	All	115/16 49	3/16 4.8	1 1/4 32
492-FX	All	115/16 49	1/4 6	1 1/4 32
493-FX	All	115/16 49	5/16 8	1 25
491-AFX	All	23/4 70	3/16 4.8	2 51
492-AFX	All	23/4 70	1/4 6	2 51
491-BFX	All	31/2 89	3/16 4.8	2 3/4 70
492-BFX	All	31/2 89	1/4 6	2 3/4 70
493-BFX	All	31/2 89	5/16 8	2 1/2 64
491-CFX	All	6 152	3/16 4.8	2 51
492-CFX	All	6 152	1/4 6	2 51

12-24 SCREW SHANK DRIVE



Part Number	Screw Size	Overall Length IN. MM.	Body Dia. IN. MM.
552-FX	All	13/16 30	.30 8

1/4" FEMALE SQUARE SERVICE DRIVE



Part Number	Screw Size	Overall Length IN. MM.	Body Dia. IN. MM.
822-F	All	2 51	1/4 6

3/8" FEMALE SQUARE SERVICE DRIVE



Part Number	Screw Size	Overall Length IN. MM.	Body Dia. IN. MM.
832-F	All	25/8 67	1/4 6
833-F	All	25/8 67	5/16 8
834-F	All	25/8 67	3/8 10



SOCKET HEAD SIZING CHART

SAE

									
Normal Hex Size, IN.	Socket Head 1960 Series	Cap Screws 1936 Series	Flat Head Cap Screws	Button Head Cap Screws	Set Screws	Shoulder Screws	Pressure Plugs	Allenuts	Low Head Cap Screws
.050	0	0,1	1,2	3,4	-	-	-	4	.050
1/16	1	2	3,4	3,4	5,6	-	-	-	5,6
5/64	2,3	3,4	5,6	5,6	8	-	-	-	8
3/32	4,5	5,6	8	8	10	-	-	-	10
7/64	6	-	-	-	-	-	-	-	-
1/8	-	8	10	10	1/4	1/4	-	4,5	1/4
9/64	8	10	-	-	-	-	-	-	-
5/32	10	1/4	1/4	1/4	5/16	5/16	-	6	5/16
3/16	1/4	-	5/16	5/16	3/8	3/8	-	8,10	3/8
7/32	-	5/16	3/8	3/8	7/16	-	1/16	-	7/16
1/4	5/16	-	7/16	-	1/2	1/2	1/8	1/4	1/2
5/16	3/8	3/8,7/16	1/2	-	5/8	5/8	-	5/16	5/8
3/8	7/16,1/2	1/2	5/8	-	3/4	3/4	1/4	3/8	-
7/16	-	-	-	-	-	-	3/8	7/16	-
1/2	5/8	5/8	3/4	-	7/8	1	1/2	1/2	-
9/16	-	3/4,7/8	7/8	-	1,11/8	-	-	-	-
5/8	3/4	1	1	-	11/4,13/8	11/4	-	5/8	-
3/4	7/8,1	11/8,11/4,13/8	11/8	-	11/2	-	3/4	3/4	-
7/8	11/8,11/4	-	11/4,13/8	-	-	11/2	1	7/8	-
1	13/8,11/2	11/2	11/2	-	13/4,2	13/4	11/4	1	-
11/4	13/4	-	-	-	-	2	-	11/4	-
11/2	2	-	-	-	-	-	11/2,2	11/2	-
13/4	21/4,21/2	-	-	-	-	-	-	-	13/4
2	23/4	-	-	-	-	-	-	-	-

METRIC

							
Normal Hex Size, IN.es	Socket Head Cap Screws	Flat Head Cap Screws	Button Head Cap Screws	Set Screws	Shoulder Screws	Allenuts	Low Head Cap Screws
1.5	M1.6, M1.7, M2	-	-	M3	-	-	-
2	M2.3, M2.5, M2.6	M3	M3	M4	-	-	-
2.5	M3	M4	M4	M5	-	-	-
3	M4	M5	M5	M6	6mm	M3	M4
4	M5	M6	M6	M8	8mm	M4	M5
5	M6	M8	M8	M10	10mm	M5	M6
6	M8	M10	M10	M12, M14	12mm	M6	M8
8	M10	M12	M12	M16	16mm	M8	M10
10	M12	M14, M16	-	M20	20mm	M10	M12
12	M14	M20	-	M24	-	M12	M14
14	M16	-	-	-	-	-	M16
17	M20	-	-	-	-	M16	M20, M22
19	M24	-	-	-	-	-	M24

SOCKET HEAD BITS

1/4" HEX INSERT BITS



Part Number	Hex Size IN.	Overall Length IN. MM.	
185-000X	1/20	1	25
185-00X	1/16	1	25
185-0X	5/64	1	25
185-1X	3/32	1	25
185-9X	7/64	1	25
185-2X	1/8	1	25
185-10X	9/64	1	25
185-3X	5/32	15/16	33
185-4X	3/16	15/16	33
185-4-4X	3/16	4	102
185-5X	7/32	15/16	33
185-6X	1/4	15/16	33
185-7X	5/16	11/4	32
185-8X	3/8	11/4	32

1/4" HEX INSERT BITS METRIC



Part Number	Hex Size MM.	Overall Length IN. MM.	
185-1.5MM	1.5	1	25
185-2MM	2	1	25
185-2.5MM	2.5	1	25
185-3MM	3	1	25
185-4MM	4	15/16	33
185-5MM	5	15/16	33
185-6MM	6	15/16	33
185-7MM	7	11/4	32
185-8MM	8	11/4	32
185-9MM	9	11/4	32
185-10MM	10	11/4	32

5/16" HEX INSERT BITS



Part Number	Hex Size IN.	Overall Length IN. MM.	
315-3X	5/32	15/16	33
315-4X	3/16	15/16	33
315-5X	7/32	15/16	33
315-6X	1/4	15/16	33
315-7X	5/16	15/16	33
315-8X	3/8	15/16	33

5/16" HEX INSERT BITS – METRIC



Part Number	Hex Size MM.	Overall Length IN. MM.	
315-2.5MM	2.5	1	25
315-4MM	4	15/16	33
315-5MM	5	15/16	33
315-6MM	6	15/16	33
315-7MM	7	15/16	33
315-8MM	8	15/16	33
315-10MM	10	13/8	35
315-12MM	12	11/4	32
315-14MM	14	11/4	32

1/4" HEX POWER DRIVE



Part Number	Hex Size IN.	Overall Length IN. MM.	
AM-01-A	1/20	115/16	49
AM-02	1/16	115/16	49
AM-02-A	5/64	115/16	49
AM-03	3/32	115/16	49
AM-03-3	3/32	3	76
AM-03-6	3/32	6	152
AM-03-A	7/64	115/16	49
AM-03-A-4	7/64	4	102
AM-04	1/8	115/16	49
AM-04-3	1/8	3	76
AM-04-35	1/8	3 1/2	89
AM-04-4	1/8	4	102
AM-04-5	1/8	5	127
AM-04-6	1/8	6	152
AM-04-A	9/64	115/16	49
AM-04-A-4	9/64	4	102
AM-05	5/32	115/16	49
AM-05-3	5/32	3	76
AM-05-35	5/32	3 1/2	89
AM-05-4	5/32	4	102
AM-05-45	5/32	4 1/2	114
AM-05-5	5/32	3	127
AM-05-6	5/32	6	152
AM-05-8	5/32	8	203
AM-06	3/16	115/16	49
AM-06-3	3/16	3	76
AM-06-35	3/16	3 1/2	89
AM-06-4	3/16	4	102
AM-06-6	3/16	6	152
AM-07	7/32	115/16	49
AM-08	1/4	115/16	49
AM-10	5/16	115/16	49

SOCKET HEAD BITS

1/4" HEX POWER DRIVE – METRIC



Part Number	Hex Size MM.	Overall Length IN. MM.
AM-1.5MM	1.5	1 15/16 49
AM-2MM	2	1 15/16 49
AM-2.5MM	2.5	1 15/16 49
AM-2.5MM-4	2.5	4 102
AM-3MM	3	1 15/16 49
AM-3MM-3	3	3 76
AM-3MM-4	3	4 102
AM-3MM-6	3	6 152
AM-4MM	4	6 152
AM-4MM-3	4	3 76
AM-4MM-4	4	4 102
AM-4MM-6	4	6 152
AM-5MM	5	1 15/16 49
AM-5MM-3	5	3 76
AM-5MM-4	5	4 102
AM-5MM-6	5	6 152
AM-6MM	6	1 15/16 49
AM-6MM-4	6	1 15/16 49
AM-6MM-6	6	6 152
AM-7MM	7	1 15/16 49
AM-8MM	8	1 15/16 49
AM-10MM	10	1 15/16 49

5/16" HEX POWER DRIVE



Part Number	Hex Size IN.	Overall Length IN. MM.
AS-06	3/16	3 76
AS-10	5/16	3 76
AS-12	3/8	3 76

7/16" HEX POWER DRIVE



Part Number	Hex Size IN.	Overall Length IN. MM.
AN-04	1/8	3 1/2 89
AN-04-A	9/64	3 1/2 89
AN-05	5/32	3 1/2 89
AN-05-6	5/32	6 152
AN-06	3/16	3 1/2 89
AN-06-6	3/16	6 152
AN-07	7/32	3 1/2 89
AN-07-8	7/32	8 203
AN-08	1/4	3 1/2 89
AN-08-8	1/4	8 203
AN-09	9/32	3 1/2 89
AN-10	5/16	3 1/2 89
AN-10-6	5/16	6 152
AN-12	3/8	3 1/2 89
AN-12-6	3/8	6 152
AN-16	1/2	3 1/2 89
AN-16-6	1/2	6 152

7/16" HEX POWER DRIVE – METRIC



Part Number	Hex Size MM.	Overall Length IN. MM.
AN-3MM	3	3 1/2 89
AN-4MM	4	3 1/2 89
AN-5MM	5	3 1/2 89
SD-5585	5	6 152
AN-6MM	6	3 1/2 89
AN-8MM	8	3 1/2 89
AN-10MM	10	3 1/2 89
AN-12MM	12	3 1/2 89
AN-14MM	14	3 1/2 89
AN-14MM-6	14	6 152

5/8" HEX POWER DRIVE



Part Number	Hex Size MM.	Overall Length IN. MM.
AP-08	1/4	4 102
AP-10	5/16	4 102
AP-12	3/8	4 102
AP-16	1/2	4 102
AP-18	9/16	4 102
AP-20	5/8	4 102
AP-24	3/4	4 102

SOCKET HEAD BITS WITH SQUARE DRIVE ADAPTERS, SAE

3/8" SQUARE DRIVE



Number Complete	Part Number		Hex Size IN.	Overall Length		Insert Length	
	Adapter Only	Insert Only		IN.	MM.	IN.	MM.
SZ-9	SC-314	SZ-9-A	3/32	2 1/4	57	13/8	35
SZ-7	SC-314	SZ-7-A	7/64	2 1/4	57	13/8	35
SZ-10	SC-314	SZ-10-A	1/8	2 1/4	57	13/8	35
SZ-11	SC-314	SZ-11-A	5/32	2 1/4	57	13/8	35
SZ-12	SC-314	SZ-12-A	3/16	2 1/4	57	13/8	35
SZ-13	SC-314	SZ-13-A	7/32	2 1/4	57	13/8	35
SZ-14	SC-314	SZ-14-A	1/4	2 1/4	57	13/8	35
SZ-15	SC-314	SZ-15-A	5/16	2 1/4	57	13/8	35
SZ-16	SC-314	SZ-16-A	3/8	2 1/4	57	13/8	35
SZ-17	SC-314	SZ-17-A	1/2	2 1/4	57	13/8	35
SZ-18	SC-314	SZ-18-A	9/16	2 1/4	57	13/8	35
SZ-19	SC-314	SZ-19-A	5/8	2 1/4	57	13/8	35

1/2" SQUARE DRIVE



Number Complete	Part Number		Hex Size IN.	Overall Length		Insert Length	
	Adapter Only	Insert Only		IN.	MM.	IN.	MM.
SZ-41	SC-514	SZ-11-A	5/32	2 1/2	64	13/8	35
SZ-20	SC-514	SZ-12-A	3/16	2 1/2	64	13/8	35
SZ-21	SC-514	SZ-13-A	7/32	2 1/2	64	13/8	35
SZ-22	SC-514	SZ-14-A	1/4	2 1/2	64	13/8	35
SZ-23	SC-514	SZ-15-A	5/16	2 1/2	64	13/8	35
SZ-24	SC-514	SZ-16-A	3/8	2 1/2	64	13/8	35
SZ-25	SC-514	SZ-17-A	1/2	2 1/2	64	13/8	35
SZ-42	SC-520	SZ-31-A	1/2	2 1/2	64	19/16	40
SZ-43	SC-514	SZ-18-A	9/16	2 1/2	64	13/8	35
SZ-44	SC-520	SZ-32-A	9/16	2 1/2	64	19/16	40
SZ-26	SC-514	SZ-19-A	5/8	2 1/2	64	13/8	35
SZ-27	RP-520	SZ-33-A	5/8	2 1/2	64	19/16	40

7/16" HEX INSERT BIT ONLY



Part Number	Hex Size IN.	Overall Length	
		IN.	MM.
SZ-12-A-2	3/16	2	51
SZ-15-A-2	5/16	2	51
SZ-11-A-3	5/32	3	76
SZ-12-A-3	3/16	3	76
SZ-13-A-3	7/32	3	76
SZ-14-A-3	1/4	3	76
SZ-15-A-3	5/16	3	76
SZ-16-A-3	3/8	3	76
SZ-14-A-4	1/4	4	102
SZ-15-A-4	5/16	4	102
SZ-16-A-4	3/8	4	102
SZ-12-A-6	3/16	6	152

3/4" SQUARE DRIVE



Number Complete	Part Number		Hex Size IN.	Overall Length		Insert Length		Bit Length (A)	
	Adapter Only	Insert Only		IN.	MM.	IN.	MM.	IN.	MM.
SZ-30	SC-720	SZ-30-A	3/8	2 5/8	67	19/16	40	29/32	23
SZ-31	SC-720	SZ-31-A	1/2	2 5/8	67	19/16	40	29/32	23
SZ-32	SC-720	SZ-32-A	9/16	2 5/8	67	19/16	40	29/32	23
SZ-33	RP-720	SZ-33-A	5/8	2 5/8	67	19/16	40	29/32	23
SZ-34	RP-720	SZ-34-A	3/4	2 5/8	67	19/16	40	29/32	23
SZ-37	RP-728	SZ-37-A	3/4	3 1/8	79	2	51	11/8	29
SZ-35	SC-720	SZ-35-A	7/8	2 5/8	67	19/16	40	29/32	23
SZ-38	RP-728	SZ-38-A	7/8	3 1/8	79	2	51	11/8	29
SZ-36	RP-720	SZ-36-A	1	2 5/8	67	19/16	40	29/32	23

1" SQUARE DRIVE



Number Complete	Part Number		Hex Size IN.	Overall Length		Insert Length		Bit Length (A)	
	Adapter Only	Insert Only		IN.	MM.	IN.	MM.	IN.	MM.
SZ-80	RP-820	SZ-31-A	1/2	3 1/16	78	19/16	40	29/32	23
SZ-85	RP-828	SZ-85-A	5/8	3 1/4	83	2	51	11/8	29
SZ-86	RP-820	SZ-34-A	3/4	3 1/32	77	19/16	40	29/32	23
SZ-87	RP-828	SZ-37-A	3/4	3 1/4	83	2	51	11/8	29
SZ-88	SC-820	SZ-35-A	7/8	3 1/16	78	19/16	40	29/32	23
SZ-89	RP-828	SZ-38-A	7/8	3 1/4	83	2	51	11/8	29
SZ-91	RP-828	SZ-39-A	1	3 1/4	83	2	51	11/8	29
SZ-101	RP-848	SZ-101-A	1 1/4	3 1/2	89	2 5/8	67	11/8	35

An "RP" prefix indicates adapters with a roll pin that is inserted through the bit.

SOCKET HEAD BIT & ADAPTER SETS, SAE



APH38	8 piece, 3/8" square drive: 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8
APH56	6 piece, 1/2" square drive: 1/4, 5/16, 3/8, 1/2, 9/16, 5/8

SOCKET HEAD BIT & ADAPTER SETS, METRIC



APH35M	5 piece, 3/8" square drive: 4mm, 5mm, 6mm, 8mm, 10mm
APH56M	6 piece, 1/2" square drive: 6mm, 8mm, 10mm, 12mm, 14mm, 17mm

SOCKET HEAD ADAPTERS & INSERTS, METRIC

3/8" SQUARE DRIVE



Number Complete	Part Number		Hex Size	Overall Length	Insert Length		Bit Length (A)		
	Adapter Only	Insert Only			IN.	MM.	IN.	MM.	
SZ-3-7-4MM	SC-314	SZ-7-4mm	4	2 1/4	57	13/8	35	7/8	22
SZ-3-7-5MM	SC-314	SZ-7-5mm	5	2 1/4	57	13/8	35	7/8	22
SZ-3-7-6MM	SC-314	SZ-7-6mm	6	2 1/4	57	13/8	35	7/8	22
SZ-3-7-8MM	SC-314	SZ-7-8mm	8	2 1/4	57	13/8	35	7/8	22
SZ-3-7-10MM	SC-314	SZ-7-10mm	10	2 1/4	57	13/8	35	7/8	22

1/2" SQUARE DRIVE



Number Complete	Part Number		Hex Size	Overall Length	Insert Length		Bit Length (A)		
	Adapter Only	Insert Only			IN.	MM.	IN.	MM.	
SZ-5-7-4MM	SC-514	SZ-7-4MM	4	2 1/2	63	13/8	35	7/8	22
SZ-5-7-5MM	SC-514	SZ-7-5MM	5	2 1/2	63	13/8	35	7/8	22
SZ-5-7-6MM	SC-514	SZ-7-6MM	6	2 1/2	63	13/8	35	7/8	22
SZ-5-7-8MM	SC-514	SZ-7-8MM	8	2 1/2	63	13/8	35	7/8	22
SZ-5-7-10MM	SC-514	SZ-7-10MM	10	2 1/2	63	13/8	35	7/8	22
SZ-5-7-12MM	SC-514	SZ-7-12MM	12	2 1/2	63	13/8	35	7/8	22
SZ-5-7-14MM	SC-514	SZ-7-14MM	14	2 1/2	63	13/8	35	15/16	24
SZ-5-10-14MM	RP-520	SZ-10-14MM	14	2 1/2	63	19/16	40	29/32	23
SZ-5-10-17MM	RP-520	SZ-10-17MM	17	2 1/2	63	19/16	40	29/32	23
SZ-5-10-19MM	RP-520	SZ-10-19MM	19	2 1/2	63	19/16	40	29/32	23

3/4" SQUARE DRIVE



Number Complete	Part Number		Hex Size	Overall Length	Insert Length		Bit Length (A)		
	Adapter Only	Insert Only			IN.	MM.	IN.	MM.	
SZ-7-10-10MM	RP-720	SZ-7-10-10MM	10	2 1/2	64	19/16	40	29/32	23
SZ-7-10-12MM	RP-720	SZ-7-10-12MM	12	2 1/2	64	19/16	40	29/32	23
SZ-7-10-14MM	RP-720	SZ-7-10-14MM	14	2 1/2	64	19/16	40	29/32	23
SZ-7-10-17MM	RP-720	SZ-7-10-17MM	17	2 1/2	64	19/16	40	29/32	23

1" SQUARE DRIVE



Number Complete	Part Number		Hex Size	Overall Length	Insert Length		Bit Length (A)		
	Adapter Only	Insert Only			IN.	MM.	IN.	MM.	
SZ-8-14-17MM	RP-828	SZ-14-17MM	17	3 5/16	84	2	51	11/8	29
SZ-8-14-19MM	RP-828	SZ-14-19MM	19	3 5/16	84	2	51	11/8	29
SZ-8-14-22MM	RP-828	SZ-14-22MM	22	3 5/16	84	2	51	11/8	29
SZ-8-14-24MM	RP-828	SZ-14-24MM	24	3 5/16	84	2	51	11/8	29
SZ-8-14-27MM	RP-828	SZ-14-27MM	27	3 5/16	84	2	51	11/8	29

SQUARE RECESS BITS

1/4" HEX INSERT BITS



Part Number	Point Size	Nominal Size	Overall Length	
			IN.	MM.
950-0X	0	1/16	1	25
950-1X	1	3/32	1	25
950-2X	2	1/8	1	25
950-3X	3	9/64	1	25

1/4" HEX POWER DRIVE



Part Number	Point Size	Nominal Size	Overall Length	
			IN.	MM.
954-0X	0	1/16	1 15/16	49
954-A-0X	0	1/16	2 3/4	70
954-C-0X	0	1/16	6	152
954-1X	1	3/32	1 15/16	49
954-A-1X	1	3/32	2 3/4	70
954-B-1X	1	3/32	3 1/2	89
954-C-1X	1	3/32	6	152
954-2X	2	1/8	1 15/16	49
954-A-2X	2	1/8	2 3/4	70
954-B-2X	2	1/8	3 1/2	89
954-C-2X	2	1/8	6	152
954-3X	3	9/64	1 15/16	49
954-A-3X	3	9/64	2 3/4	70
954-B-3X	3	9/64	3 1/2	89
954-C-3X	3	9/64	6	152

SQUARE RECESS BITS

1/4" HEX POWER DRIVE TURNED BODY

Part Number	Point Size	Nominal Size IN.	Overall Length IN. MM.
1950-0X	0	1/16	1 15/16 49
1951-0X	0	1/16	2 3/4 70
1950-1X	1	3/32	1 15/16 49
SD-5535	1	3/32	1 15/16 49
1951-1X	1	3/32	2 3/4 70
1953-1X	1	3/32	3 1/2 89
1950-2X	2	1/8	1 15/16 49
1951-2X	2	1/8	2 3/4 70
1953-2X	2	1/8	3 1/2 89
1956-2X	2	1/8	6 152
1950-3X	3	9/64	1 15/16 49
1951-3X	3	9/64	2 3/4 70
1953-3X	3	9/64	3 1/2 89

1/4" HEX POWER DRIVE

Part Number	Point Size MM.	Overall Length IN. MM.
49-TSQ-4M	4	2 50
49-TSQ-5M	5	2 50
49-TSQ-6M	6	2 50
49-TSQ-8M	8	2 50
49-TSQ-10M	10	2 50
49-TSQ-12M	12	2 50

7/16" HEX POWER DRIVE

Part Number	Point Size MM.	Overall Length IN. MM.
48-TSQ-5M	5	3 1/2 88
48-TSQ-6M	6	3 1/2 88
48-TSQ-8M	8	3 1/2 88
48-TSQ-10M	10	3 1/2 88
48-TSQ-12M	12	3 1/2 88
48-TSQ-14M	14	3 1/2 88

TRIPLE SQUARE BITS

1/4" HEX INSERT BITS

Part Number	Point Size MM.	Overall Length IN. MM.
440-TSQ-4M	4	1 25
440-TSQ-5M	5	1 25
440-TSQ-6M	6	1 25
440-TSQ-8M	8	1 25
440-TSQ-10M	10	1 25

5/16" HEX INSERT BITS

Part Number	Point Size MM.	Overall Length IN. MM.
480-TSQ-6M	6	1 1/4 32
480-TSQ-8M	8	1 1/4 32
480-TSQ-10M	10	1 1/4 32
480-TSQ-12M	12	1 1/4 32
480-TSQ-14M	14	1 1/4 32

MALE SQUARE INSERTS FOR PIPE PLUGS

1/4" TO 1/2" MALE SQUARE

Part Number	Male Hex IN.	Male Square IN.	Overall Length IN. MM.
P-1408	7/16	1/4	1 1/4 32
P-1409	7/16	9/32	1 1/4 32
P-1410	7/16	5/16	1 1/4 32
P-1412	7/16	3/8	1 1/4 32
P-1414	7/16	7/16	1 1/4 32
P-1416	7/16	1/2	1 1/4 32
P-2010	5/8	5/16	1 1/2 38
P-2012	5/8	3/8	1 1/2 38
P-2014	5/8	7/16	1 1/2 38
P-2016	5/8	1/2	1 1/2 38

Note: For pipe plug inserts use SC and RP bit holders found on page 35.

TORQ-SET® BITS

1/4" HEX INSERT BITS



Part Number	Point Size	Overall Length IN. MM.
212-0	0	1 25
212-1/4	1/4	1 25
212-1	1	1 25
212-2	2	1 25
212-3	3	1 25
212-4	4	1 25
212-5	5	1 25
212-6	6	1 25
212-8	8	1 25
212-10	10	1 25

1/4" HEX INSERT BITS – ACR®

ACR®RIBS FOR REMOVAL ONLY



Part Number	Point Size	Overall Length IN. MM.
212-1/4-ACR	1/4	1 1/4 32
212-4-ACR	4	1 25
212-6-ACR	6	1 1/4 32
212-8-ACR	8	1 1/4 32
212-10-ACR	10	1 1/4 32

5/16" HEX INSERT BITS



Part Number	Point Size	Overall Length IN. MM.
212-1/4A	1/4	1 1/4 32
212-5/16A	5/16	1 1/4 32
212-3/8A	3/8	1 1/4 32
212-8A	8	1 1/4 32
212-10A	10	1 1/4 32

5/16" HEX INSERT BITS – ACR®

ACR®RIBS FOR REMOVAL ONLY



Part Number	Point Size	Overall Length IN. MM.
212-1/4A-ACR	1/4	1 1/4 32
212-5/16A-ACR	5/16	1 1/4 32

1/4" HEX POWER DRIVE



Part Number	Point Size	Overall Length IN. MM.
170-0	0	1 1/4 32
273-0	0	1 15/16 49
273B-0	0	2 3/4 49
265-0	0	3 1/2 89
265A-0	0	6 152
170-1/4B	1/4	1 1/4 32
170-5/16B	5/16	1 1/4 32
170-3/8B	3/8	1 1/4 32
170-1	1	1 1/4 32
273A-1	1	1 13/16 46
273-1	1	1 15/16 49
273B-1	1	2 3/4 49
265-1	1	3 1/2 89
170-2	2	1 1/4 32
273A-2	2	1 13/16 46
273-2	2	1 15/16 49
273B-2	2	2 3/4 70
265-2	2	3 1/2 89
265A-1	1	6 152
265A-2	2	6 152
170-3	3	1 1/4 32
273A-3	3	1 13/16 46
273-3	3	1 15/16 49
273B-3	3	2 3/4 70
265-3	3	3 1/2 89
265A-3	3	6 152
170-4	4	1 1/4 32
273A-4	4	1 13/16 46
273-4	4	1 15/16 49
273B-4	4	2 3/4 70
265-4	4	3 1/2 89
265A-4	4	6 152
170-5	5	1 1/4 32
273-5	5	1 15/16 49
273B-5	5	2 3/4 70
265-5	5	3 1/2 89
265A-5	5	6 152
170-6	6	1 1/4 32
273A-6	6	1 13/16 46
273-6	6	1 15/16 49
273B-6	6	2 3/4 70
265-6	6	3 1/2 89
265A-6	6	6 152
170-8	8	1 1/4 32
273A-8	8	1 13/16 46
273-8	8	1 15/16 49
273B-8	8	2 3/4 70
265-8	8	3 1/2 89
265A-8	8	6 152
170-10	10	1 1/4 32
273A-10	10	1 13/16 46
273-10	10	1 15/16 49
273B-10	10	2 3/4 70
265-10	10	3 1/2 89
265A-10	10	6 152

TORQ-SET® BITS

1/4" HEX POWER DRIVE – ACR®



Part Number	Point Size	Overall Length IN. MM.
170-6-ACR	6	11/4 32
170-8-ACR	8	11/4 32
170-10-ACR	10	11/4 32

5/16" HEX POWER DRIVE



Part Number	Point Size	Overall Length IN. MM.
170-1/4A	1/4	11/4 32
170-3/8A	3/8	11/4 32
170-5/16A	5/16	11/4 32
170-8A	8	11/4 32
170-10A	10	11/4 32

7/16" HEX POWER DRIVE



Part Number	Point Size	Overall Length IN. MM.
170-1/4	1/4	11/4 32
265-1/4	1/4	3 1/2 89
265A-1/4	1/4	6 152
170-5/16	5/16	11/4 32
265-5/16	5/16	3 1/2 89
265A-5/16	5/16	6 152
170-3/8	3/8	11/4 32
170-3/8C	3/8	11/4 32
170-7/16	7/16	11/4 32
170-7/16C	7/16	11/4 32
265A-3/8	3/8	6 152
265A-7/16	7/16	6 152

7/16" HEX POWER DRIVE – ACR®

ACR® RIBS FOR REMOVAL ONLY



Part Number	Point Size	Overall Length IN. MM.
170-1/4-ACR	1/4	11/4 32
170-5/16-ACR	5/16	11/4 32

5/8" HEX POWER DRIVE



Part Number	Point Size	Overall Length IN. MM.
170-1/2	1/4	11/4 32
170-9/16	9/16	11/4 32
170-5/8	5/8	11/4 32

TRI-WING®

1/4" HEX INSERT BITS



Part Number	Recess Size	Screw Size Tension Head	Screw Size Shear Head	Overall Length IN. MM.
TWD-0	0	0-80	-	1 25
TWD-1	1	2-56	4-40	1 25
TWD-2	2	4-40	6-32	1 25
TWD-3	3	6-32	8-32	1 25
TWD-4	4	8-32	10-32	1 25
TWD-5	5	10-32	1/4-28	1 25
TWD-6	6	1/4	5/16	1 25
TWD-7	7	5/16	3/8	1 25

1/4" HEX INSERT BITS – ACR®

ACR® RIBS FOR REMOVAL ONLY



Part Number	Recess Size	Screw Size Tension Head	Screw Size Shear Head	Overall Length IN. MM.
TWD-4-ACR	4	8-32	10-32	1 25
TWD-5-ACR	5	10-32	1/4-28	1 25

5/16" HEX INSERT BITS



Part Number	Recess Size	Screw Size Tension Head	Screw Size Shear Head	Overall Length IN. MM.
TWE-4	4	8-32	10-32	11/4 32
TWE-5	5	10-32	1/4-28	11/4 32

1/4" HEX POWER DRIVE



Part Number	Recess Size	Screw Size Tension Head	Screw Size Shear Head	Overall Length IN. MM.
TW-0	0	0-80	-	11/4 32
TW-1	1	2-56	4-40	11/4 32
TW-2	2	4-40	6-32	11/4 32
TW-3	3	6-32	8-32	11/4 32
TW-4	4	8-32	10-32	11/4 32
TW-5	5	10-32	1/4-28	11/4 32
TWB-6	6	1/4-28	5/16-24	11/4 32
TWB-7	7	5/16-24	3/8-24	11/4 32
TWB-8	8	3/8-24	7/16-20	11/4 32

5/16" HEX POWER DRIVE



Part Number	Recess Size	Screw Size Tension Head	Screw Size Shear Head	Overall Length IN.	MM.
TWA-6	6	1/4-28	5/16-24	11/4	32
TWA-7	7	5/16-24	3/8-24	11/4	32
TWA-8	8	3/8-24	7/16-20	11/4	32

7/16" HEX POWER DRIVE



Part Number	Recess Size	Screw Size Tension Head	Screw Size Shear Head	Overall Length IN.	MM.
TW-6	6	1/4-28	5/16-24	11/4	32
TW-7	7	5/16-24	3/8-24	11/4	32

1/4" HEX INSERT BITS



Part Number	Recess Size	Overall Length IN.	Body Dia. IN.	Blade Thickness IN.	Blade Width IN.
HTN-B-1	1	11/4	9/32	.049	0.274
HTN-B-2	2	11/4	5/16	.059	0.295
HTN-B-3	3	11/4	3/8	.059	0.377
HTN-B-4	4	11/4	1/2	.073	0.502

Nominal Screw Size	0	1	2	3	4	5	6	8	10	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4
Hi-Torque Recess	0	0	0	1	1	1	1	2	3	4	5	6	7	8	9	10	12

+ B.N.A.E. BITS

1/4" HEX INSERT BITS



Part Number	Point Size MM.	Overall Length IN.	MM.
BNAE-3MM	3	11/8	29
BNAE-4MM	4	11/8	29
BNAE-5MM	5	11/8	29
BNAE-6MM	6	11/8	29
BNAE-8MM	8	11/8	29

1/4" HEX INSERT BITS - ACR®



Part Number	Point Size MM.	Overall Length IN.	MM.
BNAE-4MM-ACR	4	11/8	29
BNAE-5MM-ACR	5	11/8	29
BNAE-8MM-ACR	8	11/8	29

ACR® ribs for both removal and driving



FASTENER TOOLS FOR THE AIRCRAFT INDUSTRY:

APEX offers a full selection of fastener tools common to aircraft assembly and maintenance, including Tri-Wing®, Torq-Set®, and Hi-Torque®. More details are available in the APEX Aerospace catalog, SP-354-EN.

⊖ HI-TORQUE® BITS

1/4" SQUARE DRIVE BITS



Part Number	Recess Size	Overall Length IN.	Body Dia. IN.	Blade Thickness IN.	Blade Width IN.
HTS-0	0	1	1/2	.029	0.167
HTS-1	1	1	1/2	.049	0.274
HTS-2	2	1	1/2	.059	0.295
HTS-3	3	1	1/2	.059	0.377
HTS-4	4	1	1/2	.073	0.502

3/8" SQUARE DRIVE BITS



Part Number	Recess Size	Overall Length IN.	Body Dia. IN.	Blade Thickness IN.	Blade Width IN.
HTS-2A	2	11/4	3/4	.059	0.295
HTS-3A	3	1	3/4	.059	0.377
HTS-4A	4	1	3/4	.073	0.502
HTS-5	5	11/4	3/4	.079	0.629
HTS-6	6	11/4	3/4	.095	0.745

1/2" SQUARE DRIVE BITS



Part Number	Recess Size	Overall Length IN.	Body Dia. IN.	Blade Thickness IN.	Blade Width IN.
HTS-7	7	15/8	1	.112	0.884
HTS-8	8	15/8	1	.142	0.995
HTS-9	9	15/8	11/4	.162	1.136
HTS-10	10	15/8	11/4	.182	1.250
HTS-12	12	23/8	11/4	.216	1.500



BIT HOLDERS, NUTSETTERS, HAND DRIVERS, & HEX ADAPTERS



**// SUPERIOR PRODUCT
DURABILITY AND CONSISTENCY
BECAUSE OF HIGH QUALITY,
INDUSTRIAL-GRADE MATERIALS
AND CONSISTENT MANUFACTURING
PROCESS. REDUCED TOTAL COST
OF OWNERSHIP SINCE APEX
TOOLS SIGNIFICANTLY OUTLAST
COMPETITIVE TOOLS.**

BIT HOLDERS

NON MAGNETIC

1/4" HEX DRIVE FOR 1/4" HEX INSERTS



Part Number	Overall Length IN. MM.
-------------	---------------------------

490	2 1/8 54
490-3	3 76
490-4	4 102
490-5	5 127
490-6	6 152
490-8	8 203
490-10	10 254

MAGNETIC

1/4" HEX DRIVE FOR 1/4" HEX INSERTS



Part Number	OAL IN. MM.	Notes
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M-490-2	2 51	
M-490-NR	2 31/32 75	No Lock Ring
M-490	2 31/32 75	
M-497	3 3/32 79	3/8" (9.5mm) Reduced Diameter
M-490-4	4 102	
M-490-6	6 152	
M-490-8	8 203	
M-490-10	10 254	
M-490-12	12 304	
M-490-16	16 406	
M-44-90	3 1/4 83	For Flip-Tip™ Reversible Bits



M-495	2 7/8 73	3/8" (9.5mm) Turned Shank
M-495-5	5 127	3/8" (9.5mm) Turned Shank



RM-490	2 7/8 73	Nose Piece Only, #490-RN
RM-490-4	4 102	Nose Piece Only, #490-RN
RM-490-6	6 152	Nose piece only, #490-RN



M-490-2-OR	2 51	With O-Ring Retainer
M-490-OR	3 76	With O-Ring Retainer

1/4" HEX DRIVE FOR 1/4" HEX INSERTS QUICK RELEASE



Part Number	Overall Length IN. MM.	Notes
QR-M-490-2	2 51	Magnetic; Quick Release
QR-M-490-A	2 29/32 74	Magnetic; Quick Release
QR-M-490-A6	6 152	Magnetic; Quick Release
QR-M-490-200M	7 7/8 200	Magnetic; Quick Release

1/4" HEX DRIVE FOR 5/16" HEX INSERTS



Part Number	Overall Length IN. MM.	Notes
498	2 3/8 60	
M-498	3 1/16 78	Magnetic

5/16" HEX DRIVE



Part Number	Overall Length IN. MM.	Notes
630	1 13/16 46	For 1/4" Hex Inserts
M-630	3 76	For 1/4" Hex Inserts; Magnetic
638	2 1/2 64	For 1/4" Hex Inserts
M-638	3 3/32 79	For 1/4" Hex Inserts; Magnetic

5/16" BUCKEYE – DESOUTTER FOR 1/4" HEX INSERTS



Part Number	Overall Length IN. MM.	Notes
610	2 51	
M-610	3 3/16 81	Magnetic

7/16" HEX DRIVE



Part Number	Overall Length IN. MM.	Notes
480	2 3/4 70	For 5/16" hex inserts
488	2 3/4 70	For 1/4" hex inserts
M-488	3 1/16 78	For 1/4" hex inserts, magnetic
489	3 1/8 79	For 1/4" hex inserts
M-480	3 5/16 84	For 5/16" hex inserts, magnetic
M-480-6	6 152	For 5/16" hex inserts, magnetic

APEX has a variety of covered bit holders that provide anti-mar and safety benefits. Please refer to the u-GUARD section in this catalog.



MAGNETIC BIT HOLDERS:

Bit holders let you use a variety of insert bits in power tool applications. You get economy and flexibility – and fasteners can be magnetically held to the bit.

BIT HOLDERS

9/32" 130-A YANKEE TYPE FOR 1/4" HEX INSERTS



Part Number	Overall Length	
	IN.	MM.
450	21/4	57
M-450	33/8	86

5/16" 131-A YANKEE TYPE FOR 1/4" HEX INSERTS



Part Number	Overall Length	
	IN.	MM.
460	21/4	57
M-460	33/8	86

7/32" 135-A YANKEE TYPE FOR 1/4" HEX INSERTS



Part Number	Overall Length	
	IN.	MM.
M-470	33/8	86

1/4"-24 SCREW SHANK FOR 1/4" HEX INSERTS



Part Number	Overall Length	
	IN.	MM.
400-BH	11/8	29

FEMALE SQUARE DRIVE

1/4" FEMALE SQUARE DRIVE



Part Number	Overall Length		Notes
	IN.	MM.	
825	1	25	For 1/4" Hex Inserts
M-825	29/32	58	For 1/4" Hex Inserts; Magnetic
820	23/32	18	For 1/4" Square Inserts

3/8" FEMALE SQUARE DRIVE



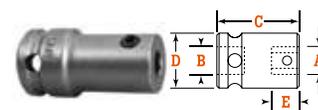
Part Number	Overall Length		Notes
	IN.	MM.	
830	11/2	38	For 5/16" Square Inserts
835	11/2	38	For 5/16" Hex Inserts
838	11/2	38	For 1/4" Hex Inserts
M-838	223/32	69	For 1/4" Hex Inserts, Magnetic
M-835	23/4	70	For 5/16" Hex Inserts, Magnetic

1/2" FEMALE SQUARE DRIVE



Part Number	Overall Length		Notes
	IN.	MM.	
850	13/4	45	For 5/16" Square Inserts
855	13/4	45	For 5/16" Hex Inserts
858	13/4	45	For 1/4" Hex Inserts
M-855	23/4	70	For 5/16" Hex Inserts, Magnetic
M-858	23/4	70	For 1/4" Hex Inserts, Magnetic

BIT HOLDERS/ ADAPTERS WITH SET SCREW OR THRU HOLE



Set Screw Lock	Part Number		Hex Opening (A) IN.	Square Drive (B) IN.	Overall Length (C) IN.	Overall Length (C) MM.	Body Dia. (D) IN.	Body Dia. (D) MM.	Opening Depth (E)	
	Spring Pin Retainer	Spring Pin Only							IN.	MM.
	-	-	1/4	1/4	11/4	32	3/4	19	5/8	16
	-	-	1/4	3/8	11/2	38	3/4	19	5/8	16
	-	-	1/4	1/2	11/2	38	7/8	22	5/8	16
	-	-	7/16	1/4	1	25	3/4	19	17/32	13
	RP-314	21-S-156-0750	7/16	3/8	13/8	35	3/4	19	17/32	13
	RP-514	21-S-156-0937	7/16	1/2	15/8	41	15/16	24	17/32	13
	RP-614	21-S-156-0375	7/16	5/8	13/4	46	11/4	32	17/32	13
	RP-520	21-S-187-1125	5/8	1/2	11/2	38	11/8	29	11/16	17
	RP-620	21-S-187-1250	5/8	5/8	11/2	38	11/4	32	11/16	17
	RP-720	21-S-187-1500	5/8	3/4	111/16	43	11/2	38	11/16	17
	RP-820	21-S-187-1375	5/8	1	21/8	54	21/8	54	11/16	17
	RP-724	21-S-187-1500	3/4	3/4	2	51	15/8	42	7/8	22
	RP-728	21-S-187-1625	7/8	3/4	2	51	15/8	42	57/64	23
	RP-828	21-S-187-1625	7/8	1	21/8	54	21/8	54	5/8	23

BIT HOLDERS

FEMALE THREADED DRIVE, QUICK RELEASING CHUCKS



Part Number	Female Thread IN.	Hex Opening IN.	Overall Length IN.	Overall Length MM.	Overall Dia. IN.	Overall Dia. MM.	Opening Depth IN.	Opening Depth MM.
QRA-08	3/8-24	1/4	1 3/4	45	3/4	19	61/64	24
QRA-14	3/8-24	7/16	2	51	1 1/4	32	11/16	27
QRF-08	1/2-20	1/4	1 3/4	45	3/4	19	61/64	24
QRF-14	1/2-20	7/16	2	51	1 1/4	32	11/16	27
QRF-20	1/2-20	5/8	2 5/8	67	1 5/8	41	1 1/2	38

FEMALE SQUARE DRIVE, QUICK RELEASING CHUCKS



Part Number	Hex Opening (A) IN.	Square Drive (B) IN.	Overall Length (C) IN.	Overall Length (C) MM.	Body Dia. (D) IN.	Body Dia. (D) MM.	Sleeve Dia. (E) IN.	Sleeve Dia. (E) MM.	Opening Depth (F) IN.	Opening Depth (F) MM.
QR-108	1/4	1/4	1 1/2	38	3/4	19	3/4	19	61/64	24
QR-308	1/4	3/8	1 3/4	45	3/4	19	3/4	19	61/64	24
QR-508	1/4	1/2	2 1/8	54	7/8	22	3/4	19	61/64	24
QR-314	7/16	3/8	2	51	1	25	1 1/4	32	13/32	28
QR-514	7/16	1/2	2 1/8	54	1	25	1 1/4	32	11/16	27
QR-514-2B	7/16	1/2	2 1/8	54	1	25	1 1/4	32	11/16	27
QR-520	5/8	1/2	2 5/8	67	1 1/2	38	1 5/8	41	1 1/2	38
QR-614	7/16	5/8	2 1/8	54	1 1/4	32	1 1/4	32	11/16	27
QR-620	5/8	5/8	2 5/8	67	1 1/2	38	1 5/8	41	1 1/2	38
QR-714	7/16	3/4	2 3/8	60	1 1/2	38	1 1/4	32	11/16	27
QR-720	5/8	3/4	3 1/8	79	1 1/2	38	1 5/8	41	1 1/2	38
QR-820	5/8	1	3 1/4	83	2 1/8	54	1 5/8	41	1 1/2	38
QR-824	3/4	1	3 3/4	95	2	51	1 7/8	48	1 5/8	41

NUTSETTERS

1/4" HEX DRIVE NUTSETTERS FOR SHEET METAL SCREWS

6 POINT POWER DRIVE, SAE



Part Number	Hex Opening IN.	Overall Length IN.	Socket Nose Dia. IN.	Nutsetter Notes
DB-08	1/4	2 9/16	7/16	Non-Magnetic
DB-10	5/16	2 9/16	1/2	Non-Magnetic
DB-12	3/8	2 9/16	9/16	Non-Magnetic
MDA-08	1/4	1 3/4	7/16	Magnetic
MDA-10	5/16	1 3/4	1/2	Magnetic
MDA-12	3/8	1 3/4	9/16	Magnetic
MDA-14	7/16	2	1 1/16	Magnetic
MDAT-08	1/4	1 3/4	3/8	Magnetic
MDB-08	1/4	2 9/16	7/16	Magnetic
MDB-10	5/16	2 9/16	1/2	Magnetic
MDB-12	3/8	2 9/16	9/16	Magnetic
MDB-14	7/16	2 9/16	5/8	Magnetic
MDC-08	1/4	2 9/16	7/16	Magnetic
MDC-10	5/16	2 9/16	1/2	Magnetic
MDC-12	3/8	2 9/16	9/16	Magnetic



APEX QUICK-RELEASE BIT HOLDERS HOLD BITS SECURELY:

A quick-release bit holder allows fast, easy insert bit changes while assuring that bits stay securely in the bit holder. Simply pull back on the knurled sleeve to release the bit.

1/4" HEX DRIVE NUTSETTERS FOR SHEET METAL SCREWS

6 POINT INSERT, SAE



Part Number	Hex Opening IN.	Overall Length IN.	Socket Nose Dia. IN.	Nutsetter Notes
MHM-1310	5/16	1 1/8	1/2	Magnetic
MHM-1912	3/8	1 3/4	9/16	Magnetic

6 POINT INSERT, METRIC



Part Number	Hex Opening IN.	Overall Length MM.	Socket Nose Dia. MM.	Nutsetter Notes
MHM-7MM	7	31.8	11.1	Magnetic
MHM-8MM	8	31.8	12.7	Magnetic
MHM-10MM	10	31.8	14.3	Magnetic

1/4" HEX DRIVE NUTSETTERS FOR SHEET METAL SCREWS

6 POINT POWER DRIVE, SAE



Part Number	Hex Opening IN.	Overall Length IN.	Socket Nose Dia. IN.	Nutsetter Notes
MHM-1710-2	5/16	2	9/16	Magnetic
MHM-1710-4	5/16	4	9/16	Magnetic

6 POINT POWER DRIVE, METRIC



Part Number	Hex Opening IN.	Overall Length MM.	Socket Nose Dia. MM.	Nutsetter Notes
MDA-6mm	6	44.5	9.5	Magnetic
MDA-7mm	7	44.5	11.1	Magnetic
MDA-8mm	8	44.5	12.7	Magnetic
MDA-10mm	10	44.5	14.3	Magnetic
MDA-10mm-80m	10	80.0	14.3	Magnetic

1/4" HEX DRIVE NUTSETTERS

6 POINT AND 6 POINT MAGNETIC, SAE



Part No. 6 Point	Part No. Magnetic	Hex Size IN.	Overall Length IN.	Socket Nose Dia. IN.
6N-0806-2	M6N-0806-2	3/16	2	5/16
6N-0806-3	M6N-0806-3	3/16	3	5/16
-	M6N-0806-5	3/16	5	5/16
-	M6N-0806-6	3/16	6	5/16
-	M6N-0806-8	3/16	8	5/16
-	M6N-0806-10	3/16	10	5/16
-	M6N-0806-12	3/16	12	5/16
6N-0808-2	M6N-0808-2	1/4	2	7/16
6N-0808-3	M6N-0808-3	1/4	3	7/16
6N-0808-4	M6N-0808-4	1/4	4	7/16
6N-0808-5	M6N-0808-5	1/4	5	7/16
6N-0808-6	M6N-0808-6	1/4	6	7/16
-	M6N-0808-8	1/4	8	7/16
-	M6N-0808-10	1/4	10	7/16
-	M6N-0808-12	1/4	12	7/16
6N-0810-2	M6N-0810-2	5/16	2	1/2
6N-0810-3	M6N-0810-3	5/16	3	1/2
6N-0810-4	M6N-0810-4	5/16	4	1/2
6N-0810-5	M6N-0810-5	5/16	5	1/2
6N-0810-6	M6N-0810-6	5/16	6	1/2

6 POINT AND 6 POINT MAGNETIC, SAE CONTINUED



Part No. 6 Point	Part No. Magnetic	Hex Size IN.	Overall Length IN.	Socket Nose Dia. IN.
-	M6N-0810-8	5/16	8	1/2
-	M6N-0810-10	5/16	10	1/2
-	M6N-0810-12	5/16	12	1/2
6N-0811-2	M6N-0811-2	11/32	2	9/16
6N-0811-3	M6N-0811-3	11/32	3	9/16
6N-0812-2	M6N-0812-2	3/8	2	9/16
6N-0812-3	M6N-0812-3	3/8	3	9/16
6N-0812-4	M6N-0812-4	3/8	4	9/16
6N-0812-6	M6N-0812-6	3/8	6	9/16
-	M6N-0812-8	3/8	8	9/16
-	M6N-0812-8	3/8	8	9/16
-	M6N-0812-10	3/8	10	9/16
-	M6N-0812-12	3/8	12	9/16
6N-0814-2	M6N-0814-2	7/16	2	21/32
6N-0814-3	M6N-0814-3	7/16	3	21/32
6N-0814-4	M6N-0814-4	7/16	4	21/32
6N-0814-6	M6N-0814-6	7/16	6	21/32
-	M6N-0814-8	7/16	8	21/32
-	M6N-0814-10	7/16	10	21/32
-	M6N-0814-12	7/16	12	21/32
6N-0816-2	M6N-0816-2	1/2	2	3/4
6N-0816-3	M6N-0816-3	1/2	3	3/4
-	M6N-0816-8	1/2	8	3/4
-	M6N-0816-10	1/2	10	3/4
-	M6N-0816-12	1/2	12	3/4
6N-0818-2	M6N-0818-2	9/16	2	13/16

6 POINT AND 6 POINT MAGNETIC, METRIC



Part No. 6 Point	Part No. Magnetic	Hex Size MM.	Overall Length MM.	Socket Nose Dia. MM.
6N-08-8M-3	M6N-08-8M-3	8	76	12.7
6N-08-8M-4	M6N-08-8M-4	8	102	12.7
6N-08-8M-6	M6N-08-8M-6	8	152	12.7
-	M6N-08-8M-8	8	203.2	12.7
-	M6N-08-8M-10	8	254	12.7
-	M6N-08-8M-12	8	304.8	12.7
-	MVM-11-10MM	10	74.6	14.3
6N-08-10M-3	M6N-08-10M-3	10	76	14.3
6N-08-10M-4	M6N-08-10M-4	10	102	14.3
6N-08-10M-6	M6N-08-10M-6	10	76	14.3
-	M6N-08-10M-8	10	203.2	14.3
-	M6N-08-10M-10	10	254	14.3
-	M6N-08-10M-12	10	304.8	14.3
6N-08-10M-8	-	10	203	14.3
6N-08-12M-2	-	12	51	19
6N-08-12M-3	M6N-08-12M-3	12	76	19
6N-08-12M-4	M6N-08-12M-4	12	102	19
6N-08-12M-6	M6N-08-12M-6	12	152	19
-	M6N-08-12M-8	12	203.2	19
-	M6N-08-12M-10	12	254	19
-	M6N-08-12M-12	12	304.8	19
6N-08-12M-10	-	12	254	19
-	M6N-08-14M-8	14	203.2	20.6
-	M6N-08-14M-10	14	254	20.6
-	M6N-08-14M-12	14	304.8	20.6

6 POINT, BOLT CLEARANCE



Part No. 6 Point	Hex Size IN.	Overall Length IN.	Socket Nose Dia. IN.	Clearance Depth (A) IN.
6B-0808	1/4	3 1/4	7/16	13/8
6B-0809	9/32	3 1/4	1/2	13/8
6B-0810	5/16	3 1/4	1/2	13/8
6B-0811	11/32	3 1/4	9/16	13/8
6B-0812	3/8	3 1/4	9/16	13/8
6B-0814	7/16	3 1/4	21/32	13/8
6B-0816	1/2	3 1/4	3/4	13/8
6B-0818	9/16	3 1/4	13/16	13/8
6B-0820	5/8	3 1/4	7/8	13/8

MAGNETIC BOLT CLEARANCE, 6 POINT AND DOUBLE HEX, METRIC



Part Number	Hex Size MM.	Overall Length MM.	Nose End Dia. MM.
MB6N-08-8M-4	8	102	13
MB6N-08-8M-6	8	152	13
MB6N-08-10M-12	10	305	14
MB6N-08-10M-14	10	356	14
MB6N-08-10M-2	10	51	14
MB6N-08-10M-4	10	102	14
MB6N-08-10M-5	10	127	14
MB6N-08-10M-6	10	152	14
MB6N-08-10M-8	10	203	14
MB6N-08-10M-D-6*	10	152	14
MB6N-08-12M-10	12	254	19
MB6N-08-12M-4	12	102	19
MB6N-08-12M-6	12	152	19
MB6N-08-12M-8	12	203	19
MB6N-08-13M-6	13	152	19
MB6N-08-14M-3	14	76	17
MB6N-08-14M-4	14	102	21

* Double hex



BOLT CLEARANCE NUTSETTERS:

Bolt clearance nutsetters allow the bolt or stud to recess into the nutsetter body as the nut is driven down. Bolt clearance nutsetters are prefixed with either 6B- or 6MB (for magnetic).

