



LOBTEX CO.,LTD.

OSAKA, JAPAN 12-8 Shijo-cho, Higashi-osaka City, Osaka 579-8053 Japan Phone: +81 72 981 7466 Fax: +81 72 981 9420 www.lobtex.co.jp ADVANCED FASTENING SYSTEMS

# LOBSTER





Hrabinská 498/19, 737 01 Český Těšín, Česka republika Mobil: +420 731 018 782







## Selection Table of Proper Riveters

Model	R1A1	R1A2	R1B1	R1B2
Feature	Ultra Lightweight	Heavy Duty & Vacuum System	Cordless Electric type	Heavy Duty Cordless Electric type
Stroke	19	26	22	22
Traction Power (N)	9,000	18,500	10,500	13,000
Weight (Kg)	1.10	1.7	1.9	2.0
Shockless	0	©	-	-
Vacuum system	0	©	-	-
<u>2.4 (3/32")</u>	•		•	
3.2 (1/8")	•		•	
4.0 (5/32")	•		•	
2.4 (3/32") 3.2 (1/8") 4.0 (5/32") 4.8 (3/16") 6.4 (1/4")	•	•	•	•
<b>≜</b> 6.4 (1/4")		•		Δ
Page	P.4	P.4	P.12	P.12

	Model	Model AR-2000S AR-2000M A		AR-2000H	AR-2000SV	AR-2000MV	AR-2000HV	AR-2000A-90	AR-2000A-45	AR-2000A-00
		1	1	1		T	T	7	7	7
	Feature	Lightweight	Higher productivity	Heavy Duty & High power	Vacuum System & Lightweight	Vacuum System & Higher productivity	Heavy Duty, Vacuum System & High power	Angle type for riveting in narrow space	Angle type for riveting in wrong position	Angle type for riveting in corner
	Stroke	14	16	18.5	14	16	18.5	16	16	16
Tra	ction Power (N)	4,800	9,100	14,000	4,800	9,100	14,000	8,000	8,000	8,000
	Weight (Kg)	1.1	1.2	1.6	1.2	1.4	1.8	1.8	1.9	1.8
	Shockless	0	0	0	0	0	0	0	0	0
V	acuum system	-	-	-	0	0	0	-	-	-
₹	2.4 (3/32")	•	•		•	•		•	•	
Capacity	3.2 (1/8")	•	•		•	•		•	•	•
ğ	4.0 (5/32")	Δ	•		Δ	•		•	•	•
Riveting	4.8 (3/16")		•	•		•	•	Δ	Δ	Δ
壹	6.4 (1/4")			•			•			
	Page	P.6	P.6	P.6	P.6	P.6	P.6	P.8	P.8	P.8

	Model	HR-200	HR-002A	HR-002D	HR-005A	HR-003A	HR-003B	HR-2050H
		1						
	Weight (Kg)	0.39	0.54	0.5	0.75	1.8	2.0	1.75
ΙĘ	2.4 (3/32")	•	•	•	•			
bac	3.2 (1/8")	•	•	•	•			
Riveting Capacity	4.0 (5/32")	Δ	•	•	Δ	•		
etin	4.8 (3/16")		<b>A</b>	<b>A</b>	<b>A</b>	•	•	•
<u>≅</u>	6.4 (1/4")						•	•
	Page	P.14	P.14	P.14	P.14	P.15	P.15	P.15

- △: Can not be used with stainless steel rivet. ■: Can be used if optional parts (sold separately) are attached.
- ▲: Can not be used with steel and stainless steel rivet.

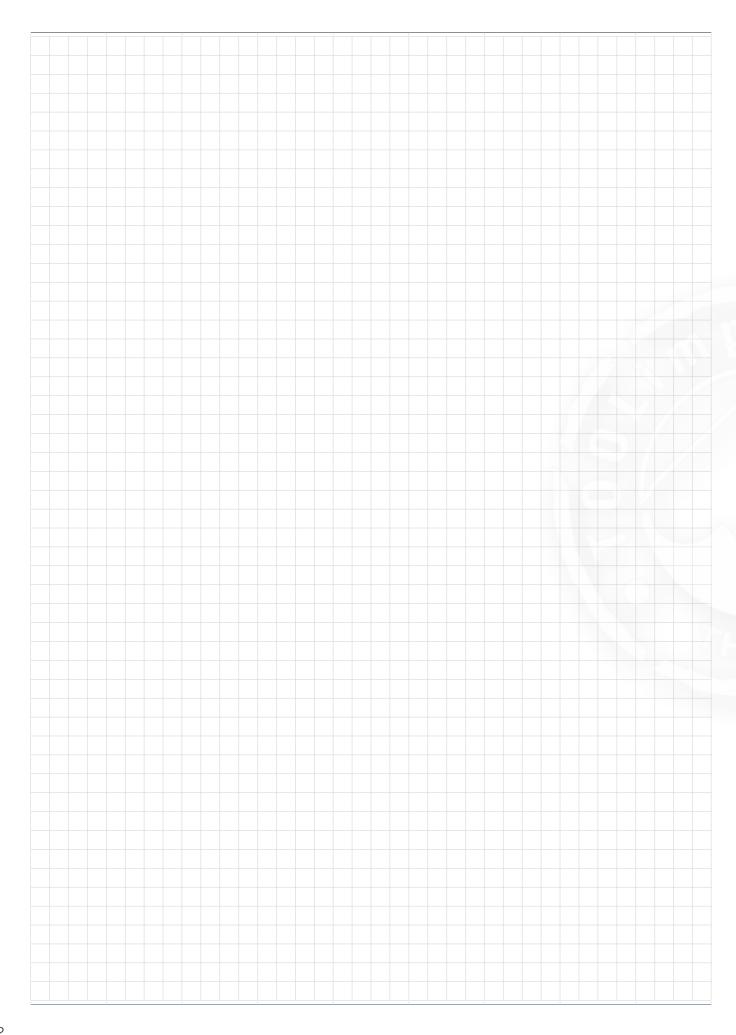
Selection Table of Proper Riveters

	Model	AR-011MX	AR-011HX	AR-3000EV
	Feature	Durable & Portable	Durable & Portable	High power & Long Stroke
	Stroke	16	16.5	24
Tra	action Power (N)	9,000	14,000	15,200
	Weight (Kg)	1.5	2.1	1.4
	Shockless	0	0	0
V	acuum system	-	-	0
. <u>₹</u>	2.4 (3/32")	•	•	
Riveting Capacity	3.2 (1/8")	•	•	
g	4.0 (5/32")	•	•	
etin	4.8 (3/16")	•	•	•
.≧	6.4 (1/4")	-	•	•
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Model	ARV-025M	ARV-015MX	ARF800P	ARF-700	@R03i
	P				
Feature	Separate type & Vacuum System	In-line type & Vacuum System	Automatic Rivet Feeding System	Automatic Rivet Feeding System	Attachment Riveter
Stroke	19	16	-	-	-
Traction Power (N)	9,800	8,000	-	-	-
Weight (Kg)	0.9(Head only)	1.8	10.9	32	0.45
Shockless	0	0	-	-	-
Vacuum system	0	0	0	0	-
≥ 2.4 (3/32")	•	•	•	-	•
3.2 (1/8")	•	•	•	•	•
2.4 (3/32") 3.2 (1/8") 4.0 (5/32") 4.8 (3/16") 6.4 (1/4")	•	•	•	•	•
4.8 (3/16")	•	•	-	•	•
6.4 (1/4")					
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Model	N1A2	EN-410	HND-005	HN-010	@N10d
	T	~		Wil	
Weight (Kg)	2.1	2.5	0.6	1.8	0.43
М3			•		
M4	•	•	•		Δ
M5	•	•	Δ	•	Δ
M6	•	•	<b>A</b>	•	Δ
M8	•	•		•	
M10	•	•		•	
M12		-			
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- △: Can not be used with stainless steel rivet. ■: Can be used if optional parts (sold separately) are attached.
- ▲: Can not be used with steel and stainless steel rivet.





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ters

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#### Riveters

#### Pneumatic Riveters

#### **High-performance R1 Series**

- ▶ R1A1 Advanced top-class Standards.
- ▶ R1A2 A heavy duty riveter capable of setting structural rivets.

4

5

7

1 Narrow Frame Head

## RIM 21mm (.827") RIM 22mm (.866")

22.0mm(.866") diameter Frame Head allows for use in tight spaces.

**2** Long Stroke

RIAI 19mm (.748") RIA2 26mm (1.02")







When the Tank case is taken off, Mandrel shutter will be closed to prevent the pop out of the spent mandrels.



Well balanced tool with a comfortable feel in the operator's hand. Handle has a natural curve that is easy to grip.

**5** Lightweight, durable design

> A superb center-balance design is comfortable in the operators hand, enhancing the lightweight feel.



3 On-board vacuum on/off switch

Simply push the button to activate vacuum, then switch to off when not in use to reduce air consumption and cost.

8 Oversized mandrel container

Oversized mandrel container. Improved efficiency = greater productivity



6 Air intake with changeable left/right direction

> Air inlets on both the left and right side allowing for greater flexibility, and operator productivity



**7** Reduced air consumption of approx. 30% compared with our conventional model



With an improved air circuitry design, consumes 30% less air than previous generation tools. This reduces compressor costs and is environmentally friendly

Soft-Set: (Shock-less function) will decrease the impact of riveting.



#### **Pneumatic Riveters**

#### **High-performance R1 Series**

#### **R1A1**



- Lightweight with excellent strength-to-weight ratio
- ▶ Built-in vacuum mandrel collection system
- Compact size with extra long stroke.
- R1A1 achieves up to a 30% reduction in air consumption\* which can reduce costs.

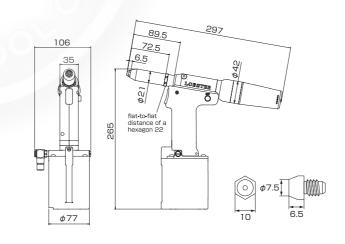
GOOD DESIGN AWARD 2012

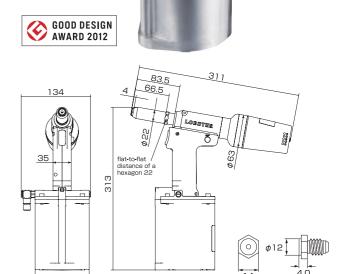


- ► Heavy duty version of R1A1 yet still light weight with excellent strength-to-weight ratio
- ► Capable of setting standard and structural rivets
- Extra long stroke
- ► High Capacity mandrel collection tank









Mod	Riveting Capacity	Traction Power	Stroke mm	Working Air Pressure MPa	Air Consumption	<b>Weight</b> kg	<b>Operating noise</b> dB	Jaws
R1A	All materials 2.4 / 3.2 / 4.0 / 4.8 (3/32", 1/8", 5/32", 3/16")	9,000	19	0.5~0.6	68 (Vacuum on)	1.1	69.5	Ultra Jaw 'M'
R1A	All materials 4.8 / 6.4 (3/16", 1/4")	18,500	26	0.5~0.6	75 (Vacuum on)	1.7	80	Ultra Jaw 'H'

\*Air pressure at 0.6 Mpa

**⚠ WARNING** 

For all Riveters

Be sure to read the instruction manual carefully and make sure that you understand them thoroughly before using the riveter.

#### **Pneumatic Riveters**

#### AR-2000 · 2000 V Series

- Lightweight riveters with resin polymer case.
- Shockless technology offers ergonomically correct action to minimize risk to CTDs (cumulative trauma disorders).
- The combination of a spring return and air return increases return speed by 30%.
- A built-in muffler reduces work noise and is gentler on the surrounding environment.
- The AR-2000V series with integrated vacuum system is low energy type riveter with simple vacuum ON/OFF switch.

#### AR-2000S · 2000SV



iveting Capacity 2.4 3.2 4.0 3/32" 1/8" 5/32"

The AR-2000S/AR2000SV are lightweight and high volume riveters for use with small diameter blind rivets.

Sets sizesφ2.4, φ3.2 (3/32", 1/8") and \$\phi4.0, (5/32")



#### AR-2000M · 2000MV

Riveting Capacity 2.4 3.2 4.0 4.8 3/32" 1/8" 5/32" 3/16"

The AR-2000M/AR-2000MV riveters are lightweight and high volume riveters for use with blind rivets from \$\phi 2.4\$ up to \$\phi 4.8\$. (3/32"-3/16") Longer stroke than previous generations of tools (AR-011M/AR-021M) resulting in improved productivity





#### AR-2000H · 2000HV







The AR-2000H/AR2000HV riveters are excellent for large diameter standard rivet sizes φ4.8 (3/16") and φ6.4 (1/4"). Heavy duty tools with a long stroke and are faster than previous generations of tools (AR-011H/AR-21H) Can be used with S-Bolts. (S-bolt nosepiece is sold separately.)





S-bolt Can be used if optional parts (sold separately) are attached. (P.28, Table. 2)

**NOSE PIECE** 

Model	Rivet	ing Ca	apacity	dmm(	inch)	Traction Power	Stroke	Working	Air	Weight		
Model	2.4 (3/32")	3.2 (1/8")	4.0 (5/32")	4.8 (3/16")	6.4 (1/4")	N	mm	Air Pressure MPa	Consumption	kg	Jaws	
AR-2000S	0	0	Δ	_	_	4,800	14.0		0.6 L/rivet	1.1	S	
AR-2000M	0	0	0	0	_	9,100	16.0	0.5~0.6	1.7	1.2	Ultra Jaw 'M'	
AR-2000H				0	0	14,000	18.5		3.6	1.6	Ultra Jaw 'H'	

\*△ Cannot be used with stainless steel rivets. \*□ Can be used if optional parts (sold separately) are attached. (Page 15, Table. 1)

#### ■With integrated vacuum system

- with integral	.ou ruc	adiii c	,, 0.0								
Madal	Rivet	ing Ca	pacity	φmm (	inch)	Traction Power	Stroke mm	Working Air Pressure	Air	Weight	Jaws
Model	2.4 (3/32")	3.2 (1/8")	4.0 (5/32")	4.8 (3/16")	6.4 (1/4")			MPa	Consumption		
AR-2000SV	0	0	Δ	_	_	4,800	14.0		90 L/min	1.2	S
AR-2000MV	0	0	0	0	_	9,100	16.0	0.5~0.6	90	1.4	Ultra Jaw 'M'
AR-2000HV	_			0	0	14,000	18.5		120	1.8	Ultra Jaw 'H'

\*△ Cannot be used with stainless steel rivets. \*□ Can be used if optional parts (sold separately) are attached. (Page 15, Table. 1)

# ·AR2000S ·AR2000M ·AR2000H ·AR2000HV AR2000HVP

#### **Pneumatic Riveters**

**Basic types** 

Launched in 1967 and following a long line of success in the field, features redesigned improvements.

