



CRITICAL APPLICATION SOCKET HEAD FASTENERS

Available in Inch and Metric Sizes

Custom Designed Fastener Solutions

Socket Head Cap Screws

Socket Button Head Cap Screws

Socket Flat Head Cap Screws

Socket Low Head Cap Screws

Socket Set Screws

Socket Shoulder Screws

Dowel Pins

Socket Jam Screws

Socket Pressure Plugs



HOLO-KROME[®]
WHEN IT MATTERS MOST[™]

www.HOLO-KROME.com



Certificate US11/82236

The management system of

Holo-Krome Company

61 Barnes Industrial Park North
Wallingford, CT 06492, United States

has been assessed and certified as meeting the requirements of

ISO 9001:2015

For the following activities:

The manufacture, procurement and delivery of fasteners and specialty formed products to industry and customer specifications.

Further clarifications regarding the scope of this certificate and the applicability of ISO 9001:2015 requirements may be obtained by consulting the organization.

This certificate is valid from 24 September 2015 until 24 September 2018 and remains valid subject to satisfactory surveillance audits. Recertification audit due a minimum of 60 days before the expiration date. Issue 5: 12 March 2018. Certified since February 1996.

The audit leading to this certificate commenced on 19/09/2017. Previous issue certificate validity date was until 15/09/2018.

Authorized by:



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GENERAL INFORMATION

About Us: All Holo-Krome products are Made in the USA and used in a wide variety of market applications which demand high quality, high strength precision components. Since its formation in 1929, Holo-Krome has been at the forefront of fastener development and innovation. In 1930, Holo-Krome invented and later patented the first practical cold heading process for mass producing high tensile strength alloy steel socket screws. As you browse through our catalog, you will see Holo-Krome manufactures and stocks a full line of standard, high quality socket screw products. In addition to the standard product line, Holo-Krome manufactures semi-standards, special fasteners and cold headed parts.

Product Number Code: All standard products have an assigned Product Number Code shown on the boxes for ease in ordering and inventory control. All products are sold in full packages only.

Special Products: Products not in the catalog can be quoted on request. Blueprints and specifications should accompany your request.

Shipments: Holo-Krome will attempt to ship in accordance with your instructions and by carrier of your choice. However, final selection for method of shipment and carrier will be at our sole discretion.

Certifications: On request, using a lot number stamped on the outside of the Box, and or the Holo-Code® on the head of the cap screw, Holo-Krome can certify the chemical analysis, the raw material supplier and the mechanical/dimensional properties of the product.

Product Plating & Modification: Holo-Krome shall not be responsible for products plated or modified in any manner not under its control.

Prices: Prices are subject to change without notice.

Bulk Prices: Quantity pricing for bulk (non-package) available on request. For the name of the authorized Holo-Krome distributor nearest you, call toll free 1-800-879-6205.

Limited Warranty: Holo-Krome warrants, for a period of one (1) year after delivery, that all Products delivered to Purchaser hereunder shall be free from any defects in material or workmanship and in conformity with any applicable specifications. Such warranty only extends to Purchaser. Purchaser shall inspect Products within a reasonable time after receipt, and shall promptly notify Holo-Krome of any claimed defect or nonconformity. Any Products determined to be defective in material or workmanship must be returned, with an invoice and/or control number to an authorized location, shipping costs to be prepaid by Purchaser, within the one-year warranty period. THE FOREGOING WARRANTIES ARE IN PLACE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED AND HOLO-KROME EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Disclaimer and Limitation of Liability: HOLO-KROME DISCLAIMS ANY LIABILITY FOR PRODUCT DEFECT CLAIMS THAT ARE DUE TO THE MISUSE, IMPROPER SELECTION OR MISAPPLICATION OF THE PRODUCT. IN NO EVENT WILL EITHER PARTY BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT, INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR INJURIES TO PERSONS OR TO PROPERTY OR LOSS OF PROFITS OR LOSS OF FUTURE BUSINESS OR REPUTATION, WHETHER BASED ON TORT OR BREACH OF CONTRACT OR OTHER BASIS, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL HOLO-KROME'S LIABILITY FOR DIRECT DAMAGES EXCEED THE PURCHASE PRICE OF THE PRODUCT.

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Fully threaded part.



HOLO-KROME[®]

WHEN IT MATTERS MOST



THE WORLD'S THIRD MOST EXPENSIVE FASTENER

The most expensive fastener anyone can buy is one that fails. The next most expensive fastener is one that saves a few pennies on price, then takes them all back by adding dollars to your installation costs. Next comes Holo-Krome precision fasteners, with greater endurance and fatigue life. Unlike fasteners of unknown origin, ours come with 90 years of specialized engineering support – manufactured, tested and certified in our Wallingford, CT facility.



The most expensive fasteners.

These are the failures:

- Fasteners that fail to live up to the manufacturer's or importer's claims
- Fasteners that save a few pennies initially, but end up costing hundreds, maybe even thousands of dollars in replacement costs
- Fasteners of unknown origin that don't carry a manufacturing pedigree
- Fasteners that can even cost you your priceless reputation
- Fasteners without the unmistakable Holo-Krome brand



The second most expensive fasteners.

What they lack in strength, can usually be made up in numbers. So, drill more holes, use more and larger fasteners, and the chances are pretty good that everything will hold together. That is, everything but your budget. Here's why...

When determining total fastener cost, studies show that the per unit price of a given fastener only represents approximately 18% of its total in-place cost. The other 82% covers drilling, tapping, and assembly steps. The real money is saved by using fewer, stronger fasteners. So, before you buy imported or bargain priced fasteners, consider the overall cost figure, and discover where the real value lies.

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Third most expensive fasteners – Holo-Krome.

- Maximum available strength
- Precision 3A threads for greater clamping force
- Radius root and radius run-out threads for structural integrity
- Controlled fillets for uniform loading under the head
- Technical support to assist in solving fastening problems
- Holo-Code[®] stamped on socket heads as well as diameter and pitch, simplifying identification and traceability for users
- ISO 9001:2015 certified
- Inspection at controlled intervals — filing of test data for long term traceability, long term reliability



***When you consider the “less expensive”
higher risk alternative, Holo-Krome is the real value.***

Socket Head Cap Screws



UNRC COARSE THREAD SERIES • 1960 SERIES
 HEAT TREATED ALLOY STEEL • UNIFIED 3A THREAD FIT
 HOLO-CODE TRACEABLE • MEETS ASME B18.3 • MEETS ASTM A574

Diameter	Length Under Head	Thread Series UNRC	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
#2 (.086") 5/64" Key	3/16"	56	72002	0.1	100
	1/4"		72004	0.1	
	5/16"		720000050	0.1	
	3/8"		72006	0.1	100
	7/16"		720000070	0.1	50
	1/2"		72008	0.2	100
	5/8"		720000090	0.1	50
	3/4"		720000096	0.1	
	7/8"		720000097	0.1	
1"	720000098	0.1	25		
#3 (.099") 5/64" Key	3/16"	48	72010	0.1	100
	1/4"		72012	0.1	
	3/8"		72014	0.1	
	1/2"		72016	0.2	
	3/4"		720000174	0.1	25
#4 (.112") 3/32" Key	3/16"	40	86150	0.2	100
	1/4"		72018	0.2	
	5/16"		86154	0.2	
	3/8"		72020	0.2	
	7/16"		720000210	0.2	
	1/2"		72022	0.3	
	5/8"		72024	0.3	
	3/4"		72026	0.3	
	7/8"		86172	0.4	
	1"		86176	0.4	
	1-1/4"		720000270	0.5	
1-1/2"	720000273	0.5			
#5 (.125") 3/32" Key	1/4"	40	72028	0.2	100
	5/16"		720000290	0.3	
	3/8"		72030	0.3	
	1/2"		72032	0.3	25
	5/8"		72034	0.3	
	3/4"		72036	0.4	
	7/8"		720000366	0.1	
	1"		720000370	0.1	
	1-1/4"		720000372	0.2	
1-1/2"	720000374	0.2			
#6 (.138") 7/64" Key	1/4"	32	72038	0.3	100
	5/16"		720000390	0.3	
	3/8"		72040	0.3	
	7/16"		720000410	0.4	
	1/2"		72042	0.4	
	5/8"		72044	0.4	
	3/4"		72046	0.4	
	7/8"		72048	0.5	
	1"		72050	0.5	
	1-1/4"		86288	0.5	
	1-1/2"		86292	0.6	
1-3/4"	86296	0.7			
2"	86300	0.8			
#8 (.164") 9/64" Key	1/4"	32	72052	0.4	100
	5/16"		720000530	0.5	
	3/8"		72054	0.5	
	7/16"		720000550	0.5	
	1/2"		72056	0.5	
	5/8"		72058	0.6	
	3/4"		72060	0.7	
	7/8"		72062	0.7	
	1"		72064	0.8	

Diameter	Length Under Head	Thread Series UNRC	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
#8 (Cont.)	1-1/4"	32	72066	0.9	100
	1-1/2"		72068	1.1	
	1-3/4"		86362	1.2	
	2"		86364	1.2	
	2-1/2"		86368	1.3	
#10 (.190") 5/32" Key	1/4"	24	86424	0.5	100
	5/16"		720000700	0.3	50
	3/8"		72070	0.6	100
	1/2"		72072	0.7	
	5/8"		72074	0.8	
	3/4"		72076	0.9	
	7/8"		72078	0.9	
	1"		72080	1.0	
	1-1/4"		72082	1.3	
	1-1/2"		72084	1.4	
	1-3/4"		72086	1.6	
	2"		72088	1.9	
	2-1/4"		86440	2.0	
	2-1/2"		86442	2.1	
	2-3/4"		720000891	2.4	
3"	720000893	2.5			
1/4" (.250") 3/16" Key	1/4"	20	86526	0.8	100
	3/8"		72090	1.0	
	1/2"		72092	1.2	
	5/8"		72094	1.4	
	3/4"		72096	1.5	
	7/8"		72098	1.6	
	1"		72100	1.8	
	1-1/4"		72102	2.1	
	1-1/2"		72104	2.5	
	1-3/4"		72106	2.8	
	2"		72108	3.0	
	2-1/4"		72110	3.4	
	2-1/2"		72112	3.8	
	2-3/4"		72114	3.9	
	3"		72116	4.3	
	3-1/4"		86576	4.8	
	3-1/2"		72117	5.2	
3-3/4"	86580	5.5			
4"	72115	5.7			
4-1/2"	720001177	3.1	50		
5/16" (.312") 1/4" Key	1/2"	18	72120	2.0	100
	5/8"		72122	2.3	
	3/4"		72124	2.5	
	7/8"		72126	2.7	
	1"		72128	2.9	
	1-1/4"		72130	3.4	
	1-1/2"		72132	3.9	
	1-3/4"		72134	4.4	
	2"		72136	4.9	
	2-1/4"		72138	5.4	
	2-1/2"		72140	5.9	
2-3/4"	72142	6.4			
3"	72144	6.9			

Fully threaded part.

Socket Head Cap Screws Cont.



UNRC COARSE THREAD SERIES • 1960 SERIES
 HEAT TREATED ALLOY STEEL • UNIFIED 3A THREAD FIT
 HOLO-CODE TRACEABLE • MEETS ASME B18.3 • MEETS ASTM A574

Diameter	Length Under Head	Thread Series UNRC	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
5/16" (Cont.)	3-1/4"	18	72146	3.7	50
	3-1/2"		72148	3.9	
	3-3/4"		720001491	4.2	
	4"		86646	4.5	
	4-1/2"		720001494	0.6	5
	5"		720001497	0.6	
	5-1/2"		720001498	0.7	
3/8" (.375") 5/16" Key	1/2"	16	72150	3.4	100
	5/8"		72152	3.8	
	3/4"		72154	4.0	
	7/8"		72156	4.3	
	1"		72158	4.6	
	1-1/4"		72160	5.2	
	1-1/2"		72162	6.0	
	1-3/4"		72164	3.3	
	2"		72166	3.9	
	2-1/4"		72168	4.3	
	2-1/2"	72170	4.5	50	
	2-3/4"	72172	4.9		
	3"	72174	5.1		
	3-1/4"	72176	5.4		
	3-1/2"	72178	5.8		
	3-3/4"	720001790	6.2		
	4"	72180	6.6		
	4-1/2"	72182	7.4		
	5"	72184	8.8		
	5-1/2"	86688	9.2		
6"	72185	9.5			
7/16" (.437") 3/8" Key	3/4"	14	72190	5.6	100
	7/8"		72192	6.0	
	1"		72194	6.4	
	1-1/4"		72196	3.8	
	1-1/2"		72198	4.2	
	1-3/4"		72200	4.6	50
	2"		72202	5.0	
	2-1/4"		72204	5.5	
	2-1/2"		72206	6.0	
	2-3/4"		72208	3.3	
	3"		72210	3.5	25
	3-1/4"		72212	4.0	
	3-1/2"		72214	4.0	
	4"		72216	4.5	
	4-1/2"		72217	5.0	
5"	86724	5.5			
1/2" (.500") 3/8" Key	1/2"	13	72218	3.7	50
	5/8"		72220	4.0	
	3/4"		72222	4.2	
	7/8"		72224	4.5	
	1"		72226	4.8	
	1-1/4"		72228	5.3	
	1-1/2"		72230	6.3	
	1-3/4"		72232	6.6	
	2"		72234	7.4	

Diameter	Length Under Head	Thread Series UNRC	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box	
1/2" (Cont.)	2-1/4"	13	72236	4.0	25	
	2-1/2"		72238	4.4		
	2-3/4"		72240	4.6		
	3"		72242	4.9		
	3-1/4"		72244	5.1		
	3-1/2"		72246	6.0		
	3-3/4"		72247	6.2		
	4"		72248	6.3		
	4-1/4"		720002490	2.7		10
	4-1/2"		72250	7.0		25
	4-3/4"		720002510	3.0	10	
	5"		72252	7.9	25	
	5-1/4"		720002530	3.2	10	
	5-1/2"		72254	8.6	25	
	5-3/4"		720002551	3.5	10	
	6"		72256	9.3	25	
	6-1/4"		720002570	3.8	10	
	6-1/2"		72258	3.8		
	7"		72260	4.0		
	7-1/2"		720002610	4.5		
	8"		72262	4.5		
	8-1/2"		720002622	5.0		
	9"		720002624	5.3		
	10"		720002625	5.9		
	11"		720002627	6.4		
12"	720002629	7.0				
5/8" (.625") 1/2" Key	1"	11	72264	4.3	25	
	1-1/4"		72266	4.8		
	1-1/2"		72268	5.3		
	1-3/4"		72270	5.6		
	2"		72272	6.0		
	2-1/4"		72274	6.8		
	2-1/2"		72276	7.3		
	2-3/4"		72278	7.8		
	3"		72280	8.4		
	3-1/4"		72282	9.0		
	3-1/2"		72284	9.5		
	4"		72286	10.5		
	4-1/2"		72288	9.5	20	
	5"		72290	10.5		
	5-1/2"		72292	5.3		
	6"		72294	5.5		
	6-1/2"		72296	5.9		
	7"		72298	6.3		
	7-1/2"		720002990	7.0		
	8"		72300	7.0		
8-1/2"	720003002	7.9				
9"	720003003	8.3				
10"	720003005	9.2				
11"	720003006	10.0				
12"	720003007	10.9				

Socket Head Cap Screws Cont.



