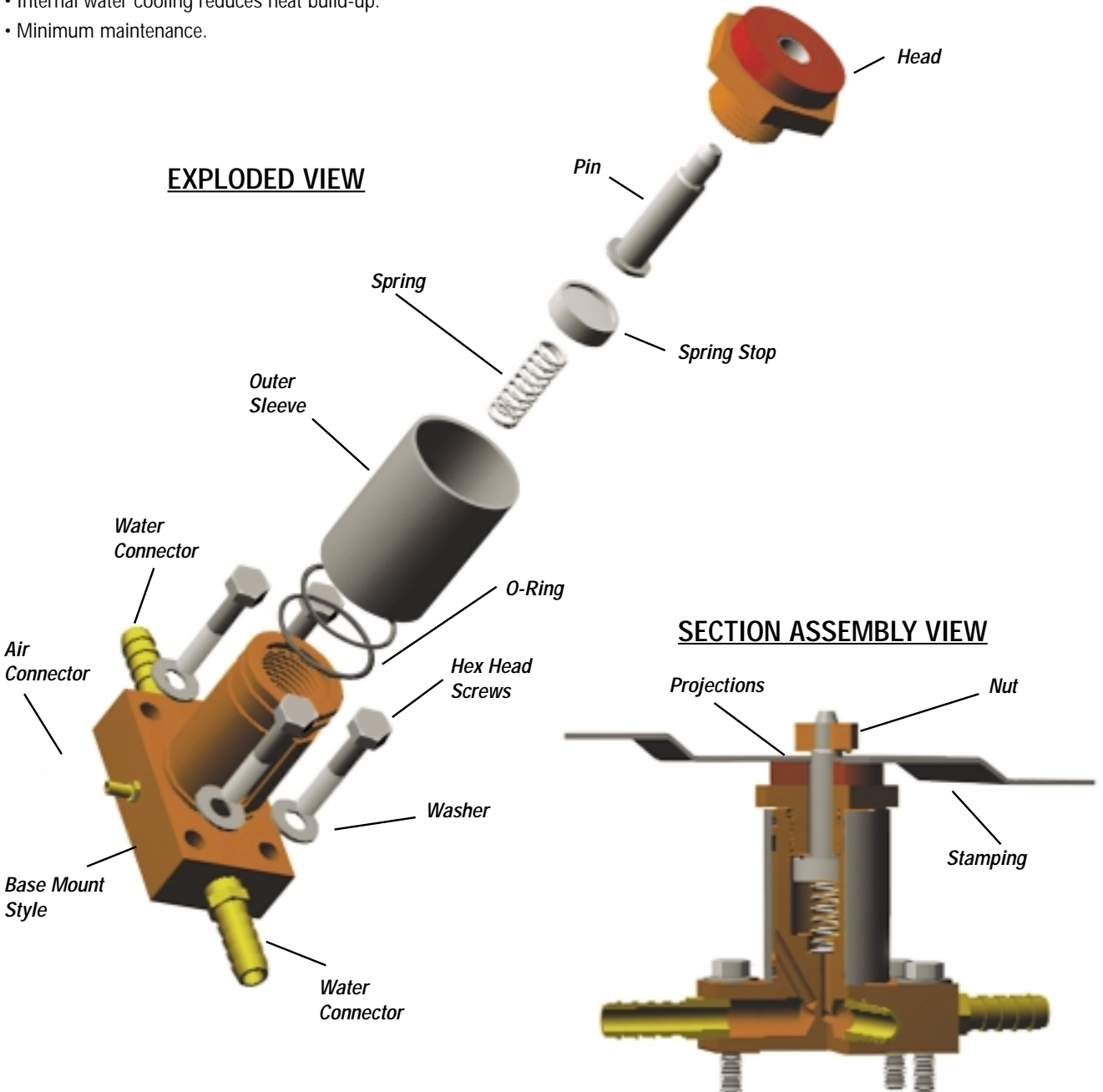


STUD & WELD NUT ELECTRODES

CenterLine manufactures a wide variety of stud & nut welding electrodes. The high quality design and assembly provides a number of features and benefits including:

