

*Fastening Systems Engineered For Performance™*

# **RIVET NUT INSERT CATALOG**



# TABLE OF CONTENTS

## GENERAL INFORMATION

PAGE

About Us .....	2-3
Rivet Nut Introduction .....	4-6

## HEX BODY RIVET NUTS

Product Line Overview .....	7
<b>Full Hex Inch Body - Inch and Metric Threads</b>	
FHK/FHL.....	8
CFH/CFHD .....	9
LRGH.....	10
<b>Full Hex Metric Body - Metric Threads</b>	
HUPO/HUKO.....	11
<b>Half Hex Inch Body - Inch and Metric Threads</b>	
CAH.....	12
<b>Half Hex Metric Body - Inch and Metric Threads</b>	
HUPO/HUKO.....	13

## ROUND BODY RIVET NUTS

Product Line Overview .....	14
<b>Inch Body - Inch and Metric Threads</b>	
CAO <i>Smooth, small flange</i> .....	15
CA <i>Smooth, large flange</i> .....	16
LRGR <i>Smooth, large flange, large diameter</i> .....	17
CPB <i>Slotted, pre-bulbed, large flange</i> .....	18
CPN <i>Smooth, straight shank, large flange</i> .....	19
CAK <i>Knurled, small flange</i> .....	20
CAL <i>Knurled, large flange</i> .....	21
CFT/CAT <i>Knurled, small flange, heavy duty, 360 swaging</i> .....	22
CFW/CAW <i>Diamond knurled, small flange, heavy duty, 360 swaging</i> .....	23
RIV-FLOAT® / RIV-FLOAT® - Short <i>Floating Nut, Self-Aligning</i> .....	24-25
NAS/MS Rivet Nuts <i>Flat and Countersunk Heads</i> .....	26-29

**Metric Body - Inch and Metric Threads**

UPO/UFO *Smooth, large and countersunk flange* ..... 30

UKO *Smooth, small flange* ..... 31

UPO RS/UFO RS *Knurled, large and countersunk flange* ..... 32

CLM/CKM *Knurled, large and small flange* ..... 33

**OTHER RIVET NUT PRODUCTS**

Rivet Nut Studs *Rivet Nut and Screw Combination* ..... 34

**SPECIALTY FASTENER SOLUTIONS**

Product Showcase ..... 35-36

**FASTENER INSTALLATION SYSTEMS**

Overview ..... 37

Hand Tools ..... 38

Pneumatic Tools (Spin-Spin) ..... 39

Hydro-Pneumatic Tools (Spin-Pull) ..... 40-42

Hand Tool Calibration Unit ..... 43

**TECHNICAL INFORMATION**

Testing Methods ..... 44

Rivet Nut Coatings ..... 45

Rivet Nut Sealants ..... 46

Mechanical Lock & Locsert® ..... 47

Sherex Product Matrix ..... 48

Decimal Equivalents & Drill Size Chart ..... 49

**ADDITIONAL INFORMATION**

Value Propositions ..... 50

Additional Sherex Product Lines ..... 51

Sherex Website & 3D Model Downloads ..... 52

Notes ..... 53

## COMPANY OVERVIEW

### ABOUT SHEREX

Sherex Industries was founded in 1979 in Buffalo, NY primarily serving the Automotive and Fluid Power markets. In 2004, the rivet nut division was spun off, and became Sherex Fastening Solutions. Throughout our 40 year history, we've remained steadfast in our mission to deliver high quality fastening solutions at the lowest total installed cost. We've expanded and improved our offerings and services by creating proprietary products, forming strategic partnerships, and establishing world-class production facilities and customer support centers in Taiwan, Mexico, U.K., Poland, and Akron, Ohio.

We've assembled a team of experienced, knowledgeable engineering and technical sales professionals that are dedicated to exceeding our customers' needs by collaborating to create customized, application-specific solutions.



### GLOBAL PRESENCE

Sherex provides service and support to our customers around the world through a network of sales offices, technical support centers, distribution hubs, and manufacturing facilities.



**MANUFACTURING  
FACILITIES  
&  
QUALITY**

## WORLD CLASS MANUFACTURING FACILITIES

Sherex has two strategically-located, ISO certified manufacturing facilities in Chungli City, Taiwan, and Akron, Ohio that produce a wide variety of fasteners.

### SHEREX TAIWAN



Sherex Taiwan specializes in using cold forming technology to produce rivet nuts, clinch nuts, and specialty designs in a high volume production environment. We are also capable of machining parts for production and application development.

### SHEREX AKRON



Sherex Akron manufactures MS/NAS fasteners, Sherex standard rivet nuts, and other specialty parts using cold forming and machining technologies. Our small and large batch production capabilities allow us to offer reduced lead times and low minimum order quantities. Cage Codes 7EK30 and 4JQL4. QSLM approved by the U.S. Defense and Logistics Agency.

## UNSURPASSED QUALITY

Each Sherex manufacturing facility is led by a team of seasoned engineering professionals charged with ensuring all products meet stringent quality requirements. Our facilities are certified to **AS9100, ISO 9001:2015, ISO 14001:2015, IATF 16949:2016, and ISO 17025:2017**. The Sherex Quality Management System, and our use of SPC (Statistical Process Control) ensures that all of our products are manufactured using reliable, repeatable, and compliant processes.

We also use tensile testing, accelerated corrosion salt spray testing machines, torque testing, standard measurement and gauging equipment, and optical sorting machines to ensure world class product quality. Please contact us for more information on our quality certifications and processes.

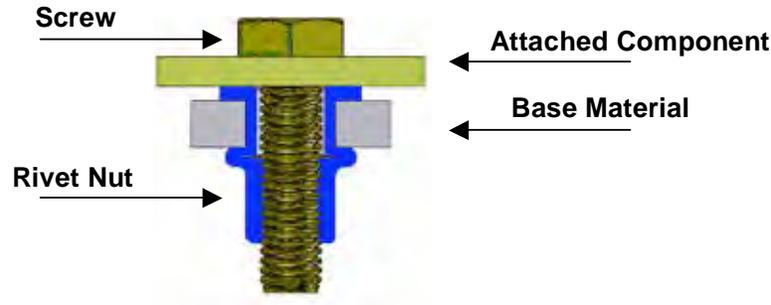


# RIVET NUT INTRODUCTION

## RIVET NUT INTRO

Blind Rivet Nuts provide load-bearing threads in thin sheet materials that are too thin for a tapped thread. They are called “blind” because they can be installed from one side of the work piece.

Once the rivet nut is installed, additional components can be attached using threaded fasteners.



### ADVANTAGES OF RIVET NUTS

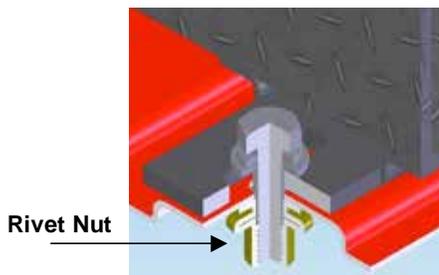
- Provide a strong thread in thin materials that cannot be tapped.
- Can be installed from one side of the work piece as a “Blind Application.”
- Are ideal when easy disassembly and reassembly of products is required.
- Can be installed in many different kinds of material including steel, plastic and fiberglass.
- Once Rivet Nuts are installed, additional components with threaded fasteners can be attached.
- Prepainted material will not be damaged during the Rivet Nut installation process.
- Rivet Nuts are available in many different styles & materials for many different types of applications.
- Ideal replacement for weld nuts:
  - More efficient, simple installation
  - Will not distort base material
  - Eliminate weld spatter, toxic fumes, and other by-products of the welding process

Rivet nuts are used in a variety of industries:

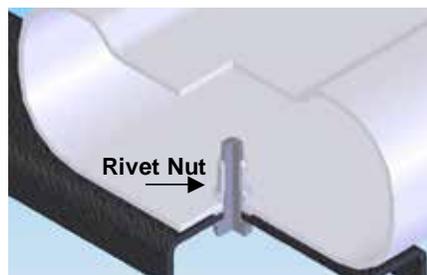
- Automotive
- HVAC
- Aerospace and Defense
- Agricultural Equipment
- Construction Equipment
- General Industrial
- Electronics
- Medical
- Railways
- Heavy Truck
- Solar
- Wind Power



### EXAMPLES OF RIVET NUT APPLICATIONS



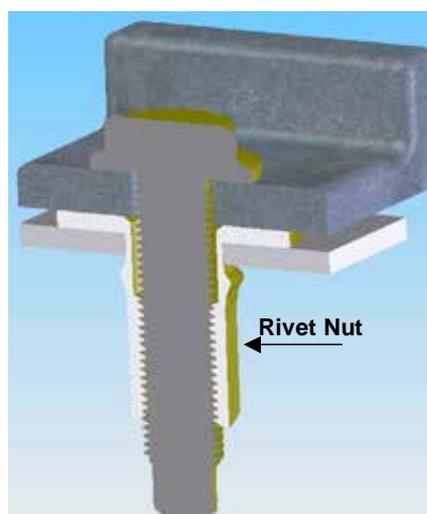
After Market Vehicle Retrofit – Tool Box



Vehicle Accessory – Pickup Side Rail



Automotive – Light Assembly  
Rivet Nut



Agriculture Equipment – High Strength  
Rivet Nut

# RIVET NUT INTRODUCTION

## BODY STYLE OVERVIEW

### Inch/Imperial Body Styles



- Imperial/Inch body styles are designed to be placed in fractional or common inch drill/punch hole sizes.
- They are the most common styles used in the American marketplace.
- Most inch/imperial body styles are available with metric or inch threads.
- Parts are manufactured by Sherex Taiwan, our **IATF 16949:2016** and **ISO 14001** certified production facility, and Sherex Akron, our **AS9100** and **ISO 9001:2015** certified facility.
- Special designs are available to meet customer specific requirements. Contact Sherex with your application information.

#### CATALOG ATTRIBUTES - INCH BODY STYLE

<b>Grip Range</b>	Material Thickness	<b>D(A/F)</b>	Diameter Across Flats
<b>L</b>	Length	<b>IL</b>	Installed Length
<b>HD</b>	Head Diameter	<b>LB</b>	Length Closed End
<b>HT</b>	Head Thickness	<b>ILB</b>	Installed Length Closed End
<b>D</b>	Diameter	<b>ITD</b>	Installed Thread Depth

### Metric/European Body Styles



- Metric European body styles are designed to be placed into metric drilled or punched holes.
- Many metric body styles are available with metric or inch threads.
- Products are manufactured in our **IATF 16949:2016**, **AS9100**, and **ISO 9001:2015** certified production facility or in the **EN 9100** certified production facility of our partner, Dejond, in Belgium.
- Special designs are available to meet customer specific requirements. Contact Sherex with your application information.

#### CATALOG ATTRIBUTES - METRIC BODY STYLE

<b>Grip Range(E)</b>	Material Thickness	<b>d</b>	Diameter
<b>L</b>	Length	<b>d(A/F)</b>	Diameter Across Flats
<b>D</b>	Head Diameter	<b>b</b>	Hole Size
<b>K</b>	Head Thickness		



## HEX BODY RIVET NUTS

Hex body rivet nuts provide superior spin out resistance to round body rivet nuts. When a hex shaped hole can be produced, we recommend using one of our full hex or half hex rivet nut product lines:

- **Full Hex** rivet nuts are ideal for heavy duty applications, and should be installed with hydro-pneumatic spin-pull tools
- **Half Hex** rivet nuts are ideal for light duty applications, and can be installed using all Sherex tools

### FULL HEX - INCH AND METRIC

Product Line	Body	Head (Flange)		Available		Performance
	Hex	Small	Large	Closed End	Sealed End	Class 8/Grade 5 Proof Load
FHL 	✓		✓	✓	✓	✓
FHK 	✓	✓		✓		✓
CFH 	✓		✓	✓	✓	

### FULL HEX - METRIC

Product Line	Body	Head (Flange)		Available Modifications	
	Hex	Small	Large	Closed End	Sealed Head
HUPO Tubtara® 	✓		✓	✓	✓
HUKO Tubtara® 	✓	✓		✓	✓

### HALF HEX - INCH AND METRIC

Product Line	Body	Head (Flange)		Available Modifications	
	Half Hex	Small	Large	Closed End	Sealed Head
CAH 	✓		✓	✓	✓
HUPO METRIC Tubtara® 	✓	✓	✓	✓	✓
HUKO METRIC Tubtara® 	✓	✓	✓	✓	

# FHK/FHL FULL HEX BODY SMALL AND LARGE FLANGE SERIES

## FHK/ FHL SERIES

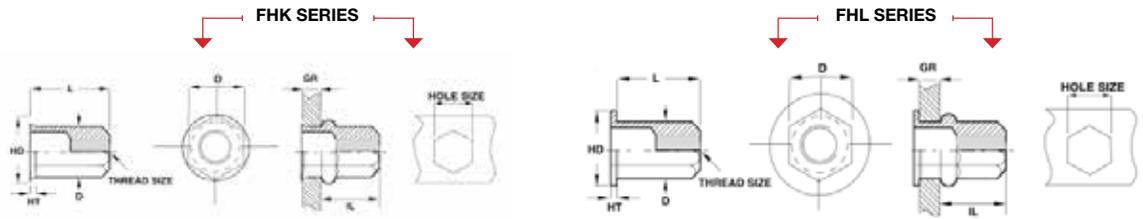
- The FHK/FHL series provides increased spin out resistance over round body and half hex body rivet nuts.
- Proven to meet Class 8 and Grade 5 thread strength.
- Inch body
- Inch and metric threads



- The FHK series has a small flange for a near flush installation.



- The FHL series has a large flange to provide increased strength in punched and drilled holes.



### FHK-SMALL FLANGE UNIFIED THREAD (UNIT - INCHES)

Part Number Inch - Steel	Thread Size	Grip Range		L ± .015	HD (A/F) ± .010 ± .015* ± .025**	HT ± .005 ± .008	D (A/F) Max.	IL Ref.	Hole Size (A/F) +.004/-.000
		Min.	Max.						
FHK2-2520-138	1/4-20 UNC	.039	.138	.673	.390	.016	.354	.469	.354
FHK2-2520-236		.138	.236	.772					
FHK2-2520-335		.236	.335	.870					
FHK2-3118-157	5/16-18 UNC	.031	.157	.787	.457	.016	.432	.535	.433
FHK2-3118-276		.157	.276	.913					
FHK2-3118-394		.276	.394	1.039					
FHK2-3716-177	3/8-16 UNC	.039	.177	.955	.559*	.025*	.511	.689	.512
FHK2-3716-295		.177	.295	1.053					
FHK2-3716-413		.295	.413	1.191					
FHK2-5013-177	1/2-13 UNC	.039	.177	1.215	.734**	.044*	.656	.866	.656

### FHK-SMALL FLANGE METRIC THREAD (UNIT - MILLIMETERS)

Part Number Metric - Steel	Thread Size	Grip Range		L ± .38	HD (A/F) ± .25 ± .38* ± .64**	HT ± 0.13 ± 0.18*	D (A/F) Max.	IL Ref.	Hole Size (A/F) +.10/-0.00
		Min.	Max.						
FHK2-610-3.5	M6 X 1.0 ISO	1.0	3.5	17.10	9.92	.44	8.98	11.9	9.0
FHK2-610-6.0		3.5	6.0	19.60					
FHK2-610-8.5		6.0	8.5	22.10					
FHK2-8125-4.0	M8 X 1.25 ISO	0.8	4.0	20.00	11.60	.41	10.98	13.6	11.0
FHK2-8125-7.0		4.0	7.0	23.20					
FHK2-8125-10.0		7.0	10.0	26.40					
FHK2-1015-4.5	M10 X 1.5 ISO	1.0	4.5	24.25	14.20*	.64*	12.98	17.5	13.0
FHK2-1015-7.5		4.5	7.5	26.75					
FHK2-1015-10.5		7.5	10.5	30.25					
FHK2-12175-4.5	M12 X 1.75 ISO	1.0	4.5	30.85	18.65**	1.12*	16.65	22.0	16.66

### FHL - LARGE FLANGE UNIFIED THREAD (UNIT - INCHES)

Part Number Inch - Steel	Thread Size	Grip Range		L ± .015	HD (A/F) ± .014	HT ± .006	D (A/F) Max.	IL Ref.	Hole Size (A/F) +.004/-.000
		Min.	Max.						
FHL2-2520-138	1/4-20 UNC	.039	.138	.657	.511	.059	.354	.469	.354
FHL2-2520-236		.138	.236	.756					
FHL2-2520-335		.236	.335	.854					
FHL2-3118-157	5/16-18 UNC	.031	.157	.771	.630	.059	.432	.535	.433
FHL2-3118-276		.157	.276	.897					
FHL2-3118-394		.276	.394	1.020					
FHL2-3716-177	3/8-16 UNC	.039	.177	.910	.748	.079	.511	.689	.512
FHL2-3716-295		.177	.295	1.010					
FHL2-3716-413		.295	.413	1.140					

### FHL-LARGE FLANGE METRIC THREAD (UNIT - MILLIMETERS)

Part Number Metric - Steel	Thread Size	Grip Range		L ± .38	HD (A/F) ± .35	HT ± .15	D (A/F) Max.	IL Ref.	Hole Size (A/F) +.10/-0.00
		Min.	Max.						
FHL2-610-3.5	M6 X 1.0 ISO	1.0	3.5	16.70	13.00	1.50	8.98	11.9	9.0
FHL2-610-6.0		3.5	6.0	19.20					
FHL2-610-8.5		6.0	8.5	21.70					
FHL2-8125-4.0	M8 X 1.25 ISO	0.8	4.0	19.60	16.00	1.50	10.98	13.6	11.0
FHL2-8125-7.0		4.0	7.0	22.80					
FHL2-8125-10.0		7.0	10.0	26.00					
FHL2-1015-4.5	M10 X 1.5 ISO	1.0	4.5	23.10	19.00	2.00	12.98	17.5	13.0
FHL2-1015-7.5		4.5	7.5	25.60					
FHL2-1015-10.5		7.5	10.5	29.10					

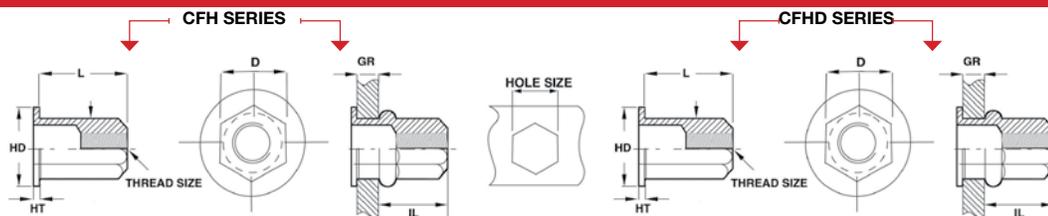
Material: Steel 1008/1010

RoHS Compliant Finishes: Zinc plated – clear trivalent chromate per Sherex SFS-01-001

Sherex full hex rivet nuts are compatible with the following hardware:  
GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8  
Please contact Sherex when using other grade fasteners.

\*Mechanical lock feature is available on all Full Hex parts. Please contact Sherex for details.  
Mating material holes must be smaller than flange diameter.

# CFH & CFHD FULL HEX BODY SERIES



**CFH/  
CFHD  
SERIES**

## CFH UNIFIED THREAD (UNIT - INCHES)

Part Number	Thread Size	Grip Range		HD		L	HT	D (A/F)	IL	Hole Size (A/F)
		Min.	Max.	Min.	Max.	± .015	Nom.	Max.	Ref.	+ .005/- .000
CFH2-1024-085♦	10-24 UNC	.010	.085	.329	.359	.344	.043	.223	.200	.224
CFH2-1024-135♦	10-24 UNC	.085	.135	.329	.359	.406	.043	.223	.210	.224
CFH2-1024-185♦	10-24 UNC	.135	.185	.329	.359	.453	.043	.223	.210	.224
CFH2-1032-085♦	10-32 UNF	.010	.085	.329	.359	.344	.043	.223	.200	.224
CFH2-1032-135♦	10-32 UNF	.085	.135	.329	.359	.406	.043	.223	.210	.224
CFH2-1032-185♦	10-32 UNF	.135	.185	.329	.359	.453	.043	.223	.210	.224
CFH2-2520-085	1/4-20 UNC	.020	.085	.422	.452	.406	.043	.296	.250	.297
CFH2-2520-145	1/4-20 UNC	.085	.145	.422	.452	.469	.043	.296	.250	.297
CFH2-2520-205♦	1/4-20 UNC	.145	.205	.422	.452	.531	.043	.296	.250	.297
CFH2-3118-105	5/16-18 UNC	.030	.105	.547	.577	.562	.048	.368	.375	.369
CFH2-3118-175	5/16-18 UNC	.105	.175	.547	.577	.640	.048	.368	.380	.369
CFH2-3118-245♦	5/16-18 UNC	.175	.245	.547	.577	.703	.048	.368	.375	.369
CFH2-3716-115♦	3/8-16 UNC	.030	.115	.641	.671	.625	.058	.437	.400	.438
CFH2-3716-205♦	3/8-16 UNC	.115	.205	.641	.671	.718	.058	.437	.405	.438
CFH2-3716-295♦	3/8-16 UNC	.205	.295	.641	.671	.812	.058	.437	.410	.438

## CFH METRIC THREAD (UNIT - MILLIMETERS)

Part Number	Thread Size	Grip Range		HD		L	HT	D (A/F)	IL	Hole Size (A/F)
		Min.	Max.	Min.	Max.	± .38	Nom.	Max.	Ref.	+ .13/- .000
CFH2-580-2.1♦	M5x0.8 ISO	0.50	2.15	9.14	9.90	10.30	1.09	6.35	6.72	6.35
CFH2-580-3.5♦	M5x0.8 ISO	2.15	3.55	9.14	9.90	11.90	1.09	6.35	6.72	6.35
CFH2-580-5.0♦	M5x0.8 ISO	3.55	5.05	9.14	9.90	13.48	1.09	6.35	6.72	6.35
CFH2-610-2.1♦	M6x1.0 ISO	0.50	2.15	10.71	11.47	10.30	1.09	7.51	6.22	7.51
CFH2-610-3.6♦	M6x1.0 ISO	2.15	3.65	10.71	11.47	11.90	1.09	7.51	6.22	7.51
CFH2-610-5.2♦	M6x1.0 ISO	3.65	5.20	10.71	11.47	13.48	1.09	7.51	6.22	7.51
CFH2-8125-2.5♦	M8x1.25 ISO	0.50	2.55	14.69	15.45	15.86	1.57	10.08	10.35	10.08
CFH2-8125-4.5♦	M8x1.25 ISO	2.50	4.55	14.69	15.45	17.84	1.57	10.08	10.35	10.08
CFH2-8125-6.6♦	M8x1.25 ISO	4.55	6.60	14.69	15.45	19.82	1.57	10.08	10.35	10.08
CFH2-1015-2.9♦	M10x1.50 ISO	0.75	2.95	17.10	17.86	15.88	1.57	11.89	13.08	11.89
CFH2-1015-5.2♦	M10x1.50 ISO	2.95	5.20	17.10	17.86	18.24	1.57	11.89	13.08	11.89
CFH2-1015-7.5♦	M10x1.50 ISO	5.20	7.50	17.10	17.86	20.62	1.57	11.89	13.08	11.89

## CFHD UNIFIED THREAD (UNIT - INCHES)

Part Number	Thread Size	Grip Range		HD		L	HT	D (A/F)	IL	Hole Size (A/F)
		Min.	Max.	Min.	Max.	± .015	Nom.	Max.	Ref.	+ .010/- .000
CFHD2-2520-080♦	1/4-20 UNC	.020	.080	.454	.484	.500	.058	.312	.340	.312
CFHD2-2520-150♦	1/4-20 UNC	.080	.150	.454	.484	.578	.058	.312	.345	.312
CFHD2-3118-100♦	5/16-18 UNC	.020	.100	.579	.609	.625	.062	.397	.405	.397
CFHD2-3118-180♦	5/16-18 UNC	.100	.180	.579	.609	.703	.062	.397	.405	.397
CFHD2-3716-125♦	3/8-16 UNC	.020	.125	.673	.703	.703	.088	.468	.450	.468
CFHD2-3716-230♦	3/8-16 UNC	.125	.230	.673	.703	.812	.088	.468	.450	.468

## PART NUMBERING SYSTEM

### CFH/CFHD Specifications

**Material:**  
Steel 1008/1010  
Stainless Steel 302  
Aluminum 5056

**RoHS Compliant Finishes:**  
Zinc Plated-Yellow Trivalent Chromate per Sherex SFS-01-001, SC2  
Zinc Plated-Clear Trivalent Chromate per Sherex SFS-01-001

### Part Number

Example: CFH2-2520-085

CFH	2	2520	085	(L)	T
Full Hex	Material	Thread Size	Grip Range	Empty-Open End	Clear Trivalent
Heavy Duty	1-Stainless			B-Closed End	
Large Flange	Steel				
CFHD - High Strength	2-Steel				
	3-Aluminum				

Special finish or material available upon request

♦ Non-Standard Part: Minimum order quantity required after depletion of stock. Please contact Sherex for current availability.

Sherex rivet nuts are compatible with the following hardware: **GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8**  
Please contact Sherex when using other grade fasteners.