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HEAT TREATED ALLOY STEEL • UNIFIED 3A THREAD FIT
HOLO-CODE TRACEABLE • MEETS ASME B18.3 • MEETS ASTM A574

Diameter	Length Under Head	Thread Series UNRC	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box	
3/4" (.750") 5/8" Key	1-1/4"	10	72302	7.1	25	
	1-1/2"		72304	7.6		
	1-3/4"		72306	8.4		
	2"		72308	9.1		
	2-1/4"		72310	9.9		
	2-1/2"		72312	10.6		
	2-3/4"		72314	11.4		
	3"		72316	12.3		
	3-1/4"		72318	13.0		
	3-1/2"		72320	13.8		
	3-3/4"		72321	14.8		
	4"		72322	15.4		
	4-1/2"		72324	14.0	20	
	5"		72326	14.7		
	5-1/2"		72328	7.9		
	6"		72330	8.4		
	6-1/2"		72332	9.0		
	7"		72334	9.6		
	7-1/2"		720003350	10.4		
	8"		72336	10.8		
8-1/2"	720003352	11.6				
9"	720003354	12.2				
9-1/2"	720003356	12.8	10			
10"	720003363	13.5				
11"	720003364	14.7				
12"	720003365	16.0				
13"	720003366	17.2				
7/8" (.875") 3/4" Key	2"	9		72338	5.1	10
	2-1/4"			72340	5.4	
	2-1/2"			72342	5.8	
	2-3/4"			72344	6.2	
	3"			72346	6.6	
	3-1/4"		72348	7.1		
	3-1/2"		72350	7.6		
	4"		72352	8.4		
	4-1/2"		72354	9.2		
	5"		72356	10.0		
	5-1/2"		72358	10.8		
	6"		72360	11.6		
	6-1/2"		72362	12.5		
7"	72364	13.0				
8"	72366	13.6				
1" (1.000") 3/4" Key	1-1/2"	8	720003677	6.1	10	
	1-3/4"		720003678	6.6		
	2"		72368	7.1		
	2-1/4"		72370	7.6		
	2-1/2"		72372	8.1		
	2-3/4"		72374	8.5		
	3"		72376	9.2		
	3-1/4"		72378	9.7		
	3-1/2"		72380	10.3		
	3-3/4"		720003810	10.8		
	4"		72382	11.3		
	4-1/2"		72384	12.4		
	5"		72386	13.5		
	5-1/2"		72388	14.6		

Diameter	Length Under Head	Thread Series UNRC	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box		
1" (1.000") 3/4" Key	6"	8	72390	15.8	10		
	6-1/2"		72392	16.8			
	7"		72394	17.8			
	7-1/2"		720003950	19.0			
	8"		72396	19.8			
	8-1/2"		720003962	21.2			
	9"		720003964	22.4			
	9-1/2"		720003966	12.0			
	10"		720003984	12.5			
	11"		720003985	14.0			
	12"		720003986	14.8			
	14"		720003987	15.3	5		
	UNIFIED 2A THREAD FIT						
	3"		7	72400		1.6	1
3-1/2"	72402	1.8					
4"	72404	2.0					
4-1/2"	72406	2.1					
5"	72408	2.3					
5-1/2"	72410	2.4					
6"	72412	2.6					
6-1/2"	72414	2.8					
7"	72416	2.9					
7-1/2"	720004170	3.2					
8"	72418	3.3					
9"	72420	3.8					
10"	72422	4.2					
11"	72424	4.6					
12"	720004260	5.0					
1-1/2" (1.500") 1" Key	UNIFIED 2A THREAD FIT						
	3-1/2"	6	72428	2.5	1		
	4"		72430	2.9			
	4-1/2"		72432	3.0			
	5"		72434	3.3			
	5-1/2"		72436	3.5			
	6"		72438	3.8			
	6-1/2"		72440	4.0			
	7"		72442	4.3			
	8"		72444	4.8			
	9"		720004460	6.3			
	10"		720004480	6.8			
	12"		720004520	7.3			

Fully threaded part.

Socket Head Cap Screws Cont.



UNRC COARSE THREAD SERIES • 1960 SERIES
 HEAT TREATED ALLOY STEEL • UNIFIED 2A THREAD FIT
 HOLO-CODE TRACEABLE • MEETS ASME B18.3 • MEETS ASTM A574

Diameter	Length Under Head	Thread Series UNRC	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
1-3/4" (1.750") 1-1/4" Key	3-1/2"	5	11568434	4.53	1
	4"		11568435	4.84	1
	4-1/2"		11568436	5.14	1
	5"		11568437	5.45	1
	5-1/2"		11568438	5.86	1
	6"		11568439	6.22	1
	7"		11568440	6.93	1
	8"		11568441	7.64	1
	9"		11568442	8.35	1
	10"		11568443	9.06	1
	12"		11568444	10.47	1
	16"		11568445	13.31	1
	20"		11568446	16.15	1

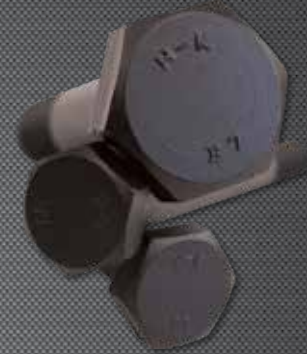
Diameter	Length Under Head	Thread Series UNRC	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
2" (2.000") 1-1/2" Key	4"	4.5	11568447	6.79	1
	4-1/2"		11568448	7.19	1
	5"		11568449	7.59	1
	5-1/2"		11568450	8.06	1
	6"		11568451	8.52	1
	7"		11568452	9.45	1
	8"		11568453	10.37	1
	9"		11568454	11.30	1
	10"		11568455	12.23	1
	12"		11568456	14.08	1
	15"		11568457	16.86	1
	18"		11568458	19.64	1
	20"		11568459	21.49	1

Please contact us about our new product lines including



**A325 &
A490
Structural
Bolts**

**B7 Heavy
Hex Cap
Screws**



**12 Point
Flange
Bolts**



Socket Head Cap Screws Cont.



UNRF FINE THREAD SERIES • 1960 SERIES
 HEAT TREATED ALLOY STEEL • UNIFIED 3A THREAD FIT
 HOLO-CODE TRACEABLE • MEETS ASME B18.3 • MEETS ASTM A574

Diameter	Length Under Head	Thread Series UNRF	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
#0 (.060") .050" Key	1/8"	80	73002	0.1	100
	3/16"		73004	0.1	
	1/4"		73006	0.1	
	3/8"		73008	0.1	
#1 (.073") 1/16" Key	1/4"	72	73014	0.1	100
	3/8"		73016	0.1	
#4 (.112") 3/32" Key	1/4"	48	730000180	0.1	50
	3/8"		730000200	0.1	
	1/2"		730000220	0.1	
	1"		730000270	0.1	
#6 (.138") 7/64" Key	1/4"	40	73018	0.3	100
	3/8"		73020	0.3	
	1/2"		73022	0.4	
	5/8"		73024	0.4	
	3/4"		73026	0.4	
	1"		730000500	0.2	
#8 (.164") 9/64" Key	1-1/4"	36	730000510	0.2	25
	3/8"		73028	0.5	
	1/2"		73030	0.5	
	3/4"		73032	0.7	
#10 (.190") 5/32" Key	1"	32	730000640	0.2	100
	1/4"		77388	0.5	
	5/16"		730000698	0.6	
	3/8"		73034	0.6	
	1/2"		73036	0.7	
	5/8"		73038	0.8	
	3/4"		73040	0.9	
	7/8"		73042	0.9	
	1"		73044	1.0	
	1-1/4"		73046	1.3	
	1-1/2"		73048	1.4	
	1-3/4"		73050	1.6	
	2"		73052	1.9	
	2-1/4"		77440	2.0	
	2-1/2"		77442	2.2	
	2-3/4"		730000891	2.3	
	3"		77446	2.5	
1/4" (.250") 3/16" Key	1/4"	28	77450	0.8	100
	3/8"		73054	1.0	
	1/2"		73056	1.2	
	5/8"		73058	1.4	
	3/4"		73060	1.5	
	7/8"		73062	1.6	
	1"		73064	1.8	
	1-1/4"		73066	2.1	
	1-1/2"		73068	2.5	
	1-3/4"		73070	2.8	
	2"		73072	3.0	
	2-1/4"		73074	3.4	
	2-1/2"		77474	3.8	
	3"		77478	4.3	
	4"		77482	5.7	

Diameter	Length Under Head	Thread Series UNRF	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
5/16" (.312") 1/4" Key	1/2"	24	73076	2.0	100
	5/8"		73078	2.3	
	3/4"		73080	2.5	
	7/8"		73082	2.7	
	1"		73084	2.9	
	1-1/4"		73086	3.4	
	1-1/2"		73088	3.9	
	1-3/4"		73090	4.4	
	2"		73092	4.9	
	2-1/4"		73094	5.4	
	2-1/2"		73096	5.9	
	3"		730001440	6.9	
	3-1/2"		730001480	3.9	
	4"		730001490	4.5	
3/8" (.375") 5/16" Key	1/2"	24	73098	3.4	100
	5/8"		73100	3.8	
	3/4"		73102	4.0	
	7/8"		73104	4.3	
	1"		73106	4.6	
	1-1/4"		73108	5.2	
	1-1/2"		73110	6.0	
	1-3/4"		73112	3.3	
	2"		73114	3.9	
	2-1/4"		73116	4.3	
	2-1/2"		73118	4.5	
	2-3/4"		73119	4.9	
	3"		73120	5.1	
	3-1/2"		77500	5.8	
	4"		77504	6.6	
	4-1/2"		730001820	7.4	
	5"		77510	8.8	
5-1/2"	730001840	9.2			
6"	730001850	9.5			
7/16" (.437") 3/8" Key	1"	20	73122	6.4	100
	1-1/4"		73124	3.8	
	1-1/2"		73126	4.2	
	2"		73128	5.0	
	2-1/2"		730002060	6.0	
	3"		730002080	3.5	
1/2" (.500") 3/8" Key	3-1/2"	20	730002140	4.0	25
	3/4"		730002220	4.2	
	1"		73130	4.8	
	1-1/4"		73132	5.3	
	1-1/2"		73134	6.3	
	1-3/4"		73136	6.6	
	2"		73138	7.4	
	2-1/4"		73140	4.0	
	2-1/2"		73142	4.4	
	2-3/4"		73143	4.6	
	3"		73144	4.9	
	3-1/2"		73145	6.0	
	4"		77540	6.3	
	4-1/2"		77544	7.0	
	5"		77548	7.9	
	5-1/2"		77552	8.6	
	6"		77556	9.3	

Fully threaded part.

Socket Head Cap Screws Cont.



UNRF FINE THREAD SERIES • 1960 SERIES
 HEAT TREATED ALLOY STEEL • UNIFIED 3A THREAD FIT
 HOLO-CODE TRACEABLE • MEETS ASME B18.3 • MEETS ASTM A574

Diameter	Length Under Head	Thread Series UNRF	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box	
5/8" (.625") 1/2" Key	1"	18	73146	4.3	25	
	1-1/4"		73148	4.8		
	1-1/2"		73150	5.3		
	1-3/4"		73152	5.6		
	2"		73154	6.0		
	2-1/2"		73156	7.3		
	2-1/4"		73155	6.8		
	2-3/4"		73158	7.8		
	3"		73160	8.4		
	3-1/2"		73164	9.5		
	4"		73168	10.5		
	4-1/2"		73172	9.5		20
	5"		73176	10.5		

Diameter	Length Under Head	Thread Series UNRF	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
3/4" (.750") 5/8" Key	1-1/4"	16	730003020	7.1	25
	1-1/2"		730003040	7.6	
	1-3/4"		730003060	8.0	
	2"		730003080	9.1	
	2-1/4"		730003100	9.9	
	2-1/2"		730003120	10.6	
	2-3/4"		730003140	11.4	
	3"		730003160	12.3	
	3-1/2"		730003200	13.8	
	3-3/4"		730003210	14.8	
	4"		730003220	15.4	
	4-1/2"		730003240	17.1	
	5"		730003260	18.8	
	5-1/2"		730003280	8.0	10
	6"		730003300	8.7	
	7"		730003340	10.0	
	8"		730003360	11.2	

Stainless Socket Cap Screws



COARSE AND FINE THREAD SERIES
 • NON-HEAT TREATED • PASSIVATED FINISH • UNIFIED 3A THREAD FIT
 MEETS ASME B18.3 • MEETS ASTM F837 CONDITION CW1

Diameter	Length Under Head	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNRC	UNRF		
#2 (.086") 56 UNRC 5/64" Key	1/4"	78004	-	0.1	100
	3/8"	78006	-	0.1	
#4 (.112") 40 UNRC 3/32" Key	3/16"	780110019	-	0.1	100
	1/4"	78010	-	0.2	
	5/16"	780110031	-	0.1	
	3/8"	78012	-	0.2	
	7/16"	780110044	-	0.2	
	1/2"	78014	-	0.3	
	5/8"	780110063	-	0.2	
	3/4"	780110075	-	0.2	
	7/8"	780110088	-	0.2	
	1"	780110100	-	0.3	
	1-1/4"	780110125	-	0.3	
1-1/2"	780110150	-	0.4		
#6 (.138") 32 UNRC 7/64" Key	1/4"	78016	-	0.3	100
	5/16"	780140031	-	0.2	
	3/8"	78018	-	0.3	
	1/2"	78020	-	0.4	
	5/8"	78022	-	0.4	
	3/4"	78024	-	0.4	
	7/8"	780140088	-	0.4	
	1"	780140100	-	0.4	
	1-1/4"	780140125	-	0.5	
	1-1/2"	780140150	-	0.6	
	1-3/4"	780140175	-	0.7	

Diameter	Length Under Head	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNRC	UNRF		
#8 (.164") 32 UNRC 9/64" Key	1/4"	780160025	-	0.3	100
	5/16"	780160031	-	0.4	
	3/8"	78026	-	0.5	
	1/2"	78028	-	0.5	
	5/8"	78030	-	0.6	
	3/4"	78032	-	0.7	
	7/8"	780160088	-	0.6	
	1"	78034	-	0.8	
	1-1/4"	780160125	-	0.8	
	1-1/2"	780160150	-	0.9	
	1-3/4"	780160175	-	1.0	
	2"	780160200	-	1.2	
	2-1/2"	780160250	-	1.5	
	#10 (.190") 24 UNRC 32 UNRF 5/32" Key	1/4"	780190025	790190025	
5/16"		780190031	790190031	0.6	
3/8"		78036	79018	0.6	
1/2"		78038	79020	0.7	
5/8"		78040	79022	0.8	
3/4"		78042	79024	0.9	
7/8"		78044	790190088	0.9	
1"		780190100	79028	0.9	
1-1/4"		780190125	79030	1.1	
1-1/2"		780190150	79032	1.2	
1-3/4"		780190175	790190175	1.4	
2"		780190200	790190200	1.6	
2-1/4"		780190225	790190225	1.8	
3"	-	790190300	2.5		

Stainless Socket Cap Screws Cont.



COARSE AND FINE THREAD SERIES

• NON-HEAT TREATED • PASSIVATED FINISH • UNIFIED 3A THREAD FIT
MEETS ASME B18.3 • MEETS ASTM F837 CONDITION CW1

Diameter	Length Under Head	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNRC	UNRF		
1/4" (.250") 20 UNRC 28 UNRF 3/16" Key	3/8"	78052	-	1.0	100
	1/2"	78054	-	1.2	
	5/8"	78056	79036	1.4	
	3/4"	78058	79038	1.5	
	7/8"	78060	-	1.6	
	1"	78062	79040	1.8	
	1-1/4"	78064	-	2.1	
	1-1/2"	78066	-	2.5	
	1-3/4"	78068	-	2.8	
5/16" (.312") 18 UNRC 1/4" Key	2"	78070	-	3.0	100
	1/2"	78072	-	2.0	
	3/4"	78076	-	2.5	
	7/8"	78078	-	2.7	
	1"	78080	-	2.9	
	1-1/4"	78082	-	3.4	
	1-1/2"	78084	-	3.9	
	2"	78088	-	4.9	

Diameter	Length Under Head	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box	
		UNRC	UNRF			
3/8" (.375") 16 UNRC 5/16" Key	1/2"	78090	-	3.4	100	
	5/8"	78092	-	3.8		
	3/4"	78094	-	4.0		
	1"	78098	-	4.6		
	1-1/4"	78100	-	5.2		
	1-1/2"	78102	-	6.0		
	1-3/4"	78104	-	3.3		50
	2"	78106	-	3.9		
	2-1/2"	78108	-	4.5		
1/2" (.500") 13 UNRC 3/8" Key	1"	78112	-	4.8	50	
	1-1/4"	78114	-	5.3		
	1-1/2"	78116	-	6.3		
	1-3/4"	78118	-	6.6		
	2"	78120	-	7.4		

Socket Low Head Cap Screws



COARSE AND FINE THREAD SERIES

HEAT TREATED ALLOY STEEL • UNIFIED 3A THREAD FIT
MEETS ASME B18.3

Because of head configurations, neither button, flat or low head cap screws can develop the full strength of the raw material heat treatment. Please see our technical handbook for all accurate tensile values.

Diameter	Length Under Head	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNRC	UNRF		
#8 (.164") 32 UNRC 5/64" Key Head Height .082	3/8"	68002	-	0.3	100
	1/2"	68004	-	0.3	
	3/4"	68008	-	0.5	
	1"	68010	-	0.7	
#10 (.190") 24 UNRC 32 UNRF 3/32" Key Head Height .095	3/8"	68012	69002	0.4	100
	1/2"	68014	69004	0.5	
	5/8"	-	69006	0.6	
	3/4"	68018	69008	0.7	
1/4" (.250") 20 UNRC 1/8" Key Head Height .125	3/8"	68022	-	0.7	100
	1/2"	68024	-	0.8	
	5/8"	68026	-	1.1	
	3/4"	68028	-	1.2	
	1"	68030	-	1.3	

Diameter	Length Under Head	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNRC	UNRF		
5/16" (.312") 18 UNRC 5/32" Key Head Height .156	1/2"	68032	-	1.4	100
	3/4"	68034	-	1.8	
	1"	68036	-	2.2	
	1-1/4"	68038	-	2.8	
	1-1/2"	68040	-	3.3	
3/8" (.375") 16 UNRC 3/16" Key Head Height .187	1/2"	68042	-	2.2	100
	3/4"	68044	-	2.8	
	1"	68046	-	3.5	
	1-1/4"	68048	-	4.2	
	1-1/2"	68050	-	5.0	
1/2" (.500") 13 UNRC 1/4" Key Head Height .250	1"	68052	-	3.7	50
	1-1/4"	68054	-	4.1	
	1-1/2"	68056	-	4.7	

Fully threaded part.