#### AR-011MX



- · Durable! A main feature of the AR-011 is its durability.
- · Increase in stroke! The MX series will increase from 14mm (0.55") to 16mm (0.63") in stroke length.(14%up!)
- · Capable of pulling Stainless rivets! With the Ultra Jaws and Soft-Set function, will allow the MX/HX series to set Stainless rivets.
- Improves maintenance...Applying one-touch detachable Jaw Case, its maintenance has become easier.
- · Lower noise level. The standard silencer function will improve overall working environment.
- Improved operating performance. The new Rotary Joint and soft safety cover will improve usage by the
- · Customization. Optional parts will expand capabilities and operator usage.

#### AR-011HX

2.4 3.2 4.0 4.8 6.4 3/32" 1/8" 5/32" 3/16" 1/4"



#### **AR-3000EV**





Increases work efficiency through its lightweight and highly-refined riveting speed. Its high power and long stroke makes this model appropriate for S-bolt and long type rivets.

4.8 (3/16") and 6.4 (1/4") blind rivets can be used if optional parts (sold separately) are attached.

Note: Φ4.8 and Φ6.4 standard rivets can be used if optional parts are attached(sold separately).



#### **NOSE PIECE**

















Model	Rivet	ing Ca	apacity	φmm (	inch)	Traction Power	Stroke	Working	Air	Weight	
Model	2.4 (3/32")	3.2 (1/8")	4.0 (5/32")	4.8 (3/16")	6.4 (1/4")	N	mm	Air Pressure MPa	Consumption	kg	Jaws
AR-011MX	0	0	0	0	_	9,000	16.0	0.5~0.6	1.5	1.5	Ultra Jaw 'H'
AR-011MX AR-011HX	0	0	0	0	0	14,000	16.5	0.51 00.6	2.9	2.1	Ultra Jaw 'M','H'

<sup>\*</sup> Cannot be used with stainless steel rivets.

#### With integrated vacuum eyetem

with integra	ieu vai	Juuiii s	ystein								
Model				φmm ( 4.8 (3/16")		Traction Power Stroke		Working Air Pressure MPa	Air Consumption	<b>Weight</b> kg	Jaws
AR-3000EV	_	_	_	S-bolt	S-bolt	15,200	24.0	0.5~0.6	90 L/min	1.4	Ultra Jaw 'H'

<sup>\*</sup> $\phi$ 4.8 and  $\phi$ 6.4 standard rivets can be used if optional parts are attached(sold separately).

- ▶ Riveting in corners or obstructed areas
- ▶ Riveting in difficult access
- ▶ Riveting head can turn 360° which enables work with better posture and improved production efficiency.

#### AR-2000A-90 · AR2000A-45 · AR2000A-00



■Note: Cannot be used with φ4.8 stainless steel blind rivets.



322 321 325 325 325 325 325 325 325 325
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AR-2000A-00

Model	Riveting Capacity \$\phi\$ mm (inch) 2.4 3.2 4.0 4.8 6.4 (3/32*) (1/8*) (5/32*) (3/16*) (1/4*)		Traction Power	Stroke mm	Working Air Pressure MPa	Air Consumption	Weight kg	Jaws			
AR-2000A-90	0	0	0	Δ	_					1.8	
AR-2000A-45	0	0	0	Δ	_	8,000	16.0	0.5~0.6	1.7 L/rivet	1.9	S
AR-2000A-00		0		Δ	_					1.8	

NOSE	E PIECE
AR-2000A-90 AR-2000A-45 AR-2000A-00	10 6.5

\*△ Cannot be used with stainless steel rivets.

#### Application

#### **Example 1** Can not riveting at the target place

Riveting point was so close to the corner, We had to alter some part of riveter or had to be compelled to miss the target





00 Offset nose of AR2000A-00 allows perfect riveting at dead set place

#### Example 2 Can not riveting in recess

At a place inaccessible with conventional riveters, we were compelled to do riveting improperly.





45 Angle nose of AR2000A-45 offers smooth riveting at hard-to reach place

Example 3 Can not riveting at a narrow space

At an unusual place, welding was the only way to access the point where does not allow to approach with riveters.





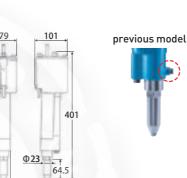
90 Angle nose of AR2000A-90 allows to riveting inside of the cylinder, shown as picture

#### In-line type

#### Pneumatic Riveters Separate type

#### ARV-015MX

- 2.4 3.2 4.0 4.8 3/32" 1/8" 5/32" 3/16"
- · Straight ejection of the spent mandrels
- · Increase in stroke!
- · Capable of Pulling 4.8mm(3/16")Stainless rivets!
- · Maintenance has become easier.
- · Rivets will not fall off downwards.

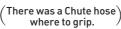


#### Change the position of the Chute hose and improved operating performance!!

Straight ejection of the spent mandrels

- Easier to operate by similar location with balancer and air hose. Decrease the clog of mandrels by making the Chute hose straight.







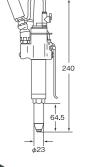
ARV-015MX No more Chute hose and easier to operate!

#### **ARV-025M**

2.4 3.2 4.0 4.8

- · Soft-Set® shockless technology offers ergonomically correct action to minimize risk of CTDs (cumulative trauma disorders).
- · Ultra jaws for longer jaw life
- · Lightweight, compact riveting head weighs under two pounds and works with remote intensifier
- In-line vertical design for ergonomic benefits in a workstation environment
- New design features unique ergonomic trigger placement in the natural operator gripping area for improved tool control
- · Exclusive hydraulic swivel fittings for ease of operator fiexibility
- · Built-in on demand mandrel vacuum system for mandrel retention and evacuation to an off-line receptacle
- Long stroke
- Able to operate in conjunction with our exclusive ARF-700 autofeeding rivet presenter system

Intensifier Unit: Interchangeable with all three models (ARV-025M, ARV-022M, and AR-022M). Heads are changed at the quick-disconnect hydraulic fitting.



**NOSE PIECE** 

ARV015MX ARV-025M

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	Model	Rive	ting C	apacity	<b>y</b> φmm (	(inch)	Traction Power	Stroke	Working Air Pressure	Air	Weight	Janua
		2.4 (3/32")	3.2 (1/8")	4.0 (5/32")	4.8 (3/16")	6.4 (1/4")	N	mm	MPa	Consumption	kg	Jaws
	A DV/01EMV		$\cap$				8 000	16.0	0.5~0.6	100	10	Liltro Jow N

	■Auxiliary va	cuum s	system									
	Model			· ·	<b>/</b> φmm (		I raction Fower	Stroke	Working Air Pressure	Air	<b>Weight</b> kg	Jaws
		2.4 (3/32")	3.2 (1/8")	4.0 (5/32")	4.8 (3/16")	6.4 (1/4")		mm	MPa	Consumption		
	ARV-025M	0	0	0	0	_	9,800	19.0	0.5~0.6	100	0.9	Ultra Jaw 'M'

\*Head weight only



For all Riveters

• Be sure to read the instruction manual carefully and make sure that you understand them thoroughly before using the riveter.

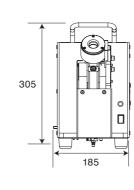
#### **Portable Rivet Feeder**

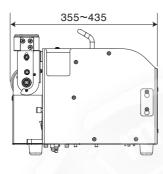
Adaptable to changes in workplace and Easy to carry around Achieved greater flexibility in installation site!

#### **ARF-800P**



■Dimensional drawing (unit: mm)

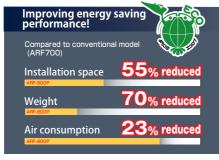




#### Achieved greater productivity!

- High speed rivet feedingAble to feed 20pcs rivets per 1 minute.
- ■Comparison of feeding work By hand ■1820minutes

ARF-800P =1340 minutes









Large capacity of basket								
	Rivet diameter 2.4m(3/32'), 3.2m(1/8') 1000Pcs  Rivet diameter 4.0m(5/32') 500Pcs							

#### **■**Specification

Weight		10.9kg (24lb)				
		3 . ,				
Electric power so	ource	AC 100~240V (50~60Hz)				
Operating voltage	ge	DC 12 V				
Consumption cu	ırrent	<1A				
Operating air p	pressure	0.5~0.6MPa				
Air	Per 1 rivet	3.1 <i>l</i> /Pcs				
consumption	When using 20 rivets per 1 minute	62 l /Minutes				
Applicable rive	t size	2.4mm (3/32") 、3.2mm (1/8") 、4.0mm (5/32")				
Operation environments	Ambient temperature	5~40°C				
environments	Humidity	less 80%RH (No bedewing)				
Range of storage temperature		-5~55℃				
Noise emission	1	<75dB				
Diameter of ai	r supply	$\varphi$ 6mm (One touch air joint) $\%$ 1				

#### ※Prepare the air connector and tube of Φ6mm

#### ■Type of ARF800P

Type of Arti ooor											
ARF800P	Compatible rivets	Diameter of frame head holder	Riveters								
	-24 -32 -40	-A (19mm)	AR-2000SV								
	-24 -32 -40	-B (21mm)	R1A1*2 AR-2000MV								
	-24 -32 -40	-C(23mm)	ARV-011MX ARV-015MX ARV-025M								

%2. When using old frame head which diameter is 22mm, it needs to be changed to new frame head (21mm) Ex: When using AR-2000MV and need rivet feeder for 3.2mm(1/8") rivets, purchase by part number ARF800P-32B (21mm)

#### **ARF-700 Outline and Performance**

#### Faster, reliable, improved work efficiency!

#### Outline

- Reduces riveting cycle time and lowers running costs.
- Reduces the time lost when inserting rivets into the riveter.
- Rivet loading is half-automated so it is possible to simultaneously line up the holes in the materila during loading.

#### Performance

- Approx. 60 rivets/minute loading speed
- Riveting speed of over 1,500 rivets/hour possible

#### **ARF-700**

#### <Sold separately> Compatible air riveters

- ARV-015M, ARV-022M, ARV-025M, AR-2000SV, AR-2000MV, and ARV-011M, R1A1
- · With VU-M vacuum unit: AR-011M
- · With optional frame head: ARV-015S
- · With optional frame head and VU-S vacuum unit: AR-011S

#### <Note>

· Large flange blind rivets cannot be used with the ARF-700.



Rivets aligned and sent to the feeder head (with cover open)

#### **ARF-700 Functions and Features**

#### Improved productivity and workability

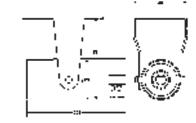
- Each rivet is automatically held in place as soon as the riveter is inserted into the feeder head.
- One hand is freeallowing for material handling or othe workstaion tasks.
- Productivity is increased by 180% to 300%(Estimation by Lobtex)
- Clean work environment can be maintained using the detachable mandrel vacuum system hose(option).

#### Freely adjustable line layout

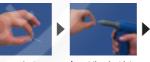
- Feeder casters allow for portability simple.
- Compact design eliminates the need to designate specific installation
- Easily detachable feeder head can be set in the appropriate location along the line.
- Feeder head is expandable (option) to fit the size of the rivet.

#### **Durable, maintenance-free design**

- Misfeed tank helps avoid delays by catching misfed rivets and allowing system to continue to operate.
- Acrylic lid on top of the feeder allow easy replenishiment of
- Set the rivets on the track rail and operation will pause to save
- Counter (option) displays the number of rivets used for easy verification.















(1 second)















ARF method





















Insert rivet through the holes (1 second)

Pull the trigger on the riveter (1 second)

Riveting complete through the riveter (1 second) be applied in 4 seconds

#### ■ Specifications

оросиновино									
ARF-700 Feeder									
External dimensions (W $ imes$ H $ imes$ D)	447 mm×364 mm×528 mm								
Weight	32 kg (total: 36 kg)								
Working air pressure	0.5 MPa to 0.6 MPa								
Power	AC 120, 230 V, 50/60 Hz								
Power consumption	70 W								

\*AC220V, 50/60Hz optional \*AC120V, 60Hz optional

		(Unit: mm)
Auto Rivet Feeder	Capacity (rivets)	Compatible rivet sizes (diameter)
ARF-700-32	2,000	3.2 (1/8")
ARF-700-40	1,500	4.0 (5/32")
ARF-700-48	1,000	4.8(3/16")



#### **Cordless Riveters**

#### **R1B1**

2.4 3.2 4.0 4.8

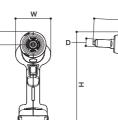
Compact, fast, and easier to use. **Advanced Cordless Riveter** 

A high-performance yet compact cordless riveter has made its debut. going beyond the conventional norm. This tool substantially improves work efficiency and precisely meets your needs when long hours of work are required.

It is a Lobtex masterpiece, with energy-saving and foolproof features, and it helps fulfill your desire to make your factory "cordless."

The smallest size and compact body in its class.





**R1B2** 

be used.

Riveting Capacity 4.8 3/16" 6.4

A high-power model

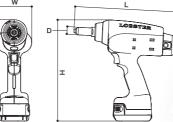
in correspondence with

high-strength blind rivets!

%6.4mm stainless steel rivet cannot

3.2 and 4.0mm rivets can be used

if optional parts are attached.





#### Mandrel Collector Mandrel collector with increased capacity for improved work efficiency

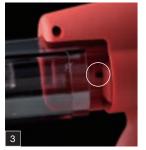
The mandrel collector placed on the side allows for location of mandrel ejection port on the top of the tool. This design is effective for smoothly storing mandrels throughout the collector, resulting in an increased number of mandrels stored during work. Minimal work interruptions make riveting less frustrating.



## LED spotlight for precisely illuminating the object

**2** LED Spotlight

Feel assured even when working in a dimly lit or narrow place. An LED spotlight illuminates the riveting area precisely.



#### Safety Device Safety device to prevent mandrels from shooting out

In a case where the mandrel collector is dislodged or not fitted properly, a safety device is actuated to interrupt the riveter power supply and disable the trigger. This feature prevents mandrels from shooting out and ensures work safety.