Sherex Fastening Solutions • 866-474-3739 • www.sherex.com • info@sherex.com



- The CFH series offers a full hexagonal body for exceptional spin out resistance.
- Inch body
- Inch and metric threads



- The CFHD series offers the same benefits as the CFH series but with higher strength.
- Inch body
- Inch threads

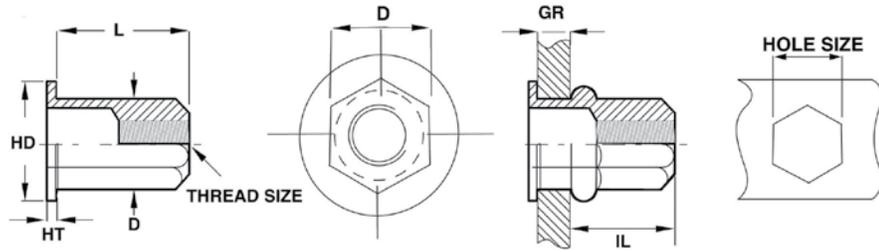


# LRGH LARGE SIZE FULL HEX SERIES

## LARGE SIZE FULL HEX SERIES



- The LRGH series has a large flange for increased performance
- Large diameters for heavy duty applications
- Inch body
- Inch and metric threads



### LRGH SERIES - FULL HEX BODY UNIFIED THREAD (UNIT - INCHES)

Part Number Inch - Steel	Thread Size	Grip Range		L	HD	HT	D (A/F)	IL	Hole Size (A/F)
		Min.	Max.	± .015	± .025	± .004	Max.	Ref.	+ .010/- .000
LRGH2-5013-177	1/2-13 UNC	.040	.177	1.181	.959	.085	.656	.866	.656
LRGH2-6211-200	5/8-11 UNC	.080	.200	1.260	1.260	.118	.826	.965	.827

### LRGH SERIES - FULL HEX METRIC THREAD (UNIT - MILLIMETERS)

Part Number Metric - Steel	Thread Size	Grip Range		L	HD	HT	D (A/F)	IL	Hole Size (A/F)
		Min.	Max.	± .38	± .64	± .10	Max.	Ref.	+ .25/- .000
LRGH2-12175-4.5	M12x1.75 ISO	1.00	4.50	30.00	24.36	2.16	16.65	22.00	16.66
LRGH2-1620-5.0	M16x2.0 ISO	2.00	5.00	32.00	32.00	3.00	20.98	24.50	21.00

### APPLICATION EXAMPLES

#### Utility Pole Attachments



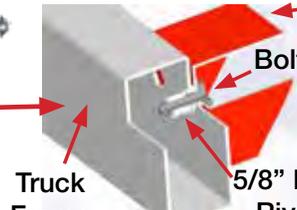
#### Utility Pole Hex Nut



3/4" Round NUT™

3/4" Step Bolt

#### Truck Frame Attachments



Truck Frame

Bracket

Bolt

5/8" Full Hex Rivet Nut

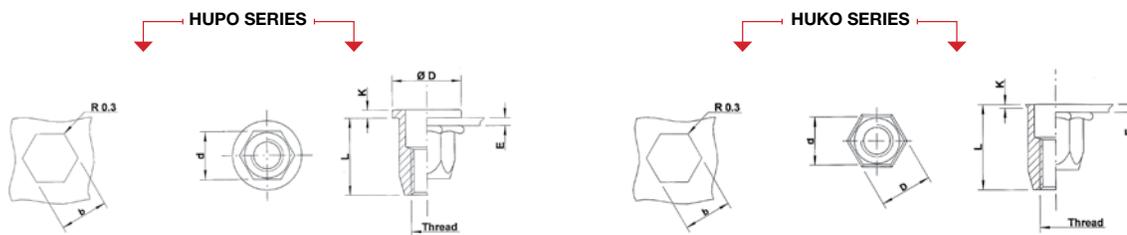
Material: Steel C1010/C1022

RoHS Compliant Finishes: Zinc plated – clear trivalent chromate per Sherex SFS-01-001

Sherex full hex rivet nuts are compatible with the following hardware: GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8  
Please contact Sherex when using other grade fasteners.

\*Mechanical lock feature is available on all Full Hex parts. Please contact Sherex for details.

# HUPO LARGE FLANGE AND HUKO SMALL FLANGE HEX METRIC SERIES



**HUPO/  
HUKO  
SERIES**



## HUPO METRIC THREAD (UNIT - MILLIMETERS)

Part Number Steel	Thread Size	Grip Range (E)		L ± 0.35	D ± 0.35	K ± 0.15	d (A/F) -0.02/-0.15	Hole Size (b+0.1)
		Min.	Max.					
TU-SM4HUPO20ZT	M4X0.7 ISO	0.5	2.0	10.0	9.0	1.0	6.0	6.0
TU-SM5HUPO30ZT	M5X0.8 ISO	0.5	3.0	13.0	10.0	1.0	7.0	7.0
TU-SM6HUPO30ZT	M6X1.0 ISO	0.5	3.0	14.5	13.0	1.5	9.0	9.0
TU-SM6HUPO55ZT	M6X1.0 ISO	3.0	5.5	16.5				
TU-SM8HUPO30ZT	M8X1.25 ISO	0.5	3.0	16.5	16.0	1.5	11.0	11.0
TU-SM8HUPO55ZT	M8X1.25 ISO	3.0	5.5	19.0				
TU-SM8HUPO80ZT	M8X1.25 ISO	5.5	8.0	22.0				
TU-SM10HSPO35ZT	M10X1.5 ISO	0.8	3.5	21.0	19.0	2.0	13.0	13.0
TU-SM10HSPO60ZT	M10X1.5 ISO	3.5	6.0	23.5				
TU-SM12HUPO40ZT	M12X1.75 ISO	1.0	4.0	25.0	23.0	2.0	16.0	16.0

## HUKO METRIC THREAD (UNIT - MILLIMETERS)

Part Number Steel	Thread Size	Grip Range (E)		L ± 0.35	D +0.3/-0.15	K +0.3/-0.05	d (A/F) -0.02/-0.15	Hole Size (b+0.1)
		Min.	Max.					
TU-SM4HUKO20ZT	M4X0.7 ISO	0.5	2.0	11.0	6.6	0.6	6.0	6.0
TU-SM5HUKO30ZT	M5X0.8 ISO	0.5	3.0	14.0	7.7	0.6	7.0	7.0
TU-SM5HUKO55ZT	M5X0.8 ISO	3.0	5.5	16.5				
TU-SM6HUKO30ZT	M6X1.0 ISO	0.5	3.0	16.0	9.8	0.7	9.0	9.0
TU-SM6HUKO55ZT	M6X1.0 ISO	3.0	5.5	18.5				
TU-SM8HUKO30ZT	M8X1.25 ISO	0.5	3.0	18.0	11.8	0.7	11.0	11.0
TU-SM8HUKO55ZT	M8X1.25 ISO	3.0	5.5	20.5				
TU-SM10HUKO35ZT	M10X1.5 ISO	0.8	3.5	23.0	13.8	0.7	13.0	13.0

## PART NUMBERING SYSTEM

### HUPO/HUKO Specifications Part Number

Example: TU-SM5HUPO30ZT

#### Material:

Steel QST 34-3	TU	S	M5	HUP	O	30	ZT
Stainless Steel 304 Cu	Product Style	Material	Thread Size	Product Type	O-Open End	Grip Range	Zinktop (Clear)
Stainless Steel 316 Cu	Metric	S-Steel		Large Flange	X-Closed End		

#### RoHs Compliant Finish:

Zinktop (Clear), 96 w / 480 r

#### Part Number

Example: TU-SM5HUKO30ZT

TU	S	M5	HUK	O	30	ZT
Product Style	Material	Thread Size	Product Type	O-Open End	Grip Range	Zinktop (Clear)
Metric	S-Steel		Small Flange	X-Closed End		

SS-304 Stainless Steel

Special finish or material available upon request

All Stainless Steel parts are semi-hexagonal shank.

Grip Range can be affected by parent material and hole size.

Sherex recommends trial installations to determine the proper grip range for the application.

Closed End sizes available: M4, M5, M6, M8. Also available with imperial threads - minimum order quantity is 25,000 pieces if not in stock.

Mating material holes must be smaller than flange diameter.

Contact Sherex for test data.

## INSTALLATION TOOLING

HUPO/HUKO Series can be installed with our Hand Tools and Hydro-Pneumatic Tools.

For additional tooling information see pages 37-43.

All Parts have been manufactured by DEJOND

TUBTARA® - A DEJOND PRODUCT

Sherex rivet nuts are compatible with the following hardware:

**GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8**

Please contact Sherex when using other grade fasteners.



- The HUPO series has a large flange that provides increased strength.

- Metric body and metric threads



- The HUKO series has a smaller flange that gives a near flush installation into the parent material.

- Metric body and metric threads



Available with closed end and seal for protection from fluids and air (X Series).

# CAH HALF HEX BODY LARGE FLANGE THIN WALL SERIES

## CAH SERIES



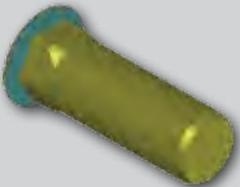
• The CAH series offers a semi hex body for excellent resistance to spin out in the hole.

• Inch body

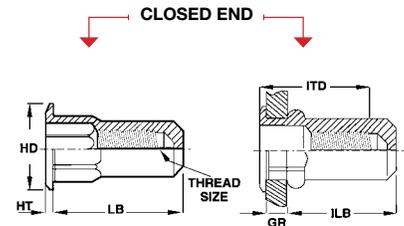
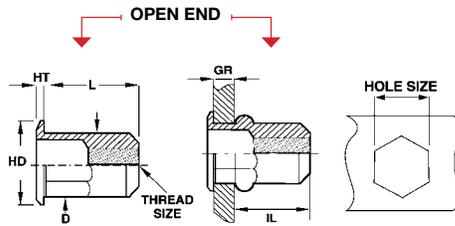
• Inch and metric threads



CLOSED END



SEALED HEAD



### UNIFIED THREAD (UNIT - INCHES)

Part Number (Steel)	Thread Size	Grip Range		L ± .015	HD ± .010 ± .025*	HT ± .003	D (A/F) Max.	IL Max.	LB ± .015	ILB Max.	ITD Ref.	Hole Size (A/F) + .004/- .000
		Min.	Max.									
CAH2-0632-080	6-32 UNC	.020	.080	.385	.375	.027	.249	.295	.740	.640	.575	.250
CAH2-0632-130	6-32 UNC	.080	.130	.435	.375	.027	.249	.295	.740	.580	.640	.250
CAH2-0832-080	8-32 UNC	.020	.080	.385	.375	.027	.249	.295	.740	.640	.575	.250
CAH2-0832-130	8-32 UNC	.080	.130	.435	.375	.027	.249	.295	.740	.580	.640	.250
CAH2-1024-130	10-24 UNC	.020	.130	.435	.390	.027	.280	.275	1.030	.845	.695	.281
CAH2-1024-225	10-24 UNC	.130	.225	.535	.390	.027	.280	.275	1.030	.735	.805	.281
CAH2-1032-130	10-32 UNF	.020	.130	.435	.390	.027	.280	.275	1.030	.845	.695	.281
CAH2-1032-225	10-32 UNF	.130	.225	.535	.390	.027	.280	.275	1.030	.735	.805	.281
CAH2-2520-165	1/4-20 UNC	.027	.165	.585	.510	.030	.374	.400	1.190	1.015	.945	.375
CAH2-2520-260	1/4-20 UNC	.165	.260	.685	.510	.030	.374	.400	1.190	.915	1.085	.375
CAH2-2528-165	1/4-28 UNF	.027	.165	.585	.510	.030	.374	.400	1.190	1.015	.945	.375
CAH2-2528-260	1/4-28 UNF	.165	.260	.685	.510	.030	.374	.400	1.190	.915	1.085	.375
CAH2-3118-150	5/16-18 UNC	.027	.150	.685	.655*	.035	.499	.530	1.445	1.235	1.045	.500
CAH2-3118-312	5/16-18 UNC	.150	.312	.845	.655*	.035	.499	.515	1.445	1.220	1.170	.500
CAH2-3124-150	5/16-24 UNF	.027	.150	.685	.655*	.035	.499	.530	1.445	1.235	1.045	.500
CAH2-3124-312	5/16-24 UNF	.150	.312	.845	.655*	.035	.499	.515	1.445	1.220	1.170	.500
CAH2-3716-150	3/8-16 UNC	.027	.150	.685	.655*	.035	.499	.530	1.445	1.235	1.045	.500
CAH2-3716-312	3/8-16 UNC	.150	.312	.845	.655*	.035	.499	.515	1.445	1.220	1.170	.500
CAH2-3724-150	3/8-24 UNF	.027	.150	.685	.655*	.035	.499	.530	1.445	1.235	1.045	.500
CAH2-3724-312	3/8-24 UNF	.150	.312	.845	.655*	.035	.499	.515	1.445	1.220	1.170	.500

### METRIC THREAD (UNIT - MILLIMETERS)

Part Number (Steel)	Thread Size	Grip Range		L ± .38	HD ± .25 ± .64*	HT ± .08	D (A/F) Max.	IL Max.	LB ± .38	ILB Max.	ITD Ref.	Hole Size (A/F) + .10/- .000
		Min.	Max.									
CAH2-470-2.0	M4x0.7 ISO	0.50	2.00	9.78	9.53	0.68	6.35	7.49	18.80	16.26	14.61	6.35
CAH2-470-3.3	M4x0.7 ISO	2.00	3.30	11.05	9.53	0.68	6.35	7.49	18.80	14.73	16.26	6.35
CAH2-580-3.3	M5x0.8 ISO	0.50	3.30	11.05	9.91	0.68	7.10	6.99	26.16	21.46	17.65	7.14
CAH2-580-5.7	M5x0.8 ISO	3.30	5.70	13.59	9.91	0.68	7.10	6.99	26.16	18.67	20.45	7.14
CAH2-610-4.2	M6x1.0 ISO	0.70	4.20	14.86	12.96	0.76	9.50	10.16	30.23	25.78	24.00	9.53
CAH2-610-6.6	M6x1.0 ISO	4.20	6.60	17.40	12.96	0.76	9.50	10.16	30.23	23.24	27.56	9.53
CAH2-8125-3.8	M8x1.25 ISO	0.70	3.80	17.40	16.64*	0.89	12.70	13.46	36.70	31.37	26.54	12.70
CAH2-8125-7.9	M8x1.25 ISO	3.80	7.90	21.46	16.64*	0.89	12.70	13.08	36.70	30.99	29.72	12.70
CAH2-1015-3.8	M10x1.5 ISO	0.70	3.80	17.40	16.64*	0.89	12.70	13.46	36.70	31.37	26.54	12.70
CAH2-1015-7.9	M10x1.5 ISO	3.80	7.90	21.46	16.64*	0.89	12.70	13.08	36.70	30.99	29.72	12.70

♦ Non-Standard Part: Minimum order quantity required after depletion of stock. Please contact Sherex for current availability.

### PART NUMBERING SYSTEM

#### CAH Specifications

##### Material:

Steel 1008/1010  
Stainless Steel 302\*  
Aluminum 5056

##### RoHS Compliant Finishes:

Zinc Plated-Yellow Trivalent Chromate per Sherex SFS-01-001, SC2  
Zinc Plated-Clear Trivalent Chromate per Sherex SFS-01-001

#### Part Number

Example: CAH2-2520-165

CAH	2	2520	165	( )
Product Style	Material	Thread Size	Grip Range	Empty-Open End
Semi Hex	1-Stainless Steel			B-Closed End
Thin Wall Series	2-Steel			T-Clear Trivalent
	3-Aluminum			

Special finish or material available upon request

\*Contact Sherex for exact product dimensions in Stainless Steel.

Grip range can be affected by parent material and hole size. Sherex recommends trial installations to determine the proper grip range for the application. Contact Sherex for details.

CAH style rivet nuts are available in sealed head and closed end designs. Other specials available upon request. Contact Sherex for test data.

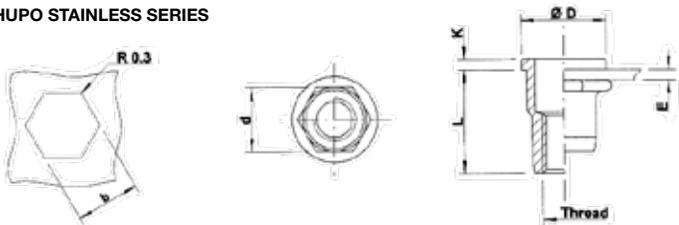
#### INSTALLATION TOOLING

CAH Series can be installed with our Hand Tools, Pneumatic Tools, and Hydro-Pneumatic Tools. For additional tooling information see pages 37-43.

Sherex rivet nuts are compatible with the following hardware:  
**GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8**  
Please contact Sherex when using other grade fasteners.

# HUPO/HUKO HALF HEX BODY METRIC SERIES

## HUPO STAINLESS SERIES



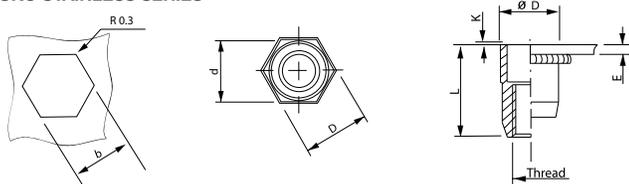
### HUPO SERIES (UNIT - MILLIMETERS)

Part Number (304 Stainless Steel)	Thread Size	Grip Range (E)		L ± 0.35	D ± 0.35/-0.15	K ± 0.15/-0.05	d (A/F) -0.02/-0.15	Hole Size (b+0.1)
		Min.	Max.					
TU-SSM4HUPO20	M4X0.7 ISO	0.5	2.0	11.0	9.0	1.0	6.0	6.0
TU-SSM5HUPO30	M5X0.8 ISO	0.5	3.0	11.5	10.0	1.0	7.0	7.0
TU-SSM6HUPO30	M6X1.0 ISO	0.5	3.0	14.5	12.0	1.5	9.0	9.0
TU-SSM6HUPO50	M6X1.0 ISO	3.0	5.5	16.5				
TU-SSM8HUPO30	M8X1.25 ISO	0.5	3.0	16.0	15.0	1.5	11.0	11.0
TU-SSM8HUPO55	M8X1.25 ISO	3.0	5.5	18.5				
TU-SSM10HUPO35	M10X1.5 ISO	0.8	3.5	21.5				

### PART NUMBERING SYSTEM

<b>HUPO Specifications</b>	<b>Part Number</b>							
<b>Material</b>	Example: TU-SM5UPO30ZT							
Steel QST 34-3	TU	S	M5	UP	O	30	ZT	
Stainless Steel 304 Cu	Product Style	Material	Thread Size	Product Type	O-Open End	Grip Range	Zinktop (Clear)	
Stainless Steel 316 Cu	Metric	S-Steel		Large Flange, Flat Head	X-Closed End			
Aluminum ALMG 2.5		A-Aluminum		Metric Body				
<b>RoHs Compliant Finish:</b>								
Zinktop (Clear), 96 w / 480 r		SS-304 Stainless Steel						
		*316-316 Stainless Steel						Special finish or material available upon request

## HUKO STAINLESS SERIES



### HUKO SERIES (UNIT - INCHES)

Part Number (304 Stainless Steel)	Thread Size	Grip Range (E)		L	D	K	Diameter-Inch d (A/F)	Diameter-Metric d (A/F)	Hole Size - Inch (b <sup>+0.04</sup> ) (A/F)	Hole Size - Metric (b <sup>+0.1</sup> ) (A/F)
		Min.	Max.							
TU-SS1032HUKO30	10-32 UNF	0.020	0.118	0.472	0.295	0.020	0.276	7.0	0.276	7.0
TU-SS2520HUKO30	1/4-20 UNC	0.020	0.118	0.571	0.374	0.020	0.354	9.0	0.354	9.0
TU-SS3118HUKO30	5/16-18 UNC	0.020	0.118	0.630	0.453	0.020	0.422	11.0	0.433	11.0

### PART NUMBERING SYSTEM

<b>HUKO Specifications</b>	<b>Part Number</b>							
<b>Material</b>	Example: TU-SS1032HUKO30							
Steel QST 34-3	TU	S	1032	HUK	O	30	30	
Stainless Steel 304 Cu	Product Style	Material	Thread Size	Product Type	O-Open End	Grip Range	Grip Range	
Stainless Steel 316 Cu	Metric	S-Steel		Small Flange	X-Closed End			
		A-Aluminum		Hexagonal Shank				
		SS-304 Stainless Steel		Inch Body				
		*316-316 Stainless Steel						Special finish or material available upon request

\*316 Stainless Steel has extra corrosion resistance and can be used in the medical, chemical and food industries.

Grip range can be affected by parent material and hole size.  
 Sherex recommends trial installations to determine the proper grip range for the application.  
 Also available with imperial threads - minimum order quantity is 25,000 pieces if not in stock.  
 Mating material holes must be smaller than flange diameter.

#### INSTALLATION TOOLING

HUPO/HUKO Series can be installed with our Hand Tools and Hydro-Pneumatic Tools.  
 For additional tooling information see pages 37-43.

All Parts have been manufactured by: DEJOND

TUBTARA®- A DEJOND PRODUCT

Sherex Fastening Solutions • 866-474-3739 • www.sherex.com • info@sherex.com

**HUPO/  
HUKO  
HALF HEX  
SERIES**



- The HUPO series offers a half hex body with a large flange that provides increased strength.
- Metric body and metric threads



- The HUKO series has a small flange for a near flush installation.
- Metric body
- Inch threads



Available with closed end and seal for protection from fluids and air (X Series).



# ROUND BODY RIVET NUTS

## ROUND BODY RIVET NUTS

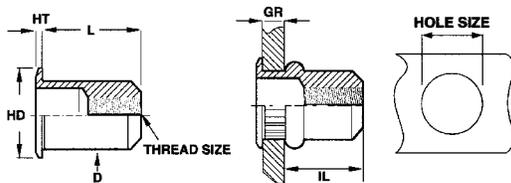
Sherex offers a comprehensive selection of round body rivet nuts designed to fit into Inch (Imperial) or Metric drilled or punched hole sizes.

INCH BODY STYLE								
Product Line	Body		Head (Flange)		Heavy Duty (Thick Wall)	360 Swaging	Large Sizes (up to 3/4", M20)	Floating Nut (for Off-center applications)
	Smooth	Knurled	Small	Large				
CAO 	✓		✓					
CA 	✓			✓				
CAK 		✓	✓					
CAL 		✓		✓				
CFT/CAT 		✓	✓		✓	✓		
CFW/CAW 		Diamond Knurl	✓		✓	✓		
CPB/CPN* 	✓			✓				
LRGR 	✓			✓			✓	
Riv-Float® 		✓	✓	✓				✓

\*Prebulbed, Slotted (CPN has straight shank)

METRIC BODY STYLE						
Product Line	Body		Head (Flange)			
	Smooth	Knurled	Small	Large	Countersunk	
UPO Tubtara® 	✓			✓		
UFO Tubtara® 	✓				✓	
UKO Tubtara® 	✓		✓			
UPO RS Tubtara® 		✓		✓		
UFO RS Tubtara® 		✓			✓	
CLM 		✓		✓		
CKM 		✓	✓			

# CAO SMALL FLANGE SMOOTH BODY THIN WALL SERIES



**CAO  
SERIES**



## UNIFIED THREAD (UNIT - INCHES)

Part Number (Steel)	Thread Size	Grip Range		L ± .015	HD ± .010 ± .015*	HT ± .003	D Max.	IL Max.	Hole Size +.006/- .000
		Min.	Max.						
CAO2-0632-080	6-32 UNC	.020	.080	.385	.295	.018	.249	.315	.250
CAO2-0832-080	8-32 UNC	.020	.080	.385	.295	.018	.249	.315	.250
CAO2-1024-130	10-24 UNC	.020	.130	.440	.320	.020	.280	.330	.281
CAO2-1032-130	10-32 UNF	.020	.130	.440	.320	.020	.280	.330	.281
CAO2-2520-165	1/4-20 UNC	.030	.165	.580	.425	.022	.374	.440	.375
CAO2-2528-165♦	1/4-28 UNF	.030	.165	.580	.425	.022	.374	.440	.375
CAO2-3118-200	5/16-18 UNC	.040	.200	.690	.560*	.022	.499	.540	.500
CAO2-3124-200♦	5/16-24 UNF	.040	.200	.690	.560*	.022	.499	.540	.500
CAO2-3716-200	3/8-16 UNC	.040	.200	.690	.560*	.022	.499	.540	.500
CAO2-3724-200♦	3/8-24 UNF	.040	.200	.690	.560*	.022	.499	.540	.500

♦ Non-Standard Part: Minimum order quantity required after depletion of stock. Please contact Sherex for current availability.

- The CAO series offers body diameters that will fit in common hole sizes.
- The small flange also allows for near flush installations.
- Inch body
- Inch and metric threads

## METRIC THREAD (UNIT - MILLIMETERS)

Part Number (Steel)	Thread Size	Grip Range		L ± .38	HD ± .25 ± .38*	HT ± .08	D Max.	IL Max.	Hole Size +.15/- .000
		Min.	Max.						
CAO2-470-2.0	M4x0.7 ISO	0.50	2.00	9.78	7.49	0.46	6.32	8.00	6.40
CAO2-580-3.3	M5x0.8 ISO	0.50	3.30	11.18	8.13	0.51	7.11	8.38	7.20
CAO2-610-4.2	M6x1.0 ISO	0.76	4.20	14.73	10.80	0.56	9.50	11.18	9.60
CAO2-8125-5.1	M8x1.25 ISO	1.02	5.10	17.53	14.22*	0.56	12.67	13.72	12.70
CAO2-1015-5.1	M10x1.5 ISO	1.02	5.10	17.53	14.22*	0.56	12.67	13.72	12.70



**CLOSED END**

## PART NUMBERING SYSTEM

### CAO Specifications

**Material:**  
Steel 1008/1010  
Aluminum 5056

### RoHS Compliant Finishes:

Inch: Zinc Plated-Clear Trivalent Chromate  
per Sherex SFS-01-001

Metric: Zinc Plated-Yellow Trivalent Chromate  
per Sherex SFS-01-001, SC2

### Part Number

Example: CAO2-2520-165

CAO	2	2520	165	( )
Product Style	Material	Thread Size	Grip Range	Empty-Open End
Low Profile	2-Steel			B-Closed End
Smooth Shank	3-Aluminum			T-Clear Trivalent
Thin Wall Series				

Special finish or material available upon request

Grip range can be affected by parent material and hole size. Sherex recommends trial installations to determine the proper grip range for the application.  
Mating material holes must be smaller than flange diameter.  
Contact Sherex for details.  
Contact Sherex for test data.