Socket Flat Head Cap Screws



COARSE AND FINE THREAD SERIES
 HEAT TREATED ALLOY STEEL • UNIFIED 3A THREAD FIT
 MEETS ASME B18.3 • MEETS ASTM F835

Because of head configurations, neither button, flat or low head cap screws can develop the full strength of the raw material heat treatment. Please see our technical handbook for all accurate tensile values. * Note: This product is designed for light applications only, such as sheet-metal covers, plastics guards, etc. It should not be used in critical high strength applications where socket head cap screws should be used.

Diameter	Length Overall	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNRC	UNRF		
#4 (.112") 40 UNRC 1/16" Key	1/4"	60002	-	0.1	100
	3/8"	60004	-	0.2	
	1/2"	60006	-	0.2	
	5/8"	60008	-	0.2	
	3/4"	60010	-	0.3	
#5 (.125") 40 UNRC 5/64" Key	1/4"	60012	-	0.1	100
	3/8"	60014	-	0.2	
	1/2"	60016	-	0.2	
	5/8"	60018	-	0.3	
	3/4"	60020	-	0.3	
#6 (.138") 32 UNRC 5/64" Key	1/4"	60022	-	0.2	100
	3/8"	60024	-	0.2	
	1/2"	60026	-	0.3	
	5/8"	60028	-	0.3	
	3/4"	60030	-	0.3	
#8 (.164") 32 UNRC 3/32" Key	3/8"	60032	-	0.3	100
	1/2"	60034	-	0.3	
	5/8"	60036	-	0.4	
	3/4"	60038	-	0.5	
	1"	60040	-	0.6	
#10 (.190") 24 UNRC 32 UNRF 1/8" Key	3/8"	60042	61002	4.0	100
	1/2"	60044	61004	0.5	
	5/8"	60046	61006	0.6	
	3/4"	60048	61008	0.6	
	1"	60050	61010	0.8	
	1-1/4"	60052	61012	1.0	
1/4" (.250") 20 UNRC 28 UNRF 5/32" Key	1-1/2"	60054	61014	1.2	100
	3/8"	60056	61016	0.8	
	1/2"	60058	61018	0.9	
	5/8"	60060	61020	1.0	
	3/4"	60062	61022	1.2	
	1"	60064	61024	1.4	
	1-1/4"	60066	61026	1.7	
	1-1/2"	60068	61028	2.1	
5/16" (.312") 18 UNRC 24 UNRF 3/16" Key	1-3/4"	60070	-	2.5	100
	2"	60072	-	2.8	
	1/2"	60074	61030	1.6	
	5/8"	60076	61032	1.7	
	3/4"	60078	61034	2.0	
	1"	60080	61036	2.4	
	1-1/4"	60082	61038	2.9	
	1-1/2"	60084	-	3.4	
	1-3/4"	60086	-	4.0	
	2"	60088	-	4.5	
2-1/4"	60090	-	5.1		
	60092	-	5.5		

Diameter	Length Overall	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNRC	UNRF		
3/8" (.375") 16 UNRC 24 UNRF 7/32" Key	5/8"	60096	61040	2.8	100
	3/4"	60098	61042	3.0	
	1"	60100	61044	3.8	
	1-1/4"	60102	61046	4.5	
	1-1/2"	60104	61048	5.0	
	1-3/4"	60106	-	3.0	
	2"	60108	-	3.5	
	2-1/4"	60110	-	3.8	
	2-1/2"	60112	-	4.2	
7/16" (.437") 14 UNRC 1/4" Key	3"	60114	-	4.9	100
	3/4"	60116	-	3.8	
	1"	60118	-	4.8	
	1-1/4"	60120	-	2.8	
	1-1/2"	60122	-	3.4	
1/2" (.500") 13 UNRC 20 UNRF 5/16" Key	3/4"	60124	61050	2.4	50
	1"	60126	61052	3.0	
	1-1/4"	60128	61054	3.8	
	1-1/2"	60130	61056	4.4	
	1-3/4"	60132	61058	4.9	
	2"	60134	61060	5.5	
	2-1/4"	60136	-	3.3	
	2-1/2"	60138	-	3.6	
	3"	60140	-	4.4	
5/8" (.625") 11 UNRC 3/8" Key	1-1/4"	60142	-	3.3	25
	1-1/2"	60144	-	3.8	
	1-3/4"	60146	-	4.3	
	2"	60148	-	4.7	
	2-1/4"	60150	-	5.1	
	2-1/2"	60152	-	5.6	
3/4" (.750") 10 UNRC 1/2" Key	3"	60154	-	6.8	25
	1-1/2"	60158	-	5.8	
	1-3/4"	60160	-	6.5	
	2"	60162	-	7.3	
	2-1/2"	60166	-	8.3	
	3"	60168	-	9.8	

Socket Button Head Cap Screws



COARSE AND FINE THREAD SERIES
 HEAT TREATED ALLOY STEEL • UNIFIED 3A THREAD FIT
 MEETS ASME B18.3 • MEETS ASTM F835

Because of head configurations, neither button, flat or low head cap screws can develop the full strength of the raw material heat treatment. Please see our technical handbook for all accurate tensile values. * Note: This product is designed for light applications only, such as sheet-metal covers, plastics guards, etc. It should not be used in critical high strength applications where socket head cap screws should be used.

Diameter	Length Under Head	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNRC	UNRF		
#4 (.112") 40 UNRC 1/16" Key	3/16	640000010	-	0.1	100
	1/4"	64002	-	0.1	
	5/16	640000030	-	0.1	
	3/8"	64004	-	0.2	
	1/2"	64006	-	0.2	50
	5/8	640000072	-	0.1	
	3/4	640000074	-	0.1	
	7/8	640000076	-	0.1	
1	640000078	-	0.1		
#5 40 UNRC (.125") 5/64" Key	1/4	640010280	-	0.2	100
	3/8	640010300	-	0.1	50
	1/2	640010320	-	0.1	
#6 (.138") 32 UNRC 5/64" Key	1/4"	64008	-	0.2	100
	5/16	640000090	-	0.1	50
	3/8"	64010	-	0.2	100
	1/2"	64012	-	0.3	
	5/8"	64014	-	0.3	
	3/4	640010460	-	0.2	50
	7/8	640010480	-	0.2	
	1	640010500	-	0.3	
	1-1/4	640010505	-	0.2	25
1-1/2	640010508	-	0.2		
#8 (.164") 32 UNRC 3/32" Key	1/4"	64016	-	0.3	100
	5/16	640000170	-	0.3	
	3/8"	64018	-	0.3	
	1/2"	64020	-	0.4	
	5/8"	64022	-	0.4	
	3/4"	64024	-	0.5	
	1"	88348	-	0.7	
#10 (.190") 24 UNRC 32 UNRF 1/8" Key	1/4"	64026	65002	0.4	100
	5/16		650000270	0.1	25
	3/8"	64028	65004	0.4	100
	1/2"	64030	65006	0.5	
	5/8"	64032	65008	0.6	
	3/4"	64034	65010	0.7	
	7/8"	64036	65012	0.4	50
	1"	64038	65014	0.4	

Diameter	Length Under Head	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNRC	UNRF		
1/4" (.250") 20 UNRC 28 UNRF 5/32" Key	1/4		650000392	0.2	25
	3/8"	64040	65016	0.8	100
	1/2"	64042	65018	0.8	
	5/8"	64044	65020	0.9	
	3/4"	64046	65022	1.1	50
	7/8"	64048	-	0.6	
	1"	64050	65024	0.7	
5/16" (.312") 18 UNRC 24 UNRF 3/16" Key	3/8"	64052	65026	1.1	100
	1/2"	64054	65028	1.4	
	5/8"	64056	65030	1.6	
	3/4"	64058	65032	1.8	50
	7/8"	64060	-	1.0	
1"	64062	65034	1.1		
3/8" (.375") 16 UNRC 24 UNRF 7/32" Key	1/2"	64064	65036	1.1	50
	5/8"	64066	-	1.2	
	3/4"	64068	65037	2.5	
	7/8"	64070	-	1.5	
	1"	64072	65038	1.6	
	1-1/4"	64074	-	2.0	
1/2" (.500") 13 UNRC 5/16" Key	1"	64076	-	1.7	25
	1-1/4"	64078	-	2.0	
	1-1/2"	64080	-	2.3	
	2"	64082	-	3.0	
5/8" (.625") 11 UNRC 3/8" Key	1"	64084	-	2.9	25
	1-1/4"	64086	-	3.3	
	1-1/2"	64088	-	3.8	
	2"	64090	-	4.8	

Holo-Krome® Socket Screw Selector



These socket screw selectors are available in inch and metric for your fastener design needs.

Socket Selector Part Numbers:

SAE: 99013, Metric: 99014

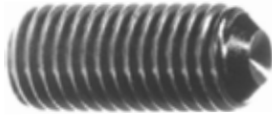
Fully threaded part.

Socket Set Screws

COARSE & FINE THREAD SERIES

HEAT TREATED ALLOY STEEL • UNIFIED 3A THREAD FIT
MEETS ASME B18.3 • MEETS ASTM F912

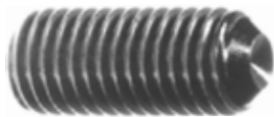
CUP POINT



Diameter	Length Overall	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNC	UNF		
#4 (.112") 40 UNC 48 UNF .050" Key	1/8"	32020	33020	0.1	100
	3/16"	32022	33022	0.1	
	1/4"	32024	33024	0.1	
	5/16"	32026	-	0.1	
	3/8"	32028	-	0.1	
	1/2"	32030	-	0.1	
	5/8"	32032	-	0.2	
#5 (.125") 40 UNC 44 UNF 1/16" Key	1/8"	32034	33026	0.1	100
	3/16"	32036	-	0.1	
	1/4"	32038	-	0.1	
	5/16"	32040	-	0.1	
	3/8"	32042	-	0.1	
	1/2"	32044	-	0.2	
	5/8"	32046	-	0.2	
3/4"	32048	-	0.2		
#6 (.138") 32 UNC 40 UNF 1/16" Key	1/8"	32050	33032	0.1	100
	3/16"	32052	33034	0.1	
	1/4"	32054	33036	0.1	
	5/16"	32056	-	0.1	
	3/8"	32058	33040	0.1	
	1/2"	32060	-	0.2	
	5/8"	32062	-	0.2	
	3/4"	32064	-	0.3	
	7/8"	32066	-	0.3	
1"	32068	-	0.4		
#8 (.164") 32 UNC 36 UNF 5/64" Key	1/8"	32070	33042	0.1	100
	3/16"	32072	33044	0.1	
	1/4"	32074	33046	0.1	
	5/16"	32076	-	0.2	
	3/8"	32078	33050	0.2	
	7/16"	32080	-	0.2	
	1/2"	32082	-	0.2	
	5/8"	32084	-	0.3	
	3/4"	32086	-	0.3	
	7/8"	32088	-	0.4	
	1"	32090	-	0.5	
#10 (.190") 24 UNC 32 UNF 3/32" Key	3/16"	32092	33054	0.1	100
	1/4"	32094	33056	0.1	
	5/16"	32096	33058	0.2	
	3/8"	32098	33060	0.3	
	1/2"	32100	33062	0.3	
	5/8"	32102	33064	0.3	
	3/4"	32104	33066	0.4	
	7/8"	32106	-	0.4	
	1"	32108	33068	0.5	
1-1/4"	32110	33070	0.6		
1/4" (.250") 20 UNC 28 UNF 1/8" Key	3/16"	32112	33072	0.3	100
	1/4"	32114	33074	0.3	
	5/16"	32116	33076	0.3	
	3/8"	32118	33078	0.4	
	1/2"	32120	33080	0.5	

Diameter	Length Overall	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNC	UNF		
1/4" (Cont.)	5/8"	32122	33082	0.6	100
	3/4"	32124	33084	0.8	
	7/8"	32126	-	0.9	
	1"	32128	33086	1.0	
	1-1/4"	32130	33088	1.3	
	1-1/2"	32132	-	1.6	
	1-3/4"	32134	-	0.9	
	2"	32136	-	1.0	
	1/4"	32138	33090	0.4	
5/16"	32140	33092	0.4		
3/8"	32142	33094	0.5		
1/2"	32146	33096	0.8		
5/8"	32148	33098	1.0		
3/4"	32150	33100	1.2		
7/8"	32152	-	1.4		
1"	32154	33102	1.7		
1-1/4"	32156	-	2.0		
1-1/2"	32158	-	2.4	100	
1-3/4"	32160	-	1.3		
2"	32162	-	1.4		
1/4"	32164	33104	0.7		50
3/8"	32168	33106	0.9		
7/16"	32170	-	1.0		
1/2"	32172	33108	1.1		
5/8"	32174	33110	1.3		
3/4"	32176	33112	1.8		
7/8"	32178	-	2.0		
1"	32180	33114	2.3		
1-1/4"	32182	33116	2.9		
1-1/2"	32184	33118	3.5	100	
1-3/4"	32186	-	2.0		
2"	32188	-	2.3		
2-1/2"	32190	-	3.0		
3/8"	32192	33120	1.1		50
7/16"	32194	33122	1.3		
1/2"	32196	33124	1.4		
5/8"	32198	-	1.8		
3/4"	32200	-	2.3		
7/8"	32202	-	1.3		
1"	32204	-	1.5		
1-1/4"	32206	-	2.0		
1-1/2"	32208	-	2.4		
2"	32210	-	3.3	100	
3/8"	32212	-	1.5		
1/2"	32214	33126	2.0		
5/8"	32216	-	2.5		
3/4"	32218	33128	2.8		
7/8"	32220	-	1.7		
1"	32222	33130	2.0		
1-1/4"	32224	-	2.4		
1-1/2"	32226	-	3.0		
1-3/4"	32228	-	1.8	50	
2"	32230	-	2.1		
2-1/2"	32232	-	2.6		
3"	32234	-	3.1		
1/2"	1/4" Key				

Socket Set Screws Cont.



COARSE & FINE THREAD SERIES CONT.

HEAT TREATED ALLOY STEEL • UNIFIED 3A THREAD FIT
MEETS ASME B18.3 • MEETS ASTM F912

CUP POINT

Diameter	Length Overall	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNC	UNF		
5/8" (.625") 11 UNC 18 UNF 5/16" Key	1/2"	32236	-	2.8	100
	5/8"	32238	33132	1.8	50
	3/4"	32240	-	2.1	
	1"	32242	33134	3.0	
	25	1-1/4"	32244	-	1.9
		1-1/2"	32246	-	2.4
		1-3/4"	32248	-	2.9
		2"	32250	-	3.2
		2-1/2"	32252	-	1.7
10	3"	32254	-	2.1	
	5/8"	32256	-	2.8	50
3/4"	32258	-	3.3		
1"	32260	-	4.3		

Diameter	Length Overall	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNC	UNF		
3/4" (Cont.)	1-1/4"	32262	-	2.7	25
	1-1/2"	32264	-	3.4	
	1-3/4"	32266	-	1.6	10
	2"	32268	-	1.8	
	2-1/2"	32270	-	2.4	
	3"	32272	-	2.9	
7/8" (.875") 9 UNC 1/2" Key	7/8"	32274	-	0.9	10
	1"	32276	-	1.0	
	2-1/2"	32282	-	3.1	
1" (1.000") 9/16" Key	1"	32286	-	1.3	10
	1-1/2"	32288	-	2.2	
	2"	32290	-	3.2	
	3"	32294	-	5.0	

Socket Set Screws

COARSE & FINE THREAD SERIES

HEAT TREATED ALLOY STEEL • UNIFIED 3A THREAD FIT
MEETS ASME B18.3 • MEETS ASTM F912



HOLO-KNURL® POINT

Diameter	Length Overall	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNC	UNF		
#4 (.112") 40 UNC .050" Key	1/8"	42002	-	0.1	100
#6 (.138") 32 UNC 40 UNF 1/16" Key	1/8"	42008	43006	0.1	100
	3/16"	42010	-	0.1	
	1/4"	42012	-	0.1	
#8 (.164") 32 UNC 5/64" Key	1/8"	42014	-	0.1	100
	3/16"	42016	-	0.1	
	1/4"	42018	-	0.1	
	3/8"	42020	-	0.2	
#10 (.190") 24 UNC 32 UNF 3/32" Key	3/16"	-	43008	0.1	100
	1/4"	42024	43010	0.1	
	3/8"	-	43012	0.3	
	1/2"	-	43014	0.3	
1/4" (.250") 20 UNC 28 UNF 1/8" Key	3/16"	42026	43016	0.3	100
	1/4"	42028	43018	0.3	
	5/16"	42030	43020	0.3	
	3/8"	42032	43022	0.4	
	1/2"	42034	-	0.5	
	3/4"	42036	-	0.8	

Diameter	Length Overall	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNC	UNF		
5/16" (.312") 18 UNC 24 UNF 5/32" Key	1/4"	42038	43024	0.4	100
	5/16"	42040	43026	0.4	
	3/8"	42042	43028	0.5	
	1/2"	42043	43030	0.8	
	5/8"	42044	-	1.0	
	3/4"	42045	-	1.2	
3/8" (.375") 16 UNC 24 UNF 3/16" Key	1"	42046	-	1.7	100
	3/8"	42047	43032	0.9	
	1/2"	42048	43034	1.1	
	3/4"	42049	-	1.8	
1/2" (.500") 13 UNC 1/4" Key	1"	42050	-	2.3	100
	1/2"	42052	-	2.0	
	5/8"	42054	-	2.5	
	3/4"	42056	-	2.8	
50	1"	42058	-	2.0	



INTERNAL KNURL POINT SOCKET SET SCREW — with the following advantages:

- Ratchet Locking Action
- Superior Holding Power
- Precision Ground or Rolled Threads
- Heat Treated Alloy Steel

Fully threaded part.