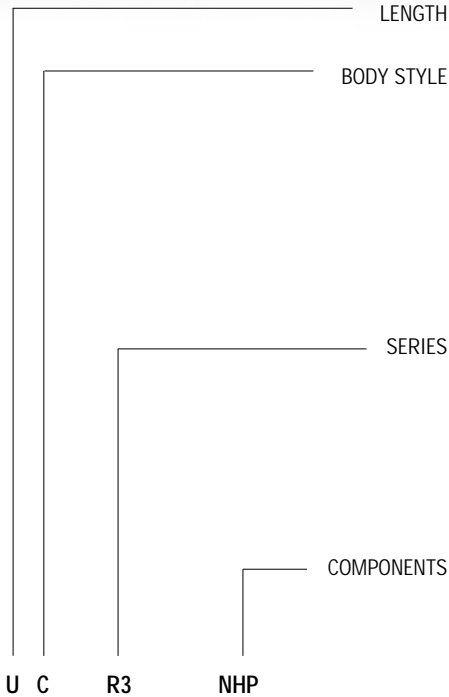
- Accurate on center positioning of pilotless nuts provided automatically.
- Insulated pin and sleeve prevents pin arcing in the threads.
- Unit converts from welding nuts to studs in seconds by removal of pilot pin and/or welding head.
- Used by automotive, mass transit, farm implement, stamping and appliance manufacturers.
- Internal water cooling reduces heat build-up.
- Minimum maintenance.



STUD & WELD NUT ELECTRODES

Stud & Weld Nut Model Number Breakdown

CODING EXAMPLE



USE U FOR STANDARD LENGTH (SHOWN BELOW)
USE X FOR EXTENDED LENGTH (.50 (12.70) LONGER THAN STANDARD LENGTH)

USE A FOR BASE MOUNT
USE B FOR 4 RW TAPER
USE C FOR 5 RW TAPER
USE D FOR 6 RW TAPER
USE E FOR 7 RW TAPER
USE F FOR 7/8-14 THREAD
USE G FOR 1-12 THREAD
USE H FOR BASE MOUNT WITH CABLE LUG (17/32" clearance hole for 1/2 screw)
USE J FOR BASE MOUNT WITH CABLE LUG (Tapped hole for 1/2-13 screw)
USE K FOR BASE MOUNT WITH CONTACT (CL-200-37)

USE 2 FOR SERIES 2 (.88" WELD FACE)
USE 3 FOR SERIES 3 (1.25" WELD FACE)
USE 4 FOR SERIES 4 (1.50" WELD FACE)
USE R2 FOR RETRACTABLE PIN SERIES 2 (.88" WELD FACE)
USE R3 FOR RETRACTABLE PIN SERIES 3 (1.25" WELD FACE)
USE R4 FOR RETRACTABLE PIN SERIES 4 (1.50" WELD FACE)

Note: Leave blank if generating a complete nut or stud welding unit because information is contained in the pin or head number.

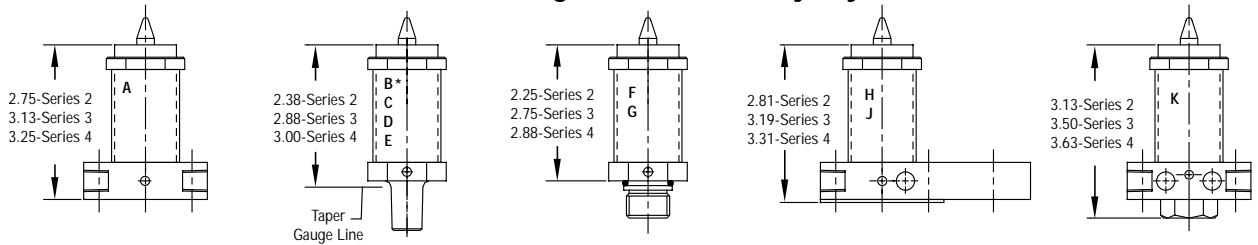
USE NHP FOR UNIT WITH NO HEAD OR PIN
USE GENERATED PIN # FOR COMPLETE NUT WELDING UNIT
USE GENERATED HEAD # FOR COMPLETE STUD WELDING UNIT

Standard Length with 5 RW Body Style Retractable Series 3 with no Head or Pin.

X A GH3050T125417
U G GP2A3482700525

Extended Length, Base Mount Style, head #. This describes a complete stud welding unit.
Standard Length, 1-12 Threaded Body Style, pin #. This describes a complete nut welding unit.

Standard Length of Series Body Styles



*Note: On Body Style 'B' add .25 to length shown.