### INSTALLATION TOOLING

CAO Series can be installed with our Hand Tools, Pneumatic Tools, and Hydro-Pneumatic Tools.  
For additional tooling information see pages 37-43.

Sherex rivet nuts are compatible with the following hardware:

**GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8**

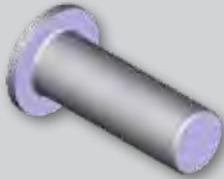
Please contact Sherex when using other grade fasteners.

# CA HEAVY DUTY RIVET NUT FLAT HEAD SERIES

## CA SERIES



- The CA series offers a thick head and thick collapse chamber wall thickness for heavy duty applications.
- Inch body and inch threads



**CLOSED END**

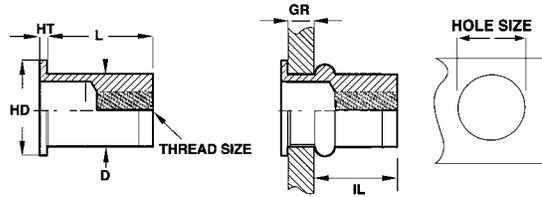


**COUNTERSUNK HEAD**



**KEYED HEAD**

Sherex manufactures NAS 1329 and NAS 1330 style Rivet Nuts. See pages 26-29 for details.



### UNIFIED THREAD (UNIT - INCHES)

Part Number (Steel)	Thread Size	Grip Range		L ± .015	HD ± .015	HT Nom.	D +.000/- .004	IL Ref.	Hole Size
		Min.	Max.						
CA-0440S-060♦	4-40 UNC	.010	.060	.345	.270	.025	.155	.230	.155-.157
CA-0440S-085♦	4-40 UNC	.060	.085	.370	.270	.025	.155	.230	.155-.157
CA-0440S-110♦	4-40 UNC	.085	.100	.400	.270	.025	.155	.230	.155-.157
CA-0632S-075♦	6-32 UNC	.010	.075	.438	.325	.032	.189	.300	.189-.193
CA-0632S-120	6-32 UNC	.075	.120	.500	.325	.032	.189	.315	.189-.193
CA-0632S-160♦	6-32 UNC	.120	.160	.500	.325	.032	.189	.270	.189-.193
CA-0832S-075	8-32 UNC	.010	.075	.438	.357	.032	.221	.300	.221-.226
CA-0832S-120	8-32 UNC	.075	.120	.500	.357	.032	.221	.315	.221-.226
CA-0832S-160♦	8-32 UNC	.120	.160	.500	.357	.032	.221	.270	.221-.226
CA-1024S-080♦	10-24 UNC	.010	.080	.531	.406	.038	.250	.380	.250-.256
CA-1024S-130♦	10-24 UNC	.080	.130	.594	.406	.038	.250	.390	.250-.256
CA-1024S-180♦	10-24 UNC	.130	.180	.641	.406	.038	.250	.390	.250-.256
CA-1032S-080	10-32 UNF	.010	.080	.531	.406	.038	.250	.380	.250-.256
CA-1032S-130	10-32 UNF	.080	.130	.594	.406	.038	.250	.390	.250-.256
CA-1032S-180♦	10-32 UNF	.130	.180	.641	.406	.038	.250	.390	.250-.256
CA-2520S-080	1/4-20 UNC	.020	.080	.625	.475	.058	.332	.450	.332-.338
CA-2520S-140♦	1/4-20 UNC	.080	.140	.687	.475	.058	.332	.450	.332-.338
CA-2520S-200	1/4-20 UNC	.140	.200	.750	.475	.058	.332	.450	.332-.338
CA-3118S-125	5/16-18 UNC	.030	.125	.750	.665	.062	.413	.505	.413-.423
CA-3118S-200	5/16-18 UNC	.125	.200	.875	.665	.062	.413	.555	.413-.423
CA-3118S-275♦	5/16-18 UNC	.200	.275	.937	.665	.062	.413	.540	.413-.423
CA-3716S-115	3/8-16 UNC	.030	.115	.844	.781	.088	.490	.585	.490-.500
CA-3716S-200	3/8-16 UNC	.115	.200	.938	.781	.088	.490	.595	.490-.500
CA-3716S-285♦	3/8-16 UNC	.200	.285	1.031	.781	.088	.490	.605	.490-.500
CA-5013S-150	1/2-13 UNC	.050	.150	.906	.906	.085	.625	.605	.625-.635
CA-5013S-250♦	1/2-13 UNC	.150	.250	1.031	.906	.085	.625	.630	.625-.635
CA-5013S-350♦	1/2-13 UNC	.250	.350	1.141	.906	.085	.625	.640	.625-.635

♦ Non-Standard Part: Minimum order quantity required after depletion of stock. Please contact Sherex for current availability.

### PART NUMBERING SYSTEM

#### CA Specifications

**Material:**  
Steel 1008/1010/1110  
Non-Magnetic Stainless Steel 302  
Stainless Steel 430  
Aluminum 5056/6053

#### RoHS Compliant Finish:

Zinc Plated-Clear Trivalent Chromate  
per Sherex SFS-01-001

#### Part Number

Example: CA-2520S-080

CA	2520	Material	( )	080
Product Style	Thread Size	S-Steel	Empty-Open End	Grip Range
Heavy Duty		A-Aluminum	B-Closed End	
Large Flange		SS-Stainless Steel 430	T-Clear Trivalent	
Smooth Shank		NM-Stainless Steel 302	K-Keyed Head	
		NM318-Stainless Steel 316		

Special finish or material available upon request

Grip range can be affected by parent material and hole size. Sherex recommends trial installations to determine the proper grip range for the application. Contact Sherex for details.

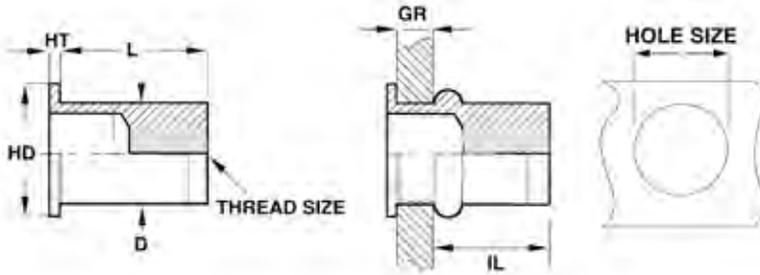
CA style rivet nuts are available in closed end, keyed, and countersunk head designs. Other specials available upon request. Contact Sherex for test data.

#### INSTALLATION TOOLING

CA Series can be installed with our Hand Tools and Hydro-Pneumatic Tools. For additional tooling information see pages 37-43.

Sherex rivet nuts are compatible with the following hardware:  
**GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8**  
Please contact Sherex when using other grade fasteners.

# LRGR LARGE SIZE ROUND SERIES



## LARGE SIZE ROUND SERIES



- The LRGR series has a large flange for increased performance
- Large diameter for heavy duty applications
- Inch body
- Inch and metric threads

### LRGR SERIES - ROUND BODY UNIFIED THREAD (UNIT - INCHES)

Part Number Inch - Steel	Thread Size	Grip Range		L	HD	HT	D	IL	Hole Size
		Min.	Max.	± .015	± .025	± .004	Max.	Ref.	+ .010/- .000
LRGR2-5013-150	1/2-13 UNC	.050	.150	1.260	.945	.085	.656	.984	.656
LRGR2-6211-200	5/8-11 UNC	.080	.200	1.428	1.181	.098	.826	1.142	.827
LRGR2-7510-250*	3/4-10 UNC	.048	.250	1.210	1.235	.118	.906	.878	.907

### LRGR SERIES - ROUND BODY METRIC THREAD (UNIT-MILLIMETERS)

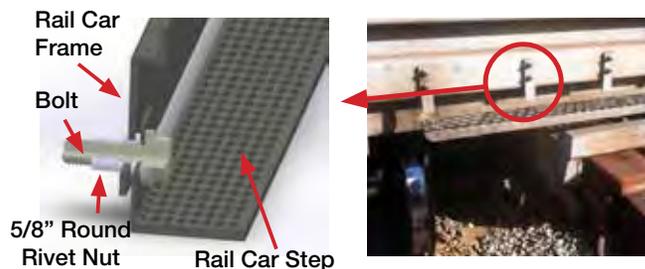
Part Number Metric - Steel	Thread Size	Grip Range		L	HD	HT	D	IL	Hole Size
		Min.	Max.	± .38	± .64	± .10	Max.	Ref.	+ .25/- .000
LRGR2-12175-3.8	M12x1.75 ISO	1.27	3.80	32.00	24.00	2.16	16.65	25.00	16.66
LRGR2-1620-5.0*	M16x2.0 ISO	2.00	5.00	36.27	30.00	2.50	20.98	29.00	21.00

### APPLICATION EXAMPLES

#### Vending Machine Leg Leveler



#### Railcar Attachments



Material: Steel C1010/C1022

RoHS Compliant Finishes: Zinc plated – clear trivalent chromate per Sherex SFS-01-001

Sherex full hex rivet nuts are compatible with the following hardware:

GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8

Please contact Sherex when using other grade fasteners.

\*Mechanical lock feature is available on all Full Hex parts.

Please contact Sherex for details.

# CPB PREBULBED SLOTTED BODY SERIES

## CPB SERIES



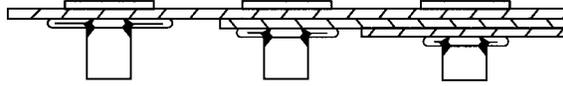
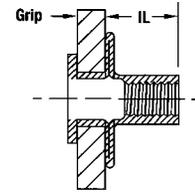
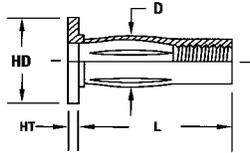
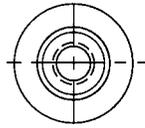
- The CPB series offers a large grip range for installation into single, variable or multiple thickness materials.

- Large backside footprint provides increased pull out resistance.

- Designed to be installed in thin plastics without distorting the base material.

- Inch body

- Inch and metric threads



Installs into single, variable, or multiple thickness materials.

### UNIFIED THREAD (UNIT - INCHES)

Part Number (Steel)	Thread Size	Grip Range		HD		L ±.015	HT ±.005	D Max.	IL Ref.	Hole Size +.006/- .000
		Min.	Max.	Min.	Max.					
CPB2-1024-175♦	10-24 UNC	.020	.175	.490	.510	.828	.038	.329	.410	.336
CPB2-1024-320♦	10-24 UNC	.175	.320	.490	.510	.921	.038	.329	.410	.336
CPB2-1032-175	10-32 UNF	.020	.175	.490	.510	.828	.038	.329	.410	.336
CPB2-1032-320	10-32 UNF	.175	.320	.490	.510	.921	.038	.329	.410	.336
CPB2-2520-280	1/4-20 UNC	.020	.280	.610	.645	1.000	.059	.382	.505	.390
CPB2-2520-500	1/4-20 UNC	.280	.500	.610	.645	1.234	.059	.382	.505	.390
CPB2-3118-280	5/16-18 UNC	.020	.280	.740	.770	1.141	.062	.495	.570	.500
CPB2-3118-500	5/16-18 UNC	.280	.500	.740	.770	1.375	.062	.495	.570	.500

### METRIC THREAD (UNIT - MILLIMETERS)

Part Number (Steel)	Thread Size	Grip Range		HD		L ±0.38	HT ±0.13	D Max.	IL Ref.	Hole Size +.15/- .000
		Min.	Max.	Min.	Max.					
CPB2-580-4.45♦	M5x0.8 ISO	0.50	4.45	12.45	12.95	21.03	0.96	8.35	10.00	8.55
CPB2-580-8.1	M5x0.8 ISO	4.45	8.10	12.45	12.95	23.80	0.96	8.35	10.00	8.55
CPB2-610-7.1	M6x1.0 ISO	0.50	7.10	15.50	16.38	25.40	1.50	9.70	12.80	10.00
CPB2-610-12.7♦	M6x1.0 ISO	7.10	12.70	15.50	16.38	31.32	1.50	9.70	12.80	10.00
CPB2-8125-7.1	M8x1.25 ISO	0.50	7.10	18.80	19.65	28.95	1.57	12.57	14.48	12.70
CPB2-8125-12.7♦	M8x1.25 ISO	7.10	12.70	18.80	19.65	34.90	1.57	12.57	14.48	12.70

♦ Non-Standard Part: Minimum order quantity required after depletion of stock. Please contact Sherex for current availability.

### PART NUMBERING SYSTEM

#### CPB Specifications

##### Material:

Steel 1008/1010

Aluminum 6061

##### RoHS Compliant Finishes:

Zinc Plated-Yellow Trivalent Chromate per Sherex SFS-01-001, SC2

Zinc Plated-Clear Trivalent Chromate per Sherex SFS-01-001

#### Part Number

Example: CPB2-2520-280

CPB	2	2520	280	( )
Product Style	2-Steel	Thread Size	Grip Range	Empty-Open End
Slotted Body	3-Aluminum			T-Clear Trivalent W-Wedge Head
Pre-bulbed				TR-Trim Head

Special finish or material available upon request



WEDGE HEAD



TRIM HEAD

Grip range can be affected by parent material and hole size. Sherex recommends trial installations to determine the proper grip range for the application. Contact Sherex for details. Contact Sherex for test data.

#### INSTALLATION TOOLING

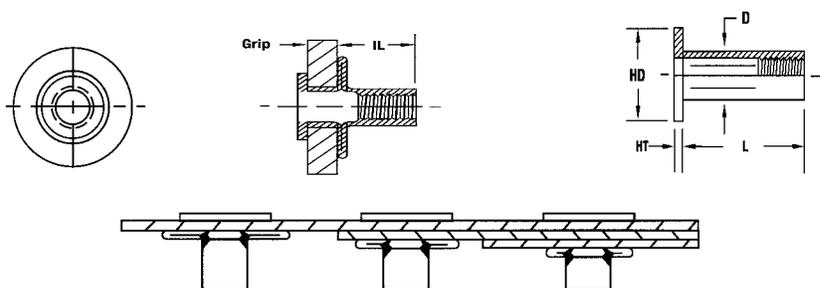
CPB Series can be installed with our Hand Tools, Pneumatic Tools, and Hydro-Pneumatic Tools. For additional tooling information see pages 37-43.

Sherex rivet nuts are compatible with the following hardware:

**GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8**

Please contact Sherex when using other grade fasteners.

# CPN STRAIGHT SHANK SLOTTED BODY SERIES



Installs into single, variable, or multiple thickness materials.

## CPN SERIES



### UNIFIED THREAD (UNIT - INCHES)

Part Number (Steel)	Thread Size	Grip Range		HD		L	HT	D	IL	Hole Size
		Min.	Max.	Min.	Max.	± .015	± .005	Max.	Ref.	+ .006/- .000
CPN2-1024-175♦	10-24 UNC	.020	.175	.490	.510	.781	.038	.272	.425	.273
CPN2-1024-320♦	10-24 UNC	.175	.320	.490	.510	.921	.038	.272	.425	.273
CPN2-1032-175♦	10-32 UNF	.020	.175	.490	.510	.781	.038	.272	.425	.273
CPN2-1032-320♦	10-32 UNF	.175	.320	.490	.510	.921	.038	.272	.425	.273
CPN2-2520-280	1/4-20 UNC	.020	.280	.610	.645	1.000	.059	.346	.505	.347
CPN2-2520-500♦	1/4-20 UNC	.280	.500	.610	.645	1.234	.059	.346	.505	.347
CPN2-3118-280♦	5/16-18 UNC	.020	.280	.740	.770	1.141	.062	.437	.570	.438
CPN2-3118-500♦	5/16-18 UNC	.280	.500	.740	.770	1.375	.062	.437	.570	.438

### METRIC THREAD (UNIT - MILLIMETERS)

Part Number (Steel)	Thread Size	Grip Range		HD		L	HT	D	IL	Hole Size
		Min.	Max.	Min.	Max.	± 0.38	± .13	Max.	Ref.	+ .15/- 0.00
CPN2-580-4.45♦	M5x0.8 ISO	0.50	4.45	12.45	12.95	21.03	0.96	7.47	9.90	7.48
CPN2-580-8.1♦	M5x0.8 ISO	4.45	8.10	12.45	12.95	23.80	0.96	7.47	9.90	7.48
CPN2-610-7.1♦	M6x1.0 ISO	0.50	7.10	15.50	16.38	25.40	1.50	8.79	12.80	8.80
CPN2-610-12.7♦	M6x1.0 ISO	7.10	12.70	15.50	16.38	31.32	1.50	8.79	12.80	8.80
CPN2-8125-7.1♦	M8x1.25 ISO	0.50	7.10	18.80	19.65	28.95	1.57	11.10	14.48	11.11
CPN2-8125-12.7♦	M8x1.25 ISO	7.10	12.70	18.80	19.65	34.90	1.57	11.10	14.48	11.11

♦ Non-Standard Part: Minimum order quantity required after depletion of stock. Please contact Sherex for current availability.

### PART NUMBERING SYSTEM

#### CPN Specifications

##### Material:

Steel 1008/1010

Aluminum 6061

##### RoHS Compliant Finishes:

Zinc Plated-Yellow Trivalent Chromate per Sherex SFS-01-001, SC2

Zinc Plated-Clear Trivalent Chromate per Sherex SFS-01-001

#### Part Number

Example: CPN2-2520-280

CPN	2	2520	280	( )
Product Style	2-Steel	Thread Size	Grip Range	Empty-Open End
Slotted Body	3-Aluminum			T-Clear Trivalent
Straight Shank				W-Wedge Head

Special finish or material available upon request



#### WEDGE HEAD

Grip range can be affected by parent material and hole size.  
 Sherex recommends trials installations to determine the proper grip range for the application.  
 Contact Sherex for details.  
 Contact Sherex for test data.

CPN Series must be installed with spin pull tooling.  
 For more information see pages 37-43.

Sherex rivet nuts are compatible with the following hardware:  
**GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8**  
 Please contact Sherex when using other grade fasteners.

# CAK SMALL FLANGE KNURLED BODY THIN WALL SERIES

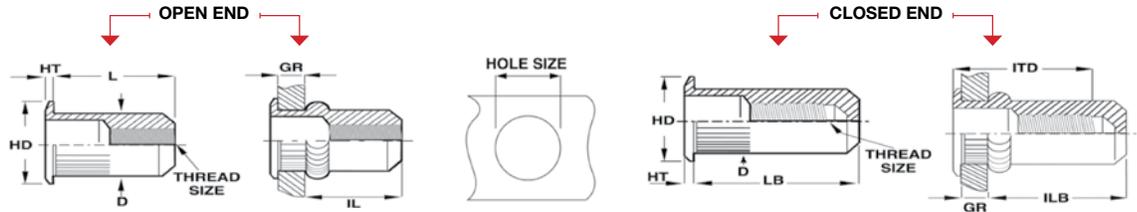
## CAK SERIES



- The CAK series has a small flange for a near flush installation.
- Knurled body provides a higher resistance to spin out when installed in soft materials.
- Inch body
- Inch and metric threads



CLOSED END



### UNIFIED THREAD (UNIT - INCHES)

Part Number (Steel)	Thread Size	Grip Range		L ± .015	HD ± .010 ± .015*	HT ± .002	D Max.	IL Max.	LB ± .015	ILB Max.	ITD Ref.	Hole Size +.006/-.000
		Min.	Max.									
CAK2-0632-080	6-32 UNC	.020	.080	.420	.310	.019	.265	.305	.740	.640	.610	.266
CAK2-0632-130	6-32 UNC	.080	.130	.470	.310	.019	.265	.305	.740	.580	.670	.266
CAK2-0832-080	8-32 UNC	.020	.080	.420	.310	.019	.265	.305	.740	.640	.610	.266
CAK2-0832-130	8-32 UNC	.080	.130	.470	.310	.019	.265	.305	.740	.580	.670	.266
CAK2-1024-130	10-24 UNC	.020	.130	.475	.340	.019	.296	.315	.990	.845	.730	.297
CAK2-1024-225	10-24 UNC	.130	.225	.585	.340	.019	.296	.315	.990	.735	.840	.297
CAK2-1032-130	10-32 UNF	.020	.130	.475	.340	.019	.296	.315	.990	.845	.730	.297
CAK2-1032-225	10-32 UNF	.130	.225	.585	.340	.019	.296	.315	.990	.735	.840	.297
CAK2-2520-165	1/4-20 UNC	.027	.165	.580	.455	.022	.390	.380	1.190	1.005	.895	.391
CAK2-2520-260	1/4-20 UNC	.165	.260	.680	.455	.022	.390	.380	1.190	.905	1.035	.391
CAK2-2528-165	1/4-28 UNF	.027	.165	.580	.455	.022	.390	.380	1.190	1.005	.895	.391
CAK2-2528-260	1/4-28 UNF	.165	.260	.680	.455	.022	.390	.380	1.190	.905	1.035	.391
CAK2-3118-150	5/16-18 UNC	.027	.150	.690	.595*	.022	.530	.470	1.390	1.175	.995	.531
CAK2-3118-312	5/16-18 UNC	.150	.312	.805	.595*	.022	.530	.425	1.390	1.025	1.120	.531
CAK2-3124-150	5/16-24 UNF	.027	.150	.690	.595*	.022	.530	.470	1.390	1.175	.995	.531
CAK2-3124-312	5/16-24 UNF	.150	.312	.805	.595*	.022	.530	.425	1.390	1.025	1.120	.531
CAK2-3716-150	3/8-16 UNC	.027	.150	.690	.595*	.022	.530	.470	1.390	1.175	.995	.531
CAK2-3716-312	3/8-16 UNC	.150	.312	.805	.595*	.022	.530	.425	1.390	1.025	1.120	.531
CAK2-3724-150	3/8-24 UNF	.027	.150	.690	.595*	.022	.530	.470	1.390	1.175	.995	.531
CAK2-3724-312	3/8-24 UNF	.150	.312	.805	.595*	.022	.530	.425	1.390	1.025	1.120	.531

### METRIC THREAD (UNIT - MILLIMETERS)

Part Number (Steel)	Thread Size	Grip Range		L ± .38	HD ± .25 ± .38*	HT ± .05	D Max.	IL Max.	LB ± .38	ILB Max.	ITD Ref.	Hole Size +.15/- .000
		Min.	Max.									
CAK2-470-2.0	M4x0.7 ISO	0.50	2.00	10.67	7.87	0.48	6.73	7.75	18.80	16.26	15.49	6.75
CAK2-470-3.3	M4x0.7 ISO	2.00	3.30	11.94	7.87	0.48	6.73	7.75	18.80	14.73	17.02	6.75
CAK2-580-3.3	M5x0.8 ISO	0.50	3.30	12.07	8.64	0.48	7.52	8.00	25.15	21.46	18.54	7.60
CAK2-580-5.7	M5x0.8 ISO	3.30	5.70	14.86	8.64	0.48	7.52	8.00	25.15	18.67	21.34	7.60
CAK2-610-4.2	M6x1.0 ISO	0.70	4.20	14.73	11.56	0.55	9.91	9.65	30.23	25.53	22.73	10.00
CAK2-610-6.6	M6x1.0 ISO	4.20	6.60	17.27	11.56	0.55	9.91	9.65	30.23	22.99	26.29	10.00
CAK2-8125-3.8	M8x1.25 ISO	0.70	3.80	17.53	15.11*	0.55	13.46	11.94	35.31	29.85	25.27	13.50
CAK2-8125-7.9	M8x1.25 ISO	3.80	7.90	20.45	15.11*	0.55	13.46	10.80	35.31	26.04	28.45	13.50
CAK2-1015-3.8	M10x1.5 ISO	0.70	3.80	17.53	15.11*	0.55	13.46	11.94	35.31	29.85	25.27	13.50
CAK2-1015-7.9	M10x1.5 ISO	3.80	7.90	20.45	15.11*	0.55	13.46	10.80	35.31	26.04	28.45	13.50

◆ Non-Standard Part: Minimum order quantity required after depletion of stock. Please contact Sherex for current availability.

### PART NUMBERING SYSTEM

#### CAK Specifications

##### Material:

Steel 1008/1010  
Stainless Steel 302\*  
Aluminum 5056

##### RoHS Compliant Finishes:

Zinc Plated-Yellow Trivalent Chromate  
per Sherex SFS-01-001, SC2  
Zinc Plated-Clear Trivalent Chromate  
per Sherex SFS-01-001

#### Part Number

Example: CAK2-2520-165

CAK	2	2520	165	( )
Product Style	Material	Thread Size	Grip Range	Empty-Open End
Small Flange	1-Stainless Steel			B-Closed End
Knurled Body	2-Steel			T-Clear Trivalent
Thin Wall Series	3-Aluminum			

Special finish or material available upon request

\*Contact Sherex for exact product dimensions in Stainless Steel.

Grip range can be affected by parent material and hole size. Sherex recommends trial installations to determine the proper grip range for the application.  
Contact Sherex for details.

CAK style rivet nuts are available in closed end designs. Other specials available upon request.

Contact Sherex for test data.

Mating material holes must be smaller than flange diameter.

#### INSTALLATION TOOLING

CAK Series can be installed with our Hand Tools, Pneumatic Tools, and Hydro-Pneumatic Tools.  
For additional tooling information see pages 37-43.