Socket Shoulder Screws

HEAT TREATED ALLOY STEEL • UNIFIED 3A THREAD FIT
MEETS ASME B18.3 • HEAT TREATED TO HRC 32 - 43



Diameter	Shoulder Length	Product Number Code	Approx. Weight per Box (lbs.)	Qty. In Box	
1/4" (.246") (.248") 1/8" Key THREAD SERIES #10-24 UNRC	3/8"	08002	0.4	25	
	1/2"	08004	0.4		
	5/8"	08006	0.4		
	3/4"	08008	0.5		
	1"	08010	0.6		
	1-1/4"	08012	0.6		
	1-1/2"	08014	0.8		
	5/16" (.3085") (.3105") 5/32" Key THREAD SERIES 1/4-20 UNRC	3/8"	08016		0.5
1/2"		08018	0.6		
5/8"		08020	0.7		
3/4"		08022	0.8		
1"		08024	0.9		
1-1/4"		08026	1.0		
1-1/2"		08028	1.1		
1-3/4"		08030	1.3		
3/8" (.371") (.373") 3/16" Key THREAD SERIES 5/16-18 UNRC	1/4"	0800330	0.9	25	
	3/8"	08034	0.9		
	1/2"	08036	1.0		
	5/8"	08038	1.1		
	3/4"	08040	1.3		
	1"	08042	1.4		
	1-1/4"	08046	1.6		
	1-1/2"	08048	1.9		
	1-3/4"	08049	2.1		
	2"	08050	2.3		
	2-1/4"	08052	2.4		
	2-1/2"	08054	2.6		
	2-3/4"	08056	2.9		
	3"	08058	3.1		
	3-1/4"	08060	3.3		
	3-1/2"	08062	3.5		
1/2" (.496") (.498") 1/4" Key THREAD SERIES 3/8-16 UNRC	3/8"	0800650	1.9	25	
	1/2"	08066	2.0		
	5/8"	08068	2.3		
	3/4"	08070	2.4		
	1"	08072	2.8		
	1-1/4"	08074	3.1		
	1-1/2"	08076	3.4		
	1-3/4"	08078	3.8		
	2"	08080	4.1		
	2-1/4"	08082	4.5		
	2-1/2"	08084	4.9		
	2-3/4"	08086	5.2		
	3"	08088	5.6		
	3-1/4"	08090	5.9		
	3-1/2"	08092	6.3		
	3-3/4"	08093	6.5		
	4"	08094	7.0		10
		4-1/4"	08095		
4-1/2"		08096	3.0		
4-3/4"		08097	3.2		
5"		08098	3.4		

Diameter	Shoulder Length	Product Number Code	Approx. Weight per Box (lbs.)	Qty. In Box	
5/8" (.621") (.623") 5/16" Key THREAD SERIES 1/2-13 UNRC	3/4"	0800994	4.1	25	
	1"	0800996	4.7		
	1-1/4"	08100	5.0		
	1-1/2"	08102	5.6		
	1-3/4"	08104	6.3		
	2"	08106	6.8		
	2-1/4"	08108	7.4		
	2-1/2"	08110	7.9		
	2-3/4"	08112	8.5		
	3"	08114	8.9		
	3-1/4"	08116	9.5		
	3-1/2"	08118	10.0		
	3-3/4"	08117	4.2		10
	4"	08120	4.4		
	4-1/4"	08119	4.6		
	4-1/2"	08122	5.0		
4-3/4"	08121	5.1			
5"	08124	5.2			
5-1/2"	08123	6.2			
6"	08125	6.6			
3/4" (.746") (.748") 3/8" Key THREAD SERIES 5/8-11 UNRC	1-1/2"	08126	3.6	10	
	1-3/4"	08128	3.8		
	2"	08130	4.0		
	2-1/4"	08132	4.4		
	2-1/2"	08134	4.8		
	2-3/4"	08136	5.0		
	3"	08138	5.4		
	3-1/4"	08139	5.6		
	3-1/2"	08140	6.0		
	3-3/4"	08141	6.3		
	4"	08142	6.6		
	4-1/4"	08143	7.0		
	4-1/2"	08144	7.2		
	4-3/4"	08145	7.6		
	5"	08146	7.8		
	5-1/2"	08148	8.5		
6"	08150	9.1			



Standard Dowel Pins Black Lustre Finish

.0002 Over Listed Diameter
Rust Resistant
MEETS ASME B18.8.2

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box	
1/8"	3/8"	01002	0.5	100	
	1/2"	01004	0.5		
	5/8"	01006	0.5		
	3/4"	01008	0.5		
	7/8"	01010	0.5		
	1"	01012	0.5		
	1-1/4"	01014	0.5		
	1-1/2"	01016	0.5		
	2"	01020	1.0		
3/16"	1/2"	01022	0.5	100	
	5/8"	01024	0.5		
	3/4"	01026	0.5		
	7/8"	01028	0.5		
	1"	01030	1.0		
	1-1/4"	01032	1.5		
	1-1/2"	01034	1.5		
	1-3/4"	01036	1.5		
	2"	01038	1.5		
1/4"	1/2"	01040	1.0	100	
	5/8"	01042	1.0		
	3/4"	01044	1.0		
	7/8"	01046	1.5		
	1"	01048	1.5		
	1-1/4"	01050	2.0		
	1-1/2"	01052	2.0		
	1-3/4"	01054	2.5		
	2"	01056	3.0		
5/16"	1/2"	01062	1.5	100	
	5/8"	01064	1.5		
	3/4"	01066	2.0		
	7/8"	01068	2.0		
	1"	01070	2.0		
	1-1/4"	01072	3.0		
	1-1/2"	01074	3.5		
	1-3/4"	01076	4.0		
	2"	01078	4.5		
3/8"	1/2"	01086	2.0	100	
	5/8"	01088	2.0		
	3/4"	01090	2.5		
	7/8"	01092	2.5		
	1"	01094	3.0		
	1-1/4"	01096	4.0		
	1-1/2"	01098	5.0		
	1-3/4"	01100	2.2		40
	2"	01102	2.6		
2-1/4"	01104	2.8			
2-1/2"	01106	3.2			
	3"	01108	3.8		

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
7/16"	1"	01110	1.8	40
	1-1/4"	01112	2.2	
	1-1/2"	01114	2.6	
	2"	01118	3.6	
	2-1/2"	01120	4.4	
	3"	01122	5.2	
1/2"	3/4"	01124	1.8	40
	1"	01126	2.4	
	1-1/4"	01128	2.8	
	1-1/2"	01130	3.4	
	1-3/4"	01132	4.0	20
	2"	01134	4.6	
	2-1/4"	01136	2.6	
	2-1/2"	01138	2.8	
5/8"	3"	01140	3.4	10
	3-1/2"	01142	4.0	
	4"	01144	4.6	
	1"	01146	0.9	
	1-1/4"	01148	1.2	
	1-1/2"	01150	1.4	
	1-3/4"	01152	1.6	
	2"	01154	1.8	
3/4"	2-1/2"	01158	2.3	10
	3"	01160	2.7	
	3-1/2"	01162	3.2	
	4"	01164	3.6	
7/8"	2"	01170	2.5	10
	2-1/2"	01172	3.2	
	3"	01174	3.8	
	3-1/2"	01176	4.4	
1"	4"	01178	5.1	10
	2"	01186	3.5	
	2-1/2"	01188	4.4	
	3"	01190	5.3	
1"	4"	01194	6.9	10
	2"	01202	4.5	
	2-1/2"	01204	5.7	
	3"	01206	6.8	
	4"	01210	9.2	

WARNING

ALWAYS PRESS DOWEL PINS INTO PLACE USING AN ARBOR PRESS. NEVER STRIKE WITH ANY MATERIAL OR TOOL, INCLUDING A HAMMER. DOING SO MAY CAUSE THE DOWEL TO SPLINTER AND MAY RESULT IN SERIOUS BODILY INJURY.



Oversize Dowel Pins Black Lustre Finish

.001 Over Listed Diameter
Rust Resistant
MEETS ASME B18.8.2

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
1/8"	1/2"	03004	5.0	100
	3/4"	03008	0.5	
	1"	03010	0.5	
3/16"	1/2"	03016	0.5	100
	1"	03022	1.0	
	1-1/2"	03026	1.5	
1/4"	1/2"	03030	1.0	100
	3/4"	03034	1.0	
	1"	03036	1.5	
	1-1/4"	03038	2.0	
	1-1/2"	03040	2.0	
5/16"	1"	03046	2.0	100
	1-1/2"	03050	3.5	
3/8"	1"	03058	3.0	100
	1-1/4"	03060	4.0	
	1-1/2"	03062	5.0	

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
1/2"	1"	03070	2.4	40
	1-1/2"	03074	3.4	
	2"	03076	4.6	

WARNING
ALWAYS PRESS DOWEL PINS INTO PLACE USING AN ARBOR PRESS. NEVER STRIKE WITH ANY MATERIAL OR TOOL, INCLUDING A HAMMER. DOING SO MAY CAUSE THE DOWEL TO SPLINTER AND MAY RESULT IN SERIOUS BODILY INJURY.

Pull-Dowels



HEAT TREATED ALLOY STEEL • 8 RMS BRIGHT MICROINCH FINISH
HARDNESS: SURFACE-ROCKWELL C 60-64, CORE-ROCKWELL C 50-58
AVG SHEAR STRENGTH: 150,000 psi DIA: .0002 OVER LISTED DIAMETER • ROUNDNESS: .00005 T.I.R.

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
5/16"	3/4"	04022	0.3	20
	1"	04026	0.4	
	1-1/4"	04028	0.6	
	1-1/2"	04030	0.7	
	2"	04034	0.9	
	2-1/2"	04038	1.4	
3/8"	1"	04042	0.6	20
	1-1/4"	04044	0.8	
	1-1/2"	04046	0.9	
	1-3/4"	04048	1.1	
	2"	04050	1.3	
	2-1/4"	04052	3.0	
	2-1/2"	04054	1.6	
1/2"	3"	04056	1.9	20
	1"	04058	1.1	
	1-1/4"	04060	1.4	
	1-1/2"	04062	1.7	
	1-3/4"	04064	2.0	
	2"	04066	2.2	
	2-1/4"	04068	2.6	
	2-1/2"	04070	2.8	
	3"	04072	3.4	
3-1/2"	04074	4.0		

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
5/8"	1-1/2"	04078	1.3	10
	2"	04082	1.8	
	2-1/4"	04084	5.1	
	2-1/2"	04086	2.2	
	3"	04088	2.7	
3/4"	2"	04094	2.5	10
	2-1/2"	04096	3.2	
	3"	04098	3.8	
	4"	04100	5.1	
1"	2"	04102	4.5	10
	3"	04106	6.7	
	4"	04110	9.0	





Allenuts®

COARSE AND FINE THREADS

MATERIAL: ALLOY STEEL HEAT TREATED TO HRC 33-39 THREADS: UNC/UNF

Diameter Threads Per Inch	Key Size	Product Number Code	Approx. Weight per Box (lbs.)	Qty in Box
#4-40	1/8"	06032	0.2	100
#5-40		06034	0.2	
#6-32	5/32"	06036	0.4	
#8-32	3/16"	06038	0.4	
#10-24		06040	0.6	
#10-32		07030	0.6	
1/4-20	1/4"	06042	1.2	
1/4-28		07032	1.2	
5/16-18	5/16"	06044	2.2	
5/16-24		07034	2.2	
3/8-16	3/8"	06046	3.2	
3/8-24		07036	3.2	

Diameter Threads Per Inch	Key Size	Product Number Code	Approx. Weight per Box (lbs.)	Qty in Box	
7/16-14	7/16"	06048	3.4	50	
7/16-20		07038	3.4		
1/2-13	1/2"	06050	4.8		
1/2-20		07040	4.8		
5/8-11	5/8"	06052	9.0		
5/8-18		07042	9.0		
3/4-10	3/4"	06054	13.6		
3/4-16		07044	13.6		
7/8-9	7/8"	06056	10.4		25
7/8-14		07046	10.4		
1-8		1"	06058	14.8	
1-14	07048		14.8		



Stainless Allenuts®

COARSE AND FINE THREADS

MATERIAL: AUSTENITIC STAINLESS STEEL • THREADS: UNC/UNF

Diameter Threads Per Inch	Key Size	Product Number Code	Approx. Weight per Box (lbs.)	Qty in Box
#4-40	1/8"	06070	0.2	100
#6-32	5/32"	06072	0.4	
#8-32	3/16"	06074	0.4	
#10-24		06076	0.6	

Diameter Threads Per Inch	Key Size	Product Number Code	Approx. Weight per Box (lbs.)	Qty in Box
#10-32	3/16"	07060	0.6	100
1/4-20	1/4"	06078	1.2	
5/16-18	5/16"	06080	2.2	
3/8-16	3/8"	06082	3.2	



Socket Pressure Plugs

DRYSEAL SOCKET PRESSURE PLUGS

NPTF 3/4" DIAMETRAL TAPER PER FOOT • HEAT TREATED ALLOY STEEL TO HRC 36-43

STAINLESS STEEL SOCKET PRESSURE PLUGS

NPTF 3/4" DIAMETRAL TAPER PER FOOT • AUSTENITIC STAINLESS STEEL

Pressure Plug Size	Length of Plug Nom.	NPTF- 3/4" Threads Per Inch	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
1/16"	5/16"	27	10002	0.5	100
1/8"			10004	0.8	
1/4"			10006	2.0	
3/8"	1/2"	18	10008	4.0	
1/2"	9/16"	14	10010	2.9	50
3/4"	5/8"		10012	5.1	
1"	3/4"	11-1/2	10014	5.3	25
1-1/4"	13/16"		10016	9.5	

Pressure Plug Size	Length of Plug Nom.	NPTF- 3/4" Threads Per Inch	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
1/8"	5/16"	27	13002	0.8	100
1/4"	7/16"	18	13004	2.0	100

Fully threaded part.

Socket Pressure Plugs Cont.

FLUSH SOCKET PRESSURE PLUGS

PTF 7/8" DIAMETRAL TAPER PER FOOT

- HEAT TREATED ALLOY STEEL TO HRC 36-43

Pressure Plug Size	Length of Plug Nom.	PTF- 7/8" Threads Per Inch	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
1/16"	1/4"	27	12002	0.5	100
1/8"			12004	0.8	
1/4"			12006	2.0	
3/8"	13/32"	18	12008	4.0	50
1/2"	17/32"	14	12010	2.9	
3/4"			12012	5.1	

BRASS FLUSH SOCKET PRESSURE PLUGS

PTF 7/8" DIAMETRAL TAPER PER FOOT

- COMMERCIAL BRASS • LEAD FREE-COMPLIANT

Pressure Plug Size	Length of Plug Nom.	PTF- 7/8" Threads Per Inch	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
1/16"	1/4"	27	11100	0.5	100
1/8"			11102	0.8	
1/4"			11104	2.0	
3/8"	13/32"	18	11106	4.0	50
1/2"	17/32"	14	11108	2.9	
3/4"			11110	5.1	



Socket Jam Screws

HEAT TREATED ALLOY STEEL TO HRC 45-53 • UNIFIED 3A THREAD FIT

Diameter	Length Overall	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNC	UNF		
#4 (.112") 40 UNC	5/64"	06002	-	0.06	100
#8 (.164") 32 UNC	7/64"	06008		0.06	
#10 (.190") 24 UNC 32 UNF	1/8"	06010	07010	0.09	
1/4" (.250") 20 UNC 28 UNF	1/8"	06012	07012	0.13	
5/16" (.312") 18 UNC 24 UNF	5/32"	06014	07014	0.25	
3/8" (.375") 16 UNC 24 UNF	3/16"	06016	07016	0.37	
7/16" (.437") 14 UNC 20 UNF	7/32"	06018	07018	0.50	
1/2" (.500") 13 UNC 20 UNF	1/4"	06020	07020	0.81	

Diameter	Length Overall	Product Number Code		Approx. Weight per Box (lbs.)	Qty. in Box
		UNC	UNF		
5/8" (.625") 11 UNC 18 UNF	5/16"	06022	07022	1.50	100
3/4" (.750") 10 UNC 16 UNF	3/8"	06024	07024	1.50	50
7/8" (.875") 9 UNC 14 UNF	7/16"	06026	07026	0.85	25
1" (1.00") 8 UNC 14 UNF	1/2"	06028	07028	1.30	

Holo-Krome® Socket Screw Selector



These socket screw selectors are available in inch and metric for your fastener design needs.