Spare Parts List (Not including Pin or Head)



Spring Stop

U2	SPRINGSTOP-U2
X2	SPRINGSTOP-X2
U3	SPRINGSTOP-U3
X3	SPRINGSTOP-X3
U4	SPRINGSTOP-U4
X4	SPRINGSTOP-X4

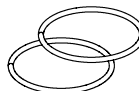


Spring

U2	SPRING037013050
U3 & U4	SPRING037025075
X2	SPRING037032100
X3 & X4	SPRING037034125



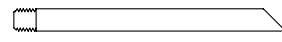
Screw Insulator
230-012



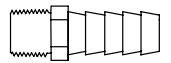
O-Ring Set
CL-206, CL-306, CL-406



Screw Insulator Washer
W-203NP



Water Tube
CLT-308-32



Water Connector
RW-1015



Air Connector
BF1

STUD & WELD NUT ELECTRODES

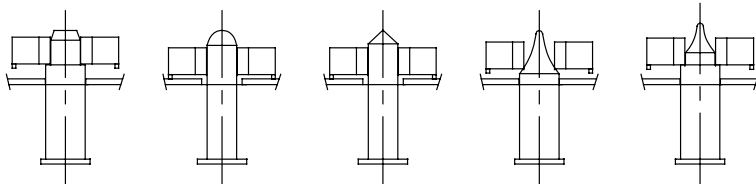
Manual Load Weld Nut Pins

PinType	Description
GP	Stainless Steel Pin, Supported by spring and/or air
CP	Coated, D2 Steel Pin, Supported by spring and/or air
RP	Retractable, Stainless Steel Pin, Movement controlled by Air Pressure only, Special Application please contact CenterLine
KP	Coated Retractable, D2 Steel Pin, Movement controlled by Air Pressure only, Special Application please contact CenterLine

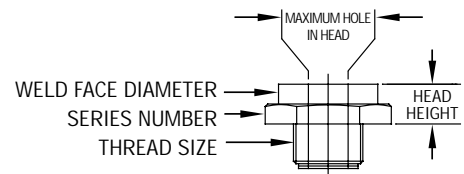
Series	Thread Size	Weld Face Diameter	Maximum Hole in Head*	Head Height
2	5/8-18	7/8 Standard	0.427 (10.85) ID	0.500
3	7/8-14	1-1/4 Standard	0.642 (16.31) ID	0.500
4	1-1/8-12	1-1/2 Standard	0.852 (21.64) ID	0.625

*Special weld nut electrodes are available for larger IDs and areas with clearance restrictions.

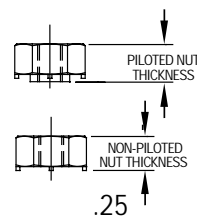
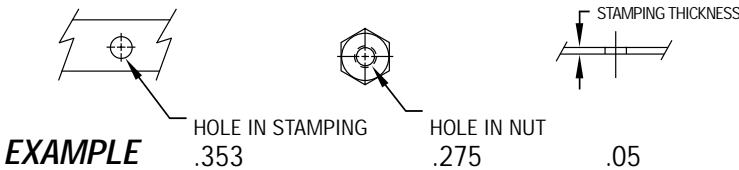
Nose Type	Description
A	Preferred when locating nut and stamping, no stamping contact during weld, no hole in upper electrode
B	Preferred when locating nut only, no stamping contact, no hole in upper electrode
C	Preferred when locating nut only, no stamping contact, no hole in upper electrode
D	Locates nut at a point on the pin nose. upper electrode requires clearance hole for pin tip
E	Preferred when locating nut and stamping, no hole in upper, good for hard to load applications



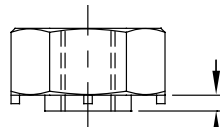
NOSE TYPE A NOSE TYPE B NOSE TYPE C NOSE TYPE D NOSE TYPE E



APPLICATION SIZES



CAUTION



DO NOT select B & C nose types when pilot thickness exceeds stamping thickness.

Generate Your Own Number (Total 14 Characters)

Example	GP	2	A	348	270	05	25
Breakdown	Pin Type	Series Number	Nose Type	Hole in Stamping -.005" (3 Dec.) - see note below	Hole in Nut -.005" (3 Dec.) - see note below	Stamping Thickness (2 Dec.)	Nut Thickness (2 Dec.)
NOTE: For B & C style pins, the "Hole in Stamping" value is the "Hole in Nut" value (i.e. GP2B2702700525)							
Part Number							

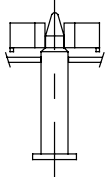
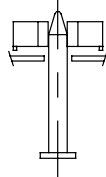


STUD & WELD NUT ELECTRODES

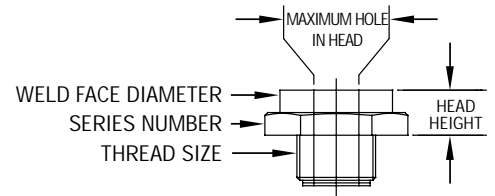
Auto Load Weld Nut Pins

PinType	Description
GA	Stainless Steel Pin, Supported by spring and/or air
CA	Coated, D2 Steel Pin, Supported by spring and/or air
RA	Retractable, Stainless Steel Pin, Movement controlled by Air Pressure only, Special Application please contact CenterLine
KA	Coated Retractable, D2 Steel Pin, Movement controlled by Air Pressure only, Special Application please contact CenterLine