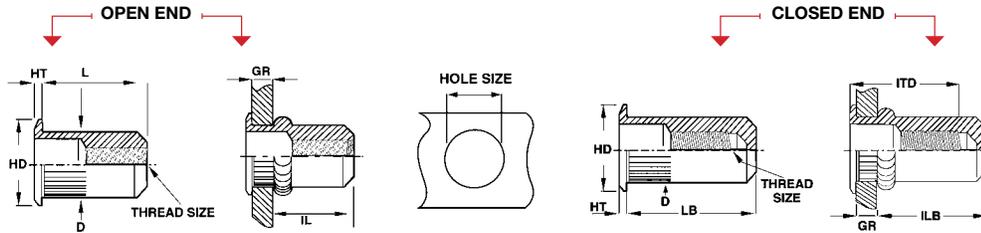
Sherex rivet nuts are compatible with the following hardware:

**GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8**

Please contact Sherex when using other grade fasteners.

Sherex Fastening Solutions • 866-474-3739 • www.sherex.com • info@sherex.com

# CAL LARGE FLANGE KNURLED BODY THIN WALL SERIES



## CAL SERIES



### UNIFIED THREAD (UNIT - INCHES)

Part Number (Steel)	Thread Size	Grip Range		L ± .015	HD ±.010 ±.025*	HT ± .003	D Max.	IL Max.	LB ± .015	ILB Max.	ITD Ref.	Hole Size +.006/-.000
		Min.	Max.									
CAL2-0632-080	6-32 UNC	.020	.080	.420	.390	.030	.265	.305	.740	.640	.610	.266
CAL2-0632-130	6-32 UNC	.080	.130	.470	.390	.030	.265	.305	.740	.580	.670	.266
CAL2-0832-080	8-32 UNC	.020	.080	.420	.390	.030	.265	.305	.740	.640	.610	.266
CAL2-0832-130	8-32 UNC	.080	.130	.470	.390	.030	.265	.305	.740	.580	.670	.266
CAL2-1024-130	10-24 UNC	.020	.130	.475	.415	.030	.296	.315	.990	.845	.730	.297
CAL2-1024-225	10-24 UNC	.130	.225	.585	.415	.030	.296	.315	.990	.735	.840	.297
CAL2-1032-130	10-32 UNF	.020	.130	.475	.415	.030	.296	.315	.990	.845	.730	.297
CAL2-1032-225	10-32 UNF	.130	.225	.585	.415	.030	.296	.315	.990	.735	.840	.297
CAL2-2520-165	1/4-20 UNC	.027	.165	.580	.500	.030	.390	.380	1.190	1.005	.895	.391
CAL2-2520-260	1/4-20 UNC	.165	.260	.680	.500	.030	.390	.380	1.190	.905	1.035	.391
CAL2-2528-165	1/4-28 UNF	.027	.165	.580	.500	.030	.390	.380	1.190	1.005	.895	.391
CAL2-2528-260	1/4-28 UNF	.165	.260	.680	.500	.030	.390	.380	1.190	.905	1.035	.391
CAL2-3118-150	5/16-18 UNC	.027	.150	.690	.685*	.035	.530	.470	1.390	1.175	.995	.531
CAL2-3118-312	5/16-18 UNC	.150	.312	.805	.685*	.035	.530	.425	1.390	1.025	1.120	.531
CAL2-3124-150	5/16-24 UNF	.027	.150	.690	.685*	.035	.530	.470	1.390	1.175	.995	.531
CAL2-3124-312	5/16-24 UNF	.150	.312	.805	.685*	.035	.530	.425	1.390	1.025	1.120	.531
CAL2-3716-150	3/8-16 UNC	.027	.150	.690	.685*	.035	.530	.470	1.390	1.175	.995	.531
CAL2-3716-312	3/8-16 UNC	.150	.312	.805	.685*	.035	.530	.425	1.390	1.025	1.120	.531
CAL2-3724-150	3/8-24 UNF	.027	.150	.690	.685*	.035	.530	.470	1.390	1.175	.995	.531
CAL2-3724-312	3/8-24 UNF	.150	.312	.805	.685*	.035	.530	.425	1.390	1.025	1.120	.531
CAL2-5013-200	1/2-13 UNC	.063	.200	1.150	.865*	.047	.685	.850	2.365	2.070	1.505	.688
CAL2-5013-350	1/2-13 UNC	.200	.350	1.300	.865*	.047	.685	.850	2.365	1.920	1.505	.688

- The CAL series has a large flange to provide increased strength in punched and drilled holes.
- Knurled body provides a higher resistance to spin out when installed in soft materials.
- Inch body
- Inch and metric threads

### METRIC THREAD (UNIT - MILLIMETERS)

Part Number (Steel)	Thread Size	Grip Range		L ± .38	HD ±.25 ±.64*	HT ± .08	D Max.	IL Max.	LB ± .38	ILB Max.	ITD Ref.	Hole Size +.15/- .000
		Min.	Max.									
CAL2-470-2.0	M4x0.7 ISO	0.50	2.00	10.68	9.91	0.76	6.73	7.75	18.80	16.26	15.49	6.75
CAL2-470-3.3	M4x0.7 ISO	2.00	3.30	11.94	9.91	0.76	6.73	7.75	18.80	14.73	17.02	6.75
CAL2-580-3.3	M5x0.8 ISO	0.50	3.30	12.07	10.54	0.76	7.52	8.00	25.15	21.46	18.54	7.60
CAL2-580-5.7	M5x0.8 ISO	3.30	5.70	14.86	10.54	0.76	7.52	8.00	25.15	18.67	21.34	7.60
CAL2-610-4.2	M6x1.0 ISO	0.70	4.20	14.73	12.70	0.76	9.91	9.65	30.23	25.53	22.73	10.00
CAL2-610-6.6	M6x1.0 ISO	4.20	6.60	17.27	12.70	0.76	9.91	9.65	30.23	22.99	26.29	10.00
CAL2-8125-3.8	M8x1.25 ISO	0.70	3.80	17.53	17.40*	0.89	13.46	11.94	35.31	29.85	25.27	13.50
CAL2-8125-7.9	M8x1.25 ISO	3.80	7.90	20.45	17.40*	0.89	13.46	10.80	35.31	26.04	28.45	13.50
CAL2-1015-3.8	M10x1.5 ISO	0.70	3.80	17.53	17.40*	0.89	13.46	11.94	35.31	29.85	25.27	13.50
CAL2-1015-7.9	M10x1.5 ISO	3.80	7.90	20.45	17.40*	0.89	13.46	10.80	35.31	26.04	28.45	13.50
CAL2-12175-5.1	M12x1.75 ISO	1.60	5.10	29.21	21.97*	1.19	17.40	21.59	60.07	52.58	38.23	17.45
CAL2-12175-8.9	M12x1.75 ISO	5.10	8.90	33.02	21.97*	1.19	17.40	21.59	60.07	48.77	38.23	17.45

◆ Non-Standard Part: Minimum order quantity required after depletion of stock. Please contact Sherex for current availability.

### PART NUMBERING SYSTEM

#### CAL Specifications

##### Material:

Steel 1008/1010  
Stainless Steel 302\*  
Aluminum 5056

##### RoHS Compliant Finishes:

Zinc Plated-Yellow Trivalent Chromate  
per Sherex SFS-01-001, SC2

Zinc Plated-Clear Trivalent Chromate  
per Sherex SFS-01-001

#### Part Number

Example: CAL2-2520-165

CAL	2	2520	165	( )
Product Style	Material	Thread Size	Grip Range	Empty-Open End
Large Flange	1-Stainless Steel			B-Closed End
Knurled Body	2-Steel			T-Clear Trivalent
Thin Wall Series	3-Aluminum			W-Wedge Head
				S-Sealed

Special finish or material available upon request

\*Contact Sherex for exact product dimensions in Stainless Steel.

Grip range can be affected by parent material and hole size. Sherex recommends trial installations to determine the proper grip range for the application. Contact Sherex for details.

CAL style rivet nuts are available in sealed, closed end, and wedge head designs by special order. Other specials available upon request. Contact Sherex for test data.

#### INSTALLATION TOOLING

CAL Series can be installed with our Hand Tools, Pneumatic Tools, and Hydro-Pneumatic Tools.

For additional tooling information see pages 37-43.

Sherex rivet nuts are compatible with the following hardware:

**GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8**

Please contact Sherex when using other grade fasteners.

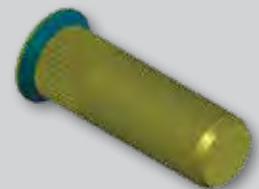
Sherex Fastening Solutions • 866-474-3739 • www.sherex.com • info@sherex.com



CLOSED END



WEDGE HEAD



SEALED HEAD



# CFT/CAT KNURLED 360° SWAGING SERIES

## CFT/ CAT SERIES



- The CFT/CAT series offers one rivet nut for materials of any thickness greater than .030 inches.

- Cadmium Free finish allows the CFT Series to be used in any industry, including automotive.

- Designed to be used in metal applications.

- Inch body

- Inch and metric threads



### UNIFIED THREAD (UNIT - INCHES)

Part Number (Steel)	Thread Size	Cadmium Free & RoHS Compliant	HD ± .005	L ± .015	D Max.	Recommended Hole Size +.005/- .00			
						MAT. THICK .030-.090	MAT. THICK .091-.124	MAT. THICK .125-.186	MAT. THICK .187-Over
CAT2-0440	4-40 UNC	N	.211	.370	.1875	.1875	.1935	.1935	.1960
CAT2-0632	6-32 UNC	N	.240	.370	.2185	.2188	.2210	.2280	.2280
CAT2-0832	8-32 UNC	N	.269	.370	.2495	.2500	.2570	.2656	.2656
CAT2-1024	10-24 UNC	N	.306	.370	.2805	.2812	.2900	.2900	.2969
CAT2-1032	10-32 UNF	N	.306	.370	.2805	.2812	.2900	.2900	.2969
CAT2-2520	1/4-20 UNC	N	.400	.515	.3745	.3750	.3750	.3860	.3906
CAT2-3118	5/16-18 UNC	N	.528	.615	.4995	.5000	.5000	.5156	.5156
CAT2-3716	3/8-16 UNC	N	.588	.745	.5615	.5625	.5625	.5781	.5781
CAT2-5013	1/2-13 UNC	N	.800	.935	.7485	.7500	.7656	.7810	.7970
CFT2-0440	4-40 UNC	Y	.211	.370	.1875	.1875	.1935	.1935	.1960
CFT2-0632	6-32 UNC	Y	.240	.370	.2185	.2188	.2210	.2280	.2280
CFT2-0832	8-32 UNC	Y	.269	.370	.2495	.2500	.2570	.2656	.2656
CFT2-1024	10-24 UNC	Y	.306	.370	.2805	.2812	.2900	.2900	.2969
CFT2-1032	10-32 UNF	Y	.306	.370	.2805	.2812	.2900	.2900	.2969
CFT2-2520	1/4-20 UNC	Y	.400	.515	.3745	.3750	.3750	.3860	.3906
CFT2-3118	5/16-18 UNC	Y	.528	.615	.4995	.5000	.5000	.5156	.5156
CFT2-3716	3/8-16 UNC	Y	.588	.745	.5615	.5625	.5625	.5781	.5781
CFT2-5013	1/2-13 UNC	Y	.800	.935	.7485	.7500	.7656	.7810	.7970

### METRIC THREAD (UNIT - MILLIMETERS)

Part Number (Steel)	Thread Size	Cadmium Free & RoHS Compliant	HD ± .13	L ± .38	D Max.	Recommended Hole Size +.13/- .00			
						MAT. THICK 0.76-2.29	MAT. THICK 2.31-3.15	MAT. THICK 3.17-4.72	MAT. THICK 4.72-Over
CAT2-350♦	M3X0.5 ISO	N	5.36	9.40	4.76	4.75	4.90	4.90	4.97
CAT2-470♦	M4X0.7 ISO	N	6.83	9.40	6.34	6.35	6.52	6.74	6.74
CAT2-580♦	M5X0.8 ISO	N	7.77	9.40	7.12	7.14	7.36	7.36	7.54
CAT2-610	M6X1.0 ISO	N	10.16	13.08	9.51	9.52	9.52	9.80	9.92
CAT2-8125♦	M8X1.25 ISO	N	13.41	15.62	12.69	12.70	12.70	13.09	13.09
CAT2-1015♦	M10X1.5 ISO	N	14.94	18.92	14.26	14.28	14.28	14.68	14.68
CAT2-12175♦	M12X1.75 ISO	N	20.32	23.75	19.01	19.05	19.44	19.83	20.24
CFT2-350♦	M3X0.5 ISO	Y	5.36	9.40	4.76	4.75	4.90	4.90	4.97
CFT2-470♦	M4X0.7 ISO	Y	6.83	9.40	6.34	6.35	6.52	6.74	6.74
CFT2-580	M5X0.8 ISO	Y	7.77	9.40	7.12	7.14	7.36	7.36	7.54
CFT2-610	M6X1.0 ISO	Y	10.16	13.08	9.51	9.52	9.52	9.80	9.92
CFT2-8125	M8X1.25 ISO	Y	13.41	15.62	12.69	12.70	12.70	13.09	13.09
CFT2-1015	M10X1.5 ISO	Y	14.94	18.92	14.26	14.28	14.28	14.68	14.68
CFT2-12175♦	M12X1.75 ISO	Y	20.32	23.75	19.01	19.05	19.44	19.83	20.24

♦ Non-Standard Part: Minimum order quantity required after depletion of stock. Please contact Sherex for current availability.

### PART NUMBERING SYSTEM

#### CFT/CAT Specifications

##### Material:

Stainless Steel, 304 L  
Steel, 12L14  
Steel, 1215

**Finish:** CAT is Cadmium Plated per QQ-P-416 Type 1, Class 3 with clear protective coating

CFT is Proprietary Tin Plated

#### Part Number

Example: CAT2-2520

CAT	2	2520
Cadmium T series	Material	Thread Size
Featuring 360° Swaging	1-Stainless Steel	
	2-Steel	

Special finish or material available upon request

**\*CFT and CAT rivet nut styles are dimensionally the same. CFT is Cadmium Free and RoHS Compliant.**

Actual hole size can be affected by parent material and material thickness. Contact Sherex for details.

CFT/CAT series available in different finishes. Other specials available upon request.

Contact Sherex for test data.

Mating material holes must be smaller than flange diameter.

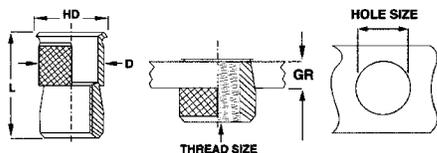
#### INSTALLATION TOOLING

CFT/CAT Series can be installed with our Hand Tools, Pneumatic Tools, and Hydro-Pneumatic Tools. For additional tooling information see pages 37-43. Sherex rivet nuts are compatible with the following hardware: **GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8** Please contact Sherex when using other grade fasteners.

**CFT Stainless Steel (CFT1) products are now produced in our Sherex Akron facility, and are available with reduced lead times!**

Sherex Fastening Solutions • 866-474-3739 • www.sherex.com • info@sherex.com

# CFW/CAW DIAMOND KNURLED 360° SWAGING SERIES



Material thickness .062"±.157 min

**CFW/  
CAW  
SERIES**



## UNIFIED THREAD (UNIT - INCHES)

Part Number (Steel)	Thread Size	Cadmium Free & RoHS Compliant	HD ± .005	L ± .015	D Max.	Hole Size +.005/- .00
CAW2-0632♦	6-32 UNC	N	.255	.370	.233	.234
CAW2-0832	8-32 UNC	N	.285	.370	.264	.266
CAW2-1024	10-24 UNC	N	.320	.370	.295	.297
CAW2-1032	10-32 UNF	N	.320	.370	.295	.297
CAW2-2520	1/4-20 UNC	N	.415	.515	.389	.391
CAW2-3118	5/16-18 UNC	N	.550	.615	.528	.531
CAW2-3716♦	3/8-16 UNC	N	.615	.740	.590	.594
CFW2-0632♦	6-32 UNC	Y	.255	.370	.233	.234
CFW2-0832	8-32 UNC	Y	.285	.370	.264	.266
CFW2-1024	10-24 UNC	Y	.320	.370	.295	.297
CFW2-1032	10-32 UNF	Y	.320	.370	.295	.297
CFW2-2520	1/4-20 UNC	Y	.415	.515	.389	.391
CFW2-3118♦	5/16-18 UNC	Y	.550	.615	.528	.531
CFW2-3716♦	3/8-16 UNC	Y	.615	.740	.590	.594

- The CFW/CAW series offers a knurled body for increased spin out resistance in soft materials.
- Increased wall thickness provides increased shear strength.
- Cadmium Free finish allows the CFW Series to be used in any industry, including automotive.
- Inch body
- Inch and metric threads

## METRIC THREAD (UNIT - MILLIMETERS)

Part Number (Steel)	Thread Size	Cadmium Free & RoHS Compliant	HD ± .13	L ± .38	D Max.	Hole Size +.13/- .00
CAW2-470♦	M4X0.7 ISO	N	7.24	9.40	6.71	6.75
CAW2-580♦	M5X0.8 ISO	N	8.13	9.40	7.50	7.54
CAW2-610♦	M6X1.0 ISO	N	10.54	13.08	9.88	9.92
CAW2-8125♦	M8X1.25 ISO	N	13.97	15.62	13.41	13.49
CAW2-1015♦	M10X1.5 ISO	N	15.62	18.80	14.99	15.00
CFW2-470♦	M4X0.7 ISO	Y	7.24	9.40	6.71	6.75
CFW2-580♦	M5X0.8 ISO	Y	8.13	9.40	7.50	7.54
CFW2-610	M6X1.0 ISO	Y	10.54	13.08	9.88	9.92
CFW2-8125♦	M8X1.25 ISO	Y	13.97	15.62	13.41	13.49
CFW2-1015♦	M10X1.5 ISO	Y	15.62	18.80	14.99	15.00

♦ Non-Standard Part: Minimum order quantity required after depletion of stock. Please contact Sherex for current availability.

## PART NUMBERING SYSTEM

### CFW/CAW Specifications

#### Material:

Stainless Steel, 304 L  
Steel, 12L14  
Steel, 1215

**Finish:** CAW is Cadmium Plated per QQ-P-416 Type 1, Class 3 with clear protective coating

CFW is Proprietary Tin Plated

### Part Number

Example: CAW2-2520

CAW	2	2520
Cadmium W series	Material	Thread Size
Featuring 360° Swaging	1-Stainless Steel	
	2-Steel	

Special finish or material available upon request

**\*CFW and CAW rivet nut styles are dimensionally the same. CFW is Cadmium Free and RoHS Compliant.**

Actual hole size can be affected by parent material and material thickness. Contact Sherex for details.

CFW/CAW series available in different finishes. Other specials available upon request.

Contact Sherex for test data.

Mating material holes must be smaller than flange diameter.

### INSTALLATION TOOLING

CFW/CAW Series can be installed with our Hand Tools, Pneumatic Tools, and Hydro-Pneumatic Tools.

For additional tooling information see pages 37-43.

Sherex rivet nuts are compatible with the following hardware:

**GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8**

Please contact Sherex when using other grade fasteners.

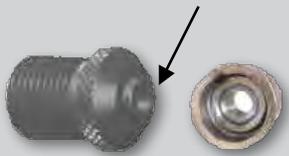
RIV-FLOAT®



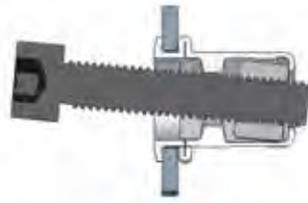
- The RIV-FLOAT® series provides easy, accurate, and fast attachment of components in off-center applications.

- Inch body
- Inch and metric threads

CENTERING  
NOSEPIECE



- The RIV-FLOAT® series should be installed with the FLEX-5 Hydro-Pneumatic Tool with a RIV-FLOAT® Anvil.



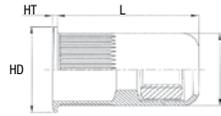
CROSS SECTION OF RIV-FLOAT®  
INSTALLED



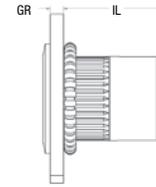
STANDARD RIVET  
NUT INSTALLED

## FEATURES AND BENEFITS

- Accounts for tolerance stack up in joint design and misalignment during service of the joint.
- Floating nut aligns to drive angle of screw virtually eliminating cross threading and spin out.
- Allows for installation in post painted or powder coat applications where riveted nut plates or cage nuts are typically used.
- RoHS compliant Zinc electroplate to 8µm with trivalent chromate - 96/240 hrs (WR/RR).
- Designed with higher thread strength than regular rivet nuts.
- Mechanically locked RIV-FLOAT® is available with prevailing torque feature to IFI spec 100/107.



UNINSTALLED



INSTALLED

## RFK SMALL FLANGE SERIES (UNIT - INCHES)

Part Number Inch (Steel)	Thread Size	Radial Deflection	Grip Range		L ± .0215	HD ± .010	HT ± .002	D Max.	IL Ref.	Hole Size +.006/- .000
			Min.	Max.						
RFK2-0632-130	6-32 UNC	.020	.027	.130	.7195	.455	.022	.390	.522	.391
RFK2-0832-130	8-32 UNC	.020	.027	.130	.7195	.455	.022	.390	.522	.391
RFK2-1032-150	10-32 UNF	.015	.027	.150	.7195	.455	.022	.390	.522	.391
RFK2-2520-150	1/4-20 UNC	.030	.027	.150	.8190	.595	.022	.530	.630	.531

## RFK SMALL FLANGE SERIES (UNIT - MILLIMETERS)

Part Number Metric (Steel)	Thread Size	Radial Deflection	Grip Range		L ± .55	HD ± .25	HT ± .05	D Max.	IL Ref.	Hole Size +.15/- .000
			Min.	Max.						
RFK2-470-3.3	M4x0.7 ISO	.51	0.70	3.3	18.28	11.56	.55	9.91	13.25	10.00
RFK2-580-3.8	M5x0.8 ISO	.38	0.70	3.8	18.28	11.56	.55	9.91	13.25	10.00
RFK2-610-3.8	M6x1.0 ISO	.76	0.70	3.8	20.80	15.11	.55	13.46	16.00	13.50

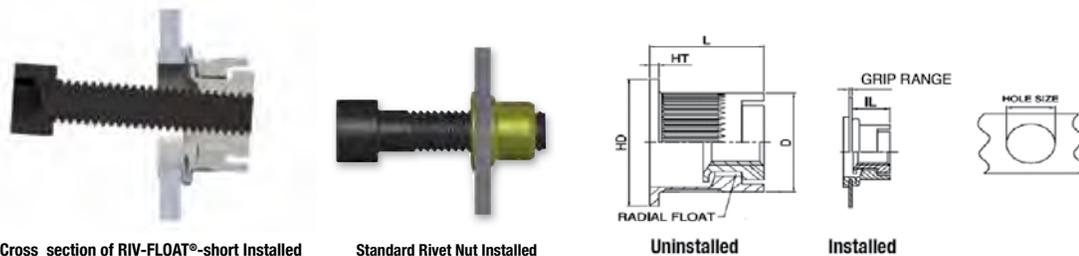
## RFL LARGE FLANGE SERIES (UNIT - INCHES)

Part Number Inch (Steel)	Thread Size	Radial Deflection	Grip Range		L ± .0215	HD ± .010	HT ± .003	D Max.	IL Ref.	Hole Size +.006/- .000
			Min.	Max.						
RFL2-0632-130	6-32 UNC	.020	.027	.130	.7195	.500	.030	.390	.522	.391
RFL2-0832-130	8-32 UNC	.020	.027	.130	.7195	.500	.030	.390	.522	.391
RFL2-1032-150	10-32 UNF	.015	.027	.150	.7195	.500	.030	.390	.522	.391
RFL2-2520-150	1/4-20 UNC	.030	.027	.150	.8190	.685	.035	.530	.630	.531

## RFL LARGE FLANGE SERIES (UNIT - MILLIMETERS)

Part Number Metric (Steel)	Thread Size	Radial Deflection	Grip Range		L ± .55	HD ± .25	HT ± .08	D Max.	IL Ref.	Hole Size +.15/- .000
			Min.	Max.						
RFL2-470-3.3	M4x0.7 ISO	.51	0.70	3.3	18.28	12.70	.76	9.91	13.25	10.00
RFL2-580-3.8	M5x0.8 ISO	.38	0.70	3.8	18.28	12.70	.76	9.91	13.25	10.00
RFL2-610-3.8	M6x1.0 ISO	.76	0.70	3.8	20.80	17.40	.89	13.46	16.00	13.50

RIV-FLOAT® is covered under US Patent No. 7,713,011



## RIV-FLOAT® SHORT SERIES



- The RIV-FLOAT® - Short series provides easy, accurate, and fast attachment of components in off-center applications with a shorter body.
- Inch body
- Inch and metric threads

### RFSK INCH THREAD SMALL FLANGE SERIES (UNIT - INCHES)

Part Number Inch - Steel	Thread Size	Radial Float	Grip Range		L	HD	HT	D	IL	Hole Size
			Min.	Max.						
RFSK2-0832-100◆	8-32 UNC	0.020	.020	.100	.394	.480	.025	.431	.246	.433
RFSK2-1024-100◆	10-24 UNC	0.020	.020	.100	.394	.480	.025	.431	.246	.433
RFSK2-1032-100◆	10-32 UNF	0.020	.020	.100	.394	.480	.025	.431	.246	.433

### RFSK METRIC THREAD SMALL FLANGE SERIES (UNIT - MILLIMETERS)

SHEREX Part Number Metric - Steel	Thread Size	Radial Float	Grip Range		L	HD	HT	D	IL	Hole Size
			Min.	Max.						
RFSK2-470-2.5	M4x0.7 ISO	0.50	0.50	2.50	10.00	12.20	.63	10.95	6.25	11.00
RFSK2-580-2.5◆	M5x0.8 ISO	0.50	0.50	2.50	10.00	12.20	.63	10.95	6.25	11.00

### RFSL INCH THREAD LARGE FLANGE SERIES (UNIT - INCHES)

Part Number Inch - Steel	Thread Size	Radial Float	Grip Range		L	HD	HT	D	IL	Hole Size
			Min.	Max.						
RFSL2-0832-100	8-32 UNC	0.020	.020	.100	.406	.555	.033	.431	.246	.433
RFSL2-1024-100	10-24 UNC	0.020	.020	.100	.406	.555	.033	.431	.246	.433
RFSL2-1032-100	10-32 UNF	0.020	.020	.100	.406	.555	.033	.431	.246	.433

### RFSL METRIC THREAD LARGE FLANGE SERIES (UNIT - MILLIMETERS)

Part Number Metric - Steel	Thread Size	Radial Float	Grip Range		L	HD	HT	D	IL	Hole Size
			Min.	Max.						
RFSL2-470-2.5	M4x0.7 ISO	0.50	0.50	2.50	10.30	14.10	.85	10.95	6.25	11.00
RFSL2-580-2.5	M5x0.8 ISO	0.50	0.50	2.50	10.30	14.10	.85	10.95	6.25	11.00

◆ Non-Standard Part: Minimum order quantity required after depletion of stock. Please contact Sherex for current availability.