Socket Selector Part Numbers:

SAE: 99013, Metric: 99014



Hex Keys

FOLD UPS

Part Number	Description	Qty. Per Box
HK12587	Set 7 Hex Fold-up Tools 2-8mm	5
HK12589	Set 9 Hex Fold-up Tools 5/64-1/4	

HEX END L-WRENCH SETS LONG & SHORT

Part Number	Description	Qty. Per Box
HK12137	Set 13 Hex L-wrenches .050-3/8 - Long	5
HK12199	Set 9 Hex L-wrenches 1.5-10mm - Long	
HK12237	Set 13 Hex L-wrenches .050-3/8 - Short	
HK12299	Set 9 Hex L-wrenches 1.5-10mm - Short	

HEX END T-HANDLE SETS INCH & METRIC

Part Number	Description	Qty. Per Box
HK15238	Set 10 Hex T-handles 6" Length 3/32-3/8	1
HK15287	Set 8 Hex T-handles 6" Length 2-10mm	

HEX END SINGLE L-WRENCHES LONG INCH

Part Number	Description	Qty. Per Box
HK12102	.050 Hex L-key LA	50
HK12103	1/16 Hex L-key LA	
HK12104	5/64 Hex L-key LA	
HK12105	3/32 Hex L-key LA	
HK12106	7/64 Hex L-key LA	
HK12107	1/8 Hex L-key LA	
HK12108	9/64 Hex L-key LA	
HK12109	5/32 Hex L-key LA	
HK12110	3/16 Hex L-key LA	
HK12111	7/32 Hex L-key LA	
HK12112	1/4 Hex L-key LA	25
HK12113	5/16 Hex L-key LA	
HK12114	3/8 Hex L-key LA	
HK12115	7/16 Hex L-key LA	
HK12116	1/2 Hex L-key LA	10
HK12117	9/16 Hex L-key LA	
HK12118	5/8 Hex L-key LA	5
HK12119	3/4 Hex L-key LA	
HK12120	7/8 Hex L-key LA	
HK12121	1" Hex L-key LA	

HEX END SINGLE L-WRENCHES LONG METRIC

Part Number	Description	Qty. Per Box
HK12150	1.5mm Hex L-key LA	50
HK12152	2mm Hex L-key LA	
HK12154	2.5mm Hex L-key LA	
HK12156	3mm Hex L-key LA	
HK12160	4mm Hex L-key LA	
HK12164	5mm Hex L-key LA	
HK12168	6mm Hex L-key LA	25
HK12172	8mm Hex L-key LA	
HK12176	10mm Hex L-key LA	
HK12178	11mm Hex L-key LA	
HK12180	12mm Hex L-key LA	10
HK12184	14mm Hex L-key LA	
HK12186	17mm Hex L-key LA	
HK12188	19mm Hex L-key LA	
HK12188	19mm Hex L-key LA	5

HEX END T-HANDLE INCH

Part Number	Description	Qty. Per Box
HK15205	3/32 Hex T-Handle 6" Length	1
HK15206	7/64 Hex T-Handle 6" Length	
HK15207	1/8 Hex T-Handle 6" Length	
HK15208	9/64 Hex T-Handle 6" Length	
HK15209	5/32 Hex T-Handle 6" Length	
HK15210	3/16 Hex T-Handle 6" Length	
HK15211	7/32 Hex T-Handle 6" Length	
HK15212	1/4 Hex T-Handle 6" Length	
HK15213	5/16 Hex T-Handle 6" Length	
HK15214	3/8 Hex T-Handle 6" Length	

HEX END SINGLE L-WRENCHES SHORT INCH

Part Number	Description	Qty. Per Box
HK12200	.028 Hex L-key SA	50
HK12201	.035 Hex L-key SA	
HK12202	.050 Hex L-key SA	
HK12203	1/16 Hex L-key SA	
HK12204	5/64 Hex L-key SA	
HK12205	3/32 Hex L-key SA	
HK12206	7/64 Hex L-key SA	
HK12207	1/8 Hex L-key SA	
HK12208	9/64 Hex L-key SA	
HK12209	5/32 Hex L-key SA	
HK12210	3/16 Hex L-key SA	25
HK12211	7/32 Hex L-key SA	
HK12212	1/4 Hex L-key SA	
HK12213	5/16 Hex L-key SA	
HK12214	3/8 Hex L-key SA	
HK12215	7/16 Hex L-key SA	
HK12216	1/2 Hex L-key SA	10
HK12217	9/16 Hex L-key SA	
HK12218	5/8 Hex L-key SA	5
HK12219	3/4 Hex L-key SA	
HK12220	7/8 Hex L-key SA	
HK12221	1" Hex L-key SA	

HEX END SINGLE L-WRENCHES SHORT METRIC

Part Number	Description	Qty. Per Box
HK12250	1.5mm Hex L-key SA	50
HK12252	2mm Hex L-key SA	
HK12254	2.5mm Hex L-key SA	
HK12256	3mm Hex L-key SA	
HK12260	4mm Hex L-key SA	
HK12264	5mm Hex L-key SA	
HK12268	6mm Hex L-key SA	25
HK12272	8mm Hex L-key SA	
HK12276	10mm Hex L-key SA	
HK12278	11mm Hex L-key SA	
HK12280	12mm Hex L-key SA	10
HK12284	14mm Hex L-key SA	
HK12286	17mm Hex L-key SA	
HK12288	19mm Hex L-key SA	5

HEX END T-HANDLE METRIC

Part Number	Description	Qty. Per Box
HK15252	2mm Hex T-Handle 6" Length	1
HK15254	2.5mm Hex T-Handle 6" Length	
HK15256	3mm Hex T-Handle 6" Length	
HK15260	4mm Hex T-Handle 6" Length	
HK15264	5mm Hex T-Handle 6" Length	
HK15268	6mm Hex T-Handle 6" Length	
HK15272	8mm Hex T-Handle 6" Length	
HK15276	10mm Hex T-Handle 6" Length	

Fully threaded part.

Socket Head Cap Screws



HEAT TREATED ALLOY STEEL TO PROPERTY CLASS 12.9
 ISO METRIC THREADS TO ANSI B1.13M • ISO 4762 & ISO 898-1
 HOLO-CODE TRACEABLE

Diameter	Length Under Head	Product Number Code	Approx. Wt. (lbs.) Per Box	Qty. Per Box
M2 Pitch .4 1.5mm Key	4	76604	0.1	100
	5	76605	0.1	
	6	76606	0.1	
	8	76608	0.1	
	10	76610	0.1	
	12	76612	0.1	
M2.5 Pitch .45 2.0mm Key	5	76655	0.1	100
	6	76656	0.1	
	8	76658	0.1	
	10	76660	0.1	
	12	76662	0.1	
M3 Pitch 0.50 2.5mm Key	5	76004	0.1	100
	6	76008	0.1	
	8	76012	0.2	
	10	76016	0.2	
	12	76020	0.2	
	15	76026	0.2	
	16	76028	0.2	
	20	76032	0.3	
	25	76036	0.3	
	30	76040	0.4	
35	76044	0.5		
M4 Pitch 0.70 3mm Key	5	76048	0.3	100
	6	76052	0.3	
	8	76056	0.3	
	10	76060	0.4	
	12	76064	0.4	
	14	76066	0.5	
	15	76068	0.5	
	16	76072	0.5	
	20	76076	0.6	
	25	76080	0.7	
	30	76084	0.8	
	35	76088	0.9	
	40	76092	1.0	
45	76096	1.0		
50	76100	1.0		
M5 Pitch 0.80 4mm Key	6	76102	0.5	100
	8	76104	0.5	
	10	76108	0.6	
	12	76112	0.6	
	14	76114	0.7	
	15	76118	0.7	
	16	76120	0.7	
	18	76122	0.7	
	20	76124	0.7	
	22	76126	0.9	
	25	76128	0.9	
	30	76132	1.0	
	35	76136	1.4	
	40	76140	1.5	
	45	76144	1.7	
	50	76148	1.9	
	55	76149	2.0	
	60	76150	2.0	
	65	76151	3.0	
70	76147	3.0		
80	76721	3.0		
90	76722	3.5		
100	76723	3.8		

Diameter	Length Under Head	Product Number Code	Approx. Wt. (lbs.) Per Box	Qty. Per Box
M6 Pitch 1.00 5mm Key	8	76152	0.9	100
	10	76156	1.0	
	12	76160	1.0	
	14	76162	1.0	
	15	76166	1.0	
	16	76168	1.0	
	18	76170	1.2	
	20	76172	1.4	
	22	76174	1.5	
	25	76176	1.6	
	30	76180	1.8	
	35	76184	2.0	
	40	76188	2.4	
	45	76192	2.6	
	50	76196	2.9	
	55	76200	3.0	
	60	76204	3.0	
	65	76208	3.6	
	70	76212	3.8	
	75	76216	3.9	
	80	76217	4.0	
90	76218	4.8		
100	76219	5.0		
110	76215	6.0		
M8 Pitch 1.25 6mm Key	10	76220	2.2	100
	12	76224	2.4	
	14	76228	2.5	
	15	76230	2.6	
	16	76232	2.8	
	18	76234	2.9	
	20	76236	3.0	
	22	76238	3.2	
	25	76240	3.4	
	30	76244	3.7	
	35	76248	4.0	
	40	76252	4.6	
	45	76256	5.0	
	50	76260	5.5	
	55	76264	5.9	
	60	76268	6.0	
	65	76272	6.8	
70	76276	7.2		
75	76280	7.6		
80	76279	8.0		
90	76281	9.0		
100	76282	10.0		
110	76283	10.7		
120	76278	11.6		
130	76730	12.8		
140	76734	13.8		
150	76738	14.9		
M10 Pitch 1.50 8mm Key	10	76286	4.0	100
	12	76284	4.0	
	15	76290	4.6	
	16	76292	4.6	
	18	76294	4.9	
	20	76296	5.0	
	22	76298	5.4	
	25	76300	5.7	
	30	76304	6.1	

Socket Head Cap Screws Cont.



HEAT TREATED ALLOY STEEL TO PROPERTY CLASS 12.9
ISO METRIC THREADS TO ANSI B1.13M • ISO 4762 & ISO 898-1
HOLO-CODE TRACEABLE

Diameter	Length Under Head	Product Number Code	Approx. Wt. (lbs.) Per Box	Qty. Per Box
M10 (Cont.)	35	76308	6.8	100
	40	76312	7.5	
	45	76316	8	
	50	76320	8.8	
	55	76324	9.6	
	60	76328	5.1	
	65	76332	5.4	50
	70	76336	5.8	
	75	76340	6.1	
	80	76344	6.4	
	90	76348	7.1	
	100	76352	7.8	
	110	76353	8.5	10
	120	76357	9.0	
	130	76354	9.9	
	140	76358	10.7	
	150	76355	11.2	
	220	760004512	3.2	
240	760004520	3.5		
260	760004528	3.8		
280	760004536	4.1		
300	760004544	4.3		
M12 Pitch 1.75 10mm Key	12	76780	6.4	100
	15	76782	6.7	
	16	76784	6.9	
	20	76356	7.0	
	25	76360	7.8	
	30	76364	8.6	
	35	76368	9.4	50
	40	76372	5.2	
	45	76376	5.7	
	50	76380	6.1	
	55	76384	6.6	
	60	76388	7.1	
	65	76392	7.6	25
	70	76396	8.1	
	75	76400	8.6	
	80	76404	9.0	
	90	76408	5.0	
	100	76412	5.5	
	110	76416	6.0	10
	120	76420	6.4	
	130	76421	6.9	
	140	76418	7.5	
	150	76422	3.2	
	160	76419	3.4	
	170	76791	3.6	
	180	76792	3.8	
	190	76793	4.0	
	200	76794	4.2	
	220	760004614	4.6	
	240	760004622	5.0	
260	760004630	5.4		
280	760004638	5.8		
300	760004646	6.2		

Diameter	Length Under Head	Product Number Code	Approx. Wt. (lbs.) Per Box	Qty. Per Box
M14 Pitch 2.00 12mm Key	20	76820	2.9	25
	25	76822	3.2	
	30	76824	3.5	
	35	76826	3.7	
	40	76830	4.0	
	45	76832	4.3	
	50	76834	4.5	
	55	76836	4.8	
	60	76838	5.3	
	65	76840	5.6	
	70	76842	6.0	
	75	76844	6.3	
	80	76846	6.7	
	85	76848	7.0	
	90	76850	7.3	
	100	76852	8.0	10
	110	76854	3.5	
	M16 Pitch 2.00 14mm Key	120	76856	3.8
25		76423	4.2	
30		76424	4.2	
35		76428	4.8	
40		76432	5.0	
45		76436	5.3	
50		76440	5.8	
55		76444	6.2	
60		76448	6.7	
65		76452	7.1	
70		76456	7.5	
75		76460	8.0	
80		76464	8.5	
90		76468	9.3	10
100		76472	4.0	
110		76476	4.4	
120		76480	4.7	
130		76478	5.1	
140		76479	5.5	
150		76481	5.8	
160		76482	6.0	
180	76483	6.2		
200	760004840	7.7		
220	760004848	8.4		
240	760004856	9.1		
260	760004864	9.8		
280	760004868	10.5		
300	760004872	11.2		

Fully threaded part.

Socket Head Cap Screws Cont.



HEAT TREATED ALLOY STEEL TO PROPERTY CLASS 12.9
 ISO METRIC THREADS TO ANSI B1.13M • ISO 4762 & ISO 898-1
 HOLO-CODE TRACEABLE

Diameter	Length Under Head	Product Number Code	Approx. Wt. (lbs.) Per Box	Qty. Per Box	
M20 Pitch 2.50 17mm Key	30	76800	16.0	25	
	35	76804	3.2	10	
	40	76484	3.2		
	45	76488	3.5		
	50	76492	3.8		
	55	76496	4.0		
	60	76500	4.3		
	65	76504	4.5		
	70	76508	4.8		
	75	76512	5.1		
	80	76516	5.4		
	90	76520	5.9		
	100	76524	6.4		
	110	76528	7.0		
	120	76532	7.6		
	130	76536	8.1		
	140	76537	8.7		
	150	76540	9.2		
	160	76541	9.7		
	180	76542	9.9		
200	76543	12.0			
M24 Pitch 3.00 19mm Key	220	760005432	1.5	1	
	240	760005434	1.6		
	260	760005436	1.7		
	280	760005438	1.8		
	300	760005440	1.9		
	40	76808	15.5		25
	50	76544	6.9		10
	55	76810	7.3		
	60	76548	7.6		
	65	76552	7.9		
70	76556	8.2			
75	760005600	8.5			
80	76560	8.9			
90	76564	9.6			
100	76568	10.7			
110	76569	11.5			
120	76572	12.3			
130	76573	13			
140	76574	13.8			
150	76576	7.3	5		
160	76577	7.7			
180	76578	8.5			
200	76579	9.3			
220	76580	10.1			
240	76581	2.3			
260	76583	2.4	1		
280	760005808	2.6			
300	760005809	2.8			

Diameter	Length Under Head	Product Number Code	Approx. Wt. (lbs.) Per Box	Qty. Per Box
M30 Pitch 3.5 22mm Key	50	760005825	1.3	1
	60	760005826	1.4	
	70	760005828	1.5	
	80	76584	1.6	
	90	76585	1.7	
	100	76586	1.8	
	110	76587	1.9	
	120	76592	2.1	
	130	76588	2.2	
	140	76593	2.3	
	150	76589	2.5	
	160	76594	2.6	
	180	76590	2.9	
	200	76591	3.1	
	220	76595	3.4	
	240	76596	3.6	
	260	760005970	3.9	
	280	760005975	4.1	
	300	76598	4.3	
	320	760005990	4.6	
	340	760005992	4.8	
	360	760005994	5.1	
	380	760005996	5.3	
	420	760005998	5.8	
M36 Pitch 4 27mm Key	80	76900	2.6	1
	90	76902	2.7	
	100	76906	2.8	
	110	76910	3.0	
	120	76914	3.3	
	130	76918	3.4	
	140	76922	3.6	
	150	76926	3.8	
	160	76930	4.0	
	170	76934	4.2	
	180	76938	4.4	
	200	76942	4.7	
	220	760009640	5.0	
	240	76946	5.4	
	260	76950	5.8	
	280	760009646	6.1	
	300	760009650	6.4	
	340	760009660	7.1	
	360	760009700	7.4	
	380	760009740	7.8	
	400	760009780	8.1	
	420	760009820	8.5	
	440	760009860	8.9	
	460	760009880	9.3	
	480	760009940	9.5	
	520	760009980	10.3	
	540	760009984	10.6	
	560	760009985	10.9	
	580	760009988	11.2	
600	760009990	11.6		
640	760009994	12.3		
650	760009995	12.5		

Socket Head Cap Screws Cont.