## 6 Counter

Foolproof system well suited for riveting management

The R1B1 can be supplied with a digital counter (build to order). Unless each riveting cycle is complete, the counter does not advance, enabling the user to minimize overlooked work deficiencies or riveting defects and to achieve foolproof rivet number



12

## (%1) Comparison with the compressor power consumption at the time pneumatic riveter is used. (%2) Measurement using 4.8mm(3/16") stainless steel rivet (NST6-2).

#### **Cordless Riveters**

#### **Energy-saving and** environmentally friendly

Installs seven times more rivets than conventional models on a single charge. The R1B1 and R1B2 consumes only one forty-fifth of the power consumed by an air riveter thanks to a lithium-ion battery and energy-efficient power transmission system. (%1) This riveting tool installs 560 rivets on a single charge. (%2)

#### The smallest size and compact body in its class

Lobtex's unique motor layout provides for a more compact body with a shorter distance between trigger and riveting point which ensures ease of rivet setting and riveting process.

#### **Functionality and** aesthetic design

Designed by Product Designer Toshiyuki Kita, the R1B1 and R1B2 is easy to grip, well balanced and aesthetically functional yet, built to endure the everyday work environment.

#### **Energy-efficient** power transmission system

A ball screw that efficiently converts rotations to linear motions and a planetary gear that transmits greater torque to ensure smoother riveting.

#### **High Speed Riveting**

With a 1.5 second cycle time, ranks the R1B1 and R1B2 in the industry's fastest class of cordless riveters. Substantially faster than previous models, the R1B1 and R1B2 truly converts your factory "cordless". (%1)

#### Handling user-friendly

The cordless design gives exceptional ease of operation. The handle is installed at an angle for positioning the tool toward the riveting point with ease. In addition, the tool's excellent weight balance causes less wrist fatigue after long hours of work. The grip-assist elastomer ensures reliable non-slippery grip for use with gloves.

Model	Overall Length (L)	Height (H)	Frame Head Diam. (D)	Width (W)	<b>Weight</b> kg	<b>(T</b> )	Stroke mm	Traction Power (N)	Jaws	Compatible Rivets  \$\phi\$mm (inch)
R1B1	260	260	21.0	90	1.9	33	22	10,500	Ultra Jaw 'M'	2.4 / 3.2 / 4.0 / 4.8 (3/32", 1/8", 5/32", 3/16")
R1B2	268	260	23.0	90	2.0	33	22	13,000	Ultra Jaw 'H'	4.8 / 6.4 (3.2 / 4.0) (3/16", 1/4" (1/8", 5/32")) ※

\*\*At the time battery pack BPL1415 is installed. \*\*3.2 / 4.0mm(1/8", 5/32") rivets can be used if optional parts are attached. \*\*6.4mm stainless steel rivets cannot be used.

#### ■Rattery Pack Specifications

Model	Туре	Voltage Rating	Capacity	Charg	Ondo No	
Wodel	туре	voltage hatting	Сараспу	Full Charge	Charge for Practical Use	Code No.
BPL1415	Li-ion	14.4 V DC	1.5 Ah	60 min	45 min	8860
BPL14	Li-ion	14.4 V DC	3.0 Ah	120 min	90 min	8856

\*Full charge: 0% → 100% Charge for practical use: 0% → 80%

harger Specifications

■Charger Specifica	1110115						
Model	Power	Code No.					
BC0075G	100-240 V AC	(230V) 8900	(120V) 8896				

■Nosepiece







#### Riveters

#### **Attachment Riveter**

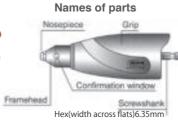
- Instantly turn your impact driver into riveter!
- Compatible with standard hexagonal chucks, so attachment to electric tools is simple.
- ▶ For automotive repair! For Do-It-Yourself projects! For home repairs!

#### @RO3i

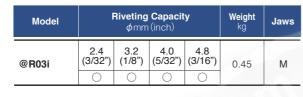


Powerful riveting in a single operation from one side of the work! Easy even for women without a strong grip! Unlike manual riveters, there is no hand pain or fatigue even during large volume riveting, thus increasing the possible scope of work!









#### **Hand Riveters**

#### HR-200

## Riveting Capacity 2.4 3.2 4.0 3/32" 1/8" 5/32"

#### Floating Jawcase Mechanism

- For professional and home use
- ■Built-in damper reduces weight of shock
- Sets rivets up to 4.0 mm (5/32")



#### HR-002A

|--|

#### **General Duty Hand Riveters**

- ■Aluminum diecast frame and drop-forged s teel lever handle
- ■Wide self-opening spring for easy re-gripping
- ■Automatic mandrel ejection
- Comes with four nosepieces to set rivets up to 4.8 mm (3/16")

#### HR-005A





#### Flexible Hand Riveters

- ■Versatile design for 360° multi-directional riveting
- Quick change nose head direction
- Comes with four nosepieces to set rivets up to 4.8 mm(3/16")

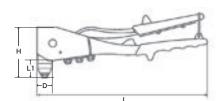


#### HR-002D

2.4 3.2 4.0 4.8 3/32" 1/8" 5/32" 3/16"

#### Floating Jawcase Mechanism

- Overcomes drawbacks of conventional hand riveters by holding the rivet firmly regardless of tool position.
- Special palm and hand grip for ease and comfort
- ■Comes with four nosepieces to set rivets up to 4.8mm(3/16")



Mardal	Rive	ting Ca	apacity	<b>/</b> φmm(	inch)	Weight	L	L1	н	D	Jaws	
Model	2.4 (3/32")	3.2 (1/8")	4.0 (5/32")	4.8 (3/16")	6.4 (1/4")	kg	mm	mm	mm	mm		
HR-200	0	0	Δ	_	_	0.39	200	40	85	φ19	S	
HR-002A	0	0	0		_	0.54	265	32	79	φ20	S	
HR-002D	0	0	0	<b>A</b>	_	0.5	270	20	83	φ20	S	
HR-005A	0	0	Δ		_	0.75	300	30	83	φ22	S	

<sup>\*△</sup> Cannot be used with stainless steel rivets.

#### **Heavy Duty Hand Riveters**

- Longer handles and gear mechanism exert greater rivet break power
- ■Maintenance-free simple rugged construction
- Sets rivets up to 6.4 mm (1/4") stainless steel as well as T-Rivet® and Monobolt® .

#### **HR-003A**











Model	Riveting Capacity \$\phi\$ mm (inch)  2.4   3.2   4.0   4.8   6.4   (3/32") (1/8") (5/32") (3/16") (1/4")						<b>L</b> mm	<b>L1</b> mm	<b>H</b> mm	<b>D</b> Ømm	Jaws
HR-003A	_	_	0	0	_	1.8	610	43	_	25	М
HR-003B	_	_	_	0	0	2.0	760	41	_	25	Н
HR-2005H				0	0	1.75	532	33	37	24	Н

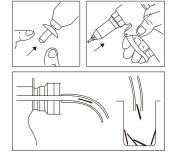
 $<sup>^*\</sup>Box$  Can be used if optional parts (sold separately) are attached.

#### **VU-S·VU-M·VU-H48·VU-H64**

00000







#### ■ Specifications

(III)

Model	2.4 (3/32")			yφmm 4.8 )(3/16")		Compatible models	Working Air Pressure MPa	Air Consumption	<b>Weight</b> g	Recommended chute hose★ (option)			
VU-S	0	0	<u> </u>	_		AR-011S		About		Material: nylon			
VU-M	-	0	0	0	_	AR-011M•AR-021M	0.5~0.6	About 100 L/min	280	Internal diameter: 5.9 mm			
VU-H48	-	-	-	0	-	AR-011H•AR-021H	0.5 -0.0	100 2,111111	200	x Length: 1,900 mm			
VU-H64	-	_	<u> </u>	_	0	AII-01111 AII-02111		About 120		Internal diameter: 7 mm x Length: 2,000 mm			

<sup>\*</sup>By connecting directly to a nozzle unit that can be disconnected from the tank, detached mandrels can be expelled into a designated location.

#### **Optional Parts**

Table 1. Riveters			
Description	AR-2000H	AR-2000HV	HR-2050H
Description	Code No.	Code No.	Code No.
Jaws case head M	14378	14378	20528
Jaws M	_	-	10117
Ultra jaws M	10281	10281	-
Jaws pusher H	10224	10224	-
Nosepiece L 2.4	10213	-	10213
Nosepiece L 3.2	10214	10214	10214
Nosepiece L 4.0	10215	10215	10215

Table 2. S-bolts Tools

Description	Code No.
Nosepiece 4.8 for S-bolts	43751
Nosepiece 6.4 for S-bolts	43750

• Be sure to read the instruction manual carefully and make sure that you understand them thoroughly before using the riveter. **△ WARNING** For all Riveters

<sup>▲</sup> Cannot be used with steel and stainless steel rivet.

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## Lobster tools Specification of Pneumatic Riveter

	Dowl	Vacu		Rive	et Diam	eter		S-		Soft Set		Air	Traction	Frame		Working
Туре	Part Number	um	2.4mm 3/32"	3.2mm 1/8"	4.0mm 5/32"	4.8mm 3/16"	6.4mm 1/4"	S- Bolt	Jaws	(Shock- less)	Stroke	Consumption (Air Pressure 0.6MPa)	Traction Power	Head Diameter	Weight	Air Pressure
Ultra Light	R1A1	0	0	0	0	0	-	-	Ultra Jaw 'M'	0	19mm .748"	68L/min*	9.0kN	21φmm .827"	1.1kg 2.43lb	
Туре	R1A2	0	-	-	-	0	0	*	Ultra Jaw 'H'	0	26mm 1.024"	75L/min*	18.5kN	22φmm .866"	1.7kg 3.75lb	
Light Type	AR2000S	-	0	0	Δ	-	-	-	S	0	14mm .551"	(0.6L/pcs)	4.8kN	19φmm .748"	1.1kg 2.43lb	
	AR2000M	-	0	0	0	0	-	-	Ultra Jaw 'M'	0	16mm .630"	(1.7L/pcs)	9.1kN	21φmm .827"	1.2kg 2.65lb	
	AR2000H	-				0	0	*	Ultra Jaw 'H'	0	18.5mm .728"	(3.6L/pcs)	14.0kN	24φmm .945"	1.6kg 3.53lb	
	AR2000SV	0	0	0	Δ	-	-	-	S	0	14mm .551"	90L/min	4.8kN	19φmm .748"	1.2kg 2.65lb	
	AR2000MV	0	0	0	0	0	-	-	Ultra Jaw 'M'	0	16mm .630"	90L/min	9.1kN	21φmm .827"	1.4kg 3.09lb	
	AR2000HV	0	-			0	0	*	Ultra Jaw 'H'	0	18.5mm .728"	120L/min	14.0kN	24φmm .945"	1.8kg 3.97lb	
0	AR011MX	-	0	0	0	0	-	-	Ultra Jaw 'M'	0	16mm .630"	(1.8L/pcs)	9.0kN	23φmm .906"	1.5kg 3.31lb	0.5 -0.6
Standard Type	AR011HX	-	0	0	0	0	0	-	Ultra Jaw 'M', 'H'	0	16.5mm .650"	(2.4L/pcs)	14.0kN	25φmm .984"	2.1kg 4.63lb	MPa
In-Line Type	ARV015MX	0	0	0	0	0	-	-	Ultra Jaw 'M'	0	16mm .630"	100L/min	8.0kN	23φmm .906"	1.8kg 3.97lb	
Separate Type	ARV025M	0	0	0	0	0	-	-	Ultra Jaw 'M'	0	19mm .748"	100L/min	9.8kN	23 φ mm .906"	0.9kg 1.98" (Head)	
	AR2000A90	-	0	0	0	Δ	-	-	S	0	16mm .630"	(1.7L/pcs)	8.0kN	17.5 <b>φ</b> mm .689"	1.8kg 3.97lb	
Angle Type	AR2000A45	-	0	0	0	Δ	-	-	S	0	16mm .630"	(1.7L/pcs)	8.0kN	17.5 φ mm .689"	1.9kg 4.19lb	
	AR2000A00	-	0	0	0	Δ	-	-	S	0	16mm .630"	(1.7L/pcs)	8.0kN	17.5 φ mm .689"	1.8kg 3.97lb	
Ultra Light Type (for S-Bolt)	AR3000EV	0	-	-	-	•	•	☆	Ultra Jaw 'H'	0	24mm .945"	120L/min	15.2kN	22 <b>φ</b> mm .866"	1.4kg 3.09lb	

\*When air pressure is 0.6MPa  $\triangle$  Cannot be used with Stainless Steel rivets,  $\square$  Can is workable by using optional parts,

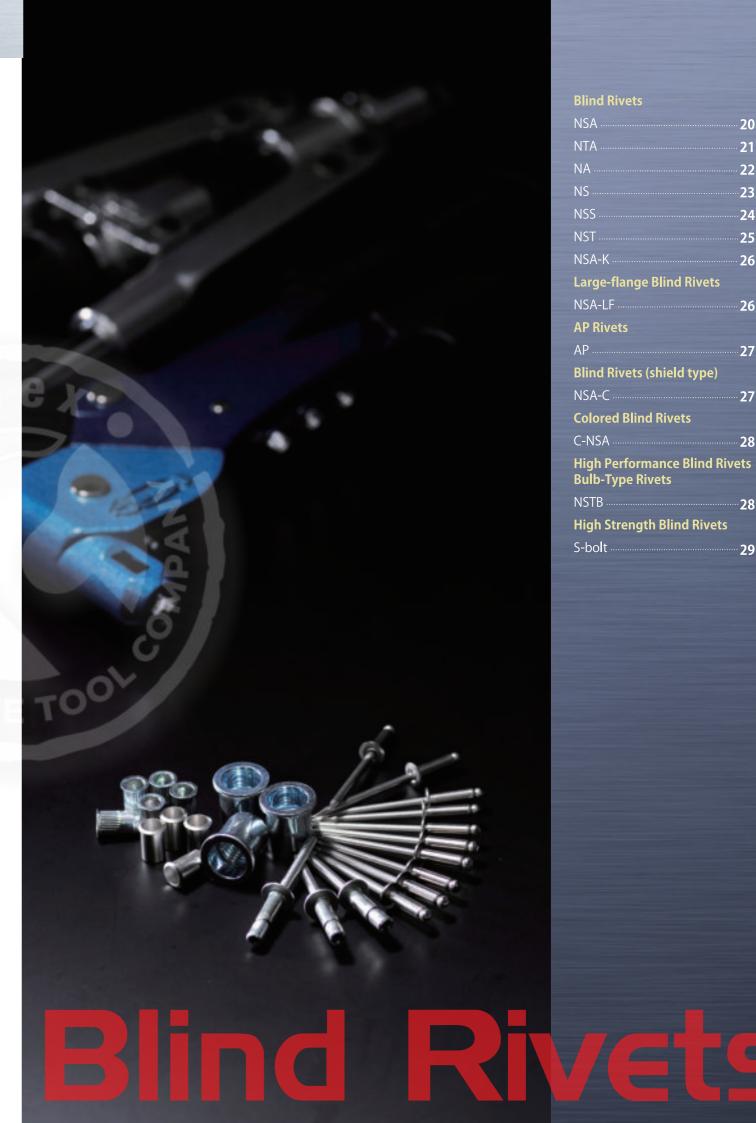
- When using open-type rivets optional parts will be required.
- ☆ Comes with optional parts for S-bolt
- ★ Can be used when using Optional parts(sold separately)

\*Soft-Set is the name of LOBSTER shock-less function which will reduce the riveting impact.