### RIV-FLOAT®-SHORT vs. Riveted Nut Plates vs. Cage Nuts

Riv-Float® Short Rivet Nuts are an ideal replacement in applications where Riveted Nut Plates or Cage Nuts are being used: they require fewer holes and installation is quicker and can be done with access to only one side of the work piece.

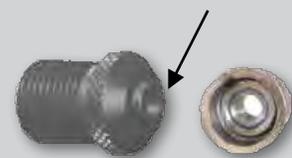
	RIV-FLOAT® SHORT	Riveted Nut Plate	Cage Nut
<b>Hole</b>	1 round hole	3 holes (1 for plate, 2 for the rivets)	1 square hole
<b>Access to work piece</b>	One side	Both sides	Both sides
<b>Installation Time</b>	2 - 3 seconds	15 - 20 seconds	15 - 20 seconds



RIV-FLOAT® Short is covered under U.S. Patent No. 9,309,914

Sherex Fastening Solutions • 866-474-3739 • www.sherex.com • info@sherex.com

#### CENTERING NOSEPIECE

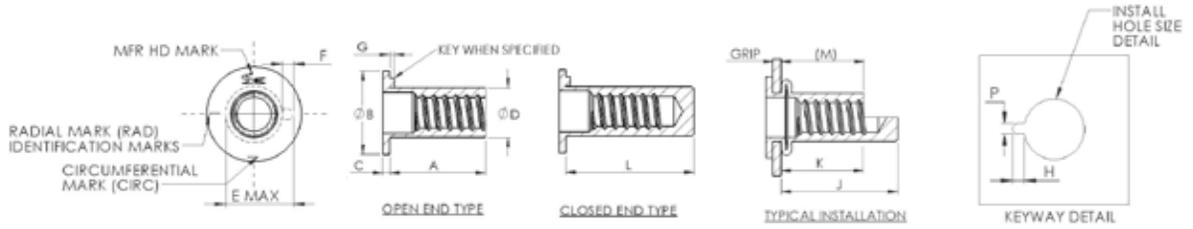


- The RIV-FLOAT® - Short series should be installed with the FLEX-5 Hydro-Pneumatic Tool with a RIV-FLOAT® - Short Anvil.

# NAS/MS FLAT HEAD STYLES

## NAS/MS FLAT HEAD STYLES

Produced in  
our AS9100  
Certified  
manufacturing  
facility in  
Akron, Ohio.



### UNIFIED THREAD (UNIT - INCHES)

THREAD SIZE	ØB +/- .015	C NOM	ØD +.000/-004	INSTALL DRILL SIZE (REF)	INSTALL HOLE SIZE		E MAX	F +.005/-000	G MAX	KEYWAY DIMENSIONS		*PULL UP FACTOR
					MIN	MAX				P +.003/-000	H	
4-40 UNC-3B	0.270	0.025	0.155	5/32	.155	.157	0.198	0.054	0.023	0.062	.046 - .048	.055
6-32 UNC-3B	0.325	0.032	0.189	NO 12	.189	.193	0.240	0.054	0.023	0.062	.056 - .058	.065
8-32 UNC-3B	0.357	0.032	0.221	NO 2	.221	.226	0.271	0.054	0.023	0.062	.056 - .058	.065
10-24 UNC-3B	0.406	0.038	0.250	E	.250	.256	0.302	0.054	0.023	0.062	.056 - .058	.080
10-32 UNF-3B												
1/4-20 UNC-3B	0.475	0.058	0.332	Q	.332	.338	0.382	0.054	0.035	0.062	.056 - .058	.095
1/4-28 UNF-3B												
5/16-18 UNC-3B	0.665	0.062	0.413	2	.413	.423	0.505	0.120	0.040	0.128	.097 - .102	.120
5/16-24 UNF-3B												
3/8-16 UNC-3B	0.781	0.088	0.490	12.5 MM	.490	.500	0.597	0.120	0.040	0.128	.110 - .115	.155
3/8-24 UNF-3B												
1/2-13 UNC-3B	0.906	0.085	0.625	5/8	.625	.635	0.733	0.120	0.040	0.128	.110 - .115	.185
1/2-20 UNF-3B												

### PART NUMBERING SYSTEM

Example: SXS2528-80CY

SX	S	2528	( )	80	CY
Sherex NAS Part	Material <b>S-Steel</b> A-Aluminum SS- 430 Stainless Steel NM- 316 Stainless (Non-Magnetic) CH-Alloy Steel B-Brass	Thread Size	( ) - Open Ended Non Keyed B-Closed End K-Keyed R-Ribbed	Grip Range Ending in 0 or 5 denotes Flat Head  Ending in 1 or 6 denotes Counter- sunk Head	<b>CY-Cadmium Yellow</b> ZY-Zinc Yellow ML-Mechanical Lock



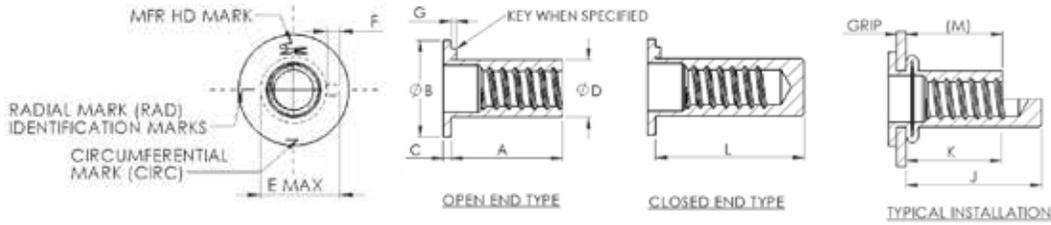
CLASSIFICATION PART STANDARD  
7EK30

CLASSIFICATION PART STANDARD  
4JQL4

Compliant to DFARS 252.225-7009



# NAS/MS FLAT HEAD STYLES



## NAS/MS FLAT HEAD STYLES

Produced in  
our AS9100 Certified  
manufacturing  
facility in  
Akron, Ohio.



### UNIFIED THREAD (UNIT - INCHES)

PART NUMBER*	THREAD SIZE	GRIP RANGE	IDENTIFYING MARK	OPEN END KEYED AND KEYLESS		CLOSED END KEYLESS			CLOSED END KEYED		
				A +/- .015	M REF	L +/- .015	J NOM	K NOM	L +/- .015	J NOM	K NOM
SXS4-60CY	4-40 UNC-3B	.010-.060	BLANK	0.345	0.230	0.500	0.385	0.230	0.500	0.385	0.230
SXS4-85CY		.060-.085	1 RAD	0.370	0.230	0.525	0.385	0.230	0.525	0.385	0.230
SXS4-110CY		.085-.110	2 RAD	0.400	0.230	0.555	0.390	0.230	0.555	0.390	0.230
SXS4-135CY		.110-.135	3 RAD	0.425	0.230	0.580	0.385	0.230	0.580	0.385	0.230
SXS4-160CY		.135-.160	4 RAD	0.450	0.230	0.605	0.385	0.230	0.605	0.385	0.230
SXS4-185CY		.160-.185	5 RAD	0.480	0.230	0.635	0.385	0.230	0.635	0.385	0.230
SXS6-75CY	6-32 UNC-3B	.010-.075	1 RAD	0.438	0.300	0.625	0.490	0.305	0.750	0.615	0.405
SXS6-120CY		.075-.120	3 RAD	0.500	0.315	0.625	0.440	0.255	0.750	0.565	0.355
SXS6-160CY		.120-.160	5 RAD	0.500	0.270	0.750	0.520	0.260	0.750	0.520	0.310
SXS6-200CY		.160-.200	1 CIRC	0.562	0.290	0.750	0.480	0.260	0.750	0.480	0.260
SXS6-240CY		.200-.240	2 CIRC	0.625	0.310	0.750	0.435	0.260	0.750	0.435	0.260
SXS6-280CY		.240-.280	3 CIRC	0.687	0.330	0.812	0.455	0.265	0.812	0.455	0.265
SXS8-75CY	8-32 UNC-3B	.010-.075	1 RAD	0.438	0.300	0.625	0.490	0.305	0.750	0.615	0.405
SXS8-120CY		.075-.120	3 RAD	0.500	0.315	0.625	0.440	0.255	0.750	0.565	0.355
SXS8-160CY		.120-.160	5 RAD	0.500	0.270	0.750	0.520	0.260	0.750	0.520	0.310
SXS8-200CY		.160-.200	1 CIRC	0.625	0.350	0.750	0.475	0.265	0.750	0.475	0.265
SXS8-240CY		.200-.240	2 CIRC	0.625	0.305	0.875	0.555	0.310	0.875	0.555	0.310
SXS8-280CY		.240-.280	3 CIRC	0.687	0.340	0.875	0.530	0.290	0.875	0.530	0.290
SXS1024-80CY	10-24 UNC-3B	.010-.080	BLANK	0.531	0.380	0.781	0.630	0.380	0.781	0.630	0.380
SXS10-80CY	10-32 UNF-3B										
SXS10-130CY		.080-.130	1 RAD	0.594	0.390	0.843	0.640	0.390	0.843	0.640	0.390
SXS10-180CY		.130-.180	2 RAD	0.641	0.390	0.891	0.640	0.390	0.891	0.640	0.390
SXS10-230CY		.180-.230	3 RAD	0.703	0.395	0.953	0.645	0.395	0.953	0.645	0.395
SXS10-280CY		.230-.280	4 RAD	0.750	0.395	1.000	0.645	0.395	1.000	0.645	0.395
SXS10-330CY		.280-.330	5 RAD	0.797	0.385	1.047	0.630	0.385	1.047	0.630	0.385
SXS2528-80CY	1/4-28 UNF-3B	.020-.080	BLANK	0.625	0.450	0.937	0.760	0.440	0.937	0.760	0.440
SXS25-80CY	1/4-20 UNC-3B										
SXS25-140CY		.080-.140	1 RAD	0.687	0.450	1.000	0.760	0.440	1.000	0.760	0.440
SXS25-200CY		.140-.200	2 RAD	0.750	0.450	1.062	0.760	0.440	1.062	0.760	0.440
SXS25-260CY		.200-.260	3 RAD	0.812	0.445	1.125	0.755	0.445	1.125	0.755	0.445
SXS25-320CY		.260-.320	4 RAD	0.875	0.445	1.187	0.755	0.445	1.187	0.755	0.445
SXS25-380CY		.320-.380	5 RAD	0.937	0.445	1.250	0.755	0.445	1.250	0.755	0.445
SXS3124-125CY	5/16-24 UNF-3B	.030-.125	BLANK	0.750	0.505	1.187	0.940	0.550	1.187	0.940	0.550
SXS31-125CY	5/16-18 UNC-3B										
SXS31-200CY		.125-.200	1 RAD	0.875	0.555	1.281	0.960	0.555	1.281	0.960	0.555
SXS31-275CY		.200-.275	2 RAD	0.937	0.540	1.343	0.950	0.560	1.343	0.950	0.560
SXS31-350CY		.275-.350	3 RAD	1.032	0.560	1.437	0.965	0.570	1.437	0.965	0.570
SXS31-425CY		.350-.425	4 RAD	1.125	0.580	1.531	0.985	0.575	1.531	0.985	0.575
SXS31-500CY		.425-.500	5 RAD	1.187	0.565	1.593	0.975	0.580	1.593	0.975	0.580
SXS3724-115CY	3/8-24 UNF-3B	.030-.115	BLANK	0.844	0.585	1.281	1.020	0.660	1.281	1.020	0.660
SXS37-115CY	3/8-16 UNC-3B										
SXS37-200CY		.115-.200	1 RAD	0.938	0.595	1.375	1.030	0.670	1.375	1.030	0.670
SXS37-285CY		.200-.285	2 RAD	1.031	0.605	1.468	1.040	0.680	1.468	1.040	0.680
SXS37-370CY		.285-.370	3 RAD	1.125	0.615	1.562	1.050	0.690	1.562	1.050	0.690
SXS37-455CY		.370-.455	4 RAD	1.218	0.630	1.656	1.065	0.710	1.656	1.065	0.710
SXS37-540CY		.455-.540	5 RAD	1.312	0.635	1.750	1.075	0.715	1.750	1.075	0.715
SXS5020-150CY	1/2-20 UNF-3B	.050-.150	BLANK	0.906	0.605	1.328	1.030	0.605	1.328	1.030	0.605
SXS50-150CY	1/2-13 UNC-3B										
SXS50-250CY		.150-.250	1 RAD	1.031	0.630	1.453	1.055	0.630	1.453	1.055	0.630
SXS50-350CY		.250-.350	2 RAD	1.141	0.640	1.562	1.060	0.640	1.562	1.060	0.640
SXS50-450CY		.350-.450	3 RAD	1.250	0.650	1.671	1.070	0.650	1.671	1.070	0.650

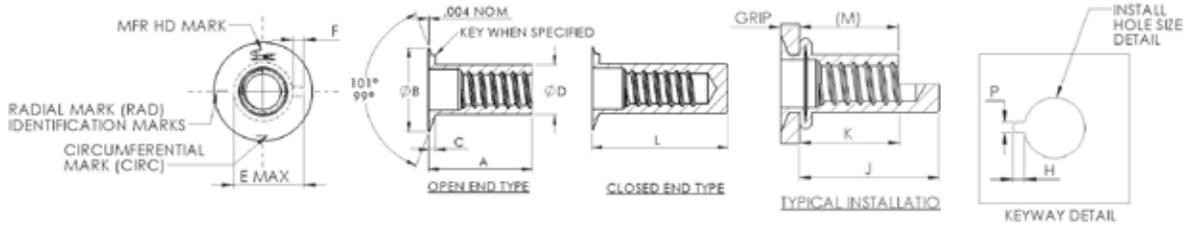
\*Note: Part numbers reflect steel, open-end, non-keyed, with cadmium yellow plating only.  
Please refer to part numbering system outlined on page 26 for further configurations.



# NAS/MS COUNTERSUNK STYLES

## NAS/MS COUNTERSUNK STYLES

Produced in our AS9100 Certified manufacturing facility in Akron, Ohio.



UNIFIED THREAD (UNIT - INCHES)													
THREAD SIZE	ØB +/- .015	C NOM	ØD +.000/- .004	INSTALL DRILL SIZE (REF)	INSTALL HOLE SIZE			E MAX	F +.005/- .000	G MAX	KEYWAY DIMENSIONS		*PULL UP FACTOR
					MIN	MAX					P +.003/- .000	H	
4-40 UNC-3B	0.270	0.025	0.155	5/32	.155	.157	0.198	0.054	0.023	0.062	.046 - .048	.055	
6-32 UNC-3B	0.325	0.032	0.189	NO 12	.189	.193	0.240	0.054	0.023	0.062	.056 - .058	.065	
8-32 UNC-3B	0.357	0.032	0.221	NO 2	.221	.226	0.271	0.054	0.023	0.062	.056 - .058	.065	
10-24 UNC-3B	0.406	0.038	0.250	E	.250	.256	0.302	0.054	0.023	0.062	.056 - .058	.080	
10-32 UNF-3B	0.406	0.038	0.250	E	.250	.256	0.302	0.054	0.023	0.062	.056 - .058	.080	
1/4-20 UNC-3B	0.475	0.058	0.332	Q	.332	.338	0.382	0.054	0.035	0.062	.056 - .058	.095	
1/4-28 UNF-3B	0.475	0.058	0.332	Q	.332	.338	0.382	0.054	0.035	0.062	.056 - .058	.095	
5/16-18 UNC-3B	0.665	0.062	0.413	Z	.413	.423	0.505	0.120	0.040	0.128	.097 - .102	.120	
5/16-24 UNF-3B	0.665	0.062	0.413	Z	.413	.423	0.505	0.120	0.040	0.128	.097 - .102	.120	
3/8-16 UNC-3B	0.781	0.088	0.490	12.5 MM	.490	.500	0.597	0.120	0.040	0.128	.110 - .115	.155	
3/8-24 UNF-3B	0.781	0.088	0.490	12.5 MM	.490	.500	0.597	0.120	0.040	0.128	.110 - .115	.155	
1/2-13 UNC-3B	0.906	0.085	0.625	5/8	.625	.635	0.733	0.120	0.040	0.128	.110 - .115	.185	
1/2-20 UNF-3B	0.906	0.085	0.625	5/8	.625	.635	0.733	0.120	0.040	0.128	.110 - .115	.185	

PART NUMBERING SYSTEM					
<b>Example: SXS2528-80CY</b>					
<b>SX</b>	<b>S</b>	<b>2528</b>	<b>(L)</b>	<b>80</b>	<b>CY</b>
Sherex NAS Part	Material <b>S-Steel</b> A-Aluminum SS- 430 Stainless Steel NM- 316 Stainless (Non-Magnetic) CH-Alloy Steel B-Brass	Thread Size	<b>(L) - Open Ended Non Keyed</b> B-Closed End K-Keyed R-Ribbed	Grip Range <b>Ending in 0 or 5 denotes Flat Head</b>  Ending in 1 or 6 denotes Counter- sunk Head	<b>CY-Cadmium Yellow</b> ZY-Zinc Yellow ML-Mechanical Lock



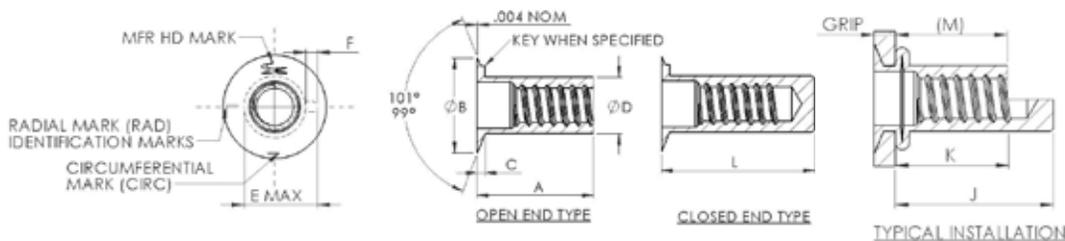
CLASSIFICATION PART STANDARD  
7EK30

Compliant to DFARS 252.225-7009

CLASSIFICATION PART STANDARD  
4JL4



# NAS/MS COUNTERSUNK STYLES



## NAS/MS COUNTERSUNK STYLES

Produced in our AS9100 Certified manufacturing facility in Akron, Ohio.



### UNIFIED THREAD (UNIT - INCHES)

PART NUMBER*	THREAD SIZE	GRIP RANGE	IDENTIFYING MARK	OPEN END KEYED AND KEYLESS		CLOSED END KEYLESS			CLOSED END KEYED		
				A +/- .015	M REF	L +/- .015	J NOM	K NOM	L +/- .015	J NOM	K NOM
SXS4-81CY	#4-40 UNC-3B	.050-.081	BLANK	0.370	0.235	0.525	0.390	0.235	0.525	0.390	0.235
SXS4-106CY		.081-.106	1 RAD	0.395	0.235	0.550	0.390	0.235	0.550	0.390	0.235
SXS4-131CY		.106-.131	2 RAD	0.420	0.235	0.575	0.390	0.235	0.575	0.390	0.235
SXS4-156CY		.131-.156	3 RAD	0.450	0.235	0.600	0.390	0.235	0.600	0.390	0.235
SXS4-181CY		.156-.181	4 RAD	0.475	0.235	0.625	0.390	0.235	0.625	0.390	0.235
SXS4-206CY		.181-.206	5 RAD	0.500	0.235	0.650	0.390	0.235	0.650	0.390	0.235
SXS6-106CY	#6-32 UNC-3B	.065-.106	BLANK	0.500	0.325	0.687	0.510	0.325	0.812	0.635	0.425
SXS6-161CY		.106-.161	2 RAD	0.500	0.280	0.687	0.465	0.280	0.812	0.590	0.380
SXS6-201CY		.161-.201	4 RAD	0.562	0.295	0.687	0.420	0.260	0.812	0.545	0.335
SXS6-241CY		.201-.241	1 CIRC	0.625	0.315	0.812	0.505	0.295	0.812	0.505	0.295
SXS6-281CY		.241-.281	2 CIRC	0.625	0.270	0.812	0.465	0.265	0.812	0.465	0.265
SXS6-321CY		.281-.321	3 CIRC	0.687	0.290	0.844	0.455	0.265	0.844	0.455	0.265
SXS8-106CY	#8-32 UNC-3B	.065-.106	BLANK	0.500	0.325	0.687	0.510	0.325	0.812	0.635	0.425
SXS8-161CY		.106-.161	2 RAD	0.500	0.280	0.687	0.465	0.280	0.812	0.590	0.380
SXS8-201CY		.161-.201	4 RAD	0.562	0.290	0.687	0.415	0.255	0.812	0.540	0.330
SXS8-241CY		.201-.241	1 CIRC	0.625	0.310	0.875	0.560	0.290	0.875	0.560	0.290
SXS8-281CY		.241-.281	2 CIRC	0.687	0.325	0.875	0.515	0.290	0.875	0.515	0.290
SXS8-321CY		.281-.321	3 CIRC	0.687	0.295	0.875	0.485	0.300	0.875	0.485	0.300
SXS1024-116CY	#10-24 UNF-3B	.065-.116	BLANK	0.578	0.395	0.828	0.645	0.395	0.828	0.645	0.395
SXS10-116CY	#10-32 UNF-3B										
SXS10-166CY		.116-.166	1 RAD	0.625	0.385	0.875	0.635	0.385	0.875	0.635	0.385
SXS10-216CY		.166-.216	2 RAD	0.687	0.400	0.938	0.650	0.400	0.938	0.650	0.400
SXS10-266CY		.216-.266	3 RAD	0.734	0.390	0.984	0.640	0.390	0.984	0.640	0.390
SXS10-316CY		.266-.316	4 RAD	0.781	0.385	1.031	0.635	0.385	1.031	0.635	0.385
SXS10-366CY		.316-.366	5 RAD	0.844	0.400	1.094	0.650	0.400	1.094	0.650	0.400
SXS2528-151CY	1/4-28 UNF-3B	.089-.151	BLANK	0.687	0.440	1.000	0.750	0.435	1.000	0.750	0.435
SXS25-151CY	1/4-20 UNC-3B										
SXS25-211CY		.151-.211	1 RAD	0.750	0.440	1.062	0.750	0.435	1.062	0.750	0.435
SXS25-271CY		.211-.271	2 RAD	0.812	0.440	1.125	0.750	0.435	1.125	0.750	0.435
SXS25-331CY		.271-.331	3 RAD	0.875	0.435	1.187	0.750	0.435	1.187	0.750	0.435
SXS25-391CY		.331-.391	4 RAD	0.937	0.435	1.250	0.750	0.435	1.250	0.750	0.435
SXS25-451CY		.391-.451	5 RAD	1.000	0.435	1.312	0.760	0.445	1.312	0.760	0.445
SXS3124-181CY	5/16-24 UNF-3B	.106-.181	BLANK	0.844	0.540	1.218	0.915	0.540	1.218	0.915	0.540
SXS31-181CY	5/16-18 UNC-3B										
SXS31-256CY		.181-.256	1 RAD	0.937	0.560	1.312	0.935	0.560	1.312	0.935	0.560
SXS31-331CY		.256-.331	2 RAD	1.000	0.550	1.406	0.955	0.550	1.406	0.955	0.550
SXS31-406CY		.331-.406	3 RAD	1.093	0.565	1.468	0.940	0.565	1.468	0.940	0.565
SXS31-481CY		.406-.481	4 RAD	1.156	0.555	1.562	0.960	0.555	1.562	0.960	0.555
SXS31-556CY		.481-.556	5 RAD	1.250	0.575	1.625	0.950	0.575	1.625	0.950	0.575
SXS3724-211CY	3/8-24 UNF-3B	.125-.211	BLANK	0.938	0.580	1.375	1.020	0.655	1.375	1.020	0.655
SXS37-211CY	3/8-16 UNC-3B										
SXS37-296CY		.211-.296	1 RAD	1.031	0.590	1.468	1.030	0.655	1.468	1.030	0.655
SXS37-381CY		.296-.381	2 RAD	1.125	0.600	1.562	1.040	0.675	1.562	1.040	0.675
SXS37-466CY		.381-.466	3 RAD	1.219	0.615	1.656	1.050	0.690	1.656	1.050	0.690
SXS37-551CY		.466-.551	4 RAD	1.312	0.625	1.750	1.065	0.705	1.750	1.065	0.705
SXS37-636CY		.551-.636	5 RAD	1.442	0.650	1.859	1.090	0.715	1.859	1.090	0.715
SXS5020-226CY	1/2-20 UNF-3B	.125-.226	BLANK	0.984	0.610	1.406	1.030	0.610	1.406	1.030	0.610
SXS50-226CY	1/2-13 UNC-3B										
SXS50-326CY		.226-.326	1 RAD	1.094	0.620	1.515	1.040	0.620	1.515	1.040	0.620
SXS50-426CY		.326-.426	2 RAD	1.218	0.640	1.625	1.050	0.640	1.625	1.050	0.640
SXS50-526CY		.426-.526	3 RAD	1.312	0.635	1.750	1.075	0.635	1.750	1.075	0.635

\*Note: Part numbers reflect steel, open-end, non-keyed, with cadmium yellow plating only. Please refer to part numbering system outlined on page 28 for further configurations.