HEAT TREATED ALLOY STEEL TO PROPERTY CLASS 12.9
ISO METRIC THREADS TO ANSI B1.13M • ISO 4762 & ISO 898-1
HOLO-CODE TRACEABLE

Diameter	Length Under Head	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
M42 Pitch 4.5 32mm Key	80	11568460	3.69	1
	90	11568461	3.91	1
	100	11568462	4.12	1
	110	11568463	4.34	1
	120	11568464	4.59	1
	130	11568465	4.81	1
	140	11568466	5.07	1
	150	11568467	5.32	1
	160	11568468	5.57	1
	170	11568469	5.83	1
	180	11568470	6.08	1
	200	11568471	6.58	1
	220	11568472	7.08	1
	240	11568473	7.59	1
	260	11568474	8.09	1
	280	11568475	8.59	1
	300	11568476	9.10	1
	340	11568477	9.61	1
	360	11568478	10.61	1
	380	11568479	11.11	1
	400	11568480	11.62	1
	420	11568481	12.13	1
	440	11568482	12.63	1
	460	11568483	13.14	1
	480	11568484	13.64	1
	500	11568485	14.14	1
	520	11568486	14.65	1
	540	11568487	15.15	1
560	11568488	15.66	1	
580	11568489	16.16	1	
600	11568490	16.66	1	
620	11568491	17.17	1	
640	11568492	17.67	1	
650	11568493	17.93	1	

Diameter	Length Under Head	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
M48 Pitch 5 36mm Key	100	11568494	5.89	1
	110	11568495	6.17	1
	120	11568496	6.46	1
	130	11568497	6.74	1
	140	11568498	7.17	1
	150	11568499	7.50	1
	160	11568500	7.83	1
	170	11568501	8.16	1
	180	11568502	8.49	1
	200	11568503	9.14	1
	220	11568504	9.80	1
	240	11568505	10.46	1
	260	11568506	11.12	1
	280	11568507	11.77	1
	300	11568508	12.43	1
	340	11568509	13.75	1
	360	11568510	14.41	1
	380	11568511	15.07	1
	400	11568512	15.73	1
	420	11568513	16.39	1
	440	11568514	17.04	1
	460	11568515	17.71	1
	480	11568516	18.36	1
	500	11568517	19.02	1
	520	11568518	19.68	1
	540	11568519	20.34	1
	560	11568520	21.00	1
	580	11568521	21.65	1
	600	11568522	22.31	1
	620	11568523	22.97	1
640	11568524	23.63	1	
340	11568509	23.96	1	

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- 100% Made in the USA
- Manufactured & certified to A325 and A490
- Designed for Steel-To-Steel Structural connections



TARGET INDUSTRIES & APPLICATIONS:

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Socket Low Head Cap Screws



ISO METRIC THREADS TO ANSI B1.13M
HEAT TREATED TO PROPERTY CLASS 10.9*

* Because of their head configurations, those may not meet the minimum ultimate tensile load specified in ISO 898-1 for property class 10.9. Please see our technical handbook for additional details.

Diameter	Length Under Head	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box
M4 Pitch 0.70 3mm Key Head Height 2.8	8	69304	0.4	100
	10	69308	0.4	
	12	69312	0.4	
	15	69316	0.5	
	16	69320	0.5	
	18	69329	0.5	
	20	69328	0.6	
	25	69332	0.7	
M5 Pitch 0.80 4mm Key Head Height 3.5	8	69350	0.7	100
	10	69354	0.7	
	12	69358	0.8	
	16	69370	0.9	
	20	69374	0.9	
	25	69378	1.1	
	30	69382	1.2	
M6 Pitch 1.00 5mm Key Head Height 4.0	8	69390	0.9	100
	10	69394	0.9	
	12	69398	1.0	
	14	69402	1.1	
	15	69406	1.1	
	16	69410	1.2	
	20	69414	1.3	
	25	69418	1.6	
	30	69422	1.7	
	35	69426	2.1	
	40	69430	2.3	
M8 Pitch 1.25 6mm Key Head Height 5.0	12	69450	2.1	100
	15	69455	2.2	
	16	69458	2.3	
	20	69462	2.6	
	25	69466	3.0	
	30	69472	3.3	

Diameter	Length Under Head	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box	
M8 (Cont.)	35	69476	3.7	100	
	40	69480	4.2		
	45	69484	2.5		
	50	69488	2.6		
	60	69492	3.0		
M10 Pitch 1.50 8mm Key Head Height 6.5	15	69501	4.0	100	
	16	69504	4.0		
	20	69508	4.3		
	25	69512	4.9		
	30	69516	5.5		
	35	69520	3.1		
	40	69524	3.3		
	45	69528	3.7		
	50	69532	4.1		
	55	69536	4.4		
M12 Pitch 1.75 10mm Key Head Height 8.0	60	69540	4.7	50	
	70	69544	5.4		
	20	69550	3.2		25
	25	69554	3.7		
	30	69558	4.1		
	35	69562	4.4		
	40	69566	2.4		
	45	69570	2.6		
	50	69574	2.9		
	60	69578	3.4		
80	69582	4.5			
100	69586	5.5			
M16 Pitch 2.00 12mm Key Head Height 10.0	30	69590	1.7	10	
	35	69594	1.9		
	40	69598	2.0		
	45	69602	2.1		
	50	69606	2.3		
	60	69610	2.6		
	70	69614	3.0		
	90	69618	3.7		
	100	69622	4.1		

Socket Head Cap Screws



STAINLESS STEEL
ISO 4762 • ISO 3506-1 • CLASS A2-70

Diameter	Length Under Head	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box
M3 Pitch 0.50 2.5mm Key	5	770305005	0.2	100
	6	77004	0.1	
	8	77008	0.2	
	10	77012	0.2	
	12	77016	0.2	
	16	77020	0.2	
	20	770305020	0.3	
	25	770305025	0.4	
	30	770305030	0.4	
	35	770305035	0.5	

Diameter	Length Under Head	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box
M4 Pitch 0.70 3mm Key	5	770407005	0.3	100
	6	770407006	0.3	
	8	77044	0.3	
	10	77048	0.4	
	12	77052	0.4	
	14	770407014	0.5	
	16	77056	0.5	
	20	77060	0.6	
	25	77064	0.7	
	30	77068	0.8	
	32	77070	0.9	
	35	770407035	0.9	
	40	770407040	1.0	
	45	770407045	1.1	
	50	770407050	1.2	

Socket Head Cap Screws Cont.



STAINLESS STEEL
ISO 4762 • ISO 3506-1 • CLASS A2-70

Diameter	Length Under Head	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box
M5 Pitch 0.80 4mm Key	6	770508006	0.6	100
	8	770508008	0.6	
	10	77084	0.6	
	12	77088	0.6	
	14	770508014	0.8	
	16	77092	0.7	
	20	77096	0.7	
	22	77098	0.8	
	25	77100	0.9	
	30	77104	1.0	
	35	77108	1.4	
	40	77110	1.5	
	45	770508045	1.8	
	50	770508050	2.0	
	55	770508055	2.1	
	60	770508060	2.3	
65	770508065	2.5		
70	770508070	2.6		
80	770508080	3.2		
90	770508090	3.3		

Diameter	Length Under Head	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box
M6 Pitch 1.00 5mm Key	8	770610008	1.0	100
	10	770610010	1.1	
	12	77124	1.0	
	16	77128	1.2	
	18	770610018	1.4	
	20	77132	1.4	
	22	77134	1.5	
	25	77136	1.6	
	30	77140	1.8	
	35	770610035	2.2	
	40	770610040	2.4	
	45	770610045	2.6	
	50	770610050	2.9	
	55	770610055	3.1	
	60	770610060	3.4	
	65	770610065	3.5	
	70	770610070	3.7	
	75	770610075	4.1	
	80	770610080	4.3	
	90	770610090	4.8	
100	770610100	5.3		
110	770610110	5.8		

Socket Flat Head Cap Screws



HEAT TREATED ALLOY STEEL ISO 10642 PROPERTY CLASS 12.9*
METRIC THREADS TO ANSI B1.13M

* Because of their head configurations, those may not meet the minimum ultimate tensile load specified in ISO 898-1 for property class 12.9. Please see our technical handbook for additional details.

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box
M3 Pitch 0.50 2mm Key	6	87003	0.1	100
	8	87004	0.1	
	10	87008	0.1	
	12	87012	0.1	
	15	87014	0.1	
	16	87016	0.1	
	20	87020	0.2	
	25	87021	0.3	
M4 Pitch 0.70 2.55mm Key	30	87022	0.3	100
	8	87024	0.2	
	10	87028	0.2	
	12	87032	0.3	
	15	87034	0.3	
	16	87036	0.3	
	18	87038	0.5	
	20	87040	0.4	
	25	87044	0.5	
	30	87048	0.6	
M5 Pitch 0.80 3mm Key	35	87049	0.7	100
	40	87050	0.9	
	8	87052	0.3	
	10	87056	0.4	
	12	87060	0.4	
	15	87062	0.5	
	16	87064	0.5	100
	18	87066	0.6	
	20	87068	0.7	

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box
M5 (Cont.)	25	87072	0.8	100
	30	87076	0.9	
	35	87077	1.3	
	40	87078	1.4	
	45	87080	1.6	
	50	87079	1.8	
M6 Pitch 1.00 4mm Key	10	87084	0.6	100
	12	87088	0.7	
	15	87090	0.8	
	16	87092	0.8	
	18	87094	0.9	
	20	87096	1.0	
	25	87100	1.1	
	30	87104	1.3	
	35	87108	1.5	
	40	87112	1.7	
	45	87113	2.1	
	50	87114	2.5	
M8 Pitch 1.25 5mm Key	60	87115	2.8	100
	15	87122	1.5	
	16	87124	1.6	
	20	87128	1.9	
	25	87132	2.2	
	30	87136	2.5	
	35	87140	2.9	100
	40	87144	3.2	

Fully threaded part.

CONTACT US FOR QUOTES ON MADE-TO-PRINT ENGINEERED SPECIALS



Socket Flat Head Cap Screws Cont.



HEAT TREATED ALLOY STEEL ISO 10642 PROPERTY CLASS 12.9*
METRIC THREADS TO ANSI B1.13M

* Because of their head configurations, those may not meet the minimum ultimate tensile load specified in ISO 898-1 for property class 12.9. Please see our technical handbook for additional details.

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box
M8 (Cont.)	45	87143	3.9	100
	50	87145	4.4	
	55	87148	4.8	
	60	87146	5.5	
	70	87147	6.6	
M10 Pitch 1.50 6mm Key	15	87151	2.5	100
	16	87149	2.6	
	20	87152	3.1	
	25	87156	3.6	
	30	87160	3.1	
	35	87164	4.6	
	40	87168	5.2	
	45	87172	6.4	
	50	87176	7.0	
	55	87173	7.6	
	60	87177	8.0	
	70	87178	4.6	50
	80	87174	5.5	
90	87175	6.0		
	100	87179	6.9	

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box
M12 Pitch 1.75 8mm Key	20	87180	4.6	100
	25	87184	5.4	
	30	87188	6.2	
	35	87192	7.0	
	40	87196	7.8	
	45	87200	4.7	50
	50	87204	5.0	
	55	87205	5.4	
	60	87206	5.8	
	70	87198	7.0	
80	87201	8.0		
	90	87202	9.0	
	100	87203	10.0	
M16 Pitch 2.00 10mm Key	30	87207	5.6	50
	35	87208	6.4	
	40	87212	3.5	
	45	87213	4.2	25
	50	87216	4.3	
	55	87218	4.9	
	60	87220	5.0	
	70	87221	6.3	

Socket Button Head Cap Screws



HEAT TREATED ALLOY STEEL
ISO 7380 PROPERTY CLASS 12.9* METRIC THREADS TO ANSI B1.13M

* Because of their head configurations, those may not meet the minimum ultimate tensile load specified in ISO 898-1 for property class 12.9. Please see our technical handbook for additional details.

Diameter	Length Under Head	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box
M3 Pitch 0.50 2mm Key	6	86002	0.1	100
	8	86001	0.1	
	10	86003	0.1	
	12	86005	0.2	
	14	86004	0.2	
	16	86006	0.2	
M4 Pitch 0.70 2.55mm Key	8	86007	0.3	100
	10	86009	0.3	
	12	86011	0.3	
	15	86012	0.4	
	16	86013	0.4	
M5 Pitch 0.80 3mm Key	10	86015	0.5	100
	12	86017	0.5	
	15	86018	0.6	
	16	86019	0.6	
	20	86021	0.8	
	25	86023	0.9	
	30	86025	1.0	
M6 Pitch 1.00 4mm Key	10	86027	0.7	100
	12	86029	0.7	
	15	86030	0.8	
	16	86031	0.9	
	18	86032	1.0	
	20	86033	1.1	
	22	86034	1.2	
	25	86035	1.2	
	30	86037	1.6	

Diameter	Length Under Head	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box
M8 Pitch 1.25 5mm Key	10	86039	1.0	100
	12	86041	1.2	
	15	86042	1.5	
	16	86043	1.5	
	18	86044	1.7	
	20	86045	1.9	
	25	86047	2.3	
	30	86049	2.8	
	35	86050	3.2	
	40	86051	3.6	
M10 Pitch 1.50 6mm Key	15	86052	3.0	100
	16	86053	3.2	
	20	86055	3.7	
	25	86057	4.2	
	30	86059	4.3	
	35	86060	4.7	
	40	86061	5.0	
M12 Pitch 1.75 8mm Key	16	86062	4.4	100
	20	86063	5.1	
	25	86065	5.9	
	30	86070	3.3	50
	35	86075	3.7	
	40	86080	4.1	
	50	86085	4.9	

Socket Shoulder Screws



HEAT TREATED ALLOY STEEL • ISO 7379* PROPERTY CLASS 12.9
METRIC THREADS TO ANSI B1.13M

* Exception to the ISO dimensional standard: diameter to be h8

Diameter	Shoulder Length	Thread Diameter	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box
6mm 3mm KEY (6.000) (5.982)	10	M5	09002	0.4	25
	12		09001	0.4	
	15		09104	0.41	
	16		09003	0.4	
	20		09005	0.5	
	25		09110	0.5	
	30		09114	0.59	
	40		09118	0.71	
8mm 4mm KEY (8.000) (7.978)	12	M6	09006	0.7	25
	15		09124	0.76	
	16		09007	0.8	
	20		09009	0.9	
	25		09011	1.0	
	30		09013	1.1	
	40		09015	1.3	
	50		09132	1.52	
10mm 5mm KEY (10.000) (9.978)	15	M8	09144	1.4	25
	16		09016	1.4	
	20		09017	1.5	
	25		09019	1.7	
	30		09021	1.8	
	40		09023	2.2	
	50		09025	2.6	
	60		09027	2.9	
	70		09029	3.2	
	80		09031	3.5	

Diameter	Shoulder Length	Thread Diameter	Product Number Code	Approx. Weight per Box (lbs.)	Qty. Per Box
12mm 6mm KEY (12.000) (11.973)	15	M10	09156	2.0	25
	16		09032	2.1	
	20		09033	2.3	
	25		09035	2.5	
	30		09037	2.8	
	40		09039	3.3	
	50		09041	3.8	
	60		09043	4.2	
	70		09045	4.7	
	80		09046	5.2	
	90		09160	5.7	
16mm 8mm KEY (16.000) (15.973)	100	09164	6.2	25	
	30	M12	09047		5.2
	40		09048		6.3
	50		09049		6.9
	60		09050		8.0
	70		09051		8.7
	80		09052		9.8
	90		09053		4.3
	100		09055		4.5
	120		09054		5.3



Dowel Pins Black Lustre Finish

RUST RESISTANT • .0051MM OVER LISTED DIAMETER • MEETS ASME/ANSI B18.8.5M

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
3mm	8	02001	0.1	100
	10	02003	0.1	
	12	02005	0.2	
	16	02007	0.2	
	20	02009	0.3	
	25	02011	0.3	
4mm	30	02013	0.4	100
	10	02015	0.2	
	12	02017	0.3	
	16	02019	0.4	
	20	02021	0.5	
	25	02023	0.6	
5mm	30	02025	0.7	100
	35	02027	0.8	
	12	02029	0.5	
	16	02031	0.6	
	20	02033	0.7	
	25	02035	0.9	
	30	02037	1.1	
35	02039	1.3		
40	02041	1.4		

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
5mm (Cont.)	45	02043	1.6	100
	50	02045	1.8	
6mm	16	02047	0.8	100
	20	02049	1.0	
	25	02051	0.8	
	30	02053	1.2	
	35	02055	1.7	
	40	02057	1.9	
	45	02059	2.2	
50	02061	2.4		
60	02063	2.9		
8mm	16	02065	1.4	100
	20	02067	1.7	
	25	02069	2.2	
	30	02071	2.4	
	35	02073	2.9	
	40	02075	3.3	
	45	02077	4.0	
	50	02079	4.2	
	60	02081	5.4	
	70	02083	6.3	

Fully threaded part.