Note:

APEX Nutsetters can be available in shapes other than 6-point (SF-hex, Double Hex, 12-Point, Torx, Torx Plus, etc.) Please reach out to our Custom Solutions department.

7/16" HEX DRIVE NUTSETTERS

6 POINT



Part No. 6 Point	Hex Size IN.	Overall Length IN.	Socket Nose Dia. IN.
6N-1410-3	5/16	3	9/16
6N-1412-3	3/8	3	9/16
6N-1414-3	7/16	3	3/4
6N-1416-3	1/2	3	13/16
6N-1416-4	1/2	4	13/16
6N-1418-3	9/16	3	7/8
6N-1418-6	9/16	6	7/8
6N-1420-3	5/8	3	1
6N-1424-3	3/4	3	1 1/8
6N-1424-6	3/4	6	1 1/8

5/8" HEX DRIVE NUTSETTERS

6 POINT



Part No. 6 Point	Hex Size IN.	Overall Length IN.	Socket Nose Dia. IN.
6N-2028-4	7/8	4	1 3/8
6N-2036-4	1 1/8	4	1 5/8

HAND DRIVERS



Part Number	Female Hex Size IN.	Overall Length IN. MM.	Blade Projection IN. MM.	Notes
M-15-SC	1/4	8 1/2 216	4 3/8 111	Phillips #1, #2, #3; Slotted 4F-5R, 10F-12R; Hollow Handle. Magnetic
M-15-SC-A	1/4	8 1/2 216	4 3/8 111	Without Bits; Hollow Handle. Magnetic



REPLACEABLE BIT DRIVERS

Part Number	Female Hex Size IN.	Overall Length IN. MM.	Blade Projection IN. MM.
1510-P	1/4	2 3/4 70	7/8 22
1500-P	1/4	7 1/2 191	3 9/32 83

INDUSTRIAL BIT KIT



24BITKIT includes plastic carrying case with:

- Magnetic hand driver and magnetic bit holder
- Phillips Bits: #1, #2, #3
- Slotted Bits: 3F-4R, 4F-5R, 6F-8R, 8F-10R, 10F-12R
- Torx® Bits: T-10, T-15, T-20, T-25, T-27, T-30, T-40
- Square Recess Bits: 3/32", 1/8"
- Hex Bits: 5/64", 3/32", 7/64", 1/8", 9/64"
- Pozidriv® Bits: #1, #2



REPLACEABLE BIT DRIVERS – MAGNETIC

Part Number	Female Hex Size IN.	Overall Length IN. MM.	Blade Projection IN. MM.
M-1505-P	1/4	2 3/8 60	3/8 10
M-1500-P	1/4	8 1/2 216	4 3/8 111

AWLS



Part Number	Overall Length IN. MM.	Shank Dia. IN. MM.
AW-95	7 7/16 189	.307 7.8
AW-95-L	8 203	.307 7.8
AW-95-LL	8 7/8 225	.307 7.8

HEX POWER DRIVE ADAPTERS

MALE HEX POWER DRIVE WITH 1/4" MALE SQUARE



Part Number	Hex Drive IN.	Type of Lock	Overall Length IN. MM.
EX-250	1/4	Pin	1 3/8 35
EX-250-B	1/4	Ball	1 3/8 35
EX-250-2	1/4	Pin	2 51
EX-250-B-2	1/4	Ball	2 51
EX-250-3	1/4	Pin	3 76
EX-250-B-3	1/4	Ball	3 76
EX-250-4	1/4	Pin	4 102
EX-250-B-4	1/4	Ball	4 102
EX-250-5	1/4	Pin	5 127
EX-250-B-5	1/4	Ball	5 127
EX-250-6	1/4	Pin	6 152
EX-250-B-6	1/4	Ball	6 152
EX-250-8	1/4	Pin	8 203
EX-250-B-8	1/4	Ball	8 203
EX-250-10	1/4	Pin	10 254
EX-250-12	1/4	Pin	12 305
EX-250-B-12	1/4	Ball	12 305
EX-250-14	1/4	Pin	14 356
EX-250-18	1/4	Pin	18 457
EX-250-22	1/4	Pin	22 559

HEX POWER DRIVE ADAPTERS

MALE HEX DRIVE WITH 3/8" MALE SQUARE



Part Number	Hex Drive IN.	Type of Lock	Overall Length	
			IN.	MM.
EX-370	1/4	Pin	1 5/8	41
EX-370-B	1/4	Ball	1 5/8	41
EX-370-2	1/4	Pin	2	51
EX-370-B-2	1/4	Ball	2	51
EX-370-3	1/4	Pin	3	76
EX-370-B-3	1/4	Ball	3	76
EX-370-4	1/4	Pin	4	102
EX-370-B-4	1/4	Ball	4	102
EX-370-5	1/4	Pin	5	127
EX-370-6	1/4	Pin	6	152
EX-370-B-6	1/4	Ball	6	152
EX-370-8	1/4	Pin	8	203
EX-370-B-8	1/4	Ball	8	203
EX-370-10	1/4	Pin	10	254
EX-370-B-10	1/4	Ball	10	254
EX-370-12	1/4	Pin	12	305
EX-370-18	1/4	Pin	18	457
EX-380	5/16	Pin	1 1/2	38
EX-380-B	5/16	Ball	1 1/2	38
EX-380-2	5/16	Pin	2	51
EX-380-B-2	5/16	Ball	2	51
EX-380-3	5/16	Pin	3	76
EX-380-4	5/16	Pin	4	102
EX-380-6	5/16	Pin	6	152
EX-371	7/16	Pin	1 3/4	45
EX-371-2	7/16	Pin	2	51
EX-371-2 3/4	7/16	Pin	2 3/4	70
EX-371-3	7/16	Pin	3	76
EX-371-B-3	7/16	Ball	3	76
EX-371-4	7/16	Pin	4	102
EX-371-5	7/16	Pin	5	127
EX-371-6	7/16	Pin	6	152
EX-371-8	7/16	Pin	8	203
EX-371-10	7/16	Pin	10	254
EX-371-12	7/16	Pin	12	305
EX-371-15	7/16	Pin	15	381

MALE HEX POWER DRIVE WITH 1/2" MALE SQUARE



Part Number	Hex Size IN.	Type of Lock	Overall Length	
			IN.	MM.
EX-500-2	1/4	Pin	2	51
EX-500-B-2	1/4	Ball	2	51
EX-500-3	1/4	Pin	3	76
EX-500-B-3	1/4	Ball	3	76
EX-500-4	1/4	Pin	5	102
EX-500-B-4	1/4	Ball	4	102
EX-500-6	1/4	Pin	6	152
EX-500-B-6	1/4	Ball	6	152
EX-512-2	5/16	Pin	2	51
EX-512-B-2	5/16	Ball	2	51
EX-512-3	5/16	Pin	3	76
EX-512-B-4	5/16	Ball	4	102
EX-501-2	7/16	Pin	2 1/8	54
EX-501-B-2	7/16	Ball	2 1/8	54
EX-501-3	7/16	Pin	3	76
EX-501-B-3	7/16	Ball	3	76
EX-501-4	7/16	Pin	4	102
EX-501-B-4	7/16	Ball	4	102
EX-501-5	7/16	Pin	5	127
EX-501-B-5	7/16	Ball	5	127
EX-501-6	7/16	Pin	6	152
EX-501-B-6	7/16	Ball	6	152
EX-501-8	7/16	Pin	8	203
EX-501-B-8	7/16	Ball	8	203
EX-501-10	7/16	Pin	10	254
EX-501-B-10	7/16	Ball	10	254
EX-501-12	7/16	Pin	12	305
EX-501-B-12	7/16	Ball	12	305
EX-501-15	7/16	Pin	15	381
EX-502	5/8	Pin	2	51
EX-502-B	5/8	Ball	2	51
EX-502-3	5/8	Pin	3	76
EX-502-B-3	5/8	Ball	3	76
EX-502-B-4	5/8	Ball	4	102
EX-502-5	5/8	Pin	5	127
EX-502-6	5/8	Pin	6	152
EX-502-8	5/8	Pin	8	203

MALE HEX POWER DRIVE WITH 5/8" MALE SQUARE



Part Number	Hex Size IN.	Type of Lock	Overall Length	
			IN.	MM.
EX-620-3	7/16	Pin	3	76
EX-621-3	5/8	Pin	3	76
EX-621-B-3	5/8	Ball	3	76
EX-621-6	5/8	Pin	6	152
EX-621-8	5/8	Pin	8	203

HEX POWER DRIVE ADAPTERS

MALE HEX POWER DRIVE WITH 3/4" MALE SQUARE



Part Number	Hex Size IN.	Type of Lock	Overall Length	
			IN.	MM.
EX-757-3	7/16	7/32 Drill Hole	3	76
EX-757-B-3	7/16	Ball	3	76
EX-758-4	5/8	7/32 Drill Hole	4	102
EX-758-B-4	5/8	Ball	4	102
EX-758-6	5/8	7/32 Drill Hole	6	152
EX-758-9	5/8	7/32 Drill Hole	9	229

THREADED ADAPTERS

THREADED SCREW SHANK



Part Number	Male Square IN.	Male Thread IN.	Overall Length		Body Diameter	
			IN.	MM.	IN.	MM.
TH-256	1/4	1/4-28	1 5/8	41	7/16	11
TH-376	3/8	1/4-28	1 5/8	41	1/2	13
TH-250	1/4	1/4-28	1 5/8	41	7/16	11
TH-370	3/8	1/4-28	1 3/4	45	1/2	13
TH-372	3/8	1/4-28	1 3/4	45	1/2	13

HEX DRIVE UNIVERSAL ADAPTERS

MALE HEX TO MALE SQUARE



Part Number	Tension	Male Square IN.	Male Hex IN.	Type of Lock	Overall Length		Largest Dia.	
Standard					IN.	MM.	IN.	MM.
-	KSM-25-3	1/4	1/4	Pin	3	76	5/8	15.9
-	KSM-25-6	1/4	1/4	Pin	6	152	5/8	15.9
-	KSM-25-8	1/4	1/4	Pin	8	203	5/8	15.9
-	KSM-25-9	1/4	1/4	Pin	9	229	5/8	15.9
KCM-25-B-6	KSM-25-B-6	1/4	1/4	Ball	6	152	5/8	15.9
KCM-37-6	KSM-37-6	3/8	1/4	Pin	6	152	3/4	19.1
-	KSM-37-B-6	3/8	1/4	Ball	6	152	3/4	19.1
KCM-37-9	-	3/8	1/4	Pin	9	229	3/4	19.1





SOCKETS, UNIVERSAL WRENCHES, EXTENSIONS, AND ADAPTERS



// **MACHINED FROM HIGH
CARBON ALLOY STEEL
AND DESIGNED TO MEET
OR EXCEED LICENSOR
STANDARDS, RESULTING
IN TIGHTER TOLERANCES
AND SUPERIOR PRODUCT
QUALITY & CONSISTENCY.**

SOCKET TYPES



IMPACT SOCKETS



Industrial grade impact sockets are available in a wide range of lengths and wall thicknesses, and with single or double hex openings. Square openings are available in select sizes.

FIXED MAGNETIC IMPACT SOCKETS



M PREFIX

Magnetic sockets hold the fastener in driving position, even when working straight down. Time-wasting motions are eliminated when starting fasteners or working in hard-to-reach areas.

MAGNETIC BOLT CLEARANCE IMPACT SOCKETS



MB PREFIX

As the nut is run down, a spring-loaded or hollow cylinder magnet allows the bolt or stud to retract into the socket body. Nuts are held firmly in the socket.

SURFACE DRIVE SOCKETS



SF PREFIX

Large openings on the six corners of the hex end opening create a "floating" action that allows the socket to slip quickly and easily onto the nut or bolt. Ideal for compensating for imperfect alignment between the tool and fastener. Not generally recommended for impact use.

FAST LEAD IMPACT SOCKETS



FL PREFIX

Designed for power tool and multiple spindle power tools, a specially tapered opening provides complete engagement with the nut almost instantly upon engagement. This speeds productivity and extends tool life. Engagement is possible without starting and stopping the tool for each nut.

EXTENSIONS & ADAPTERS

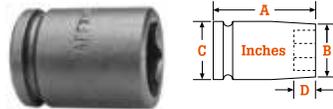
A wide range of accessories are available to adapt sockets to nearly every tool and application.

SQUARE DRIVE UNIVERSAL WRENCHES

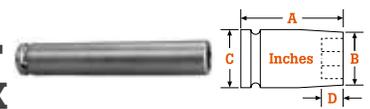
Designed to provide access in hard-to-reach fastening applications.

1/4" SQUARE DRIVE SOCKETS, SAE

STANDARD LENGTH, 6 POINT AND DOUBLE HEX



EXTRA LONG LENGTH, 6 POINT AND DOUBLE HEX

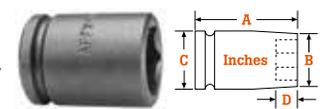


Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
1105	-	5/32	7/8	1/4	1/2	3/32
1106	1106-D	3/16	7/8	5/16	1/2	3/32
1107	1107-D	7/32	7/8	3/8	1/2	5/32
1108	1108-D	1/4	7/8	3/8	1/2	5/32
X-1108*	-	1/4	7/8	3/8	1/2	5/32
HA-510	-	5/16	7/8	7/16	7/16	3/16
1109	1109-D	9/32	1	7/16	1/2	3/16
1110	1110-D	5/16	1	1/2	1/2	3/16
X-1110*	-	5/16	1	1/2	1/2	3/16
1111	1111-D	11/32	1	9/16	9/16	3/16
1112	1112-D	3/8	1	9/16	9/16	1/4
1113	-	13/32	1	5/8	5/8	1/4
1114	1114-D	7/16	1	5/8	5/8	9/32
1116	1116-D	1/2	1	11/16	11/16	11/32
1118	-	9/16	1	13/16	13/16	7/16
1120	-	5/8	1	7/8	7/8	7/16

*Parts have a harder heat treat

Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
1308	1308-D	1/4	3	3/8	1/2	5/32
1310	-	5/16	3	1/2	1/2	3/16
1311	1311-D	11/32	3	1/2	1/2	3/16
1312	-	3/8	3	9/16	9/16	1/4
1313	-	13/32	3	9/16	9/16	1/4
1314	-	7/16	3	5/8	5/8	9/32
1316	-	1/2	3	11/16	11/16	11/32
1318	-	9/16	3	13/16	13/16	7/16
1320	-	5/8	3	7/8	7/8	7/16

MAGNETIC, STANDARD LENGTH, 6 POINT



Part No. 6 Point	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
M-1105	5/32	7/8	5/16	1/2	3/32
M-1106	3/16	7/8	5/16	1/2	3/32
M-1107	7/32	7/8	3/8	1/2	5/32
MX-1108*	1/4	7/8	3/8	1/2	5/32
M-1108-E*	1/4	7/8	3/8	1/2	5/32
MX-1108-E*	1/4	7/8	3/8	1/2	5/64
MHA-4108*	1/4	7/8	3/8	3/8	5/64
MHA-510**	5/16	7/8	7/16	7/16	1/8
MX-1109*	9/32	1	7/16	1/2	3/16
MHA-1310	5/16	1	7/16	1/2	1/8
M-1110	5/16	1	1/2	1/2	3/16
MX-1110*	5/16	1	1/2	1/2	3/16
MX-1111	11/32	1	1/2	1/2	3/16
M-1112*	3/8	1	9/16	9/16	1/4
MX-1112	3/8	1	9/16	9/16	1/4
M-1114	7/16	1	5/8	5/8	9/32
M-1116	1/2	1	11/16	11/16	11/32
M-1118	9/16	1	11/16	11/16	11/32

*Parts have a harder heat treat; MX-1108-E has no lead-in chamfer.

** No DIN groove

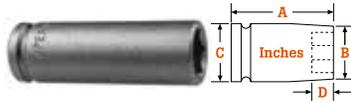
LONG LENGTH, 6 POINT AND DOUBLE HEX



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
1206	1206-D	3/16	1 3/4	5/16	1/2	3/32
1207	-	7/32	1 3/4	3/8	1/2	5/32
1208	1208-D	1/4	1 3/4	3/8	1/2	5/32
1209	1209-D	9/32	1 3/4	7/16	1/2	3/16
1210	1210-D	5/16	1 3/4	1/2	1/2	3/16
1211	-	11/32	1 3/4	9/16	9/16	3/16
1212	1212-D	3/8	1 3/4	9/16	9/16	1/4
1213	-	13/32	1 3/4	5/8	5/8	1/4
1214	-	7/16	1 3/4	5/8	5/8	9/32
1216	1216-D	1/2	1 3/4	11/16	11/16	11/32
1218	-	9/16	1 3/4	13/16	13/16	7/16

1/4" SQUARE DRIVE SOCKETS, SAE

MAGNETIC, LONG & EXTRA LONG LENGTH, 6 POINT



SURFACE DRIVE & FAST LEAD, STANDARD & LONG LENGTH



Part No. 6 Point	Part No. Bolt Clearance	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
-	MB-1206	3/16	1 3/4	5/16	1/2	5/32
M-1208	MB-1208	1/4	1 3/4	3/8	1/2	5/32
-	MB-1308	1/4	3	3/8	1/2	5/32
M-1209	MB-1209	9/32	1 3/4	7/16	1/2	3/16
M-1210	MB-1210	5/16	1 3/4	1/2	1/2	3/16
-	MB-1211	11/32	1 3/4	9/16	9/16	3/16
-	MB-1311	11/32	3	1/2	1/2	3/16
M-1212	MB-1212	3/8	1 3/4	9/16	9/16	1/4
-	MB-1312	3/8	3	9/16	9/16	1/4
M-1214	MB-1214	7/16	1 3/4	5/8	5/8	9/32
-	MB-1314	7/16	3	5/8	5/8	9/32
-	MB-1216	1/2	1 3/4	11/16	11/16	11/32
-	MB-1218	9/16	1 3/4	13/16	13/16	7/16

Part No. Surface Drive	Part No. Fast Lead	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
-	FL-1108	1/4	7/8	3/8	1/2	5/32
-	FL-1212	3/8	1 3/4	9/16	9/16	1/4
-	FL-1109	9/32	7/8	3/8	1/2	5/32
-	FL-1110	5/16	1	1/2	1/2	3/16
SF-1112	FL-1112	3/8	1	9/16	9/16	1/4
-	FL-1114	7/16	1	5/8	5/8	9/32
-	FL-1214	7/16	1 3/4	5/8	5/8	9/32
SF-1116	FL-1116	1/2	1	11/16	11/16	11/32
-	FL-1216	1/2	1 3/4	11/16	11/16	11/32

1/4" SQ. DR. SOCKETS FOR SAE SHEET METAL SCREWS

6 POINT & 6 POINT MAGNETIC, FOR PREDRILLED HOLES*



6 POINT & 6 POINT MAGNETIC, FOR SELF-DRILLING & TAPPING SCREWS*



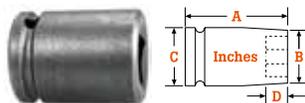
Part No. 6 Point	Part No. Magnetic	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
-	M1E06	3/16	7/8	5/16	1/2	3/32
-	M1E07	7/32	7/8	3/8	1/2	5/32
1E08	M1E08	1/4	7/8	3/8	1/2	5/32
1E10	M1E10	5/16	7/8	1/2	1/2	3/16
-	M1E11	11/32	1	1/2	1/2	3/16
-	M1E12	3/8	1	5/8	5/8	1/4
-	M1E14	7/16	1	11/16	11/16	9/32
-	M1E16	1/2	1	11/16	11/16	11/32

Part No. 6 Point	Part No. Magnetic	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
1P06	M1P06	3/16	7/8	5/16	1/2	3/32
1P07	M1P07	7/32	7/8	3/8	1/2	5/32
1P08	M1P08	1/4	7/8	7/16	1/2	5/32
-	M1P09	9/32	7/8	1/2	1/2	3/16
1P10	M1P10	5/16	7/8	1/2	1/2	3/16
1P11	M1P11	11/32	1	1/2	1/2	3/16
1P12	M1P12	3/8	1	5/8	5/8	1/4
1P14	M1P14	7/16	1	11/16	11/16	9/32
1P16	M1P16	1/2	1	11/16	11/16	11/32
-	M1A08	1/4	7/8	7/16	1/2	5/64

*Sockets for predrilled holes are intermediate hardness.

1/4" SQUARE DRIVE SOCKETS FOR SAE SQUARE NUTS

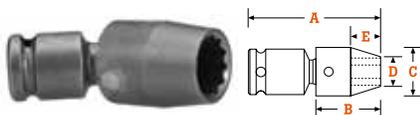
SINGLE SQUARE & DOUBLE SQUARE



Part No. Single Square	Part No. Double Square	Square Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
1608	1608-D	1/4	1	1/2	1/2	3/16
1612	1612-D	3/8	1	3/4	3/4	1/4

1/4" SQUARE DRIVE UNIVERSAL WRENCHES, SAE

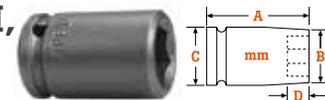
6 POINT AND DOUBLE HEX



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Socket Length (B) IN.	Socket Dia. (C) IN.	Nose End Dia. (D) IN.	Clearance Depth (E) IN.
SA-25	SA-25-D	1/4	17/32	3/4	5/8	3/8	3/8
SA-26	SA-26-D	5/16	117/32	3/4	5/8	7/16	3/8
SA-28	SA-28-D	3/8	119/32	13/16	5/8	17/32	7/16
SA-29	SA-29-D	7/16	121/32	7/8	5/8	5/8	1/2
SA-30	SA-30-D	1/2	121/32	7/8	11/16	11/16	1/2
SA-65	-	9/16	121/32	7/8	11/16	11/16	1/2

1/4" SQUARE DRIVE SOCKETS, METRIC

STANDARD LENGTH, 6 POINT AND DOUBLE HEX



Part No. 6 Point	Part No. Double Hex	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
3.5MM11	-	3.5	22.2	6.4	12.7	2.4
4MM11	-	4	22.2	6.4	12.7	2.4
4.5MM11	-	4.5	22.2	7.9	12.7	2.4
5MM11	-	5	22.2	8.7	12.7	3.9
5.5MM11	-	5.5	22.2	9.5	12.7	3.9
6MM11	6MM11-D	6	22.2	9.5	12.7	3.9
7MM11	7MM11-D	7	22.2	11.1	12.7	4.8
8MM11	8MM11-D	8	25.4	12.7	12.7	4.8
9MM11	9MM11-D	9	25.4	14.3	14.3	4.8
10MM11	10MM11-D	10	25.4	15.9	15.9	6.4
OS-10MM11	-	10	25.4	14.3	14.3	6.4
11MM11	11MM11-D	11	25.4	15.9	15.9	7.2
12MM11	12MM11-D	12	25.4	17.5	17.5	7.2
13MM11	13MM11-D	13	25.4	19.1	19.1	8.7
14MM11	14MM11-D	14	25.4	20.6	20.6	11.1
15MM11	-	15	25.4	22.2	22.2	11.1
16MM11	-	16	25.4	22.2	22.2	11.1

LONG LENGTH, 6 POINT AND DOUBLE HEX



Part No. 6 Point	Part No. Double Hex	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
5MM21	-	5	44.4	8.7	12.7	3.9
5.5MM21	-	5.5	44.4	9.5	12.7	3.9
6MM21	-	6	44.4	9.5	12.7	3.9
7MM21	-	7	44.4	11.1	12.7	4.8
8MM21	8MM21-D	8	44.4	12.7	12.7	4.8
9MM21	9MM21-D	9	44.4	14.3	14.3	4.8
10MM21	10MM21-D	10	44.4	15.9	15.9	6.4
11MM21	-	11	44.4	15.9	15.9	7.2
12MM21	-	12	44.4	17.5	17.5	7.2
13MM21	13MM21-D	13	44.4	19.1	19.1	8.7
14MM21	-	14	44.4	20.6	20.6	11.1
15MM21	15mm21-D	15	50.8	22.2	22.2	11.1
16MM21	-	16	50.8	22.2	22.2	11.1

1/4" SQUARE DRIVE SOCKETS, METRIC

MAGNETIC, STANDARD LENGTH, 6 POINT



Part No. Fixed Magnet	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
M-5MM11	5	22.2	8.7	12.7	3.9
M-5.5MM11	5.5	22.2	9.5	12.7	3.9
M-6MM11	6	22.2	9.5	12.7	3.9
M-7MM11	7	22.2	11.9	12.7	4.8
MVA-20-7MM	7	22.2	10.5	10.5	4.8
M-8MM11	8	25.4	12.7	12.7	4.8
M-9MM11	9	25.4	14.3	14.3	4.8
M-10MM11	10	25.4	15.9	15.9	6.4
M-11MM11	11	25.4	15.9	15.9	7.2
M-12MM11	12	25.4	17.5	17.5	7.2
M-13MM11	13	25.4	19.1	19.1	8.7
M-14MM11	14	25.4	20.6	20.6	11.1
M-15MM11	15	25.4	22.2	22.2	11.1

MAGNETIC, LONG LENGTH, 6 POINT



Part No. Fixed Magnet	Part No. Magnetic Bolt Clearance	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
-	MB-5MM21	5	44.4	8.7	12.7	3.9
-	MB-5.5MM21	5.5	44.4	9.5	12.7	3.9
M-6MM21	MB-6MM21	6	44.4	9.5	12.7	3.9
M-7MM21	MB-7MM21	7	44.4	11.9	12.7	4.8
M-8MM21	MB-8MM21	8	44.4	12.7	12.7	4.8
M-9MM21	MB-9MM21	9	44.4	14.3	14.3	4.8
M-10MM21	MB-10MM21	10	44.4	15.9	15.9	6.4
-	OSMB-10MM21	10	44.4	14.2	14.2	6.4
M-11MM21	MB-11MM21	11	44.4	15.9	15.9	7.2
M-12MM21	MB-12MM21	12	44.4	17.5	17.5	7.2
M-13MM21	MB-13MM21	13	44.4	19.1	19.1	8.7
-	MB-14MM21	14	44.4	20.6	20.6	11.1
-	MB-15MM21	15	50.8	22.2	22.2	11.1
-	MB-16MM21	16	50.8	22.2	22.2	11.1

SURFACE DRIVE, STANDARD AND LONG LENGTH



Part No. Surface Drive	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
SF-8MM11	8	25.4	12.7	12.7	4.7
SF-10MM11	10	25.4	15.9	15.9	6.4
SF-10MM21	10	44.4	15.9	15.9	6.4
SF-12MM21	11	44.4	17.5	15.9	7.2
SF-13MM11	13	25.4	19.1	19.1	8.7
SF-13MM21	13	44.4	19.1	19.1	8.7
SF-15MM11	15	25.4	22.2	22.2	11.1

1/4" SQ. DR. SOCKETS FOR METRIC SHEET METAL SCREWS

6 POINT AND 6 POINT MAGNETIC

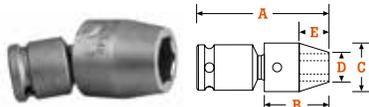


Part No. 6 Point	Part No. Fixed Magnet	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
3.5MME1	-	3.5	22.2	6.4	12.7	2.4
4MME1	M-4MME1	4	22.2	6.4	12.7	2.4
-	M-5MME1	5	22.2	8.7	12.7	3.9
5.5MME1	M-5.5MME1	5.5	22.2	9.5	12.7	3.9
6MME1	M-6MME1	6	22.2	9.5	12.7	3.9
7MME1	M-7MME1	7	22.2	11.1	12.7	4.8
-	MR-7MME1*	7	22.2	11.1	12.7	4.8
8MME1	M-8MME1	8	25.4	12.7	12.7	4.8
9MME1	M-9MME1	9	25.4	14.3	14.3	4.8
10MME1	M-10MME1	10	25.4	15.9	15.9	6.4
11MME1	M-11MME1	11	25.4	17.5	17.5	7.2
12MME1	M-12MME1	12	25.4	17.5	17.5	7.2
13MME1	M-13MME1	13	25.4	19.1	19.1	8.7

*MR-7MME1 has stronger magnet

1/4" SQUARE DRIVE UNIV. WRENCHES, METRIC

6 POINT

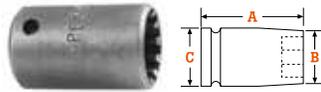


Part No. 6 Point	Hex Opening MM.	Overall Length (A) MM.	Socket Length (B) MM.	Socket Dia. (C) MM.	Nose End Dia. (D) MM.	Clearance Depth (E) MM.
SA-15-6M	6	31	19.1	15.9	9.5	9.5
SA-15-7M	7	31	19.1	15.9	10.3	9.5
SA-16-8M	8	38	19.1	19.1	11.1	7.9
SA-16-10M	10	40	20.6	19.1	15.1	9.5

Maximum operating angle when using Universal Wrench is 30 degrees.

1/4" SQUARE DR. SOCKETS FOR SPLINE FASTENERS

STANDARD AND LONG LENGTH



Part Number	Spline Size	Nominal Size IN.	Overall Length (A)		Nose End Dia. (B)		Drive End Dia. (C)	
			IN.	MM.	IN.	MM.	IN.	MM.
CMS-1507	7	7/32	2	51	21/64	8	7/16	11
CMS-1408	8	1/4	7/8	22	3/8	10	7/16	11
CMS-1508	8	1/4	2	51	3/8	10	7/16	11
CMS-1409	9	9/32	7/8	22	7/16	11	7/16	11
CMS-1509	9	9/32	2	51	7/16	11	7/16	11
CMS-1410	10	5/16	7/8	22	29/64	12	29/64	12
CMS-1510	10	5/16	2	51	29/64	12	29/64	12
CMS-1412	12	3/8	7/8	22	17/32	14	17/32	14
CMS-1414	14	7/16	1	25	39/64	16	39/64	16



APEX SPLINE SOCKETS:

APEX Spline Sockets conform to military specifications MS-37787 and MIL-W-8982C.

1/4" SQUARE DRIVE TORX® SOCKETS

FOR EXTERNAL TORX SCREWS



Part Number	Part No. Fixed Magent	Driver Size	Overall Length (A)		Nose End Dia. (B)		Drive End Dia. (C)	
			IN.	MM.	IN.	MM.	IN.	MM.
TX-1104	-	E4	1	25.4	1/4	6.4	1/2	12.7
TX-1105	-	E5	1	25.4	1/4	6.4	1/2	12.7
TX-1106	-	E6	1	25.4	5/16	7.9	1/2	12.7
TX-1108	-	E8	1	25.4	3/8	9.5	1/2	12.7
TX-1110	MTX-1110	E10	1	25.4	9/16	14.3	9/16	14.3
TX-1112	-	E12	1	25.4	5/8	15.9	5/8	15.9

FOR EXTERNAL TORX SCREWS, THIN WALL



Part Number	Part No. Fixed Magnetic	Driver Size	Overall Length (A)		Nose End Dia. (B)		Drive End Dia. (C)	
			IN.	MM.	IN.	MM.	IN.	MM.
TX-1404	-	E4	1	25.4	1/4	6.4	1/2	12.7
TX-1405	-	E5	1	25.4	1/4	6.4	1/2	12.7
-	MTX-1405	E5	7/8	22.2	1/4	6.4	7/16	11.1
TX-1406	-	E6	1	25.4	5/16	7.9	1/2	12.7
TX-1407	-	E7	1	25.4	5/16	7.9	1/2	12.7
TX-1408	-	E8	1	25.4	3/8	9.5	1/2	12.7
TX-1410	-	E10	1	25.4	1/2	12.7	1/2	12.7
TX-1411	-	E11	1	25.4	1/2	12.7	1/2	12.7
TX-1412	-	E12	1	25.4	9/16	14.3	9/16	14.3

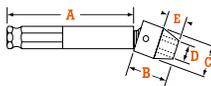
FOR TORX NUTS



Part Number	Driver Size	Overall Length (A)		Nose End Dia. (B)		Drive End Dia. (C)	
		IN.	MM.	IN.	MM.	IN.	MM.
TX-1E05	E5	7/8	22.2	3/8	9.5	1/2	12.7
TX-1E06	E6	7/8	22.2	7/16	11.1	1/2	12.7
TX-1E08	E8	7/8	22.2	1/2	12.7	1/2	12.7

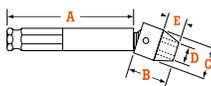
1/4" MALE HEX UNIVERSAL WRENCHES

SAE 6 POINT, STANDARD & TENSION TYPE – EXTENSION



Part Number	Part No. Tension	Hex Opening IN.	Shank Length (A) IN.	Socket Length (B) IN.	Socket Dia. (C) IN.	Nose End Dia. (D) IN.	Clearance Depth (E) IN.
KC-25-3	-	1/4	3	3/4	5/8	3/8	3/8
KC-25-4	-	1/4	4	3/4	5/8	3/8	3/8
KC-25-6	KS-25-6	1/4	6	3/4	5/8	3/8	3/8
KC-25-9	-	1/4	9	3/4	5/8	3/8	3/8
KC-25-12	-	1/4	12	3/4	5/8	3/8	3/8
KC-26-3	-	5/16	3	3/4	5/8	7/16	3/8
KC-26-6	KS-26-6	5/16	6	3/4	5/8	7/16	3/8
KC-26-9	-	5/16	9	3/4	5/8	7/16	3/8
KC-26-12	KS-26-12	5/16	12	3/4	5/8	7/16	3/8
-	KS-100-6	5/16	6	3/4	3/4	7/16	5/16
KC-27-3	-	11/32	3	3/4	5/8	1/2	3/8
KC-27-6	-	11/32	6	3/4	5/8	1/2	3/8
KC-28-3	-	3/8	3	13/16	5/8	9/16	7/16
KC-28-6	KS-28-6	3/8	6	13/16	5/8	9/16	7/16
KC-29-3	-	7/16	3	7/8	5/8	5/8	1/2
-	KS-28-12	3/8	12	13/16	5/8	9/16	7/16
-	KS-102-6	3/8	6	13/16	3/4	9/16	3/8
KC-29-6	KS-29-6	7/16	6	7/8	5/8	3/8	1/2
KC-30-3	-	1/2	3	7/8	11/16	11/16	1/2
KC-30-4	-	1/2	4	7/8	11/16	11/16	1/2
KC-30-6	KS-30-6	1/2	6	7/8	11/16	11/16	1/2
KC-30-9	-	1/2	9	7/8	11/16	11/16	1/2
KC-101-6	-	11/32	6	3/4	3/4	15/32	5/16
-	KS-104-6	1/2	6	1	3/4	3/4	9/16
KC-105-6	KS-105-6	9/16	6	1	13/16	13/16	9/16
-	KS-105-9	9/16	9	1	13/16	13/16	9/16

METRIC 6 POINT, STANDARD & TENSION TYPE – EXTENSION



Part Number	Part No. Tension	Hex Opening MM.	Shank Length (A) MM.	Socket Length (B) MM.	Socket Dia. (C) MM.	Nose End Dia. (D) MM.	Clearance Depth (E) MM.
KC-5-7M-4	-	7	102	19.1	15.9	10.3	9.5
KC-5-7M-6	KS-5-7M-6	7	152	19.1	15.9	10.3	9.5
-	KS-5-7M-9	7	229	19.1	15.9	10.3	9.5
KC-6-8M-3	-	8	76	19.1	19.1	11.1	7.9
KC-6-8M-4	-	8	102	19.1	19.1	11.1	7.9
KC-6-8M-6	KS-6-8M-6	8	152	19.1	19.1	11.1	7.9
KC-6-8M-9	KS-6-8M-9	8	229	19.1	19.1	11.1	7.9
KC-6-9M-6	-	9	152	19.1	19.1	12.7	7.9
KC-6-10M-3	-	10	76	20.6	19.1	15.1	9.5
KC-6-10M-4	-	10	102	20.6	19.1	15.1	9.5
KC-6-10M-6	KS-6-10M-6	10	152	20.6	19.1	15.1	9.5
-	KS-6-10M-9	10	229	20.6	19.1	15.1	9.5
KC-6-10M-12	-	10	305	20.6	19.1	15.1	9.5
KC-7-11M-6	KS-7-11M-6	11	152	23.8	22.2	15.1	10.3
KC-7-12M-3	-	12	76	23.8	22.2	15.1	10.3
KC-7-12M-6	-	12	152	23.8	22.2	15.1	10.3
KC-7-12M-9	-	12	229	23.8	22.2	15.1	10.3
KC-7-13M-3	-	13	76	25.4	22.2	15.1	11.9
KC-7-13M-6	KS-7-13M-6	13	152	25.4	22.2	15.1	11.9
KC-7-13M-9	KS-7-13M-9	13	229	25.4	22.2	15.1	11.9



APEX UNIVERSAL WRENCHES & SOCKETS:

Meet the Minimum Proof Torque requirements specified in ASME impact standards B107.2, B107.33M and B107.110. Maximum operating angle is 30 degrees for Universal Wrenches.

1/4" SQUARE DR. EXTENSIONS

7/8" TO 14"
LENGTH



Part Number	Male Square IN.	Type of Lock	Overall Length	
			IN.	MM.
EX-252	1/4	Pin	7/8	22
EX-252-B	1/4	Ball	7/8	25
EX-255-2	1/4	Pin	2	51
EX-255-B-2	1/4	Ball	2	51
EX-255-3	1/4	Pin	3	76
EX-255-4	1/4	Pin	4	102
EX-255-B-4	1/4	Ball	4	102
EX-255-6	1/4	Pin	6	152
EX-255-B-6	1/4	Ball	6	152
EX-255-8	1/4	Pin	8	203
EX-255-10	1/4	Pin	10	254
EX-255-12	1/4	Pin	12	305
EX-255-14	1/4	Pin	14	356

1/4" SQUARE DR. ADAPTERS

1/4" FEMALE SQ. TO
3/8" MALE SQ.



Part Number	Female Square IN.	Male Square IN.	Type of Lock	Overall Length	
				IN.	MM.
EX-372	1/4	3/8	Pin	1	25.4
EX-372-B	1/4	3/8	Ball	1	25.4

1/4" SQUARE DRIVE UNIVERSAL ADAPTERS

FEMALE SQUARE TO
MALE SQUARE



Part Number	Female Square IN.	Male Square IN.	Type of Lock	Largest Dia.		Overall Length	
				IN.	MM.	IN.	MM.
MF-25	1/4	1/4	Pin	5/8	16	15/8	41
MF-25-B	1/4	1/4	Ball	5/8	16	15/8	41



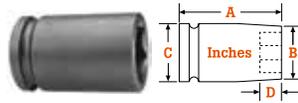
APEX UNIVERSAL WRENCHES & SOCKETS:

APEX Universal Wrenches and Sockets meet the Minimum Proof Torque requirements specified in ASME impact standards B107.2, B107.33M and B107.110. Maximum operating angle is 30 degrees for Universal Wrenches.

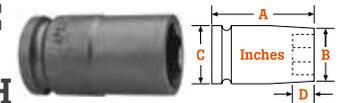


3/8" SQUARE DRIVE SOCKETS, SAE

6 POINT & DOUBLE HEX, SHORT & STANDARD LENGTH



6 POINT & DOUBLE HEX, THIN WALL, STANDARD LENGTH



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
3108	3108-D	1/4	11/4	7/16	3/4	5/32
3109	3109-D	9/32	11/4	7/16	3/4	3/16
3010	-	5/16	7/8	1/2	3/4	3/16
3110	3110-D	5/16	11/4	1/2	3/4	3/16
3111	-	11/32	11/4	1/2	3/4	3/16
3012	3012-D	3/8	7/8	19/32	3/4	3/16
3112	3112-D	3/8	11/4	19/32	3/4	1/4
3113	3113-D	13/32	11/2	11/16	3/4	1/4
3014	3014-D	7/16	7/8	11/16	3/4	9/32
3114	3114-D	7/16	11/2	11/16	3/4	9/32
3016	3016-D	1/2	7/8	13/16	13/16	5/16
3116	3116-D	1/2	11/2	13/16	13/16	11/32
3117	-	17/32	11/2	13/16	13/16	11/32
3018	3018-D	9/16	7/8	7/8	7/8	5/16
3118	3118-D	9/16	11/2	7/8	7/8	7/16
3119	-	19/32	11/2	7/8	7/8	7/16
3020	3020-D	5/8	1	15/16	15/16	7/16
3120	3120-D	5/8	11/2	15/16	15/16	7/16
3022	3022-D	11/16	1	1	1	7/16
3122	-	11/16	11/2	1	1	7/16
3024	3024-D	3/4	1	11/16	11/16	7/16
3124	3124-D	3/4	11/2	11/16	11/16	15/32
3126	-	13/16	11/2	11/8	11/8	7/16
3028	3028-D	7/8	1	11/4	11/4	7/16
-	HC-3816*	1/2	11/2	11/16	11/16	11/32

* No DIN groove

Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
3408	3408-D	1/4	11/4	7/16	3/4	5/32
3409	-	9/32	11/4	7/16	3/4	3/16
3410	3410-D	5/16	11/4	1/2	3/4	3/16
08-3410*	-	5/16	11/4	7/16	19/32	3/16
3412	3412-D	3/8	11/2	19/32	3/4	1/4
3414	3414-D	7/16	11/2	5/8	3/4	9/32
3416	3416-D	1/2	11/2	3/4	3/4	11/32
3418	3418-D	9/16	11/2	25/32	13/16	7/16
3420	3420-D	5/8	11/2	7/8	7/8	7/16
3424	3424-D	3/4	11/2	1	1	15/32
3426	-	13/16	11/2	11/8	11/8	17/32
3428	-	7/8	11/2	13/16	11/4	9/16
3430	3430-D	15/16	11/2	15/16	15/16	5/8
3432	-	1	11/2	13/8	13/8	5/8
3434	-	11/16	11/2	11/2	11/2	11/16

* No DIN groove



3/8" SQUARE DRIVE SOCKETS, SAE

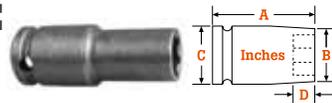
6 POINT & DOUBLE HEX, LONG AND EXTRA LONG LENGTH



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
3208	3208-D	1/4	2	7/16	3/4	5/32
3308	-	1/4	3 1/2	7/16	3/4	5/32
3209	-	9/32	2	7/16	3/4	3/16
3210	3210-D	5/16	2	1/2	3/4	3/16
3310	3310-D	5/16	3 1/2	1/2	3/4	3/16
-	OS-3310-D*	5/16	3 1/2	15/32	5/8	3/16
3211	3211-D	11/32	2	1/2	3/4	3/16
3212	3212-D	3/8	2	19/32	3/4	1/4
3312	3312-D	3/8	3 1/2	19/32	3/4	1/4
3214	3214-D	7/16	2	11/16	3/4	9/32
3314	3314-D	7/16	3 1/2	11/16	3/4	9/32
3216	3216-D	1/2	2	13/16	13/16	11/32
3316	3316-D	1/2	3 1/2	13/16	13/16	11/32
3218	3218-D	9/16	2	7/8	7/8	7/16
3318	3318-D	9/16	3 1/2	7/8	7/8	7/16
3220	3220-D	5/8	2	15/16	15/16	7/16
3320	3320-D	5/8	3 1/2	15/16	15/16	7/16
3222	3222-D	11/16	2	1	1	7/16
3322	3322-D	11/16	3 1/2	1	1	7/16
3224	3224-D	3/4	2	11/16	1-1/16	15/32
3324	3324-D	3/4	3 1/2	11/16	11/16	15/32
3226	3226-D	13/16	2	1 1/4	1 1/4	17/32
3326	3326-D	13/16	3 1/2	1 1/4	1 1/4	17/32
3228	3228-D	7/8	2	1 1/4	1 1/4	9/16
3328	-	7/8	3-1/2	1 1/4	1 1/4	9/16

* No DIN groove

6 POINT & DOUBLE HEX, THIN WALL, LONG LENGTH



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
3510	-	5/16	2	1/2	3/4	3/16
-	HC-5310-D*	5/16	2	1/2	5/8	3/16
3511	-	11/32	2	1/2	3/4	3/16
3512	3512-D	3/8	2	19/32	3/4	1/4
3514	3514-D	7/16	2	5/8	3/4	9/32
3516	3516-D	1/2	2	3/4	3/4	11/32
3518	3518-D	9/16	2	25/32	13/16	7/16
3524	3524-D	3/4	2	1	1	15/32
3530	-	15/16	2	15/16	15/16	5/8
3532	-	1	2	1 3/8	1 3/8	5/8
3534	-	1 1/16	2	1 1/2	1 1/2	11/16

* No DIN groove

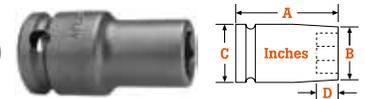
MAGNETIC, SHORT AND STANDARD LENGTH



Part No. Fixed Magnet	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
M-3108	1/4	1 1/4	7/16	3/4	5/32
M-3109	9/32	1 1/4	7/16	3/4	3/16
M-3110	5/16	1 1/4	1/2	3/4	3/16
M-3012	3/8	7/8	19/32	3/4	3/16
M-3112	3/8	1 1/4	19/32	3/4	1/4
M-3014	7/16	7/8	11/16	3/4	9/32
M-3114	7/16	1 1/2	11/16	3/4	9/32
MSW-604	7/16	1 1/2	21/32	3/4	9/32
M-3016	1/2	7/8	13/16	13/16	5/16
M-3116	1/2	1 1/2	13/16	13/16	11/32
MHC-3816*	1/2	1 1/2	11/16	11/16	11/32
M-3018	9/16	7/8	7/8	7/8	5/16
M-3118	9/16	1 1/2	7/8	7/8	7/16
MSW-343	9/16	1 1/2	3/4	3/4	7/16
M-3120	5/8	1 1/2	15/16	15/16	7/16

* No DIN groove

MAGNETIC, THIN WALL, STANDARD LENGTH



Part No. Fixed Magnet	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
M-3408	1/4	1 1/4	7/16	3/4	5/32
M-3410	5/16	1 1/4	1/2	3/4	3/16
OSM-3410*	5/16	1 1/4	7/16	19/32	3/16
M-3411	11/32	1 1/4	1/2	3/4	3/16
M-3412	3/8	1 1/2	19/32	3/4	1/4
M-3414	7/16	1 1/2	5/8	3/4	9/32
OSM-3414*	7/16	1 1/2	5/8	5/8	9/32
M-3416	1/2	1 1/2	3/4	3/4	11/32
M-3418	9/16	1 1/2	25/32	13/16	7/16
M-3424	3/4	1 1/2	1	1	15/32
M-3426	13/16	1 1/2	1 1/8	1 1/8	17/32

* No DIN groove

3/8" SQUARE DRIVE SOCKETS, SAE

MAGNETIC, LONG LENGTH & EXTRA LONG LENGTH



Part No. Fixed Magnet	Part No. Mag Bolt Clearance	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
-	MB-3210	5/16	2	1/2	3/4	3/16
M-3212	MB-3212	3/8	2	19/32	3/4	1/4
M-3214	MB-3214	7/16	2	11/16	3/4	9/32
-	MB-3314	7/16	3 1/2	11/16	3/4	9/32
M-3216	MB-3216	1/2	2	13/16	13/16	11/32
M-3218	MB-3218	9/16	2	7/8	7/8	7/16
-	MB-3318	9/16	3 1/2	7/8	7/8	7/16
-	MB-3220	5/8	2	15/16	15/16	7/16

MAGNETIC, THIN WALL, LONG LENGTH



Part No. Fixed Magnet	Part No. Mag Bolt Clearance	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
-	MB-3512	3/8	2	19/32	3/4	1/4
M-3514	MB-3514	7/16	2	5/8	3/4	9/32
-	MB-3516	1/2	2	3/4	3/4	11/32

SURFACE DRIVE & FAST LEAD, SHORT AND STANDARD LENGTH



Part No. Surface Drive	Part No. Fast Lead	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
SF-3010	-	5/16	7/8	1/2	3/4	3/16
SF-3110	FL-3110	5/16	11/4	1/2	3/4	3/16
SF-3012	FL-3012	3/8	7/8	19/32	3/4	3/16
SF-3112	FL-3112	3/8	11/4	19/32	3/4	1/4
SF-3014	FL-3014	7/16	7/8	11/16	3/4	9/32
SF-3114	FL-3114	7/16	11/2	11/16	3/4	9/32
SF-3016	FL-3016	1/2	7/8	13/16	13/16	5/16
SF-3116	FL-3116	1/2	11/2	13/16	13/16	11/32
SF-3018	FL-3018	9/16	7/8	7/8	7/8	5/16
SF-3118	FL-3118	9/16	11/2	7/8	7/8	7/16
SF-3120	FL-3120	5/8	11/2	15/16	15/16	7/16
-	FL-3022	11/16	1	15/16	15/16	7/16
-	FL-3122	11/16	11/2	1	1	7/16
-	FL-3024	3/4	1	11/16	11/16	7/16
-	FL-3124	3/4	11/2	11/16	11/16	15/32

SURFACE DRIVE & FAST LEAD, THIN WALL, STANDARD LENGTH



Part No. Surface Drive	Part No. Fast Lead	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
SF-3412	FL-3412	3/8	11/2	19/32	3/4	1/4
SF-3414	FL-3414	7/16	11/2	5/8	3/4	9/32
SF-3416	-	1/2	11/2	3/4	3/4	11/32
SF-HC-3816	-	1/2	11/2	11/16	11/16	11/32
SF-3418	-	9/16	11/2	25/32	13/16	7/16
SF-3432	-	1	11/2	13/8	13/8	5/8

SURFACE DRIVE & FAST LEAD, LONG AND EXTRA LONG LENGTH



Part No. Surface Drive	Part No. Fast Lead	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
-	FL-3210	5/16	2	1/2	3/4	3/16
SF-3212	FL-3212	3/8	2	19/32	3/4	1/4
-	FL-3312	3/8	3 1/2	19/32	3/4	1/4
SF-3214	FL-3214	7/16	2	11/16	3/4	9/32
SF-3314	FL-3314	7/16	3 1/2	11/16	3/4	9/32
SF-3216	FL-3216	1/2	2	13/16	13/16	11/32
SF-3316	FL-3316	1/2	3 1/2	13/16	13/16	11/32
SF-3218	FL-3218	9/16	2	7/8	7/8	7/16
SF-3318	FL-3318	9/16	3 1/2	7/8	7/8	7/16
-	FL-3220	5/8	2	15/16	15/16	7/16
SF-3320	FL-3320	5/8	3 1/2	15/16	15/16	7/16
SF-3224	-	3/4	2	11/16	11/16	15/32
SF-3324	FL-3324	3/4	3 1/2	11/16	11/16	15/32
-	FL-3326	13/16	3 1/2	11/4	11/4	17/32

SURFACE DRIVE, THIN WALL, LONG LENGTH

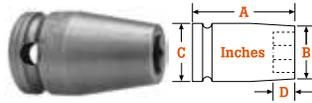


Part No. Surface Drive	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
SF-3512	3/8	2	19/32	3/4	1/4
OSSF-3512*	3/8	2	19/32	19/32	1/4
SF-3514	7/16	2	5/8	3/4	9/32
OSSF-3514*	7/16	2	5/8	5/8	9/32
SF-3516	1/2	2	3/4	3/4	11/32
SF-3518	9/16	2	25/32	13/16	7/16

* No ring groove

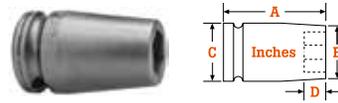
3/8" SQ. DR. SOCKETS FOR SAE SHEET METAL SCREWS

6 POINT & 6 POINT MAGNETIC, FOR PREDRILLED HOLES



Part No. Non Magnetic	Part No. Magnetic	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
-	M3E08	1/4	1 1/4	7/16	3/4	5/32
3E10	M3E10	5/16	1 1/4	1/2	3/4	3/16
3E11	-	11/32	1 1/4	1/2	3/4	3/16
3E12	M3E12	3/8	1 1/4	19/32	3/4	1/4
3E14	M3E14	7/16	1 1/4	11/16	3/4	9/32
3E16	M3E16	1/2	1 1/2	13/16	13/16	11/32
-	M3E18	9/16	1 1/2	7/8	7/8	7/16

6 POINT & 6 POINT MAGNETIC, FOR SELF-TAPPING SCREWS*

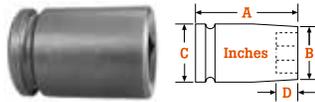


Part No. Non Magnetic	Part No. Magnetic	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
-	M3P06	3/16	1 1/4	5/16	3/4	3/32
-	M3P07	7/32	1 1/4	3/8	3/4	5/32
-	M3P08	1/4	1 1/4	7/16	3/4	5/32
3P10	M3P10	5/16	1 1/4	1/2	3/4	3/16
3P12	M3P12	3/8	1 1/4	5/8	3/4	1/4
3P14	M3P14	7/16	1 1/4	11/16	3/4	9/32
3P16	M3P16	1/2	1 1/2	13/16	13/16	11/32
-	M3P18	9/16	1 1/2	7/8	7/8	7/16

*Sockets for self-tapping screws are maximum hardness.