Series	Thread Size	Weld Face Diameter	Maximum Hole in Head*	Head Height
2	5/8-18	7/8 Standard	0.427 (10.85) ID	0.500
3	7/8-14	1-1/4 Standard	0.642 (16.31) ID	0.500
4	1-1/8-12	1-1/2 Standard	0.852 (21.64) ID	0.625

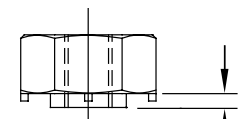
*Special weld nut electrodes are available for larger IDs and areas with clearance restrictions.

Nose Type	
N	P
	
NOSE TYPE N	NOSE TYPE P
	
STRAIGHT	STRAIGHT
For auto loading nuts where the stamping is being located.	For auto loading nuts where the stamping is not being located. Refer to caution note.



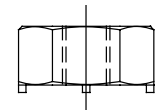
CAUTION
P Nose Types Only

PILOTED NUT

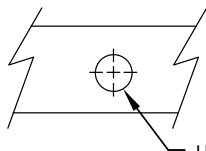


Caution: If pilot thickness exceeds stamping thickness, please see special application sheet

NON-PILOTED NUT



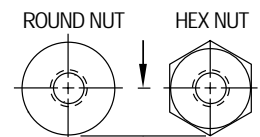
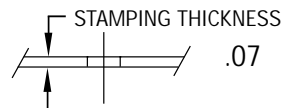
APPLICATION SIZES



HOLE IN STAMPING
ONLY FOR N NOSE TYPES
.502



HOLE IN NUT
.362



MEASUREMENT FROM CENTER
TO OUTERMOST EDGE
.47

EXAMPLE

Generate Your Own Number (Total 14 Characters)

Example	GA	3	N	497	357	07	47
Breakdown	Pin Type	Series Number	Nose Type	Hole in Stamping -.005" (3 Dec.) - see note below	Hole in Nut -.005" (3 Dec.) - see note below	Stamping Thickness (2 Dec.)	Measurement from Center to Outermost Edge (2 Dec.)
NOTE: For P style pins, the "Hole in Stamping" value is the "Hole in Nut" value (i.e. GA3PB3573570747)							
Part Number							

STUD & WELD NUT ELECTRODES

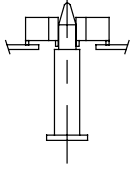

Special Application Auto Load Weld Nut Pins

PinType	Description
GA	Stainless Steel Pin, Supported by spring and/or air
CA	Coated, D2 Steel Pin, Supported by spring and/or air
RA	Retractable, Stainless Steel Pin, Movement controlled by Air Pressure only, Special Application please contact CenterLine
KA	Coated Retractable, D2 Steel Pin, Movement controlled by Air Pressure only, Special Application please contact CenterLine

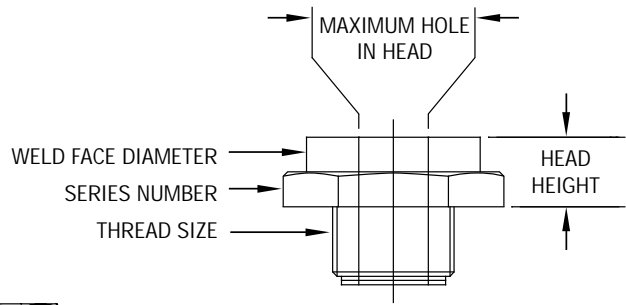
Series	Thread Size	Weld Face Diameter	Maximum Hole in Head*	Head Height
2	5/8-18	7/8 Standard	0.427 (10.85) ID	0.500
3	7/8-14	1-1/4 Standard	0.642 (16.31) ID	0.500
4	1-1/8-12	1-1/2 Standard	0.852 (21.64) ID	0.625

*Special weld nut electrodes are available for larger IDs and areas with clearance restrictions.

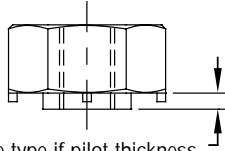
Nose Type

M

NOSE TYPE M

STRAIGHT

For auto loading nuts where the stamping is not being located and pilot thickness is greater than material thickness.