# UPO LARGE FLANGE/UFO COUNTERSUNK FLANGE ROUND METRIC SERIES

**UPO/  
UFO  
SERIES**



• The UPO series offers a large flange for increased strength and better containment of round or oversized holes.

• Metric body and metric threads

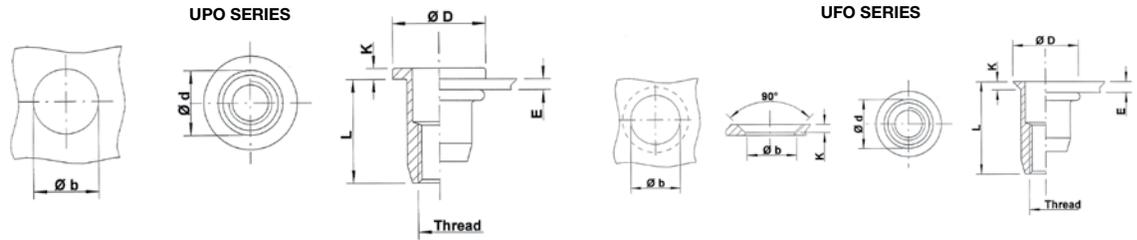


• The UFO series offers a countersunk head for flush installation into the parent materials.

• Metric body and metric threads



Available with knurled shank for increased performance (KN Series).



## UPO SERIES METRIC THREAD (UNIT - MILLIMETERS)

Part Number Steel	Thread Size	Grip Range (E)		L ± 0.35	D ± 0.35	K ± 0.15	d -0.02/-0.15	Hole Size (b+0.1)
		Min.	Max.					
TU-SM3UPO20ZT	M3X0.5 ISO	0.5	2.0	9.8	8.0	0.8	5.0	5.1
TU-SM3UPO30ZT	M3X0.5 ISO	2.0	3.0	10.8				
TU-SM4UPO30ZT	M4X0.7 ISO	0.5	3.0	10.8	10.0	0.8	6.0	6.0
TU-SM4UPO45ZT	M4X0.7 ISO	3.0	4.5	12.3				
TU-SM5UPO30ZT	M5X0.8 ISO	0.5	3.0	12.0	11.0	1.0	7.0	7.0
TU-SM5UPO55ZT	M5X0.8 ISO	3.0	5.5	15.0				
TU-SM6UPO30ZT	M6X1.0 ISO	0.5	3.0	14.5	13.0	1.5	9.0	9.0
TU-SM6UPO55ZT	M6X1.0 ISO	3.0	5.5	16.5				
TU-SM6UPO80ZT	M6X1.0 ISO	5.5	8.0	19.0	16.0	1.5	11.0	11.0
TU-SM8UPO30ZT	M8X1.25 ISO	0.5	3.0	16.0				
TU-SM8UPO55ZT	M8X1.25 ISO	3.0	5.5	18.5	18.5	2.3	12.4	12.5
TU-SM8UPO80ZT	M8X1.25 ISO	5.5	8.0	21.5				
TU-SM10UPO35ZT	M10X1.5 ISO	0.8	3.5	19.8	19.0	2.0	13.0	13.0
TU-SM10UPO60ZT	M10X1.5 ISO	3.5	6.0	22.8				
TU-SM10SPO35ZT	M10X1.5 ISO	0.8	3.5	21.0	23.0	2.0	16.0	16.0
TU-SM10SPO60ZT	M10X1.5 ISO	3.5	6.0	24.0				
TU-SM12UPO40ZT	M12X1.75 ISO	1.0	4.0	25.0	28.0	2.0	16.0	16.0
TU-SM12UPO70ZT	M12X1.75 ISO	4.0	7.0	28.0				

## UFO SERIES METRIC THREAD (UNIT - MILLIMETERS)

Part Number Steel	Thread Size	Grip Range (E)		OL ± 0.35	D +0.00/-0.5	K +0.3/-0.05	d -0.02/-0.15	Hole Size (b+0.1)
		Min.	Max.					
TU-SM3UFO35ZT	M3X0.5 ISO	1.7	3.5	11.25	8.0	1.5	5.0	5.1
TU-SM4UFO35ZT	M4X0.7 ISO	1.7	3.5	11.5				
TU-SM4UFO50ZT	M4X0.7 ISO	3.5	5.0	13.0	9.0	1.5	6.0	6.0
TU-SM5UFO40ZT	M5X0.8 ISO	1.7	4.0	13.0				
TU-SM5UFO65ZT	M5X0.8 ISO	4.0	6.5	16.0	10.0	1.5	7.0	7.0
TU-SM6UFO45ZT	M6X1.0 ISO	1.7	4.5	17.0				
TU-SM6UFO65ZT	M6X1.0 ISO	4.5	6.5	19.0	12.0	1.5	9.0	9.0
TU-SM8UFO45ZT	M8X1.25 ISO	1.7	4.5	19.0				
TU-SM8UFO65ZT	M8X1.25 ISO	4.5	6.5	21.0	14.0	1.5	11.0	11.0
TU-SM10UFO45ZT	M10X1.5 ISO	1.7	4.5	21.0				
TU-SM10UFO65ZT	M10X1.5 ISO	4.5	6.5	23.0	15.4	1.5	12.4	12.5
TU-SM12UFO45ZT	M12X1.75 ISO	2.0	4.5	26.0				
TU-SM12UFO75ZT	M12X1.75 ISO	4.5	7.5	29.0	19.0	1.8	16.0	16.0

## PART NUMBERING SYSTEM

UPO Specifications	Part Number
<b>Material:</b> Steel QST 34-3 Stainless Steel 304 Cu Stainless Steel 316 Cu Aluminum ALMG 2.5	Example: TU-SM5UPO30ZT
Product Style: Metric	S
Material: S-Steel	M5
A-Aluminum	UP
SS-304 Stainless Steel	Thread Size
*316-316 Stainless Steel	Product Type
	O - Open End
	X - Closed End
	30
	Grip Range
	ZT
	Zinktop (Clear)

UFO Specifications	Part Number
<b>Material:</b> Steel QST 34-3 Stainless Steel 304 Cu Aluminum ALMG 2.5	Example: TU-SM5UFO35ZT
Product Style: Metric	S
Material: S-Steel	M5
A-Aluminum	UF
SS-304 Stainless Steel	Thread Size
*316-316 Stainless Steel	Product Type
	O - Open End
	X - Closed End
	35
	Grip range
	ZT
	Zinktop (Clear)

RoHs Compliant Finish:	Special finish or material available upon request
Zinktop (Clear), 96 w / 480 r	A-Aluminum
	SS-304 Stainless Steel
	Countersunk Head
	Metric Body

\*316 Stainless Steel has extra corrosion resistance and can be used in the medical, chemical and food industries. Grip Range can be affected by parent material and hole size. Sherex recommends trial installations to determine the proper grip range for the application. Closed End sizes available: M4, M5, M6, and M8. Also available with imperial threads - minimum order quantity is 25,000 pieces if not in stock. Contact Sherex for test data. Mating material holes must be smaller than flange diameter.

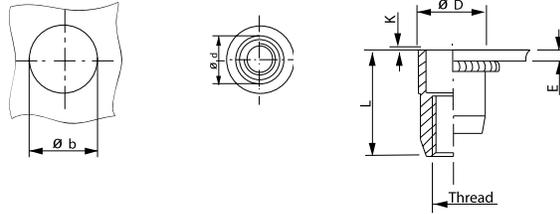
### INSTALLATION TOOLING

UPO and UFO Series can be installed with our Hand Tools and Hydro-Pneumatic Tools. For additional tooling information see pages 37-42.

All Parts have been manufactured by: **DEJOND**  
TUBTARA® - A DEJOND PRODUCT

Sherex Fastening Solutions • 866-474-3739 • www.sherex.com • info@sherex.com

# UKO SMALL FLANGE ROUND METRIC SERIES



**UKO  
SERIES**



- The UKO inch series has a smaller flange that gives a near flush installation.
- Metric body and metric threads

## UKO UNIFIED THREAD (UNIT - INCHES)

Part Number (304 Stainless Steel)	Thread Size	Grip Range (E)		L	D	K	Diameter-Inch (d)	Diameter-Metric (d)	Hole Size - Inch (b <sup>+.004</sup> )	Hole Size - Metric (b <sup>+0.1</sup> )
		Min.	Max.							
TU-SS1032UKO30	10-32 UNF	.020	.118	.472	.295	.020	.276	7.0	.276	7.0
TU-SS2520UKO30	1/4-20 UNC	.020	.118	.571	.374	.020	.354	9.0	.354	9.0
TU-SS3118UKO30	5/16-18 UNC	.020	.118	.630	.453	.020	.433	11.0	.433	11.0

## METRIC THREAD (UNIT - MILLIMETERS)

Part Number Steel	Thread Size	Grip Range (E)		OL ± 0.35	D +0.3/-0.15	K +0.3/-0.05	d -0.02/-0.15	Hole Size (b+0.1)
		Min.	Max.					
TU-SM4UKO30ZT	M4X0.7 ISO	0.5	3.0	10.75	6.5	0.5	6.0	6.0
TU-SM5UKO30ZT	M5X0.8 ISO	0.5	3.0	12.0	7.5	0.5	7.0	7.0
TU-SM5UKO55ZT	M5X0.8 ISO	3.0	5.5	15.0				
TU-SM6UKO30ZT	M6X1.0 ISO	0.5	3.0	14.5	9.5	0.5	9.0	9.0
TU-SM6UKO55ZT	M6X1.0 ISO	3.0	5.5	16.5				
TU-SM8UKO30ZT	M8X1.25 ISO	0.5	3.0	16.0	11.5	0.5	11.0	11.0
TU-SM8UKO55ZT	M8X1.25 ISO	3.0	5.5	18.5				
TU-SM10UKO35ZT	M10X1.5 ISO	0.8	3.5	19.5	12.9	0.5	12.4	12.5

## PART NUMBERING SYSTEM

UKO Specifications	Part Number						
<b>Material:</b>	Example: TU-SM5UKO30ZT						
Steel QST 34-3	TU	S	M5	UK	O	30	ZT
Stainless Steel 304 Cu	Product Style:	Material	Thread Size	Product Type	O-Open End	Grip range	Zinktop (Clear)
Stainless Steel 316 Cu	Metric	S-Steel		Smooth Shank	X-Closed		
Aluminum ALMG 2.5		A-Aluminum		Small Flange, Round	End		
		SS-304 Stainless Steel		Body			
<b>RoHs Compliant Finish:</b>		*316-316 Stainless Steel		Metric Body			
Zinktop (Clear), 96 w / 480 r							Special finish or material available upon request

\*316 Stainless Steel has extra corrosion resistance and can be used in the medical, chemical and food industries.

Grip Range can be affected by parent material and hole size. Sherex recommends trial installations to determine the proper grip range for the application. Closed End sizes available: M4, M5, M6, M8.

Also available with imperial threads - minimum order quantity is 25,000 pieces if not in stock.

Contact Sherex for test data.

Mating material holes must be smaller than flange diameter.

### INSTALLATION TOOLING

UKO Series can be installed with our Hand Tools and Hydro-Pneumatic Tools. For additional tooling information see pages 37-42.

All Parts have been manufactured by DEJOND

TUBTARA®- A DEJOND PRODUCT



Available with knurled shank for increased performance (KN Series).

# UPO RS LARGE FLANGE AND UFO RS COUNTERSUNK HEAD KNURLED METRIC SERIES

## UPO RS/ UFO RS SERIES



- The UPO RS series has a large flange that provides increased strength and better containment of round or oversized holes.

- Unique knurling increases spin out resistance in soft materials.

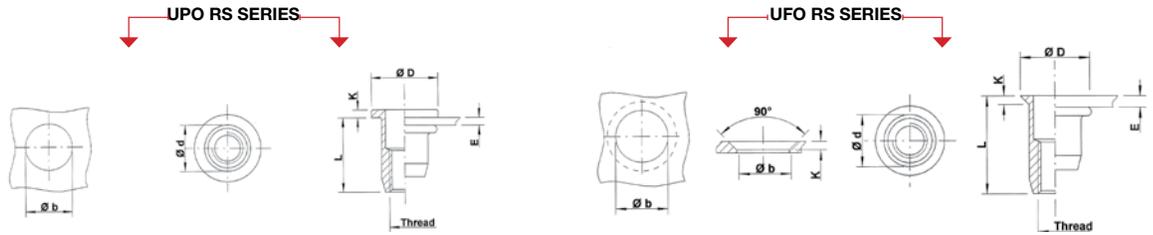
- Metric body and metric threads



- The UFO RS has a countersunk head style for flush installations.

- Unique knurling increases spin out resistance.

- Metric body and metric threads



### UPO RS METRIC THREAD (UNIT - MILLIMETERS)

Part Number Steel	Thread Size	Grip Range (E)		L ± 0.35	D ± 0.35	K ± 0.15	d -0.02/-0.15	Hole Size (b+0.1)
		Min.	Max.					
TU-SM4UPO30RZT	M4X0.7 ISO	0.5	3.0	10.75	10.0	0.75	6.3	6.4
TU-SM4UPO45RZT	M4X0.7 ISO	3.0	4.5	12.25				
TU-SM5UPO30RZT	M5X0.8 ISO	0.5	3.0	12.0	11.0	1.0	7.3	7.4
TU-SM5UPO55RZT	M5X0.8 ISO	3.0	5.5	15.0				
TU-SM6UPO30RZT	M6X1.0 ISO	0.5	3.0	14.5	13.0	1.5	9.3	9.4
TU-SM6UPO55RZT	M6X1.0 ISO	3.0	5.5	16.5				
TU-SM8UPO30RZT	M8X1.25 ISO	0.5	3.0	16.0	16.0	1.5	11.4	11.5
TU-SM8UPO55RZT	M8X1.25 ISO	3.0	5.5	18.5				
TU-SM10UPO35RZT	M10X1.5 ISO	0.8	3.5	19.75	18.5	2.25	12.9	13.0
TU-SM10UPO60RZT	M10X1.5 ISO	3.5	6.0	22.75				

### UFO RS METRIC THREAD (UNIT - MILLIMETERS)

Part Number Steel	Thread Size	Grip Range (E)		L ± 0.35	D +0.00/-0.5	K +0.3/-0.05	d -0.02/-0.15	Hole Size (b+0.1)
		Min.	Max.					
TU-SM4UFO35RZT	M4X0.7 ISO	1.7	3.5	11.5	9.0	1.5	6.3	6.4
TU-SM4UFO50RZT	M4X0.7 ISO	3.5	5.0	13.0				
TU-SM5UFO40RZT	M5X0.8 ISO	1.7	4.0	13.0	10.0	1.5	7.3	7.4
TU-SM5UFO65RZT	M5X0.8 ISO	4.0	6.5	16.0				
TU-SM6UFO45RZT	M6X1.0 ISO	1.7	4.5	17.0	12.0	1.5	9.3	9.4
TU-SM6UFO65RZT	M6X1.0 ISO	4.5	6.5	19.0				
TU-SM8UFO45RZT	M8X1.25 ISO	1.7	4.5	19.0	14.0	1.5	11.4	11.5
TU-SM8UFO65RZT	M8X1.25 ISO	4.5	6.5	21.0				
TU-SM10UFO45RZT	M10X1.5 ISO	1.7	4.5	21.0	15.4	1.5	12.9	13.0
TU-SM10UFO65RZT	M10X1.5 ISO	4.5	6.5	23.0				

### PART NUMBERING SYSTEM

#### UPO RS/UFO RS Specifications

Part Number Example: TU-SM5UPO30RZT

#### Material:

Steel QST 34-3

TU S M5 UP O 30 R ZT  
 Product Style: Material Thread Size Product Type O-Open End Grip Ribbed Zinktop (Clear)  
 Metric S-Steel Large Flange, Flat Head Metric Body

#### RoHs Compliant Finish:

Zinktop (Clear), 96 w / 480 r

#### Part Number

Example: TU-SM5UFO40RZT

TU S M5 UF O 30 R ZT  
 Product Style: Material Thread Size Product Type O-Open End Grip Ribbed Zinktop (Clear)  
 Metric S-Steel Smooth Shank Countersunk Head Metric Body

Special finish or material available upon request

Grip Range can be affected by parent material and hole size.

Sherex recommends trial installations to determine the proper grip range for the application.

Also available with imperial threads - minimum order quantity is 25,000 pieces if not in stock.

Contact Sherex for test data.

#### INSTALLATION TOOLING

UPO RS/UFO RS Series can be installed with our Hand Tools and Hydro-Pneumatic Tools.

For additional tooling information see pages 37-42.

All Parts have been manufactured by:



TUBTARA® - A DEJOND PRODUCT

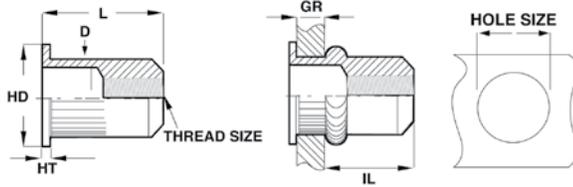
Sherex rivet nuts are compatible with the following hardware:

**GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8**

Please contact Sherex when using other grade fasteners.

Sherex Fastening Solutions • 866-474-3739 • www.sherex.com • info@sherex.com

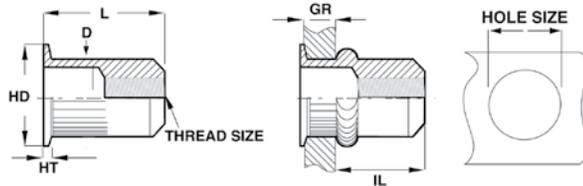
# CLM LARGE FLANGE AND CKM SMALL FLANGE KNURLED METRIC SERIES



**CLM/  
CKM  
SERIES**

## CLM METRIC THREAD (UNIT - MILLIMETERS)

Part Number Metric - Steel	Thread Size	Grip Range (E)		L Nom.	HD Min. Max.		HT ±.13	D Max.	IL Ref.	Hole Size +0.10/- .000
		Min.	Max.		Min.	Max.				
CLM2-470-3.0	M4X0.7 ISO	0.25	3.00	11.5	8.62	9.38	0.75	5.95	7.10	6.00
CLM2-580-3.0	M5X0.8 ISO	0.25	3.00	13.0	9.62	10.38	1.00	6.95	7.90	7.00
CLM2-610-3.0	M6X1.0 ISO	0.50	3.00	16.0	12.62	13.38	1.50	8.95	9.40	9.00
CLM2-8125-3.0	M8X1.25 ISO	0.50	3.00	17.5	15.62	16.38	1.50	10.95	11.00	11.00
CLM2-1015-3.5	M10X1.5 ISO	0.50	3.50	22.0	18.12	18.88	2.25	12.95	14.50	13.00



## CKM METRIC THREAD (UNIT - MILLIMETERS)

Part Number Metric - Steel	Thread Size	Grip Range (E)		L Nom.	HD Min. Max.		HT ±.13	D Max.	IL Ref.	Hole Size +0.10/- .000
		Min.	Max.		Min.	Max.				
CKM2-470-3.0	M4X0.7 ISO	0.25	3.00	11.3	6.70	7.20	0.46	5.95	7.10	6.00
CKM2-580-3.0	M5X0.8 ISO	0.25	3.00	12.7	7.70	8.20	0.46	6.95	7.90	7.00
CKM2-610-3.0	M6X1.0 ISO	0.50	3.00	15.3	9.70	10.20	0.50	8.95	9.40	9.00
CKM2-8125-3.0	M8X1.25 ISO	0.50	3.00	17.3	11.62	12.38	0.63	10.95	11.00	11.00
CKM2-1015-3.5	M10X1.5 ISO	0.50	3.50	20.4	13.62	14.38	0.80	12.95	14.50	13.00

◆ Non-Standard Part: Minimum order quantity required after depletion of stock. Please contact Sherex for current availability.

## PART NUMBERING SYSTEM

### CLM/CKM Specifications

#### Material:

Steel 1008/1010  
Aluminum 5056

#### RoHS Compliant Finishes:

Zinc Plated-Yellow Trivalent Chromate  
per Sherex SFS-01-001, SC2

Zinc Plated-Clear Trivalent Chromate  
per Sherex SFS-01-001

### Part Number

Example: CLM2-610-3.0

CLM	2	610	3.0	( )
Product Style	Material	Thread Size	Grip Range	Empty-Open End
Large Flange	2-Steel			B-Closed End
Knurled Body	3-Aluminum			T-Clear Trivalent
Metric Body				
CKM	2	610	3.0	( )
Product Style	Material	Thread Size	Grip Range	Empty-Open End
Small Flange	2-Steel			B-Closed End
Knurled Body	3-Aluminum			T-Clear Trivalent
Metric Body				

Special finish or material available upon request

Grip range can be affected by parent material and hole size. Sherex recommends trial installations to determine the proper grip range for the application.

Contact Sherex for details.

CLM & CKM style rivet nut specials available upon request.

Contact Sherex for test data.

Mating material holes must be smaller than flange diameter.

### INSTALLATION TOOLING

CLM/CKM Series can be installed with our Hand Tools and Hydro-Pneumatic Tools.

For additional tooling information see pages 37-42.

Sherex rivet nuts are compatible with the following hardware:

**GRADE 2, GRADE 5, CLASS 8.8 and CLASS 9.8**

Please contact Sherex when using other grade fasteners.



- The CLM series is the metric body version of the CAL series.

- Metric body and metric threads



- The CKM series is the metric body version of the CAK series.

- Metric body and metric threads

## RIVET NUT STUDS



A Rivet Nut Stud is a 2 piece fastener combining a rivet nut and a screw, ideal for thin sheet metal applications with blind installation requirements. Sherex Rivet Nuts are available in a variety of sizes, styles, materials, and finishes. Contact us with your thread size, length, and installation material thickness requirements.

### FEATURES AND BENEFITS

- Simple, blind installation
- Reduces processing cost of weld studs
- Eliminates risk of weld spatter and material distortion
- Eliminates cost of post installation paint process
- Can be used as a hanging point or centering pin
- Great for use in wire harnessing

### PRODUCT EXAMPLES

#### Wedge Head Stud



This M6 stud was developed for wire harnessing on a truck frame. The design incorporates a wedgehead feature for increased spin out resistance, and a MAThread® screw for reduced cross thread risk during assembly.

#### Full Hex Stud



This M12 Full Hex stud was developed as a replacement for a weld stud in an agricultural feeder.

### INSTALLATION

Sherex Rivet Nut studs can be installed with specially designed rivet nut stud headsets using our SSG and Flex series tools.



\* MAThread® is a registered trademark of MAThread Inc.

Sherex's Application and Design Engineers can create custom, application-specific solutions. We work with our customers to understand the application requirements and manufacturing scenario, and design high performance lowest-total-installed cost solutions. We are available for line walks and to collaborate with your engineering and manufacturing teams. Contact us today to learn more. Here are some examples of custom products created by Sherex:



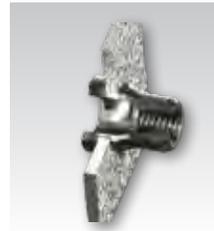
This Dejong part was designed with a "compression limiter-like" collar on the flat head, used to act as a spacer between two assembled components.



Was developed to attach a molded plastic cover to a base unit. If the rivet nut has an outside thread to accept a nut, the plastic cover could be altered and the external thread of the rivet nut could be used for the attachment point.



Designed with an extra large head to act like a spacer.



Sherex developed this part to add increased spin out resistance in soft materials. Special knurl design provides increased engagement with the base material. Small flange provided near flush installation.



Special small grip part designed for materials thinner than .030 inches.



## SPECIALTY FASTENER SOLUTIONS



A replacement for a more expensive, machined component that would periodically spin-out. The customer required a low-profile insert with high spin-out resistance. Sherex developed this part has a half-hex body to increase spin performance, 0.145" max installed length, and higher strength threads to withstand installation forces.



Sherex developed a high strength rivet nut that is compatible with class 10.9 bolts. This design incorporates a full hex body for increased spin out resistance. It also ensures the bolt is the failure mode, which is a best practice when working with structural applications.



Special head and wedge design to meet spin-out requirements in an application.



Sherex shouldered rivet nut was developed for attachments in plastics. The shoulder design provides a positive metal to metal installation redirecting the load of the joint through the rivet nut shoulder. This minimizes the plastic from creeping during assembly and maintains joint clamp load.



M6 prebulbed slotted body design incorporated under head wedges to increase the spin out resistance in soft plastic.



5/16-18 prebulbed slotted body style with a trimmed head. This head feature allowed installation in the field by the consumer or assembler when used with a special low cost installation tool. Feature also allows head to sit flush within a slot to prevent spin out.



Closed end design with o-ring and o-ring recess under head provides the ultimate sealing solution for attachment points in applications with chemicals and other fluids that breakdown other sealing compounds.