## Specification of Cordless Riveter

	Part	Type of		Rive	et Diam	eter		S-	Voltage				Traction	Frame	
Туре	Number	Battery	2.4mm 3/32"	3.2mm 1/8"	4.0mm 5/32"	4.8mm 3/16"	6.4mm 1/4"	Bolt	Voltage Rating	Jaws	Stroke	Capacity	Power	Head Diameter	Weight
Cordless	R1B1	Li-ion	0	0	0	0	-	-	DC14.4V	Ultra Jaw 'M'	22mm .866"	1.5Ah (*3.0Ah)	10.5kN	21φmm .827"	1.9kg 4.19lb
Туре	R1B2	Li-ion	-			0	Δ	*	DC14.4V	Ultra Jaw 'H'	22mm .866"	1.5Ah (*3.0Ah)	13.0kN	23φmm .906"	2.0kg 4.41lb

- $\triangle$  Cannot be used for 6.4mm(1/4") stainless rivets  $\square$  Can be used by optional parts(sold separately)
- ★ When using R1B2 to rivet S-bolt, can be used by using optional parts(sold separately)
- \*Battery pack capacity 3.0Ah is sold separately



#### **LOBSTER Blind Rivet Fastening Method**

#### What is LOBSTER blind rivet?

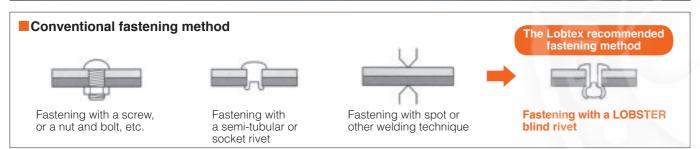
LOBSTER blind rivets can be used in a variety of assembly processes. Because multiple base materials can be fastened together in a single operation from one side of the work, these rivets contribute greatly to labor savings, lowered costs and increased work speed. In addition, the various head shapes and material combinations that are available with blind rivets make it possible to easily conform to various industrial design specifications. Further, by using LOBSTER blind rivets in conjunction with LOBSTER riveters and other automatic fastening systems and their prominent quality, reliability and results, the positive effect is doubled.

#### **LOBSTER Blind Rivet Operating Method**

Blind rivet work procedure



#### The difference between conventional methods and the LOBSTER blind rivet method



#### **Applications**

#### **Automotive / transport**



#### **Example applications**

Automotive ornamentation, automotive interior decoration, two-wheeled vehicles, refrigeration vehicles, dry vans, bus bodies, railroad cars, airplanes, forklifts, all-terrain vehicles, various containers, motorcycles, snowmobiles, etc.

#### Electric / Electronic equipment



#### Example applications

Computer racks, cubicles, elevators, lighting, household appliances, power supply units, office equipment, terminals, substrates and circuit boards, various meters and instruments, etc.

#### Construction

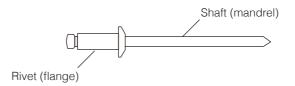


#### Example applications

Gates, carports, rain lattices, fences, handrails, entrance doors, sliding storm doors, bay windows, windows shutters, storage sheds, prefab houses, curtain walls, steel-frame houses, insulation sashes, construction hardware, etc.

In addition to the above example applications, LOBSTER blind rivets can be applied to any of a variety of different assemblies. Contact our company representative or technical support if you have any technical questions.

#### Structure of Blind Rivet



#### LOBSTER Blind Rivet P/N Explanation

#### Example P/N

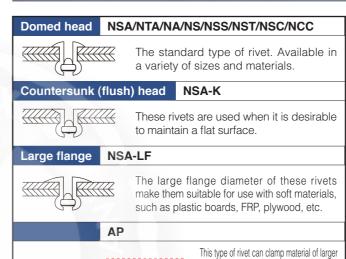
SNS

Rivet diameter (φ4.8mm)
6÷32×25.4≒φ4.8mm
Maximum grip length (φ3.2mm)
2÷16×25.4≒φ3.2mm

Rivet material (aluminum)
Shaft material (steel)

The original Japanese name of Lobtex ("N" for Nippon Riki)

#### **Selection Table of Proper Rivets**



This type of rivet can clamp material of larger thicknesses than before, so it is possible to use a single rivet type to fasten a wider range of materials. Excellent airtight characteristics and also appropriate for use with soft boards.

# Shield NSA-C/NST-C (Production upon order) Closed rivet head for superior waterproof characteristics. Bulb type NSTB Excellent anti-vibration and airtight characteristics. Greater tensile strength at the corresponding materials' surface of contact. Increases the strength of the application material. Heavy duty S-bolt Strong, good clamping strength, anti-vibration and

SNS

airtight characteristics.

			Market	Mate	erial		Riv	et Diam	eter		
Туре	Flang	е Туре	Model	Rivet	Shaft	2.4	3.2	4.0	4.8	6.4	Page
			NSA	Aluminum	Steel	•	•	•	•	•	P.20
OY			NTA	Aluminum	Stainless steel	•	•	•	•	•	P.21
	Domed Head	HHA KHHH	NA	Aluminum	Aluminum	•	•	•	•	•	P.22
Standard	Domed Head		NS	Steel	Steel	•	•	•	•	•	P.23
			NST	Stainless steel	Stainless steel	•	•	•	•	•	P.24
			NSS	Stainless steel	Steel	•	•	•	•	•	P.25
	Countersunk Head		NSA-K	Aluminum	Steel	•	•	•	•		P.26
Large Flange	Domed Head		NSA-LF	Aluminum	Steel			•	•		P.26
Bulb	Domed Head		AP	Aluminum	Steel		•	•	•		P.27
Buib	Domed Flead		NSTB	Stainless steel	Stainless steel				•		P.28
Shield	Domed Head		NSA-C	Aluminum	Steel			•	•		P.27
Colored	Domed Head		CNSA	Aluminum	Steel		•	•			P.28
Structural (Bolt)	Domed Head		SNS	Steel	Steel				•	•	P.29
Girdeldrai (BOII)	Countersunk Head		SNS-K	Steel	Steel					•	P.29

## Blind Rivets

With an aluminum rivet body and steel shaft, this standard rivet has a wide range of applications.







et	Aluminum (JIS A 5154)	Shaft	Steel (carbon steel)	

S—S	$\dashv$
HD	D ₩
<del></del>     <del></del>   F	$\rightarrow$

Rivet	Hole		Appropriate			Dime	nsions			Strength		per
<b>diameter D</b> φ mm	diameter φmm	Model	material thickness mm	L mm	H ø mm	T mm	<b>W ø</b> mm	S mm	F mm	Tensile N	Shearing N	package
		NSA3-2	1.0~3.2	5.6				28.5	35			
2.4	2.5~2.6	NSA3-3	1.6~4.8	7.6	4.8	0.9	1.45	26.5	35	700	450	1,000
		NSA3-4	3.2~6.4	9.1				25.0	35			
		NSA4-1	1.0~1.6	4.8				32.1	38			
		NSA4-2	1.0~3.2	6.5	1			30.4	38			
		NSA4-3	1.6~4.8	8.2	1			28.7	38			1,000
		NSA4-4	3.2~6.4	9.9	1		1.8	27.0	38	1,350	950	
3.2	3.3~3.4	NSA4-5	4.8~8.0	11.6	6.4	1.1		29.3	42			
		NSA4-6	6.4~9.5	13.3	1			27.6	42			
		NSA4-8	9.5~12.7	16.7	1			27.2	45			
		NSA4-10	12.7~15.9	19.0	1		1.0	32.9	53	4 000	050	
		NSA4-12	15.9~19.1	23.0			1.9	28.9	53	1,300	850	
		NSA5-2	1.2~3.2	7.2				33.5	42			
		NSA5-3	1.6~4.8	8.9				31.8	42			
		NSA5-4	3.2~6.4	10.5				30.2	42			
4.0	44-40	NSA5-5	4.8~8.0	12.2		1.0	0.04	28.5	42	0.000	1.550	1 000
4.0	4.1~4.2	NSA5-6	6.4~9.5	13.9	8.0	1.3	2.24	32.8	48	2,200	1,550	1,000
		NSA5-8	9.5~12.7	17.2				29.5	48			
		NSA5-10	12.7~15.9	19.7	1			34.0	55			
		NSA5-12	15.9~19.1	23.0				30.7	55			
		NSA6-2	1.6~3.2	7.6				38.5	48			
		NSA6-3	1.6~4.8	9.3				36.8	48			
		NSA6-4	3.2~6.4	11.0	1			35.1	48			
		NSA6-5	4.8~8.0	12.8				33.3	48			1,000
4.0	40 50	NSA6-6	6.4~9.5	14.5		1.0	0.04	41.6	56	0.000	0.000	
4.8	4.9~5.0	NSA6-8	9.5~12.7	17.9	9.6	1.9	2.64	38.2	56	3,300	2,200	
		NSA6-10	12.7~15.9	21.3	]			36.0	56			
		NSA6-12	15.9~19.1	24.8	1			34.9	60			
		NSA6-14	19.1~22.3	28.2	]			39.6	66			500
		NSA6-16	22.3~25.4	29.7	1			36.4	66			
		NSA8-2	1.6~3.2	9.2				48.4	60			
		NSA8-4	3.2~6.4	12.4				45.2	60			
		NSA8-6	6.4~9.5	15.6				42.0	60			
6.4	6.5~6.6	NSA8-8	9.5~12.7	18.9	12.8	2.4	3.83	38.7	60	5,300	3,400	500
		NSA8-10	12.7~15.9	22.1	12.0			45.5	70			
		NSA8-12	15.9~19.1	25.4				42.2	70			
		NSA8-14	19.1~22.3	28.6	1			39.0	70			

Blind Rivets		
The strength is same as NSA and a corrosion resistance.	Appropriate material thickness	l e l
NTA Domed head		H
Rivet Aluminum (JIS A 5154)	Shaft Stainless Steel (SUS304 or equivalent)	L F

Rivet	Hole		Appropriate			Dime	nsions			Strength		per
<b>diameter</b> <b>D</b> <i>φ</i> mm	diameter φmm	Model	material thickness mm	L mm	<b>H</b> ø mm	T mm	<b>W ø</b> mm	S mm	F mm	Tensile N	Shearing N	package
		NTA3-2	1.0~3.2	5.6				28.5	35			
2.4	2.5~2.6	NTA3-3	1.6~4.8	7.6	4.8	0.9	1.45	26.5	35	700	450	1,000
		NTA3-4	3.2~6.4	9.1				25.0	35			
		NTA4-1	1.0~1.6	4.8				32.1	38			
		NTA4-2	1.0~3.2	6.5				30.4	38			
		NTA4-3	1.6~4.8	8.2				28.7	38			
3.2		NTA4-4	3.2~6.4	9.9		1.1	1.8	27.0	38	1,350	950	
	3.3~3.4	NTA4-5	4.8~8.0	11.6	6.4			29.3	42			1,000
		NTA4-6	6.4~9.5	13.3				27.6	42			
		NTA4-8	9.5~12.7	16.7				27.2	45			
		NTA4-10	12.7~15.9	19.0				32.9	53	1 200	050	
		NTA4-12	15.9~19.1	23.0			1.9	28.9	53	1,300	850	
		NTA5-2	1.2~3.2	7.2				33.5	42			
		NTA5-3	1.6~4.8	8.9				31.8	42			
		NTA5-4	3.2~6.4	10.5				30.2	42			
		NTA5-5	4.8~8.0	12.2				28.5	42		4.550	4 000
4.0	4.1~4.2	NTA5-6	6.4~9.5	13.9	8.0	1.3	2.24	32.8	48	2,200	1,550	1,000
		NTA5-8	9.5~12.7	17.2				29.5	48			
		NTA5-10	12.7~15.9	19.7	1			34.0	55			
		NTA5-12	15.9~19.1	23.0				30.7	55			
		NTA6-2	1.6~3.2	7.6				38.5	48			
		NTA6-3	1.6~4.8	9.3				36.8	48			
		NTA6-4	3.2~6.4	11.0				35.1	48			1,000
		NTA6-5	4.8~8.0	12.8				33.3	48			
4.0	40.50	NTA6-6	6.4~9.5	14.5			0.04	41.6	58	0.000	0.000	
4.8	4.9~5.0	NTA6-8	9.5~12.7	17.9	9.6	1.9	2.64	38.2	58	3,300	2,200	
		NTA6-10	12.7~15.9	21.3	1			36.0	58			
		NTA6-12	15.9~19.1	24.8				34.9	60			
		NTA6-14	19.1~22.3	28.2	1			39.6	66			500
		NTA6-16	22.3~25.4	29.7				36.4	66			
		NTA8-2	1.6~3.2	9.2				48.4	60			
		NTA8-4	3.2~6.4	12.4				45.2	60			
		NTA8-6	6.4~9.5	15.6				42.0	60			
6.4	6.5~6.6	NTA8-8	9.5~12.7	18.9	12.8	2.4	3.83	38.7	60	5,300	3,400	500
		NTA8-10	12.7~15.9	22.1				45.5	70			
		NTA8-12	15.9~19.1	25.4				42.2	70			
		NTA8-14	19.1~22.3	28.6	1			39.0	70			

**A WARNING** 

For all Blind rivets

Be sure that you understand all of the work conditions involved before using blind rivets.
 Before starting work, ALWAYS read the instruction manual for your riveter tool.

## Blind Rivets

These all-aluminum rivets have a high corrosion resistance and are appropriate for fastening together aluminum plates or soft materials like resin.