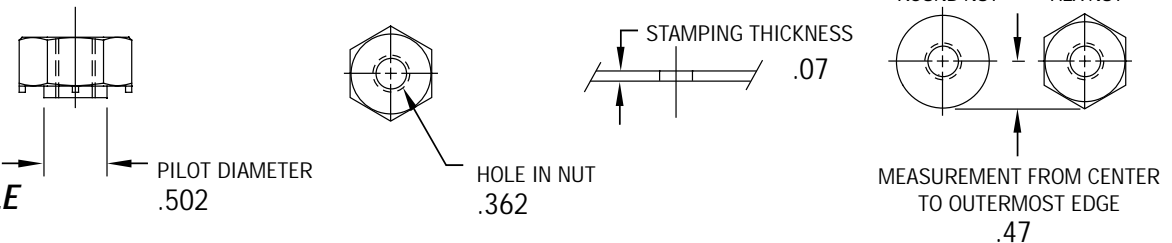
PILOTED NUT



Use M nose type if pilot thickness exceeds stamping thickness, and pin is not used to locate stamping.

CAUTION
For M Nose Type pins ADD .005" to the pilot diameter.

APPLICATION SIZES



EXAMPLE

PILOT DIAMETER .502

HOLE IN NUT .362

STAMPING THICKNESS .07

ROUND NUT

HEX NUT

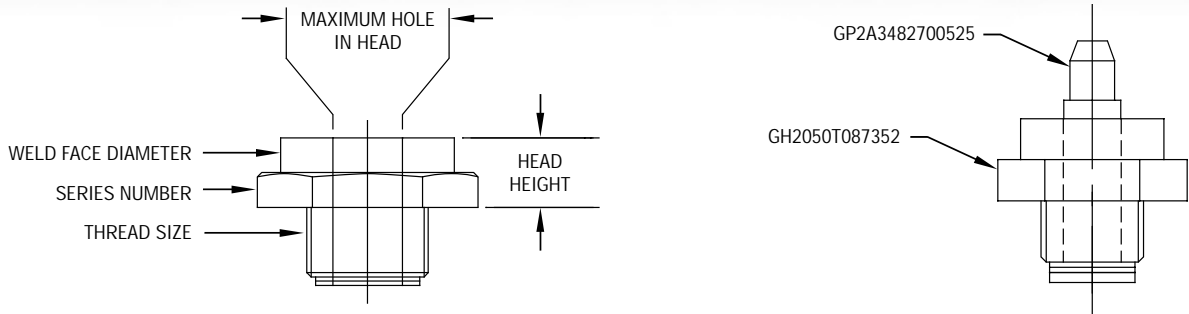
MEASUREMENT FROM CENTER TO OUTERMOST EDGE .47

Generate Your Own Number (Total 14 Characters)

Example	GA	3	M	507	357	07	47
Breakdown	Pin Type	Series Number	Nose Type	Pilot Diameter + .005" (3 Dec.)	Hole in Nut -.005" (3 Dec.)	Stamping Thickness (2 Dec.)	Measurement from Center to Outermost Edge (2 Dec.)
Part Number							

STUD & WELD NUT ELECTRODES

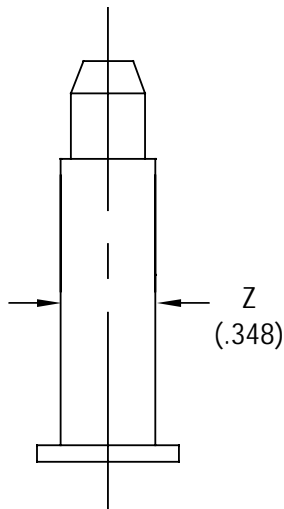
Nut Welding Heads



Series	Thread Size	Weld Face Diameter	Maximum Hole in Head*	Head Height
2	5/8-18	7/8 Standard	0.427 (10.85) ID	0.500
3	7/8-14	1-1/4 Standard	0.642 (16.31) ID	0.500
4	1-1/8-12	1-1/2 Standard	0.852 (21.64) ID	0.625

**Special weld nut electrodes are available for larger IDs and areas with clearance restrictions.*

EXAMPLE



Pin # GP2A3482700525

Series Number — Major Diameter of Pin (Z dimension)

PART NUMBER INSTRUCTIONS

- Example:** Z Dimension = .348
- Step 1** Establish the major diameter of pin (Z dimension).
- Step 2** The final 3 digits in the nut welding head # are represented by the following formula.
 $Z (.348) + .002 = .350$
- Step 3** Lastly, insert the result from **Step 2** to the end of the series part number prefix below.

Final Nut Welding Head Number
Example Series 2 - GH2050T087350

Generate Your Own Number (Total 13 Characters)

Series	Part Number Prefix	Z + .002" Specify to 3 decimal places.
2	GH2050T087	
3	GH3050T125	
4	GH4062T150	