We are committed to providing comprehensive solutions that include the right-fit fastener and the right-fit installation tool at the lowest-total-installed-cost. In addition to our standard and speciality fasteners, we offer the following installation system options:

### RIVET NUT HAND TOOLS

- Best for small production work and prototyping
- Available in multiple sizes and styles



### PNEUMATIC TOOLS (SPIN-SPIN)

- Powered by air pressure
- Available in pistol grip, right angle, and inline styles
- Feature quick change nose piece for headset replacement



### HYDRO-PNEUMATIC TOOLS (SPIN-PULL)

- Powered by air pressure and hydraulic fluid
- Best Practices tools for installing all sizes of rivet nuts



### PROCESS MONITORING

- Ensure perfect installations
- Configured to evaluate the installation of every rivet nut that is installed in the application



### AUTOMATION

- Best for large production environments
- Contact us to discuss your application requirements



### Tool Service and Repair

Please contact one of our authorized repair partners for tool service and repair:

**Alcorn Industries**  
5412 Rock Hampton Court  
Indianapolis, IN 46268  
Alcornindustrial.com  
Sales@alcornindustrial.com  
1-800-317-4775

**Three Day Tool Service**  
6767 8th Street  
Buena Park, CA 90620  
Threedaytool.com  
sales@threedaytool.com  
714-521-9180

# RIVET NUT HAND TOOLS

## HAND TOOLS



## LHF TOOLS

STANDARD		
Thread Size	Mandrel	Anvil
6-32	LHFM 0632	LHFA 0632
8-32	LHFM 0832	LHFA 0832
10-24	LHFM 1024	LHFA 10
10-32	LHFM 1032	LHFA 10
1/4-20	LHFM 2520	LHFA 25
1/4-28	LHFM 2528	LHFA 25
M4	LHFM M4	LHFA M4
M5	LHFM M5	LHFA M5
M6	LHFM M6	LHFA M6
M8	LHFM M8	LHFA M8
M10	LHFM M10	LHFA M10

RIV-FLOAT®		
Thread Size	Mandrel	Anvil
6-32	LHFM 2528	LHFA 25
8-32	LHFM 2528	LHFA 25
10-32	LHFM 1032	LHFA 10RF
1/4-20	LHFM 2520	LHFA 25RF
M4	LHFM 2528	LHFA 25
M5	LHFM M5	LHFA M5RF
M6	LHFM M6	LHFA M6RF

RIV-FLOAT®-SHORT		
Thread Size	Mandrel	Anvil
8-32	LHFM 0832	LHFM 0832RFS
10-32	LHFM 1032	LHFM 1032RFS
M4	LHFM M4	LHFM M4RFS
M5	LHFM M5	LHFM M5RFS

LHF 202 (Imperial Tool) Includes: 8-32, 10-24, and 1/4-20 head sets

LHF 202M (Metric Tool) Includes: M4, M5, and M6 head sets

This hand tool was designed to install any rivet nut ranging in size from 6-32 to 1/4-28 (M4-M10), and is ideal for small production work and prototyping.

## DLHT AND DRHT TOOLS (formerly M4 and M5 Hand Tool)



DLHT



DRHT

STANDARD			
Thread Size	Head Sets (Includes Anvil & Mandrel)	Anvil	Mandrel
6-32	MHS-0632	MA-0632	M-0632
8-32	MHS-0832	MA-0832	M-0832
10-24	MHS-1024	MA-1024	M-1024
10-32	MHS-1032	MA-1032	M-1032
1/4-20	MHS-2520	MA-2520	M-2520
1/4-28	MHS-2528	MA-2528	M-2528
5/16-18	MHS-3118	MA-3118	M-3118
3/8-16	MHS-3716	MA-3716	M-3716
1/2-13	MHS-5013	MA-5013	M-5013
M4	MHS-M4	MA-M4	M-M4
M5	MHS-M5	MA-M5	M-M5
M6	MHS-M6	MA-M6	M-M6
M8	MHS-M8	MA-M8	M-M8
M10	MHS-M10	MA-M10	M-M10
M12	MHS-M12	MA-M12	M-M12

RIV-FLOAT®			
Thread Size	Head Sets (Includes Anvil & Mandrel)	Anvil	Mandrel
8-32	MHS-0832RF	MA-2520/2528	M-2528
10-32	MHS-1032RF	MA-1032RF	M-1032
1/4-20	MHS-2520RF	MA-2520/2528RF	M-2520
M4	MHS-M4RF	MA-2520/2528	M-2528
M5	MHS-M5RF	MA-M5RF	M-M5
M6	MHS-M6RF	MA-M6RF	M-M6

RIV-FLOAT®-SHORT			
Thread Size	Head Sets (Includes Anvil & Mandrel)	Anvil	Mandrel
8-32	MHS-0832RF	MA-0832RFS	M-0832
10-24	MHS-1024RFS	MA-10RFS	M-1024
10-32	MHS-1032RF	MA-10RFS	M-1032
M4	MHS-M4RFS	MA-M4RFS	M-M4
M5	MHS-M5RFS	MA-M5RFS	M-M5

DLHT (Imperial Tool) Includes: 1/4-20, 5/16-18, 3/8-16, and 1/2-13 head sets.

DLHT (Metric Tool) Includes: M6, M8, M10, and M12 head sets

DRHT (Imperial Tool) Includes: 10-32, 1/4-20, 5/16-18, and 3/8-16 head sets.

DRHT (Metric Tool) Includes: M5, M6, M8, and M10 head sets

## RNHTS TOOL

STANDARD	
Part Number	Thread
RNHT-0632	6-32
RNHT-0832	8-32
RNHT-1024	10-24
RNHT-1032	10-32
RNHT-2520	1/4-20
RNHT-2528	1/4-28
RNHT-3118	5/16-18
RNHT-3124	5/16-24
RNHT-3716	3/8-16
RNHT-3724	3/8-24
RNHT-4320	7/16-20
RNHT-M3	M3
RNHT-M4	M4
RNHT-M5	M5
RNHT-M6	M6
RNHT-M8	M8
RNHT-M10	M10

RIV-FLOAT®	
Thread Size	Part Number
6-32	RNHT-2528RF
8-32	RNHT-2528RF
10-32	RNHT-1032RF
1/4-20	RNHT-2520RF
M4	RNHT-2528RF
M5	RNHT-M5RF
M6	RNHT-M6RF

RIV-FLOAT®-SHORT	
Thread Size	Part Number
M4	RNHT-M4RFS
M5	RNHT-M5RFS



# RIVET NUT PNEUMATIC SPIN - SPIN TOOLS

Designed for installing steel or aluminum CAL, CAK, CAH, CAO, CFT/CAT\*, CFW/CAW\* and CPB rivet nut inserts. Features quick change nose piece for head set replacement without tools.

\*Can install stainless steel.

**RIVET NUT  
PNEUMATIC  
SPIN - SPIN  
TOOLS**

**SSG-800  
PISTOL GRIP STYLE**



**SSG-910  
RIGHT ANGLE STYLE**



**SSG-900  
INLINE STYLE**



Part Number	Thread Size	Tool RPM		Air Pressure (Dynamic) PSI	Weight LBS	Air Inlet NPT	Air Use CFM	Minimum Hose Size IN	Complete Head Assembly	Hex Driver	Mandrel	Bearing Set	Complete Head Assembly Rivet Nut Stud
		801&901	911										
SSG - 801, 901 & 911	4-40	3000	2200	35-45	3.0	1/4"	5	3/8	HS-0440	HD-4	M-0440-150	BS-4	
	6-32	3000	2200	70-80	3.0	1/4"	5	3/8	HS-0632	HD-6	M-0632-150	BS-6	HSS-0632
	8-32	3000	2200	70-90	3.0	1/4"	5	3/8	HS-0832	HD-8	M-0832-150	BS-8	
	M3	3000	2200	35-45	3.0	1/4"	5	3/8	HS-M3	HD-M3	M-M3-30	BS-M3	
	M4	3000	2200	35-45	3.0	1/4"	5	3/8	HS-M4	HD-M4	M-M4-35	BS-M4	
		<b>802&amp;902</b>	<b>912</b>										
SSG - 802, 902 & 912	10-24	1500	1100	60-80	3.0	1/4"	5	3/8	HS-1024	HD-10	M-1024-175	BS-10	
	10-32	1500	1100	60-80	3.0	1/4"	5	3/8	HS-1032	HD-10	M-1032-175	BS-10	HSS-1032
	1/4-20	1500	1100	70-90	3.0	1/4"	5	3/8	HS-2520	HD-25	M-2520-175	BS-25	HSS-2520
	1/4-28	1500	1100	70-90	3.0	1/4"	5	3/8	HS-2528	HD-25	M-2528-200	BS-25	
	M5	1500	1100	60-80	3.0	1/4"	5	3/8	HS-M5	HD-M5	M-M5-40	BS-M5	HSS-M5
	M6	1500	1100	70-90	3.0	1/4"	5	3/8	HS-M6	HD-M6	M-M6-40	BS-M6	HSS-M6
		<b>803&amp;903</b>	<b>913</b>										
SSG - 803, 903 & 913	5/16-18	600	400	90-110	3.0	1/4"	5	3/8	HS-3118	HD-31	M-3118-175	BS-31	
	5/16-24	600	400	90-110	3.0	1/4"	5	3/8	HS-3124	HD-31	M-3124-175	BS-31	
	3/8-16	600	400	90-110	3.0	1/4"	5	3/8	HS-3716	HD-37	M-3716-200	BS-37	HSS-3716
	3/8-24	600	400	90-110	3.0	1/4"	5	3/8	HS-3724	HD-37	M-3724-200	BS-37	
	M8	600	400	90-110	3.0	1/4"	5	3/8	HS-M8	HD-M8	M-M8-40	BS-M8	HSS-M8
SSG - 804	5/16-18	400	400	90-110	3.0	1/4"	5	3/8	HS-3118	HD-31	M-3118-175	BS-31	
	5/16-24	400	400	90-110	3.0	1/4"	5	3/8	HS-3124	HD-31	M-3124-175	BS-31	
	3/8-16	400	400	90-110	3.0	1/4"	5	3/8	HS-3716	HD-37	M-3716-200	BS-37	
	3/8-24	400	400	90-110	3.0	1/4"	5	3/8	HS-3724	HD-37	M-3724-200	BS-37	
	M8	400	400	90-110	3.0	1/4"	5	3/8	HS-M8	HD-M8	M-M8-40	BS-M8	HSS-M8
SSG-808	1/2-13	275	275	75-120	4.0	1/4"	5	3/8	HS-5013	HD-50	M-5013-250	BS-50	
	1/2-20	275	275	75-120	4.0	1/4"	5	3/8	HS-5020	HD-50	M-5020-225	BS-50	
	M12	275	275	75-120	4.0	1/4"	5	3/8	HS-M12	HD-M12	M-M12-60	BS-M12	

\*Contact Sherex for Prebulbed (CPB) Mandrel part numbers and for SSG replacement part numbers.

Contact Sherex for SSG Replacement part numbers.

\*Weight for 800 series only.

High temperature grease should be used to lubricate the bearing set. Contact Sherex for availability.

Sherex recommends the use of an air regulator, air filter, and lubrication system to reduce the wear of internal components. It is also recommended to lubricate the mandrel to increase performance. Mandrels should be replaced when excessive thread wear occurs with a high quality socket head cap screw.

# RIVET NUT HYDRO-PNEUMATIC FLEX-5 TOOL

## FLEX-5 TOOL

### One Tool With Pull to Pressure & Pull to Stroke Capabilities



**FLEX-5P:** The Sherex FLEX-5P utilizes a Pull to Pressure method of installation. This method allows the same insert type to be installed into varying material thicknesses (within the Grip Range of the part) without any adjustment to the tool.



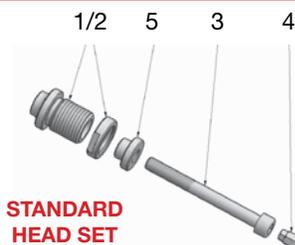
**FLEX-5S:** The Sherex FLEX-5S utilizes a Pull to Stroke method of installation. This method allows the insert to be installed to the same distance each time. This is helpful when installing into soft materials (prevents crushing of the base material) or when a specific Installed Length is required.

View our FLEX-5 Tool Demonstrations at [www.sherex.com](http://www.sherex.com)

#### FEATURES AND BENEFITS

##### Change over kit for converting between pull to pressure and pull to stroke

- Installs Rivet Nuts from: M3-M10 and 4-40-3/8-16.
- Push to start nose piece to spin on fastener.
- Single stage trigger.
- Automatic reverse with manual reverse bypass.
- Quick change mandrel design.
- Light weight (4.2 lbs).
- Can be suspended from a balancer.
- Socket head cap screw mandrel.
- Installs Rivet Nut Studs from M5-M8 and 10-24-5/16-24.
- Available in an in-line version.
- Split tool available (remote booster for lighter tool).
- Upgradeable to process monitoring.
- 5,000 lbs (22 kN) pulling force at 90 psi.
- 7 mm (0.276 in.) of available stroke.
- 2-3 second cycle time.
- All aluminum design for improved durability.



#### HEAD SETS FOR STANDARD RIVET NUTS

Thread Size	Complete Headset	Anvil (1 + 2)	Mandrel (3)	Hex Driver (4)	Reducing sleeve (5)
M 3	FL5 - HS - M3	FL5 - HS - 00903	M -M3 -40	FL5 - HS - 01003	FL5 - HS - 09103
M 4	FL5 - HS - M4	FL5 - HS - 00904	M -M4 - 55	FL5 - HS - 01004	FL5 - HS - 09104
M 5	FL5 - HS - M5	FL5 - HS - 00905	M -M5 - 65	FL5 - HS - 01005	FL5 - HS - 09105
M 6	FL5 - HS - M6	FL5 - HS - 00906	M -M6 - 65	FL5 - HS - 01006	FL5 - HS - 09106
M 8	FL5 - HS - M8	FL5 - HS - 00908	M -M8 - 65	FL5 - HS - 01008	FL5 - HS - 09108
M 10	FL5 - HS - M10	FL5 - HS - 00910	M -M10 - 65	FL5 - HS - 01010	n/a
4 - 40 UNC	FL5 - HS - 0440	FL5 - HS - 00854	M -0440 - 175	FL5 - HS - 00754	FL5 - HS - 09154
6 -32 UNC	FL5 - HS - 0632	FL5 - HS - 00856	M -0632 - 175	FL5 - HS - 00756	FL5 - HS - 09156
8 -32 UNC	FL5 - HS - 0832	FL5 - HS - 00858	M -0832 - 175	FL5 - HS - 00758	FL5 - HS - 09158
10-24 UNC	FL5 - HS - 1024	FL5 - HS - 00850	M -1024 - 250	FL5 - HS - 00750	FL5 - HS - 09150
10-32 UNF	FL5 - HS - 1032	FL5 - HS - 00850	M -1032 - 250	FL5 - HS - 00750	FL5 - HS - 09150
1/4-20 UNC	FL5 - HS - 2520	FL5 - HS - 00848	M -2520 - 250	FL5 - HS - 00748	FL5 - HS - 09148
1/4-28 UNF	FL5 - HS - 2528	FL5 - HS - 00848	M -2528 - 250	FL5 - HS - 00748	FL5 - HS - 09148
5/16-18 UNC	FL5 - HS - 3118	FL5 - HS - 00840	M -3118 - 250	FL5 - HS - 00740	FL5 - HS - 09140
5/16-24 UNF	FL5 - HS - 3124	FL5 - HS - 00840	M -3124 - 250	FL5 - HS - 00740	FL5 - HS - 09140
3/8-16 UNC	FL5 - HS - 3716	FL5 - HS - 00842	M -3716 - 250	FL5 - HS - 00742	n/a
3/8-24 UNF	FL5 - HS - 3724	FL5 - HS - 00842	M -3724 - 250	FL5 - HS - 00742	n/a

# RIVET NUT HYDRO-PNEUMATIC FLEX-5 TOOL & MS 100 TOOL

## HEAD SETS FOR RIVET NUT STUDS

Thread Size	Complete Headset	Anvil (1 + 2)	Mandrel (3)	Hex Driver (4)	Reducing sleeve (5)
M5	FL5 - HS - M5S	FL5 - HS - S0905	FL5 - HS - 0S005	FL5 - HS - 01010	n/a
M6	FL5 - HS - M6S	FL5 - HS - S0906	FL5 - HS - 0S006	FL5 - HS - 01010	n/a
M8*	FL5 - HS - M8S	FL5 - HS - S0908	FL5 - HS - 0S008	FL5 - HS - 01010	n/a
10-24 UNC	FL5 - HS - 1024S	FL5 - HS - S0850	FL5 - HS - S1024	FL5 - HS - 01010	n/a
10-32 UNF	FL5 - HS - 1032S	FL5 - HS - S0850	FL5 - HS - S1032	FL5 - HS - 01010	n/a
1/4-20 UNC	FL5 - HS - 2520S	FL5 - HS - S0848	FL5 - HS - S2520	FL5 - HS - 01010	n/a
1/4-28 UNF	FL5 - HS - 2528S	FL5 - HS - S0848	FL5 - HS - S2528	FL5 - HS - 01010	n/a
5/16-18 UNC *	FL5 - HS - 3118S	FL5 - HS - S0840	FL5 - HS - S3118	FL5 - HS - 01010	n/a
5/16-24 UNF *	FL5 - HS - 3124S	FL5 - HS - S0840	FL5 - HS - S3124	FL5 - HS - 01010	n/a

\*Head sets include p/n FL5-HS-12S92 adaptor nut

## HEAD SETS FOR RIV-FLOAT®

Thread Size	Complete Headset	Anvil (1 + 2)	Mandrel (3)	Hex Driver (4)	Reducing sleeve (5)
M4	FL5-HS-2528R	FL5-HS-00848	M-2528-225	FL5-HS-00748	FL5-HS-09148
M5	FL5-HS-M5R	FL5-HS-R0995	M-M5-65	FL5-HS-01005	FL5-HS-09105
M6	FL5-HS-M6R	FL5-HS-R0996	M-M6-65	FL5-HS-01006	FL5-HS-09106
4-40 UNC	FL5-HS-2528R	FL5-HS-00848	M-2528-225	FL5-HS-00748	FL5-HS-09148
6-32 UNC	FL5-HS-2528R	FL5-HS-00848	M-2528-225	FL5-HS-00748	FL5-HS-09148
8-32 UNC	FL5-HS-2528R	FL5-HS-00848	M-2528-225	FL5-HS-00748	FL5-HS-09148
10-24 UNC	FL5-HS-1024R	FL5-HS-R0950	M-1024-250	FL5-HS-00750	FL5-HS-09150
10-32 UNF	FL5-HS-1032R	FL5-HS-R0950	M-1032-250	FL5-HS-00750	FL5-HS-09150
1/4-20 UNC	FL5-HS-2520R	FL5-HS-R0948	M-2520-250	FL5-HS-00748	FL5-HS-09148
1/4-28 UNF	FL5-HS-2528R1	FL5-HS-R0948	M-2528-250	FL5-HS-00748	FL5-HS-09148

## HEAD SETS FOR RIV-FLOAT®-SHORT

Thread Size	Complete Headset	Anvil (1 + 2)	Mandrel (3)	Hex Driver (4)	Reducing sleeve (5)
M4	FL5-HS-M4SR	FL5-HS-SR0994	M-M4-55	FL5-HS-01004	FL5-HS-09104
M5	FL5-HS-M5SR	FL5-HS-SR0995	M-M5-65	FL5-HS-01005	FL5-HS-09105
8-32 UNC	FL5-HS-0832SR	FL5-HS-SR0858	M-0832-150	FL5-HS-00758	FL5-HS-09158
10-24 UNC	FL5-HS-1024SR	FL5-HS-SR0950	M-1024-225	FL5-HS-00750	FL5-HS-09150
10-32 UNF	FL5-HS-1032SR	FL5-HS-SR0950	M-1032-225	FL5-HS-00750	FL5-HS-09150

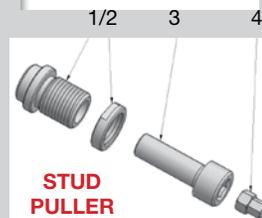
## MS100 RIVET NUT TOOL

MS100		
Thread Size	Mandrel	Anvil
5/16-18	MA-373-3118	MA-369-3118
5/16-24	MA-377-3124	MA-369-3118
3/8-16	MA-374-3716	MA-370-3716
3/8-24	MA-378-3724	MA-370-3716
7/16-14	MA-375-4314	MA-371-4314
7/16-20	MA-301-4320	MA-371-4314
1/2-13	MA-376-5013	MA-372-5013
1/2-20	MA-379-5020	MA-372-5013
M8	MA-308-08MM	MA-318-08MM
M10	MA-310-10MM	MA-320-10MM
M12	MA-312-12MM	MA-322-12MM
M14	MA-314-14MM	MA-324-14MM

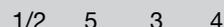
The MS 100 Rivet Nut installation tool installs rivet nuts from 5/16-18 to 1/2-20 and M8 to M14. It also installs 5/16 -18 and M8 Riv-Float®. The MS 100 tool comes with one mandrel and one anvil.

The MS 100 Rivet Nut installation tool should be operated at 80-100 psi. Sherex recommends the use of an air regulator, air filter and lubrication system to reduce the wear of internal components. It is also recommended to lubricate the mandrel to increase performance. Mandrels should be replaced when excessive thread wear occurs.

## FLEX-5 TOOL



STUD PULLER



RIV-FLOAT® HEAD SETS



# RIVET NUT HYDRO-PNEUMATIC FLEX-18 TOOL

## FLEX-18 TOOL



### FEATURES AND BENEFITS

The most powerful tool on the market providing Pull to Pressure and Pull to Stroke installation capabilities.

- Installs Rivet Nuts from M8 to M16 and 5/16-18 to 3/4-10.
- Push to start nose piece to spin on fastener.
- Single stage trigger.
- Automatic reverse with manual reverse bypass.
- Quick change mandrel design.
- Socket head cap screw mandrel for sizes up to M12 and 1/2-20.
- Can be suspended from a balancer.
- **18,000 lbs. (80 kN) of pulling force.**
- **15 mm (.591 in) of available stroke.**
- Upgradeable to process monitoring.
- 2-3 second cycle time.
- Light weight handle (8.0 lbs.).
- All aluminum handle design for improved durability.

### HEAD SETS FOR STANDARD SIZE NOSE CASE

Thread Size	Complete Headset	Anvil	Mandrel	Hex Driver	Adaptor Nut
M8	FL18 - HS -M8	FL18 - HS -00908	M-M8 -65	FL5 - HS -010 08	FL18 - HS -09108
M10	FL18 - HS -M10	FL18 - HS -00910	M-M10-65	FL5 - HS -01010	FL18 - HS -09110
M12	FL18 - HS -M12	FL18 - HS -00912	M-M12-65	FL18 - HS -01012	FL18 - HS -09112
5/16-18 UNC	FL18 - HS -3118	FL18 - HS -00908	M-3118 -250	FL5 - HS -00740	FL18 - HS -09108
5/16-24 UNF	FL18 - HS -3124	FL18 - HS -00908	M-3124 -250	FL5 - HS -00740	FL18 - HS -09108
3/8-16 UNC	FL18 - HS -3716	FL18 - HS -00910	M-3716 -300	FL5 - HS -00742	FL18 - HS -09110
3/8-24 UNF	FL18 - HS -3724	FL18 - HS -00910	M-3724 -300	FL5 - HS -00742	FL18 - HS -09110
1/2-13 UNC	FL18 - HS -5013	FL18 - HS -00950	M-5013 -300	FL18 - HS -00750	FL18 - HS -09150
1/2-20 UNF	FL18 - HS -5020	FL18 - HS -00950	M-5020 -300	FL18 - HS -00750	FL18 - HS -09150

### HEAD SETS FOR LARGE SIZE NOSE CASE

Thread Size	Complete Headset	Anvil	Mandrel
M16	FL18 - HS -M16	FL18 - HS -00916	M-M16-FL 18
5/8-11 UNC	FL18 - HS -6211	FL18 - HS -00962	M-6211 -FL18
3/4-10 UNC	FL18 - HS -7510	FL18 - HS -00975	M-7510 -FL18

View our FLEX-18 tool demonstration at [www.sherex.com](http://www.sherex.com)

Contact Sherex for more information on Process Monitoring Tools.

The Hand Tool Calibration Unit measures the pulling force for **both pneumatic and hydro-pneumatic tools** to ensure the tool is meeting the required setting force to install into the application.

With the ability to measure the pull force of a tool before performing an install, operators are assured the tool is calibrated correctly to make a **perfect install**.



**CALIBRATION  
UNIT**

## FEATURES AND BENEFITS

Improve the quality of your rivet nut installations in real time

- Measures pulling force for spin-spin and spin-pull tools.
- Start measuring tools immediately.
- Displays value and curve when unit detects any load applied from rivet nut hand tools.
- Secondary screen displays data from up to seven previous tests.
- Aggregates average and Maximum pull.
- Interchangeable headsets for sizes M4 / #6-32 through M12 and 1/2"-13.
- Rivet nut stud headsets available for M5 / #8-32 through M8 / 3/8"-16
- Integrated microSD card slot for data storage and transfer.
- Ergonomically designed for use on a work station.
- Optional power bank connected to the unit via USB-Type C.

## Other Benefits Include

- *Schedule tool maintenance*
- *View historical performance*
- *Compare installation methods*
- *Mobile*
- *Installation efficiency*
- *Maintenance reductions*
- *Reduce scrap*
- *Improve tool functionality*



Visit [www.sherex.com/calibration-unit](http://www.sherex.com/calibration-unit)  
for more information and videos on Sherex's Hand Tool Calibration Unit

## TESTING METHODS

### PULL OUT



**Definition:**

- Pull Out occurs when threads are pulled from the rivet nut (ultimate thread strength) or base material is distorted and the entire rivet nut pulls through the base material.

**Causes:**

- Hole size is too large.
- Forces applied to the joint are higher than anticipated.

### SPIN OUT



**Definition:**

- Spin Out is the amount of torque required to make a rivet nut spin in the hole in which it was installed.

**Causes:**

- Bolt cross threads into the rivet nut causing it to spin.
- Excessive corrosion causes bolt to bind in the nut.
- Using a screw with mechanical locking feature that has higher prevailing torque than the spin out of the rivet nut.

### TORQUE OUT



**Definition:**

- Torque force required to strip threads out of the rivet nut.
- This method of testing sandwiches the head of the rivet nut between the non-rotational mating part and parent or base panel.
- Spin Out is not a factor because tightening the bolt on the non-rotating part holds the rivet nut in place and prevents it from spinning.