3/8" SQ. DR. SOCKETS FOR SAE SQUARE NUTS

SINGLE SQUARE & DOUBLE SQUARE



Part No. Single Square	Part No. Double Square	Square Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
3607	-	7/32	1 1/2	7/16	3/4	3/16
3608	-	1/4	1 1/2	1/2	3/4	3/16
3609	3609-D	9/32	1 1/2	9/16	3/4	3/16
3610	3610-D	5/16	1 1/2	5/8	3/4	1/4
3612	3612-D	3/8	1 1/2	3/4	3/4	1/4
3614	3614-D	7/16	1 1/2	7/8	7/8	9/32
3616	3616-D	1/2	1 1/2	1	1	11/32
3618	3618-D	9/16	1 1/2	1	1	7/16
3620	-	5/8	1 1/2	1 1/8	1 1/8	7/16
3624	-	3/4	1 1/2	1 3/8	1 3/8	15/32

3/8" SQ. DR. SOCKET SETS, SAE

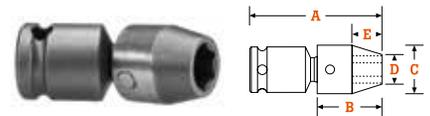
6 POINT



APS38	8 piece, standard length: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4
APS38L	8 piece, long length: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4

3/8" SQ. DR. UNIV. WRENCHES, SAE

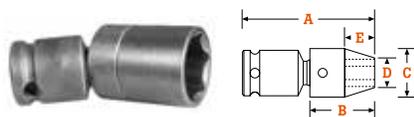
6 POINT & DOUBLE HEX



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Socket Length (B) IN.	Socket Dia. (C) IN.	Nose End Dia. (D) IN.	Clearance Depth (E) IN.
SA-120	SA-120-D	5/16	1 53/64	3/4	3/4	7/16	5/16
SA-122	SA-122-D	3/8	1 57/64	13/16	3/4	9/16	3/8
SA-200	-	3/8	1 115/16	7/8	7/8	9/16	11/32
SA-123	SA-123-D	7/16	2 1/64	15/16	3/4	19/32	1/2
SA-201	-	7/16	2	15/16	7/8	5/8	13/32
SA-124	SA-124-D	1/2	2 5/64	1	3/4	3/4	9/16
SA-202	SA-202-D	1/2	2 1/16	1	7/8	11/16	15/32
SA-125	SA-125-D	9/16	2 1/8	1	13/16	13/16	9/16
SA-203	SA-203-D	9/16	2 1/16	1 1/16	7/8	3/4	17/32
SA-302	-	9/16	2 1/8	1 1/8	1	3/4	9/16
SA-205	SA-205-D	5/8	2 1/8	1 1/8	7/8	7/8	19/32
SA-305	-	11/16	2 5/16	1 1/4	1	1	11/16
SA-306	-	3/4	2 5/16	1 1/4	1 1/8	1 1/8	11/16

3/8" SQ. DR. IRONBAND™ UNIV. WRENCHES, SAE

6 POINT



Part Number	Hex Opening IN.	Overall Length (A) IN.	Socket Length (B) IN.	Socket Dia. (C) IN.	Nose End Dia. (D) IN.	Clearance Depth (E) IN.
SA-C-120	5/16	1.83	.75	.75	.44	.31
SA-C-122	3/8	1.89	.81	.75	.56	.38
SA-C-123	7/16	2.02	.94	.75	.59	.50
SA-C-124	1/2	2.08	1.0	.75	.75	.56
SA-C-205	5/8	2.13	1.13	.88	.88	.59
SA-C-305	11/16	2.31	1.25	1.00	1.00	.69
SA-C-306	3/4	2.31	1.25	1.13	1.13	.69

3/8" SQ. DR. UNIVERSAL WRENCH SET, SAE

6 POINT



APU37 7 piece, standard length: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4



APEX UNIVERSAL WRENCHES & SOCKETS:

APEX Universal Wrenches and Sockets meet the Minimum Proof Torque requirements specified in ASME impact standards B107.2, B107.33M and B107.110. Maximum operating angle is 30 degrees for Universal Wrenches.

3/8" SQUARE DRIVE UNIV. WRENCHES, SAE – EXTENSION

6 POINT STANDARD & TENSION TYPE



Part No. Standard	Part No. Tension	Hex Open IN.	Shank Length (A) IN.	Socket Length (B) IN.	Socket Dia. (C) IN.	Nose End Dia. (D) IN.	Clearance Depth (E) IN.
KA-43-6	KD-43-6	3/8	6	13/16	5/8	17/32	7/16
KA-44-3	-	7/16	3	7/8	5/8	5/8	1/2
KA-44-4	-	7/16	4	7/8	5/8	5/8	1/2
KA-44-6	KD-44-6	7/16	6	7/8	5/8	5/8	1/2
KA-103-6	KD-103-6	7/16	6	15/16	3/4	19/32	1/2
KA-45-3	-	1/2	3	7/8	5/8	11/16	1/2
KA-45-4	-	1/2	4	7/8	5/8	11/16	1/2
KA-45-6	KD-45-6	1/2	6	7/8	5/8	11/16	1/2
KA-45-9	-	1/2	9	7/8	5/8	11/16	1/2
KA-104-9	-	1/2	9	1	3/4	3/4	9/16
-	KD-104-12	1/2	12	1	3/4	3/4	9/16
KA-105-3	KD-105-3	9/16	3	1	3/4	13/16	9/16
KA-105-4	-	9/16	4	1	3/4	13/16	9/16
KA-105-6	KD-105-6	9/16	6	1	3/4	13/16	9/16
KA-105-9	-	9/16	9	1	3/4	13/16	9/16
KA-205-3	-	5/8	3	11/8	7/8	7/8	19/32
-	KD-205-6	5/8	6	11/8	7/8	7/8	19/32

3/8" SQ. DR. IRONBAND™ UNIV. WRENCHES, SAE-EXT.

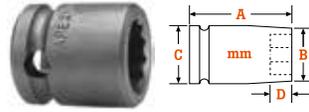
6 POINT STANDARD & TENSION TYPE



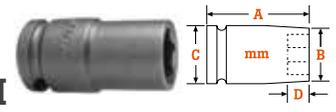
Part No. Standard	Part No. Tension	Hex Open IN.	Shank Length (A) IN.	Socket Length (B) IN.	Socket Dia. (C) IN.	Nose End Dia. (D) IN.	Clearance Depth (E) IN.
KAW-C-43-6	KDW-C-43-6	3/8	6	13/16	5/8	17/32	7/16
KAW-C-44-6	KDW-C-44-6	7/16	6	7/8	5/8	5/8	1/2
KAW-C-45-6	KDW-C-45-6	1/2	6	7/8	5/8	11/16	1/2
-	KDW-C-104-3	1/2	3	1	3/4	3/4	9/16
KAW-C-104-9	-	1/2	9	1	3/4	3/4	9/16
-	KDW-C-104-12	1/2	12	1	3/4	3/4	9/16
KAW-C-105-6	KDW-C-105-6	9/16	6	1	3/4	13/16	9/16

3/8" SQUARE DRIVE SOCKETS, METRIC

6 POINT & DOUBLE HEX, SHORT AND STANDARD LENGTH



6 POINT & DOUBLE HEX, THIN WALL, STANDARD LENGTH



Part No. 6 Pt.	Part No. Double Hex	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
6MM13	-	6	31.7	11.1	19.1	3.9
7MM03	-	7	22.2	11.1	19.1	3.0
7MM13	-	7	31.7	11.1	19.1	4.8
8MM03	-	8	22.2	12.7	19.1	4.8
8MM13	8MM13-D	8	31.7	12.7	19.1	4.8
9MM13	9MM13-D	9	31.7	15.1	19.1	4.8
10MM03	10MM03-D	10	22.2	16.8	19.1	6.4
10MM13	10MM13-D	10	31.7	16.8	19.1	6.4
11MM03	11MM03-D	11	22.2	17.5	19.1	7.2
11MM13	11MM13-D	11	31.7	17.5	19.1	7.2
12MM03	12MM03-D	12	22.2	19.1	19.1	7.2
12MM13	12MM13-D	12	38.1	19.1	19.1	7.2
13MM03	13MM03-D	13	22.2	20.6	20.6	7.9
13MM13	13MM13-D	13	38.1	20.6	20.6	8.7
14MM03	14MM03-D	14	22.2	22.2	22.2	7.9
14MM13	14MM13-D	14	38.1	22.2	22.2	11.1
15MM03	15MM03-D	15	23.8	22.2	22.2	9.5
15MM13	15MM13-D	15	38.1	22.2	22.2	11.1
16MM03	16MM03-D	16	25.4	23.8	23.8	11.1
16MM13	16MM13-D	16	38.1	23.8	23.8	11.1
17MM03	-	17	25.4	25.4	25.4	11.1
17MM13	17MM13-D	17	38.1	25.4	25.4	11.1
18MM03	-	18	25.4	25.4	25.4	11.1
18MM13	18MM13-D	18	38.1	25.4	25.4	11.1
19MM03	19MM03-D	19	25.4	28.6	28.6	11.1
19MM13	19MM13-D	19	38.1	28.6	28.6	11.9
20MM03	-	20	25.4	28.6	28.6	11.1
21MM03	-	21	25.4	31.7	31.7	11.1
21MM13	-	21	38.1	31.7	31.7	13.5
22MM03	-	22	25.4	31.7	31.7	11.1
22MM13	-	22	38.1	31.7	31.7	14.3

Part No. 6 Pt.	Part No. Double Hex	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
6MM43	-	6	31.7	9.5	19.1	3.9
7MM43	7MM43-D	7	31.7	11.1	19.1	4.8
OS-8MM13	-	8	31.7	11.7	15.7	4.8
8MM43	8MM43-D	8	31.7	12.7	19.1	4.8
9MM43	9MM43-D	9	31.7	12.7	19.1	4.8
10MM43	10MM43-D	10	31.7	15.1	19.1	6.4
-	VC-487-10MM-D	10	31.7	14.6	14.6	7.1
-	OS-10MM43-D	10	31.7	15	15	7.1
11MM43	-	11	38.1	15.9	19.1	7.2
12MM43	12MM43-D	12	38.1	17.5	19.1	7.2
13MM43	13MM43-D	13	38.1	19.1	19.1	8.7
14MM43	14MM43-D	14	38.1	19.8	20.6	11.1
15MM43	15MM43-D	15	38.1	20.6	20.6	11.1
16MM43	16MM43-D	16	38.1	22.2	22.2	11.1
17MM43	17MM43-D	17	38.1	23.8	23.8	11.1
18MM43	-	18	38.1	23.8	23.8	11.1
19MM43	19MM43-D	19	38.1	25.4	25.4	11.9

6 POINT & DOUBLE HEX, LONG & EXTRA LONG LENGTH

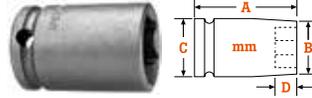


Part No. 6 Pt.	Part No. Double Hex	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
7MM23	-	7	50.8	11.1	19.1	4.8
8MM23	8MM23-D	8	50.8	12.7	19.1	4.8
9MM23	9MM23-D	9	50.8	15.1	19.1	4.8
10MM23	10MM23-D	10	50.8	16.8	19.1	6.4
OS-10MM23*	OS-10MM23-D*	10	50.8	14.2	15.9	6.4
10MM33	-	10	88.9	16.8	19.1	6.4
11MM23	11MM23-D	11	50.8	17.5	19.1	7.2
12MM23	12MM23-D	12	50.8	19.1	19.1	7.2
12MM33	-	12	88.9	19.1	19.1	7.1
13MM23	13MM23-D	13	50.8	20.6	20.6	8.7
13MM33	-	13	88.9	20.6	20.6	8.7
14MM23	14MM23-D	14	50.8	22.2	22.2	11.1
14MM33	-	14	88.9	22.1	22.1	11.1
15MM23	15MM23-D	15	50.8	22.2	22.2	11.1
15MM33	15MM33-D	15	88.9	22.2	22.2	11.1
16MM23	16MM23-D	16	50.8	23.8	23.8	11.1
17MM23	17MM23-D	17	50.8	25.4	25.4	11.1
18MM23	18MM23-D	18	50.8	25.4	25.4	11.1
19MM23	19MM23-D	19	50.8	28.6	28.6	11.9
21MM23	-	21	50.8	31.7	31.7	13.5
22MM23	-	22	50.8	31.7	31.7	14.3

* No DIN groove

3/8" SQUARE DRIVE SOCKETS, METRIC

MAGNETIC, SHORT & STANDARD LENGTH



MAGNETIC, LONG & EXTRA LONG LENGTH

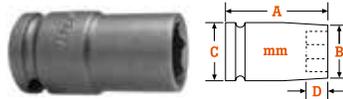


Part No. Fixed Magnet	Part No. Double Hex	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
M-6MM13	-	6	31.8	11.1	19.1	3.9
M-7MM13	-	7	31.8	11.1	19.1	4.8
M-8MM13	-	8	31.8	12.7	19.1	4.8
M-9MM13	-	9	31.8	15.1	19.1	4.8
M-10MM03	-	10	22.2	16.8	19.1	6.4
M-10MM13	-	10	31.8	16.8	19.1	6.4
-	M-10MM13-D	10	31.8	16.8	19.1	3.8
OSM-10MM13	-	10	31.7	14.2	19.1	7.1
-	MVC-487-10MM-D	10	31.8	14.7	14.7	4.4
M-11MM03	-	11	22.2	17.5	19.1	7.2
M-11MM13	-	11	31.7	17.5	19.1	7.2
M-12MM03	-	12	22.2	19.1	19.1	7.2
M-12MM13	-	12	38.1	19.1	19.1	7.2
-	M-12MM13-D	12	38.1	19.1	19.1	5.1
M-13MM03	-	13	22.2	20.6	20.6	8.7
M-13MM13	-	13	38.1	20.6	20.6	8.7
MVC-693-13MM	-	13	50.8	19.1	19.1	5.9
M-14MM03	-	14	22.2	22.2	22.2	4.8
M-14MM13	-	14	38.1	22.2	22.2	11.1
M-15MM03	-	15	23.8	22.2	22.2	9.5
M-15MM13	-	15	38.1	22.2	22.2	11.1
M-16MM13	-	16	38.1	23.8	23.8	11.1
M-17MM13	-	17	38.1	25.4	25.4	11.1
M-18MM03	-	18	25.4	25.4	25.4	11.1
M-18MM13	-	18	38.1	25.4	25.4	11.1

Part Number Magnetic	Part No. Double Hex	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
MB-6MM23	-	6	50.8	11.1	19.1	3.9
MB-7MM23	-	7	50.8	11.1	19.1	4.8
M-8MM23	-	8	50.8	12.7	19.1	4.8
MB-8MM23	-	8	50.8	12.7	19.1	4.8
OSMB-8MM23*	-	8	50.8	11.7	15.9	4.8
MB-9MM23	-	9	50.8	15.1	19.1	4.8
MB-10MM23	MB-10MM23-D	10	50.8	16.8	19.1	6.4
OSMB-10MM23*	OSMB-10MM23-D	10	50.8	14.2	15.9	6.4
MB-10MM33	-	10	88.9	16.8	19.1	6.4
MB-11MM23	-	11	50.8	17.5	19.1	7.2
MB-11MM33	-	11	88.9	17.5	19.1	8.0
MB-12MM23	MB-12MM23-D	12	50.8	19.1	19.1	7.2
MB-12MM33	-	12	88.9	19.1	19.1	8.0
M-13MM23	-	13	50.8	20.6	20.6	5.1
MB-13MM23	MB-13MM23-D	13	50.8	20.6	20.6	8.7
MB-13MM33	-	13	88.9	20.6	20.6	8.7
MB-14MM23	MB-14MM23-D	14	50.8	22.2	22.2	11.1
MB-14MM33	-	14	88.9	22.2	22.2	9.5
MB-15MM23	-	15	50.8	22.2	22.2	11.1
MB-15MM33	-	15	88.9	22.2	22.2	11.1
MB-16MM23	-	16	50.8	23.8	23.8	11.1
MB-17MM23	-	17	50.8	25.4	25.4	11.1
MB-18MM23	-	18	50.8	25.4	25.4	11.1

* No DIN groove

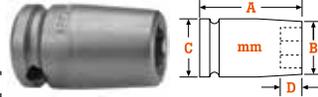
MAGNETIC, THIN WALL, STANDARD LENGTH



Part No. Fixed Magnetic	Part No. Double Hex	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
M-8MM43	-	8	31.7	12.7	19.1	4.8
M-10MM23	-	10	50.8	16.8	19.1	3.9
M-10MM43	-	10	31.7	15.1	19.1	6.4
-	OSM-10MM43-D	10	31.7	15	15	7.1
M-11MM43	-	11	38.1	15.9	19.1	7.2
M-12MM43	-	12	38.1	17.5	19.1	7.2
-	M-12MM43-D	12	38.1	17.5	19.1	7.9
M-13MM43	-	13	38.1	19.1	19.1	8.7
M-14MM43	-	14	38.1	19.8	20.6	11.1
M-15MM43	-	15	38.1	20.5	20.6	11.1

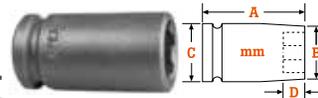
3/8" SQUARE DRIVE SOCKETS, METRIC

SURFACE DRIVE, SHORT AND STANDARD LENGTH



Part No. Surface Drive	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
SF-8MM13	8	31.7	12.7	19.1	4.8
SF-10MM03	10	22.2	16.8	19.1	6.4
SF-10MM13	10	31.7	16.8	19.1	6.4
MSF-10MM13	10	31.8	16.7	19.1	3.8
SF-11MM13	11	31.7	17.5	19.1	7.2
SF-12MM03	12	22.2	19.1	19.1	7.2
SF-12MM13	12	38.1	19.1	19.1	7.2
SF-13MM03	13	22.2	20.6	20.6	8.7
SF-13MM13	13	38.1	20.6	20.6	8.7
SF-14MM13	14	38.1	22.2	22.2	11.1
SF-15MM03	15	23.8	22.2	22.2	11.1
SF-15MM13	15	38.1	22.2	22.2	11.1
SF-16MM13	16	38.1	23.8	23.8	11.1
SF-17MM03	17	25.4	25.4	25.4	11.1
SF-17MM13	17	38.1	25.4	25.4	11.1
SF-18MM13	18	38.1	25.4	25.4	11.1
SF-19MM13	18	38.1	28.6	28.6	11.9

SURFACE DRIVE, THIN WALL, STANDARD LENGTH



Part No. Surface Drive	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
SF-10MM43	10	31.7	15.1	19.1	6.4
OSSF-10MM43*	10	31.7	15.1	15.1	6.4
SF-11MM43	11	38.1	15.9	19.1	7.2
SF-12MM43	12	38.1	17.5	19.1	7.2
SF-13MM43	13	38.1	19.1	19.1	8.7
SF-15MM43	15	38.1	20.6	20.6	11.1
SF-17MM43	17	38.1	23.8	23.8	11.1
SF-18MM43	18	38.1	23.8	23.8	11.1
SF-19MM43	19	38.1	25.4	25.4	11.9

* No DIN groove

SURFACE DRIVE, LONG & EXTRA LONG LENGTH

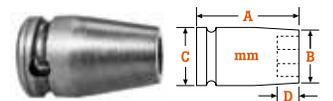


Part No. Surface Drive	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
SF-8MM23	8	50.8	12.7	19.1	4.8
OSSF-8MM23*	8	50.8	11.9	15.9	4.8
SF-8MM33	8	88.9	11.9	19.1	4.7
SF-10MM23	10	50.8	16.8	19.1	6.4
OSSF-10MM23*	10	50.8	14.2	15.9	6.4
VCSF-836-10MM	10	123.7	15.0	19.1	7.1
VCSF-840-10MM	10	98.4	15.7	19.1	7.1
SF-10MM33	10	88.9	16.8	19.1	6.4
SF-11MM23	11	50.8	17.5	19.1	7.2
SF-12MM23	12	50.8	19.1	19.1	7.2
SF-13MM23	13	50.8	20.6	20.6	8.7
SF-13MM33	13	88.9	20.6	20.6	8.7
SF-15MM23	15	50.8	22.2	22.2	11.1
SF-15MM33	15	88.9	22.2	22.2	11.1
SF-17MM23	17	50.8	25.4	25.4	11.1
SF-18MM23	18	50.8	25.4	25.4	11.1
SF-19MM23	19	50.8	28.6	28.6	11.9

* No DIN groove

3/8" SQ. DR. SOCKETS FOR METRIC SHEET METAL SCREWS

6 POINT & 6 POINT MAGNETIC, FOR PREDRILLED HOLES



Part No. 6 Pt.	Part No. Magnetic	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
-	M-6MME3	6	31.7	11.1	19.1	3.9
-	M-7MME3	7	31.7	11.9	19.1	4.8
8MME3	M-8MME3	8	31.7	12.7	19.1	4.8
10MME3	M-10MME3	10	31.7	16.8	19.1	6.4
-	M-11MME3	11	31.7	17.5	19.1	7.2
13MME3	M-13MME3	13	38.1	20.6	20.6	8.7

3/8" SQUARE DRIVE SOCKET SETS, METRIC

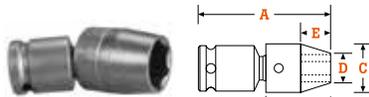
6 POINT



AP312M	12 piece, standard length: 7mm, 8mm, 9mm, 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 16mm, 17mm, 18mm
AP312LM	12 piece, long length: 7mm, 8mm, 9mm, 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 16mm, 17mm, 18mm

3/8" SQ. DR. IRONBAND™ UNIV. WRENCHES, METRIC

6 POINT



Part No. 6 Pt.	Hex Opening MM.	Overall Length (A) MM.	Socket Length (B) MM.	Socket Dia. (C) MM.	Nose End Dia. (D) MM.	Clearance Depth (E) MM.
SA-C-36-10M	10	48	20.6	19.1	15.1	9.5
SA-C-37-12M	12	51	23.8	22.2	17.5	10.3
SA-C-37-13M	13	52	25.4	22.2	17.5	11.9
SA-C-37-14M	14	54	27.0	22.2	19.1	13.5
SA-C-38-15M	15	56	28.6	25.4	19.8	14.3
SA-C-38-17M	17	59	31.8	25.4	25.4	17.5
SA-C-38-18M	18	59	31.8	25.4	25.4	17.5

3/8" SQ. DR. UNIVERSAL WRENCH SET, METRIC

6 POINT



APU37M	7 piece, standard length: 10mm, 12mm, 13mm, 14mm, 15mm, 17mm, 18mm
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3/8" SQ. DR. UNIV. WRENCHES, METRIC – EX.

6 POINT STANDARD & TENSION TYPE



Part No. Standard	Part No. Tension	Hex Open MM.	Shank Length (A) MM.	Socket Length (B) MM.	Socket Dia. (C) MM.	Nose End Dia. (D) MM.	Clearance Depth (E) MM.
KA-6-10M-4	-	10	102	20.6	19.1	15.1	9.5
KA-6-10M-6	KD-6-10M-6	10	152	20.6	19.1	15.5	9.5
KA-6-10M-9	KD-6-10M-9	10	229	23.8	19.1	15.5	9.5
-	KD-6-10M-12	10	305	20.6	19.1	15.5	9.3
-	KD-7-11M-6	11	152	23.8	22.2	15.9	10.3
KA-7-11M-12	KD-7-11M-12	11	305	23.8	22.2	15.9	10.3
KA-7-12M-4	-	12	102	23.8	22.2	17.5	10.3
KA-7-12M-6	KD-7-12M-6	12	152	23.8	22.2	17.5	10.3
KA-7-12M-9	KD-7-12M-9	12	229	25.4	22.2	17.5	10.3
KA-7-12M-12	KD-7-12M-12	12	305	23.8	22.2	17.5	10.3
KA-7-13M-3	-	13	76	25.4	22.2	17.5	11.9
KA-7-13M-4	-	13	102	25.4	22.2	17.5	11.9
KA-7-13M-6	KD-7-13M-6	13	152	25.4	22.2	17.5	11.9
KA-7-13M-9	KD-7-13M-9	13	229	27.0	22.2	17.5	11.9
KA-7-13M-12	KD-7-13M-12	13	305	25.4	22.2	17.5	11.9
KA-7-14M-6	KD-7-14M-6	14	152	27	22.2	19.1	13.5
-	KD-7-14M-9	14	152	27.0	22.2	19.1	13.5
-	KD-7-14M-12	14	229	28.6	22.2	19.1	13.5
-	-	14	305	27.0	22.2	19.1	13.5
KA-8-15M-3	-	15	76	28.6	25.4	19.8	14.3
-	KD-8-15M-6	15	152	28.6	25.4	19.8	14.3
KA-8-15M-9	KD-8-15M-9	15	229	20.6	25.4	19.8	14.3
KA-8-15M-12	KD-8-15M-12	15	305	28.6	25.4	19.8	14.3

3/8" SQ. DR. IRONBAND™ UNIV. WRENCHES, METRIC – EXT.

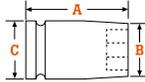
6 POINT STANDARD & TENSION TYPE



Part No. Standard	Part No. Tension	Hex Open MM.	OAL (A) MM.	Socket Length (B) MM.	Socket Dia. (C) MM.	Nose End Dia. (D) MM.	Clearance Depth (E) MM.
KAW-C-6-10M-6	KDW-C-6-10M-6	10	152	20.6	19.1	15.5	9.5
KAW-C-6-10M-9	KDW-C-6-10M-9	10	229	20.6	19.1	15.5	9.5
KAW-C-7-12M-6	KDW-C-7-12M-6	12	152	23.8	22.2	17.5	10.3
KAW-C-7-12M-12	KDW-C-7-12M-12	12	305	23.8	22.2	17.5	10.3
-	KDW-C-7-13M-3	13	76	25.4	22.2	17.5	11.9
KAW-C-7-13M-6	KDW-C-7-13M-6	13	152	25.4	22.2	17.5	11.9
KAW-C-7-13M-12	KDW-C-7-13M-12	13	305	25.4	22.2	17.5	11.9
KAW-C-7-14M-6	KDW-C-7-14M-6	14	152	27.0	22.2	19.1	13.5
KAW-C-8-15M-9	KDW-C-8-15M-9	15	229	28.6	25.4	19.8	14.3

3/8" SQ. DR. SOCKETS FOR SPLINE FASTENERS

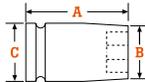
STANDARD AND LONG LENGTH



Part No.	Spline Size	Nominal Size IN.	Overall Length (A)		Nose End Dia. (B)		Drive End Dia. (C)	
			IN.	MM.	IN.	MM.	IN.	MM.
CMS-3412	12	3/8	1	25	17/32	14	21/32	17
CMS-3512	12	3/8	2 1/8	54	17/32	14	21/32	17
CMS-3414	14	7/16	1 1/16	27	5/8	16	11/16	18
CMS-3416	16	1/2	1 1/16	27	23/32	18	23/32	18
CMS-3418	18	9/16	1 1/16	27	13/16	21	13/16	21
CMS-3518	18	9/16	2 3/8	60	13/16	21	13/16	21
CMS-3420	20	5/8	1 3/16	30	7/8	22	7/8	22

3/8" SQ. DR. TORX® SOCKETS

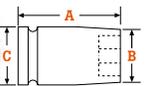
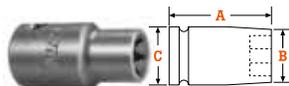
FOR EXTERNAL TORX SCREWS



Part No.	Driver Size	Overall Length (A)		Nose End Dia. (B)		Drive End Dia. (C)	
		IN.	MM.	IN.	MM.	IN.	MM.
TX-3106	E-6	1 1/4	32	3/8	10	3/4	19
TX-3107	E-7	1 1/4	32	3/8	10	3/4	19
TX-3108	E-8	1 1/4	32	7/16	11	3/4	19
TX-3110	E-10	1 1/4	32	1/2	13	3/4	19
TX-3112	E-12	1 1/4	32	5/8	16	3/4	19
MTX-3112*	E-12	1 1/4	32	5/8	16	3/4	19
TX-3114	E-14	1 1/4	32	1 1/16	18	3/4	19
TX-3116	E-16	1 1/4	32	1 3/16	21	13/16	21

* Magnetic

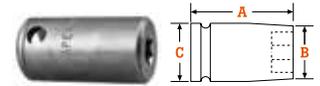
FOR EXTERNAL TORX SCREWS, THIN WALL



Part No.	Driver Size	Overall Length (A)		Nose End Dia. (B)		Drive End Dia. (C)	
		IN.	MM.	IN.	MM.	IN.	MM.
TX-3406	E-6	1 1/4	32	5/16	8	5/8	16
TX-3407	E-7	1 1/4	32	11/32	9	5/8	16
TX-3408	E-8	1 1/4	32	3/8	10	5/8	16
TX-3508	E-8	2	51	3/8	10	5/8	16
TX-3410	E-10	1 1/4	32	1/2	13	5/8	16
MTX-3410*	E-10	1 1/4	32	3/8	10	5/8	16
TX-3412	E-12	1 1/4	32	9/16	14	5/8	16
MTX-3412*	E-12	1 1/4	32	9/16	14	5/8	16
TX-3414	E-14	1 1/4	32	5/8	16	3/4	19
MTX-3414*	E-14	1 1/4	32	5/8	16	3/4	19

* Magnetic

FOR TORX NUTS



Part No.	Driver Size	Overall Length (A)		Nose End Dia. (B)		Drive End Dia. (C)	
		IN.	MM.	IN.	MM.	IN.	MM.
TX-3E08	E-8	1 1/4	32	5/8	16	5/8	16
TX-3E10	E-10	1 1/4	32	5/8	16	5/8	16

3/8" SQ. DR. EXTENSIONS

1 1/4" TO 18" LENGTH



Part No.	Male Square IN.	Type of Lock	Overall Length	
			IN.	MM.
EX-374	3/8	Pin	1 3/8	34
EX-374-B	3/8	Ball	1 3/8	34
EX-376-2	3/8	Pin	2	21
EX-376-B-2	3/8	Ball	2	51
EX-376-3	3/8	Pin	3	76
EX-376-B-3	3/8	Ball	3	76
EX-376-4	3/8	Pin	4	102
EX-376-B-4	3/8	Ball	4	102
EX-376-5	3/8	Pin	5	127
EX-376-B-5	3/8	Ball	5	127
EX-376-6	3/8	Pin	6	152
EX-376-B-6	3/8	Ball	6	152
EX-376-8	3/8	Pin	8	203
EX-376-B-8	3/8	Ball	8	203
EX-376-9	3/8	Pin	9	229
EX-376-B-9	3/8	Ball	9	229
EX-376-10	3/8	Pin	10	254
EX-376-B-10	3/8	Ball	10	254
EX-376-12	3/8	Pin	12	305
EX-376-B-12	3/8	Ball	11	305
EX-376-15	3/8	Pin	15	381
EX-376-B-15	3/8	Ball	15	381
EX-376-18	3/8	Pin	18	457

3/8" SQ. DR. ADAPTERS

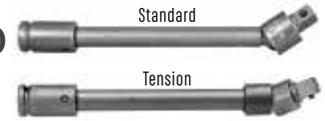
1/4" TO 3/4" MALE SQUARE



Part No.	Female Square IN.	Male Square IN.	Type of Lock	Overall Length IN.	Overall Length MM.
EX-254	3/8	1/4	Pin	1 1/4	32
EX-254-B	3/8	1/4	Ball	1 1/4	32
EX-257-2	3/8	1/4	Pin	2	51
EX-257-B-2	3/8	1/4	Ball	2	51
EX-257-3	3/8	1/4	Pin	3	76
EX-257-B-3	3/8	1/4	Ball	3	76
EX-257-4	3/8	1/4	Pin	4	102
EX-257-B-4	3/8	1/4	Ball	4	102
EX-257-5	3/8	1/4	Pin	5	127
EX-257-B-5	3/8	1/4	Ball	5	127
EX-257-6	3/8	1/4	Pin	6	152
EX-257-B-6	3/8	1/4	Ball	6	152
EX-257-8	3/8	1/4	Pin	8	203
EX-257-11	3/8	1/4	Pin	11	279
EX-503	3/8	1/2	Pin	1 1/2	38
EX-503-B	3/8	1/2	Ball	1 1/2	38
EX-507-2	3/8	1/2	Pin	2	51
EX-507-3	3/8	1/2	Pin	3	76
EX-507-B-3	3/8	1/2	Ball	3	76
EX-507-4	3/8	1/2	Pin	4	102
EX-507-B-4	3/8	1/2	Ball	4	102
EX-507-6	3/8	1/2	Pin	6	152
EX-507-B-6	3/8	1/2	Ball	6	152
EX-622	3/8	5/8	Pin	1 1/2	38
EX-750	3/8	3/4	7/32 Drill Hole	1 1/2	38
EX-750-B	3/8	3/4	Ball	1 1/2	38

3/8" SQ. DR. UNIVERSAL ADAPTERS – EXT.

FEMALE SQUARE TO MALE SQUARE



Part No. Standard	Part No. Tension	Female Square IN.	Male Square IN.	Type of Lock	Largest Dia. IN.	Largest Dia. MM.
KAM-37-3	KDM-37-3	3/8	3/8	Pin	3/4	19
-	KDM-37-B-3	3/8	3/8	Ball	3/4	19
KAM-37-12	KDM-37-12	3/8	3/8	Pin	3/4	19
-	KDM-37-6	3/8	3/8	Pin	3/4	19
-	KDM-37-9	3/8	3/8	Pin	3/4	19
-	KDM-38-3	3/8	3/8	Pin	7/8	22
KAM-38-6	KDM-38-6	3/8	3/8	Pin	7/8	22
-	KDM-38-9	3/8	3/8	Pin	7/8	22
-	KDM-38-12	3/8	3/8	Pin	7/8	22

3/8" SQ. DR. UNIV. ADAPTERS

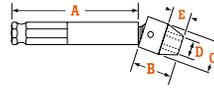
FEMALE SQUARE TO MALE SQUARE



Part No.	Female Square IN.	Male Square IN.	Type of Lock	Overall Length IN.	Overall Length MM.	Largest Dia. IN.	Largest Dia. MM.
MF-27	3/8	1/4	Pin	1 5/16	49	3/4	19
MF-27-B	3/8	1/4	Ball	1 5/16	49	3/4	19
MF-37	3/8	3/8	Pin	2 1/8	54	3/4	19
MF-37-B	3/8	3/8	Ball	2 1/8	54	3/4	19
MF-38-B	3/8	3/8	Ball	2 1/2	64	7/8	22

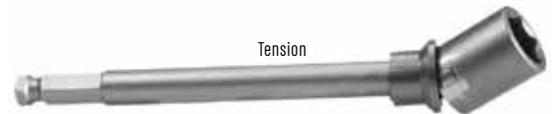
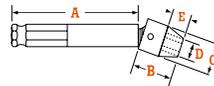
7/16" MALE HEX UNIVERSAL WRENCHES

SAE 6 POINT, STANDARD & TENSION TYPE – EXTENSION



Part Number	Part No. Tension	Hex Opening IN.	Shank Length (A) IN.	Socket Length (B) IN.	Socket Dia. (C) IN.	Nose End Dia. (D) IN.	Clearance Depth (E) IN.
KB-43-6	-	3/8	6	13/16	5/8	7.32	7/16
-	KT-44-6	7/16	6	7/8	5/8	5/8	1/2
KB-45-3	-	1/2	3	7/8	11/16	11/16	1/2
KB-45-4	- -KT-	1/2	4	7/8	11/16	11/16	1/2
KB-104-6	104-6	1/2	6	1	3/4	3/4	9/16
KB-202-6	KT-202-6	1/2	6	1	7/8	11/16	15/32
-	KT-202-9	1/2	9	1	7/8	11/16	15/32
KB-202-12	KT-202-12	1/2	12	1	7/8	11/16	15/32
KB-317-9	KT-317-9	1/2	9	1	1	11/16	7/16
KB-105-3	-	9/16	3	1	13/16	13/16	9/16
-	KT-105-6	9/16	6	1	13/16	13/16	9/16
-	KT-105-9	9/16	9	1	13/16	13/16	9/16
-	KT-105-12	9/16	12	1	13/16	13/16	9/16
-	KT-203-6	9/16	6	11/16	7/8	3/4	17/32
KB-203-9	KT-203-9	9/16	9	11/16	7/8	3/4	17/32
KB-203-12	KT-203-12	9/16	12	11/16	7/8	3/4	17/32
-	KT-318-6	9/16	6	11/8	1	3/4	9/16
KB-318-12	-	9/16	12	11/8	1	3/4	9/16
KB-205-6	KT-205-6	5/8	6	11/8	7/8	7/8	19/32
KB-205-12	KT-205-12	5/8	12	11/8	7/8	7/8	19/32
KB-320-6	KT-320-6	5/8	6	13/16	1	27/32	5/8
-	KT-320-9	5/8	9	13/16	1	27/32	5/8
-	KT-320-12	5/8	12	13/16	1	27/32	5/8
KB-321-6	-	11/16	6	11/4	1	1	11/16
KB-322-3	-	3/4	3	11/4	11/8	1-1/8	11/16
KB-322-6	KT-322-6	3/4	6	11/4	11/8	1-1/8	11/16
-	KT-322-9	3/4	9	11/4	11/8	11/8	11/16

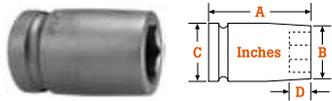
METRIC 6 POINT, STANDARD & TENSION TYPE – EXTENSION



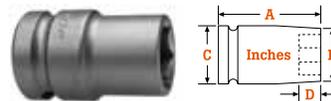
Part Number	Part No. Tension	Hex Opening MM.	Shank Length (A) MM.	Socket Length (B) MM.	Socket Dia. (C) MM.	Nose End Dia. (D) MM.	Clearance Depth (E) MM.
KB-6-10M-6	KT-6-10M-6	10	152	20.6	19.1	15.1	9.5
-	KT-6-10M-9	10	152	20.6	19.1	15.1	9.5
-	KT-6-10M-12	10	305	20.6	19.1	15.1	9.5
KB-7-11M-6	-	11	152	23.8	22.2	15.9	10.3
KB-7-13M-3	-	13	76	25.4	22.2	17.5	11.9
KB-7-13M-6	KT-7-13MM-6	13	152	25.4	22.2	17.5	11.9
KB-7-13M-9	KT-7-13MM-9	13	229	25.4	22.2	17.5	11.9
KB-7-13M-12	-	13	305	25.4	22.2	17.5	11.9
KB-7-14M-6	KT-7-14M-6	14	152	27.0	22.2	19.1	13.5
-	KT-7-14M-12	14	305	27.0	22.2	19.1	14.3
-	KT-7-15M-6	15	152	27	22.2	19.1	14.3
KB-8-15M-6	KT-8-15M-6	15	152	28.6	25.4	19.8	14.3
KB-8-15M-9	KT-8-15M-9	15	229	28.6	25.4	19.8	14.3
KB-8-15M-12	KT-8-15M-12	15	305	28.6	25.4	19.8	14.3
KB-8-16M-6	KT-8-16M-6	16	152	30.2	25.4	21.4	15.9
KB-8-16M-9	KT-8-16M-9	16	229	30.2	25.4	21.4	15.9
-	KT-8-16M-12	16	305	30.2	25.4	21.4	15.9
-	KT-8-17M-6	17	152	31.8	25.4	25.4	17.5
KB-8-17M-12	KT-8-17M-12	17	305	31.8	25.4	25.4	17.5
KB-8-18M-6	KT-8-18M-6	18	152	31.8	25.4	25.4	17.5
-	KT-8-18M-9	18	229	31.8	25.4	25.4	17.5
-	KT-8-18M-12	18	305	21.8	25.4	25.4	17.5
KB-10-19M-6	KT-10-19M-6	19	152	34.9	31.8	26.2	16.3

1/2" SQUARE DRIVE SOCKETS, SAE

6 POINT AND DOUBLE HEX, STANDARD LENGTH



6 POINT AND DOUBLE HEX, THIN WALL, STANDARD LENGTH



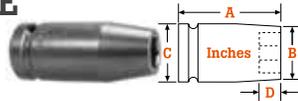
Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
5108	-	1/4	11/2	7/16	15/16	5/32
5110	5110-D	5/16	11/2	1/2	15/16	3/16
5112	5112-D	3/8	11/2	5/8	15/16	1/4
5114	5114-D	7/16	11/2	11/16	15/16	9/32
5116	5116-D	1/2	11/2	13/16	15/16	11/32
SH-335	-	1/2	11/2	45/64	15/16	11/32
5118	5118-D	9/16	11/2	7/8	15/16	7/16
SH-336	SH-336-D	9/16	11/2	27/32	15/16	7/16
5119	-	19/32	11/2	15/16	15/16	7/16
5120	5120-D	5/8	11/2	1	1	7/16
SH-338	SH-338-D	5/8	11/2	15/16	1	7/16
5122	5122-D	11/16	11/2	11/8	11/8	7/16
SH-339	-	11/16	11/2	11/64	11/16	7/16
SW-282	SW-282-D	3/4	11/2	11/4	11/4	15/32
5124	5124-D	3/4	11/2	11/8	11/8	15/32
5126	5126-D	13/16	11/2	11/4	11/4	17/32
5128	5128-D	7/8	11/2	15/16	15/16	9/16
5130	5130-D	15/16	11/2	13/8	13/8	5/8
5131	-	31/32	11/2	11/2	11/2	5/8
5132	5132-D	1	11/2	11/2	11/2	5/8
5134	5134-D	11/16	15/8	11/2	11/2	11/16
5136	5136-D	11/8	15/8	15/8	15/8	3/4
5138	5138-D	13/16	15/8	13/4	13/4	3/4
5140	5140-D	11/4	13/4	13/4	13/4	13/16
5142	-	15/16	13/4	17/8	17/8	13/16
5144	5144-D	13/8	17/8	2	2	13/16
5146	-	17/16	2	2	2	15/16
5148	5148-D	11/2	2	21/8	21/8	1
5152	5152-D	15/8	2	23/8	23/8	11/8
5154	-	111/16	2	23/8	23/8	11/8
5156	-	13/4	2	21/2	21/2	11/8

Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
5412	5412-D	3/8	11/2	19/32	15/16	1/4
5414	5414-D	7/16	11/2	21/32	15/16	9/32
5416	5416-D	1/2	11/2	23/32	15/16	11/32
5418	5418-D	9/16	11/2	13/16	15/16	7/16
5420	5420-D	5/8	11/2	7/8	15/16	7/16
5421	5421-D	21/32	11/2	29/32	15/16	7/16
-	5422-D	11/16	11/2	15/16	15/16	7/16
OS-5424*	-	3/4	11/2	11/32	11/32	15/32
5424	5424-D	3/4	11/2	11/32	11/8	15/32
5426	5426-D	13/16	11/2	11/8	11/8	17/32
HE-1028	HE-1028-D	7/8	11/2	11/4	11/4	9/16
5428*	-	7/8	11/2	13/16	11/4	9/16
HE-530	-	15/16	11/2	15/16	15/16	5/8
5430*	5430-D	15/16	11/2	11/4	11/4	5/8
5432	5432-D	1	11/2	13/8	13/8	5/8
5434	5434-D	11/16	15/8	17/16	17/16	11/16
5436	5436-D	11/8	15/8	11/2	11/2	3/4
5438	-	13/16	15/8	15/8	15/8	3/4
5440	5440-D	11/4	13/4	111/16	13/4	13/16
5442	-	15/16	13/4	125/32	17/8	13/16

* No DIN groove

1/2" SQUARE DRIVE SOCKETS, SAE

6 POINT AND DOUBLE HEX, LONG & EXTRA LONG LENGTH



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
5210	-	5/16	2 1/4	1/2	15/16	3/16
5310	-	5/16	3 1/4	1/2	15/16	3/16
5212	-	3/8	2 1/4	5/8	15/16	1/4
5312	-	3/8	3 1/4	5/8	15/16	1/4
5214	-	7/16	2 1/4	11/16	15/16	9/32
5314	-	7/16	3 1/4	11/16	15/16	9/32
5216	5216-D	1/2	2 1/4	13/16	15/16	11/32
5316	5316-D	1/2	3 1/4	13/16	15/16	11/32
5218	5218-D	9/16	2 1/4	7/8	15/16	7/16
5318	5318-D	9/16	3 1/4	7/8	15/16	7/16
5220	-	5/8	2 1/4	1	1	7/16
5320	-	5/8	3 1/4	1	1	7/16
5222	-	11/16	2 1/4	11/8	11/8	7/16
5322	5322-D	11/16	3 1/4	11/8	11/8	7/16
5224	5224-D	3/4	2 1/4	11/8	11/8	15/32
5324	5324-D	3/4	3 1/4	11/8	11/8	15/32
5226	5226-D	13/16	2 1/4	11/4	11/4	17/32
5228	5228-D	7/8	2 1/4	15/16	15/16	9/16
5328	-	7/8	3 1/2	15/16	15/16	9/16
5326	-	13/16	3 1/2	1 1/4	1 1/4	17/32
5230	5230-D	15/16	2 1/4	13/8	13/8	5/8
5330	5330-D	15/16	3 1/2	13/8	13/8	5/8
5232	-	1	2 1/4	1 1/2	1 1/2	5/8
5332	-	1	3 1/2	1 1/2	1 1/2	5/8
5234	-	1 1/16	2 3/8	1 1/2	1 1/2	11/16
5334	-	1 1/16	3 1/2	1 1/2	1 1/2	11/16
5236	5236-D	1 1/8	2 3/8	15/8	15/8	3/4
5336	5336-D	1 1/8	3 1/2	15/8	15/8	3/4
5238	-	13/16	2 3/8	1 3/4	1 3/4	3/4
5338	-	13/16	3 1/2	1 3/4	1 3/4	3/4
5240	5240-D	1 1/4	2 1/2	1 3/4	1 3/4	13/16
5340	5340-D	1 1/4	3 1/2	1 3/4	1 3/4	13/16
5242	-	15/16	2 1/2	1 7/8	1 7/8	13/16
5342	-	15/16	3 1/2	1 7/8	1 7/8	13/16
5244	-	13/8	2 1/2	2	2	13/16
5344	-	13/8	3 5/8	2	2	13/16
5248	-	1 1/2	2 1/2	2 1/8	2 1/8	1
5348	-	1 1/2	3 3/4	2 1/8	2 1/8	1