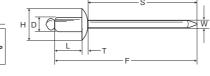




Rivet	Aluminum* (A 5052)	(
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Rivet	Hole		Appropriate			Dime	nsions			Stre	ength	per
<b>diameter D</b> $\phi$ mm	diameter	Model	material thickness mm	L mm	<b>H</b> Ø mm	T mm	<b>W ø</b> mm	<b>S</b> mm	F mm	Tensile N	Shearing N	package
		NA3-2	1.0~3.2	5.6				28.5	35			
2.4	2.5~2.6	NA3-3	1.6~4.8	7.6	4.8	0.9	1.5	26.5	35	650	450	1,000
		NA3-4	3.2~6.4	9.1				25.0	35			
		NA4-1	1.0~1.6	4.8				32.1	38			
		NA4-2	1.0~3.2	6.5				30.4	38			
		NA4-3	1.6~4.8	8.2				28.7	38			
		NA4-4	3.2~6.4	9.9		1.1	1.9	27.0	38		750	
3.2	3.3~3.4	NA4-5	4.8~8.0	11.6	6.4			29.3	42	1,000		1,000
		NA4-6	6.4~9.5	13.3				27.6	42			
		NA4-8	9.5~12.7	16.7				24.2	45			
		NA4-10	12.7~15.9	19.0				32.9	53			
		NA4-12	15.9~19.1	23.0				28.9	53			
		NA5-2	1.2~3.2	7.2				33.5	42			
		NA5-3	1.6~4.8	8.9				31.8	42			
		NA5-4	3.2~6.4	10.5	]			30.2	42			
4.0	44-40	NA5-5	4.8~8.0	12.2	1	4.0		28.5	42	1.000	1.150	1 000
4.0	4.1~4.2	NA5-6	6.4~9.5	13.9	8.0	1.3	2.4	32.8	48	1,600	1,150	1,000
		NA5-8	9.5~12.7	17.2				29.5	48			
		NA5-10	12.7~15.9	19.7				34.0	55			
		NA5-12	15.9~19.1	23.0				30.7	55			
		NA6-2	1.6~3.2	7.6				38.5	48			
		NA6-3	1.6~4.8	9.3				36.8	48			
		NA6-4	3.2~6.4	11.0				35.1	48			
		NA6-5	4.8~8.0	12.8				33.3	48			1,000
4.0	40-50	NA6-6	6.4~9.5	14.5		10	2.9	39.6	56	0.050	1.000	
4.8	4.9~5.0	NA6-8	9.5~12.7	17.9	9.6	1.9	2.9	36.2	56	2,350	1,600	
		NA6-10	12.7~15.9	21.3	1			34.0	56			
		NA6-12	15.9~19.1	24.8				34.9	60			
		NA6-14	19.1~22.3	28.2				37.6	66			500
		NA6-16	22.3~25.4	29.7				34.4	66			
		NA8-2	1.6~3.2	9.2				48.9	60			
		NA8-4	3.2~6.4	12.4				45.7	60			
		NA8-6	6.4~9.5	15.6				42.5	60			
6.4	6.5~6.6	NA8-8	9.5~12.7	18.9	12.8	2.4	3.8	39.2	60	4,200	2,650	500
		NA8-10	12.7~15.9	22.1	1			46.0	70			300
		NA8-12	15.9~19.1	25.4				42.7	70			
		NA8-14	19.1~22.3	28.6	1			39.5	70			

#### Blind Rivets

**Blind Rivets** 

These all-steel rivets have a high strength and are appropriate for fastening steel pieces together.



NS Domed head



vet	Steel (carbon steel)	Shaft	Steel (carbon steel)	C

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HD	> ₩
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Rivet	Hole	ameter Model	Appropriate	_		Dime	nsions			Strength		per
<b>diameter</b> <b>D</b> <i>φ</i> mm	diameter φmm		material thickness mm	L mm	H ø mm	T mm	<b>W ø</b> mm	S mm	F mm	Tensile N	Shearing N	package
0.4	05.00	NS3-2	1.0~3.2	5.5	4.0	0.0	4.5	28.8	35	050	700	1 000
2.4	2.5~2.6	NS3-4	3.2~6.4	8.7	4.8	0.8	1.5	25.6	35	850	700	1,000
		NS4-1	1.0~1.6	4.8				32.1	38			
		NS4-2	1.0~3.2	6.4				30.5	38			
		NS4-3	1.6~4.8	8.0		1.1		28.9	38			
3.2	3.3~3.4	NS4-4	3.2~6.4	9.5	6.4		1.9	27.4	38	1,700	1,300	1,000
		NS4-5	4.8~8.0	11.2				29.7	42			
		NS4-6	6.4~9.5	12.7				28.2	42			
		NS4-8	9.5~12.7	15.9				25.0	42			
		NS5-2	1.2~3.2	7.0				33.7	44		2,000	
		NS5-3	1.6~4.8	8.6				32.7	44	2,700		
4.0	4.1~4.2	NS5-4	3.2~6.4	10.2	8.0	1.3	2.4	30.5	44			1,000
4.0	4.1 4.2	NS5-5	4.8~8.0	11.8	0.0	1.0	2.4	28.9	44			1,000
		NS5-6	6.4~9.5	13.3				32.4	48			
		NS5-8	9.5~12.7	16.5				29.2	48			
		NS6-2	1.6~3.2	7.6				38.5	48			
		NS6-3	1.6~4.8	9.2		1.8	2.9	36.9	48			
		NS6-4	3.2~6.4	10.8				35.3	48			
4.8	4.9~5.0	NS6-5	4.8~8.0	12.4	9.6			33.7	48	4,000	3,000	1,000
4.0	4.5 5.6	NS6-6	6.4~9.5	14.0	3.0	1.0	2.5	40.1	56	4,000	0,000	
		NS6-8	9.5~12.7	17.2				36.9	56			
		NS6-10	12.7~15.9	20.4				33.7	56			
		NS6-12	15.9~19.1	23.6				34.5	60			500
		NS8-4	3.2~6.4	12.4	12.7	1.6	3.83	46.0	60			
		NS8-6	6.4~9.5	15.6	12.7	1.0	0.00	42.8	60			
6.4	6.5~6.6	NS8-8	9.5~12.7	18.9				39.2	60	7,200	5,200	500
J.7	0.0	NS8-10	12.7~15.9	22.1	12.8	2.4	3.8	36.0	70	7,200	0,200	500
		NS8-12	15.9~19.1	25.4	12.0	2.4	0.0	32.7	70			
		NS8-14	19.1~22.3	28.6				29.5	70			

**⚠ WARNING** 

For all Blind rivets

Be sure that you understand all of the work conditions involved before using blind rivets.
 Before starting work, ALWAYS read the instruction manual for your riveter tool.

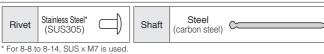
#### Blind Rivets

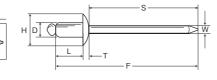
With a stainless steel rivet body and steel shaft, the corrosion resistance of these rivets is inferior to NST rivets, but their strength is equivalent.



NSS Domed head







Rivet	Hole	Martal	Appropriate			Dime	nsions			Stre	ength	per
<b>diameter</b> <b>D</b> <i>φ</i> mm	<b>diameter</b> φ mm	Model	material thickness mm	L mm	Hφmm	T mm	<b>W ø</b> mm	<b>S</b> mm	F mm	Tensile N	Shearing N	package
0.4	05.00	NSS3-2	1.0~3.2	5.5	4.0	0.0	4.5	29.0	35	1 000	1.400	1.000
2.4	2.5~2.6	NSS3-4	3.2~6.4	8.7	4.8	0.6	1.5	25.8	35	1,300	1,100	1,000
		NSS4-1	1.0~1.6	4.4				33.0	38			
		NSS4-2	1.0~3.2	6.0				31.4	38		1400	
		NSS4-3	1.6~4.8	7.6				29.8	38			
3.2	3.3~3.4	NSS4-4	3.2~6.4	9.2	6.4	0.8	2.0	28.2	38	2,700	2,350	1,000
		NSS4-5	4.8~8.0	10.8	]			30.6	42			
		NSS4-6	6.4~9.5	12.3				29.1	42			
		NSS4-8	9.5~12.7	15.5	]			25.9	42			
		NSS5-2	1.2~3.2	6.6				34.6	42			
		NSS5-3	1.6~4.8	8.2	7.0			33.0	42		2,400	
		NSS5-4	3.2~6.4	9.8				31.4	42	0.050		4.000
4.0	4.1~4.2	NSS5-5	4.8~8.0	11.4	7.9	1.0	2.5	29.8	42	3,950	3,400	1,000
		NSS5-6	6.4~9.5	12.9				33.3	47			
		NSS5-8	9.5~12.7	16.1				30.1	47			
		NSS6-2	1.6~3.2	7.1				39.7	48			
		NSS6-3	1.6~4.8	9.0				37.8	48			
		NSS6-4	3.2~6.4	10.3				36.5	48			
		NSS6-5	4.8~8.0	11.9				34.9	48			1,000
		NSS6-6	6.4~9.5	13.5				41.3	56			
4.8	4.9~5.0	NSS6-8	9.5~12.7	16.7	9.5	1.4	2.85	38.1	56	6,350	5,450	
		NSS6-10	12.7~15.9	19.9				34.9	56			
		NSS6-12	15.9~19.1	23.0				35.8	60			
		NSS6-14	19.1~22.3	26.5				38.3	66			500
		NSS6-16	22.3~25.4	29.7				35.1	66			
		NSS8-4	3.2~6.4	12.4	100			46.0	60	44.000	1	
		NSS8-6	6.4~9.5	15.6	12.8	1.7	3.8	42.8	60	11,300	9,300	
0.4		NSS8-8	9.5~12.7	18.9				39.5	60			500
6.4	6.5~6.6	NSS8-10	12.7~15.9	22.1	1			46.3	70	40.500		500
		NSS8-12	15.9~19.1	25.4	12.5	1.9	3.9	43.0	70	10,500	8,500	
		NSS8-14	19.1~22.3	28.6				39.8	70			

#### Blind Rivets

**Blind Rivets** 

These all-stainless steel rivets have top strength and top corrosion resistance.



NST Domed head



Rivet	Stainless Steel* (SUS305)		Shaft	Stainless Steel (SUS304 or equivalent)	C
* For 8-8 to	o 8-14, SUS x N	17 is used.			

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Rivet	Hole	Martid	Appropriate			Dime	nsions			Stre	ength	per
<b>D</b> <i>φ</i> mm	diameter	Model	material thickness mm	L mm	<b>H</b> ø mm	T mm	<b>W ø</b> mm	S mm	F mm	Tensile N	Shearing N	package
0.4	05.00	NST3-2	1.0~3.2	5.5	4.0	0.0	4.5	29.0	35	1 000	1 100	1.000
2.4	2.5~2.6	NST3-4	3.2~6.4	8.7	4.8	0.6	1.5	25.8	35	1,300	1,100	1,000
		NST4-1	1.0~1.6	4.4				33.0	38			
		NST4-2	1.0~3.2	6.0				31.4	38			
		NST4-3	1.6~4.8	7.6	1			29.8	38			
3.2	3.3~3.4	NST4-4	3.2~6.4	9.2	6.4	0.8	2.0	28.2	38	2,700	2,350	1,000
		NST4-5	4.8~8.0	10.8				30.6	42			
		NST4-6	6.4~9.5	12.3				29.1	42			
	1	NST4-8	9.5~12.7	15.5				25.9	42			
		NST5-2	1.2~3.2	6.6				34.6	42			
		NST5-3	1.6~4.8	8.2				33.0	42			
		NST5-4	3.2~6.4	9.8			0.5	31.4	42	0.050	0.400	4 000
4.0	4.0 4.1~4.2	NST5-5	4.8~8.0	11.4	7.9	1.0	2.5	29.8	42	3,950	3,400	1,000
		NST5-6	6.4~9.5	12.9				33.3	47			
		NST5-8	9.5~12.7	16.1				30.1	47			
		NST6-2	1.6~3.2	7.1				39.7	48			
		NST6-3	1.6~4.8	9.0				37.8	48			1,000
		NST6-4	3.2~6.4	10.3				36.5	48			
		NST6-5	4.8~8.0	11.9	1			34.9	48			
	10 50	NST6-6	6.4~9.5	13.5	1			41.3	52	0.050	5 450	
4.8	4.9~5.0	NST6-8	9.5~12.7	16.7	9.5	1.4	2.9	38.1	52	6,350	5,450	
		NST6-10	12.7~15.9	19.9				34.9	60			
		NST6-12	15.9~19.1	23.0	1			35.8	60			
		NST6-14	19.1~22.3	26.5				38.3	66			500
		NST6-16	22.3~25.4	29.7	1			35.1	66			
		NST8-4	3.2~6.4	12.4	10.0		0.0	46.0	60	11.000	0.000	
		NST8-6	6.4~9.5	15.6	12.8	1.7	3.8	42.8	60	11,300	9,300	
C 4	G E - 00	NST8-8	9.5~12.7	18.9				39.5	60			F00
6.4	6.5~6.6	NST8-10	12.7~15.9	22.1	10.5	1.9		46.3	70	70	0.500	500
		NST8-12	15.9~19.1	25.4	12.5		1.9 3.9	3.9	43.0	70	10,500	8,500
		NST8-14	19.1~22.3	28.6				39.8	70			

**A WARNING** 

For all Blind rivets

Be sure that you understand all of the work conditions involved before using blind rivets.
 Before starting work, ALWAYS read the instruction manual for your riveter tool.

27

## Blind Rivets

#### Blind Rivets

These rivets are a countersunk type head. By preparing a countersunk hole in the base material, the flange will not protrude and will end up flush with the surface of the material.