**Causes:**

- Assembly torque is too high causing thread failure.
- Improper grade of fastener used.

\*Torque can be affected by various factors such as coefficient of friction of the finish, prevailing torque, washers, etc. Sherex recommends you test your application.

### SUGGESTED ASSEMBLY TORQUE



**Definition:**

- Recommended torque for assembling a rivet nut joint with Class 8.8/ Grade 5 hardware.

Contact Sherex should you require Grade 8, Class 10 or higher joint strength.

THREAD SIZE	SUGGESTED ASSEMBLY TORQUE
	INCH LBS. - Nm PLATED SCREW GRADE 5 CLASS 8.8
# 6-32 UNC	12
# 8-32 UNC	22
# 10-24 UNC	32
# 10-32 UNF	36
1/4-20 UNC	75
1/4-28 UNF	75
5/16-18 UNC	156
5/16-24 UNC	156
3/8-16 UNC	276
3/8-24 UNF	276
M4x0.7 ISO	2.5
M5x0.8 ISO	5.0
M6x1.0 ISO	8.6
M8x1.25 ISO	21.0
M10x1.5 ISO	42.0
M12x1.75 ISO	72.0

## COATINGS

Sherex rivet nuts are coated in a variety of electroplated coatings to increase corrosion resistance. Electroplated coatings are metals within a solution applied via an electrical current, and are RoHS, Reach, and ELV compliant, EXCEPT for Cadmium.

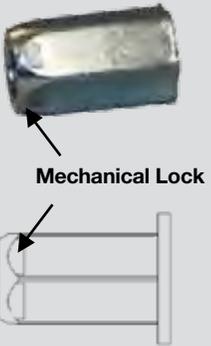
Customer-specific and custom coatings are available on request.

Coating	Description	Salt Spray Test Results (per ASTM B117-16)
 <b>Zinktop Clear</b>	<ul style="list-style-type: none"> <li>• Zinc plated then coated (passivated) with Trivalent Chromate</li> <li>• Standard on Dejong Tubtara®</li> <li>• Color: clear</li> </ul>	<ul style="list-style-type: none"> <li>• 96 hours before white rust</li> <li>• 480 hours before red rust</li> </ul>
 <b>Zinc Nickel</b>	<ul style="list-style-type: none"> <li>• Standard Zinc Nickel</li> <li>• Color: silver (clear) or black</li> </ul>	<ul style="list-style-type: none"> <li>• 120 hours before white rust</li> <li>• 1,000 hours before red rust</li> </ul>
 <b>Trivalent Chromate</b>	<ul style="list-style-type: none"> <li>• Zinc plated then coated (passivated) with Trivalent Chromate</li> <li>• Color: yellow, clear, black</li> </ul>	<ul style="list-style-type: none"> <li>• 96 hours before white rust</li> <li>• 240 hours before red rust</li> </ul>
 <b>Tin</b>	<ul style="list-style-type: none"> <li>• Proprietary</li> <li>• Cadmium replacement when RoHS compliance is needed</li> </ul>	<ul style="list-style-type: none"> <li>• 96 hours before red rust</li> </ul>
 <b>CRE</b>	<ul style="list-style-type: none"> <li>• Proprietary Zinc Nickel offering superior performance to standard</li> <li>• Color: silver or black</li> </ul>	<ul style="list-style-type: none"> <li>• 500 hours before red rust</li> </ul>
 <b>CR</b>	<ul style="list-style-type: none"> <li>• Proprietary Zinc Nickel offering superior performance standard</li> <li>• Color: silver or black</li> </ul>	<ul style="list-style-type: none"> <li>• 1,000 hours before red rust</li> </ul>
 <b>Cadmium Yellow</b>	<ul style="list-style-type: none"> <li>• Compliant to ASTM B766, Class 5, Type II, and SAE AMS-QQ-P-416 Class 3, Type II</li> </ul>	<ul style="list-style-type: none"> <li>• 96 hours before red rust</li> </ul>
 <b>Cadmium Clear</b>	<ul style="list-style-type: none"> <li>• Rivet Nuts (CAW, CAT)</li> <li>• Compliant to SAE AMS-QQ-P-416 Class 3, Type 1 with clear coat</li> </ul>	<ul style="list-style-type: none"> <li>• 72 hours before white rust</li> <li>• 144 hours before red rust</li> </ul>

## SEALANTS

Rivet nut head sealants are an ideal solution when a leak proof joint is required. We recommend using in conjunction with closed end rivet nuts for optimal performance.

Seal	Description	Performance Results	Best Fit Applications
<p><b>Seal2</b></p> 	<ul style="list-style-type: none"> <li>• For standard large flange rivet nuts</li> <li>• Prevents fluid or air from passing through head</li> <li>• Resistant to automotive fluids (oils, fuels, antifreeze)</li> <li>• Ideal replacement for PVC foam</li> </ul>	<ul style="list-style-type: none"> <li>• Withstands temperatures up to 300F (150C)</li> <li>• No leakage up to 160 psi of backside pressure</li> </ul>	<ul style="list-style-type: none"> <li>• Where resistance to automotive fluids is necessary</li> </ul>
<p><b>Plastisol</b></p> 	<ul style="list-style-type: none"> <li>• For standard large flange rivet nuts</li> <li>• PVC particles suspended in plasticizer</li> <li>• Cost effective option for sealing out dirt, dust, and water</li> </ul>	<ul style="list-style-type: none"> <li>• Not recommended in applications where contact with automotive fluids is possible</li> </ul>	<ul style="list-style-type: none"> <li>• General purpose sealing</li> </ul>
<p><b>Silicone</b></p> 	<ul style="list-style-type: none"> <li>• For standard large flange rivet nuts</li> <li>• Compatible with plastics</li> </ul>	<ul style="list-style-type: none"> <li>• Withstands temperatures up to 425F (218C)</li> <li>• Can pass through paint bake for up to 30 minutes with no reduction in sealing performance</li> </ul>	<ul style="list-style-type: none"> <li>• Where part must withstand a finish baking process</li> </ul>
<p><b>Dejond O-Ring Seal</b></p> 	<ul style="list-style-type: none"> <li>• For HX Tubtara® parts</li> <li>• O-ring made of Nitrile Rubber (NBR)</li> <li>• Offset groove for metal to metal contact, providing better spin out resistance</li> </ul>	<ul style="list-style-type: none"> <li>• Watertight up to 145 PSI (per IP68)</li> <li>• Resistant to hydraulic fluids, organic oils, gasoline, kerosene, and water under 175F (80C)</li> </ul>	<ul style="list-style-type: none"> <li>• Marine, automotive, heavy truck, and other harsh environments where a watertight seal is required</li> </ul>

Product	Description	Performance Results	Best Fit Applications
<p><b>Mechanical Lock</b></p>  <p>Mechanical Lock</p>	<ul style="list-style-type: none"> <li>• The final thread of the rivet nut is mechanically deformed. The deformed thread acts as a prevailing torque feature, which resists vibrational loosening.</li> <li>• Available on most rivet nuts series, including Hex Body, Round Body with keyed head, and Round Body with wedge head</li> <li>• Spin-pull tools are required for installation</li> </ul>	<ul style="list-style-type: none"> <li>• Mechanical locks are applied onto rivet nuts to customer specifications, and can be applied to meet IFI, ISO, and NAS prevailing torque specifications. Contact Sherex for more information.</li> </ul>	<ul style="list-style-type: none"> <li>• Where joints are susceptible to vibrational loosening</li> <li>• Where currently using locking patch on a bolt. Our Mechanical Lock feature is a cost-effective alternative.</li> </ul>
<p><b>Locsert®</b></p> 	<ul style="list-style-type: none"> <li>• For standard rivet nuts</li> <li>• Adhesive preapplied under the head</li> <li>• During installation, the adhesive bonds the rivet nut to the base material</li> <li>• Increases spin out performance</li> </ul>	<ul style="list-style-type: none"> <li>• Has been tested to increase spin out performance on average 87%</li> </ul>	<ul style="list-style-type: none"> <li>• Where a round hole is the only option - not able to stamp a hex hole</li> <li>• Increased spin out performance for a round rivet nut</li> </ul>

# SHEREX PRODUCT MATRIX

Product Line	Body Style					Standard Head Styles				Available Modifications		Application Base Material				Proof Load Performance	Other	Performance	
	Round, Smooth	Round, Knurled	Slotted	Half Hex	Full Hex	Small Flange	Large Flange	Flat	Counter-sunk	Closed End	Sealed Head	Plastics	Hard Steel	Thick Steel (>.5")	Aluminum	Class 8 Proof Load	RoHs Compliant	Spin Out	Pull Out
CAL		X					X			X	X	R <sup>1</sup>	P-	P	P+		Yes	C	C
CAK		X				X				X		NR	P-	P	P+		Yes	C	C
CAH				X			X			X	X	P <sup>1</sup>	R	P+	R		Yes	B	C
CA	X						X	X	X	X		P <sup>1</sup>	P-	P	P		Yes	C	A
CAO	X					X				X		NR	P-	P	P		Yes	C	C
FHK					X	X				X	X	NR	R	P+	R	X	Yes	A	A
FHL					X		X	X		X	X	P <sup>+</sup>	R	P+	R	X	Yes	A	A
CFW		X *DIAMOND				X						P-	P-	R	P		Yes	C	C
CAW		X *DIAMOND				X						P-	P-	R	P		No	C	C
CFT		X				X						NR	P-	R	P		Yes	C	C
CAT		X				X						NR	P-	R	P		No	C	C
CPB	X		X				X	X				R <sup>1</sup>	NR	P	P		Yes	C	A
CPN	X		X				X	X				P <sup>1</sup>	NR	P	P		Yes	C	A
CFH					X		X	X		X	X	P <sup>1</sup>	R	P+	R		Yes	A	A
CFHD					X		X	X		X	X	P <sup>1</sup>	R	P+	R		Yes	A	A
LRGR	X						X	X		X	X	R <sup>1</sup>	P-	P	P+	X	Yes	C	C
LRGH					X		X	X		X	X	P <sup>1</sup>	R	P+	R	X	Yes	A	A
RFL		X					X			X	X	R <sup>1</sup>	P-	P	P+		Yes	A	A
RFK		X				X				X		NR	P-	P	P+		Yes	A	A
RFSL		X					X				X	R <sup>1</sup>	P-	P	P+		Yes	A	A
RFSK		X				X						NR	P-	P	P+		Yes	A	A
UPO	X						X	X	X	X	X	P <sup>1</sup>	P	P	P		Yes	C	B
UFO	X						X		X	X		P <sup>1</sup>	P	p	P		Yes	C	B
UKO	X					X		X	X	X		NR	P	p	P		Yes	C	B
HUPO					X <sup>2</sup>		X	X	X	X	X	P <sup>1</sup>	R	P+	R		Yes	A	A
HUKO					X <sup>2</sup>	X		X	X	X		NR	R	P+	R		Yes	A	A
UPO RS		X					X	X	X	X	X	R <sup>1</sup>	P-	P	P+		Yes	C	B
UFO RS		X					X		X	X		P <sup>1</sup>	P-	P	P+		Yes	C	B
CLM		X					X			X	X	R <sup>1</sup>	P-	P	P+		Yes	C	B
CKM		X				X				X		NR	P-	P	P+		Yes	C	B
SX	X						X	X	X	X	X	P <sup>+</sup>	P	P	P		No	C	A

Rivet nut studs in all product styles (excludes CAT, CAW, CFT, and CFW lines) are available by custom order.

- 1) May require special design features in plastics.
- 2) Stainless and carbon steel only, stainless steel HUPO/HUKO parts are half hex.

A: High  
B: Medium  
C: Low

R: Recommended  
P+: Possible, higher performance  
P: Possible  
P-: Possible, lower performance  
NR: Not recommended

# SHEREX DECIMAL EQUIVALENTS & DRILL SIZE CHART

Drill Size	Inch (Dec.)	Metric (mm)	Drill Size	Inch (Dec.)	Metric (mm)	Drill Size	Inch (Dec.)	Metric (mm)	Drill Size	Inch (Dec.)	Metric (mm)	Drill Size	Inch (Dec.)	Metric (mm)
80	.0135	.343	50	.0700	1.778	22	.1570	3.988	G	.2610	6.630	31/64	.4844	12.304
79	.0145	.368	49	.0730	1.854	21	.1590	4.039	17/64	.2656	6.746	1/2	.5000	12.700
1/64	.0156	.396	48	.0760	1.930	20	.1610	4.089	H	.2660	6.756	33/64	.5156	13.096
78	.0160	.406	5/64	.0781	1.984	19	.1660	4.216	I	.2720	6.909	17/32	.5312	13.492
77	.0180	.457	47	.0785	1.994	18	.1695	4.305	J	.2770	7.036	35/64	.5469	13.891
76	.0200	.508	46	.0810	2.057	11/64	.1719	4.366	K	.2810	7.137	9/16	.5625	14.288
75	.0210	.533	45	.0820	2.083	17	.1730	4.394	9/32	.2812	7.142	37/64	.5781	14.684
74	.0225	.572	44	.0860	2.184	16	.1770	4.496	L	.2900	7.366	19/32	.5938	15.083
73	.0240	.609	43	.0890	2.261	15	.1800	4.572	M	.2950	7.493	39/64	.6094	15.479
72	.0250	.635	42	.0935	2.375	14	.1820	4.623	19/64	.2969	7.541	5/8	.6250	15.875
71	.0260	.660	3/32	.0938	2.383	13	.1850	4.700	N	.3020	7.671	41/64	.6406	16.271
70	.0280	.711	41	.0960	2.438	3/16	.1875	4.763	5/16	.3125	7.938	21/32	.6562	16.667
69	.0292	.742	40	.0980	2.489	12	.1890	4.801	O	.3160	8.026	43/64	.6719	17.066
68	.0310	.787	39	.0995	2.527	11	.1910	4.851	P	.3230	8.204	11/16	.6875	17.463
1/32	.0312	.792	38	.1015	2.578	10	.1935	4.915	21/64	.3281	8.334	45/64	.7031	17.859
67	.0320	.813	37	.104	2.642	9	.1960	4.978	Q	.3320	8.433	23/32	.7188	18.258
66	.330	.838	36	.1065	2.705	8	.1990	5.055	R	.3390	8.611	47/64	.7344	18.654
65	.0350	.889	7/64	.1094	2.779	7	.2010	5.105	11/32	.3438	8.733	3/4	.7500	19.050
64	.0360	.914	35	.1100	2.794	13/64	.2031	5.159	S	.3480	8.839	49/64	.7656	19.446
63	.0370	.940	34	.1110	2.819	6	.2040	5.182	T	.3580	9.093	25/32	.7812	19.842
62	.0380	.965	33	.1130	2.870	5	.2055	5.220	23/64	.3594	9.129	51/64	.7969	20.241
61	.0390	.991	32	.1160	2.946	4	.2090	5.309	U	.3680	9.347	13/16	.8125	20.638
60	.0400	1.016	31	.1200	3.048	3	.2130	5.410	3/8	.3750	9.525	53/64	.8281	21.034
59	.0410	1.041	1/8	.1250	3.175	7/32	.2188	5.558	V	.3770	9.576	27/32	.8438	21.433
58	.0420	1.067	30	.1285	3.264	2	.2210	5.613	W	.3860	9.804	55/64	.8594	21.829
57	.0430	1.092	29	.1360	3.454	1	.2280	5.791	25/64	.3906	9.921	7/8	.8750	22.225
56	.0465	1.181	28	.1405	3.569	A	.2340	5.944	X	.3970	10.084	57/64	.8906	22.621
3/64	.0469	1.191	9/63	.1406	3.571	15/64	.2344	5.954	Y	.4040	10.262	29/32	.9062	23.017
55	.0520	1.321	27	.1440	3.658	B	.2380	6.045	13/32	.4062	10.317	59/64	.9219	23.416
54	.0550	1.397	26	.1470	3.734	C	.2420	6.147	Z	.4130	10.490	15/16	.9375	23.813
53	.0595	1.511	25	.1495	3.797	D	.2460	6.248	27/64	.4219	10.716	61/64	.9531	24.209
1/16	.0625	1.588	24	.1520	3.861	1/4	.2500	6.350	7/16	.4375	11.113	31/32	.9688	24.608
52	.0635	1.613	23	.1540	3.912	E	.2500	6.350	29/64	.4531	11.509	63/64	.9844	25.004
51	.0670	1.702	5/32	.1562	3.967	F	.2570	6.528	15/32	.4688	11.908	1	1.000	25.400

No. of Gauge	Aluminum (B & S)	Steel (U.S. Std.)
10	0.101	0.1345
11	0.0907	0.1196
12	0.0808	0.1046
13	0.072	0.0897
14	0.0641	0.0747
15	0.0571	0.0673
16	0.0508	0.0598
17	0.0453	0.0538
18	0.0403	0.0478
19	0.0359	0.0418
20	0.0320	0.0359

No. of Gauge	Aluminum (B & S)	Steel (U.S. Std.)
21	0.0285	0.0329
22	0.0253	0.0299
23	0.0226	0.0269
24	0.0201	0.0239
25	0.0179	0.0209
26	0.0159	0.0179
27	0.0142	0.0164
28	0.0126	0.0149
29	0.0113	0.0135
30	0.0100	0.0120



## FASTENING SYSTEMS ENGINEERED FOR PERFORMANCE™

### Benefits of Full Hex Rivet Nuts vs. Welded Hex Fasteners

#### The challenge:

A manufacturer of agricultural equipment was experiencing insufficient throughput rates in its baler product lines.

- The issue was determined to be a result of the welding process used in the numerous attachment points.
- The manufacturer wanted to improve the work environment by reducing the amount of emissions and vapors caused by the welding process.

#### The solution:

Working directly with the manufacturer, the Sherex engineering team designed a new line of full hex rivet nuts to meet the application performance requirements.

- The new full hex rivet nuts significantly increased the application spin out resistance during installation.
- Sherex provided a complete installation solution to the customer: full hex rivet nuts and the FLEX-5 tool.
- This new process replaced the previous welding process, increasing throughput by 50%.

- Additionally, the new solution eliminated all emissions and vapors associated with the welding process, which led to a safer working environment for the assemblers.

#### The savings:

Annual usage of the rivet nuts: 1,000,000

**Cost savings: \$0.12 per weld = \$120,000 annual savings!**

Sherex is a global manufacturer with a unique market approach in engineered fastening solutions that combines fasteners, tooling, and automation to deliver the best solution at the **lowest total installed cost**.



### Benefits of In-Die Fastener Installation vs. Welded Fastener Methods

#### The challenge:

A manufacturer of automotive safety systems was experiencing a high fallout rate at the attachment point of the seat belt retractor assembly.

- The failure was determined to be a result of the secondary welding process that was required to attach the nut to the sheet metal component.
- This process caused a very high percentage of thread damage and distortion of the welded nut.

#### The solution:

Sherex introduced the manufacturer to an MDS automation in-die fastener installation system.

- By utilizing the MDS automation installation system and incorporating a clinch nut design into the seat rail, the manufacturer was able to produce the sheet metal stamping and place the fastener in the same operation.
- This improvement eliminated the welding process that caused the thread damage.

- The new clinch nut automated process simplified the component manufacturing process by reducing the number of required steps and reduced on-site inventory.

#### The savings:

Annual part assemblies: 450,000

**Cost savings: \$0.37 per part = \$166,500 annual savings!**

Sherex is a global manufacturer with a unique market approach in engineered fastening solutions that combines fasteners, tooling, and automation to deliver the best solution at the **lowest total installed cost**.



These are illustrative examples of actual experiences and are intended for sales purposes only.



Sherex also offers a variety of additional product lines to meet customer application requirements:

## FASTENERS FOR THIN SHEET PLASTICS



### THREADED INSERTS

Threaded Inserts provide a strong threaded attachment point in soft or hard plastics and are ideal when post-mold installation is required.



### MOLDED INSERTS

Molded Inserts provide a high performance threaded attachment point in soft or hard plastics, and are ideal for applications where inserts can be installed during the molding process.



### COMPRESSION LIMITERS

Compression Limiters are used in conjunction with fasteners in soft or hard plastics applications to prevent overstressing of the base material and clamp loss of the fastened joint. Sherex's compression limiters are custom engineered for the specific application.



### LOAD BEARING NUT AND STUD PLATES

Load bearing nut and stud plates are metal plates with pre-installed fasteners. They allow superior joint performance using fasteners typically not used in plastics and composites and reduce fastener installation time on the production line.

Sherex offers two types of load bearing nut and stud plates: Internally Threaded Nut Plates (with Clinch Nuts, Rivet Nuts, Riveting Nuts, or Threaded Inserts installed) and Externally Threaded Stud Plates (with Clinch Nuts or Rivet Nuts installed). All nut and stud plates are custom engineered to meet specific application requirements.

## FASTENERS FOR THIN SHEET METALS



### CLINCH NUTS

Clinch nuts are self-clinching, internally threaded nuts that are pressed into the base material. They are ideal for applications where there is access to both sides of the base material, and with high thread strength and superior pull-out force requirements. Sherex clinch nuts are available with a serrated clinch feature, a six-lobe clinch feature, or with custom riveting nut feature.

## VIBRATIONAL LOOSENING PREVENTION

### TECSERIES®



### WEDGE LOCKING WASHERS

TEC Series wedge locking washers are heavy duty, reusable, self-locking washers designed to secure safety-critical applications against vibrational loosening. Manufactured using stamping process. Available in carbon and stainless steel sizes M3-M72, #5-3".

### DISC-LOCK®



### WEDGE LOCKING WASHERS

Disc-Lock wedge locking washers are heavy duty, self-locking washers designed to secure safety-critical applications against vibrational loosening. Ideal for applications where reusability is not required. Manufactured using scrapless cold-forming technology. Available in carbon steel sizes M3-M38, #6-1 1/1 and in stainless steel sizes M6-M24, 1/4"-1".

### DISC-LOCK®



### WEDGE LOCKING NUTS

Disc-Lock Wedge locking nuts are patented, heavy duty, self-locking nuts designed to protect joint integrity to secure safety critical applications against vibrational loosening. Available in sizes from M10 to M22, 3/8" to 7/8".

**ADDITIONAL  
SHEREX  
PRODUCT  
LINES**

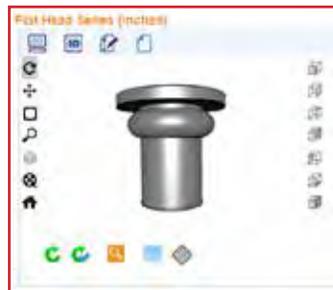
## SHEREX WEBSITE AND 3D MODELS

### SHEREX WEBSITE



- Complete product catalog featuring thousands of unique parts
- Engineering and sales drawings, marketing literature, pictures and full product specs available online or as a download for offline viewing.

### 3D MODEL DOWNLOADS



- Sherex utilizes Solidworks® 3D modeling to offer full customization and design capabilities to our customers. Simply click the button on our website to gain access to thousands of 3D models.
- Solidworks® enables customers to select parts based on style of interest, type of material, material thickness, open or closed end, and thread size.
- Once a customer has selected the required options, Solidworks® will create a 3D model of the fastener for placement into your modeling system.
- Models are available in 60 different formats, ranging from 3D XML to Universal 3D. Customers can view parts from any angle or perspective, and download CAD files for offline use.
- Models are available for Imperial/Inch body styles, Full Hex rivet nuts, RIV-FLOAT®, and Brass Inserts.
- Customers can directly request a quote from Sherex through the Solidworks site, and have a customer service rep follow up with them promptly to discuss their unique needs.





**SHEREX FASTENING SOLUTIONS®**

**HEADQUARTERS:**

**SHEREX FASTENING SOLUTIONS, LLC**

400 Riverwalk Pkwy, Suite 600

Tonawanda, NY 14150

Phone: 866-474-3739

Fax: 716-875-0358

E-mail: [info@sherex.com](mailto:info@sherex.com)

[www.sherex.com](http://www.sherex.com)

**PRODUCTION FACILITIES:**

**SHEREX AKRON**

850 Moe Drive

Akron, OH 44310

Phone: 330-630-2293

Fax: 716-875-0358

Email: [sales@sherex.com](mailto:sales@sherex.com)

**SHEREX TAIWAN**

No. 201, Sandong Road

Chungli City

Taoyuan District, Taiwan 32053

Phone: +886 3-498-8689

Fax: +886 3-498-3543

Email: [sales@sherex.com.tw](mailto:sales@sherex.com.tw)

**GLOBAL SALES AND DISTRIBUTION OFFICES:**

**SHEREX MEXICO S. DE R.L. DE C.V.**

Circuito Balvanera 5A Bodega 11

Parque Industrial Balvanera

Corregidora, Queretaro

C.P. 76900 Mexico

Phone: +52 (442) 196-8354

Email: [sales@sherexmexico.com](mailto:sales@sherexmexico.com)

**SHEREX UK**

Empire Business Park, Unit 14 Enterprise Way

Burnley, BB12 6LT, United Kingdom

Phone: +44 (0)1282 227164

Email: [uksales@sherex.com](mailto:uksales@sherex.com)

**SHEREX POLAND SP. Z O. O**

al. Krakowska 106, 02-256

Warsaw, Poland

NIP: 5213908996

Tel.: +48 22 580 19 60

Email: [sales@sherex.pl](mailto:sales@sherex.pl)

**ALL INFORMATION IN THIS CATALOG IS SUBJECT TO CHANGE WITHOUT NOTICE.**

**THIS CATALOG IS UNCONTROLLED UNLESS VIEWED FROM THE FOLLOWING LOCATION: [SHEREX.COM/TECHNICAL-INFO](http://SHEREX.COM/TECHNICAL-INFO).**

**PLEASE REFER TO THIS LOCATION FOR THE MOST CURRENT VERSION OF THE CATALOG.**