CONTACT US FOR QUOTES ON MADE-TO-PRINT ENGINEERED SPECIALS





Dowel Pins Black Lustre Finish Cont.

RUST RESISTANT • .0051MM OVER LISTED DIAMETER • MEETS ASME/ANSI B18.8.5M

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
10mm	20	02085	2.6	100
	25	02087	3.3	
	30	02089	4.0	
	35	02091	4.6	
	40	02093	5.3	
	45	02095	2.5	40
	50	02097	2.8	
	60	02099	3.2	
	70	02101	3.8	
	80	02103	4.4	
90	02105	4.8	12mm	
25	02107	2.1		40
30	02109	2.4		
35	02111	2.6		
40	02113	3.1		
45	02115	3.5		
50	02117	3.9		20
60	02119	2.3		
70	02121	2.7		
80	02123	3.2		
90	02125	3.6		
100	02127	3.8		

Diameter	Length Overall	Product Number Code	Approx. Weight per Box (lbs.)	Qty. in Box
16mm	30	02131	1.0	10
	35	02133	1.2	
	40	02135	1.4	
	45	02137	1.6	
	50	02139	1.7	
	60	02141	2.1	
	70	02143	2.4	
	80	02145	2.7	
	90	02147	3.1	
	100	02149	3.5	
20mm	50	02151	2.7	10
	60	02153	3.2	
	70	02155	3.7	
	80	02157	4.3	
	90	02159	4.9	
	100	02161	5.4	
	110	02163	5.9	
	120	02165	6.5	
	130	02167	7.0	
	140	02169	7.6	

Please contact us about our new product lines including

12 Point Flange Bolts

- Manufacturing and certified to ASTM A574
- 100% Made in the USA Holo-Krome Quality
- 170k-180k PSI Tensile
- Allows for greater torque to be applied to fastener
- Withstands heavy duty applications where higher tensile strength is required



TARGET INDUSTRIES & APPLICATIONS:

Material Handling & Equipment • Automotive / Off-Road Suspension • Cranes • Rigging & Hoisting
Heavy Trucking • Mining & Earth Moving Equipment • Aircraft Manufacturing

Set Screw and Key Assortments

Precision tolerances, heat treated alloy steel, black finish



**Item No.
56410**

170 Pc. SAE Cap Screw Set

An assortment of 12 sizes of SAE alloy steel socket head cap screws in a 12 section plastic box. Box size: 10-3/4" x 6-3/4" x 1-7/8".

Weight 3.7 lbs.

Assortment Contents

Cap Screw Size	Quantity
#6-32 X 1/2	20
#8-32 X 1/2	
1/4-20 X 1/2	10
1/4-20 X 3/4	
1/4-20 X 1	
5/16-18 X 1	

Cap Screw Size	Quantity
5/16-18 X 1-1/2	10
3/8-16 X 1	
3/8-16 X 1-1/2	
#10-32 X 1/2	20
#10-32 X 3/4	
#10-32 X 1	



**Item No.
56420**

300 Pc. SAE Button Head Cap Screw Set

An assortment of 12 sizes of SAE alloy steel button head cap screws in a 12 section plastic box. Box size: 10-3/4" x 6-3/4" x 1-7/8". Weight: 3.7 lbs.

Assortment Contents

Button Head Size	Quantity
#6-32 X 3/8	25
#6-32 X 1/2	
#8-32 X 3/8	
#8-32 X 1/2	
1/4-20 X 1/2	
1/4-20 X 3/4	

Button Head Size	Quantity
1/4-20 X 1	25
5/16-18 X 3/4	
5/16-18 X 1	
#10-32 X 3/8	
#10-32 X 1/2	
#10-32 X 3/4	



**Item No.
56430**

300 Pc. SAE Flat Head Cap Screw Set

An assortment of 12 sizes of SAE alloy steel flat head cap screws in a 12 section plastic box. Box size: 10-3/4" x 6-3/4" x 1-7/8". Weight: 3.4 lbs.

Assortment Contents

Flat Head Size	Quantity
#6-32 X 3/8	25
#6-32 X 1/2	
#8-32 X 3/8	
#8-32 X 1/2	
1/4-20 X 1/2	
1/4-20 X 3/4	

Flat Head Size	Quantity
1/4-20 X 1	25
5/16-18 X 3/4	
5/16-18 X 1	
#10-32 X 3/8	
#10-32 X 1/2	
#10-32 X 3/4	

Assortments

Cap Screw, Set Screw and Key Assortment

Precision tolerances, heat treated alloy steel, black finish



Item No.
56886
Set No.
621

336 Pc. SAE Set Screw and Hex Key Assortment

An assortment of 24 numbered size alloy steel socket set screws with a cup point and the appropriate short arm hex keys in a sectioned metal box. Contains 288 set screws and 48 hex keys. Box size: 8-1/2" x 5-3/4" x 1". Weight: 1.3 lbs.

Assortment Contents:

Set Screw Size	Quantity
#4-40 X 1/8	12
#4-40 X 3/16	
#4-40 X 1/4	
#4-40 X 5/16	
#4-40 X 3/8	
#5-40 X 1/8	
#5-40 X 3/16	
#5-40 X 1/4	
#5-40 X 5/16	
#5-40 X 3/8	
#6-32 X 1/8	
#6-32 X 3/16	

Set Screw Size	Quantity
#6-32 X 1/4	12
#6-32 X 5/16	
#6-32 X 3/8	
#8-32 X 1/8	
#8-32 X 3/16	
#8-32 X 1/4	
#8-32 X 5/16	
#8-32 X 3/8	
#10-24 X 3/16	
#10-24 X 1/4	
#10-24 X 5/16	
#10-24 X 3/8	

Hex Key Size	Quantity
.050	12
1/16	
5/64	
3/32	



Item No.
56438

300 Pc. SAE Holo-Knurl® Point Screw Set

An assortment of 12 sizes of SAE alloy steel socket set screws with a Holo-Knurl® point in a 12 section plastic box. Box size: 10-3/4" x 6-3/4" x 1-7/8". Weight: 2.3 lbs.

Assortment Contents:

Set Screw Size	Quantity
#8-32 X 1/4	25
#10-32 X 3/16	
#10-32 X 1/4	
1/4-20 X 1/4	
1/4-20 X 3/8	
1/4-20 X 1/2	

Set Screw Size	Quantity
1/4-28 X 1/4	25
5/16-18 X 3/8	
5/16-18 X 1/2	
3/8-16 X 3/8	
3/8-16 X 1/2	
1/2-13 X 1/2	



Item No.
76582
Set No.
MK2

274 Pc. Metric Cap Screw and Hex Key Assortment

An assortment of 18 sizes of alloy steel metric socket head cap screws and the appropriate short arm hex keys in a sectioned plastic box. Contains 270 cap screws and 4 hex keys. Box size: 11" x 6-3/4" x 1-3/4". Weight: 5 lbs.

Assortment Contents:

Cap Screw Size	Quantity
M4 X 10MM	25
M4 X 12MM	
M4 X 20MM	
M4 X 25MM	
M5 X 12MM	
M5 X 20MM	10
M5 X 25MM	
M5 X 30MM	
M6 X 12MM	

Cap Screw Size	Quantity
M6 X 20MM	10
M6 X 25MM	
M6 X 30MM	
M6 X 40MM	
M8 X 20MM	
M8 X 25MM	
M8 X 30MM	
M8 X 40MM	
M8 X 45MM	

Hex Key Size	Quantity
3MM	1
4MM	
5MM	
6MM	

Assortments

Set Screw and Key Assortments

Precision tolerances, heat treated alloy steel, black finish



Item No.
56880

Set No.
602

705 Pc. SAE Set Screw and Hex Key Assortment

An assortment of 11 sizes of SAE alloy steel socket set screws with a cup point and the appropriate short arm hex keys in a sectioned metal Box. Contains 590 set screws and 115 hex keys. Box size: 9-3/4" x 13-3/4" x 2-1/2". Weight: 9.3 lbs.

Assortment Contents:

Set Screw Size	Quantity
#10-32 X 3/16	100
#10-32 X 1/4	50
1/4-20 X 1/4	100
1/4-20 X 3/8	50
5/16-18 X 5/16	100
5/16-18 X 3/8	50

Set Screw Size	Quantity
3/8-16 X 3/8	50
3/8-16 X 1/2	
7/16-14 X 7/16	20
1/2-13 X 1/2	10
5/8-11 X 5/18	

Hex Key Size	Quantity
3/32	25
1/8	
5/32	
3/16	5
7/32	
1/4	
5/16	



Item No.
56884

Set No.
608

145 Pc. SAE Set Screw and Hex Key Assortment

An assortment of 10 sizes of SAE alloy steel socket set screws with a cup point and the appropriate short arm hex keys in a sectioned plastic box. Contains 100 set screws and 45 hex keys. Box size: 8-3/8" x 4-1/2" x 1-1/2". Weight: 1.3 lbs.

Assortment Contents:

Set Screw Size	Quantity
#8-32 X 3/16	10
#8-32 X 1/4	
#10-32 X 3/16	10
#10-32 X 1/4	
1/4-20 X 1/4	

Set Screw Size	Quantity
1/4-20 X 3/8	10
5/16-18 X 5/16	
5/16-18 X 3/8	10
3/8-16 X 3/8	
3/8-16 X 1/2	

Hex Key Size	Quantity
5/64	10
3/32	
1/8	
5/32	5
3/16	

Please contact us about our new product lines including

B7 Heavy Hex Cap Screws

- ASTM A193 Grade B7
- 100% Made in the USA
- Minimum Tensile Strength of 120k PSI
- Greater bearing surface; distributes clamping load over greater area
- RoHS & DFARS Complaint



TARGET INDUSTRIES & APPLICATIONS:

Petrochemical • Power Generation • Paper & Pulp • High Heat Applications • Compressors
Vacuum Products • Industrial Tank Fabrication

Definitions of Screw and Thread Terms

Major Diameter - The largest diameter of the thread of the screw or nut. The term "major diameter" replaces the term "outside diameter" as applied to the thread of a screw and also the term "full diameter" as applied to the thread of a nut.

Minor Diameter - The smallest diameter of the thread of a screw or nut. The term "minor diameter" replaces the term "core diameter" as applied to the thread of a screw and also the term "inside diameter" as applied to the thread of a nut.

Half Angle of Thread - The angle included between a side of the thread and the normal to the axis, measured in an axial plane.

Angle of Thread - The angle included between the sides of the thread measured in an axial plane.

Root - The surface of the thread corresponding to the minor diameter of the screw and the major diameter of the nut.

Side or Flank - The surface of the thread which connects the crest with the root.

Pitch Line - An element of the imaginary cylinder or cone as specified under "Pitch Diameter".

Axis of a Screw - The longitudinal central line through the screw.

Crest - The surface of the thread corresponding to the major diameter of the screw and the minor diameter of the nut.

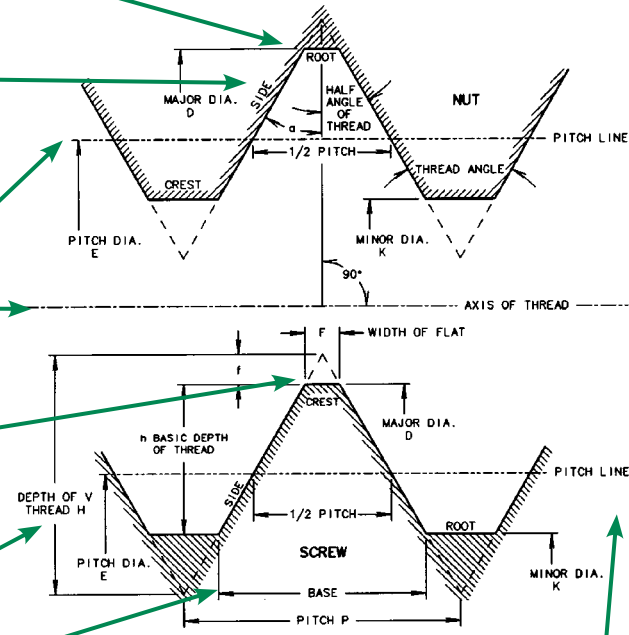
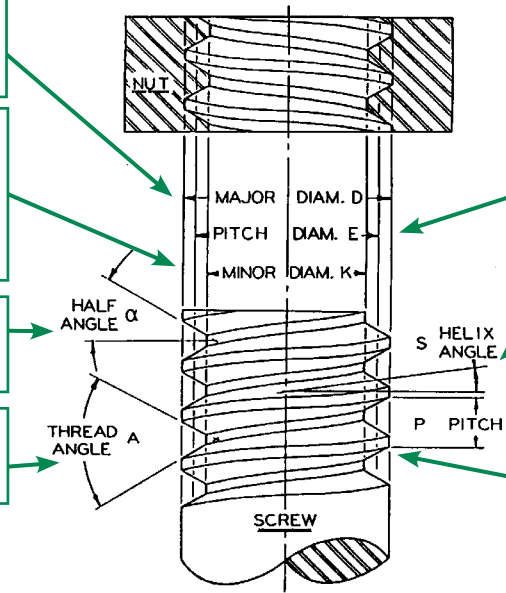
Depth of Thread - The distance between the crest and the base of the thread measured normal to the axis.

Base of Thread - The bottom section of the thread; the greatest section between the two adjacent roots.

Pitch Diameter - On a straight screw thread, the diameter of an imaginary cylinder, the surface of which would pass through the threads at such points as to make equal the width of the threads and the width of the spaces cut by the surface of the cylinder. On a taper screw thread, the diameter, at a given distance from a reference plane perpendicular to the axis of an imaginary cone, the surface of which would pass through the threads at such points as to make equal the width of the threads and the width of the spaces cut by the surface of the cone.

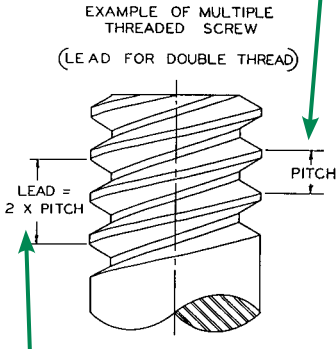
Helix Angle - The angle made by the helix, or conical spiral, of the thread at the pitch diameter with a plane perpendicular to the axis.

Screw Thread - A ridge or uniform section in the form of a helix on the external or internal surface of a cylinder, or in the form of a conical spiral on the external or internal surface of a cone.



Pitch - the distance from a point on a screw thread to a corresponding point on the next thread measured parallel to the axis.

The pitch in inches -

$$\frac{1}{\text{Number of threads per inch}}$$


Lead - The distance a screw thread advances axially in one turn. On a single threaded screw the lead and pitch are identical; on a double threaded screw the lead is two times the pitch; on a triple threaded screw the lead is three times the pitch, etc.

Thickness of Thread (1/2 of pitch) - The distance between the adjacent sides of the thread measured along or parallel to the pitch line.

Internal Thread ex. a nut - An internal thread is a thread on the inside of a member.

External Thread ex. a bolt - An external thread is a thread on the outside of a member.

Number of Threads - The number of threads in one inch of length.

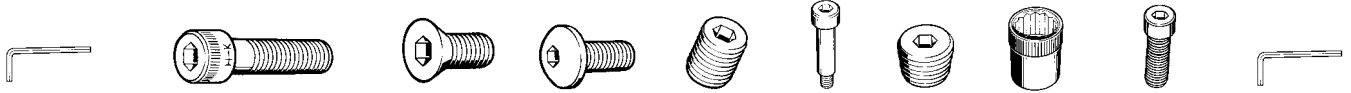
Length of Engagement - The length of contact between two mated threaded parts measured axially.

Depth of Engagement - The depth of thread contact of two mated parts, measured radially.