NSA-K Countersunk head



Aluminum (JIS A 5154)	Shaft	Steel (carbon steel)	C======
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Rivet	Hole	Madal	Appropriate material thickness		Dimensions					Stre	ngth	per
$\begin{array}{c} \textbf{diameter} \\ \textbf{D}  \phi  \text{mm} \end{array}$	diameter	Model	material thickness mm	<b>L</b> mm	<b>H</b> Ø mm	T mm	<b>W ø</b> mm	S mm	F mm	Tensile N	Shearing N	package
2.4	2.5~2.6	NSA3-2K	1.6~3.2	5.6	4.8	0.8	1.45	28.6	35	600	450	1 000
2.4	2.5,02.6	NSA3-4K	3.2~6.4	9.1	4.8	0.8	1.45	25.1	35	000	450	1,000
		NSA4-2K	1.6~3.2	6.5				30.3	38			
		NSA4-3K	1.6~4.8	8.2				28.6	38			
3.2	3.3~3.4	NSA4-4K	3.2~6.4	9.9	6.4	1.2	1.8	26.9	38	1.050	950	1,000
3.2	3.3~3.4	NSA4-5K	4.8~8.0	11.6	0.4	1.2	1.0	29.2	42	1,350	950	1,000
		NSA4-6K	6.4~9.5	13.3	1			27.5	42			
		NSA4-8K	9.5~12.7	16.7	1			27.1	45		1300	
		NSA5-2K	1.2~3.2	7.2		0 1.5		33.4	42			
		NSA5-3K	1.6~4.8	8.9				31.7	42			
4.0	44-40	NSA5-4K	3.2~6.4	10.5			1.5	0.04	30.1	42	0.100	1.450
4.0	4.1~4.2	NSA5-5K	4.8~8.0	12.2	8.0		2.24	28.4	42	2,100	1,450	1,000
		NSA5-6K	6.4~9.5	13.9	1			32.7	48			
		NSA5-8K	9.5~12.7	17.2				29.4	48			
		NSA6-2K	2.4~3.2	7.6				38.7	48			
		NSA6-3K	2.4~4.8	9.3	1			37.0	48			
		NSA6-4K	3.2~6.4	11.0	1			35.3	48			
4.8	4.9~5.0	NSA6-5K	4.8~8.0	12.8	9.6	1.7	2.64	43.5	48	3,250	2,250	1,000
		NSA6-6K	6.4~9.5	14.5	1			41.8	58			
		NSA6-8K	9.5~12.7	17.9	_				38.4	58		
		NSA6-10K	12.7~15.9	20.1	1			36.2	58			

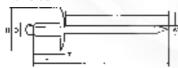
#### **Large-flange Blind Rivets**

These rivets are a large flange diameter. Even if the side of the base material where the flange is located is of a soft material, there is minimal deforming of that material and it is possible to use a large diameter hole on that side.

NSA-LF Domed head



	Rivet	Aluminum (JIS A 5154)	:	į	Shaft	Steel (carbon steel)	C
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Rivet	Hole	David assembles	Appropriate material thickness			Dime	nsions			Strength		per	
<b>diameter D</b> φ mm	<b>diameter</b>	Part number	mm mm	<b>L</b> mm	Hφmm	T mm	<b>W</b> <i>φ</i> mm	S mm	F mm	Tensile N	Shearing N	package	
		NSA5-4LF	3.2~6.4	10.5				29.8	42				
4.0	44-40	NSA5-5LF	4.8~8.0	12.2	1,00	4.7	0.04	28.1	42	0.000	1.550	1 000	
4.0	4.1~4.2	NSA5-6LF	6.4~9.5	13.9	12.0	1.7	2.24	32.4	48	2,200	1,550	1,000	
		NSA5-8LF	9.5~12.7	17.2				29.1	48				
		NSA6-2LF	1.6~3.2	7.6				38.2	48				
		NSA6-3LF	1.6~4.8	9.3				36.5	48				
		NSA6-4LF	3.2~6.4	11.0				34.8	48				
		NSA6-5LF	4.8~8.0	12.8					33.0	48			
4.8	4.9~5.0	NSA6-6LF	6.4~9.5	14.5	15.9	2.2	2.64	41.3	58	3,300	2,200	500	
4.0	4.9. 95.0	NSA6-8LF	9.5~12.7	17.9	15.9	2.2	2.04	37.9	58	3,300	2,200	500	
		NSA6-10LF	12.7~15.9	21.3				35.7	58				
		NSA6-12LF	15.9~19.1	23.3				34.5	60				
		NSA6-14LF	19.1~22.3	26.5				39.3	68				
		NSA6-16LF	22.3~25.4	29.7				36.1	68				

#### **AP Rivets**

AP rivets can be used with a wide range of material thicknesses, so it is possible to use this one rivet type to fasten a wider range of materials.

Displays excellent airtight characteristics and is also appropriate for use with soft material as well.



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	Rivet	Aluminum* (A 5052)	ш)	Shaft	Steel (carbon steel)	C	D				
	* For 2.4 mm diameter rivets, aluminum ( IIS 5154) is used										

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Rivet	Hole diameter	Model	Appropriate material thickness			Dime	nsions	Strength		per		
<b>D</b> <i>φ</i> mm	φmm φmm	Model	mm	<b>L</b> mm	H ø mm	T mm	<b>W ø</b> mm	S mm	F mm	Tensile N	Shearing N	package
3.2	3.4~3.5	AP4-3	1.0~4.8	8.2	6.4		1.0	28.7	38	1.000	750	1 000
3.2	3.4~3.5	AP4-5	4.8~8.0	13.3	0.4	4   1.1	.1   1.9	27.6	42	1,000	750	1,000
4.0	4.2~4.3	AP5-4	1.2~6.4	10.5	8.0	1.3	2.4	30.2	42	1,600	1,150	1,000
4.0	5.0~5.1	AP6-4	1.6~6.4	11.0	9.5	1.0	2.0	35.1	48	0.050	1.600	1,000
4.8 5.0	5.0~5.1	AP6-8	6.4~12.7	18.5	9.5	1.9	2.9	35.6	56	2,350	1,000	1,000

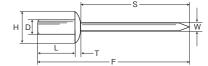
## Blind Rivets (shield type)

NSA-C rivets have a high airtight and a high antivibration.

They also eliminate the worry of dropping the leftover shaft head.



	minum A 5056)	5	Shaft	Steel (carbon steel)	
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Rivet	Hole diameter		Appropriate material thickness			Dime	nsions			Stre	per	
<b>D</b> <i>φ</i> mm	φmm	Model	mm	L mm	Ηφmm	<b>T</b> mm	<b>W ø</b> mm	<b>S</b> mm	F mm	Tensile N	Shearing N	package
		NSA5-2C	1.2~3.2	8.0				32.2	42			
		NSA5-3C	1.6~4.8	9.6				30.6	42			
4.0	4.1~4.2	NSA5-4C	3.2~6.4	11.2	8.0	1.8	2.18	29.1	42	2,550	1,800	1,000
		NSA5-5C	4.8~8.0	12.8				30.4	45			
		NSA5-6C	6.4~9.5	14.4				28.8	45			
		NSA6-2C	1.6~3.2	8.5				34.4	45			
		NSA6-3C	1.6~4.8	10.0				32.9	45			
4.8	4.9~5.0	NSA6-4C	3.2~6.4	11.6	9.6	2.4	2.66	31.3	45	3,900		1,000
4.0	4.9 95.0	NSA6-5C	4.8~8.0	13.1	9.0	2.4	2.00	32.8	48	3,900	2,600	1,000
		NSA6-6C	6.4~9.5	14.7				31.2	48			
		NSA6-8C	9.5~12.7	17.9				30.0	50			

**↑** WARNING

For all Blind rivets

- Be sure that you understand all of the work conditions involved before using blind rivets.
  Before starting work, ALWAYS read the instruction manual for your riveter tool.

Utilizing blind rivets with a pre-colored flange eliminates the need to paint the rivets and offers an attractive finish. Available in your preferred color.

C-NSA Domed head



Rivet	Aluminum (JIS A 5154)		Shaft	Steel (carbon steel)	C
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0-1	Rivet	Hole	Madel	Appropriate			Dime	nsions			Stre	ength	per
Color	<b>diameter</b> <b>D</b> ∅ mm	<b>diameter</b>	Model	material thickness mm	<b>L</b> mm	<b>H</b> ømm	T mm	<b>W</b> $\phi$ mm	S mm	F mm	Tensile N	Shearing N	package
			C-NSA4-2BR	1.0~3.2	6.5				30.4				
Bronze	3.2	3.3~3.4	C-NSA4-3BR	1.6~4.8	8.2	6.4	1.1	1.8	28.7	38	1,350	950	1,000
DIONZE			C-NSA4-4BR	3.2~6.4	9.9				27.0				
			C-NSA5-2BR	1.2~3.2	7.2				33.5				
	4.0	4.1~4.2	C-NSA5-3BR	1.6~4.8	8.9	8.0	1.3	2.24	31.8	42	2,200	1,550	1,000
			C-NSA5-4BR	3.2~6.4	10.5				30.2				
			C-NSA4-2W	1.0~3.2	6.5				30.4			950	
White	3.2	3.3~3.4	C-NSA4-3W	1.6~4.8	8.2	6.4	1.1	1.8	28.7	38	1,350		1,000
WITTE			C-NSA4-4W	3.2~6.4	9.9				27.0				
			C-NSA5-2W	1.2~3.2	7.2				33.5				
	4.0	4.1~4.2	C-NSA5-3W	1.6~4.8	8.9	8.0	1.3	2.24	31.8	42	2,200	1,550	1,000
			C-NSA5-4W	3.2~6.4	10.5				30.2				
			C-NSA4-2B	1.0~3.2	6.5				30.4				
Black	3.2	3.3~3.4	C-NSA4-3B	1.6~4.8	8.2	6.4	1.1	1.8	28.7	38	1,350	950	1,000
Diack			C-NSA4-4B	3.2~6.4	9.9				27.0				
			C-NSA5-2B	1.2~3.2	7.2				33.5				
	4.0	4.1~4.2	C-NSA5-3B	1.6~4.8	8.9	8.0	1.3	2.24	31.8	42	2,200	1,550	1,000
			C-NSA5-4B	3.2~6.4	10.5				30.2				

#### **High Performance Blind Rivets Bulb-Type Rivets**

Stainless steel bulb type NSTB rivet ( $\phi$ 4.8) offers excellent anti-vibration and airtight characteristics simply not available in conventional rivets!

**NSTB** 





ensures tight fit.



Superior anti-vibration and airtight characteristics The "hole-fill" function employing special-shaped rivet and shaft

Greater tensile strength at the corresponding materials' surface of contact Buckling is triple that of standard rivets of the same diameter,

thus improving tensile strength at the corresponding material. Increased strength of the application material

The axial strength is high in comparison to conventional rivets,

adding high surface rigidity to the corresponding material. Because surface rigidity per unit of surface area is increased for

veneer boards as well, a secure joint is ensured.

Other sizes and materials are scheduled.







Riveted boards

Cross-sectional diagram

**Applications** 

Passenger vehicle bumpers PC servers Window shutters and sliding storm doors Refrigeration truck frames Computer racks

#### Specifications and performance

#### ■ NSTB rivets [Materials] Rivet: stainless steel. Shaft: stainless steel

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Model	<b>D</b> φ mm	<b>d</b> φmm	T mm	L mm	E mm	<b>W</b> φ mm	Hole diameter (mm)	Appropriate material thickness	Tensile N	Shearing N	Mandrel removal strength N	per package
NSTB 6-3	9.5	4.8	1.4	14.0	27	3.2	4.9~5.1	1.6~4.8	5,800	5,500	1,000	1,000
NSTB 6-4	9.5	4.8	1.4	15.5	27	3.2	4.9~5.1	3.2~6.4	5,800	5,500	800	1,000
NSTB 6-6	9.5	4.8	1.4	19.5	27	3.2	4.9~5.1	6.4~9.6	5,500	6,500	800	1,000

#### High Strength Blind Rivets S-bolt ( $\phi$ 4.8, $\phi$ 6.4)

Fastening from one side of the work, superior strength, and high anti-vibration performance makes S-bolt rivets appropriate for weldless work and for fastening important safety-related parts!

The stable supply, stable quality, and reasonable cost performance of S-bolts are all achieved through domestic production!

**▼**Fastening

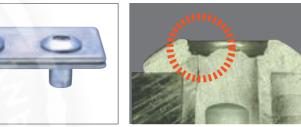
#### **Locking construction**

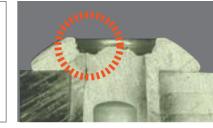
An original locking mechanism enables easier visual confirmation of the locked parts in comparison with other manufacturs' standard products and ensures secure lock.

#### "Hole fill" function

The rivet body itself is expanded during clamping, thus filling the lower hole more tightly and securing superior anti-vibration and weather-resistance conditions. We can supply data from JIS-standard vibration test for automotive parts. Various other tests (tensile, shearing and salt water atomization) can be performed as well.

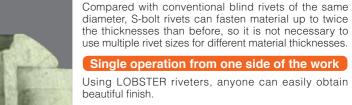
## **▼**Cross-sectional diagram of





## fastening

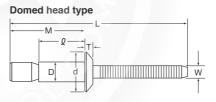


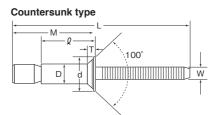


High strength

"hole fill" function.

#### Specifications and performance





Through a synergy of tensile, shearing, and shaft

removal strength, S-bolt rivets have two to three times

the strength of conventional blind rivets of the same

Excellent anti-vibration performance is achieved

through an original locking mechanism and our unique

This performance has been proven in JISD 1601

The rivet body itself is expanded during clamping, thus

filling the lower hole more tightly and securing superior

High anti-vibration characteristics

vibration tests for automotive parts.

weather-resistance conditions.

Wide application range



#### Steel ... Domed and countersunk types [Material] Rivet: steel (mid-carbon steel), Shaft: steel (low-carbon steel)

	Model	<b>D</b> ømm	<b>d</b> ømm	<b>T</b> mm	<b>ℓ</b> mm	<b>M</b> mm	<b>L</b> mm	<b>₩</b> ømm	Hole diameter (mm)	Appropriate material thickness	<b>Tensile</b> N	Shearing N	Shaft removal strength N	per package
ad	SNS 48069	4.8	9.8	2.0	11.0	18.5	47.0	3.0	4.9~5.0	1.7~6.9	4,800	6,100	900	500
Domed head type	SNS 48110	4.6	9.6	2.0	15.0	25.0	55.0	3.0	4.9705.0	1.7~11.0	4,600	6,100	900	500
tyk	SNS 64095	6.4	13.0	2.6	14.5	24.0	55.0			2.1~9.5				
õ	SNS 64159	0.4	13.0	2.0	20.0	33.0	65.0			2.1~15.9				
Countersunk head type	SNS 64120K	6.4	10.0	2.1	17.0	27.0	55.0	4.0	6.6~7.0	3.2~12.0	9,800	11,300	1,100	250

**⚠ WARNING** 

For all Blind rivets

 Be sure that you understand all of the work conditions involved before using blind rivets. Before starting work, ALWAYS read the instruction manual for your riveter tool.