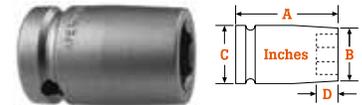
6 POINT AND DOUBLE HEX, THIN WALL, EXTRA LONG LENGTH



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
5510	-	5/16	3 1/4	1/2	15/16	3/16
5512	5512-D	3/8	3 1/4	19/32	15/16	1/4
5514	5514-D	7/16	3 1/4	21/32	15/16	9/32
5516	5516-D	1/2	3 1/4	23/32	15/16	11/32
0S-5516*	-	1/2	3 1/4	47/64	7/8	11/32
5518	5518-D	9/16	3 1/4	13/16	15/16	7/16
0S-5518*	-	9/16	3 1/4	13/16	27/32	7/16
5520	5520-D	5/8	3 1/4	7/8	15/16	7/16
5522	5522-D	11/16	3 1/4	15/16	15/16	7/16
SW-493	-	3/4	2 1/4	1 1/4	1 1/4	15/32
5524	5524-D	3/4	3 1/4	1 1/32	1 1/8	15/32
5526	5526-D	13/16	3 1/2	1 1/8	1 1/8	17/32
5528	5528-D	7/8	3 1/2	1 3/16	1 1/4	9/16
5530	5530-D	15/16	3 1/2	1 1/4	1 1/4	5/8
5532	5532-D	1	3 1/2	1 3/8	1 3/8	5/8
5534	5534-D	1 1/16	3 1/2	1 7/16	1 7/16	11/16

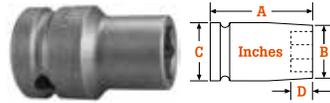
* No DIN groove

MAGNETIC, STANDARD LENGTH



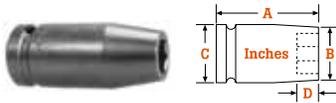
Part No. Fixed Magnet	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
M-5110	5/16	1 1/2	1/2	15/16	3/16
M-5112	3/8	1 1/2	5/8	15/16	1/4
M-5114	7/16	1 1/2	11/16	15/16	9/32
M-5116	1/2	1 1/2	13/16	15/16	11/32
MSH-335	1/2	1 1/2	45/64	15/16	11/32
M-5118	9/16	1 1/2	7/8	15/16	7/16
MSH-336	9/16	1 1/2	27/32	15/16	7/16
M-5120	5/8	1 1/2	1	1	7/16
M-5122	11/16	1 1/2	1 1/8	1 1/8	7/16
M-5124	3/4	1 1/2	1 1/8	1 1/8	15/32

MAGNETIC, THIN WALL, STANDARD LENGTH



Part No. Fixed Magnet	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
M-5416	1/2	11/2	23/32	15/16	11/32
M-5418	9/16	11/2	13/16	15/16	7/16
M-5420	5/8	11/2	7/8	15/16	7/16

MAGNETIC, LONG LENGTH & EXTRA LONG LENGTH



Part No. Fixed Magnet	Part No. Bolt Clearance	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
-	MB-5212	3/8	2-1/4	5/8	15/16	1/4
M-5512*	-	3/8	3-1/4	19/32	15/16	1/4
-	MB-5214	7/16	2-1/4	11/16	15/16	9/32
M-5216	MB-5216	1/2	2-1/4	13/16	15/16	11/32
M-5316	-	1/2	3-1/4	13/16	15/16	11/32
M-5218	-	9/16	2-1/4	7/8	15/16	7/16
-	MB-HE9518	9/16	2-1/4	7/8	15/16	7/16
M-5518*	-	9/16	3-1/4	13/16	15/16	7/16
-	MB-5220	5/8	2-1/4	1	1	7/16

*Thin wall

SURFACE DRIVE & FAST LEAD, STANDARD LENGTH



Part No. Surface Drive	Part No. Fast Lead	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
SF-5112	-	3/8	11/2	5/8	15/16	1/4
-	FL-5114	7/16	11/2	11/16	15/16	9/32
SF-5116	FL-5116	1/2	11/2	13/16	15/16	11/32
SF-SH-335	FL-SH-335	1/2	11/2	45/64	15/16	11/32
SF-5118	FL-5118	9/16	11/2	7/8	15/16	7/16
SF-SH-336	-	9/16	11/2	27/32	15/16	7/16
SF-5120	FL-5120	5/8	11/2	1	1	7/16
SF-5122	FL-5122	11/16	11/2	11/8	11/8	7/16
SF-5124	FL-5124	3/4	11/2	11/8	11/8	15/32
SF-SW-282	-	3/4	11/2	11/4	11/4	15/32
SF-5126	FL-5126	13/16	11/2	11/4	11/4	17/32
SF-5128	FL-5128	7/8	11/2	15/16	15/16	9/16
SF-5130	FL-5130	15/16	11/2	13/8	13/8	5/8
SF-5132	FL-5132	1	11/2	11/2	11/2	5/8
SF-5134	FL-5134	11/16	15/8	11/2	11/2	11/16

SURFACE DRIVE & FAST LEAD, THIN WALL, STANDARD LENGTH



Part No. Surface Drive	Part No. Fast Lead	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
SF-5412	-	3/8	11/2	19/32	15/16	1/4
SF-5414	-	7/16	11/2	21/32	15/16	9/32
SF-5416	FL-5416	1/2	11/2	23/32	15/16	11/32
SF-5418	FL-5418	9/16	11/2	13/16	15/16	7/16
SF-5420	-	5/8	11/2	7/8	15/16	7/16
SF-5422	-	11/16	11/2	15/16	15/16	7/16
SF-5424	-	3/4	11/2	11/32	11/8	15/32
SF-5426	-	13/16	11/2	11/8	11/8	17/32

SURFACE DRIVE & FAST LEAD, LONG AND EXTRA LONG LENGTH



Part No. Surface Drive	Part No. Fast Lead	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
SF-5212	-	3/8	2 1/4	9/16	15/16	9/32
SF-5216	FL-5216	1/2	2 1/4	13/16	15/16	11/32
-	FL-5316	1/2	3 1/4	13/16	15/16	11/32
SF-HE-9518	FL-HE-9518	9/16	2 1/4	7/8	7/8	7/16
SF-5218	FL-5218	9/16	2 1/4	7/8	15/16	7/16
SF-5318	FL-5318	9/16	3 1/4	7/8	15/16	7/16
SF-5320	FL-5320	5/8	3 1/4	1	1	7/16
SF-5222	FL-5222	11/16	2 1/4	11/8	11/8	7/16
SF-5224	FL-5224	3/4	2 1/4	11/8	11/8	15/32
-	FL-SW-493	3/4	2 1/4	1 1/4	1 1/4	15/32
SF-5324	FL-5324	3/4	3 1/4	11/8	11/8	15/32
SF-5226	FL-5226	13/16	2 1/4	1 1/4	1 1/4	17/32
-	FL-5326	13/16	3 1/2	1 1/4	1 1/4	17/32
SF-5228	FL-5228	7/8	2 1/4	15/16	15/16	9/16
SF-5328	-	7/8	3 1/2	15/16	15/16	9/16
SF-5230	-	15/16	2 1/4	13/8	13/8	5/8
SF-5330	-	15/16	3 1/2	13/8	13/8	5/8
SF-5232	-	1	2 1/4	11/2	11/2	5/8

SURFACE DRIVE, THIN WALL, EXTRA LONG LENGTH



Part No. Surface Drive	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
SF-5514	7/16	3-1/4	21/32	15/16	9/32
SF-5516	1/2	3-1/4	23/32	15/16	11/32
SF-5518	9/16	3-1/4	13/16	15/16	7/16
SF-5520	5/8	3-1/4	7/8	15/16	7/16
SF-5524	3/4	3-1/4	1-1/32	1-1/8	15/32
SF-5526	13/16	3-1/4	1-1/8	1-1/8	17/32
SF-5528	7/8	3-1/2	1-3/16	1-1/4	9/16
SF-5532	1	3-1/2	1-3/8	1-3/8	5/8

1/2" SQ. DR. SOCKETS FOR SAE SHEET METAL SCREWS

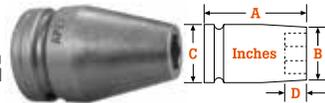
6 POINT & 6 POINT MAGNETIC, FOR PREDRILLED HOLES*



Part No. 6 Point	Part No. Magnetic	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
5E10	M5E10	5/16	11/2	1/2	15/16	3/16
5E12	M5E12	3/8	11/2	5/8	15/16	1/4
-	M5E14	7/16	11/2	11/16	15/16	9/32
5E16	M5E16	1/2	11/2	13/16	15/16	11/32
-	M5E18	9/16	11/2	15/16	15/16	7/16

*Sockets for predrilled holes are intermediate hardness.

6 POINT & 6 POINT MAGNETIC, FOR SELF-TAPPING SCREWS*

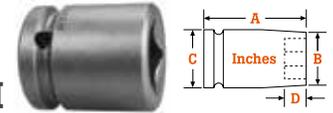


Part No. 6 Point	Part No. Magnetic	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
-	M5P10	5/16	11/2	1/2	15/16	3/16
5P12	M5P12	3/8	11/2	5/8	15/16	1/4
5P14	M5P14	7/16	11/2	11/16	15/16	9/32
-	M5P16	1/2	11/2	13/16	15/16	11/32
-	M5P18	9/16	11/2	15/16	15/16	7/16

*Sockets for self-tapping screws are maximum hardness.

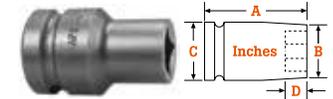
1/2" SQ. DR. SOCKETS FOR SAE SQUARE NUTS

SINGLE SQUARE & DOUBLE SQUARE, STANDARD LENGTH



Part No. Single Square	Part No. Double Square	Square Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
5609	-	9/32	11/2	1/2	15/16	3/16
5610	5610-D	5/16	11/2	5/8	15/16	1/4
5612	5612-D	3/8	11/2	3/4	15/16	1/4
5614	5614-D	7/16	11/2	7/8	15/16	9/32
5616	5616-D	1/2	11/2	1	1	11/32
5618	5618-D	9/16	11/2	11/8	11/8	7/16
5620	5620-D	5/8	1-1/2	11/4	1-1/4	7/16
5622	-	11/16	11/2	11/4	11/4	7/16
5624	5624-D	3/4	11/2	13/8	13/8	15/32
5626	-	13/16	11/2	11/2	11/2	17/32
5628	-	7/8	11/2	15/8	15/8	5/8
5632	-	1	15/8	13/4	13/4	5/8
5634	-	11/16	13/4	17/8	17/8	11/16
5636	5636-D	11/8	13/4	2	2	3/4

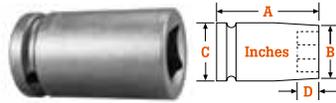
SINGLE SQUARE & DOUBLE SQUARE, THIN WALL, STANDARD LENGTH



Part No. Single Square	Part No. Double Square	Square Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
5912	5912-D	3/8	11/2	11/16	15/16	1/4
5914	5914-D	7/16	11/2	25/32	15/16	9/32
5918	5918-D	9/16	11/2	1	1	7/16
5920	-	5/8	11/2		11/8	7/16

1/2" SQ. DR. SOCKETS FOR SAE SQUARE NUTS

SINGLE SQUARE & DOUBLE SQUARE, LONG & EXTRA LONG LENGTH



Part No. Single Square	Part No. Double Square	Square Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
5812	-	3/8	3 1/4	3/4	15/16	1/4
5716	-	1/2	2 1/4	1	1	11/32
-	5816-D	1/2	3 1/4	1	1	7/16
5720	-	5/8	2 1/4	1 1/4	1 1/4	7/16
5820	5820-D	5/8	3 1/2	1 1/4	1 1/4	7/16
5822	5822-D	11/16	3 1/2	1 1/4	1 1/4	7/16
5724	5724-D	3/4	2 1/4	1 3/8	1 3/8	15/32
-	5826-D	13/16	3 1/2	1 1/2	1 1/2	17/32
5728	-	7/8	2 1/4	1 5/8	1 5/8	5/8
-	5832-D	1	3 1/2	1 3/4	1 3/4	5/8
-	5834-D	1 1/16	3 1/2	1 7/8	1 7/8	11/16
-	5836-D	1 1/8	3 1/2	2	2	3/4

1/2" SQ. DR. SOCKET SET, SAE

6 POINT

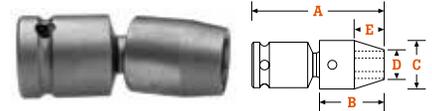


APS58XL

8 piece, extra long length: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16

1/2" SQ. DR. UNIV. WRENCHES, SAE

6 POINT & DOUBLE HEX



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Socket Length (B) IN.	Socket Dia. (C) IN.	Nose End Dia. (D) IN.	Clearance Depth (E) IN.
SA-120	SA-120-D	5/16	1 53/64	3/4	3/4	7/16	5/16
SA-216	SA-216-D	3/8	2 11/64	7/8	7/8	9/16	11/32
SA-217	SA-217-D	7/16	2 15/64	15/16	7/8	5/8	13/32
SA-316	-	7/16	2 17/64	15/16	1	5/8	3/8
SA-218	SA-218-D	1/2	2 19/64	1	7/8	11/16	15/32
SA-317	-	1/2	2 31/64	1	1	11/16	7/16
SA-219	SA-219-D	9/16	2 23/64	1 1/16	7/8	3/4	17/32
SA-318	SA-318-D	9/16	2 29/64	1 1/8	1	3/4	9/16
SA-221	SA-221-D	5/8	2 27/64	1 1/8	7/8	7/8	19/32
SA-320	-	5/8	2 33/64	1 3/16	1	27/32	5/8
SA-402	SA-402-D	5/8	2 49/64	1 1/4	1 1/4	7/8	33/64
SA-321	SA-321-D	1 1/16	2 37/64	1 1/4	1	1	11/16
SA-322	SA-322-D	3/4	2 37/64	1 1/4	1 1/8	1 1/8	11/16
SA-404	SA-404-D	3/4	2 57/64	1 3/8	1 1/4	1 1/32	5/8
SA-501	-	3/4	3 1/32	1 5/8	1 1/2	1 1/8	25/32
SA-406	-	13/16	2 57/64	1 3/8	1 1/4	1 1/8	41/64
SA-407	-	7/8	2 57/64	1 3/8	1 3/16	1 5/16	41/64
SA-409	SA-409-D	15/16	2 57/64	1 3/8	1 5/16	1 5/16	41/64
SA-505	-	15/16	3 5/32	1 3/4	1 1/2	1 3/8	29/32
SA-410	-	1	2 61/64	1 7/16	1 1/2	1 1/2	45/64
SA-411	-	1-1/16	3 1/64	1 1/2	1 1/2	1 1/2	49/64
SA-508	-	1-1/8	3 9/32	1 7/8	1 5/8	1 5/8	11/32
SA-510	-	1-1/4	3 13/32	2	1 3/4	1 3/4	15/32

1/2" SQ. DR. IRONBAND™ UNIV. WRENCHES, SAE

6 POINT



Part No.	Hex Opening IN.	Overall Length (A) IN.	Socket Length (B) IN.	Socket Dia. (C) IN.	Nose End Dia. (D) IN.	Opening Depth (E) IN.
SA-C-216	3/8	2.17	.88	.88	.56	.34
SA-C-217	7/16	2.23	.94	.88	.63	.41
SA-C-218	1/2	2.30	1.00	.88	.69	.47
SA-C-219	9/16	2.36	1.06	.88	.75	.53
SA-C-221	5/8	2.42	1.13	.88	.88	.59
SA-C-321	11/16	2.58	1.25	1.00	1.00	.69
SA-C-322	3/4	2.58	1.25	1.00	1.13	.69
SA-C-407	7/8	2.89	1.38	1.25	1.31	.64
SA-C-409	15/16	2.89	1.38	1.25	1.31	.64
SA-C-410	1	2.95	1.44	1.25	1.50	.70
SA-C-411	11/16	3.02	1.50	1.25	1.50	.77
SA-C-508	11/8	3.28	1.88	1.50	1.63	1.03
SA-C-510	11/4	3.41	2.00	1.50	1.75	1.16

1/2" SQ. DR. UNIV. WRENCH SET, SAE

6 POINT



APU56

6 piece, standard length: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4

APEX UNIVERSAL WRENCHES & SOCKETS:
APEX Universal Wrenches and Sockets meet the Minimum Proof Torque requirements specified in ASME impact standards B107.2, B107.33M and B107.110. Maximum operating angle is 30 degrees for Universal Wrenches.

UNIVERSAL WRENCHES 1/2" SQ. DR., SAE – EXT.

6 POINT STANDARD & TENSION TYPE



Part No. Standard	Part No. Tension	Hex Open IN.	Shank Length (A) IN.	Socket Length (B) IN.	Socket Dia. (C) IN.	Nose End Dia. (D) IN.	Clearance Depth (E) IN.
-	KN-41-3	5/16	3	3/4	5/8	7/16	3/8
-	KN-41-6	5/16	6	3/4	5/8	7/16	3/8
KH-43-6	KN-43-6	3/8	6	13/16	5/8	17/32	7/16
-	KN-43-9	3/8	9	13/16	5/8	17/32	7/16
KH-44-6	KN-44-6	7/16	6	7/8	5/8	5/8	1/2
KH-45-3	-	1/2	3	7/8	5/8	11/16	1/2
KH-45-4	-	1/2	4	7/8	5/8	11/16	1/2
KH-45-6	KN-45-6	1/2	6	7/8	5/8	11/16	1/2
-	KN-45-9	1/2	9	7/8	5/8	11/16	1/2
KH-104-6	KN-104-6	1/2	6	1	3/4	3/4	9/16
-	KN-104-9	1/2	9	1	3/4	3/4	9/16
KH-202-6	KN-202-6	1/2	6	1	7/8	11/16	15/32
-	KN-202-8	1/2	8	1	7/8	11/16	15/32
KH-105-3	-	9/16	3	1	3/4	13/16	9/16
KH-105-6	KN-105-6	9/16	6	1	3/4	13/16	9/16
-	KN-105-9	9/16	9	1	3/4	13/16	9/16
KH-105-12	KN-105-12	9/16	12	1	3/4	13/16	9/16
KH-203-4	-	9/16	4	11/16	7/8	3/4	17/32
KH-203-6	KN-203-6	9/16	6	11/16	7/8	3/4	17/32
KH-203-9	KN-203-9	9/16	9	11/16	7/8	3/4	17/32
-	KN-203-12	9/16	12	11/16	7/8	3/4	17/32
-	KN-318-3	9/16	3	1 1/8	1	3/4	9/16
KH-318-4	KN-318-4	9/16	4	1 1/8	1	3/4	9/16
KH-205-12	-	5/8	12	1 1/8	7/8	7/8	19/32
KH-205-3	-	5/8	3	1 1/8	7/8	7/8	19/32
KH-205-4	-	5/8	4	1 1/8	7/8	7/8	19/32
KH-205-6	KN-205-6	5/8	6	1 1/8	7/8	7/8	19/32
KH-205-D-6	-	5/8	6	1 1/8	7/8	7/8	19/32
-	KN-205-9	5/8	9	1 1/8	7/8	7/8	19/32
KH-205-12	KN-205-12	5/8	12	1 1/8	7/8	7/8	19/32
KH-320-6	KNS-320-D-6	5/8	6	13/16	1	27/32	5/8
-	KN-320-12	5/8	12	13/16	1	27/32	5/8
KH-321-6	-	11/16	6	1 1/4	1	1	11/16
KH-322-6	KN-322-6	3/4	6	1 1/4	1	1 1/8	11/16
-	KN-322-9	3/4	9	1 1/4	1	1 1/8	11/16
-	KN-322-12	3/4	12	1 1/4	1	1 1/8	11/16
-	KN-404-6	3/4	6	1 3/8	1 1/4	1 1/32	4 1/64
KH-409-3	-	15/16	3	1 3/8	1 1/4	1 5/16	4 1/64
KH-409-4	-	15/16	4	1 3/8	1 1/4	1 5/16	4 1/64
KH-409-6	-	15/16	6	1 3/8	1 1/4	1 5/16	4 1/64
KH-409-12	-	15/16	12	1 3/8	1 1/4	1 5/16	4 1/64
KH-540-6-B-2.75	-	1 1/4	6	2 3/4	1 1/2	1 3/4	1 29/32

1/2" SQ. DR. IRONBAND™ UNIV. WRENCHES, SAE – EXT.

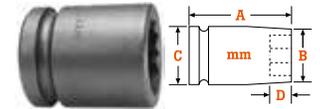
6 POINT



Part No. Standard	Part No. Tension	Hex Open IN.	Overall Length (A) IN.	Socket Length (B) IN.	Socket Dia. (C) IN.	Nose End Dia. (D) IN.	Opening Depth (E) IN.
KHW-C-43-6	KNW-C-43-6	3/8	6	13/16	5/8	17/32	7/16
KHW-C-44-6	KNW-C-44-6	7/16	6	7/8	5/8	5/8	1/2
KHW-C-45-6	KNW-C-45-6	1/2	6	7/8	5/8	11/16	1/2
-	KNW-C-104-9	1/2	9	1	3/4	3/4	9/16
KHW-C-105-6	KNW-C-105-6	9/16	6	1	3/4	13/16	9/16
KHW-C-105-12	KNW-C-105-12	9/16	12	1	3/4	13/16	9/16
-	KNW-C-203-6	9/16	6	11/16	7/8	3/4	17/32
-	KNW-C-318-6	9/16	6	11/8	1	3/4	9/16
KHW-C-205-6	KNW-C-203-9	9/16	9	11/16	7/8	3/4	17/32
KHW-C-205-12	KNW-C-205-6	5/8	6	11/8	7/8	7/8	19/32
-	KNW-C-205-12	5/8	12	11/8	7/8	7/8	19/32
KHW-C-322-6	KNW-C-322-6	3/4	6	11/4	1	11/8	11/16
-	KNCW-322-9	3/4	9	11/4	1	11/8	11/16
-	KNW-C-322-12	3/4	12	11/4	1	11/8	11/16
-	KNCBUW-C-404-6	3/4	6	13/8	11/4	11/32	41/64
KHW-C-409-6	-	15/16	6	13/8	11/4	15/16	41/64

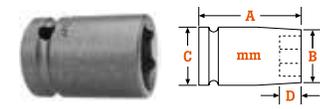
1/2" SQUARE DRIVE SOCKETS, METRIC

6 POINT & DOUBLE HEX, STANDARD LENGTH



Part No. 6 Point	Part No. Double Hex	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
10MM15	10MM15-D	10	38.1	16.7	23.8	6.4
11MM15	11MM15-D	11	38.1	17.5	23.8	7.2
12MM15	12MM15-D	12	38.1	19.1	23.8	7.2
13MM15	13MM15-D	13	38.1	22.2	23.8	8.7
14MM15	14MM15-D	14	38.1	22.2	23.8	11.1
15MM15	15MM15-D	15	38.1	23.8	23.8	11.1
16MM15	16MM15-D	16	38.1	25.4	25.4	11.1
17MM15	17MM15-D	17	38.1	28.6	28.6	11.1
18MM15	18MM15-D	18	38.1	28.6	28.6	11.1
19MM15	19MM15-D	19	38.1	28.6	28.6	11.9
20MM15	-	20	38.1	31.7	31.7	11.9
21MM15	21MM15-D	21	38.1	31.7	31.7	13.5
22MM15	22MM15-D	22	38.1	33.3	33.3	14.3
23MM15	23MM15-D	23	38.1	34.9	34.9	15.9
24MM15	24MM15-D	24	38.1	34.9	34.9	15.9
25MM15	-	25	38.1	38.1	38.1	15.9
26MM15	26MM15-D	26	38.1	38.1	38.1	15.9
27MM15	27MM15-D	27	41.3	41.3	41.3	17.5
28MM15	-	28	41.3	41.3	41.3	19.1
29MM15	29MM15-D	29	41.3	44.4	44.4	19.1
30MM15	30MM15-D	30	41.3	44.4	44.4	19.1
32MM15	32MM15-D	32	44.4	44.4	44.4	20.6
33MM15	-	33	44.4	47.6	47.6	20.6
34MM15	-	34	47.6	47.5	47.5	20.5
35MM15	-	35	47.6	50.8	50.8	20.6
36MM15	-	36	47.6	50.8	50.8	23.8

6 POINT & DOUBLE HEX, THIN WALL, STANDARD LENGTH



Part No. 6 Point	Part No. Double Hex	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
10MM45	10MM45-D	10	38.1	15.9	23.8	6.4
12MM45	12MM45-D	12	38.1	17.5	23.8	7.2
13MM45	13MM45-D	13	38.1	18.7	23.8	8.7
14MM45	14MM45-D	14	38.1	20.6	23.8	11.1
15MM45	15MM45-D	15	38.1	22.2	23.8	11.1
16MM45	16MM45-D	16	38.1	22.2	23.8	11.1
17MM45	17MM45-D	17	38.1	23.8	23.8	11.1
18MM45	18MM45-D	18	38.1	25.4	25.4	11.1
19MM45	-	19	38.1	26.3	26.3	11.9
21MM45	21MM45-D	21	38.1	28.6	28.6	13.5
22MM45	22MM45-D	22	38.1	30.2	31.7	14.3

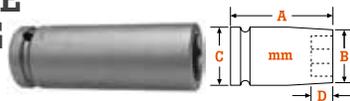
1/2" SQUARE DRIVE SOCKETS, METRIC

6 POINT & DOUBLE HEX, LONG LENGTH



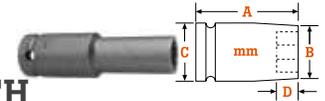
Part No. 6 Point	Part No. Double Hex	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
10MM25	10MM25-D	10	57.1	16.7	23.8	6.4
11MM25	-	11	57.1	17.5	23.8	7.2
12MM25	12MM25-D	12	57.1	19.1	23.8	7.2
13MM25	13MM25-D	13	57.1	22.2	23.8	8.7
14MM25	-	14	57.1	22.2	23.8	11.1
15MM25	15MM25-D	15	57.1	23.8	23.8	11.1
16MM25	16MM25-D	16	57.1	25.4	25.4	11.1
17MM25	17MM25-D	17	57.1	28.6	28.6	11.1
18MM25	18MM25-D	18	57.1	28.6	28.6	11.1
19MM25	-	19	57.1	28.6	28.6	11.9
20MM25	20MM25-D	20	57.1	31.7	31.7	11.9
21MM25	21MM25-D	21	57.1	31.7	31.7	13.5
22MM25	22MM25-D	22	57.1	33.3	33.3	14.3
23MM25	23MM25-D	23	57.1	34.9	34.9	15.9
24MM25	24MM25-D	24	57.1	34.9	34.9	15.9
25MM25	-	25	57.1	38.1	38.1	15.9
26MM25	-	26	57.1	38.1	38.1	15.9
27MM25	-	27	60.3	41.3	41.3	17.5
28MM25	-	28	60.3	41.3	41.3	19.1
30MM25	30MM25-D	30	60.3	44.4	44.4	19.1
32MM25	-	32	63.5	44.4	44.4	20.6

6 POINT & DOUBLE HEX, EXTRA LONG LENGTH



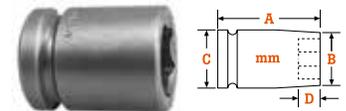
Part No. 6 Point	Part No. Double Hex	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
10MM35	10MM35-D	10	82.5	16.7	23.8	6.4
11MM35	-	11	82.5	17.5	23.8	7.2
12MM35	12MM35-D	12	82.5	19.1	23.8	7.2
13MM35	13MM35-D	13	82.5	22.2	23.8	8.7
14MM35	14MM35-D	14	82.5	22.2	23.8	11.1
15MM35	-	15	82.5	23.8	23.8	11.1
16MM35	16MM35-D	16	82.5	25.4	25.4	11.1
17MM35	17MM35-D	17	82.5	28.6	28.6	11.1
18MM35	18MM35-D	18	82.5	28.6	28.6	11.1
19MM35	19MM35-D	19	82.5	28.6	28.6	11.9
20MM35	20MM35-D	20	88.9	31.7	31.7	11.9
21MM35	21MM35-D	21	88.9	31.7	31.7	13.5
22MM35	22MM35-D	22	88.9	33.3	33.3	14.3
24MM35	24MM35-D	24	88.9	34.9	34.9	15.9
25MM35	-	25	88.9	38.1	38.1	15.9

6 POINT & DOUBLE HEX, THIN WALL, EXTRA LONG LENGTH



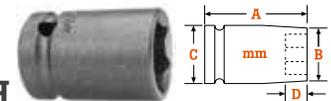
Part No. 6 Point	Part No. Double Hex	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
10MM55	10MM55-D	10	82.5	15.9	23.8	6.4
11MM55	-	11	82.5	16.7	23.8	7.2
12MM55	12MM55-D	12	82.5	17.5	23.8	7.2
13MM55	13MM55-D	13	82.5	18.7	23.8	8.7
14MM55	14MM55-D	14	82.5	20.6	23.8	11.1
15MM55	15MM55-D	15	82.5	22.2	23.8	11.1
16MM55	16MM55-D	16	82.5	22.2	23.8	11.1
17MM55	17MM55-D	17	82.5	23.8	23.8	11.1
18MM55	18MM55-D	18	82.5	25.4	25.4	11.1
19MM55	-	19	82.5	26.3	26.3	11.9
21MM55	21MM55-D	21	88.9	28.6	28.6	13.5
22MM55	22MM55-D	22	88.9	30.2	31.7	14.3
24MM55	24MM55-D	24	88.9	33.3	33.3	15.9
26MM55	-	26	88.9	34.9	34.9	15.9
27MM55	27MM55-D	27	88.9	36.5	38.1	17.5
29MM55	-	29	88.9	38.1	38.1	19.1
30MM55	-	30	88.9	39.7	41.1	19.1
32MM55	-	32	88.9	42.9	42.9	20.6

MAGNETIC, STANDARD LENGTH



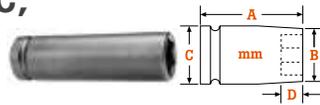
Part No. Fixed Magnet	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
M-10MM15	10	38.1	16.7	23.8	6.4
M-11MM15	11	38.1	17.5	23.8	7.2
M-12MM15	12	38.1	19.1	23.8	7.2
M-13MM15	13	38.1	22.2	23.8	8.7
M-14MM15	14	38.1	22.2	23.8	11.1
M-15MM15	15	38.1	23.8	23.8	11.1
M-16MM15	16	38.1	25.4	25.4	11.1
M-17MM15	17	38.1	28.6	28.6	11.1
M-18MM15	18	38.1	28.5	28.5	11.1
M-19MM15	19	38.1	28.6	28.6	11.9
M-21MM15	21	38.1	31.7	31.7	13.5

MAGNETIC, THIN WALL, STANDARD LENGTH



Part No. Fixed Magnet	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
M-13MM45	13	38.1	18.7	23.8	8.7
M-14MM45	14	38.1	20.6	23.8	11.1
M-15MM45	15	38.1	22.2	23.8	11.1
M-18MM45	18	38.1	25.4	25.4	8.0

6 POINT, MAGNETIC, THIN WALL, EXTRA LONG LENGTH



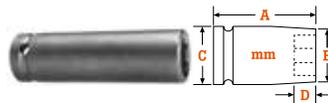
Part Number	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
M-12MM55	12	82.5	17.4	23.8	5.2
M-14MM55	14	82.5	20.6	23.6	6.4
M-15MM55	15	82.5	22.2	23.8	7.1

MAGNETIC, LONG LENGTH



Part No. Fixed Magnetic	Part No. Mag. Bolt Clearance	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
	MB-10MM25	10	57.1	16.7	23.8	6.4
	MB-12MM25	12	57.1	19.1	23.8	7.2
M-13MM25	MB-13MM25	13	57.1	22.2	23.8	8.7
	MB-14MM25	14	57.1	22.2	23.8	11.1
M-15MM25	MB-15MM25	15	57.1	23.8	23.8	11.1
	MB-16MM25	16	57.1	25.4	25.4	11.1
	MB-17MM25	17	57.1	28.4	28.4	11.1
M-18MM25	MB-18MM25	18	57.1	28.6	28.5	11.1

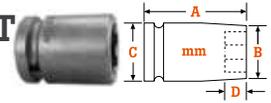
MAGNETIC, EXTRA LONG LENGTH



Part No. Fixed Magnetic	Part No. Mag. Bolt Clearance	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
M-13MM35	MB-13MM35	13	82.5	22.2	23.8	8.7
M-13MM55		13	82.5	18.7	23.8	8.7
M-15MM35	MB-15MM35	15	82.5	23.8	23.8	11.1
M-18MM35	MB-18MM35	18	82.5	28.6	28.6	11.1
M-18MM55*		18	82.5	25.4	25.4	11.1

*Thin wall

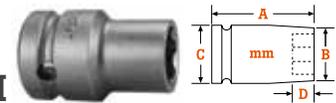
SURFACE DRIVE SHORT & STANDARD LENGTH



Part No. Surface Drive	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.	Mag. / Non-Mag.
SF-10MM15	10	38.1	16.7	23.8	6.4	Non-Mag.
SF-11MM15	11	38.1	17.5	23.8	7.2	Non-Mag.
SF-12MM15	12	38.1	19.1	23.8	7.2	Non-Mag.
SF-13MM15	13	38.1	22.2	23.8	8.7	Non-Mag.
MSF-13MM15*	13	38.1	22.2	23.8	8.7	Magnetic
SF-14MM15	14	38.1	22.2	23.8	11.1	Non-Mag.
SF-15MM15	15	38.1	23.8	23.8	11.1	Non-Mag.
MVESF-126-16MM*	16	33	25.4	25.4	7.9	Non-Mag.
SF-16MM15	16	38.1	25.4	25.4	11.1	Magnetic
MSF-16MM15*	16	38.1	25.4	25.4	11.1	Magnetic
MSF-18MM15*	18	38.1	28.5	28.6	11.1	Magnetic
SF-17MM15	17	38.1	28.6	26.6	11.1	Non-Mag.
SF-18MM15	18	38.1	28.6	28.6	11.1	Non-Mag.
SF-19MM15	19	38.1	28.6	28.6	11.9	Non-Mag.
SF-20MM15	20	38.1	31.7	31.7	11.9	Non-Mag.
SF-21MM15	21	38.1	31.7	31.7	13.5	Non-Mag.
SF-22MM15	22	38.1	33.3	33.3	14.3	Non-Mag.
SF-23MM15	23	38.1	34.9	34.9	15.9	Non-Mag.
SF-24MM15	24	38.1	34.9	34.9	15.9	Non-Mag.

*Magnetic surface drive

SURFACE DRIVE, THIN WALL, STANDARD LENGTH

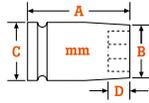


Part No. Surface Drive	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
SF-10MM45	10	38.1	15.9	23.8	6.4
SF-11MM45	11	38.1	16.7	23.8	7.2
SF-12MM45	12	38.1	17.5	23.8	7.2
SF-13MM45	13	38.1	18.7	23.8	8.7
SF-14MM45	14	38.1	20.6	23.8	11.1
SF-15MM45	15	38.1	22.2	23.8	11.1
SF-16MM45	16	38.1	22.2	23.8	11.1
SF-17MM45	17	38.1	23.8	23.8	11.1
MSF-17MM45*	17	38.1	23.8	23.8	7.9
SF-18MM45	18	38.1	25.4	25.4	11.1
SF-19MM45	19	38.1	26.3	26.3	11.9
SF-21MM45	21	38.1	28.6	28.6	11.9

*Magnetic surface drive

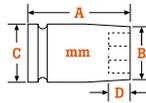
1/2" SQUARE DRIVE SOCKETS, METRIC

SURFACE DRIVE, LONG LENGTH



Part No. Surface Drive	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
SF-8MM25	8	57.1	12.7	23.6	4.7
SF-10MM25	10	57.1	16.7	23.6	4.7
SF-11MM25	11	57.1	17.5	23.8	7.2
SF-12MM25	12	57.1	19.1	23.8	7.2
SF-13MM25	13	57.1	22.2	23.8	7.2
SF-14MM25	14	57.1	22.2	23.8	11.1
SF-15MM25	15	57.1	23.8	23.8	11.1
SF-16MM25	16	57.1	25.4	25.4	11.1
SF-17MM25	17	57.1	28.6	28.6	11.1
SF-18MM25	18	57.1	28.6	28.6	11.1
SF-19MM25	19	57.1	28.6	28.6	11.9
SF-21MM25	21	57.1	31.7	31.7	13.5
SF-22MM25	22	57.1	33.3	33.3	14.3
SF-24MM25	24	57.1	34.9	34.9	15.9

SURFACE DRIVE, EXTRA LONG LENGTH



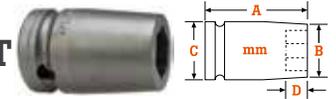
Part No. Surface Drive	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
SF-10MM35	10	82.5	16.7	23.8	6.4
SF-12MM35	12	82.5	17.5	23.8	7.2
SF-13MM35	13	82.5	19.1	23.8	7.2
SF-14MM35	14	82.5	22.2	23.8	11.1
SF-15MM35	15	82.5	23.8	23.8	11.1
SF-16MM35	16	82.5	25.4	25.4	11.1
SF-17MM35	17	82.5	28.6	28.6	11.1
SF-18MM35	18	82.5	28.6	28.6	11.1
SF-19MM35	19	82.5	28.6	28.6	11.9
SF-21MM35	21	88.9	31.7	31.7	13.5
SF-22MM35	22	88.9	33.3	33.3	14.3
SF-24MM35	24	88.9	34.9	34.9	15.9

SURFACE DRIVE, THIN WALL, EXTRA LONG LENGTH



Part No. Surface Drive	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
SF-10MM55	10	82.5	15.9	23.8	6.4
SF-11MM55	11	82.5	16.7	23.8	7.2
SF-13MM55	13	82.5	18.7	23.8	8.7
SF-14MM55	14	82.5	20.6	23.8	11.1
SF-15MM55	15	82.5	22.2	23.8	11.1
SF-16MM55	16	82.5	22.2	23.8	11.1
SF-17MM55	17	82.5	23.8	23.8	11.1
SF-18MM55	18	82.5	25.4	25.4	11.1
SF-19MM55	19	82.5	26.3	26.3	11.9
SF-21MM55	21	88.9	28.6	28.6	13.5
SF-22MM55	22	88.9	30.2	31.7	15.9

1/2" SQUARE DRIVE SOCKETS FOR METRIC SHEET METAL SCREWS



Part No. 6 Point	Part No. Magentic	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
	M-13MME5	13	38.1	22.2	23.8	8.7
15MME5	M-15MME5	15	38.1	23.8	23.8	11.1

1/2" SQ. DR. SOCKET SET, METRIC

6 POINT

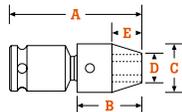


APS511M

11 piece, standard length: 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 16mm, 17mm, 18mm, 19mm, 21mm

1/2" SQ. DR. IRONBAND™ UNIV. WRENCHES, METRIC

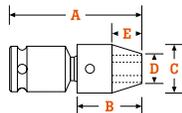
6 POINT



Part No. 6 Pt.	Hex Opening MM.	Overall Length (A) MM.	Socket Length (B) MM.	Socket Dia. (C) MM.	Nose End Dia. (D) MM.	Clearance Depth (E) MM.
SA-C-57-13M	13	58	25.4	22.2	17.5	11.9
SA-C-57-14M	14	60	27.0	22.2	19.1	13.5
SA-C-58-15M	15	62	28.6	25.4	19.8	14.3
SA-C-58-16M	16	64	30.2	25.4	21.4	15.9
SA-C-58-17M	17	66	31.8	25.4	25.4	17.5
SA-C-58-18M	18	66	31.8	25.4	25.4	17.5
SA-C-510-21M	21	73	34.9	31.8	28.6	16.3
SA-C-510-22M	22	73	34.9	31.8	31.8	16.3

1/2" SQUARE DRIVE UNIV. WRENCHES, METRIC

6 POINT



Part No. 6 Pt.	Hex Opening MM.	Overall Length (A) MM.	Socket Length (B) MM.	Socket Dia. (C) MM.	Nose End Dia. (D) MM.	Clearance Depth (E) MM.
SA-57-13M	13	58	25.4	22.2	17.5	11.9
SA-57-14M	14	60	27.0	22.2	19.1	13.5
SA-58-15M	15	62	28.6	25.4	19.8	14.3
SA-58-16M	16	64	30.2	25.4	21.4	15.9
SA-58-17M	17	66	31.8	25.4	25.4	17.5
SA-58-18M	18	66	31.8	25.4	25.4	17.5
SA-58-19M	19	66	31.8	25.4	28.6	17.5
SA-510-19M	19	73	34.9	31.8	26.2	16.3
SA-510-20M	20	73	34.9	31.8	27.0	16.3
SA-510-21M	21	73	34.9	31.8	28.6	16.3
SA-510-22M	22	73	34.9	31.8	31.8	16.3
SA-510-24M	24	73	34.9	31.8	34.9	16.3

1/2" SQUARE DRIVE UNIV. WRENCH SET, METRIC

6 POINT



APU56M

6 piece, standard length: 13mm, 14mm, 15mm, 16mm, 17mm, 18mm

1/2" SQ. DR. UNIVERSAL WRENCHES, METRIC – EXTENSION

6 POINT, STANDARD AND TENSION TYPE



Part No. Standard	Part No. Tension	Hex Opening MM.	Shank Length (A) MM.	Socket Length (B) MM.	Socket Dia. (C) MM.	Nose End Dia. (D) MM.	Clearance Depth (E) MM.
-	KN-7-12M-6	12	152	23.8	22.2	17.5	10.3
-	KN-7-12M-9	12	229	23.8	22.2	17.5	10.3
KH-7-13M-3	-	13	76	25.4	22.2	17.5	11.9
KH-7-13M-4	-	13	102	25.4	22.2	17.5	11.9
KH-7-13M-6	KN-7-13M-6	13	152	25.4	22.2	17.5	11.9
KH-7-13M-9	KN-7-13M-9	13	229	25.4	22.2	17.5	11.9
-	KN-7-13M-12	13	305	25.4	22.2	17.5	11.9
KH-7-14M-6	KN-7-14M-6	14	152	27.0	22.2	19.1	13.5
-	KN-7-14M-9	14	229	27.0	22.2	19.1	13.5
KH-8-14M-6	-	14	152	28.6	25.4	19.1	14.3
KH-8-15M-3	KN-8-15M-3	15	76	28.6	25.4	19.8	14.3
KH-8-15M-6	KN-8-15M-6	15	152	28.6	25.4	19.8	14.3
KH-8-15M-9	KN-8-15M-9	15	229	28.6	25.4	19.8	14.3
-	KN-8-15M-12	15	305	28.6	25.4	19.8	14.3
KH-8-16M-3	-	16	76	30.2	25.4	21.4	15.9
KH-8-16M-4	-	16	102	30.2	25.4	21.4	15.9
KH-8-16M-6	KN-8-16M-6	16	152	30.2	25.4	21.4	15.9
KH-8-16M-9	KN-8-16M-9	16	229	30.2	25.4	21.4	15.9
KH-8-16M-12	KN-8-16M-12	16	305	30.2	25.4	21.4	15.9
KH-8-17M-3	-	17	76	31.8	25.4	25.4	17.5
KH-8-17M-4	-	17	102	31.8	25.4	25.4	17.5
KH-8-17M-6	KN-8-17M-6	17	152	31.8	25.4	25.4	17.5
KH-8-17M-9	KN-8-17M-9	17	229	31.8	25.4	25.4	17.5
KH-8-18M-3	KN-8-18M-3	18	76	31.8	25.4	25.4	17.5
KH-8-18M-4	-	18	102	31.8	25.4	25.4	17.5
KH-8-18M-6	KN-8-18M-6	18	152	31.8	25.4	25.4	17.5
KH-8-18M-9	KN-8-18M-9	18	229	31.8	25.4	25.4	17.5
-	KN-8-18M-12	18	305	31.8	25.4	25.4	17.5
KH-10-19M-3	-	19	76	34.9	31.8	26.2	16.2
KH-10-19M-6	-	19	152	34.9	31.8	26.2	16.2
KH-10-19M-9	-	19	229	34.9	31.8	26.2	16.2
KH-10-19M-12	-	19	305	34.9	31.8	26.2	16.2
-	KN-10-24M-6	24	152	34.9	31.8	34.9	16.2
-	KNS-8-18M-4	18	102	31.8	25.4	25.4	17.5



APEX UNIVERSAL WRENCHES & SOCKETS:

APEX Universal Wrenches and Sockets meet the Minimum Proof Torque requirements specified in ASME impact standards B107.2, B107.33M and B107.110. Maximum operating angle is 30 degrees for Universal Wrenches.

1/2" SQ. DR. IRONBAND™ UNIV. WRENCHES, METRIC – EXTENSION

6 POINT

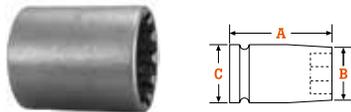


Part No. Standard	Part No. Tension	Hex Open	Overall Length (A) MM.	Socket Length (B) MM.	Socket Dia. (C) MM.	Nose End Dia. (D) MM.	Clearance Depth (E) MM.
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KHW-C-7-13M-6	KNW-C-7-13M-6	13	152	25.4	22.2	17.5	11.9
KHW-C-7-13M-9	KNW-C-7-13M-9	13	229	25.4	22.2	17.5	11.9
KHW-C-7-14M-6	KNW-C-7-14M-6	14	152	27.0	22.2	19.1	13.5
KHW-C-8-15M-6	KNW-C-8-15M-6	15	152	28.6	25.4	19.8	14.3
KHW-C-8-15M-9	-	15	229	28.6	25.4	19.8	14.3
-	KNW-C-8-15M-12	15	305	28.6	25.4	19.8	14.3
KHW-C-8-16M-6	-	16	152	30.2	25.4	21.4	15.9
KHW-C-8-16M-9	KNW-C-8-16M-9	16	229	30.2	25.4	21.4	15.9
KHW-C-8-17M-6	KNW-C-8-17M-6	17	152	31.8	25.4	25.4	17.5
KHW-C-8-17M-9	KNW-C-8-17M-9	17	229	31.8	25.4	25.4	17.5
KHW-C-8-18M-4	-	18	102	31.8	25.4	25.4	17.5
KHW-C-8-18M-6	KNW-C-8-18M-6	18	152	31.8	25.4	25.4	17.5
KHW-C-8-18M-9	KNW-C-8-18M-9	18	229	31.8	25.4	25.4	17.5

1/2" SQ. DR. SOCKETS FOR SPLINE FASTENERS

STANDARD & LONG LENGTH



Part No.	Spline Size	Nominal Size IN.	Overall Length (A) IN. MM.	Nose End Dia. (B) IN. MM.	Drive End Dia. (C) IN. MM.	Mag./ Non-Mag.
CMS-5416	16	1/2	1 1/4 32	23/32 18	7/8 22	Non-Magnetic
CMS-5422	22	11/16	1 1/2 38	31/32 25	31/32 25	Non-Magnetic
CMS-5426	26	13/16	1 1/2 38	11/8 29	11/8 29	Non-Magnetic
CMS-5430	30	15/16	1 1/2 38	11/4 32	1 1/4 32	Non-Magnetic

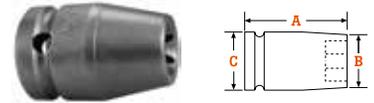
APEX SPLINE SOCKETS:

APEX Spline Sockets conform to military specifications MS-37787 and MIL-W-8982C.