Mean Area - The term "mean area of a screw," when used in specifications and for other purposes, designates the cross-sectional area computed from the mean of the basic pitch and minor diameters.

Dimensional Standards

Hex Key Fit Selector - Keys Fit These Products



Nominal Key Size, Inches	Socket Head Cap Screws		Flat Head Cap Screws	Button Head Cap Screws	Set Screws	Shoulder Screws	Pressure Plugs	Allenuts	Low Head Cap Screws	Nominal Key Size, Inches
	1960 Series	1936 Series								
.028	-	-	-	-	0	-	-	-	-	.028
.035	-	-	0	0	1,2	-	-	-	-	.035
.050	0	0,1	1,3	1,3	3,4	-	-	-	4	.050
1/16	1	2	3,4	3,4	5,6	-	-	-	5,6	1/16
5/64	2,3	3,4	5,6	5,6	8	-	-	-	8	5/64
3/32	4,5	5,6	8	8	10	-	-	-	10	3/32
7/64	6	-	-	-	-	-	-	-	-	7/64
1/8	-	8	10	10	1/4	1/4	-	4,5	1/4	1/8
9/64	8	10	-	-	-	-	-	-	-	9/64
5/32	10	1/4	1/4	1/4	5/16	5/16	1/16	6	5/16	5/32
3/16	1/4	-	5/16	5/16	3/8	3/8	1/8	8,10	3/8	3/16
7/32	-	5/16	3/8	3/8	7/16	-	-	-	7/16	7/32
1/4	5/16	-	7/16	-	1/2	1/2	1/4	1/4	1/2	1/4
5/16	3/8	3/8, 7/16	1/2	-	5/8	5/8	3/8	5/16	5/8	5/16
3/8	7/16, 1/2	1/2	5/8	-	3/4	3/4	1/2	3/8	-	3/8
7/16	-	-	-	-	-	-	-	7/16	-	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, 1-1/8	-	3/4	-	-	9/16
5/8	3/4	1	1	-	1-1/4, 1-3/8	1-1/4	1	5/8	-	5/8
3/4	7/8, 1	-	1-1/8	-	1-1/2	-	1-1/4	3/4	-	3/4
7/8	1-1/8, 1-1/4	-	1-1/4, 1-3/8	-	-	1-1/2	-	7/8	-	7/8
1	1-3/8, 1-1/2	1-1/2	1-1/2	-	1-3/4, 2	1-3/4	1-1/2, 2	1	-	1
1-1/4	1-3/4	-	-	-	-	2	-	1-1/4	-	1-1/4
1-1/2	2	1-1/8, 1-1/4, 1-3/8	-	-	-	-	-	1-1/2	-	1-1/2
1-3/4	2-1/4, 2-1/2	-	-	-	-	-	-	-	-	1-3/4
2	-3/4	-	-	-	-	-	-	-	-	2

Hex Key Fit Selector - Keys Fit These Products



Nominal Key Size, MM	Socket Head Cap Screws	Flat Head Cap Screws	Button Head Cap Screws	Set Screws	Shoulder Screws	Allenuts	Low Head Cap Screws	Nominal Key Size, MM
0.7	-	-	-	M1.4, M1.6, M1.7	-	-	-	0.7
0.9	-	-	-	M2, M2.3	-	-	-	0.9
1.3	M1.4	-	-	M2.5, M2.6	-	-	-	1.3
1.5	M1.6, M1.7, M2	-	-	M3	-	-	-	1.5
2	M2.3, M2.5, M2.6	M3	M3	M4	-	-	-	2
2.5	M3	M4	M4	M5	-	-	-	2.5
3	M4	M5	M5	M6	6mm	M3	M4	3
4	M5	M6	M6	M8	8mm	M4	M5	4
5	M6	M8	M8	M10	10mm	M6	M6	5
6	M8	M10	M10	M12, M14	12mm	M6	M8	6
8	M10	M12	M12	M16	16mm	M8	M10	8
10	M12	M14, M16	-	M20	20mm	M10	M12	10
12	M14	M20	-	M24	-	M12	M14	12
14	M16	-	-	-	-	-	M16	14
17	M20	-	-	-	-	M16	M20, M22	17
19	M24	-	-	-	-	-	M24	19

Fully threaded part.

Terms Relating to Classification and Tolerances

Allowance - An intentional difference in the dimensions of mating parts. It is the minimum clearance of the maximum interference which is intended between mating parts. It represents the condition of the tightest permissible fit, or the largest internal member mated with the smallest external member.

Examples:

A 1/2-13 American National Coarse Thread.

Minimum pitch diameter of nut (2B)	0.4500
Maximum pitch diameter of screw (2A)	<u>0.4485</u>
Allowance (positive)	0.0015

Tolerance - The amount of variation permitted in the size of a part.

Example:

1/2 - 13, 3A American National Coarse Thread Series.

Maximum pitch diameter	0.4500
Minimum pitch diameter	<u>.4463</u>
Tolerance.	0.0037

Basic Size - The theoretical or nominal standard size from which all variations are made.

Crest Clearance - Defined on a screw form as the space between the crest of a thread and the root of its mating part.

Finish - The character of the surface on a screw thread or other product.

Fit - The relation between two mating parts with reference to the conditions of a assembly. For example: Wrench fit; close fit; medium fit; free fit; loose fit. The quality of fit is dependent upon both the relative size and the quality of finish of the mating parts.

Neutral Zone - A positive allowance (See "Allowance.")

Limits - The extreme permissible dimensions of a part.

Example :

1/2-13, Class 3A, American National Coarse Thread Series.

The limits are:

Maximum pitch diameter (3A)	0.4500
Minimum pitch diameter (3A)	0.4463

Recommended Torque Specification* Inch & Metric Fastener Charts



Socket Head Cap Screws				
Nominal Size	Inch		Metric	
	Tightening Torque (Inch - lbs)		Nominal Size	Tightening Torque (N·m)
	UNRC	UNRF		
0	-	2.6	M1.6	0.34
1	4.5	4.8	M2	0.69
2	7.5	8.0	M2.5	1.43
3	11.0	12.0	M3	2.48
4	16.0	18.0	M4	5.85
5	24.0	24.0	M5	12.0
6	30.0	34.0	M6	20.3
8	55.0	58.0	M8	48.8
10	79.0	90.0	M10	97.5
1/4	200.0	230.0	M12	165.0
5/16	415.0	460.0	M14	265.0
3/8	740.0	845.0	M16	413.0
7/16	1,190.0	1,305.0	M20	825.0
1/2	1,800.0	2,065.0	M24	1,425.0
5/8	3,400.0	3,800.0	M30	2,775.0
3/4	6,000.0	6,750.0	M36	4,875.0
7/8	8,250.0	9,200.0		
1	12,500.0	13,000.0		
1-1/4	25,000.0	27,750.0		
1-1/2	43,500.0	49,000.0		



Socket Shoulder Bolts				
Nominal Size	Inch		Metric	
	Tightening Torque (Inch - lbs)		Nominal Size	Tightening Torque (N·m)
1/4	50		M5 x 0.8	6.9
5/16	125		M6 x 1	12.0
3/8	265		M8 x 1.25	28.0
1/2	470		M10 x 1.5	56.0
5/8	1,150		M12 x 1.75	99.0
3/4	2,000		M16 x 2	250.0
1	4,000		M20 x 2.5	400.0



Cup Point Set Screws				
Nominal Size	Inch		Metric	
	Tightening Torque (Inch - lbs)		Nominal Size	Tightening Torque (N·m)
0	1.1		1.6	0.1
1	2.1		2.0	0.2
2	2.1		2.5	0.6
3	6.0		3.0	1.0
4	6.0		4.0	2.1
5	11.0		5.0	4.7
6	11.0		6.0	7.7
8	23.0		8.0	17.8
10	40.0		10.0	35.0
1/4	94.0		12.0	55.0
5/16	183.0		16.0	125.0
3/8	317.0		20.0	250.0
7/16	502.0		24.0	425.0
1/2	750.0			
5/8	1,460.0			
3/4	2,520.0			
7/8	5,750.0			
1	8,000.0			



Button Head Socket Cap Screws				
Nominal Size	Inch		Metric	
	Tightening Torque (Inch - lbs)		Nominal Size	Tightening Torque (N·m)
4	8		M3 x 0.5	1.25
5	-		M4 x 0.7	2.9
6	15		M5 x 0.8	5.9
8	30		M6 x 1	10.0
10	65		M8 x 1.25	24.0
1/4	125		M10 x 1.5	48.0
5/16	200		M12 x 1.75	84.0
3/8	360		M16 x 2	207.0
1/2	1000		M20 x 2.5	-
5/8	1750			

NOTE: This specification is for Holo-Krome® alloy steel fasteners with thermal black finish and light oil.



Flat Head Socket Cap Screws				
Nominal Size	Inch		Metric	
	Tightening Torque (Inch - lbs)		Nominal Size	Tightening Torque (N·m)
4	9.5		M3 x 0.5	1.85
5	14.0		M4 x 0.7	3.4
6	18.0		M5 x 0.8	6.9
8	32.0		M6 x 1	12.0
10	75.0		M8 x 1.25	28.0
1/4	140.0		M10 x 1.5	56.0
5/16	245.0		M12 x 1.75	99.0
3/8	400.0		M16 x 2	246.0
7/16	600.0		M20 x 2.5	400.0
1/2	1,200.0			
5/8	2,000.0			
3/4	4,000.0			
7/8	6,000.0			
1	8,500.0			



Low Head Socket Cap Screws	
Inch	
Nominal Size	Tightening Torque (Inch - lbs)
4	5.0
5	9.5
6	9.5
8	19.0
10	30.0
1/4	75.0

Low Head Socket Cap Screws	
Inch	
Nominal Size	Tightening Torque (Inch - lbs)
5/16	150.0
3/8	275.0
7/16	425.0
1/2	600.0
5/8	1,300.0

* Suggested torque values were determined based on calculations in controlled conditions intended to produce desired preloads. Testing should be completed to confirm suitability for individual applications

HOLO-KROME® *can make your tough shapes easier!*

Manufacturing parts with unusual contour, strength and cost requirements often becomes uneconomical as material, labor and energy costs escalate. For many companies, HOLO-KROME® has become the economic design and manufacturing alternative. The key is metal forming versus metal removal. We have 90 years of applied technology experience in forming metal solutions. For us, tough parts take shape just a little easier.



HOLO-KROME ADVANTAGES

- Technical Engineering Staff to Answer your Questions
- Same Day Shipping
- 98% Fill Rates
- Full Metric and SAE Line
- Cad Drawing Online
- Two Fully Automated Continuous Heat Treating Furnaces Totalling 2,400 lbs/hr. Capacity
- Three Semi-Automated Batch Furnace Systems

QUALITY CONTROL

- ISO 9001:2015
- Holo-Code Traceability
- Limited Raw Materials Suppliers to ensure tight chemistry
- ROHS Compliant
- QSLM Class 2 Approved
- DFARS Compliant
- A2LA

PRODUCTS

- **Bolts, Screws & Studs:** Hex Heads, Heavy Hex, Dog Points, Flange 12 pt Screws, and Single End, Double End, and Fully Threaded Studs
According to: A193/A193M, A320/A320M, ANSI B18.2.1, DIN 931, 933, 960, & 961, A325/A325M, A490, A449, A354BD. SAE J429. and MORE
- **All Types of Socket Cap Screws**
According to: ANSI B18.3, ISO 4762, ISO 898-1, A574, A193/A193M, A320/A320M, and MORE
- **Custom Headed Parts**

RAW MATERIALS

- **Carbon & Alloy Steel:** A193:B7, B7M, B16, A320/A320M:L7/L7M,1018, 1045, 4140/42, 4037, 4137, 4340, 8640, and MORE
- **Stainless Steel:** 302HQ/304L (18-8), 316/316L, A2/A4 (50/70/80), 410, B8/B8M, B6/B6X, 17-4, PH (H925/H950/H1025/H1075/H1100/H1150/DH1150), and MORE
- **Super Alloys:** Monel™ 400/K500, A286

COATINGS

- **Electrolytic Coatings:** Zinc Plating, Nickel Plating, Chromium Plating, Copper Plating, Cadmium Plating
- **Chemical & Other Coatings:** Mn/Zn Phosphating, Electroless Nickel Plating, Geomet, Molybdenum Disulphide, PTFE Product/Material Standards: ASTM, API, ANSI, ISO, DIN, NACE, SAE, IFI, and MORE

MACHINING & PART SIZE CAPABILITIES

Threading

- All Standard and Metric Thread Pitches (UNC, UNF, UNJ, Metric, Pipe)
- Rolled: up to 2" Diameter
- Right/Left Hand

Hot Upset Forging

- Hot Heading and Forging: up to 2" Diameter (M48) and 28" (720mm) long

Cold Heading

Our 200,000 sq. ft. facility specializes in small to large, medium to high-volume parts, including:

- Specialty Shoulder Screws
- Large Head with Small Body Severe Upsets and Extrusions
- Custom Designed Parts and Exotic Configurations
- Semi-Special Manufactured Large Washer Heads
- Non-Standard Product with High Heads

Socket Cap Screws: #0-2" and M1.6 to M48

Socket Set Screws: #4 to 1"

Socket Shoulder Screws: 1/4" to 3/4" and M6 to M16

Dowel Pins: 1/8" to 1" and 3mm to 20mm - Standard and oversize

Special Head Cap Screws:

Flat Head – #4 to 3/4" and M3 to M16

Button Head – #4 to 5/8" and M3 to M12

Low Head – #8 to 1/4" and M4 to M16



CUSTOM DESIGNED SOLUTIONS

HOLO-KROME® Company

Made in the USA products are used in a wide variety of market applications that demand high-quality, high-strength precision components. In addition to the standard product line of cap screws, socket shoulder bolts, dowel pins, socket jam screws, and socket pipe plugs, HOLO-KROME also manufactures semi-standards, specialty parts and cold-headed parts.

With emphasis on lower cost and higher productivity, more companies are looking to HOLO-KROME to solve assembly and "tough-to-manufacture" part problems. If there is a length, material, coating or other criteria you don't find on our website or in our catalog, we will supply a quotation.

Do you require screw machine parts that have:

- Two or more outside diameters?
- A recess or bore up to 2x diameter in depth?
- A requirement for special material?

Warm or cold heading may be a practical alternative. Shaping metal by controlled warm or cold forming yields inherently stronger parts. Material structure is controlled in critical stress areas, eliminating the possibility of tears that are so common with machined parts.

HOLO-KROME can shape various types of material - aluminum and brasses, austenitic and martensitic stainless, 4000 series alloy steels, all the way through H-11 and other tool steels - into difficult dimensions while retaining the metallurgically important property of grain flow.

Tough-to-manufacture parts can be produced at less cost than traditional methods. With little or no metal removal, savings in material normally justifies HOLO-KROME's heading process. Our vertically integrated manufacturing process encompasses many innovative secondary and finishing operations such as high-speed/proprietary machining, full capability contour grinding, and precision roll threading up to 2" diameter. Our finishing operations include a controlled-heat treating department. Most high-strength alloy parts are automatically conveyed through furnaces to ensure that specified metallurgical properties are achieved.



Contact our quoting team regarding your made-to-print parts.

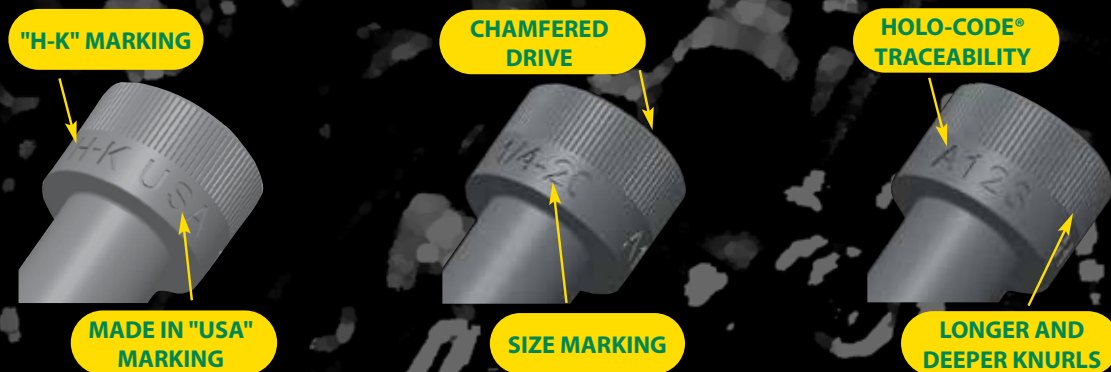


HOLO-KROME®

WHEN IT MATTERS MOST™

HOLO-KROME has been providing superior-quality critical application fasteners since 1929, and now offers custom designed solutions of the same superior-quality – each product proudly made in the USA.

THE DIFFERENCE IS EASY TO SEE



To learn more about HOLO-KROME and the products we provide, visit:

www.holo-krome.com



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