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## Special Blind rivet (built to order)

	Rivet diameter	Hole diameter	Model	Appropriate material thickness	Dime	nsions	Stre	ength
	mm	mm		mm	<b>L</b> mm	Hφmm	Tensile N	Shearing
	3.2	3.3~3.4	NSA42LF	1.0~3.2	6.5	9.4	1350	960
	3.2	3.3~3.4	NSA43LF	1.6~4.8	8.2	9.4	1350	960
Large-flange Blind Rivets	3.2	3.3~3.4	NSA44LF	3.2~6.4	9.9	9.4	1350	960
Large-flange Bilnd Rivets Rivet body: Aluminum	3.2	3.3~3.4	NSA45LF	4.8~8.0	11.6	9.4	1350	960
Mandrel: Steel	3.2	3.3~3.4	NSA46LF	6.4~9.5	13.3	9.4	1350	960
	3.2	3.3~3.4	NSA48LF	9.5~12.7	16.7	9.4	1350	960
	4.0	4.1~4.2	NSA52LF	1.2~3.2	7.2	12.0	2200	1550
	4.0 3.2	4.1~4.2 3.3~3.4	NSA53LF NS42K	1.6~4.8 1.6~3.2	8.9 6.5	12.0 6.4	2200 1400	1550 1300
Blind Rivets	3.2	3.3~3.4	NS43K	1.6~4.8	8.2	6.4	1400	1300
countersunk head)	3.2	3.3~3.4	NS44K	3.2~6.4	9.9	6.4	1400	1300
Rivet body: Steel	4.0	4.1~4.2	NS53K	1.6~4.8	8.9	8.0	2200	2000
/landrel: Steel	4.0	4.1~4.2	NS54K	3.2~6.4	10.5	8.0	2200	2000
	4.0	4.1~4.2	NS56K	6.4~9.5	13.9	8.0	2200	2000
	3.2	3.3~3.4	NST42K	1.6~3.2	6.5	6.4	2500	2100
	3.2	3.3~3.4	NST43K	1.6~4.8	8.2	6.4	2500	2100
llind Rivets	3.2	3.3~3.4	NST44K	3.2~6.4	9.9	6.4	2500	2100
countersunk head)	4.0	4.1~4.2	NST52K	1.6~3.2	7.2	8.0	4200	3200
livet body: Stainless	4.0	4.1~4.2	NST53K	1.6~4.8	8.9	8.0	4200	3200
teel landrel: Stainless steel	4.0	4.1~4.2	NST54K	3.2~6.4	10.5	8.0	4200	3200
ianurei. Ställiless steel	4.8	4.9~5.0 4.9~5.0	NST62K	2.4~3.2	7.6	9.6	<u>_6</u> 000	4800
	4.8	4.9~5.0 4.9~5.0	NST63K NST64K	2.4~4.8 3.2~6.4	9.3	9.6	6000	4800 4800
P Rivets	4.8	4.9~5.0 5.0~5.1	AP612	3.2~6.4 12.7~19.1	26.5	9.6	2380	1680
1111000	3.2	3.3~3.4	NSA41C	1.0~1.6	6.5	6.0	1600	1200
	3.2	3.3~3.4	NSA41C NSA42C	1.6~3.2	8.0	6.0	1600	1200
	3.2	3.3~3.4	NSA43C	3.2~4.8	9.5	6.0	1600	1200
Blind Rivets (shield type)	3.2	3.3~3.4	NSA44C	4.8~6.4	11.0	6.0	1600	1200
Rivet body: Aluminum	3.2	3.3~3.4	NSA45C	6.4~8.0	13.0	6.0	1600	1200
ianurei: Steel	4.8	4.9~5.0	NSA610C	12.7~15.9	23.0	9.6	3900	2600
	6.4	6.5~6.6	NSA84C	3.2~6.4	12.7	12.7	6000	4000
	6.4	6.5~6.6	NSA86C	6.4~9.5	15.9	12.7	6000	4000
	3.2	3.3~3.4	NST41C	1.0~1.6	6.5	6.0	3000	2700
	3.2	3.3~3.4	NST42C	1.6~3.2	7.0	6.0	3000	2700
	3.2	3.3~3.4	NST43C	3.2~4.8	9.0	6.0	3000	2700
	3.2	3.3~3.4	NST44C	4.8~6.4	11.0	6.0	3000	2700
Blind Rivets (shield type)	3.2	3.3~3.4	NST45C NST52C	6.4~8.0	13.0	6.0	3000	2700
	4.0	4.1~4.2 4.1~4.2	NST52C NST53C	1.2~3.2 3.2~4.8	10.0	8.0	4300 4300	4000
	4.0	4.1~4.2	NST54C	4.8~6.4	11.0	8.0	4300	4000
livet body: stainless	4.0	4.1~4.2	NST55C	6.4~8.0	13.0	8.0	4300	4000
teel	4.0	4.1~4.2	NST56C	8.0~9.5	14.0	8.0	4300	4000
landrel: Stainless steel	4.8	4.9~5.0	NST62C	1.6~3.2	8.0	9.5	6000	5500
	4.8	4.9~5.1	NST63C	3.2~4.8	10.0	9.5	6000	5500
	4.8	4.9~5.2	NST64C	4.8~6.4	12.0	9.5	6000	5500
	4.8	4.9~5.3	NST65C	6.4~8.0	13.5	9.5	6000	5500
	4.8	4.9~5.4	NST66C	8.0~9.5	15.0	9.5	6000	5500
	4.8	4.9~5.5	NST68C	9.5~12.7	18.0	9.5	6000	5500
	4.8	4.9~5.6	NST610C	12.7~15.9	21.0	9.5	6000	5500
	4.0	4.1~4.2	NTA52C	1.2~3.2	8.0	8.0	2550	1820
	4.0	4.1~4.2	NTA53C	1.6~4.8	9.6	8.0	2550	1820
	4.0	4.1~4.2	NTA54C	3.2~6.4	11.2	8.0	2550	1820
lind Divote /abiatata	4.0	4.1~4.2	NTA55C	4.8~8.0	12.8	8.0	2550	1820
lind Rivets (shield type) livet body: Aluminum	4.0	4.1~4.2 4.9~5.0	NTA56C NTA62C	6.4~9.5 1.6~3.2	14.4 8.5	8.0 9.6	2550 3900	1820 2600
landrel: Stainless steel	4.8	4.9~5.0	NTA63C	1.6~4.8	10.0	9.6	3900	2600
	4.8	4.9~5.0	NTA64C	3.2~6.4	11.6	9.6	3900	2600
	4.8	4.9~5.0	NTA65C	4.8~8.0	13.1	9.6	3900	2600
	4.8	4.9~5.0	NTA66C	6.4~9.5	14.7	9.6	3900	2600
	4.8	4.9~5.0	NTA68C	9.5~12.7	17.9	9.6	3900	2600
	3.2	3.3~3.4	NSC41	1.0~1.6	4.8	6.4	1400	950
	3.2	3.3~3.4	NSC42	1.0~3.2	6.4	6.4	1400	950
	3.2	3.3~3.4	NSC43	1.6~4.8	8.0	6.4	1400	950
lind Rivets	3.2	3.3~3.4	NSC44	3.2~6.4	9.5	6.4	1400	950
ivet body: Copper	3.2	3.3~3.4	NSC45	4.8~8.0	11.2	6.4	1400	950
landrel: Steel	4.0	4.1~4.2	NSC52	1.2~3.2	7.0	8.0	2150	1550
	4.0	4.1~4.2	NSC53	1.6~4.8	8.6	8.0	2150	1550
	4.0	4.1~4.2	NSC54	3.2~6.4	10.2	8.0	2150	1550
	4.0 3.2	4.1~4.2	NSC56 NCC41	6.4~9.5	13.3 4.8	8.0 6.4	2150	1550 950
	3.2	3.3~3.4 3.3~3.4	NCC41 NCC42	1.0 1.6	6.4	6.4	1400	950
	3.2	3.3~3.4	NCC42 NCC43	1.0 3.2 1.6 4.8	8.0	6.4	1400	950
Blind Rivets	3.2	3.3~3.4	NCC43	3.2 6.4	9.5	6.4	1400	950
Rivet body: Copper	3.2	3.3~3.4	NCC44 NCC45	4.8 8.0	11.2	6.4	1400	950
Mandrel: Copper	4.0	4.1~4.2	NCC52	1.2 3.2	7.0	8.0	2150	1550
· · ·	4.0	4.1~4.2	NCC53	1.6 4.8	8.6	8.0	2150	1550
	4.0	4.1~4.2	NCC54	3.2 6.4	10.2	8.0	2150	1550
	4.0	4.1~4.2	NCC56	6.4 9.5	13.3	8.0	2150	1550



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# LOBSTER

#### **Pneumatic Rivet Nut Setters**

- Operating speed 40%up(comparing with previous LOBSTER model).
- ▶ POWER: Approximately 40% UP!! (Applicable to M12 rivet nuts).
- LIGHT WEIGHT:Approximately 20%weight saving!!(Compared with LOBSTER previous model).
- Easily insert rivet nuts(Simply push the rivet nut to the mandrel).
- Clutch mechanism(Make accurate installation and avoid working failure).
- Easy stroke adjustment(No need tools to adjust the stroke).
- Good weight balance for usability(Less fatigue).
- One-touch reverse(Reverse button for in case of accident).

#### **N1A2**

#### Nut Setting Capacity

Aluminum, steel, stainless steel

M3 M4 M5 M6 M8 M10 M12

**SPEED** 

Operating speed

40% up / comparing with previous LOBSTER model

## **Easily insert rivet nuts**

Simply push the rivet nut to the mandrel



Make accurate installation and avoid working failure

0

Easy stroke adjustment

No need tools to adjust the stroke

Stroke



**Good weight balance** 

One-touch reverse

Reverse button for in case of accident

for usability

Less fatigue

①Push the rivet nut to the

mandrel for installation.

**POWER** 

Previous 18kN 18kN 25kN

Approximately 40% UP!!

Applicable to M12 rivet nuts

# **LIGHT WEIGHT**



## Approximately 20 % weight saving!!

(Compared with LOBSTER previous model)

Model	Nut Setting Capacity	<b>Weight</b>	Working Air Pressure	Air Cunsumption
	*1 *2	kg	MPa	L/nut
N1A2	(M3)•M4•M5•M6 M8•M10•(M12)	2.1	0.5~0.6	3.0

<sup>\*\*1</sup> When using M3, M12 rivet nuts, please purchase screw mandrel M3(64933)/M12(64939) and nosepiece M3(64940)/M12(64946) sold separately.

#### **Electric Rivet Nut Setter**

- M3 to M10 rivet nut can be used regardless of the base material.
- Easy-to-grip slender handle design.
- ► One-touch reverse-operation lever.
- ▶ Replacement of the insert relay is simple and has longer lifespan than before.



- \* If M3 is used, screw mandrel M3(14078) and nosepiece M3(10587)
- required.(sold separately)

  \* ( AC220V, 50/60Hz
- AC120V, 60Hz

Model	Nut Setting Capacity	Weight kg	Power Supply	Power Consumption W	Current A	Code length m
EN-410	(M3)•M4•M5 M6•M8•M10		Optional*	305	3.3	2.5

#### **Attachment Rivet Nut Setter**

#### @N10d



Instantly turn your cordless driver drill (14.4V) into Attachment Rivet Nut Setter.
LOBSTER M4 to M6 rivet nuts can be fastened quickly

Suitable for those who mainly use LOBSTER Rivet Nuts. Not expensive than Pneumatic Rivet Nut Setter. Less fatigue than continuous work for Hand Rivet Nut Setter.

Model	Applicable Nut material	Nut Setting Capacity	Weight kg		
@N10d	Aluminum:M4,M5,M6 Steel:M4,M5,M6	M4,M5,M6	0.45		

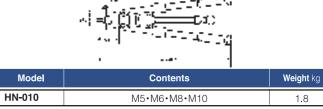
#### **Heavy Duty Type Hand Rivet Nut Setter**

- Suitable for those who mainly use LOBSTER M8 and M10 rivet nuts.
- Installation and removal of LOBSTER rivet nuts can be accomplished quickly with one-touch operation of the round clip.

  Replacement of the screw mandrel when changing sizes is simple as well.





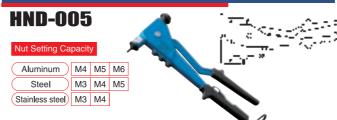


#### **Hand Rivet Nut Setter**

▶ Installation and removal of LOBSTER rivet nuts can be accomplished quickly with one-touch operation of the round clip. Replacement of the screw mandrel when changing sizes is simple as well.

#### Hand Rivet Nut Setter Kits

- Includes a full set of the most-often used LOBSTER rivet nuts.
- ▶ Perfect for automotive, billboard, sheet metal and factory work, etc.



Model	Contents	Weight kg
HND-005	M3•M4•M5•M6 (Cannot be used with steel M6, stainless steel M5, and stainless steel M6.)	0.6



Model	Contents	Weight kg
HND-105	HND005 hand rivet nut setter (1), LOBSTER NAD4M rivet nut (50), LOBSTER NAD5M rivet nut (50), LOBSTER NAD6M rivet nut (50)	1.74



For all rivet nut setters

Be sure to read the instruction manual carefully and make sure that you understand them thoroughly before using the rivet nut setter.

<sup>※2</sup> Except rivet nuts unworkable within the tool specifications.

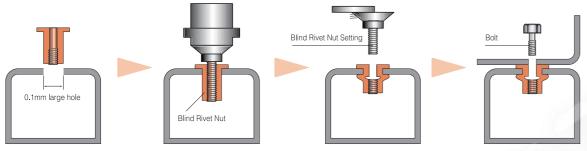
# LOBSTER

#### **LOBSTER Blind Rivet Nuts**

- ▶ Blind fasteners that combine the features of nut and rivet.
- Single-action fastening with a beautiful finish for use on thin boards where it is difficult to set a tap, or for round or square pipes and plastic boards where welding is not possible.
- Easy for anyone to install securely when used in conjunction with LOBSTER Pneumatic Rivet Nut Setter, Electric Rivet Nut Setter or Hand Rivet Nut Setter, and demonstrates an excellent capacity for lowering costs and saving labor.