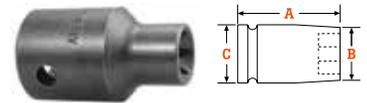
1/2" SQ. DR. TORX® SOCKETS

FOR EXTERNAL TORX SCREWS



Part Number	Part No. Fixed Magnet	Driver Size	Overall Length (A) IN. MM.	Nose End Dia. (B) IN. MM.	Drive End Dia. (C) IN. MM.
TX-5110	-	E-10	1 1/2 38	9/16 13	1 25
TX-5112	-	E-12	1 1/2 38	5/8 16	1 25
TX-5114	-	E-14	1 1/2 38	11/16 18	1 25
TX-5116	-	E-16	1 1/2 38	13/16 21	1 25
TX-5118	MTX-5118	E-18	1 1/2 38	7/8 22	1 25
TX-5120	-	E-20	1 1/2 38	1 25	1 3/16 30
TX-5124	-	E-24	1 1/2 38	15/16 33	1 5/16 33

FOR EXTERNAL TORX SCREWS, THIN WALL



Part Number	Driver Size	Overall Length (A) IN. MM.	Nose End Dia. (B) IN. MM.	Drive End Dia. (C) IN. MM.
TX-5408	E-8	1 1/2 38	3/8 10	7/8 22
TX-5410	E-10	1 1/2 38	1/2 13	7/8 22
TX-5412	E-12	1 1/2 38	9/16 14	7/8 22
TX-5414	E-14	1 1/2 38	5/8 16	7/8 22
TX-5416	E-16	1 1/2 38	7/8 22	7/8 22
TX-5418	E-18	1 1/2 38	15/16 24	15/16 24
TX-5420	E-20	1 1/2 38	1 1/16 27	1 1/16 27

1/2" SQ. DR. EXTENSIONS

1 23/32" TO
18" LENGTH



Part Number	Male Square IN.	Type of Lock	Overall Length	
			IN.	MM.
EX-504	1/2	Pin	1 23/32	44
EX-504-B	1/2	Ball	1 23/32	44
EX-508-2	1/2	Pin	2	51
EX-508-B-2	1/2	Ball	2	51
EX-508-3	1/2	Pin	3	76
EX-508-B-3	1/2	Ball	3	76
EX-508-4	1/2	Pin	4	102
EX-508-B-4	1/2	Ball	4	102
EX-508-5	1/2	Pin	5	127
EX-508-B-5	1/2	Ball	5	127
EX-508-6	1/2	Pin	6	152
EX-508-B-6	1/2	Ball	6	152
EX-508-8	1/2	Pin	8	203
EX-508-B-8	1/2	Ball	8	203
EX-508-9	1/2	Pin	9	229
EX-508-B-9	1/2	Ball	9	229
EX-508-10	1/2	Pin	10	254
EX-508-B-10	1/2	Ball	10	254
EX-508-12	1/2	Pin	12	305
EX-508-B-12	1/2	Ball	12	305
EX-508-15	1/2	Pin	15	381
EX-508-B-15	1/2	Ball	15	381
EX-508-16	1/2	Pin	16	406
EX-508-18	1/2	Pin	18	457
EX-508-24	1/2	Pin	24	610

1/2" SQ. DR. ADAPTERS

1/4" TO 3/4"
MALE SQUARE



Part Number	Female Square IN.	Male Square IN.	Type of Lock	Overall Length	
				IN.	MM.
EX-260	1/2	1/4	Pin	1 1/2	38
EX-260-B	1/2	1/4	Ball	1 1/2	38
EX-258-B-2	1/2	1/4	Ball	2	51
EX-258-4	1/2	1/4	Pin	4	102
EX-375	1/2	3/8	Pin	1 1/2	38
EX-375-B	1/2	3/8	Ball	1 1/2	38
EX-377-2	1/2	3/8	Pin	2	51
EX-377-B-2	1/2	3/8	Ball	2	51
EX-377-3	1/2	3/8	Pin	3	76
EX-377-B-3	1/2	3/8	Ball	3	76
EX-377-4	1/2	3/8	Pin	4	102
EX-377-B-4	1/2	3/8	Ball	4	102
EX-377-5	1/2	3/8	Pin	5	127
EX-377-B-5	1/2	3/8	Ball	5	127
EX-377-6	1/2	3/8	Pin	6	152
EX-377-B-6	1/2	3/8	Ball	6	152
EX-377-8	1/2	3/8	Pin	8	203
EX-377-B-8	1/2	3/8	Ball	8	203
EX-377-9	1/2	3/8	Pin	9	229
EX-377-B-9	1/2	3/8	Ball	9	229
EX-377-10	1/2	3/8	Pin	10	254
EX-377-B-10	1/2	3/8	Ball	10	254
EX-377-12	1/2	3/8	Pin	12	305
EX-377-B-12	1/2	3/8	Ball	12	305
EX-377-15	1/2	3/8	Pin	15	381
EX-623	1/2	5/8	Pin	1 1/2	38
EX-623-B	1/2	5/8	Ball	1 1/2	38
EX-626-3	1/2	5/8	Pin	3	76
EX-751	1/2	3/4	7/32 drill hole	1 13/16	46
EX-751-B	1/2	3/4	Ball	1 13/16	46

1/2" SQ. DR. UNIVERSAL ADAPTERS

3/8" TO 3/4" MALE SQUARE



Part Number	Female Square IN.	Male Square IN.	Type of Lock	Overall Length		Largest Dia.	
				IN.	MM.	IN.	MM.
MF-39	1/2	3/8	Pin	2 9/16	65	7/8	22
MF-39B	1/2	3/8	Ball	2 9/16	65	7/8	22
MF-50	1/2	1/2	Pin	2 11/16	68	1	25
MF-50B	1/2	1/2	Ball	2 11/16	68	1	25
MF-55	1/2	1/2	Pin	3 1/16	78	1 1/4	32
MF-55B	1/2	1/2	Ball	3 1/16	78	1 1/4	32
MF-70	1/2	3/4	7/32 drill hole	3 5/8	92	1 1/2	38
MF-70B	1/2	3/4	Ball	3 5/8	92	1 1/2	38

1/2" SQ. DR. UNIV. ADAPTERS – EXT.

1/2" MALE SQUARE

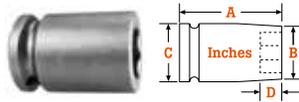


Part Number	Part No. Tension	Female Square IN.	Male Square IN.	Type of Lock	Largest Dia.	
					IN.	MM.
KHM-37-6	KNM-37-6	1/2	3/8	Pin	3/4	19
KHM-38-6	KNM-38-6	1/2	3/8	Pin	7/8	22
KHM-50-3	KNM-50-3	1/2	1/2	Pin	1	25
KHM-50-6	KNM-50-6	1/2	1/2	Pin	1	25
KHM-50-B-6	KNM-50-B-6	1/2	1/2	Ball	1	25

Maximum operating angle when using Universal Wrench is 30 degrees.

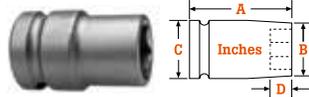
5/8" SQUARE DRIVE SOCKETS, SAE

6 POINT & DOUBLE HEX, STANDARD LENGTH



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
6118	-	9/16	17/8	7/8	11/4	7/16
6120	6120-D	5/8	17/8	1	11/4	7/16
6122	-	11/16	17/8	11/8	11/4	7/16
6124	-	3/4	17/8	11/4	11/4	15/32
6128	-	7/8 in	17/8	13/8	13/8	9/16
6134	-	11/16	2	15/8	15/8	11/16
6136	-	11/8	2	15/8	15/8	3/4
6140	-	11/4	2	17/8	17/8	13/16
6142	-	15/16	2	2	2	13/16
6144	-	13/8	2 1/8	2	2	13/16
6146	-	17/16	2 1/8	2 1/8	2 1/8	15/16
6148	-	1 1/2	2 1/4	2 1/8	2 1/8	1

6 POINT, THIN WALL STANDARD LENGTH



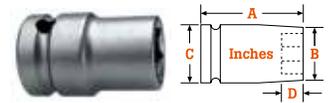
Part No. 6 Point	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
6426	13/16	17/8	11/8	11/4	17/32
6430	15/16	2	15/16	15/16	5/8

6 POINT, EXTRA LONG LENGTH



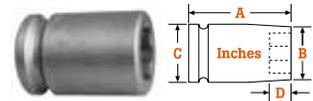
Part No. 6 Point	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
6320	5/8	3 1/2	1	11/4	7/16
6322	11/16	3 1/2	11/8	11/4	7/16
6324	3/4	3 1/2	11/4	11/4	15/32
6326	13/16	3 1/2	11/4	11/4	17/32
6330	15/16	3 1/2	11/2	11/2	5/8
6336	11/8	3 1/2	15/8	15/8	3/4
6340	11/4	3 1/2	17/8	17/8	13/16
6342	15/16	3 1/2	2	2	13/16
6344	13/8	3 1/2	2	2	13/16
6348	1 1/2	3 1/2	2 1/8	2 1/8	1

6 POINT & DOUBLE HEX, THIN WALL, EXTRA LONG LENGTH



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
-	6520-D	5/8	3 1/2	15/16	11/4	7/16
6524	6524-D	3/4	3 1/2	11/16	11/4	15/32
-	6528-D	7/8	3 1/2	13/16	11/4	9/16

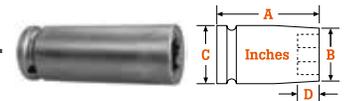
SURFACE DRIVE & FAST LEAD, STANDARD LENGTH



Part No. Surface Drive	Part No. Fast Lead	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
SF-6118	-	9/16	17/8	7/8	11/4	7/16
SF-6120	-	5/8	17/8	1	11/4	7/16
SF-6124	FL-6124	3/4	17/8	11/4	11/4	15/32
SF-6424*	-	3/4	17/8	11/16	11/4	15/32
SF-6128	FL-6128	7/8	17/8	13/8	13/8	9/16

*Thin wall

SURFACE DRIVE & FAST LEAD, EXTRA LONG LENGTH



Part No. Surface Drive	Part No. Fast Lead	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
SF-6320	-	5/8	3 1/2	1	11/4	7/16
SF-6324	FL-6324	3/4	3 1/2	11/4	11/4	15/32
SF-6524*	-	3/4	3 1/2	11/16	11/4	15/32
SF-6326	-	13/16	3 1/2	11/4	11/4	17/32
SF-6328	-	7/8	3 1/2	13/8	13/8	9/16
SF-6330	-	15/16	3 1/2	11/2	11/2	5/8

*Thin wall

5/8" SQ. DR. SOCKETS, METRIC

6 POINT & SURFACE DRIVE, STANDARD LENGTH



Part No. 6 Point	Part No. Surface Drive	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
-	SF-15MM16	15	48	23.8	31.8	11.1
16MM16	SF-16MM16	16	48	25.4	31.8	11.1
17MM16	SF-17MM16	17	48	28.6	31.8	11.1
18MM16	SF-18MM16	18	48	28.5	31.8	11.1
-	SF-19MM16	19	48	31.8	31.8	11.9
21MM16	SF-21MM16	21	48	31.8	31.8	13.5
-	SF-22MM16	22	48	34.9	34.9	14.3
24MM16	SF-24MM16	24	51	38.1	38.1	15.9

6 POINT & SURFACE DRIVE, EXTRA LONG LENGTH



Part No. 6 Point	Part No. Surface Drive	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
-	SF-15MM36	15	89	23.8	31.8	11.1
17MM36	-	17	89	25.4	31.8	11.1
-	SF-18MM36	18	89	28.6	31.8	11.1
19MM36	SF-19MM36	19	89	31.8	31.8	11.9
21MM36	SF-21MM36	21	89	31.8	31.8	13.5
-	SF-22MM36	22	89	34.9	34.9	14.3
24MM36	SF-24MM36	24	89	38.1	38.1	15.9

5/8" SQ. DR. UNIV. ADAPTERS

1/2" TO 5/8" MALE SQUARE



Part Number	Female Square IN.	Male Square IN.	Type of Lock	Overall Length IN.	Overall Length MM.	Largest Dia. IN.	Largest Dia. MM.
MF-62	5/8	5/8	Pin	3 1/4	83	1 1/4	32
MF-62B	5/8	5/8	Ball	3 1/4	83	1 1/4	32
MF-51	5/8	1/2	Pin	3 5/16	84	1 1/4	32

5/8" SQ. DR. EXT.

1 7/8" TO 12"



Part Number	Male Square IN.	Type of Lock	Overall Length IN.	Overall Length MM.
EX-624	5/8	Pin	1 7/8	48
EX-624-B	5/8	Ball	1 7/8	48
EX-627-3	5/8	Pin	2	76
EX-627-4	5/8	Pin	4	102
EX-627-6	5/8	Pin	6	152
EX-627-8	5/8	Pin	8	203
EX-627-10	5/8	Pin	10	254
EX-627-12	5/8	Pin	12	305

5/8" SQ. DR. ADAPTERS

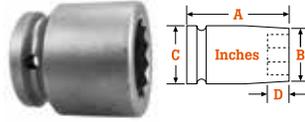
1/2" TO 3/4" MALE SQUARE



Part Number	Female Square IN.	Male Square IN.	Type of Lock	Overall Length IN.	Overall Length MM.
EX-505	5/8	1/2	Pin	1 7/8	48
EX-505-B	5/8	1/2	Ball	1 7/8	48
EX-509-3	5/8	1/2	Pin	3	76
EX-509-4	5/8	1/2	Pin	4	102
EX-509-5	5/8	1/2	Pin	5	127
EX-509-6	5/8	1/2	Pin	6	152
EX-509-10	5/8	1/2	Pin	10	254
EX-509-12	5/8	1/2	Pin	12	305
EX-752	5/8	3/4	7/32 Drill Hole	1 7/8	48
EX-752-B	5/8	3/4	Ball	1 7/8	48

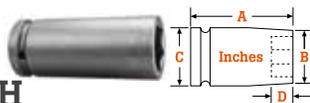
3/4" SQUARE DRIVE SOCKETS, SAE

6 POINT & DOUBLE HEX, STANDARD LENGTH



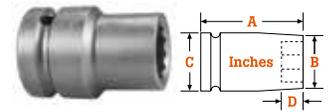
Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
7120	7120-D	5/8	2	11/16	11/2	7/16
7122	7122-D	11/16	2	11/8	11/2	7/16
7124	7124-D	3/4	2	11/4	11/2	15/32
7128	7128-D	7/8	2	11/2	11/2	9/16
7130	7130-D	15/16	2	11/2	11/2	5/8
7132	7132-D	1	2	15/8	15/8	5/8
7134	7134-D	11/16	2	13/4	13/4	11/16
7136	7136-D	11/8	2 1/8	13/4	13/4	3/4
7140	7140-D	11/4	2 1/8	2	13/4	13/16
7142	7142-D	15/16	2 1/8	2	13/4	13/16
7144	-	13/8	2 1/8	2 1/8	2 1/8	13/16
7146	-	17/16	2 1/4	2 1/4	2 1/8	15/16
7148	7148-D	1 1/2	2 1/4	2 1/4	2 1/8	1
7152	7152-D	15/8	2 1/4	2 1/2	2 1/8	1 1/8
7154	7154-D	1 11/16	2 1/4	2 1/2	2 1/8	1 1/8
7156	-	1 3/4	2 1/4	2 5/8	2 1/8	1 1/8
7158	-	1 13/16	2 1/4	2 3/4	2 1/8	1 1/4
7160	7160-D	1 7/8	2 1/4	2 3/4	2 1/8	1-1/4
7164	7164-D	2	2 3/8	2 7/8	2 1/8	1-3/8
7168	-	2 1/8	2 3/8	3 1/8	2 1/8	1 3/8
7170	7170-D	2 3/16	2 1/2	3 1/8	2 1/8	1 1/2
7172	7172-D	2 1/4	2 1/2	3 1/4	2 1/8	1 1/2
7176	-	2 3/8	2 5/8	3 1/2	2 1/8	1 5/8
7180	7180-D	2 1/2	2 5/8	3 1/2	2 1/8	1 5/8

6 POINT & DOUBLE HEX, THIN WALL, EXTRA LONG LENGTH



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
7524	-	3/4	4	11/8	13/8	15/32
7528	-	7/8	4	13/8	13/8	9/16
7530	7530-D	15/16	4	13/8	13/8	5/8
7536	7536-D	11/8	4	15/8	15/8	3/4
7540	-	1 1/4	4	13/4	13/4	13/16
7542	-	1 5/16	4	1 7/8	1 3/4	13/16
7548	-	1 1/2	4	2 1/8	2 1/8	1
7552	-	1 5/8	4	2 1/4	2 1/8	1 1/8
7556	-	1 3/4	4	2 1/2	2 1/8	1 1/8

6 POINT & DOUBLE HEX, THIN WALL STANDARD LENGTH



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
7424	7424-D	3/4	2	11/8	13/8	15/32
7426	-	13/16	2	11/4	13/8	17/32
7428	7428-D	7/8	2	15/16	13/8	9/16
7430	7430-D	15/16	2	13/8	13/8	5/8
7432	-	1	2	17/16	17/16	5/8
7434	-	1 1/16	2	11/2	11/2	11/16
7436	-	1 1/8	2 1/8	15/8	15/8	3/4
7438	-	1 3/16	2 1/8	15/8	15/8	3/4
7442	7442-D	1 5/16	2 1/8	1 7/8	1 3/4	13/16
7446	-	1 7/16	2 1/4	2	1 3/4	15/16
7448	-	1 1/2	2 1/4	2 1/8	2 1/8	1
7454	-	1 11/16	2 1/4	2 3/8	2 1/8	1 1/8
7456	-	1 3/4	2 1/4	2 7/16	2 1/8	1 1/8

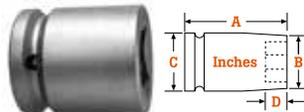
6 POINT & DOUBLE HEX, EXTRA LONG LENGTH



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
7324SKT	7324-D	3/4	4	1 1/4	1 1/2	15/32
7328	-	7/8	4	1 7/16	1 1/2	9/16
7330	7330-D	15/16	4	1 1/2	1 1/2	5/8
7332	7332-D	1	4	1 1/2	1 1/2	5/8
7334	-	1 1/16	4	1 5/8	1 5/8	11/16
7336	7336-D	1 1/8	4	1 3/4	1 3/4	3/4
7340	-	1 1/4	4	1 7/8	1 3/4	13/16
7342	-	1 5/16	4	2	1 3/4	13/16
7346	-	1 7/16	4	2 1/8	2 1/8	15/16
7348	-	1 1/2	4	2 1/4	2 1/8	1
7352	-	1 5/8	4	2 1/2	2 1/8	1 1/8
7358	-	1 13/16	4	2 3/4	2 1/8 in	1 1/4
7360	-	1 7/8	4	2 3/4	2 1/8	1 1/4
7364	-	2	4 1/8	2 7/8	2 1/8	1 3/8
7372	-	2 1/4	4 1/4	3 1/4	2 1/8	1 1/2

3/4" SQUARE DRIVE SOCKETS FOR SAE SQUARE NUTS

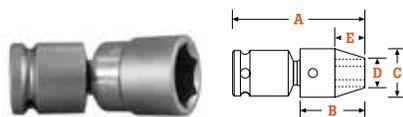
SINGLE SQUARE & DOUBLE SQUARE, STANDARD LENGTH



Part No. Single Square	Part No. Double Square	Square Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
7624	-	3/4	2	1 1/2	1 1/2	15/32
7628	-	7/8	2	1 3/4	1 3/4	5/8
7630	-	15/16	2 1/8	1 7/8	1 3/4	5/8
7632	-	1	2 1/8	2	1 3/4	5/8
7636	-	1 1/8	2 1/8	2 1/8	2 1/8	3/4
-	7836-D	1 1/8	4	2 1/8	2 1/8	3/4

3/4" SQUARE DRIVE UNIVERSAL WRENCHES, SAE

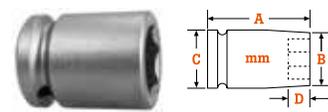
6 POINT



Part No. 6 Pt.	Hex Opening IN.	Overall Length (A) IN.	Socket Length (B) IN.	Socket Dia. (C) IN.	Nose End Dia. (D) IN.	Clearance Depth (E) IN.
SA-535	15/16	3 25/32	1 3/4	1 1/2	1 3/8	29/32
SA-537	1 1/16	3 29/32	1 7/8	1 1/2	1 5/8	1 1/32
SA-538	1 1/8	3 29/32	1 7/8	1 1/2	1 5/8	1 1/32
SA-601	15/16	4 1/32	1 15/16	1 3/4	1 1/2	29/32
SA-603	1 1/16	4 3/32	2	1 3/4	1 5/8	31/32
SA-604	1 1/8	4 5/32	2 1/16	1 3/4	1 3/4	1 1/32
SA-606	1 1/4	4 7/32	2 1/8	1 3/4	1 7/8	1 3/32
SA-607	1 5/16	4 7/32	2 1/8	1 3/4	1 7/8	1 3/32
SA-609	1 7/16	4 11/32	2 1/4	1 3/4	2 1/8	1 5/32
SA-610	1 1/2	4 11/32	2 1/4	1 3/4	2 1/4	1 5/32
SA-712	1 5/8	4 11/32	2 3/8	2	2 3/8	1 3/16
SA-715	1 13/16	4 11/32	2 3/8	2	2 5/8	1 3/16
SA-716	1 7/8	4 11/32	2 3/8	2	2 5/8	1 3/16
SA-718	2	4 15/32	2 1/2	2	2 7/8	1 5/16

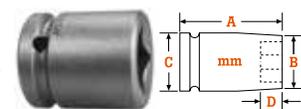
3/4" SQ. DR. SOCKETS, METRIC

6 POINT, STANDARD LENGTH



Part No. 6 Point	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
17MM17	17	51	31.8	38.1	11.1
18MM17	18	51	28.6	38.1	11.1
19MM17	19	51	31.8	38.1	11.9
20MM17	20	51	33.3	38.1	11.9
21MM17	21	51	34.9	38.1	13.5
22MM17	22	51	38.1	38.1	14.3
22MM47	22	51	33.3	34.9	14.3
24MM17	24	51	38.1	38.1	15.9
24MM47	24	51	34.9	34.9	15.9
26mm17	26	51	41.3	41.3	15.9
27MM17	27	51	44.4	44.4	17.5
27MM47	27	51	38.1	38.1	17.5
29MM17	29	54	47.6	44.4	19.1
30MM17	30	54	47.6	44.4	19.1
30MM47	30	54	41.3	41.3	19.1
32MM17	32	54	50.8	44.4	20.6
32MM47	32	54	44.4	44.4	20.6
33MM17	33	54	50.8	44.4	20.6
36MM17	36	57	57.1	54.0	23.8
37MM17	37	57	57.1	54.0	23.8
41MM17	41	57	63.5	54.0	31.8
46MM17	46	57	69.9	54.0	31.8

6 POINT & SURFACE DRIVE, STANDARD & LONG LENGTH



Part No. Surface Drive	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
SF-15MM17	15	51	23.6	38.1	11.1
VGSF-19-15MM	15	51	24.0	38.1	11.9
SF-16MM17	16	51	27	38.1	11.1
SF-17MM17	17	51	28.6	38.1	11.1
SF-18MM17	18	51	28.6	38.1	11.1
SF-18MM47	18	51	23.8	34.9	11.9
SF-18MM37	18	102	28.6	38.1	11.1
SF-19MM17	19	51	31.8	38.1	11.9
SF-21MM17	21	51	34.9	38.1	13.5
SF-21MM37	21	102	34.9	38.1	13.5
SF-22MM37	22	102	36.6	38.1	14.3
SF-24MM17	24	51	38.1	38.1	15.9
SF-24MM37	24	102	38.1	38.1	15.9

3/4" SQ. DR. SOCKETS, METRIC

6 POINT, EXTRA LONG LENGTH



Part No. 6 Point	Hex Opening IN.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
21MM37	21	102	34.9	38.1	13.5
24MM37	24	102	38.1	38.1	15.9
25MM37	25	102	38.1	38.1	15.9
27MM37	27	102	41.3	41.3	17.5
28MM37	28	101.6	44.4	44.4	19.1
29MM37	29	101.6	44.4	44.4	19.1
30MM37	30	101.6	44.4	44.4	19.1
32MM37	32	101.6	47.6	44.4	20.6
33MM37	33	101.6	50.8	44.4	20.6
34MM37	34	101.6	54.0	54.0	20.6
36MM37	36	101.6	54.0	54.0	23.8
41MM37	41	101.6	63.5	54.0	28.6
VGSF-20-15MM	15	133.4	24.7	38.1	8.7

6 POINT, THIN WALL EXTRA LONG LENGTH



Part No. 6 Point	Hex Opening IN.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
21MM57	21	102	34.9	34.9	13.5
22MM57	22	102	34.9	34.9	14.3
24MM57	24	102	34.9	34.9	15.9
27MM57	27	101.6	38.1	38.1	17.5
30MM57	30	101.6	42.9	42.9	19.1

3/4" SQ. DR. EXTENSIONS

2 1/4" TO 15"



Part Number	Male Square IN.	Type of Lock	Overall Length IN. MM.
EX-753	3/4	7/32 Drill Hole	2 1/4 57
EX-753-B	3/4	Ball	2 1/4 57
EX-755-4	3/4	7/32 Drill Hole	4 102
EX-755-B-4	3/4	Ball	4 102
EX-755-6	3/4	7/32 Drill Hole	6 152
EX-755-B-6	3/4	Ball	6 152
EX-755-8	3/4	7/32 Drill Hole	8 203
EX-755-B-8	3/4	Ball	8 203
EX-755-10	3/4	7/32 Drill Hole	10 254
EX-755-12	3/4	7/32 Drill Hole	12 305
EX-755-B-12	3/4	Ball	12 305
EX-755-15	3/4	7/32 Drill Hole	15 381
EX-755-B-15	3/4	Ball	15 381

3/4" SQ. DR. ADAPTERS

1/2" TO 1" MALE SQUARE



Part Number	Female Square IN.	Male Square IN.	Type of Lock	Overall Length IN. MM.
EX-506	3/4	1/2	Pin	2 51
EX-506-B	3/4	1/2	Ball	2 51
EX-510-3	3/4	1/2	Pin	3 76
EX-510-B-3	3/4	1/2	Ball	3 76
EX-510-4	3/4	1/2	Pin	4 102
EX-510-B-4	3/4	1/2	Ball	4 102
EX-510-B-5	3/4	1/2	Ball	5 127
EX-510-6	3/4	1/2	Pin	6 152
EX-510-B-6	3/4	1/2	Ball	6 152
EX-510-8	3/4	1/2	Pin	8 203
EX-510-B-8	3/4	1/2	Ball	8 203
EX-625	3/4	5/8	Pin	2 51
EX-625-B	3/4	5/8	Ball	2 51
EX-628-3	3/4	5/8	Pin	3 76
EX-1000	3/4	1	9/32 Drill Hole	2 9/16 65
EX-1000-B	3/4	1	Ball	2 9/16 65

3/4" SQ. DR. UNIV. ADAPTERS

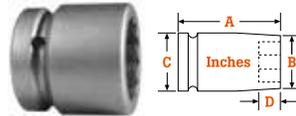
3/4" MALE SQUARE



Part Number	Female Square IN.	Male Square IN.	Type of Lock	Overall Length		Largest Dia.	
				IN.	MM.	IN.	MM.
MF-75	3/4	3/4	7/32 Drill Hole	4	102	11/2	38
MF-75B	3/4	3/4	Ball	4	102	11/2	38
MF-76	3/4	3/4	7/32 Drill Hole	4 3/8	111	13/4	45
MF-76B	3/4	3/4	Ball	4 3/8	111	13/4	45

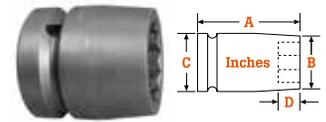
1" SQUARE DRIVE SOCKETS, SAE

6 POINT & DOUBLE HEX, STANDARD LENGTH



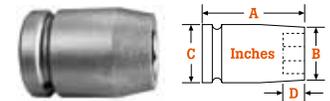
Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
-	8124-D	3/4	2 1/8	15/16	2	13/16
8126	-	13/16	2 1/8	13/8	2	13/16
-	8128-D	7/8	2 1/8	1 1/2	2	13/16
-	8130-D	15/16	2 1/8	1 1/2	2	13/16
-	8132-D	1	2 1/8	1 5/8	2	13/16
-	8134-D	1 1/16	2 1/8	1 11/16	2	13/16
-	8136-D	1 1/8	2 1/8	1 3/4	2	13/16
8138	8138-D	1 3/16	2 1/8	2 1/8	2	13/16
-	8140-D	1 1/4	2 1/8	2 1/8	2 1/8	13/16
8142	8142-D	1 5/16	2 1/8	2 1/8	2 1/8	13/16
-	8144-D	1 3/8	2 1/8	2 1/8	2 1/8	13/16
-	8146-D	1 7/16	2 1/4	2 1/4	2 1/8	15/16
8148	8148-D	1 1/2	2 1/4	2 1/4	2 1/8	15/16
-	8150-D	1 9/16	2 1/4	2 3/8	2 1/8	15/16
8152	-	1 5/8	2 3/8	2 1/2	2 1/8	15/16
8160	-	1 7/8	2 1/2	2 3/4	2 5/8	1 1/16
8162	8162-D	1 15/16	2 1/2	2 7/8	2 5/8	1 1/16
8170	-	2 3/16	2 3/4	3 1/4	3 1/4	1 5/16
8172	-	2 1/4	2 3/4	3 1/4	3 1/4	1 5/16
8174	-	2 5/16	2 3/4	3 3/8	3 1/4	1 3/8
8176	-	2 3/8	2 7/8	3 1/2	3 1/4	1 3/8
8180	-	2 1/2	2 7/8	3 3/4	3 1/4	1 3/8
8186	-	2 11/16	3	4	3 1/4	1 1/2
8188	-	2 3/4	3 1/8	4	3 1/4	1 5/8
8190	-	2 13/16	3 1/8	4	3 1/4	1 5/8

6 POINT & DOUBLE HEX, THIN WALL STANDARD LENGTH



Part No. 6 Point	Part No. Double Hex	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
-	8430-D	15/16	2 1/8	1 7/16	1 7/8	13/16
8432	8432-D	1	2 1/8	1 1/2	1 7/8	13/16
8434	-	1 1/16	2 1/8	1 9/16	1 7/8	13/16
8436	-	1 1/8	2 1/8	1 5/8	1 7/8	13/16
8440	8440-D	1 1/4	2 1/8	1 13/16	2	13/16
8442	8442-D	1 5/16	2 1/8	1 7/8	2	13/16
-	8444-D	1 3/8	2 1/8	1 15/16	2	13/16
8448	8448-D	1 1/2	2 1/4	2 1/8	2 1/8	15/16
8454	-	1 11/16	2 3/8	2 3/8	2 1/8	15/16
8456	-	1 3/4	2 3/8	2 7/16	2 1/8	1 1/16
8458	-	1 13/16	2 1/2	2 9/16	2 1/8	1 1/16
8460	-	1 7/8	2 1/2	2 5/8	2 5/8	1 1/16
8464	-	2	2 5/8	2 3/4	2 5/8	1 3/16
8472	-	2 1/4	2 3/4	3 1/8	2 5/8	1 5/16
8480	-	2 1/2	2 7/8	3 3/8	3 1/4	1 7/16

6 POINT, LONG LENGTH



Part No. 6 Point	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (A) IN.	Opening Depth (D) IN.
8228	7/8	3	1 7/16	2 1/8	9/16
8236	1 1/8	3	1 3/4	2 1/8	3/4
8240	1 1/4	3	2 1/8	2 1/8	13/16

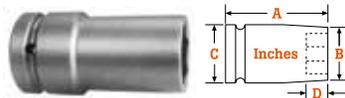
1" SQUARE DRIVE SOCKETS, SAE

6 POINT, EXTRA LONG LENGTH



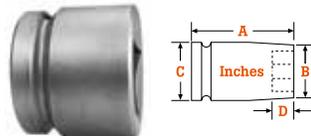
Part No. 6 Point	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
8324	3/4	4 1/4	1 1/4	2 1/8	15/32
8326	13/16	4 1/4	1 3/8	2 1/8	17/32
8332	1	4 1/4	1 9/16	2 1/8	5/8
8336	1 1/8	4 1/4	1 3/4	2 1/8	3/4
8338	1 3/16	4 1/4	1 7/8	2 1/8	3/4
8340	1 1/4	4 1/4	2 1/8	2 1/8	13/16
8342	1 5/16	4 1/4	2 1/8	2 1/8	13/16
8346	1 7/16	4 1/4	2 1/4	2 1/8	15/16
8356	1-3/4	4 1/4	2 5/8	2 5/8	1 1/8
8360	1 7/8	4 1/4	2 3/4	2 5/8	1 1/4
8364	2	4 3/8	2 7/8	2 5/8	1 3/8
8370	2 3/16	4 1/2	3 1/8	2 5/8	1 1/2
8378	2 7/16	4 1/2	3 1/2	3 1/4	1 5/8
8380	2 1/2	4 1/2	3 1/2	3 1/4	1 5/8
8382	2 9/16	4 1/2	3 3/4	3 1/4	1 3/4
8384	2 5/8	4 1/2	3 3/4	3 1/4	1 3/4

6 POINT, THIN WALL, EXTRA LONG LENGTH



Part No. 6 Point	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
8530	15/16	4 1/4	1 1/2	2 1/8	5/8
8536	1 1/8	4 1/4	1 5/8	2 1/8	3/4
8540	1 1/4	4 1/4	1 13/16	2 1/8	13/16
8542	1 5/16	4 1/4	1 7/8	2 1/8	13/16

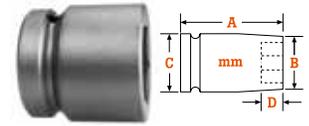
SINGLE SQUARE & DOUBLE SQUARE, STANDARD LENGTH



Part Single Square	Part No. Double Square	Hex Opening IN.	Overall Length (A) IN.	Nose End Dia. (B) IN.	Drive End Dia. (C) IN.	Opening Depth (D) IN.
8624	-	3/4	2 1/8	1 5/8	2	13/16
8632	-	1	2 1/8	2 1/8	2 1/8	13/16
8634	-	1 1/16	2 1/8	2 1/8	2 1/8	13/16
8636	-	1 1/8	2 1/4	2 1/4	2 1/8	15/16
8638	8638-D	1 3/16	2 1/4	2 1/4	2 1/8	15/16
8640	8640-D	1 1/4	2 1/4	2 3/8	2 1/8	15/16
8644	-	1 3/8	2 5/16	2 5/8	2 5/8	1
-	8646-D	1 7/16	2 3/8	2 5/8	2 5/8	1
8648	-	1 1/2	2 3/8	2 3/4	2 5/8	1 1/16
-	8652-D	1 5/8	2 1/2	2 7/8	2 5/8	1 1/16

1" SQUARE DRIVE SOCKETS, METRIC

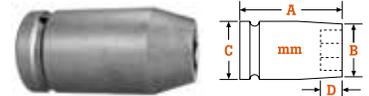
6 POINT, STANDARD LENGTH



Part No. 6 Point	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
21MM18	21	54	34.9	50.8	13.5
24MM18	24	54	38.1	50.8	20.6
27MM18	27	54	42.9	50.8	20.6
29mm18	29	54	47.6	50.8	20.6
30MM18	30	54	50.8	50.8	20.6
30MM48*	30	54	44.4	54.0	20.6
32MM18	32	54	54.0	54.0	20.6
34mm18	34	54	54.0	54.0	20.6
36MM18	36	57	57.1	54.0	23.9
41MM18	41	60	63.5	54.0	23.9
42MM18	42	60	63.5	54.0	23.9
46MM18	46	64	69.8	66.7	26.9
50MM18	50	66	76.2	66.7	30.2

*Thin wall

6 POINT, LONG LENGTH



Part No. 6 Point	Hex Opening MM.	Overall Length (A) MM.	Nose End Dia. (B) MM.	Drive End Dia. (C) MM.	Opening Depth (D) MM.
24MM38	24	108	38.1	54.0	15.9
SF-24MM38	24	108	38.1	54.0	15.9
27MM38	27	108	41.3	54.0	17.5
28MM38	28	108	44.4	54.0	19.1
33MM38	33	108	54.0	54.0	20.6
36MM38	36	108	54.0	54.0	23.8
37MM38	37	108	57.1	54.0	23.8
46MM38	46	108	69.8	66.7	31.8
50MM38	50	111	73.0	66.7	34.9

1" SQ. DR. EXTENSIONS

2 13/16" TO 15" LENGTH



Part Number	Male Square IN.	Type of Lock	Overall Length	
			IN.	MM.
EX-1001	1	9/32 Drill Hole	2 13/16	71
EX-1001-B	1	Ball	2 13/16	71
EX-1003-4	1	9/32 Drill Hole	4	102
EX-1003-B-4	1	Ball	4	102
EX-1003-6	1	9/32 Drill Hole	6	152
EX-1003-B-6	1	Ball	6	152
EX-1003-8	1	9/32 Drill Hole	8	203
EX-1003-B-8	1	Ball	8	203
EX-1003-10	1	9/32 Drill Hole	10	254
EX-1003-B-10	1	Ball	10	254
EX-1003-12	1	9/32 Drill Hole	12	305
EX-1003-B-12	1	Ball	12	305
EX-1003-15	1	9/32 Drill Hole	15	381
EX-1003-B-15	1	Ball	15	381

1" SQ. DR. ADAPTERS

3/4" TO 1 1/2" MALE SQUARE



Part Number	Female Square IN.	Male Square IN.	Type of Lock	Overall Length	
				IN.	MM.
EX-754	1	3/4	7/32 Drill Hole	2 13/16	71
EX-754-B	1	3/4	Ball	2 13/16	71
EX-756-4	1	3/4	7/32 Drill Hole	4	102
EX-756-6	1	3/4	7/32 Drill Hole	6	152
EX-756-8	1	3/4	7/32 Drill Hole	8	203
EX-756-B-8	1	3/4	Ball	8	203
EX-1101	1	1 1/2	3/8 Drill Hole	3 9/16	91

1" SQ. DR. UNIVERSAL ADAPTERS

3/4" TO 1" MALE SQUARE



Part Number	Female Square IN.	Male Square IN.	Type of Lock	Overall Length		Largest Dia.	
				IN.	MM.	IN.	MM.
MF-77-B	1	3/4	Ball	4 3/4	121	2	51
MF-82-B	1	1	Ball	5	127	2	51

1 1/2" SQ. DR. SOCKETS, SAE

6 POINT, STANDARD LENGTH



Part No. 6 Point	Hex Opening IN.	Overall Length MM.	Nose End Dia. MM.	Drive End Dia. MM.	Opening Depth MM.
9172	2 1/4	3 1/4	3 3/8	3 1/4	1 1/2

1 1/2" SQ. DR. ADAPTERS

1" MALE SQUARE



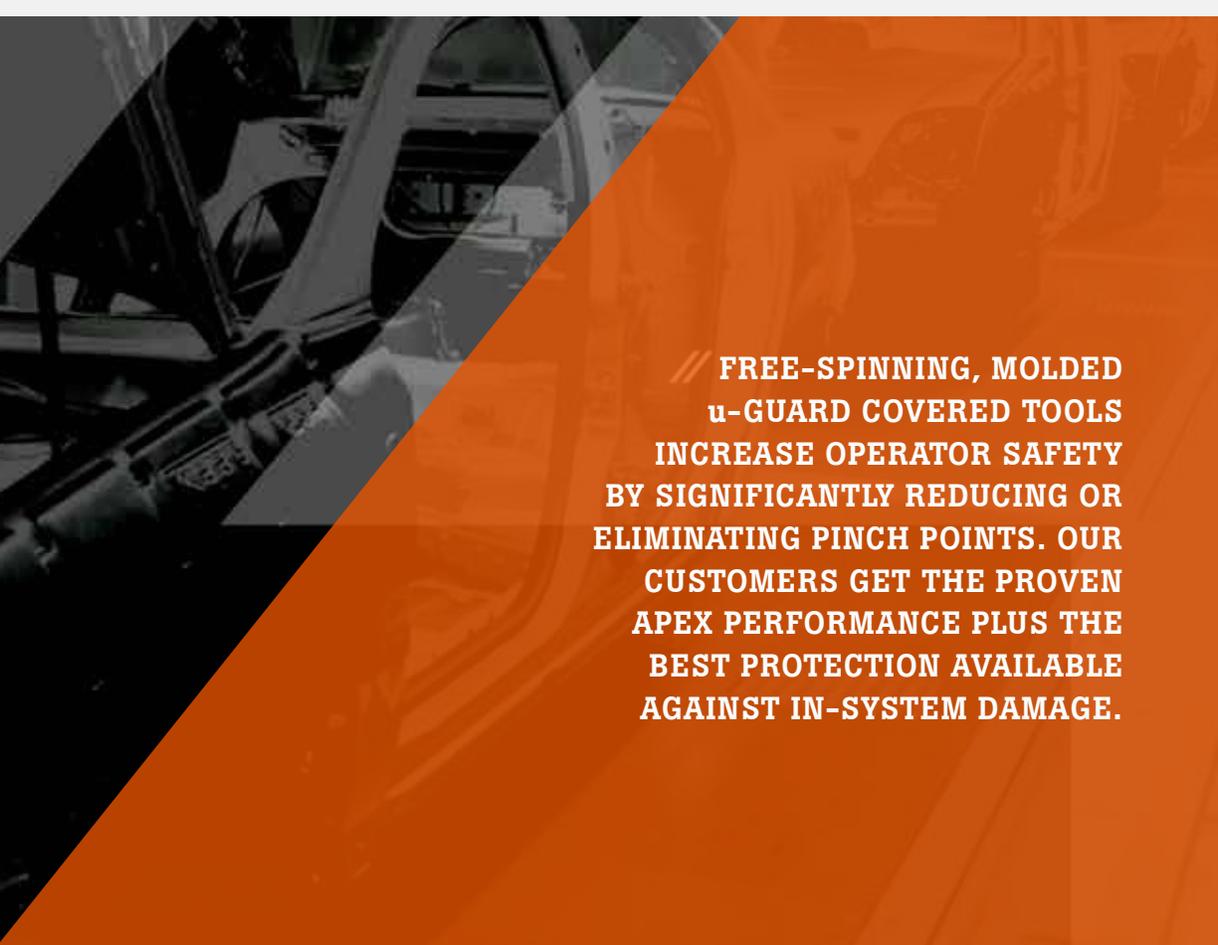
Part Number	Female Square IN.	Male Square IN.	Type of Lock	Overall Length	
				IN.	MM.
EX-1005	1 1/2	1	9/32 Drill Hole	3 15/16	100
EX-1005-B	1 1/2	1	Ball	3 15/16	100



APEX  **U-GUARD**



APEX U-GUARD PREMIUM SAFETY AND ANTI-MAR COVERED TOOLS



**// FREE-SPINNING, MOLDED
u-GUARD COVERED TOOLS
INCREASE OPERATOR SAFETY
BY SIGNIFICANTLY REDUCING OR
ELIMINATING PINCH POINTS. OUR
CUSTOMERS GET THE PROVEN
APEX PERFORMANCE PLUS THE
BEST PROTECTION AVAILABLE
AGAINST IN-SYSTEM DAMAGE.**

APEX | U-GUARD™

THE GLOBAL LEADER IN ENHANCING OPERATOR SAFETY ON THE ASSEMBLY LINE

APEX u-GUARD™ free-spinning covered drive tools increase operator safety by significantly reducing or eliminating pinch points when operators are wearing gloves.

APEX u-GUARD provides a protective barrier between genuine APEX fastener tools and your finely finished workpiece, thereby delivering the proven APEX performance plus the best protection available against in-system damage. The free-spinning design provides maximum protection for polished and highly sensitive surfaces.

APEX has solutions for all aspects of safety on an assembly line when it comes to fastener drive tools. In addition to our line of Covered Bits, Bit Holders, Sockets, Extensions, and Universal Wrenches, we also offer u-GUARD Gap Covers that will eliminate the gap between a socket and an extension or between the right-angle power tool and a socket / extension.

THE APEX u-GUARD LINE OF COVERED DRIVE TOOLS HAS EVOLVED INTO THE TOOL OF CHOICE FOR ENHANCING OPERATOR SAFETY IN ALMOST ALL LEADING ASSEMBLY PLANTS.

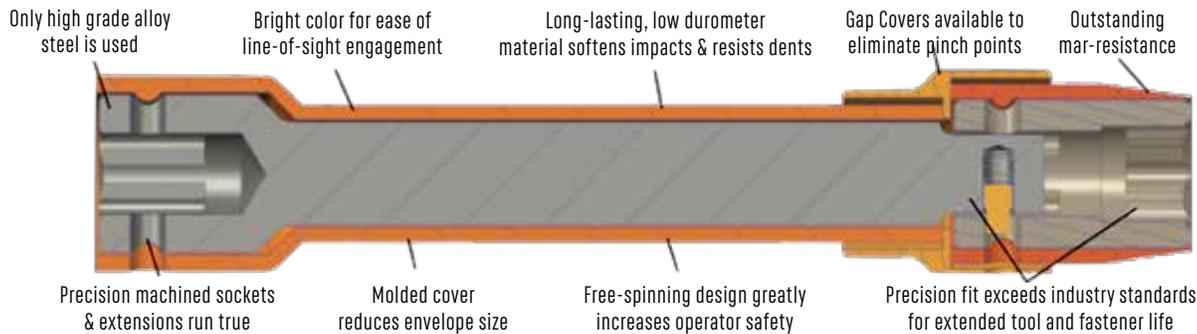


APEX u-GUARD gap cover enhances safety by covering the gap between a socket and an extension

APEX u-GUARD ADVANTAGE

- INCREASED OPERATOR SAFETY
- REDUCED IN-SYSTEM DAMAGE AND MARRING
- ENHANCED PLANT PRODUCTIVITY
- FREE-SPINNING DESIGN FOR IMPROVED ERGONOMICS AND SAFETY
- SUPERIOR DURABILITY LEADING TO SIGNIFICANTLY LOWER COST OF OWNERSHIP

THINK SAFETY THINK APEX | u-GUARD™



APEX u-GUARD UGS MOLDED COVERED TOOLS

Over the past decade, the APEX u-GUARD UGS Series of molded covered tools have been rapidly adopted by leading aerospace, appliance, automotive and heavy equipment assembly plants around the world. These tools allow the drive tool to spin freely inside of the covers, significantly reducing or eliminating contact from the rotating tool during a fastening operation. In addition to improving operator safety, these tools help minimize in-system damage and marring caused during fastening.



APEX u-GUARD UGH MACHINED COVERED TOOLS

The APEX u-GUARD UGH Series of high durometer covered tools are machined for tight tolerances. Made from a high performance engineered thermoplastic material, these free-spinning covered tools offer a thin protective cover for tight clearance applications. u-GUARD UGH tools can be configured to suit a unique customer application where a standard u-GUARD UGS tool may not be available.

THE COVER STORY: u-GUARD UGS

- **LOW DUROMETER, THERMOPLASTIC URETHANE (TPU ELASTOMER) MATERIAL THAT RESISTS DENTS DURING INCIDENTAL SIDE IMPACTS.**
- **ABSORBS SIDE IMPACTS AND DOES NOT PRODUCE RAISED BURRS WHEN IMPACTED.**
- **MOLDED TO THE TOOL FOR REDUCED ENVELOPE DIMENSIONS YET STILL ABLE TO EXHIBIT "FREE-SPINNING" CAPABILITY FOR IMPROVED OPERATOR SAFETY AND ERGONOMICS.**
- **COVER IS NON-REMOVABLE TO PREVENT UNWANTED TAMPERING ON THE LINE.**
- **LOW SUSTAINED COEFFICIENT OF FRICTION BETWEEN THE COVER AND THE TOOL PRODUCES MINIMAL LOSS OF TOOL EFFICIENCY.**
- **SIGNATURE ORANGE COLOR MAKES FASTENER CONTACT EASIER AND STATION MONITORING SMOOTHER.**
- **PART NUMBERS ARE CLEARLY MARKED FOR EASE OF IDENTIFICATION.**

ONLY APEX HAS THE ENGINEERING CAPABILITY, MANUFACTURING PROWESS, AND SUPPLY NETWORK TO MEET THE GLOBAL REQUIREMENTS OF TODAY'S MARKET PLACE.

LEADING INNOVATOR IN FASTENER DRIVE TOOLS

SELECT CASE STUDIES

BODY ASSEMBLY

Problem: Customer expressed safety concerns due to snagging of operators' gloves while guiding a Tap.

APEX Solution: Developed a covered tap holder that includes a spring-loaded non-marring sleeve which covers all of the Tap except the tip.

Benefit to Customer:

- Increased operator safety since the cover prevents gloves from getting trapped
- Improved plant productivity due to significant reduction in safety incidents



INTERIOR COMPONENT ASSEMBLY

Problem: Customer needed a quick release chuck with a free spinning cover to improve operator safety and reduce marring.

APEX Solution: Developed a free-spinning, covered driver that allows the user to activate the quick-release feature

Benefit to Customer:

- Customer can change-out power drive bits quickly
- Anti-mar cover replaces typical knurled surface without compromising functionality
- Free-spinning design significantly improves operator safety



FINAL ASSEMBLY - VARIOUS APPLICATIONS

Problem: A standard Universal Wrench with a 30 degree angle failed to deliver the required torque. Customer also required a covered tool for reduced marring.

APEX Solution: Developed a covered Universal Wrench that provides a 20 degree angle

Benefit to Customer:

- Custom tool is providing the required torque
- Socket & shank are covered with a free-spinning orange cover enhancing safety and anti-mar protection



APEX u-GUARD SOCKET GAP COVERS

LEAVING NO SAFETY GAP ON THE ASSEMBLY LINE



Manufactured from engineered thermoplastic material, these covers significantly outlast the free-spinning tools that they are covering

APEX u-GUARD socket gap covers have been developed to further enhance plant and operator safety by helping minimize fastening tool related injuries on the assembly line. Starting with engineered thermoplastic material that combines low friction and wear resistance with high impact resistance to ensure a long lasting, high quality part, APEX u-GUARD socket gap covers are then machined for a form fitting profile which flows from the extension to the socket keeping the outer envelope size to a minimum while providing for maximum clearance in most applications.

APEX SOCKET/EXTENSION GAP COVERS

Drive Size	Part Number	Min. Internal Cover Dia. (Inch) (Socket Side)
1/4"	GC-A-0688	0.714
1/4"	GC-A-0750	0.776
1/4"	GC-A-0812	0.840
3/8"	GC-C-0812	0.832
3/8"	GC-C-0938	0.970
3/8"	GC-C-1000	1.028
3/8"	GC-C-1063	1.084
3/8"	GC-C-1125	1.146
3/8"	GC-C-1250	1.270
1/2"	GC-E-1125	1.150
1/2"	GC-E-1188	1.208
1/2"	GC-E-1250	1.270
1/2"	GC-E-1375	1.395
1/2"	GC-E-1438	1.458



Gap Cover showing connection between the extension and socket.



Tool with Gap Cover connection

THE GLOBAL LEADER IN PROMOTING SAFETY AND ANTI-MAR DRIVE TOOLS

WHY APEX u-GUARD SOCKET GAP COVERS?

Operator safety when performing fastening operations is becoming a growing concern in assembly plants such as large automotive plants. Manufacturing facilities have concerns about operators' gloves or hair potentially getting stuck in the gap between the socket and extension. Such risk can now be significantly reduced by using APEX u-GUARD Socket Gap Covers.



FEATURES AND BENEFITS:

- Increased operator safety by removing the pinch point between the covered sockets and extensions
- Improve productivity by reducing lost time to injuries and recordable incidents
- Superior durability - generally outlast the free-spinning tools that they are covering
- Easy to install via a pin-lock mechanism
- Robust, free-spinning design
- Versatile - one gap cover can be used for multiple socket/extension combinations

NEW! APEX RIGHT-ANGLE NUTRUNNER GAP COVERS



APEX has developed covers to bridge the gap between the right-angle power tool and the socket (or extension) for most right angle nutrunner. APEX is currently offering Right-Angle Nutrunner Gap Covers as a custom solution. To obtain a quick quote, please contact us with the options below:

(it's required to have the right angle nutsetter brand and model number to receive a sales quote)



UGS SERIES SOCKETS

1/4" SQUARE DRIVE SOCKETS, SAE, NON-MAGNETIC

Part Number	Fastener End Size IN.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-1104	1/8	Hex	0.91	23.1
UG-1105	5/32	Hex	0.91	23.1
UG-1107	7/32	Hex	0.91	23.1
UG-1107-D	7/32	Double Hex	0.91	23.1
UG-1E08	1/4	Hex	0.88	22.4
UG-1108	1/4	Hex	0.91	23.1
UG-1108-D	1/4	Double Hex	0.91	23.1
UG-FL-1108	1/4	Hex	0.91	23.1
UG-X-1108	1/4	Hex	0.91	23.1
UG-1608	1/4	Square	1.03	26.2
UG-1608-D	1/4	Double Sq.	1.03	26.2
UG-1208	1/4	Hex	1.8	45.7
UG-1P09	9/32	Hex	0.91	23.1
UG-1609-D	9/32	Double Sq.	1.03	26.2
UG-1209	9/32	Hex	1.78	45.2
UG-1110	5/16	Hex	1.03	26.2
UG-1110-D	5/16	Double Hex	1.03	26.2
UG-1610	5/16	Square	1.03	26.2
UG-1610-D	5/16	Double Sq.	1.03	26.2
UG-FL-1110	5/16	Hex	1.03	26.2
UG-1210-D	5/16	Double Hex	1.75	44.5
UG-1210	5/16	Hex	1.78	45.2
UG-FL-1210	5/16	Hex	1.78	45.2
UG-X-1110	5/16	Hex	3.53	89.7
UG-ZA-110	5/16	Hex	3.53	89.7
UG-1111	11/32	Hex	1.03	26.2
UG-1111-D	11/32	Double Hex	1.03	26.2
UG-1P11	11/32	Hex	1.03	26.2
UG-1211	11/32	Hex	1.78	45.2
UG-FL-1211	11/32	Hex	1.78	45.2
UG-1112	3/8	Hex	1.03	26.2
UG-1112-D	3/8	Double Hex	1.03	26.2
UG-1P12	3/8	Hex	1.03	26.2
UG-FL-1112	3/8	Hex	1.03	26.2
UG-SF-1112	3/8	Hex	1.03	26.2
UG-1212	3/8	Hex	1.78	45.2
UG-1212-D	3/8	Double Hex	1.78	45.2
UG-FL-1212	3/8	Hex	1.78	45.2
UG-SF-1212	3/8	Hex	1.78	45.2
UG-1113	13/32	Hex	1.03	26.2
UG-1213	13/32	Hex	1.78	45.2
UG-1114	7/16	Hex	1.03	26.2
UG-1114-D	7/16	Double Hex	1.03	26.2
UG-FL-1114	7/16	Hex	1.03	26.2
UG-SF-1114	7/16	Hex	1.03	26.2
UG-FL-1214	7/16	Hex	1.78	45.2
UG-1116	1/2	Hex	1.03	26.2
UG-1116-D	1/2	Double Hex	1.03	26.2
UG-1P16	1/2	Hex	1.03	26.2
UG-FL-1116	1/2	Hex	1.03	26.2
UG-SF-1116	1/2	Hex	1.03	26.2
UG-1120	5/8	Hex	1.03	26.2
UG-TXA-908	E8	Torx	3.53	89.7
UG-TX-1110	E10	Torx	1.03	26.2

1/4" SQUARE DRIVE SOCKETS, SAE, MAGNETIC

Part Number	Fastener End Size IN.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-M-1105	5/32	Hex	0.91	23.1
UG-M-1107	7/32	Hex	0.91	23.1
UG-M1E07	7/32	Hex	0.91	23.1
UG-M1E08	1/4	Hex	0.88	22.4
UG-M-1108-E	1/4	Hex	0.91	23.1
UG-M1E08-LN	1/4	Hex	0.91	23.1
UG-M1P08-LN	1/4	Hex	0.91	23.1
UG-MX-1108	1/4	Hex	0.91	23.1
UG-MX-1108-E	1/4	Hex	0.91	23.1
UG-SM-1108	1/4	Hex	0.91	23.1
UG-MB-1208	1/4	Hex	1.80	45.7
UG-M1P09	9/32	Hex	0.91	23.1
UG-MB-1209	9/32	Hex	1.78	45.2
UG-M-1110	5/16	Hex	1.03	26.2
UG-MX-1110	5/16	Hex	1.03	26.2
UG-M-1210	5/16	Hex	1.78	45.2
UG-MB-1210	5/16	Hex	1.78	45.2
UG-SM-1210	5/16	Hex	1.78	45.2
UG-MB-1210-D	5/16	Double Hex	1.78	45.2
UG-MZA-110	5/16	Hex	3.53	89.7
UG-M-1111	11/32	Hex	1.03	26.2
UG-M1E11	11/32	Hex	1.03	26.2
UG-M1P11	11/32	Hex	1.03	26.2
UG-MX-1111	11/32	Hex	1.03	26.2
UG-MB-1211	11/32	Hex	1.78	45.2
UG-SM-1211	11/32	Hex	1.78	45.2
UG-SM-1212	11/32	Hex	1.78	45.2
UG-MB-1212-D	11/32	Double Hex	1.78	45.2
UG-M-1112	3/8	Hex	1.03	26.2
UG-M1E12	3/8	Hex	1.03	26.2
UG-M1P12	3/8	Hex	1.03	26.2
UG-MX-1112	3/8	Hex	1.03	26.2
UG-MB-1212	3/8	Hex	1.78	45.2
UG-M-1114	7/16	Hex	1.03	26.2
UG-MX-1114	7/16	Hex	1.03	26.2
UG-SM-1114	7/16	Hex	1.03	26.2
UG-M-1114-D	7/16	Double Hex	1.03	26.2
UG-MB-1214	7/16	Hex	1.78	45.2
UG-M-1116	1/2	Hex	1.03	26.2
UG-M1E16	1/2	Hex	1.03	26.2
UG-M1P16	1/2	Hex	1.03	26.2
UG-MTX-5114	E14	Torx	1.50	38.1

Note:

SF: Surface drive hex | FL: Fast lead hex

1/4" SQUARE DRIVE SOCKETS, METRIC, NON-MAGNETIC

Part Number	Fastener End Size IN.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-4MM11	4	Hex	0.91	23.1
UG-4MME1	4	Hex	0.91	23.1
UG-5MME1	5	Hex	0.91	23.1
UG-5MM11	5	Hex	0.91	23.1
UG-5.5MME1	5.5	Hex	0.91	23.1
UG-5.5MM11	5.5	Hex	0.91	23.1
UG-6MM11	6	Hex	0.91	23.1
UG-6MM11-D	6	Double Hex	0.91	23.1
UG-6MME1	6	Hex	0.91	23.1
UG-7MM11	7	Hex	0.91	23.1
UG-7MM11-D	7	Double Hex	0.91	23.1
UG-7MME1	7	Hex	0.91	23.1
UG-SF-7MM11	7	Hex	0.91	23.1
UG-7MM21	7	Hex	1.78	45.2
UG-SF-7MM21	7	Hex	1.78	45.2
UG-8MM11	8	Hex	1.03	26.2
UG-8MME1	8	Hex	1.03	26.2
UG-SF-8MM11	8	Hex	1.03	26.2
UG-8MM11-D	8	Double Hex	1.03	26.2
UG-FL-8MM11	8	Hex	1.03	26.2
UG-8MM21	8	Hex	1.78	45.2
UG-8MM21-D	8	Double Hex	1.78	45.2
UG-FL-8MM21	8	Hex	1.78	45.2
UG-SF-8MM21	8	Hex	1.78	45.2
UG-9MM11	9	Hex	1.03	26.2
UG-9MM11-D	9	Double Hex	1.03	26.2
UG-SF-9MM11	9	Hex	1.03	26.2
UG-9MM21	9	Hex	1.78	45.2
UG-9MM21-D	9	Double Hex	1.78	45.2
UG-10MM11	10	Hex	1.03	26.2
UG-10MM11-D	10	Double Hex	1.03	26.2
UG-10MME1	10	Hex	1.03	26.2
UG-OS-10MM11	10	Hex	1.03	26.2
UG-OS-10MM11-D	10	Double Hex	1.03	26.2
UG-SF-10MM11	10	Hex	1.03	26.2
UG-10MM21	10	Hex	1.78	45.2
UG-10MM21-D	10	Double Hex	1.78	45.2
UG-FL-10MM21	10	Hex	1.78	45.2
UG-SF-10MM21	10	Hex	1.78	45.2
UG-11MM11	11	Hex	1.03	26.2
UG-11MM11-D	11	Double Hex	1.03	26.2
UG-SF-11MM11	11	Hex	1.03	26.2
UG-11MM21	11	Hex	1.78	45.2
UG-12MM11	12	Hex	1.03	26.2
UG-SF-12MM11	12	Hex	1.03	26.2
UG-13MM11	13	Hex	1.03	26.2
UG-13MM11-D	13	Double Hex	1.03	26.2
UG-13MME1	13	Hex	1.03	26.2
UG-SF-13MM11	13	Hex	1.53	38.9
UG-15MM11	15	Hex	1.03	26.2
UG-16MM11	16	Hex	1.03	26.2

UGS SERIES SOCKETS

1/4" SQUARE DRIVE SOCKETS, METRIC, MAGNETIC

Part Number	Fastener End Size IN.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-M-5MM11	5	Hex	0.91	23.1
UG-M-5MME1	5	Hex	0.91	23.1
UG-M-5.5MM11	5.5	Hex	0.91	23.1
UG-M-5.5MME1	5.5	Hex	0.91	23.1
UG-M-6MM11	6	Hex	0.91	23.1
UG-M-6MME1	6	Hex	0.91	23.1
UG-MVA-104-7MM	7	Hex	0.88	22.4
UG-M-7MM11	7	Hex	0.91	23.1
UG-M-7MME1	7	Hex	0.91	23.1
UG-M-7MME1	7	Hex	0.91	23.1
UG-M-7MM21	7	Hex	1.78	45.2
UG-MB-7MM21	7	Hex	1.78	45.2
UG-SM-7MM21	7	Hex	1.78	45.2
UG-M-8MME1	8	Hex	1.03	26.2
UG-M-8MM11	8	Hex	1.03	26.2
UG-M-8MM11-D	8	Double Hex	1.03	26.2
UG-M-8MM21	8	Hex	1.78	45.2
UG-MB-8MM21	8	Hex	1.78	45.2
UG-SM-8MM21	8	Hex	1.78	45.2
UG-M-9MME1	9	Hex	1.03	26.2
UG-M-9MM11	9	Hex	1.03	26.2
UG-M-9MM21	9	Hex	1.78	45.2
UG-MB-9MM21	9	Hex	1.78	45.2
UG-SM-9MM21	9	Hex	1.78	45.2
UG-M-10MM11	10	Hex	1.03	26.2
UG-M-10MME1	10	Hex	1.03	26.2
UG-MSF-10MM11	10	Hex	1.03	26.2
UG-MSWM-10MME1	10	Hex	1.03	26.2
UG-OSM-10MM11	10	Hex	1.03	26.2
UG-MB-10MM21	10	Hex	1.78	45.2
UG-M-10MM21	10	Hex	1.78	45.2
UG-MB-SF-10MM21	10	Hex	1.78	45.2
UG-MSF-10MM21	10	Hex	1.78	45.2
UG-OSMB-10MM21	10	Hex	1.78	45.2
UG-SM-10MM21	10	Hex	1.78	45.2
UG-M-11MM11	11	Hex	1.03	26.2
UG-M-11MM21	11	Hex	1.78	45.2
UG-MB-11MM21	11	Hex	1.78	45.2
UG-SM-11MM21	11	Hex	1.78	45.2
UG-M-12MM11	12	Hex	1.03	26.2
UG-M-13MM11	13	Hex	1.03	26.2
UG-M-13MME1	13	Hex	1.03	26.2
UG-M-15MM11	15	Hex	1.03	26.2

3/8" SQUARE DRIVE SOCKETS, SAE, NON-MAGNETIC

Part Number	Fastener End Size IN.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-3108	1/4	Hex	1.28	32.5
UG-3108-D	1/4	Double Hex	1.28	32.5
UG-3109	9/32	Hex	1.28	32.5
UG-3110	5/16	Hex	1.25	31.8
UG-3110-D	5/16	Double Hex	1.28	32.5
UG-3210-D	5/16	Double Hex	2.03	51.6
UG-SF-3210	5/16	Hex	2.03	51.6
UG-3210	5/16	Hex	2.04	51.8
UG-3111	11/32	Hex	1.28	32.5
UG-3211	11/32	Hex	2.03	51.6
UG-3211-D	11/32	Double Hex	2.03	51.6
UG-3P12	3/8	Hex	1.28	32.5
UG-3112	3/8	Hex	1.28	32.5
UG-3412	3/8	Hex	1.53	38.9
UG-3412-D	3/8	Double Hex	1.53	38.9
UG-3612-D	3/8	Double Sq.	1.53	38.9
UG-FL-3412	3/8	Hex	1.53	38.9
UG-SF-3412	3/8	Hex	1.53	38.9
UG-3612	3/8	Square	1.54	39.1
UG-3212	3/8	Hex	2.03	51.6
UG-3212-D	3/8	Double Hex	2.03	51.6
UG-3614	7/16	Square	1.53	38.9
UG-3614-D	7/16	Double Sq.	1.53	38.9
UG-3214	7/16	Hex	2.03	51.6
UG-SF-3214	7/16	Hex	2.03	51.6
UG-3016	1/2	Hex	0.91	23.1
UG-FL-3016-D	1/2	Double Hex	0.91	23.1
UG-SF-3016	1/2	Hex	0.91	23.1
UG-SF-3016	1/2	Hex	0.91	23.1
UG-3416	1/2	Hex	1.53	38.9
UG-3416-D	1/2	Double Hex	1.53	38.9
UG-3616	1/2	Square	1.53	38.9
UG-3616-D	1/2	Double Sq.	1.53	38.9
UG-3P16	1/2	Hex	1.53	38.9
UG-FL-3116	1/2	Hex	1.53	38.9
UG-3116	1/2	Hex	1.53	38.9
UG-SF-3116	1/2	Hex	1.53	38.9
UG-SF-3416	1/2	Hex	1.53	38.9
UG-SF-3216	1/2	Hex	2.03	51.6
UG-3216	1/2	Hex	2.03	51.6
UG-3216-D	1/2	Double Hex	2.03	51.6
UG-3516	1/2	Hex	2.03	51.6
UG-3516-D	1/2	Double Hex	2.03	51.6
UG-FL-3216	1/2	Hex	2.03	51.6
UG-SF-3516	1/2	Hex	2.03	51.6
UG-3117	17/32	Hex	1.53	38.9
UG-3118	9/16	Hex	1.53	38.9
UG-3118-D	9/16	Double Hex	1.53	38.9

Part Number	Fastener End Size IN.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-3418	9/16	Hex	1.53	38.9
UG-3418-D	9/16	Double Hex	1.53	38.9
UG-3618	9/16	Square	1.53	38.9
UG-3618-D	9/16	Double Sq.	1.53	38.9
UG-FL-3118	9/16	Hex	1.53	38.9
UG-SF-3118	9/16	Hex	1.53	38.9
UG-SF-3418	9/16	Hex	1.53	38.9
UG-SW-343	9/16	Hex	1.53	38.9
UG-3218	9/16	Hex	2.03	51.6
UG-3218-D	9/16	Double Hex	2.03	51.6
UG-FL-3218	9/16	Hex	2.03	51.6
UG-SF-3218	9/16	Hex	2.03	51.6
UG-3318	9/16	Hex	3.53	89.7
UG-3318-D	9/16	Double Hex	3.53	89.7
UG-3119	19/32	Hex	1.53	38.9
UG-3020	5/8	Hex	1.03	26.2
UG-3020-D	5/8	Double Hex	1.03	26.2
UG-3420-D	5/8	Double Hex	1.53	38.9
UG-3620	5/8	Square	1.53	38.9
UG-FL-3122	11/16	Hex	1.53	38.9
UG-SF-3122	11/16	Hex	1.53	38.9
UG-3222	11/16	Hex	2.03	51.6
UG-3222-D	11/16	Double Hex	2.03	51.6
UG-3424	3/4	Hex	1.53	38.9
UG-3424-D	3/4	Double Hex	1.53	38.9
UG-SF-3124	3/4	Hex	1.53	38.9
UG-3524	3/4	Hex	2.03	51.6
UG-3524-D	3/4	Double Hex	2.03	51.6
UG-3426	13/16	Hex	1.53	38.9
UG-TX-3108	E8	Torx	1.29	32.8
UG-10EP13	10EP	Torx Plus	1.28	32.5
UG-TX-3110	E10	Torx	1.28	32.5
UG-TX-3114	E14	Torx	1.28	32.5



UGS SERIES SOCKETS

3/8" SQUARE DRIVE SOCKETS, SAE, MAGNETIC

Part Number	Fastener End Size IN.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-MB-3210	5/16	Hex	2.04	51.8
UG-MB-3211	11/32	Hex	2.03	51.6
UG-M-3P12	3/8	Hex	1.28	32.5
UG-M-3412	3/8	Hex	1.53	38.9
UG-M-3614-D	7/16	Double Sq.	1.53	38.9
UG-M-3016	1/2	Hex	0.91	23.1
UG-M-3P16	1/2	Hex	1.53	38.9
UG-M-3116	1/2	Hex	1.53	38.9
UG-M-3416-D	1/2	Double Hex	1.53	38.9
UG-M-3416-E	1/2	Hex	1.53	38.9
UG-M3E16	1/2	Hex	1.53	38.9
UG-MB-3216	1/2	Hex	2.03	51.6
UG-SM-3216	1/2	Hex	2.03	51.6
UG-M-3216	1/2	Hex	2.03	51.6
UG-MB-3516	1/2	Hex	2.03	51.6
UG-M-3118	9/16	Hex	1.53	38.9
UG-M-3418-D	9/16	Double Hex	1.53	38.9
UG-M-3218	9/16	Hex	2.03	51.6
UG-MB-3218	9/16	Hex	2.03	51.6
UG-SM-3218	9/16	Hex	2.03	51.6
UG-M-3318	9/16	Hex	3.53	89.7
UG-MB-3318	9/16	Hex	3.53	89.7
UG-M-3124	3/4	Hex	1.53	38.9
UG-M-3424	3/4	Hex	1.53	38.9
UG-M-3426	13/16	Hex	1.53	38.9
UG-MTX-3108	E8	Torx	1.28	32.5
UG-MTX-3110	E10	Torx	1.28	32.5
UG-MTX-3114	E14	Torx	1.25	31.8

3/8" SQUARE DRIVE SOCKETS, METRIC, NON-MAGNETIC

Part Number	Fastener End Size MM.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-7MM13	7	Hex	1.28	32.5
UG-FL-7MM13	7	Hex	1.28	32.5
UG-SF-7MM13	7	Hex	1.28	32.5
UG-FL-7MM23	7	Hex	2.03	51.6
UG-7MM23	7	Hex	2.03	51.6
UG-SF-7MM23	7	Hex	2.03	32.5
UG-SF-8MM13	8	Hex	1.28	32.5
UG-8MM13	8	Hex	1.28	32.5
UG-8MM13-D	8	Double Hex	1.28	32.5
UG-8MME3	8	Hex	1.28	32.5
UG-FL-8MM13	8	Hex	1.28	32.5
UG-8MM23	8	Hex	2.03	51.6
UG-FL-8MM23	8	Hex	2.03	51.6
UG-SF-8MM23	8	Hex	2.03	51.6
UG-9MM23	9	Hex	2.03	51.6
UG-SF-9MM23	9	Hex	2.03	51.6
UG-10MM03	10	Hex	0.9	22.7
UG-SF-10MM03	10	Hex	0.9	22.7
UG-FL-10MM03	10	Hex	0.91	23.1
UG-10MM13	10	Hex	1.28	32.5
UG-10MM13-D	10	Double Hex	1.28	32.5
UG-SF-10MM43	10	Hex	1.28	32.5
UG-10MM43	10	Hex	1.28	32.5
UG-10MM43-D	10	Double Hex	1.28	32.5
UG-FL-10MM43	10	Hex	1.28	32.5
UG-FL-10MM43-E	10	Hex	1.28	32.5
UG-SF-10MM13	10	Hex	1.28	32.5
UG-10MM63	10	Square	1.53	38.9
UG-10MM63-D	10	Double Sq.	1.53	38.9
UG-10MM23	10	Hex	2.03	51.6
UG-OS-10MM23	10	Hex	2.03	51.6
UG-10MM23-D	10	Double Hex	2.03	51.6
UG-CSF-10MM23	10	Hex	2.03	51.6
UG-FL-10MM23	10	Hex	2.03	51.6
UG-FL-10MM23-E	10	Hex	2.03	51.6
UG-SF-10MM23	10	Hex	2.03	51.6
UG-10MM33	10	Hex	3.53	89.7
UG-CSF-10MM33	10	Hex	3.53	89.7
UG-FL-10MM33	10	Hex	3.53	89.7
UG-SF-10MM33	10	Hex	3.53	89.7
UG-11MM13	11	Hex	1.28	32.5
UG-SF-11MM13	11	Hex	1.28	32.5
UG-FL-11MM13	11	Hex	1.28	32.5
UG-11MM23	11	Hex	2.03	51.6
UG-11MM23-D	11	Double Hex	2.03	51.6
UG-SF-11MM23	11	Hex	2.03	51.6
UG-12MM03	12	Hex	0.91	23.1
UG-SF-12MM03	12	Hex	0.91	23.1

Part Number	Fastener End Size IN.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-12MM03-D	12	Double Hex	0.91	23.1
UG-FL-12MM03	12	Hex	0.91	23.1
UG-12MM13	12	Hex	1.53	38.9
UG-12MM13-D	12	Double Hex	1.53	38.9
UG-FL-12MM13	12	Hex	1.53	38.9
UG-SF-12MM13	12	Hex	1.53	38.9
UG-12MM23	12	Hex	2.03	51.6
UG-12MM23-D	12	Double Hex	2.03	51.6
UG-SF-12MM23	12	Hex	2.03	51.6
UG-SF-12MM53	12	Hex	2.03	51.6
UG-13MM03	13	Hex	0.91	23.1
UG-SF-13MM03	13	Hex	0.91	23.1
UG-13MM03-D	13	Double Hex	0.91	23.1
UG-FL-13MM03	13	Hex	0.91	23.1
UG-13MM13	13	Hex	1.53	38.9
UG-13MME3	13	Hex	1.53	38.9
UG-13MM13-D	13	Double Hex	1.53	38.9
UG-13MM43	13	Hex	1.53	38.9
UG-13MM43-D	13	Double Hex	1.53	38.9
UG-CSF-13MM43	13	Hex	1.53	38.9
UG-FL-13MM13	13	Hex	1.53	38.9
UG-SF-13MM13	13	Hex	1.53	38.9
UG-SF-13MM43	13	Hex	1.53	38.9
UG-CSF-13MM23	13	Hex	2.03	51.6
UG-VC-68-13MM	13	Hex	2.03	51.6
UG-13MM23	13	Hex	2.03	51.6
UG-SF-13MM23	13	Hex	2.03	51.6
UG-13MM23-D	13	Double Hex	2.03	51.6
UG-SF-13MM53	13	Hex	2.03	51.6
UG-FL-13MM23	13	Hex	2.03	51.6
UG-13MM33	13	Hex	3.53	89.7
UG-CSF-13MM33	13	Hex	3.53	89.7
UG-SF-13MM33	13	Hex	3.53	89.7
UG-14MM13	14	Hex	1.53	38.9
UG-14MM13-D	14	Double Hex	1.53	38.9
UG-14MM43	14	Hex	1.53	38.9
UG-SF-14MM13	14	Hex	1.53	38.9
UG-14MM23	14	Hex	2.03	51.6
UG-14MM23-D	14	Double Hex	2.03	51.6
UG-SF-14MM23	14	Hex	2.03	51.6
UG-14MM33	14	Hex	3.53	89.7
UG-15MM03	15	Hex	0.97	24.7
UG-15MM03-D	15	Double Hex	0.97	24.7
UG-FL-15MM03	15	Hex	0.97	24.7
UG-SF-15MM03	15	Hex	0.97	24.7
UG-15MM13	15	Hex	1.53	38.9
UG-15MM13-D	15	Double Hex	1.53	38.9

Note:

CSF: Surface hex with extra large counter-sink.

UGS SERIES SOCKETS

3/8" SQUARE DRIVE SOCKETS, METRIC, NON-MAGNETIC (CONTINUED)

Part Number	Fastener End Size IN.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-15MM43	15	Hex	1.53	38.9
UG-15MM43-D	15	Double Hex	1.53	38.9
UG-CSF-15MM43	15	Hex	1.53	38.9
UG-SF-15MM13	15	Hex	1.53	38.9
UG-SF-15MM43	15	Hex	1.53	38.9
UG-15MM23	15	Hex	2.03	51.6
UG-15MM23-D	15	Double Hex	2.03	51.6
UG-CSF-15MM23	15	Hex	2.03	51.6
UG-SF-15MM33	15	Hex	2.03	51.6
UG-15MM33	15	Hex	3.53	89.7
UG-15MM33-D	15	Double Hex	3.53	89.7
UG-CSF-15MM33	15	Hex	3.53	89.7
UG-16MM03-D	16	Double Hex	1.03	26.2
UG-SF-16MM03	16	Hex	1.03	26.2
UG-16MM43	16	Hex	1.53	38.9
UG-16MM43-D	16	Double Hex	1.53	38.9
UG-17MM13	17	Hex	1.53	38.9
UG-17MM13-D	17	Double Hex	1.53	38.9
UG-SF-17MM13	17	Hex	1.53	38.9
UG-17MM23	17	Hex	2.03	51.6
UG-17MM23-D	17	Double Hex	2.03	51.6
UG-SF-17MM23	17	Hex	2.03	51.6
UG-18MM13	18	Hex	1.53	38.9
UG-18MM13-D	18	Double Hex	1.53	38.9
UG-SF-18MM13	18	Hex	1.53	38.9
UG-18MM23	18	Hex	2.03	51.6
UG-18MM23-D	18	Double Hex	2.03	51.6
UG-SF-18MM23	18	Hex	2.03	51.6
UG-19MM13	19	Hex	1.53	38.9
UG-19MM13-D	19	Double Hex	1.53	38.9
UG-19MM43	19	Hex	1.53	38.9
UG-19MM43-D	19	Double Hex	1.53	38.9
UG-FL-19MM13	19	Hex	1.53	38.9
UG-SF-19MM13	19	Hex	1.53	38.9
UG-SF-19MM43	19	Hex	1.53	38.9
UG-20MM13	20	Hex	1.53	38.9

3/8" SQUARE DRIVE SOCKETS, METRIC, MAGNETIC

Part Number	Fastener End Size MM.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-M-7MME3	7	Hex	1.25	31.8
UG-M-7MM13	7	Hex	1.28	32.5
UG-SM-7MM13	7	Hex	1.28	32.5
UG-MB-7MM23	7	Hex	2.04	51.8
UG-M-8MM13	8	Hex	1.28	32.5
UG-M-8MME3	8	Hex	1.28	32.5
UG-MSF-8MM13	8	Hex	1.28	32.5
UG-M-8MM23	8	Hex	2.03	51.6
UG-MB-8MM23	8	Hex	2.03	51.6
UG-SM-8MM23	8	Hex	2.03	51.6
UG-SWMSF-8MM23	8	Hex	2.03	51.6
UG-MB-9MM23	9	Hex	2.03	51.6
UG-M-10MM03	10	Hex	0.9	22.7
UG-MVC-806-10MM	10	Hex	1.2	30.5
UG-M-10MME3	10	Hex	1.28	32.5
UG-M-10MM13	10	Hex	1.28	32.5
UG-SM-10MM13	10	Hex	1.28	32.5
UG-M-10MM13-D	10	Double Hex	1.28	32.5
UG-M-10MM43	10	Hex	1.28	32.5
UG-MSF-10MM13	10	Hex	1.28	32.5
UG-MSF-10MM43	10	Hex	1.28	32.5
UG-SWMSF-10MM13	10	Hex	1.28	32.5
UG-SM-10MM23	10	Hex	2.02	51.3
UG-OSM-10MM23	10	Hex	2.03	51.6
UG-MB-10MM23-D	10	Double Hex	2.03	51.6
UG-M-10MM23	10	Hex	2.03	51.6
UG-MB-10MM23	10	Hex	2.03	51.6
UG-MBVC-804-10MM	10	Hex	2.03	51.6
UG-MSF-10MM23	10	Hex	2.03	51.6
UG-MB-SF-10MM23	10	Hex	2.03	51.6
UG-OSMB-10MM23	10	Hex	2.03	51.6
UG-SWMSF-10MM23	10	Hex	2.03	51.6
UG-M-10MM33	10	Hex	3.53	89.7
UG-MB-10MM33	10	Hex	3.53	89.7
UG-MSF-10MM33	10	Hex	3.53	89.7
UG-SWMSF-10MM33	10	Hex	3.53	89.7
UG-M-11MM13	11	Hex	1.28	32.5
UG-OSMB-11MM23	11	Hex	2.03	51.6
UG-MB-11MM23	11	Hex	2.03	51.6
UG-MB-SF-11MM23	11	Hex	2.03	51.6
UG-SM-11MM23	11	Hex	2.03	51.6
UG-SWMSF-11MM23	11	Hex	2.03	51.6
UG-M-12MM03-D	12	Double Hex	0.91	23.1
UG-M-12MM03	12	Hex	0.91	23.1
UG-M-12MM13	12	Hex	1.53	38.9
UG-M-12MM13-D	12	Double Hex	1.53	38.9
UG-SWMSF-12MM13	12	Hex	1.53	38.9

Part Number	Fastener End Size MM.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-M-12MM23	12	Hex	2.03	51.6
UG-MB-12MM23	12	Hex	2.03	51.6
UG-MB-12MM23-D	12	Double Hex	2.03	51.6
UG-SM-12MM23	12	Hex	2.03	51.6
UG-SM-SF-12MM23	12	Hex	2.03	51.6
UG-MBVCB-305-12MM	12	Hex	2.53	64.3
UG-M-13MM03	13	Hex	0.91	23.1
UG-M-13MM13	13	Hex	1.53	38.9
UG-M-13MME3	13	Hex	1.53	38.9
UG-M-13MM13-D	13	Double Hex	1.53	38.9
UG-M-13MM43	13	Hex	1.53	38.9
UG-M-13MM43-D	13	Double Hex	1.53	38.9
UG-MB-13MM23	13	Hex	1.53	38.9
UG-MB-13MM23-D	13	Double Hex	1.53	38.9
UG-MFL-13MM43	13	Hex	1.53	38.9
UG-MSF-13MM13	13	Hex	1.53	38.9
UG-MSF-13MM23	13	Hex	1.53	38.9
UG-MSF-13MM43	13	Hex	1.53	38.9
UG-SM-13MM13	13	Hex	1.53	38.9
UG-SM-13MM23	13	Hex	1.53	38.9
UG-SM-13MM43	13	Hex	1.53	38.9
UG-SWMSF-13MM13	13	Hex	1.54	39.1
UG-SWMSF-13MM23	13	Hex	2.03	51.6
UG-SWMSF-13MM33	13	Hex	2.03	51.6
UG-M-13MM23	13	Hex	2.04	51.8
UG-SWM-13MM23	13	Hex	2.04	51.8
UG-SWMSF-13MM23	13	Hex	2.04	51.8
UG-MB-13MM33	13	Hex	3.53	89.7
UG-MB-SF-13MM33	13	Hex	3.53	89.7
UG-SM-13MM33	13	Hex	3.53	89.7
UG-M-14MM13	14	Hex	1.53	38.9
UG-M-14MM13-D	14	Double Hex	1.53	38.9
UG-M-14MM43-D	14	Double Hex	1.53	38.9
UG-M-14MM23	14	Hex	2.03	51.6
UG-MB-14MM23	14	Hex	2.03	51.6
UG-MBSF-14MM23	14	Hex	2.03	51.6
UG-MB-14MM23-D	14	Double Hex	2.03	51.6
UG-SWMSF-14MM23	14	Hex	2.03	51.6
UG-SWMSF-14MM33	14	Hex	2.03	51.6
UG-MB-14MM33	14	Hex	3.53	89.7
UG-M-15MM03	15	Hex	0.97	24.7
UG-M-15MM13	15	Hex	1.53	38.9
UG-M-15MM13-D	15	Double Hex	1.53	38.9
UG-MSF-15MM13	15	Hex	1.53	38.9
UG-M-15MM43	15	Hex	1.53	38.9
UG-SM-15MM43	15	Hex	1.53	38.9
UG-SWMSF-15MM13	15	Hex	1.53	38.9



UGS SERIES SOCKETS

3/8" SQUARE DRIVE SOCKETS, METRIC, MAGNETIC (CONTINUED)

Part Number	Fastener End Size MM.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-M-15MM23	15	Hex	2.03	51.6
UG-MB-15MM23	15	Hex	2.03	51.6
UG-MBSF-15MM23	15	Hex	2.03	51.6
UG-MB-SF-15MM23	15	Hex	2.03	51.6
UG-SM-15MM23	15	Hex	2.03	51.6
UG-SWM-15MM33	15	Hex	2.03	51.6
UG-SWMSF-15MM23	15	Hex	2.03	51.6
UG-M-15MM33	15	Hex	3.53	89.7
UG-MB-15MM33	15	Hex	3.53	89.7
UG-M-16MM43	16	Hex	1.53	38.9
UG-M-17MM13	17	Hex	1.53	38.9
UG-SM-17MM23	17	Hex	1.53	38.9
UG-SWMSF-17MM13	17	Hex	1.53	38.9
UG-SWMSF-17MM23	17	Hex	1.53	38.9
UG-M-17MM23	17	Hex	2.03	51.6
UG-MB-17MM23	17	Hex	2.03	51.6
UG-M-18MM13	18	Hex	1.53	38.9
UG-SWMSF-18MM13	18	Hex	1.53	38.9
UG-SWMSF-18MM23	18	Hex	1.53	38.9
UG-M-18MM23	18	Hex	2.03	51.6
UG-MB-18MM23	18	Hex	2.03	51.6
UG-M-19MM13	19	Hex	1.53	38.9
UG-SWMSF-19MM13	19	Hex	1.53	38.9

1/2" SQUARE DRIVE SOCKETS, SAE, NON-MAGNETIC

Part Number	Fastener End Size IN.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-5608-D	1/4	Double Sq.	1.53	38.9
UG-5110	5/16	Hex	1.53	38.9
UG-5110-D	5/16	Double Hex	1.53	38.9
UG-SF-5113	13/32	Hex	1.53	38.9
UG-5114	7/16	Hex	1.53	38.9
UG-5114-D	7/16	Double Hex	1.53	38.9
UG-5814-D	7/16	Double Sq.	3.28	83.3
UG-5616	1/2	Square	1.53	38.9
UG-5616-D	1/2	Double Sq.	1.53	38.9
UG-5916	1/2	Square	1.53	38.9
UG-5916-D	1/2	Double Sq.	1.53	38.9
UG-FL-5516	1/2	Hex	3.28	83.3
UG-SF-5516	1/2	Hex	3.28	83.3
UG-5618	9/16	Square	1.53	38.9
UG-5618-D	9/16	Double Sq.	1.53	38.9
UG-5918	9/16	Square	1.53	38.9
UG-5918-D	9/16	Double Sq.	1.53	38.9
UG-5118	9/16	Hex	1.53	38.9
UG-SF-5118	9/16	Hex	1.53	38.9
UG-5218	9/16	Hex	2.28	57.9
UG-5318	9/16	Hex	3.28	83.3
UG-5318-D	9/16	Double Hex	3.28	83.3
UG-5818-D	9/16	Double Sq.	3.28	83.3
UG-5119	19/32	Hex	1.53	38.9
UG-5419-D	19/32	Double Hex	1.53	38.9
UG-5219-D	19/32	Double Hex	2.28	57.9
UG-5420	19/32	Hex	3.28	83.3
UG-5120	5/8	Hex	1.53	38.9
UG-5120-D	5/8	Double Hex	1.53	38.9
UG-5620	5/8	Square	1.53	38.9
UG-5620-D	5/8	Double Sq.	1.53	38.9
UG-FL-5120	5/8	Hex	1.53	38.9
UG-SC-520	5/8	Hex	1.53	38.9
UG-5720	5/8	Square	2.28	57.9
UG-5420-D	5/8	Double Hex	3.28	83.3
UG-SF-5420	5/8	Hex	3.28	83.3
UG-SF-5120	5/8	Hex	3.53	89.7
UG-5121-D	21/32	Double Hex	1.53	38.9
UG-5122	11/16	Hex	1.53	38.9
UG-5122-D	11/16	Double Hex	1.53	38.9
UG-5422	11/16	Hex	1.53	38.9
UG-5422-D	11/16	Double Hex	1.53	38.9
UG-5622	11/16	Square	1.53	38.9
UG-FL-5122	11/16	Hex	1.53	38.9
UG-SF-5122	11/16	Hex	1.53	38.9
UG-SF-5422	11/16	Hex	1.53	38.9
UG-5222	11/16	Hex	2.28	57.9
UG-FL-5222	11/16	Hex	2.28	57.9

Part Number	Fastener End Size IN.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-SF-5222	11/16	Hex	2.28	57.9
UG-5322	11/16	Hex	3.28	83.3
UG-5322-D	11/16	Double Hex	3.28	83.3
UG-5522	11/16	Hex	3.28	83.3
UG-5522-D	11/16	Double Hex	3.28	83.3
UG-SF-5522	11/16	Hex	3.28	83.3
UG-SF-SW-282	3/4	Hex	1.03	26.2
UG-SW-282	3/4	Hex	1.03	26.2
UG-SW-282-D	3/4	Double Hex	1.03	26.2
UG-5124	3/4	Hex	1.53	38.9
UG-5124-D	3/4	Double Hex	1.53	38.9
UG-FL-5124	3/4	Hex	1.53	38.9
UG-SF-5124	3/4	Hex	1.53	38.9
UG-5224	3/4	Hex	2.28	57.9
UG-5224-D	3/4	Double Hex	2.28	57.9
UG-FL-5224	3/4	Hex	2.28	57.9
UG-SF-5224	3/4	Hex	2.28	57.9
UG-5324	3/4	Hex	3.28	83.3
UG-5324-D	3/4	Double Hex	3.28	83.3
UG-FL-5324	3/4	Hex	3.28	83.3
UG-SF-5324	3/4	Hex	3.28	83.3
UG-5225-D	25/32	Double Hex	2.28	57.9
UG-SF-5126	13/16	Hex	1.03	26.2
UG-5126	13/16	Hex	1.53	38.9
UG-5126-D	13/16	Double Hex	1.53	38.9
UG-5426	13/16	Hex	1.53	38.9
UG-5426-D	13/16	Double Hex	1.53	38.9
UG-FL-5126	13/16	Hex	1.53	38.9
UG-SF-5426	13/16	Hex	1.53	38.9
UG-5226	13/16	Hex	2.28	57.9
UG-5226-D	13/16	Double Hex	2.28	57.9
UG-5526	13/16	Hex	3.28	83.3
UG-5526-D	13/16	Double Hex	3.28	83.3

1/2" SQUARE DRIVE SOCKETS, SAE, MAGNETIC

Part Number	Fastener End Size IN.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-M-5110	5/16	Hex	1.53	38.9
UG-M-5120	5/8	Hex	1.53	38.9
UG-M-5420	5/8	Hex	3.28	83.3
UG-M-5122	11/16	Hex	1.53	38.9
UG-M-5124	3/4	Hex	1.53	38.9
UG-MB-5224-D	3/4	Double Hex	2.28	57.9
UG-MB-5324	3/4	Hex	3.28	83.3

UGS SERIES SOCKETS

1/2" SQUARE DRIVE SOCKETS, METRIC, NON-MAGNETIC

Part Number	Fastener End Size MM.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-8MM15	8	Hex	1.53	38.9
UG-8MM15-D	8	Double Hex	1.53	38.9
UG-SF-8MM15	8	Hex	1.53	38.9
UG-11MM15	11	Hex	1.53	38.9
UG-SF-11MM15	11	Hex	1.53	38.9
UG-13MM15	13	Hex	1.53	38.9
UG-SF-13MM15	13	Hex	1.53	38.9
UG-CSF-13MM45	13	Hex	1.53	38.9
UG-13MM45	13	Hex	1.53	38.9
UG-SF-13MM45	13	Hex	1.53	38.9
UG-13MM25	13	Hex	2.28	57.9
UG-SF-13MM25	13	Hex	2.28	57.9
UG-FL-13MM25	13	Hex	2.28	57.9
UG-13MM35	13	Hex	3.28	83.3
UG-13MM55	13	Hex	3.28	83.3
UG-SF-13MM55	13	Hex	3.28	83.3
UG-13MM55-D	13	Double Hex	3.28	83.3
UG-FL-13MM55	13	Hex	3.28	83.3
UG-SF-13MM35	13	Hex	3.28	83.3
UG-14MM65	14	Square	1.53	38.9
UG-SF-14MM15	14	Hex	1.53	38.9
UG-14MM15	14	Hex	1.54	39.1
UG-14MM25	14	Hex	2.28	57.9
UG-15MM15	15	Hex	1.53	38.9
UG-15MM15-D	15	Double Hex	1.53	38.9
UG-15MM45	15	Hex	1.53	38.9
UG-15MM45-D	15	Double Hex	1.53	38.9
UG-15MME5	15	Hex	1.53	38.9
UG-FL-15MM15	15	Hex	1.53	38.9
UG-SF-15MM15	15	Hex	1.53	38.9
UG-SF-15MM45	15	Hex	1.53	38.9
UG-15MM25	15	Hex	2.28	57.9
UG-SF-15MM25	15	Hex	2.28	57.9
UG-15MM35	15	Hex	3.28	83.3
UG-FL-15MM45	15	Hex	3.28	83.3
UG-15MM55	15	Hex	3.28	83.3
UG-SF-15MM35	15	Hex	3.28	83.3
UG-16MM15	16	Hex	1.53	38.9
UG-16MM15-D	16	Double Hex	1.53	38.9
UG-FL-16MM15	16	Hex	1.53	38.9
UG-SF-16MM15	16	Hex	1.53	38.9
UG-16MM45	16	Hex	3.28	83.3
UG-16MM45-D	16	Double Hex	3.28	83.3
UG-SF-16MM45	16	Hex	3.28	83.3
UG-17MM15	17	Hex	1.53	38.9
UG-SF-17MM15	17	Hex	1.53	38.9
UG-17MM15-D	17	Double Hex	1.53	38.9
UG-SF-17MM45	17	Hex	1.53	38.9

Part Number	Fastener End Size MM.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-17MM45	17	Hex	1.53	38.9
UG-17MM45-D	17	Double Hex	1.53	38.9
UG-FL-17MM15	17	Hex	1.53	38.9
UG-17MM25	17	Hex	2.28	57.9
UG-17MM25-D	17	Double Hex	2.28	57.9
UG-SF-17MM25	17	Hex	2.28	57.9
UG-17MM55	17	Hex	3.28	83.3
UG-17MM55-D	17	Double Hex	3.28	83.3
UG-SF-17MM55	17	Hex	3.28	83.3
UG-18MM15	18	Hex	1.53	38.9
UG-SF-18MM15	18	Hex	1.53	38.9
UG-18MM15-D	18	Double Hex	1.53	38.9
UG-18MM45	18	Hex	1.53	38.9
UG-18MM45-D	18	Double Hex	1.53	38.9
UG-19MM15-D	18	Double Hex	1.53	38.9
UG-FL-18MM15	18	Hex	1.53	38.9
UG-18MM25	18	Hex	2.28	57.9
UG-SF-18MM25	18	Hex	2.28	57.9
UG-18MM25-D	18	Double Hex	2.28	57.9
UG-FL-18MM25	18	Hex	2.28	57.9
UG-18MM35	18	Hex	3.28	83.3
UG-18MM35-D	18	Double Hex	3.28	83.3
UG-FL-18MM35	18	Hex	3.28	83.3
UG-SF-18MM35	18	Hex	3.28	83.3
UG-SF-18MM45	18	Hex	3.53	89.7
UG-19MM15	19	Hex	1.53	38.9
UG-FL-19MM15	19	Hex	1.53	38.9
UG-SF-19MM15	19	Hex	1.53	38.9
UG-19MM25	19	Hex	2.28	57.9
UG-SF-19MM25	19	Hex	2.28	57.9
UG-CSF-19MM25	19	Hex	2.28	57.9
UG-FL-19MM25	19	Hex	2.28	57.9
UG-19MM35	19	Hex	3.28	83.3
UG-19MM35-D	19	Double Hex	3.28	83.3
UG-SF-19MM35	19	Hex	3.28	83.3
UG-20MM15	20	Hex	1.53	38.9
UG-SF-20MM15	20	Hex	1.53	38.9
UG-20MM25	20	Hex	2.28	57.9
UG-20MM25-D	20	Double Hex	2.28	57.9
UG-21MM15	21	Hex	1.53	38.9
UG-21MM15-D	21	Double Hex	1.53	38.9
UG-21MM45	21	Hex	1.53	38.9
UG-21MM45-D	21	Double Hex	1.53	38.9
UG-SF-21MM15	21	Hex	1.53	38.9
UG-SF-21MM45	21	Hex	1.53	38.9
UG-21MM25	21	Hex	2.28	57.9
UG-SF-21MM25	21	Hex	2.28	57.9
UG-21MM25-D	21	Double Hex	2.28	57.9
UG-21MM55	21	Hex	3.28	83.3
UG-SF-21MM55	21	Hex	3.28	83.3

1/2" SQUARE DRIVE SOCKETS, METRIC, MAGNETIC

Part Number	Fastener End Size MM.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-M-8MM15	8	Hex	1.53	38.9
UG-M-11MM15	11	Hex	1.53	38.9
UG-M-13MM15	13	Hex	1.53	38.9
UG-M-13MM45	13	Hex	1.53	38.9
UG-MSF-13MM15	13	Hex	1.53	38.9
UG-SWMFL-13MM15	13	Hex	1.53	38.9
UG-M-13MM25	13	Hex	2.28	57.9
UG-MB-13MM25	13	Hex	2.28	57.9
UG-MBSF-13MM25	13	Hex	2.28	57.9
UG-M-13MM35	13	Hex	3.28	83.3
UG-M-13MM55	13	Hex	3.28	83.3
UG-MB-13MM35	13	Hex	3.28	83.3
UG-MB-13MM55	13	Hex	3.28	83.3
UG-MBSF-13MM35	13	Hex	3.28	83.3
UG-M-14MM15	14	Hex	1.53	38.9
UG-MSF-14MM15	14	Hex	1.53	38.9
UG-MBSF-14MM25	14	Hex	2.28	57.9
UG-MB-14MM25	14	Hex	2.28	57.9
UG-MB-14MM25-D	14	Double Hex	2.28	57.9
UG-M-15MM15	15	Hex	1.53	38.9
UG-M-15MME5	15	Hex	1.53	38.9
UG-MSF-15MM15	15	Hex	1.53	38.9
UG-SWMSF-15MM15	15	0	1.53	38.9
UG-SWM-15MM25	15	Hex	2.25	57.2
UG-M-15MM25	15	Hex	2.28	57.9
UG-MB-15MM25	15	Hex	2.28	57.9
UG-MSF-15MM25	15	Hex	2.28	57.9
UG-SM-15MM25	15	Hex	2.28	57.9
UG-M-15MM35-D	15	Double Hex	3.28	83.3
UG-M-15MM45	15	Hex	3.28	83.3
UG-M-15MM55	15	Hex	3.28	83.3
UG-MB-15MM35	15	Hex	3.28	83.3
UG-MSF-15MM35	15	Hex	3.28	83.3
UG-SM-15MM35	15	Hex	3.28	83.3
UG-M-16MM15	16	Hex	1.53	38.9
UG-M-16MM45	16	Hex	1.53	38.9
UG-MSF-17MM15	17	Hex	0.59	15
UG-M-17MM45	17	Hex	1.53	38.9
UG-MCBC-17MM15	17	Hex	1.53	38.9
UG-MSF-17MM45	17	Hex	1.53	38.9
UG-M-17MM15	17	Hex	1.53	38.9
UG-M-17MM15-D	17	Double Hex	1.53	38.9
UG-MB-17MM25	17	Hex	2.28	57.9
UG-MB-17MM35	17	Hex	3.28	83.3
UG-MB-17MM55	17	Hex	3.28	83.3
UG-M-18MM15	18	Hex	1.53	38.9
UG-MSF-18MM15	18	Hex	1.53	38.9
UG-SM-18MM25	18	Hex	1.53	38.9
UG-M-18MM25	18	Hex	2.28	57.9
UG-MB-18MM25	18	Hex	2.28	57.9
UG-M-18MM35	18	Hex	3.28	83.3



UGS SERIES SOCKETS

1/2" SQUARE DRIVE SOCKETS, METRIC, MAGNETIC (CONTINUED)

Part Number	Fastener End Size MM.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-MB-18MM35	18	Hex	3.28	83.3
UG-SM-18MM35	18	Hex	3.28	83.3
UG-MSF-18MM45	18	Hex	3.53	89.7
UG-M-19MM15	19	Hex	1.53	38.9
UG-M-21MM15	21	Hex	1.53	38.9
UG-MSF-21MM15	21	Hex	1.53	38.9
UG-M-21MM25	21	Hex	2.28	57.9
UG-MB-21MM25	21	Hex	2.28	57.9

5/8" SQUARE DRIVE SOCKETS, SAE, NON-MAGNETIC

Part Number	Fastener End Size MM.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-FL-6324	3/4	Hex	2.03	51.6
UG-SF-6324	3/4	Hex	2.03	51.6
UG-6324	3/4	Hex	3.53	89.7
UG-SF-6326	13/16	Hex	2.03	51.6
UG-6326	13/16	Hex	3.53	89.7
UG-6326-D	13/16	Double Hex	3.53	89.7

5/8" SQUARE DRIVE SOCKETS, METRIC, NON-MAGNETIC

Part Number	Fastener End Size MM.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-CSF-18MM36	18	Hex	3.53	89.7
UG-SF-19MM36	19	Hex	2.03	51.6
UG-VFSF-132-19MM	19	Hex	3.5	88.9
UG-FL-21MM36	21	Hex	2.03	51.6
UG-SF-21MM36	21	Hex	2.03	51.6
UG-21MM36	21	Hex	3.53	89.7

5/8" SQUARE DRIVE SOCKETS, METRIC, MAGNETIC

Part Number	Fastener End Size MM.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-M-21MM36	21	Hex	2.03	51.6

3/4" SQUARE DRIVE SOCKETS, SAE, NON-MAGNETIC

Part Number	Fastener End Size MM.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-7340	1 1/4	Hex	4.03	102.4

3/4" SQUARE DRIVE SOCKETS, METRIC, NON-MAGNETIC

Part Number	Fastener End Size IN.	Fastener End Shape	Overall Length	
			IN.	MM.
UG-VGSF-41-19MM	19	Hex	3.5	88.9
UG-VGSF-60-21MM	21	Hex	4.03	102.4
UG-VGSF-43-22MM	22	Hex	4.03	102.4
UG-SF-30MM37	30	Hex	4.03	102.4
UG-30MM37	30	Hex	4.03	102.4
UG-SF-32MM37	32	Hex	4.03	102.4
UG-32MM37	32	Hex	4.03	102.4

3/8" FEMALE SQUARE SERVICE DRIVE TORX BIT

Part Number	Fastener End Size IN.	Overall Length	
		IN.	MM.
UG-834-TX-45-5	T45	5	127
UG-834-TX-50	T50	2.65	67.3
UG-834-TX-50R	T50	2.65	67.3

UGS SERIES EXTENSIONS & ADAPTERS

1/4" MALE HEX DRIVE EXTENSIONS WITH 1/4" MALE SQUARE

Part Number	Overall Length	
	IN.	MM.
UG-EX-250-2	2	50.8
UG-EX-250-3	3	76.2
UG-EX-250-4	4	101.6
UG-EX-250-5	5	127
UG-EX-250-6	6	152.4
UG-EX-250-8	8	203.2
UG-EX-250-10	10	254
UG-EX-250-12	12	304.8
UG-EX-250-18	18	457.2

1/4" MALE HEX DR. ADAPTERS WITH 3/8" MALE SQUARE

Part Number	Overall Length	
	IN.	MM.
UG-EX-370-2	2	50.8
UG-EX-370-B-2	2	50.8
UG-EX-370-3	3	76.2
UG-EX-370-B-3	3	76.2
UG-EX-370-4	4	101.6
UG-EX-370-B-4	4	101.6
UG-EX-370-5	5	127
UG-EX-370-6	6	152.4
UG-EX-370-8	8	203.2
UG-EX-370-10	10	254

UGS SERIES EXTENSIONS & ADAPTERS

1/4" FEMALE SQ. DR. EXTENSIONS WITH 1/4" MALE SQUARE

Part Number	Overall Length	
	IN.	MM.
UG-EX-255-2	2	50.8
UG-HA-15608	2	50.8
UG-HA-15608-2X-2	2	50.8
UG-EX-255-B-2	2	50.8
UG-EX-255-3	3	76.2
UG-EX-255-4	4	101.6
UG-HA-15608-2X-4	4	101.6
UG-EX-255-B-4	4	101.6
UG-EX-255-6	6	152.4
UG-HA-15608-2X-6	6	152.4
UG-EX-255-B-6	6	152.4
UG-EX-255-8	8	203.2
UG-EX-255-10	10	254
UG-EX-255-12	12	304.8
UG-HA-15608-2X-14	14	355.6
UG-EX-255-18	18	457.2

3/8" FEMALE SQ. DR. ADAPTERS WITH 1/4" MALE SQUARE

Part Number	Overall Length	
	IN.	MM.
UG-EX-257-2	2	50.8
UG-EX-257-4	4	101.6
UG-EX-257-5	5	127
UG-EX-257-6	6	152.4

3/8" FEMALE SQ. DR. ADAPTERS WITH 1/2" MALE SQUARE

Part Number	Overall Length	
	IN.	MM.
UG-EX-503	1.5	38.1
UG-EX-503-B	1.5	38.1

3/8" FEMALE SQUARE DRIVE ADAPTERS WITH 5/8" MALE SQUARE

Part Number	Overall Length	
	IN.	MM.
UG-EX-622	1.53	38.1

3/8" FEMALE SQ. DR. EXT. WITH 3/8" MALE SQUARE

Part Number	Overall Length	
	IN.	MM.
UG-EX-374	1.4	35.6
UG-EX-374-B	1.4	35.6
UG-EX-376-2	2	50.8
UG-EX-376-B-2	2	50.8
UG-EX-376-3	3	76.2
UG-EX-376-B-3	3	76.2
UG-EX-376-4	4	101.6
UG-EX-376-B-4	4	101.6
UG-HC-8612-4	4	101.6
UG-EX-376-5	5	127
UG-EX-376-B-5	5	127
UG-EX-376-6	6	152.4
UG-EX-376-B-6	6	152.4
UG-EX-376-8	8	203.2
UG-EX-376-B-8	8	203.2
UG-EX-376-9	9	228.6
UG-EX-376-B-9	9	228.6
UG-EX-376-10	10	254
UG-EX-376-B-10	10	254
UG-EX-376-12	12	304.8
UG-EX-376-B-12	12	304.8
UG-EX-376-15	15	381
UG-HC-22712-15	15.3	388.6
UG-EX-376-18	18	457.2
UG-EX-376-24	24	609.6
UG-EX-376-36	36	914.4

7/16" MALE HEX POWER DR. ADAPTERS WITH 1/2" MALE SQUARE

Part Number	Overall Length	
	IN.	MM.
UG-EX-501-2	2	50.8
UG-EX-501-3	3	76.2
UG-EX-501-4	4	101.6
UG-EX-501-6	6	152.4

7/16" MALE HEX DR. ADAPTERS WITH 3/8" MALE SQUARE

Part Number	Overall Length	
	IN.	MM.
UG-EX-371-2	2	50.8
UG-EX-371-3	3	76.2
UG-EX-371-4	4	101.6
UG-EX-371-6	6	152.4

1/2" FEMALE SQ. DRIVE ADAPTERS WITH 3/8" MALE SQ.

Part Number	Overall Length	
	IN.	MM.
UG-EX-377-2	2	50.8
UG-EX-377-B-3	3	76.2
UG-EX-377-4	4	101.6
UG-EX-377-M-4	4	101.6
UG-EX-377-6	6	152.4
UG-EX-377-B-6	6	152.4
UG-EX-377-8	8	203.2
UG-EX-377-12	12	304.8
UG-EX-377-B-12	12	304.8



UGS SERIES EXTENSIONS & ADAPTERS

1/2" FEMALE SQ. DRIVE ADAPTERS WITH 3/8" MALE SQ.

Part Number	Overall Length	
	IN.	MM.
UG-EX-377-2	2	50.8
UG-EX-377-B-3	3	76.2
UG-EX-377-4	4	101.6
UG-EX-377-M-4	4	101.6
UG-EX-377-6	6	152.4
UG-EX-377-B-6	6	152.4
UG-EX-377-8	8	203.2
UG-EX-377-12	12	304.8
UG-EX-377-B-12	12	304.8

1/2" FEMALE SQ. DRIVE EXTENSIONS

Part Number	Overall Length	
	IN.	MM.
UG-EX-508-8	8	203.2
UG-EX-508-B-8	8	203.2
UG-HE-25316	8	203.2
UG-HE-25316-2X-8	8	203.2
UG-EX-508-9	9	228.6
UG-EX-508-10	10	254
UG-EX-508-B-10	10	254
UG-EX-508-12	12	304.8
UG-EX-508-B-12	12	304.8
UG-EX-508-15	15	381
UG-EX-508-16	16	406.4
UG-EX-508-18	18	457.2
UG-EX-508-20	20	508
UG-EX-508-36	36	914.4

UGS SERIES BIT HOLDERS

1/4" MALE HEX POWER DRIVE BIT HOLDERS, MAGNETIC

Part Number	Overall Length		Hex Insert Bit Size. IN. Shape	
	IN.	MM.	IN.	Shape
UG-M-490	3.59	91.2	1/4	Hex
UG-M-490-4	4.59	116.6	1/4	Hex
UG-M-490-6	6.59	167.4	1/4	Hex
UG-M-490-8	8.59	218.2	1/4	Hex
UG-M-490-14	14.59	370.6	1/4	Hex

1/4" FEMALE SQUARE DRIVE BIT HOLDERS, NON-MAGNETIC

Part Number	Overall Length		Hex Insert Bit Size. IN. Shape	
	IN.	MM.	IN.	Shape
UG-825	1.03	26.2	1/4	Hex

1/4" FEMALE SQUARE DRIVE BIT HOLDERS, MAGNETIC

Part Number	Overall Length		Hex Insert Bit Size. IN. Shape	
	IN.	MM.	IN.	Shape
UG-M-825-EB	2.46	62.5	1/4	Hex
UG-M-825	2.9	73.7	1/4	Hex

3/8" FEMALE SQ. DRIVE BIT HOLDERS, NON-MAGNETIC

Part Number	Overall Length		Hex Insert Bit Size. IN. Shape	
	IN.	MM.	IN.	Shape
UG-838	1.53	38.9	1/4	Hex
UG-835	1.53	38.9	5/16	Hex

3/8" FEMALE SQUARE DRIVE BIT HOLDER, MAGNETIC

Part Number	Overall Length		Hex Insert Bit Size. IN. Shape	
	IN.	MM.	IN.	Shape
UG-M-835	3.55	90.2	5/16	Hex

1/2" FEMALE SQ DRIVE BIT HOLDER, NON- MAGNETIC

Part Number	Overall Length		Hex Insert Bit Size. IN. Shape	
	IN.	MM.	IN.	Shape
UG-855	1.78	45.2	5/16	Hex

1/2" FEMALE SQ. DRIVE BIT HOLDERS, MAGNETIC

Part Number	Overall Length		Hex Insert Bit Size. IN. Shape	
	IN.	MM.	IN.	Shape
UG-M-858	3.26	82.8	1/4	Hex
UG-M-855	3.55	90.2	5/16	Hex

UGH SERIES

MALE HEX DR. TO MALE SQUARE ADAPTERS, SAE

Part Number	Hex Drive IN.	Male Square IN.	Overall Length IN.	MM.
NC-EX-370-8	1/4	3/8	8	203.2
NC-EX-500-3	1/4	1/2	3	76.2
NC-EX-500-4	1/4	1/2	4	101.6
NC-EX-500-B-4	1/4	1/2	4	101.6
NC-EX-500-6	1/4	1/2	6	152.4
NC-EX-380-4	5/16	3/8	4	101.6
NC-EX-251-6	7/16	1/4	6	152.4
NC-EX-251-10	7/16	1/4	10	254
NC-EX-501-5	7/16	1/2	5	127
NC-EX-501-8-NY	7/16	1/2	8	203.2
NC-EX-501-10-NY	7/16	1/2	10	254
NC-EX-501-12-NY	7/16	1/2	12	304.8
NC-EX-501-15-NY	7/16	1/2	15	381
NC-EX-757-3	7/16	3/4	3	76.2
NC-EX-502-6	5/8	1/2	6	152.4
NC-EX-502-8	5/8	1/2	8	203.2
NC-EX-758-4	5/8	3/4	4	101.6

FEMALE SQ. DR. TO MALE SQUARE ADAPTERS, SAE

Part Number	Female Square IN.	Male Square IN.	Overall Length IN.	MM.
NC-EX-372	1/4	3/8	1	25.4
NC-EX-254	3/8	1/4	1.25	31.8
NC-EX-254-B	3/8	1/4	1.25	31.8
NC-EX-257-12-NY	3/8	1/4	12	304.8
NC-EX-257-2	3/8	1/4	2	50.8
NC-EX-257-3	3/8	1/4	3	76.2
NC-EX-257-8	3/8	1/4	8	203.2
NC-EX-507-2	3/8	1/2	2	50.8
NC-EX-507-3	3/8	1/2	3	76.2
NC-EX-507-6	3/8	1/2	6	152.4
EX-507-8-NC	3/8	1/2	8	203.2
NC-EX-260-2	1/2	1/4	2	50.8
NC-EX-260-4	1/2	1/4	4	101.6
NC-EX-377-B-2	1/2	3/8	2	50.8
NC-EX-377-3	1/2	3/8	3	76.2
NC-EX-751-B	1/2	3/4	1.81	46
NC-EX-505	5/8	1/2	1.87	47.5
NC-EX-505-B	5/8	1/2	1.88	47.7
NC-EX-510-19.5-NY	3/4	1/2	19.5	495.3
NCEX-510-19_688NY	3/4	1/2	19.68	500.1
NC-EX-506	3/4	1/2	2	50.8
NC-EX-506-B	3/4	1/2	2	50.8
NC-EX-510-4	3/4	1/2	4	101.6
NC-EX-510-6	3/4	1/2	6	152.4
NC-EX-510-8	3/4	1/2	8	203.2
NC-EX-628-14	3/4	5/8	14	355.6
NC-EX-625	3/4	5/8	2	50.8
NC-EX-756-10	1	3/4	10.25	260.4

FEMALE SQ. DR. TO MALE SQUARE EXTENSIONS, SAE

Part Number	Female Square IN.	Male Square IN.	Overall Length IN.	MM.
NC-EX-255-6	1/4	1/4	6	152.4
NC-EX-374-B	3/8	3/8	1.37	34.8
NC-EX-376-3	3/8	3/8	3	76.2
NC-EX-376-4-NY	3/8	3/8	4	101.6
NC-EX-504	1/2	1/2	1.71	43.4
NC-EX-504-B	1/2	1/2	1.72	43.6
NC-EX-753	3/4	3/4	2.25	57.2
NC-EX-753-B	3/4	3/4	2.25	57.2
NC-EX-755-3	3/4	3/4	3	76.2
NC-EX-755-4	3/4	3/4	4	101.6
NC-EX-755-6	3/4	3/4	6	152.4
NC-EX-755-B-6	3/4	3/4	6	152.4
ORNC-EX-755-6	3/4	3/4	6	152.4
NC-EX-755-8	3/4	3/4	8	203.2
NC-EX-755-B-8	3/4	3/4	8	203.2
NC-EX-755-10	3/4	3/4	10	254
NCO-EX-755-10	3/4	3/4	10	254
ORNC-EX-755-10	3/4	3/4	10	254
NC-EX-755-12	3/4	3/4	12	304.8
NC-EX-755-15	3/4	3/4	15	381
NC-EX-1003-18	1	1	18	457.2

FEMALE SQUARE DRIVE, QUICK RELEASING CHUCKS

Part Number	Drive Size IN.	Fastener End Size IN.	End Shape	Overall Length IN.	MM.
NC-QR-108	1/4	1/4	Hex	1.5	38.1
NC-QR-308	3/8	1/4	Hex	1.75	44.5
NC-QR-508	3/8	1/4	Hex	2.125	54
NC-QR-514	1/2	7/16	Hex	2.125	54
NC-QR-520	1/2	5/8	Hex	2.625	66.7
NC-QR-720	3/4	5/8	Hex	3.125	79.4

1/4" FEMALE HEX DRIVE, QUICK RELEASING CHUCK

Part Number	Fastener End Size MM.	End Shape	Overall Length IN.	MM.
NC-MRQRS-108-10MM	10	Hex	1.56	39.6

FEMALE SQ. DR. BIT HOLDERS/ADAPTERS WITH SET SCREW

Part Number	Drive Size IN.	Fastener End Size IN.	End Shape	Overall Length IN.	MM.
NC-SC-108	1/4	1/4	Hex	1.31	33.3
NC-SC-308	3/8	1/4	Hex	1.58	40.1
NC-SC-308-2344A	3/8	1/4	Hex	2.34	59.5
NC-SC-308-425A	3/8	1/4	Hex	4.25	108
NC-SC-308-675A	3/8	1/4	Hex	6.75	171.5
NC-SC-314	3/8	7/16	Hex	1.45	36.9
NC-SC-508	1/2	1/4	Hex	1.58	40.1
NC-SC-514	1/2	7/16	Hex	1.7	43.1
NC-SC-514-4032	1/2	7/16	Hex	4.03	102.4
NC-zv	1/2	5/8	Hex	1.58	40.1

1/4" MALE HEX DRIVE NUTSETTERS METRIC & SAE

Part Number	Fastener End Size MM.	End Shape	Overall Length IN.	MM.
NCO-6N-08-6M-5	6	Female Hex	1.31	5
NCO-6N-08-7M-3	7	Female Hex	1.58	3.04
NC-M6N-0810-6	5/16	Female Hex	2.34	6.04
NCO-6N-08-8M-3	8	Female Hex	4.25	3.04
MNC6N-08-8M-4	8	Female Hex	6.75	4
NCO-6N-08-8M-4	8	Female Hex	1.45	4.04
NCO-6N-08-8M-5	8	Female Hex	1.58	5.04
MDA-10MM-NC	10	Female Hex	1.7	1.84
MNC6N-08-10M-3	10	Female Hex	4.03	3
MNC6N-08-10M-4	10	Female Hex	1.58	4
SMNC6B-08-10M-4	10	Female Hex		4
MNC6N-08-10M-6	10	Female Hex		6
MNC6N-08-10M-6	10	Female Hex		6
SMNC6B-08-10M-6	10	Female Hex		6
MNC6N-08-10M-8	10	Female Hex		8
MNC6N-08-22M-4	22	Female Hex		4.06

1/4" MALE HEX DRIVE BIT HOLDERS

Part Number	Fastener End Size MM.	End Shape	Overall Length IN.	MM.
NC-490-3	1/4	Female Hex	3	76.2
NC-490-4	1/4	Female Hex	4	101.6
NC-490-9	1/4	Female Hex	9	304.8



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3/8" FEMALE SQUARE DRIVE STUD SETTERS

Part Number	Fastener End Size IN.	Thread	Overall Length	
			IN.	MM.
NC-WJ-1271-M6X1.0	3/8	M6	1.95	49.6
NC-WJ-1271-M7X1.0	3/8	M7	1.95	49.6
NC-WJ-1271-M8X1.0	3/8	M8	1.95	49.6
NC-WJ-1271-M8X1.25	3/8	M8	1.95	49.6
NC-WJ-1271	3/8	M10	1.89	48.1

1/4" FEMALE SQUARE DRIVE SOCKET, MAGNETIC, SAE

Part Number	Fastener End Size IN.	Shape	Overall Length	
			IN.	MM.
MNC-1208	1/4	Hex	1.81	46.05

3/8" FEMALE SQUARE DRIVE SOCKETS, MAGNETIC, SAE

Part Number	Fastener End Size IN.	Shape	Overall Length	
			IN.	MM.
NC-M-3112	3/8	Hex	1.33	33.7
MBNC-3512	3/8	Hex	2	50.8
NC-MB-3314	7/16	Hex	3.57	90.9

1/4" FEMALE SQ. DRIVE SOCKETS, NON-MAGNETIC, SAE

Part Number	Fastener End Size IN.	Shape	Overall Length	
			IN.	MM.
NC-1308-D-NY	1/4	Double Hex	3.07	78.2
NC-1112	3/8	Hex	1	25.4
NC-1212	3/8	Hex	1.81	46

3/8" FEMALE SQ. DRIVE SOCKETS, NON-MAGNETIC, SAE

Part Number	Fastener End Size IN.	Shape	Overall Length	
			IN.	MM.
NC-3108	1/4	Hex	1.3	33.1
NC-3208	1/4	Hex	2.1	53.3
NC-3010	5/16	Hex	.938	23.8
NC-3310	5/16	Hex	3.555	90.3
NC-3411	11/32	Hex	1.327	33.7
NC-3112	3/8	Hex	1.312	33.3
NC-3212	3/8	Hex	2	50.8
NC-3512-NY	3/8	Hex	2.08	52.8
NC-3312	3/8	Hex	3.555	90.3
NC-3014	7/16	Hex	.947	24.1
NC-3414	7/16	Hex	1.5	38.1
MNC-3114	7/16	Hex	1.58	40.1
NC-3114	7/16	Hex	1.58	40.1
NC-3114-D	7/16	Double Hex	1.58	40.1
NC-3514-NY	7/16	Hex	2.077	52.8
NC-3316	1/2	Hex	3.577	90.9
NC-3316-NY	1/2	Hex	3.577	90.9
NC-3018	9/16	Hex	.952	24.18
NC-3018-NY	9/16	Hex	.952	24.18
NC-3518	9/16	Hex	2	50.8
NC-3120	5/8	Hex	1.58	40.1
NC-3220	5/8	Hex	2.08	52.8
NC-3320	5/8	Hex	3.58	90.9
NC-3024	3/4	Hex	1.07	27.2
NC-3224	3/4	Hex	2.08	52.8
NC-3324	3/4	Hex	3.58	90.9
NC-3326-D	13/16	Double Hex	3.58	90.9
NC-3028	7/8	Hex	1.08	27.4
NC-3428	7/8	Hex	1.5	38.1
NC-3228	7/8	Hex	2.08	52.8

1/2" FEMALE SQUARE DRIVE SOCKETS, NON-MAGNETIC, SAE

Part Number	Fastener End Size IN.	Shape	Overall Length	
			IN.	MM.
NC-SF-5110	5/16	Hex	1.58	40.1
NC-5112	3/8	Hex	1.53	38.9
NC-SF-5112	3/8	Hex	1.58	40.1
NC-5212	3/8	Hex	2.33	59.1
NC-5116	1/2	Hex	1.58	40.1
NC-SF-5116	1/2	Hex	1.58	40.1
NC-SF-5316	1/2	Hex	3.34	84.5
NC-SF-5418	9/16	Hex	1.58	40.1
NC-5220	5/8	Hex	2.33	59.1
NC-5320	5/8	Hex	3.327	84.5
NC-5424	3/4	Hex	1.58	40.1
NC-SF-5424	3/4	Hex	1.58	40.1
NC-5626	13/16	Square	1.58	40.1
NC-5128	7/8	Hex	1.5	38.1
NC-5128-A	7/8	Hex	1.58	40.1
NC-5428-D	7/8	Double Hex	1.58	40.1
NC-5528	7/8	Hex	3.58	90.9
NC-5230	15/16	Hex	2.327	59.11
NC-5132	1	Hex	1.5	38.1
NC-5134	11/16	Hex	1.7	43.1
NC-5436	11/8	Hex	1.7	43.2
NC-5140	11/4	Hex	1.83	46.4
NC-5140-D	11/4	Double Hex	1.83	46.4
NC-5152-D	15/8	Double Hex	2.077	52.8

3/4" FEMALE SQ. DRIVE SOCKETS, NON-MAGNETIC, SAE

Part Number	Fastener End Size IN.	Shape	Overall Length	
			IN.	MM.
NC-7324	3/4	Hex	4	101.6
NC-7524	3/4	Hex	4.08	103.6
NC-7130	15/16	Hex	2.08	52.8
NC-7136	11/8	Hex	2.20	55.9

1" FEMALE SQ. DRIVE SOCKETS, NON-MAGNETIC, SAE

Part Number	Fastener End Size IN.	Shape	Overall Length	
			IN.	MM.
NC-8224	3/4	Hex	3	76.2
NC-8636	11/8	Square	2.35	59.7
NC-8148-NY	11/2	Square	2.327	59.1

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1/4" FEMALE SQUARE DRIVE SOCKETS, MAGNETIC, METRIC

Part Number	Fastener End		Overall Length	
	Size MM.	Shape	IN.	MM.
NC-MB-5.5MM21	5.5	Hex	1.83	46.4
NC-M-6MM21	6	Hex	1.79	45.5
NC-MB-6MM21	6	Hex	1.83	46.4
NC-M-10MM21-NY	10	Hex	1.83	46.4
NC-MB-10MM21	10	Hex	1.83	46.4
NC-M-13MM21	13	Hex	1.83	46.4
NC-MB-13MM21	13	Hex	1.83	46.4

3/8" FEMALE SQ. DRIVE SOCKETS, MAGNETIC, METRIC

Part Number	Fastener End		Overall Length	
	Size MM.	Shape	IN.	MM.
NC-M-6MM13	6	Hex	1.33	33.7
NCO-MB-6MM23	6	Hex	2.08	52.8
SWMSF-7MM23-NC	7	Hex	2.08	52.8
NC-M-8MM43	8	Hex	1.33	33.7
NCO-M-8MM43	8	Hex	1.33	33.7
OSMB-8MM23-NC	8	Hex	2.12	53.9
NC-OSMB-10MM23	10	Hex	2.08	52.8
NC-MB-11MM33-NY	11	Hex	3.58	90.9
SWMSF-12MM13-NC	12	Hex	1.58	40.1
SWMSF-12MM23-NC	12	Hex	2.05	52.1
NCW-M-13MM23	13	Hex	2.08	52.8
NC-MB-13MM23-NY	13	Hex	2.08	52.8
NC-MB-13MM33-NY	13	Hex	3.58	90.9
NC-M-14MM13	14	Hex	1.58	40.1
NC-MB-14MM23	14	Hex	2	50.8
NC-MB-15MM23-NY	15	Hex	2.08	52.8
NC-MB-16MM23	16	Hex	2.08	52.8
NC-M-17MM13-D	17	Double Hex	1.58	40.1

1/2" FEMALE SQUARE DRIVE SOCKETS, MAGNETIC, METRIC

Part Number	Fastener End		Overall Length	
	Size MM.	Shape	IN.	MM.
NC-M-10MM15	10	Hex	1.58	40.1
NC-MB-16MM25	16	Hex	2.33	59.1
NC-MSF-16MM35-NY	16	Hex	3.33	84.5
NC-MSF-18MM15-NY	18	Hex	1.58	40.1
NC-MBSF-18MM25-NY	18	Hex	2.25	57.2

5/8" FEMALE SQUARE DRIVE SOCKET, MAGNETIC, METRIC

Part Number	Fastener End		Overall Length	
	Size MM.	Shape	IN.	MM.
NC-M-18MM16	18	Hex	1.95	49.6

3/8" FEMALE SQ. DR. TORX SOCKETS, MAGNETIC

Part Number	Drive Size	Fastener End Size	Overall Length	
			IN.	MM.
NC-MTX-3112	3/8	E12	1.3	33.7
NC-MTX-5116-NY	1/2	E16	1.58	40.1
NC-MTX-5118-NY	1/2	E18	1.58	40.1
NC-MTX-5120-NY	1/2	E20	1.58	40.1

1/4" FEMALE SQ. DR. TORX SOCKETS, NON-MAGNETIC

Part Number	Fastener End Size	Overall Length	
		IN.	MM.
NC-TX-1105	E5	1.08	27.4
NC-TX-1108	E8	1.08	27.4

3/8" FEMALE SQ. DR. TORX SOCKETS, NON-MAGNETIC

Part Number	Fastener End Size	Overall Length	
		IN.	MM.
NCO-TX-3105	E5	1.3	33.7
NC-TX-3106	E6	1.3	33.7
NC-TX-3107	E7	1.3	33.7
NC-TX-3407	E7	1.37	34.9
NC-TXC-2708	E8	4.72	120
NC-TX-3410	E10	1.3	32.9
NC-TX-3112	E12	1.25	31.8
NCO-TX-3414	E14	1.33	33.7

1/2" FEMALE SQ. DRIVE TORX SOCKETS, NON-MAGNETIC

Part Number	Fastener End Size	Overall Length	
		IN.	MM.
NC-TX-5408	E8	1.55	39.2
NC-TX-5110	E10	1.58	40.1
NC-TX-5112	E12	1.58	40.1
TXNC-5114	E14	1.5	38.1
NC-TX-5414	E14	1.56	39.7
NC-TX-5114	E14	1.58	40.1
NC-TX-5116	E16	1.58	40.1
NC-TX-5118	E18	1.58	40.1
NC-TX-5120	E20	1.58	40.1

3/4" FEMALE SQ. DR. TORX SOCKETS, NON-MAGNETIC

Part Number	Fastener End Size	Overall Length	
		IN.	MM.
NC-TX-7120	E20	2.08	52.8
NC-TX-7124	E24	2.08	52.8



CUSTOM SOLUTIONS & SPECIALTY PRODUCTS



// THE INDUSTRY EXPERT IN DEVELOPING CUSTOMIZED, "HARD-TO-DESIGN" FASTENER DRIVE TOOLS TO SOLVE OUR CUSTOMERS' CRITICAL FASTENING PROBLEMS.

INNOVATIVE CUSTOM SOLUTIONS

When you have a complex situation on the assembly line or in your MRO facility that cannot be solved by standard drive tools, APEX will solve the problem by designing and developing a custom tool just for your particular need!

For 85 years, industrial customers around the world have relied on APEX to solve their critical fastener drive tool problems. As the world renowned specialist in developing industrial-grade screwdriver bits, impact sockets, and universal wrenches, we design tools to optimize your operations and ensure that your operations run smoothly.

We take great pride in our ability to offer our customers complete tooling solutions that not only meet their requirements, but more often surpass them! Our in-house prototype department backed by a state-of-the-art manufacturing plant puts us in a unique position to deliver a custom tool that will provide outstanding performance consistently - whether it's the first time as a prototype or after it has been supplied to you for many years.

Let us partner with you to develop a custom fastener drive tool designed to optimize your operations and ensure that your assembly line runs smoothly.



APEX CUSTOM SOLUTIONS ADVANTAGE

GLOBAL INDUSTRY LEADER

- Recognized as the industry expert in developing customized, "Hard-To-Design" bits, bit holders, sockets, and universal wrenches
- 85 years of experience in solving our customers' critical fastening tool problems
- Thousands of custom products designed for our global customers - chances are that we may have already designed what you are looking for!

SUPERIOR PRODUCT QUALITY

- Advanced engineering capabilities, proprietary raw materials, and consistent manufacturing process leads to superior product quality
- Custom tools designed for greatest strength and longevity considering application constraints and torque requirements
- Our tools outlast competitive tools substantially and greatly reduce your total cost of ownership

ADVANCED TECHNOLOGY

- Latest solid-modeling and FEA tools used in product design
- 3D-printed prototypes available in plastic to enable customers to confirm dimensions and fit before ordering metal parts
- ISO 9001 / AS9100 certified Quality management system

SUPPORT WHEN YOU NEED IT

- Dedicated applications specialists to ensure fast turnaround times on Custom Solution inquiries
- 24/7 production - capability to respond in real time and support you in preventing downtime
- Expedited delivery option available

3-D PRINTED PROTOTYPE PARTS

APEX offers the option of ordering 3-D printed prototype parts, in thermoplastic material, to help you evaluate the design and confirm the fit to the fastener. Once you are satisfied, we can then manufacture the metal part for you.



CONTACT OUR APPLICATIONS SPECIALISTS FOR A QUOTE:

Please use any of the following options to get in touch with one of our Applications Specialists and obtain a quick quote.



REVERSIBLE SOCKETS FOR SAE HEX HEAD SHEET METAL SCREWS

STANDARD



Part Number	Hex Size IN.	Overall Length IN.	Outside Dia. IN.	Roll Pin Part Number
SW-350	1/4	9/16	3/8	21-S-078-0375
SH-402	13/16	3/4	13/16	21-S-078-0750

MAGNETIC



Part Number	Hex Size IN.	Overall Length IN.	Outside Dia. IN.	Spring Pin Part Number
MSW-350	1/4	31/32	3/8	21-S-078-0375
MSW-90	1/4	31/32	7/16	21-S-078-0437
MSW-90-B*	1/4	31/32	7/16	21-S-078-0437
MSW-984	5/16	31/32	9/16	21-S-078-0562
MSW-984-B*	5/16	31/32	9/16	21-S-078-0562
MSH-400	3/8	11/8	11/16	21-S-078-0687

* Tapered ends

SHANKS FOR REVERSIBLE SOCKETS



Part Number	Male Hex Power Drive IN.	Male Hex Size IN.	Overall Length IN.	Socket Notes
SH-629	1/4	1/4	2	
SH-629-P	1/4	1/4	2	Pin Lock
SH-629-P-4	1/4	1/4	4	Pin Lock
SH-629-5	1/4	1/4	5	
SH-629-6	1/4	1/4	6	
SH-57	1/4	1/4	2	Full Length Hex
SH-57-3	1/4	1/4	3	Full Length Hex
SH-57-4	1/4	1/4	4	Full Length Hex
SH-57-6	1/4	1/4	6	Full Length Hex
SH-57-8	1/4	1/4	8	Full Length Hex
SH-59	1/4	5/16	2	
SH-59-3	1/4	5/16	3	
SH-59-4	1/4	5/16	4	
SH-59-6	1/4	5/16	6	
SH-414	1/4	1/2	2	
SH-412	1/4	3/8	2	
SH-404	7/16	3/8	2	

VALVE STEM DRIVERS

1/4" MALE HEX DRIVE



Part Number	Slot Size	Overall Length IN.	MM.	Body Dia. IN.	MM.
SD-3138	.083	2.500	63.5	0.178	4.5
SD-5187	.083	2.500	63.5	0.178	4.5
SD-5073	.087	1.750	44.4	0.181	4.6
SD-5197	.095	1.680	42.7	0.187	4.7

TAP HOLDING SOCKETS

MALE HEX DRIVE, SAE



Part Number	Male Hex Size IN.	Tap Size IN.	Socket Length: IN.	MM.	Socket Dia. IN.	MM.
SJ-935-1/4	7/16	1/4	15/16	24	5/8	16
SJ-935-5/16	1/2	5/16	15/16	24	5/8	16
SJ-935-3/8 FS	9/16	3/8	1	25	21/32	17
SJ-935-7/16	5/8	7/16	1	25	3/4	19
SJ-935-1/2	3/4	1/2	1 1/4	32	7/8	22

MALE HEX DRIVE, METRIC



Part Number	Male Hex Size MM.	Tap Size IN.	M	Socket Length IN.	MM.	Socket Dia. IN.	MM.
SJ-935-8MMX5	8	-	M5	15/16	24	5/8	16
SJ-935-10MMX6	10	-	M6	15/16	24	5/8	16
SJ-935-12MMX8	12	-	M8	15/16	24	5/8	16
SJ-935-14MMX7/16	14	7/16	-	1	25	21/32	17
SJ-935-14MMX10	14	-	M10	1	25	21/32	17
SJ-935-17MMX8	17	-	M8	1	25	13/16	21
SJ-935-17MMX12	17	-	M12	1	25	13/16	21

Note:

APEX does not stock the parts listed in this section.

TAP HOLDING SOCKETS

FEMALE SQUARE DRIVE, SAE



Part Number	Female Square IN.	Tap Size IN.	Socket Length		Socket Dia.	
			IN.	MM.	IN.	MM.
HC-100-10	3/8	#10	1 1/2	38	3/4	19
HC-100-1/4	3/8	1/4	1 1/2	38	3/4	19
HC-100-5/16	3/8	5/16	1 1/2	38	3/4	19
HC-100-3/8 FS	3/8	3/8	1 1/2	38	3/4	19
HC-100-7/16	3/8	7/16	1 1/2	38	3/4	19
HC-100-1/2	3/8	1/2	1 1/2	38	3/4	19
HC-100-5/8	3/8	5/8	1 3/4	46	1	25
HC-100-3/4	3/8	3/4	2	51	1	25
HE-100-1/4	1/2	1/4	1 1/2	38	7/8	22
HE-100-5/16	1/2	5/16	1 1/2	38	7/8	22
HE-100-3/8 FS	1/2	3/8	1 1/2	38	7/8	22
HE-100-7/16	1/2	7/16	1 1/2	38	7/8	22
HE-100-1/2	1/2	1/2	1 5/8	41	7/8	22
HE-100-5/8	1/2	5/8	1 3/4	46	1	25
HE-100-3/4	1/2	3/4	2	51	1	25

DRILL HOLDERS

1/4" MALE HEX DRIVE



Part Number	Drill Size IN.	Overall Length		Body Dia.	
		IN.	MM.	IN.	MM.
WJ-284-11	#11	2 5/8	67	3/4	19
WJ-284-30	#30	2 5/8	67	5/8	16
WJ-284-7/64	7/64	2 5/8	67	1/2	13
WJ-284-1/8	1/8	2 5/8	67	5/8	16
WJ-284-9/64	9/64	2 5/8	67	5/8	16
WJ-284-5/32	5/32	2 5/8	67	3/4	19
WJ-284-3/16	3/16	2 5/8	67	3/4	19
WJ-284-1/4	1/4	2 5/8	67	3/4	19
WJ-284-5/16	5/16	2 5/8	67	3/4	19
WJ-284-3/8	3/8	2 5/8	67	1	25

7/16" MALE HEX DRIVE



Part Number	Drill Size IN.	Overall Length		Body Dia.	
		IN.	MM.	IN.	MM.
WJ-265-3/16	3/16	2 3/8	60	3/4	19
WJ-265-13/64	13/64	2 3/8	60	3/4	19
WJ-265-1/4	1/4	2 3/8	60	3/4	19
WJ-265-3/8	3/8	2 3/8	60	1	25
WJ-265-7/16	7/16	2 3/8	60	1	25
WJ-265-1/2	1/2	2 3/8	60	1 1/8	29
WJ-265-17/32	17/32	2 3/8	60	1 1/8	29

GREASE FITTING SOCKETS

FOR ANGLED GREASE FITTINGS, DEEP AND SHALLOW BROACH DEPTH



Part No. 6 Point	Part No. Mag.	Hex Size IN.	Square Drive IN.	Overall Length IN.	Overall Length MM.	Broach Depth IN.	Broach Depth MM.	Magnet Depth IN.	Magnet Depth MM.
ZN-112	-	3/8	1/4	1 1/4	32	9/16	14	-	-
ZN-312	MZN-312	3/8	3/8	1 1/2	38	9/16	14	7/32	6
ZN-512	-	3/8	1/2	1 1/2	32	9/16	14	-	-
ZN-114	-	7/16	1/4	1 1/4	32	7/16	11	-	-
ZN-314	MZN-314	7/16	3/8	1 1/2	38	7/16	11	7/16	11
ZN-514	MZN-514	7/16	1/2	1 1/2	38	7/16	11	7/16	11
ZE-112	-	3/8	1/4	1 1/4	32	1/8	3	-	-
ZE-314	-	7/16	3/8	1 1/2	38	3/16	5	-	-
ZE-514	-	7/16	1/2	1 1/2	38	3/16	5	-	-

FOR STRAIGHT GREASE FITTINGS



Part No. 6 Point	Part No. Mag.	Hex Size IN.	Square Drive IN.	Overall Length IN.	Overall Length MM.	Broach Depth IN.	Broach Depth MM.	Magnet Depth IN.	Magnet Depth MM.
ZA-110	MZA-110	5/16	1/4	1	25	1/8	3	21/64	8
ZA-310	MZA-310	5/16	3/8	1 1/4	32	1/8	3	21/64	8
ZA-510	MZA-510	5/16	1/2	1 1/2	38	1/8	3	19/64	7
ZA-512	-	3/8	1/2	1 1/2	38	1/8	3	-	-
ZA-314	MZA-314	7/16	3/8	1 1/4	32	3/16	5	23/64	9
ZA-514	MZA-514	7/16	1/2	1 1/2	38	3/16	5	3/8	10

#5 (1 5/8") SPLINE DRIVE

EXTENSIONS



Part Number	Overall Length: IN.	Overall Length: MM.	Description
EXL-15	15	381	Female spline to male spline

ADAPTERS



Part Number	Description
EXL-1000	Female spline to 1" male square
EXL-1100	Female spline to 1 1/2" male square

#5 (1 5/8") SPLINE DRIVE

UNIVERSAL WRENCHES



Part Number	Description
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MFL-250	Female spline to male spline (heavy duty)
MFL-1000	Female spline to 1" male square

BUDD WHEEL SOCKETS



Part Number	Drive Size	Overall Length:		Hex Opening
		IN.	MM.	
BW-748	3/4" Square	3 3/8	85.7	Combo. 13/16" Square, 1 1/2" Hex
BW-848	1" Square	3 3/8	85.7	Combo. 13/16" Square, 1 1/2" Hex
BW-156	1" Square	4	101.6	Combo. 15/16" Square, 1 3/4" Hex
VH-1-41MM	1" Square	4	101.6	Combo. 13/16" Square, 14 mm Hex
BW-8626	1" Square	2 1/8	54	13/16" Square
BW-848-F	1" Square	3 3/4	95	Combo. 13/16" Square, 1 1/2" Hex for Mag Wheels
HT-848	#5 Spline	3 13/16	96.8	Combo. 13/16" Square, 1 1/2" Hex
HT-1548-D	#5 Spline	4	101.6	1 1/2" Double Hex

FERRY CAP SOCKETS



3/8" SQUARE DRIVE

Part Number	Head Size	Overall Length		Nose Dia.		Drive Dia.	
		IN.	MM.	IN.	MM.	IN.	MM.
FC-310	5/16	1 1/4	31.75	15/32	11.9	5/8	15.9
FC-312	3/8	1 1/4	31.75	9/16	4.3	3/4	19.0

SPARK PLUG SOCKETS



3/8 SQUARE DRIVE - SAE

Part Number	Hex Opening IN.	Overall Length IN.	Nose End Dia. IN.	Drive End Dia. IN.
HC-3520*	5/8	2 1/2	0.8700	0.8700
SWMHCSF-7320	5/8	2 1/2	0.86	0.8640
WJ-1680-A	7/8	3 1/2	1.10	1.10
WJ-1680-B	7/8	3 1/2	1.10	1.10

* Double hex

3/8 SQUARE DRIVE - METRIC

Part Number	Hex Opening MM.	Overall Length MM.	Nose End Dia. MM.	Drive End Dia. MM.
MVC-265-14MM	14	75	22	22
VC-270-14MM	14	165	17	24
MVC-272-14MM	14	178	20	24
VC-271-14MM	14	178	20	24
VCCB-280-14MM-D*	14	180	18	20
MVC-262-14MM-8.75	14	222	21	22
VCFL-118-16MM	16	76	21	24
VC-112-16MM-D*	16	76	24	24
VCFL-107-16MM	16	76	24	24
NCVCF-107-16MM	16	78	29	29
SWMVCSF-114-16MM	16	80	22	22
VCFL-119-16MM	16	127	21	24
VCFL-120-16MM	16	127	24	24
VCFLNC-121-16MM	16	146	21	27
MVC-116-16MM	16	178	21	24
MVC-117-16MM	16	178	21	24
VC-115-16MM	16	178	21	24

* Double hex

1/2 SQUARE DRIVE - METRIC

Part Number	Square Drive Size IN.	Hex Opening MM.	Overall Length MM.	Nose End Dia. MM.	Drive End Dia. MM.
SWMVESF-122-16MM	1/2	16	80	22	22
SWMVESFNC-122-16MM	1/2	16	82	25	25

LUG NUT SOCKETS



5/8" MALE HEX DRIVE, METRIC

Part Number	Male Hex Dr. Sz.	Hex Opening MM.	Overall Length MM.	Dia. Nose End MM.	Dia. Drive End MM.	Opening Depth MM.
VPSFNC-1-19MM	5/8	19	97	29.7	34.7	19.1
VPSFNC-1-22MM	5/8	22	97	34.8	29.6	19.1

5/8" SQUARE DRIVE, METRIC

Part Number	Male Square Dr. Sz.	Hex Opening MM.	Overall Length MM.	Dia. Nose End MM.	Dia. Drive End MM.	Opening Depth MM.
VFSFNC-140-19MM-NY	5/8	19	59.4	29.7	29.7	15.9
VFSFNC-135-19MM	5/8	19	58.1	30.0	30.0	15.9

3/4" SQUARE DRIVE, SAE

Part Number	Male Square Dr. Sz.	Hex Opening IN.	Overall Length IN.	Dia. Nose End IN.	Dia. Drive End IN.	Opening Depth IN.
HGSFNC-3028	3/4	7/8	4	1.28	1.5	0.875
HGSFNC-3328	3/4	7/8	4	1.4	1.5	0.35

DOUBLE ENDED BITS



1/4" HEX INSERT BITS

Part Number	Point Shape	Size #	Overall Length IN.
441P1S	Phillips - Slotted	#1 4F-5R	1 1/4
442P2P	Phillips - Phillips	#2 #2	1 1/4
442P3S	Phillips - Slotted	#2 8F-10R	1 1/4
SD-5586	Torx - Torx	T30 T30	1 3/8

1/4" HEX POWER DRIVE

Part Number	Point Shape	Size #	Overall Length IN.	Overall Length MM.
49J-2P2P-100MI	Phillips - Phillips	#2 #2	3.9	100
49J-2P2P-100MR	Phillips - Phillips	#2 #2	3.9	100
49J-2P2P-150MR	Phillips - Phillips	#2 #2	3.9	100
49J-2P2P-160MR	Phillips - Phillips	#2 #2	6.3	160
49J-2P2P-50MMI	Phillips - Phillips	#2 #2	2.0	50
49J-2P2P-50MMR	Phillips - Phillips	#2 #2	2.0	50
49J-2P2P-65MMR	Phillips - Phillips	#2 #2	2.6	65
49J-2P2P-75MMI	Phillips - Phillips	#2 #2	3.0	75
49J-2P2P-75MMR	Phillips - Phillips	#2 #2	3.0	75
49J-2P2P-8I	Phillips - Phillips	#2 #2	8.0	203
SD-5482	Hex - Hex	1/4" 1/4"	6.0	152
SD-5522	Torx - Torx	T-20 T-20	3.9	100
SD-5522-T25-T25	Torx - Torx	T-25 T-25	3.9	100
SD-5522-T30-T30	Torx - Torx	T-30 T-30	3.9	100
SD-5597-2P-5MM-6	Cruciform - Hex	#2 5 mm	6.0	152
SD-5597-2P-5MM-8	Cruciform - Hex	#2 5 mm	8.0	203
SD-5597-2P-T30-6	Cruciform - Torx	#2 T-30	6.0	152
SD-5597-2P-T30-8	Cruciform - Torx	#2 T-30	8.0	203
SD-5621	Slotted - Slotted	6F-8R 6F-8R	2.75	70
SD-5759	Hex - Hex	6 mm 6mm	3.9	100

MARKER SOCKETS



3/8" SQUARE DRIVE

Part Number	Hex Opening MM.	Overall Length MM.
WJ-1268-8MM	8	169.2
WJ-1268-10MM	10	169.2
WJ-1268-12MM	12	169.2
WJ-1268-14MM	14	169.2

1/2" SQUARE DRIVE

Part Number	Hex Opening MM.	Overall Length MM.
WJ-1268-12MM-1-2	12	169.2
WJ-1268-14MM-1/2	14	169.2
WJ-1268-16MM-1-2	16	169.2
WJ-1268	17	202.2
WJ-1268-19MM-D*	19	203.2
WJ-1268-19MM	19	203.2

*Double Hex

SOCKET RETAINING RINGS

PLASTIC RING WITH STEEL INSERT



Part Number	Drive Size	Inside Dia.	
		IN.	MM.
10005S	3/4" Square	1 1/4	31.8
10032S	3/4" Square	1 7/16	36.5
10034S	3/4" Square	1 5/8	41.3
10008S	1" Square	1 3/4	44.5
10010S	1" Square	2	50.8
10015S	1" Square	2 1/8	54.0
10016S	1" Square	2 1/4	57.2
10017S	1" Square	2 1/2	63.5
10019S	1" Square	2 5/8	66.7
10020S	1 1/2" Square	2 7/8	73.0
10025S	1 1/2" Square	3 3/8	85.7

METAL RING



Part Number	Drive Size	Inside Dia.	
		IN.	MM.
MET-1301C	3/8" Square	.677	17.2
MET-1302C	3/8" Square	.771	19.6
MET-1401C	1/2" Square	.855	22.5
MET-1402C	1/2" Square	1.086	27.6
MET-1600C	3/4" Square	1.594	40.5
MET-1800C	1" Square	1.948	49.5

ADAPTERS

#130-A YANKEE DRIVE FOR SPIRAL TYPE DRIVER



Part Number	Male Square IN.	Overall Length		Shank Dia.	
		IN.	MM.	IN.	MM.
YK-250	1/4	1 15/16	49	.277	7.0
YK-370	3/8	2 3/16	56	.277	7.0
YK-500	1/2	2 5/16	59	.277	7.0

#131-A YANKEE DRIVE FOR SPIRAL TYPE DRIVER



Part Number	Male Square IN.	Overall Length		Shank Dia.	
		IN.	MM.	IN.	MM.
YK-501	1/2	2 5/16	59	.310	8.0

ADAPTERS

#135-A YANKEE DRIVE FOR SPIRAL TYPE DRIVER



Part Number	Male Square IN.	Overall Length		Shank Dia.	
		IN.	MM.	IN.	MM.
YK-252	1/4	1 15/16	49	.215	5.5
YK-372	3/8	2 3/16	56	.215	5.5
YK-502	1/2	2 5/16	59	.215	5.5

FEMALE THREADED ADAPTERS



Part Number	Female Thread IN.	Male Square IN.	Type of Lock
TH-257	3/8"-24	1/4	Pin
TH-377	3/8"-24	3/8	Pin
TH-501	3/8"-24	1/2	Pin
TH-378	1/2"-20	3/8	Pin
TH-502	1/2"-20	1/2	Pin

MALE THREADED ADAPTERS



Part Number	Male Thread IN.	Hex Drive IN.
TM-20	1/2"-20	1/4
TM-24	3/8"-24	1/4
TN-20	1/2"-20	7/16
TN-24	3/8"-24	7/16

BALL END HEX BITS



1/4" HEX INSERT BITS

Part Number	Hex Size		Overall Length	
	IN.	MM.	IN.	MM.
185-000X-BH-4.25	3/64	-	4 1/4	107.95
185-00X-BH-4.5	1/16	-	4 1/2	114.30
185-0X-BH-4.5	5/64	-	4 1/2	114.30
185-1X-BH-6.25	3/32	-	6 1/4	158.75
AM-6MM-BH-165M	-	6	6 1/2	165.00
AM-6MM-BH-255M	-	6	10	254.00

1/4" HEX POWER DRIVE

Part Number	Hex Size		Overall Length	
	IN.	MM.	IN.	MM.
AM-05-BH-9	5/32	-	9	228.60
AM-3MM-BH-4	-	3	4	101.60
AM-4MM-BH-4	-	4	4	101.60
AM-5MM-BH-4	-	5	4	101.60
SD-5536-BH	3/32	-	4 5/8	117.48
SD-5537-BH	5/64	-	5 1/4	133.35
SD-5609-7-64-BH	7/64	-	6	152.40
SD-5630-2_5MM-BH	-	5	4	101.60
SD-5734-BH	7/64	-	5	127.00
SD-5786-BH	5/32	-	3 1/2	88.90
SD-5160	5/32	-	5 1/3	135.20

5/16" HEX INSERT BITS

Part Number	Hex Size MM.	Overall Length	
		IN.	MM.
315-6MM-BH-3	6	3	76.20
315-8MM-BH-3	8	3	76.20
315-10MM-BH-3	10	3	76.20

3/8" HEX INSERT BITS

Part Number	Hex Size MM.	Overall Length	
		IN.	MM.
SD-5814-4M-4-BH	4	4	101.60
SD-5814-6M-4-BH	6	4	101.60

7/16" HEX INSERT BITS

Part Number	Hex Size		Overall Length	
	IN.	MM.	IN.	MM.
SD-5809-10M-4-BH-B	-	10	2 7/8	73.03
SD-5809-10M-6-BH-B	-	10	4 7/8	123.83
SD-5809-10M-8-BH-B	-	10	6 7/8	174.63
SD-5809-8M-4-BH-B	-	8	2 7/8	73.03
SD-5814-4M-4-BH-B	-	4	3 1/8	79.38
SD-5814-6M-4-BH-B	-	6	3 1/8	79.38
SZ-19-A-BH	5/8	-	1 3/8	34.93
SZ-7-10MM-BH	-	10	1 3/8	34.93
SZ-7-6MM-BH	-	6	1 3/8	34.93
SZ-7-6MM-BH-1125	-	6	1 1/8	28.58
SZ-7-6MM-BH-1375	-	6	1 3/8	34.93
SZ-7-6MM-BH-2375	-	6	2 3/8	60.33
SZ-7-8MM-BH	-	8	1 3/8	34.93

7/16" HEX POWER DRIVE

Part Number	Hex Size		Overall Length	
	IN.	MM.	IN.	MM.
AN-6MM-BH-80M	-	6	3 1/64	76.60
AN-8MM-BH	-	8	3 1/2	88.90
SD-5790-BH	15/64	-	3 1/64	76.60

1/2" HEX SERVICE DRIVE

Part Number	Hex Size MM.	Overall Length	
		IN.	MM.
SD-5809-10M-4-BH	10	4	101.60
SD-5809-10M-6-BH	10	6	152.40
SD-5809-10M-8-BH	10	8	203.20
SD-5809-8M-4-BH	8	4	101.60

5/8" HEX INSERT BITS

Part Number	Hex Size MM.	Overall Length	
		IN.	MM.
SD-5810-12M-4-BH-B	12	3	76.20
SD-5810-12M-6-BH-B	12	5	127.00
SD-5810-12M-8-BH-B	12	7	177.80
SD-5810-14M-4-BH-B	14	3	76.20
SD-5810-14M-8-BH-B	14	7	177.80
SZ-10-17MM-BH	17	1 9/16	39.67
SZ-10-18MM-BH-3750	18	3 3/4	95.25

3/4" SQUARE SERVICE DRIVE

Part Number	Hex Size MM.	Overall Length	
		IN.	MM.
SD-5810-12M-4-BH	12	4	101.60
SD-5810-12M-6-BH	12	6	152.40
SD-5810-12M-8-BH	12	8	203.20
SD-5810-14M-4-BH	14	4	101.60
SD-5810-14M-8-BH	14	8	203.20

BARBELL SOCKETS



3/8" FEMALE SQUARE DRIVE

Part Number	Hex Opening MM.	Overall Length		Nose End Dia. MM.	Drive End Dia. MM.
		IN.	MM.		
RMBVC-272-12MM-D*	12	2.0	50.8	0.63	0.71
MBVC-41-12MM-B	12	7.8	196.9	0.75	0.71
MBVC-41-12MM-A	12	6.0	152.4	0.75	0.71
MVCCBC-284-12MM-9	12	9.0	228.6	0.75	0.75
MBVC-41-12MM	12	4.5	115.0	0.75	0.75
VCSF-27-14MM-200M	14	7.9	200.0	0.88	0.88
MBVCCBC-249-14MM-8	14	8.0	203.2	0.87	0.84
MVCCBC-248-14MM-4	14	4.0	101.6	0.87	0.87
VC-27-14MM	14	5.7	145.0	0.88	0.88
MVCF-147-15MM	15	5.9	150.7	0.75	0.89

* Double hex

1/2" FEMALE SQUARE DRIVE

Part Number	Hex Opening IN.	Hex Opening MM.	Overall Length		Nose End Dia. MM.	Drive End Dia. MM.
			IN.	MM.		
HE-334-A-7	1 1/4	-	7	187.5	1.12	1.75
VESF-54-8MM	-	8	3.3	82.6	0.81	0.55
VE-6-14M-200M	-	14	7.9	200.0	0.98	0.82
VE-27-14MM-150M	-	14	6.3	160.1	1.00	0.87
MBVE-338-14MM	-	14	5.9	150.0	0.94	0.88
VE-15-30MM	-	30	6.0	152.4	1.13	1.63

3/4" FEMALE SQUARE DRIVE

Part Number	Hex Opening IN.	Hex Opening MM.	Overall Length		Nose End Dia. MM.	Drive End Dia. MM.
			IN.	MM.		
HG-6840	1 1/4	-	6.0	152.4	1.75	1.75
HG-6940	1 1/4	-	6.0	152.4	1.75	1.75
HG-334-A-7	1 1/4	-	7.6	193.0	1.50	1.75
VG-64-21MM	-	21	10.0	254.0	1.38	1.38

COMBINATION SOCKETS



1/4" SQUARE DRIVE

BIT WITHIN A SOCKET, SAE

Part Number	Hex Opening IN.	Bit Size and Type	Overall Length IN.	Nose End Dia. IN.	Drive End Dia. IN.
HA-10110XT40	5/16	T40 Torx	2 3/16	1/2	1/2

1/4" HEX DRIVE

NUTSETTERS WITH BITS

Part Number	Hex Opening IN.	Bit Size and Type	Overall Length MM.	Nose End Dia. MM.
SWMVM-10-7MX2QD*	7	#2 Quadrex	99.2	12.7
SWMVM-22-8MX2QD*	8	#2 Quadrex	99.2	12.7

* Features sidewall magnets

3/8" SQUARE DRIVE

SOCKET WITHIN A SOCKET, METRIC

Part Number	Hex Opening Sizes and Styles (Standard Hex Unless Noted)	Overall Length MM.	Nose End Dia. MM.	Drive End Dia. MM.
VC-76-8M-12M	8mm, 12mm	38.1	19.1	19.1
MRVC-309-10MM**	10 mm, 7 mm	31.8	16.7	19.1
VC-612-10MX8M	10mm, 8mm	44.5	19.1	19.1
VCNC-843-10MX8M***	10mm, 8mm	40.1	22.2	22.2
VCSF-799-10M8M	SF-10mm, SF-8mm*	72.6	16.5	19.1
VC-274-12M-10M	12mm, 10mm	50.8	20.6	20.6
VC-321-12MX10M	12mm, 10mm	146.1	19.1	19.1
VC-679-13MMX8EP	13mm, EP8 Torx Plus	57.2	20.6	20.6
VC-681-13MMX5MM	13mm, 5mm	101.6	22.2	22.2
VCSF-418-13MM	13mm, SF-10mm*	63.5	20.6	20.6
VCSF-419-13MM	SF-13mm, 10mm*	68.2	20.6	20.6
VC-287-14MX10M	14mm, 10mm	63.5	22.2	22.2
VC-130-15M10M	15mm, 10mm	88.9	22.2	22.2
VE-326-15MM-13MM	15mm, 13mm	73.0	23.8	23.8
VC-150-15MX13M	15mm, 13mm	70.6	22.2	22.2
VC-159-15MX13M	15mm, 13mm	84.1	22.2	22.2
VC-295-17MX12M	17mm, 12mm	74.7	25.4	25.4
VC-291-17MX13M	17mm, 13mm	82.6	25.4	25.4
VC-37-19M14M	19mm, 14mm	69.9	28.6	28.6
VCSF-110-16MX24M	SF-24mm, SF-16mm*	162.3	31.8	30.0

* SF=Surface drive hex; ** Magnetic; *** Free spinning non-mar cover

COMBINATION SOCKETS

3/8" SQUARE DRIVE

BIT WITHIN A SOCKET, METRIC

Part Number	Hex Opening IN.	Bit Size and Type	Overall Length MM.	Nose End Dia. MM.	Drive End Dia. MM.
VCNC-844-10MXT30**	10	T-30 Torx	59.1	22.2	22.2
VC-613-10MXT40	10	T-40 Torx	53.7	16.7	19.1
VCSF-131-11MXT30*	SF-11	T-30 Torx	52	14.9	19.1
VC-282-14MXT50	14	T-50 Torx	82.6	22.2	22.2
VE-154-19MM-6MM	19	6mm Hex	111.1	28.6	28.6

*SF=Surface drive hex; ** Free spinning non-mar cover

3/8" SQUARE DRIVE

BIT WITHIN A SOCKET, SAE

Part Number	Hex Opening IN.	Bit Size and Type	Overall Length IN.	Nose End Dia. IN.	Drive End Dia. IN.
HC-1030	15/16	5/16 Hex	4 1/4	1 1/4	1 1/4
HC-1230	15/16	5/16 Hex	5 3/4	1 1/4	1 1/4

1/2" SQUARE DRIVE

SOCKET WITHIN A SOCKET, METRIC

Part Number	Hex Opening Sizes and Styles (Standard Hex Unless Noted)	Overall Length MM.	Nose End Dia. MM.	Drive End Dia. MM.
VE-368-13M10M	13mm, 10mm	82.6	22.2	23.8
MVE-332-14MX12M**	14mm, 12mm	63.5	22.2	23.8
VE-333-14MX12M	14mm, 12mm	63.5	22.2	23.8
VE-260-14MD-E10	14mm Double Hex, E10 Torx	97	22.7	25
VE-331-15M13M	15mm, 13mm	82.6	23.8	23.8
VE-360-17MX14M	17mm, 14mm	66.7	28.6	28.6
VESF-106-17MX13M-D	17mm, 13mm Double Hex	76.2	25.4	25.4
VE-382-17MX14M	17mm, 14mm	66.7	25.4	25.4
VE-115-18MX13M	18mm, 13mm	76.2	28.6	28.6
VE-116-18MX15M	18mm, 15mm	77.8	28.6	28.6
VENC-117-18MXE14***	18mm, E14 Torx	92.1	28.6	28.6
VESF-332-15M13M*	SF-18mm, SF-13mm	82.6	21	21
VE-84-22MX19M	22mm, 19mm	82.6	29.8	29
VESF-78-22MM-19MM*	SF-22mm, SF-19mm	48	33.8	28
VENC-27-27MX24M***	27mm, 24mm	84.5	44.5	44.5
VE-14-30MX18M	30mm, 18mm	95.3	44.5	44.5

*SF=Surface drive hex; ** Magnetic; *** Free spinning non-mar cover

1/2" SQUARE DRIVE

SOCKET WITHIN A SOCKET, SAE

Part Number	Hex Opening Sizes and Styles (Standard Hex Unless Noted)	Overall Length IN.	Nose End Dia. IN.	Drive End Dia. IN.
HESF-26318-E10*	SF-9/16", E10 Torx	2 1/4	15/16	15/16
HESF-4432*	SF-1", SF-15/16	2 1/4	1 3/8	1 3/8

*SF=Surface drive hex

1/2" SQUARE DRIVE

BIT WITHIN A SOCKET, METRIC

Part Number	Hex Opening IN.	Bit Size and Type	Overall Length MM.	Nose End Dia. MM.	Drive End Dia. MM.
VE-120-12MXTSQ10M	12 Hex	10mm Triple Square	69.9	22.2	23.8
VE-120-12MXTSQ12M	12 Hex	12mm Triple Square	69.9	22.2	23.8
VE-331-13MM-T50	13 Hex	T50 Torx	82.6	19.1	23.8
VESF-132-15MX10M*	SF-15	10mm Hex	133.4	25.4	25.4
VE-131-16MX8M	16 Hex	8mm Hex	82	23.9	23.9
VE-214-17MM-D	17 Double Hex	T55 Torx	130	30	28.6
VE-369-17MM-D-T55	17 Double Hex	T55 Torx	88.8	28.6	28.6
VE-371-17MM-D-T55	17 Double Hex	T55 Torx	102.2	28.6	28.6
VE-381-17MM-D-T55	17 Double Hex	T55 Torx	188.3	28.6	28.6
VE-120-18MX8M	18 Hex	8mm Hex	158	24	24

*SF=Surface drive hex

3/4" SQUARE DRIVE

SOCKET WITHIN A SOCKET, SAE

Part Number	Hex Opening Sizes and Styles (Standard Hex Unless Noted)	Overall Length IN.	Nose End Dia. IN.	Drive End Dia. IN.
MBVA-6-12MM10MM**	12mm, 10mm	44.5	19.1	19.1
VGNC-129-18MXE14***	18mm, E14 Torx	103.6	28.6	37.2
VG-66-21MX18M	21mm, 18mm	101.6	33.0	33.0
VG-76-24MX14M	24mm, 14mm	101.6	38.1	38.1

** Magnetic; *** Free spinning non-mar cover

3/4" SQUARE DRIVE

BIT WITHIN A SOCKET, METRIC

Part Number	Hex Opening IN.	Bit Size and Type	Overall Length MM.	Nose End Dia. MM.	Drive End Dia. MM.
VGSF-31-15MX10M*	SF-15	10mm Hex	133.4	25.4	38.1
VGSF-77-21MX12M*	SF-21	21mm Hex	158.8	38.1	38.1

*SF=Surface drive hex

COMBINATION SOCKETS

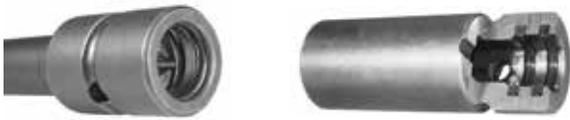
1" SQUARE DRIVE

SOCKET WITHIN A SOCKET, SAE

Part Number	Hex Opening Sizes and Styles (Standard Hex Unless Noted)	Overall Length IN.	Nose End Dia. IN.	Drive End Dia. IN.
VH-27-27MX22M	27mm, 22mm	108.0	47.6	41.3
VHSF-2-38MM-33MM*	SF-38mm, SF-33mm	95.3	57.2	57.2
HHSF-8148-33MM*	1 1/2", SF-33mm	95.3	60.3	60.3
HHSF-10748-33MM*	1 1/2", SF-33mm	108.0	60.3	60.3

*SF=Surface drive hex

COUNTER-BORED TOOLS



APEX offers sockets and extensions with counter-bores machined on the drive end of the socket/ extension. Benefits to the user are improved axial alignment between the power tool and socket/extension, improved torque transfer, and ergonomic benefits to the operator due to reduced vibrations.

3/8" SQUARE DRIVE

Part Number	Tool Type	Fastener End Type	Fastener End Size IN. MM.	Overall Length IN. MM.
HC-8612-2	Extension: Pin Lock	Square	3/8 -	2 -
HC-8612-4	Extension: Pin Lock	Square	3/8 -	4 -
HC-8612-6	Extension: Pin Lock	Square	3/8 -	6 -
HC-8612-8	Extension: Pin Lock	Square	3/8 -	8 -
MBVC-41-12MM-B	Barbell Socket Magnetic	Hex	- 12	- 197
MVCCBC-284-12MM-5	Barbell Socket Magnetic	Hex	- 12	- 127
MVCCBC-284-12MM-9	Barbell Socket Magnetic	Hex	- 12	- 229
MBVCCBR323-12M120M	Barbell Socket Magnetic	Hex	- 12	- 120
MBVC-41-12MM	Barbell Socket Magnetic	Hex	- 12	- 115

1/2" SQUARE DRIVE

Part Number	Tool Type	Fastener End Type	Fastener End Size IN. MM.	Overall Length IN. MM.
MVECBU-131-12MM	Socket Magnetic	Hex	- 12	- 115
WE-4516-4	Extension: Pin Lock	Square	1/2 -	4 -
WE-4516-6	Extension: Pin Lock	Square	1/2 -	6 -

5/8" SQUARE DRIVE

Part Number	Tool Type	Fastener End Type	Fastener End Size MM.	Overall Length MM.
MVFCB-137-19MM	Socket Magnetic	Hex	19	48
MVFCB-68-17MM	Socket Magnetic	Hex	17	48

ADAPTERS

SOCKET & RATCHET WRENCH ADAPTERS, SAE



Part Number	Male Square IN.	Male Hex IN.	Overall Length IN.
A-108	1/4	1/4	25/32
A-110	1/4	5/16	25/32
A-112	1/4	3/8	25/32
A-114	1/4	7/16	25/32
A-116	1/4	1/2	25/32
A-118	1/4	9/16	25/32
A-120	1/4	5/8	25/32
A-312	3/8	3/8	11/64
A-314	3/8	7/16	11/64
A-316	3/8	1/2	15/64
A-318	3/8	9/16	15/64
A-320	3/8	5/8	15/64
A-322	3/8	11/16	15/64
A-324	3/8	3/4	15/64
A-328	3/8	7/8	15/64
A-512	1/2	3/8	13/32
A-514	1/2	7/16	13/32
A-516	1/2	1/2	13/32
A-518	1/2	9/16	13/32
A-520	1/2	5/8	11/8
A-522	1/2	11/16	11/8
A-524	1/2	3/4	11/8
A-526	1/2	13/16	11/8
A-528	1/2	7/8	11/8
A-530	1/2	15/16	11/8
A-534	1/2	11/16	11/8
A-536	1/2	11/8	11/8
A-538	1/2	13/16	11/8
A-540	1/2	11/4	11/8

ADAPTERS

SOCKETS WITH MALE HEX



Part Number	Female Square IN.	Male Hex IN.	Overall Length	
			IN.	MM.
SJ-375	5/16	3/8	13/16	21
SJ-349	3/8	7/16	15/16	24
SJ-350	7/16	7/16	15/16	24
SJ-360	3/8	1/2	15/16	24
SJ-361	7/16	1/2	15/16	24
SJ-55	7/16	9/16	15/16	24
SJ-241	1/2	1/2	1	25
SJ-351	1/2	7/16	1	25
SJ-352	9/16	7/16	1	25
SJ-362	9/16	1/2	1	25
SJ-379	1/2	3/8	1	25
SJ-380	9/16	3/8	1	25
SJ-66	1/2	9/16	1	25
SJ-67	9/16	9/16	1	25
SJ-68	5/8	9/16	11/8	28
SJ-364	11/16	1/2	1 3/16	30

SOCKET & RATCHET WRENCH ADAPTERS, METRIC



Part Number	Male Square IN.	Male Hex IN.	Overall Length	
			IN.	MM.
A-1-6mm	1/4	6	25/32	20
A-1-7mm	1/4	7	25/32	20
A-1-8mm	1/4	8	25/32	20
A-1-9mm	1/4	9	25/32	20
A-1-13mm	1/4	13	25/32	20
A-3-10mm	3/8	10	15/16	24
A-3-11mm	3/8	11	15/16	24
A-3-12mm	3/8	12	15/16	24
A-3-13mm	3/8	13	15/16	24
A-3-14mm	3/8	14	15/16	24
A-3-15mm	3/8	15	15/16	24
A-3-16mm	3/8	16	15/16	24
A-3-17mm	3/8	17	15/16	24
A-3-18mm	3/8	18	15/16	24
A-3-19mm	3/8	19	15/16	24
A-5-10mm	1/2	10	11/8	29
A-5-11mm	1/2	11	11/8	29
A-5-12mm	1/2	12	11/8	29
A-5-13mm	1/2	13	11/8	29
A-5-14mm	1/2	14	11/8	29
A-5-15mm	1/2	15	11/8	29
A-5-16mm	1/2	16	11/8	29
A-5-17mm	1/2	17	11/8	29
A-5-18mm	1/2	18	11/8	29
A-5-19mm	1/2	19	11/8	29
A-5-20mm	1/2	20	11/8	29
A-5-21mm	1/2	21	11/8	29
A-5-22mm	1/2	22	11/8	29
A-5-23mm	1/2	23	11/8	29
A-5-24mm	1/2	24	11/8	29
A-5-25mm	1/2	25	11/8	29

WSK WOBBLE SOCKET ADAPTER KIT

The APEX WSK can convert any fastener tool with a female square drive (3/8", 1/2", 5/8", 3/4", or 1") and a DIN groove into a Wobble socket. This will enable you to drive fasteners that may have a slight misalignment (up to 10 degrees) between the drive tool axis and the fastener axis. In addition, this will also prove extremely useful in hand-drive operations where clearance may be an issue.

KEY BENEFITS OF APEX WSK:

- Improves productivity by providing a wobble (or swivel) to any existing socket immediately
- Can be used with standard sockets or application-specific specials
- Corrects misalignment up to 10 degrees
- Reduces cam-out caused by misalignment
- Improves tool life by engaging fastener correctly
- Easy to assemble





TORQUE SCREWDRIVERS



// APEX TORQUE LIMITING SCREWDRIVERS OFFER HIGH QUALITY SOLUTIONS FOR A VARIETY OF PRECISION TORQUE APPLICATIONS. EACH TORQUE SCREWDRIVER IS MADE FROM TOP GRADE MATERIALS AND MACHINED TO EXACTING TOLERANCES RESULTING IN PREMIUM PERFORMANCE AND DURABILITY.

TORQUE LIMITING SCREWDRIVERS

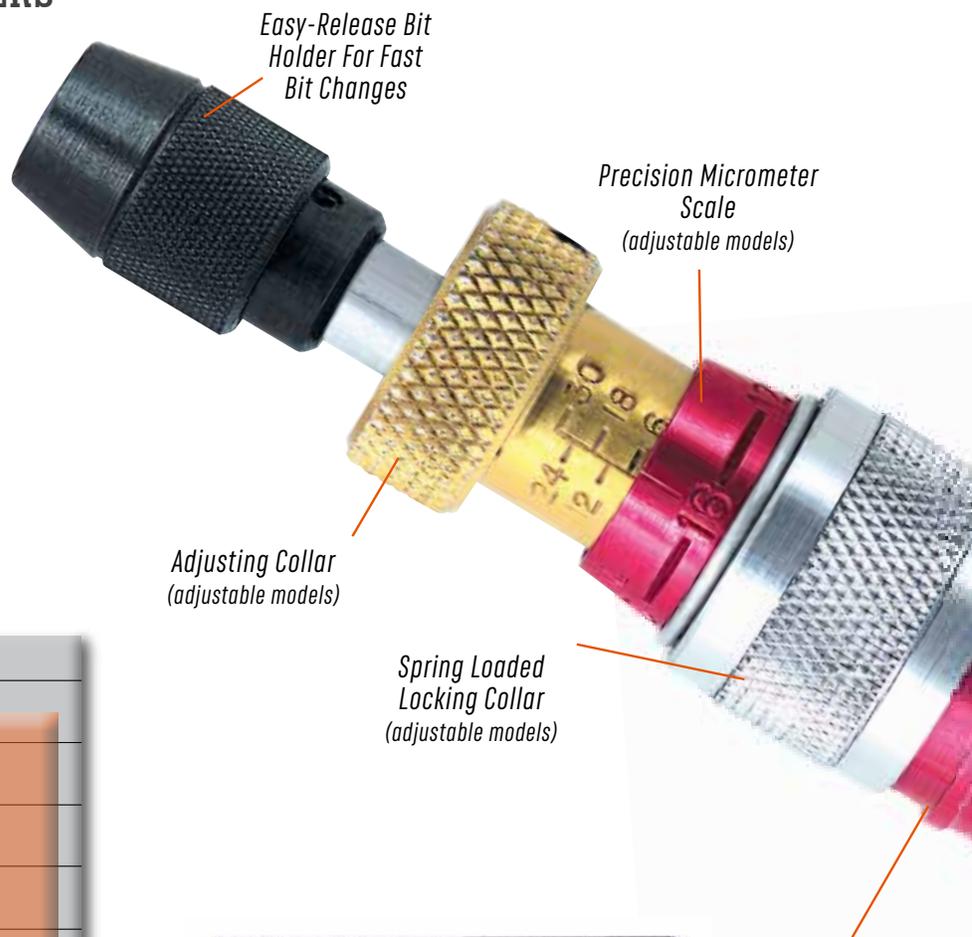
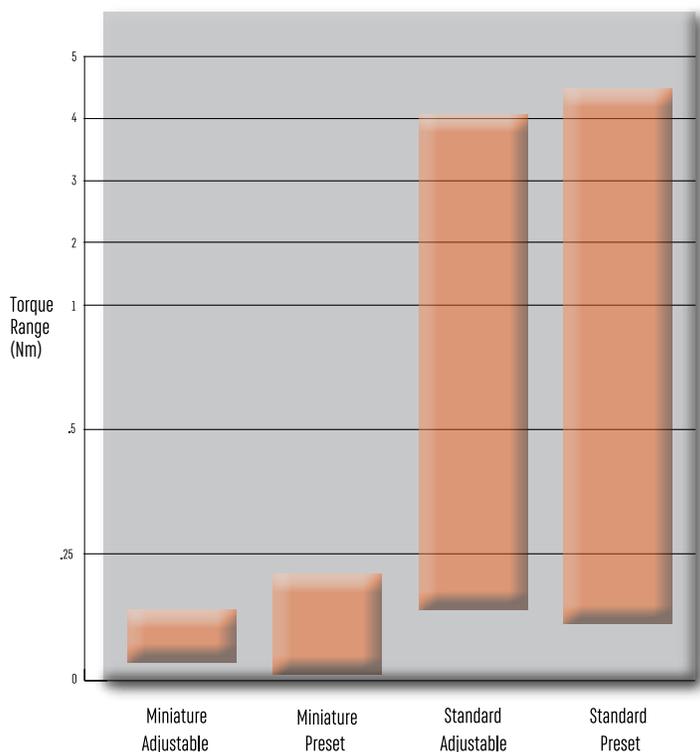
APEX®

TORQUE LIMITING SCREWDRIVERS INTRODUCTION:

APEX torque limiting screwdrivers offer high quality solutions for a variety of applications. Our torque screwdrivers add value to the assembly process by enabling you to assess, control and improve product reliability, which ultimately leads to customer satisfaction.

APEX offers a complete line of torque limiting screwdrivers covering a range of 2-640 in. oz. Six standard models are available for light duty torque applications including general electronic and computer assembly. Two miniature models offer reliable fastening of the very smallest of applications such as cellular phone assembly.

Torque Screwdrivers



Easy-Release Bit Holder For Fast Bit Changes

QUALITY

Electronics assembly and other light screw assembly applications demand precision that can only be accomplished with the use of precision tools. All APEX torque screwdrivers are made of top grade materials machined to exacting tolerances. Working parts are heat treated for added strength and durability. Then, each tool is carefully assembled by our experienced technicians. All APEX torque screwdrivers feature aluminum housings to reduce weight and maximize durability. Our screwdrivers also feature a unique roller bearing cam, which produces smooth, accurate, and consistent performance when tightening fasteners. When the maximum torque setting is achieved, the cam mechanism automatically slips to prevent over-tightening.

Each APEX screwdriver is calibrated according to ASME B107.14M before leaving the plant, using test equipment traceable to NIST (National Institute of Standards and Technology).



In addition to being highly durable, several features have been engineered into APEX torque screwdrivers to increase ease of use. Each of the three standard adjustable models is distinguished by red, blue and black for easy identification. Also, a patented, spring-loaded locking collar locks the scale at the desired torque setting. This helps to prevent the operator from accidentally using the screwdriver in the unlocked position, which may lead to incorrectly tightened fasteners. All models feature a quick-release bit holder, which securely retains the bit during operation, while allowing for easy removal.

Our manufacturing processes are ISO 9001 certified, which means that APEX products are manufactured to the highest quality standards. Quality materials, precision machining and assembly is what makes APEX torque screwdrivers the tool of choice.

CALIBRATION INTERVALS

Due to the consistent precision accuracy needed while using these products, we recommend calibrating our torque screwdrivers every six months. However, the quality objectives, frequency of application and type of application will ultimately determine how often to calibrate the tool.

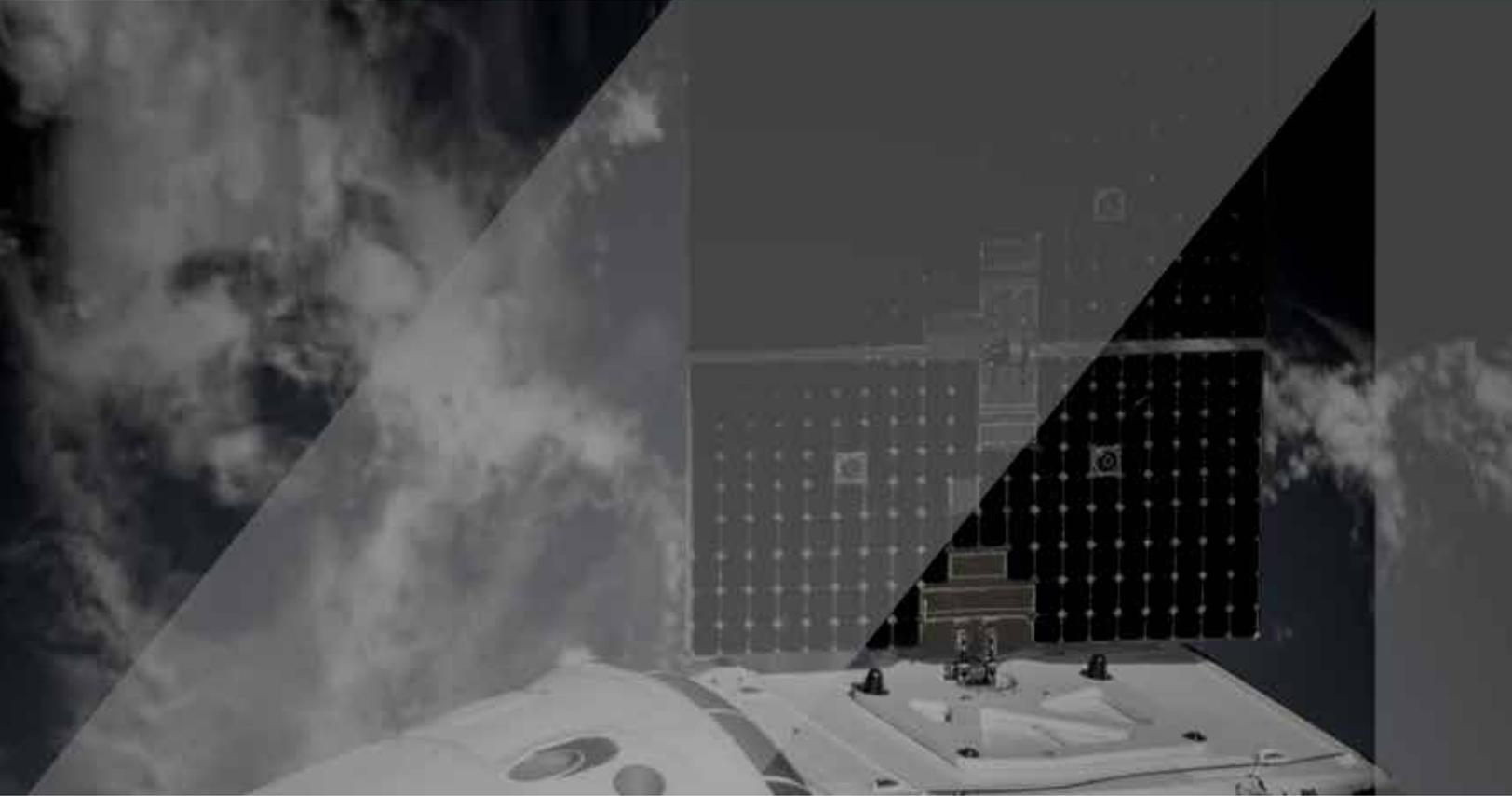


Ground And Tuned Torque Spring For Repeatability And Accuracy

Precision Ground Roller Bearing Cam

Adjusting Screw

All-Aluminum Housing To Reduce Weight And Increase Durability



UNIVERSAL JOINTS



**// SUPERIOR TORQUE
TRANSFER SOLUTIONS FOR THE
TOUGHEST APPLICATIONS -
IN ZERO GRAVITY, AT 25,000
FEET OR ON THE FACTORY FLOOR.**

APEX UNIVERSAL JOINTS OVERVIEW



APEX®

**LESS DOWNTIME,
MORE LIFETIME.**

APEX has been supplying universal joints for military and commercial applications since 1933. Over these 80+ years we have provided engineered solutions for thousands of demanding applications worldwide. Today APEX is recognized as the “Less downtime, more Lifetime” leader in pin and cube universal joint designs and applications.

OUR PRIMARY MARKETS ARE:

GOVERNMENT/MILITARY APPLICATIONS

APEX meets the demanding requirements military applications such as gun systems, remote valve control, Unmanned Aerial Vehicles (UAV), thrust vector control systems, and fan drive universal joints.



AEROSPACE

Commercial, military, business jets, and private aircraft all utilize APEX universal joints. Typical uses include flap/ slat actuation, “hinges” for cargo doors and windows, mechanical linkages for steering, trim control and door latching mechanisms. APEX double universal joints have even been used to replace gear boxes. These high strength-to-weight ratio universal joints have excellent torsional freeplay (i.e., backlash) characteristics suited to this environment.



OFF-HIGHWAY/ CONSTRUCTION EQUIPMENT

Applications include steering columns, a variety of mechanical linkages and power take offs. Also included are custom designs for specialty equipment (e.g. fire trucks.)



PERFORMANCE RACING

Our MS series of universal joints have become the standard by which all other universal joints are measured. The same aerospace design considerations are applicable in this competitive market. Primary uses are for steering, shift linkages, and chassis adjustment applications.



INDUSTRIAL POWER TRANSMISSION

This represents the most diverse area of applications. Some typical uses are steel leveling equipment, links to conveyor systems, pump drive systems, multiple spindle drill heads, bowling alley pin setters, canning equipment, centerless grinders, bottling machines, industrial sewing machines, control linkages, mixing equipment, packaging machinery, and industrial scales. This list represents only a fraction of the applications where APEX universal joints are used. Our "quick-change" universal joints are extremely popular in this area. They eliminate precision alignment requirements and allow for quick repair of critical machinery and assembly/conveyor lines.

APEX universal joints consistently deliver performance in process industries where continuous operation is the norm and equipment availability/uptime is critical. Whatever your application, you can depend on APEX universal joints to provide rigidity and exceptionally high strength-to-weight ratios with less deflection, superior fatigue resistance and high overload capacity. Add to this APEX'S wide selection of elastomeric covers that seal lubrication in and protect the universal joint from harsh operating environments (e.g., dirt, water, abrasive slurry, etc.), and you have unsurpassed reliability for your application. All of these features can be incorporated into single, double, telescopic, or quick-change universal joints. We specialize in make-to-order products engineered to optimize your application and reduce operating costs. APEX is the Performance Authority for pin-and-cube universal joints.

APEX UNIVERSAL JOINTS OVERVIEW

APEX OFFERS A VARIETY OF SOLUTIONS FOR YOUR STANDARD OR CUSTOM APPLICATION

If your application calls for something other than our standard 300 or 400 series universal joints, APEX can provide it for you. Our engineers are ready to solve your application problems.

Some of the options available are:

■ UNIVERSAL JOINT CONFIGURATIONS:

In addition to the standard plain bearing design, there is also a "Press Fit" design which improves fatigue life in reverse loading applications. For higher RPMs, we offer a needle bearing line.

■ MATERIALS:

Alloy steels (4140, 4150, 4340), Austenitic stainless steel (303, 304, 316, Nitronic 60), Martensitic stainless steel (416, 440C, 13-8, 17-4, 15-5), carbon steel (1020, 8620) and specialty steels (such as Stressproof and S-2 Modified).

■ BEARINGS:

APEX utilizes plain, rolling element and polymer bearings in its designs. Selecting the right bearing maximizes the performance the universal joint, minimizes/eliminates maintenance, and increases the life of the universal joint.

■ HEAT TREATMENT:

Advanced heat treat, selective through hardening, induction hardening, and case hardening.

■ SURFACE TREATMENT:

Light oil, cadmium (electrolytic and vacuum), electrolytic zinc, nickel (electrolytic and electroless), black oxide, phosphate (manganese and zinc), solid film lubricant, and a variety of paint solutions.

■ COVER MATERIALS:

Silicone, Nitrile, EPDM, Viton, Neoprene, FDA approved food polymer, vinyl, Silicon/Dacron, Fluoro-Silicon/Nomex.

■ COVER STYLES:

Bulbous, flat, and convoluted.

■ LUBRICANTS:

High pressure gear oil, "natural" grease, synthetic grease, synthetic grease with additives (improves "dry start" characteristics), non-outgassing grease, food grade grease, graphite powder, and solid film lubricant.

■ GEOMETRY:

Square, Hex, Threaded, splines (involute or straightsided), gears, split collar with lug bolt, keyways, precision diameters (.0002"), gears, whistle-notch, and quickrelease. Where applicable, these are available in male or female.



Additionally, multiple features can be combined on the same hub. APEX engineers utilize these options daily to design the product right for your needs. From extreme loading (including seismic) to harsh environments (-80° to 600° F), APEX is your Total Solution Source.

QUALITY

APEX universal joints are supplied from our Dayton facility which has AS9100 certification. AS9100 is a widely adopted and standardized quality management system for the aerospace industry and incorporates fully the entirety of the current version of ISO 9001.

Our Dayton facility, manufacturing site of APEX Universal Joints, has AS9100 Quality System Certification. The driving force behind the implementation of the Quality System is the commitment "to provide our customers with the best value delivered by offering only products and services that meet or exceed their expectations."

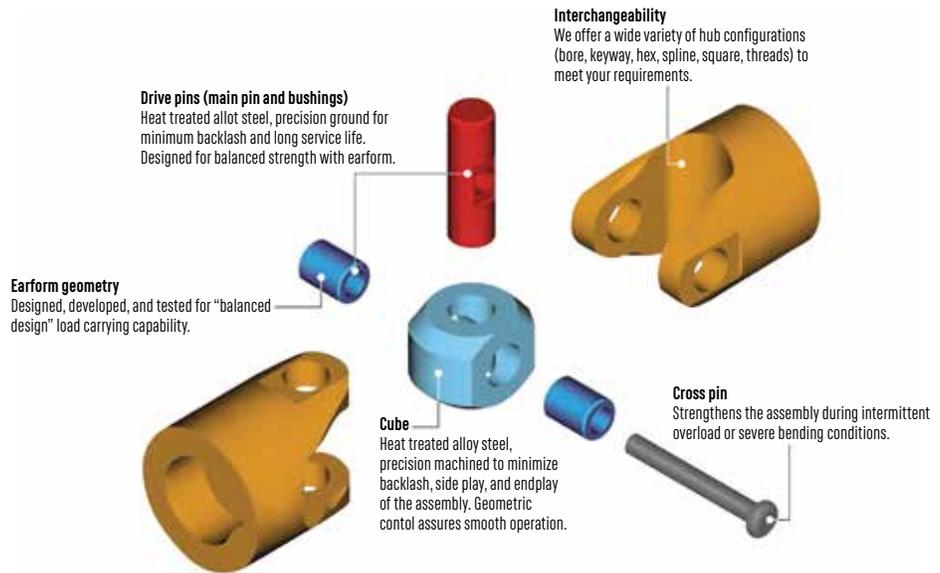


THE APEX TOTAL SOLUTION DESIGNED INTO EVERY UNIVERSAL JOINT

The illustration below highlights many of the common design features that have made Apex the Market Leader in providing “less downtime, more lifetime” for some of the most demanding applications. At the heart of this success is engineering excellence that created and continues to refine this design to meet the ever increasing challenges of new applications. To further compliment this, add Apex’s manufacturing capabilities and its proprietary heat-treat processes. The result is a “balanced” design that provides the highest strength-to-weight ratio pin and cube universal joint available. It is not uncommon for Apex to outperform the competition by at least 30% in strength for equivalent size products.

PERFORMANCE FEATURES:

- Efficient operation up to 35° standard (higher operating angles available)
- Designed-in overload capacity for greater reliability. (Temporary torsional overloads up to 80% and axial overloads up to 150% of the rated ultimate capacity can occur without harmful binding.)
- Advanced heat treat of alloy steel maximizes “toughness”
- Available with covers that seal in lubrication and greatly improve service life.



APEX design engineers utilize 3-D solid models and finite element analysis (FEA) to develop and evaluate different design options.



When you bring your applications to APEX, you will be supported by a technical staff that has decades of experience in performing Finite Element Analysis (FEA), 3-D Solid Modeling, Metallurgical analysis, non-destructive testing, functional testing, and prototype production.

CONVERSION TABLES

MILLIMETER – DECIMAL – FRACTION

MM	DEC.	IN.	MM	DEC.	IN.	MM	DEC.	IN.	MM	DEC.	IN.	MM	DEC.	IN.
0.100	.0039		5.159	.2031	13/64	10.200	.4016		15.300	.6024		20.300	.7992	
0.200	.0079		5.200	.2047		10.300	.4055		15.400	.6063		20.400	.8031	
0.300	.0118		5.300	.2087		10.319	.4063	13/32	15.478	.6094	39/64	20.500	.8071	
0.397	.0156	1/64	5.400	.2126		10.400	.4094		15.500	.6102		20.600	.8110	
0.400	.0157		5.500	.2165		10.500	.4134		15.600	.6142		20.638	.8125	13/16
0.500	.0197		5.556	.2188	7/32	10.600	.4173		15.700	.6181		20.700	.8150	
0.600	.0236		5.600	.2205		10.700	.4219		15.800	.6220		20.800	.8189	
0.700	.0276		5.700	.2244		10.716	.4219	27/64	15.875	.6250	5/8	20.900	.8228	
0.794	.0313	1/32	5.800	.2283		10.800	.4252		15.900	.6250		21.000	.8268	
0.800	.0315		5.900	.2323		10.900	.4291		16.000	.6299		21.034	.8281	53/64
0.900	.0354		5.953	.2344	15/64	11.000	.4331		16.100	.6339		21.100	.8307	
1.000	.0394		6.000	.2362		11.100	.4370		16.200	.6378		21.200	.8307	
1.100	.0433		6.100	.2402		11.113	.4375	7/16	16.272	.6406	41/64	21.200	.8346	
1.191	.0469	3/64	6.200	.2441		11.200	.4409		16.300	.6417		21.300	.8386	
1.200	.0472		6.300	.2480		11.300	.4449		16.400	.6457		21.400	.8425	
1.300	.0512		6.350	.2500	1/4	11.400	.4488		16.500	.6496		21.431	.8438	27/32
1.400	.0551		6.400	.2520		11.500	.4528		16.600	.6535		21.500	.8465	
1.500	.0591		6.500	.2559		11.509	.4531	29/64	16.669	.6563	21/32	21.600	.8504	
1.588	.0625	1/16	6.600	.2598		11.600	.4567		16.700	.6575		21.700	.8543	
1.600	.0630		6.700	.2638		11.700	.4606		16.800	.6614		21.800	.8583	
1.700	.0669		6.747	.2656	17/64	11.800	.4646		16.900	.6654		21.828	.8594	55/94
1.800	.0709		6.800	.2677		11.900	.4685		17.000	.6693		21.900	.8622	
1.900	.0748		6.900	.2717		11.906	.4688	15/32	17.066	.6719	43/64	22.000	.8661	
1.984	.0781	5/64	7.000	.2756		12.000	.4724		17.100	.6732		22.100	.8701	
2.000	.0878		7.100	.2795		12.100	.4764		17.200	.6772		22.200	.8740	
2.100	.0827		7.144	.2813	9/32	12.200	.4803		17.300	.6811		22.225	.8750	7/8
2.200	.0866		7.200	.2835		12.300	.4843		17.400	.6850		22.300	.8780	
2.300	.0906		7.300	.2874		12.303	.4844	31/64	17.463	.6875	11/16	22.400	.8819	
2.381	.0938	3/32	7.400	.2913		12.400	.4882		17.500	.6890		22.500	.8858	
2.400	.0945		7.500	.2953		12.500	.4921		17.600	.6929		22.600	.8898	
2.500	.0984		7.541	.2969	19/64	12.600	.4961		17.700	.6968		22.622	.8906	57/64
2.600	.1024		7.600	.2992		12.700	.5000	1/2	17.800	.7008		22.700	.8937	
2.700	.1063		7.700	.3031		12.800	.5039		17.859	.7031	45/64	22.800	.8976	
2.778	.1094	7/64	7.800	.3071		12.900	.5079		17.900	.7047		22.900	.9016	
2.800	.1102		7.900	.3110		13.000	.5118		18.000	.7087		23.000	.9055	
2.900	.1142		7.938	.3125	5/16	13.097	.5156	33/64	18.100	.7126		23.019	.9063	29/32
3.000	.1181		8.000	.3150		13.100	.5157		18.200	.7165		23.100	.9094	
3.100	.1220		8.100	.3189		13.200	.5197		18.256	.7188	23/32	23.200	.9134	
3.175	.1250	1/8	8.200	.3228		13.300	.5236		18.300	.7205		23.300	.9173	
3.200	.1260		8.300	.3268		13.400	.5276		18.400	.7244		23.400	.9213	
3.300	.1299		8.334	.3281	21/64	13.494	.5313	17/32	18.500	.7283		23.416	.9219	59/64
3.400	.1339		8.400	.3307		13.500	.5315		18.600	.7323		23.500	.9252	
3.500	.1378		8.500	.3346		13.600	.5354		18.653	.7344	47/64	23.600	.9291	
3.572	.1406	9/64	8.600	.3386		13.700	.5394		18.700	.7362		23.700	.9331	
3.600	.1417		8.700	.3425		13.800	.5433		18.800	.7402		23.800	.9370	
3.700	.1457		8.731	.3438	11/32	13.891	.5469	35/64	18.900	.7441		23.900	.9409	
3.800	.1496		8.800	.3465		13.900	.5472		19.000	.7480		24.000	.9449	
3.900	.1535		8.900	.3504		14.000	.5512		19.050	.7500	3/4	24.100	.9488	
3.969	.1563	5/32	9.000	.3543		14.100	.5551		19.100	.7520		24.200	.9528	
4.000	.1575		9.100	.3583		14.200	.5591		19.200	.7559		24.209	.9531	61/64
4.100	.1624		9.128	.3594	23/64	14.288	.5625	9/16	19.300	.7598		24.300	.9567	
4.200	.1654		9.200	.3622		14.300	.5630		19.400	.7638		24.400	.9606	
4.300	.1693		9.300	.3661		14.400	.5669		19.447	.7656	49/64	24.500	.9646	
4.366	.1719	11/64	9.400	.3701		14.500	.5709		19.500	.7677		24.600	.9685	
4.400	.1732		9.500	.3740		14.600	.5748		19.600	.7717		24.606	.9688	31/32
4.500	.1772		9.525	.3750	3/8	14.684	.5781	37/64	19.700	.7756		24.700	.9724	
4.600	.1811		9.600	.3780		14.700	.5787		19.800	.7795		24.800	.9764	
4.700	.1850		9.700	.3819		14.800	.5827		19.844	.7813	25/32	24.900	.9803	
4.763	.1875	3/16	9.800	.3858		14.900	.5866		19.900	.7835		25.000	.9843	
4.800	.1890		9.900	.3898		15.000	.5906		20.000	.7874		25.003	.9844	63/64
4.900	.1929		9.922	.3902	25/64	15.081	.5938	19/32	20.100	.7913		25.100	.9882	
5.000	.1969		10.000	.3937		15.100	.5945		20.200	.7953		25.200	.9921	
5.100	.2008		10.100	.3976		15.200	.5984		20.241	.7969	51/64	25.300	.9961	
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UG-SW-343	93	VC-37-19M14M	113	VG-76-24MX14M	114	ZE-314	108
UG-SWM-13MM23	95	VC-487-10MM-D	56	VGNC-129-18MXE14	114	ZE-514	108
UG-SWM-15MM23	97	VC-612-10MX8M	113	VGSF-19-15MM	81	ZN-112	108
UG-SWM-15MM33	96	VC-613-10MXT40	114	VGSF-20-15MM	81	ZN-114	108
UG-SWMFL-13MM15	97	VC-679-13MMX8EP	113	VGSF-31-15MX10M	114	ZN-312	108
UG-SWMFL-13MM23	95	VC-681-13MMX5MM	113	VGSF-77-21MX12M	114	ZN-314	108
UG-SWMSF-10MM13	95	VC-76-8M-12M	113	VH-1-41MM	109	ZN-512	108
UG-SWMSF-10MM23	95	VCCB-280-14MM-D	109	VH-27-27MX22M	115	ZN-514	108
UG-SWMSF-10MM33	95	VCF1-107-16MM	109	VHSF-2-38MM-33MM	115		
UG-SWMSF-11MM23	95	VCF1-118-16MM	109	VPSFNC-1-19MM	110		
UG-SWMSF-12MM13	95	VCF1-119-16MM	109	VPSFNC-1-22MM	110		
UG-SWMSF-13MM13	95	VCF1-120-16MM	109	W-321X	16		
UG-SWMSF-13MM23	95	VCF1NC-121-16MM	109	WE-4516-4	115		
UG-SWMSF-14MM23	95	VCNC-843-10MX8M	113	WE-4516-6	115		
UG-SWMSF-14MM33	95	VCNC-844-10MXT30	114	WJ-1268	110		
UG-SWMSF-15MM13	95	VCSF-110-16MX24M	113	WJ-1268-10MM	110		
UG-SWMSF-15MM15	97	VCSF-131-11MXT30	114	WJ-1268-12MM	110		
UG-SWMSF-15MM23	96	VCSF-27-14MM-200M	113	WJ-1268-12MM-1-2	110		
UG-SWMSF-17MM13	96	VCSF-418-13MM	113	WJ-1268-14MM	110		
UG-SWMSF-17MM23	96	VCSF-419-13MM	113	WJ-1268-14MM-1/2	110		
UG-SWMSF-18MM13	96	VCSF-799-10M8M	113	WJ-1268-16MM-1-2	110		
UG-SWMSF-18MM23	96	VCSF-836-10MM	58	WJ-1268-19MM	110		
UG-SWMSF-19MM13	96	VCSF-840-10MM	58	WJ-1268-19MM-D	110		
UG-SWMSF-8MM23	95	VE-115-18MX13M	114	WJ-1268-8MM	110		
UG-TX-1110	92	VE-116-18MX15M	114	WJ-1680-A	109		
UG-TX-3108	93	VE-120-12MXTSQ10M	114	WJ-1680-B	109		
UG-TX-3110	93	VE-120-12MXTSQ12M	114	WJ-265-1/2	108		
UG-TX-3114	93	VE-120-18MX8M	114	WJ-265-1/4	108		
UG-TXA-908	92	VE-131-16MX8M	114	WJ-265-13/64	108		
UG-VC-68-13MM	94	VE-14-30MX18M	114	WJ-265-17/32	108		
UG-VFSF-132-19MM	98	VE-15-30MM	113	WJ-265-3/16	108		
UG-VGSF-41-19MM	98	VE-154-19MM-6MM	114	WJ-265-3/8	108		
UG-VGSF-43-22MM	98	VE-214-17MM-D	114	WJ-265-7/16	108		
UG-VGSF-60-21MM	98	VE-260-14MD-E10	114	WJ-284-1/4	108		
UG-X-1108	92	VE-27-14MM-150M	113	WJ-284-1/8	108		
UG-X-1110	92	VE-326-15MM-13MM	113	WJ-284-11	108		
UG-ZA-110	92	VE-331-13MM-T50	114	WJ-284-3/16	108		
UG-EX-250-5	98	VE-331-15M13M	114	WJ-284-3/8	108		
UG-7340	98	VE-333-14MX12M	114	WJ-284-30	108		
UG-855	100	VE-360-17MX14M	114	WJ-284-5/16	108		

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