#### LOBSTER Blind Rivet Nut Setters

#### **Work Procedure**

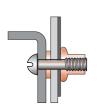


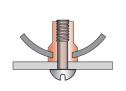
#### **LOBSTER Blind Rivet Nuts Application Examples**

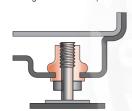
Fastening an accessory piece to thin board



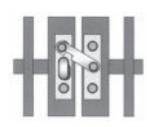
Leveling of farm tools/implements

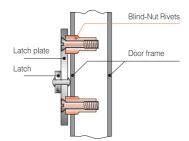






Attaching a latch to door





#### Applications

#### Household equipment

Storage sheds, doors, kitchen appliances, steel furniture, sash crescent stoppers, etc.

#### Household appliances

TV, stereo, air-conditioner, refrigerator, oven, etc.

#### Automotive

Accessories, malls, taillights, steps for RVs, etc.

#### Othe

Electrical work, farm implements, interior/exterior work, solar equipment, etc.









**△ WARNING** 

#### For all Rivet nuts

#### Be sure that you understand all of the work conditions involved before using rivet nuts. Before starting work. ALWAYS read the instruction manual for your rivet nut cetter.

#### **Blind Rivet Nuts**

**■ K Type** (NTK·NSK·NAK) **D Type** (NSD·NAD)





- Blind rivet fasteners that combine the features of a nut and rivet.
- Single-action riveting with a beautiful finish for use on thin boards where it is difficult to set a tap, or for round or square pipes and plastic boards where welding is not possible.
- Easy for anyone to install securely when used in conjunction with a LOBSTER Pneumatic Rivet Nut Setter, Electric Rivet Nut Setter or Hand Rivet Nut Setter, and demonstrates an excellent capacity for lowering costs and saving labor.

#### Blind Rivet Nuts with Serration





- Soft riveting makes the rivet nut perfect for use with thin or soft boards.
- ●30% less riveting strength than standard rivets enables more delicate riveting.
- Tapered tip means ease-of-insert into holes, making rivet nuts suitable for use with auto riveting.
- ●The serrations on the shaft ensure a snug fit into the base material and virtually eliminate loosening.
- Deformation of thin boards is avoided, especially with the countersunk (flush) K-type rivet.

#### **Selection Table of Proper Rivet Nuts**

	4 1	уре	Model	Material	М3	M4	M5	М6	М8	M10	M12	Page
	Large		NSD	Steel		•	•	•	•	•	•	P.32
	flange	NAD	Aluminum		•	•	•	•	•		P.32	
Standard Type	S 17	_	NSK	Steel	•	•	•	•	•	•	•	P.32
	Small flange		NAK	Aluminum		•	•	•	•	•		P.33
		•	NTK	Stainless Steel		•	•	•	•	•		P.33
Serrated	Large flange	T	NSD-R	Steel		•	•	•	•	•		P.33
Туре	Small flange	1	NSK-R	Steel		•	•	•	•	•		P.33

. .



#### Rivet Nuts

#### Type D (Large flange)

#### ● NSD/Steel (JIS SWCH)

\* made to order item



Dimensions



Model	Nut Setting	diameter		Outer an			Terisiie	Torque	per	Compatible
	Capacity	mm	D(φmm)	d( $\phi$ mm)	T(mm)	L(mm)	N	N•m	package	screws
NSD-4M	1.0~2.0	6.1	6.0	9.0	0.8	11.5	7,300	5.9	1,000	M4×0.7
NSD-415M	0.5~1.5	6.1	6.0	9.3	0.8	10.8	6,700	5.9	1,000	M4×0.7
NSD-425M	1.5~2.5	6.1	6.0	9.3	0.8	11.8	6,700	5.9	1,000	M4×0.7
NSD-435M	2.5~3.5	6.1	6.0	9.3	0.8	12.8	6,700	5.9	1,000	M4×0.7
NSD-5M	1.0~3.2	7.1	7.0	10.0	1.0	13.0	10,800	9.3	1,000	M5×0.8
NSD-515M	0.5~1.5	7.1	7.0	10.3	1.0	12.0	9,800	10.8	1,000	M5×0.8
NSD-525M	1.5~2.5	7.1	7.0	10.3	1.0	13.0	9,800	10.8	1,000	M5×0.8
NSD-535M	2.5~3.5	7.1	7.0	10.3	1.0	14.0	9,800	10.8	1,000	M5×0.8
NSD-6M	1.0~3.2	9.1	9.0	12.0	1.5	16.1	19,600	17.6	1,000	M6×1.0
NSD-625M	1.0~2.5	9.1	9.0	12.3	1.5	15.5	16,700	19.6	1,000	M6×1.0
NSD-640M	2.5~4.0	9.1	9.0	12.3	1.5	17.0	16,700	19.6	1,000	M6×1.0
NSD-8M	1.0~3.2	11.1	11.0	14.0	1.5	17.0	21,500	34.3	1,000	M8×1.25
NSD-825M	1.0~2.5	11.1	11.0	14.3	1.5	17.0	23,500	37.2	500	M8×1.25
NSD-840M	2.5~4.0	11.1	11.0	14.3	1.5	18.5	23,500	37.2	500	M8×1.25
NSD-1025M	1.0~2.5	13.1	13.0	16.3	1.5	17.5	29,400	58.8	500	M10×1.5
NSD-1040M	2.5~4.0	13.1	13.0	16.3	1.5	19.0	29,400	58.8	500	M10×1.5
NSD-1240M	2.5~4.0	16.1	16.0	19.0	1.5	20.0	40,200	97.2	300	M12×1.75

#### ● NAD/Aluminum (JIS A5056)



Dimensions



Model	Nut Setting Capacity	Hole diameter	Outer dimensions				Tensile	Torque	per package	Compatible
	Сараспу	mm	D(φmm)	d( <b>p</b> mm)	T(mm)	L(mm)	N	N · m	раскаче	screws
NAD-4M	1.0~2.0	6.1	6.0	9.0	0.8	11.0	4,000	4.9	1,000	M4×0.7
NAD-415M	0.5~1.5	6.1	6.0	9.3	0.8	10.3	3,900	3.9	1,000	M4×0.7
NAD-425M	1.5~2.5	6.1	6.0	9.3	0.8	11.3	3,900	3.9	1,000	M4×0.7
NAD-435M	2.5~3.5	6.1	6.0	9.3	0.8	12.3	3,900	3.9	1,000	M4×0.7
NAD-5M	1.0~3.2	7.1	7.0	10.0	1.0	12.6	6,400	7.8	1,000	M5×0.8
NAD-515M	0.5~1.5	7.1	7.0	10.3	1.0	11.5	6,200	6.9	1,000	M5×0.8
NAD-525M	1.5~2.5	7.1	7.0	10.3	1.0	12.5	6,200	6.9	1,000	M5×0.8
NAD-535M	2.5~3.5	7.1	7.0	10.3	1.0	13.5	6,200	6.9	1,000	M5×0.8
NAD-6M	1.0~3.2	9.1	9.0	12.0	1.5	16.1	10,800	14.7	1,000	M6×1.0
NAD-625M	1.0~2.5	9.1	9.0	12.3	1.5	15.0	9,500	13.7	1,000	M6×1.0
NAD-640M	2.5~4.0	9.1	9.0	12.3	1.5	16.5	9,500	13.7	1,000	M6×1.0
NAD-8M	1.0~3.2	11.1	11.0	14.0	1.5	16.7	13,700	29.4	1,000	M8×1.25
NAD-825M	1.0~2.5	11.1	11.0	14.3	1.5	16.5	14,200	29.4	500	M8×1.25
NAD-840M	2.5~4.0	11.1	11.0	14.3	1.5	18.0	14,200	29.4	500	M8×1.25
NAD-1025M	1.0~2.5	13.1	13.0	16.3	1.5	17.0	19,100	37.2	500	M10×1.5
NAD-1040M	2.5~4.0	13.1	13.0	16.3	1.5	18.5	19,100	37.2	500	M10×1.5

#### Type K (Small flange)

#### NSK/Steel (JIS SWCH)

\* made to order item



Dimensions



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Model	Nut Setting	diameter		Outer din	nensions		Tensile	Torque	per	Compatible
	Capacity	mm	D( <b>ø</b> mm)	d( <b>ø</b> mm)	T(mm)	L(mm)	N	N•m	package	screws
NSK-3M	1.0~2.0	5.1	5.0	6.0	0.5	8.5	4,900	3.9	1,000	M3×0.5
NSK-4M	1.0~2.0	6.1	6.0	7.0	0.5	11.3	7,300	5.9	1,000	M4×0.7
NSK-415M	0.5~1.5	6.1	6.0	7.0	0.5	10.0	6,700	5.9	1,000	M4×0.7
NSK-425M	1.5~2.5	6.1	6.0	7.0	0.5	11.0	6,700	5.9	1,000	M4×0.7
NSK-435M	2.5~3.5	6.1	6.0	7.0	0.5	12.0	6,700	5.9	1,000	M4×0.7
NSK-5M	1.0~3.2	7.1	7.0	8.0	0.5	12.7	10,800	9.3	1,000	M5×0.8
NSK-515M	0.5~1.5	7.1	7.0	8.0	0.5	11.0	9,800	10.8	1,000	M5×0.8
NSK-525M	1.5~2.5	7.1	7.0	8.0	0.5	12.0	9,800	10.8	1,000	M5×0.8
NSK-535M	2.5~3.5	7.1	7.0	8.0	0.5	13.0	9,800	10.8	1,000	M5×0.8
NSK-6M	1.0~3.2	9.1	9.0	10.0	0.8	15.4	19,600	17.6	1,000	M6×1.0
NSK-625M	1.0~2.5	9.1	9.0	10.0	0.5	14.0	16,700	19.6	1,000	M6×1.0
NSK-640M	2.5~4.0	9.1	9.0	10.0	0.5	15.5	16,700	19.6	1,000	M6×1.0
NSK-8M	1.0~3.2	11.1	11.0	12.0	0.8	16.5	21,500	34.3	1,000	M8×1.25
NSK-825M	1.0~2.5	11.1	11.0	12.0	0.5	15.5	23,500	37.2	500	M8×1.25
NSK-840M	2.5~4.0	11.1	11.0	12.0	0.5	17.0	23,500	37.2	500	M8×1.25
NSK-10M	1.0~4.0	13.1	13.0	14.0	0.8	17.8	24,500	44.1	500	M10×1.5
NSK-1025M	1.0~2.5	13.1	13.0	14.0	0.5	16.0	29,400	58.8	500	M10×1.5
NSK-1040M	2.5~4.0	13.1	13.0	14.0	0.5	17.5	29,400	58.8	500	M10×1.5
NSK-1240M	2.5~4.0	16.1	16.0	18.0	0.7	20.8	40,200	97.2	300	M12×1.75

#### Rivet Nuts

#### Type K (Small flange)

#### NAK/Aluminum (JIS A5056)



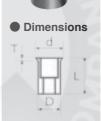
Dimensions



Model	Nut Setting	Hole diameter		Outer din	nensions		Tensile	Torque	per	Compatible
	Capacity	mm	$D(\phi mm)$	$d(\phi mm)$	T(mm)	L(mm)	N	N⋅m	package	screws
NAK-4M	1.0~2.0	6.1	6.0	7.0	0.5	11.3	4,000	4.9	1,000	M4×0.7
NAK-415M	0.5~1.5	6.1	6.0	7.0	0.5	10.0	3,900	3.9	1,000	M4×0.7
NAK-425M	1.5~2.5	6.1	6.0	7.0	0.5	11.0	3,900	3.9	1,000	M4×0.7
NAK-435M	2.5~3.5	6.1	6.0	7.0	0.5	12.0	3,900	3.9	1,000	M4×0.7
NAK-5M	1.0~3.2	7.1	7.0	8.0	0.5	12.7	6,400	7.8	1,000	M5×0.8
NAK-515M	0.5~1.5	7.1	7.0	8.0	0.5	11.0	6,200	6.9	1,000	M5×0.8
NAK-525M	1.5~2.5	7.1	7.0	8.0	0.5	12.0	6,200	6.9	1,000	M5×0.8
NAK-535M	2.5~3.5	7.1	7.0	8.0	0.5	13.0	6,200	6.9	1,000	M5×0.8
NAK-6M	1.0~3.2	9.1	9.0	10.0	0.5	14.6	10,800	14.7	1,000	M6×1.0
NAK-625M	1.0~2.5	9.1	9.0	10.0	0.5	14.0	9,500	13.7	1,000	M6×1.0
NAK-640M	2.5~4.0	9.1	9.0	10.0	0.5	15.5	9,500	13.7	1,000	M6×1.0
NAK-8M	1.0~3.2	11.1	11.0	12.0	0.5	15.7	13,700	29.4	1,000	M8×1.25
NAK-825M	1.0~2.5	11.1	11.0	12.0	0.5	15.5	14,200	29.4	500	M8×1.25
NAK-840M	2.5~4.0	11.1	11.0	12.0	0.5	17.0	14,200	29.4	500	M8×1.25
NAK-1025M	1.0~2.5	13.1	13.0	14.0	0.5	16.0	19,100	37.2	500	M10×1.5
NAK-1040M	2.5~4.0	13.1	13.0	14.0	0.5	17.5	19,100	37.2	500	M10×1.5

#### NTK/Stainless (JIS SUS303)





Model	Nut Setting Capacity	Hole diameter		Outer din	nensions		Tensile	Torque	per package	Compatible
	Сараспу	mm	$D(\phi mm)$	$d(\phi mm)$	T(mm)	L(mm)	N	N·m	раскаде	screws
NTK-3M15	0.5~1.5	5.1	5.0	6.0	0.7	8.7	8,900	2.9	200	M3×0.5
NTK-4M	0.3~1.0	6.1	6.0	7.0	0.7	9.5	9,800	6.8	200	M4×0.7
NTK-4M20	1.0~2.0	6.1	6.0	7.0	0.7	10.6	9,800	6.8	200	M4×0.7
NTK-4M25	1.5~2.5	6.1	6.0	7.0	0.7	11.2	9,800	6.8	200	M4×0.7
NTK-4M35	2.5~3.5	6.1	6.0	7.0	0.5	12.0	9,800	6.8	200	M4×0.7
NTK-5M	0.3~1.5	7.1	7.0	8.0	0.7	11.1	11,800	9.8	200	M5×0.8
NTK-5M30	1.5~3.0	7.1	7.0	8.0	0.7	12.1	11,800	9.8	200	M5×0.8
NTK-6M	0.3~2.0	9.1	9.0	10.0	0.7	14.1	22,500	21.5	100	M6×1.0
NTK-6M40	2.0~4.0	9.1	9.0	10.0	0.7	15.6	22,500	21.5	100	M6×1.0
NTK-8M	0.3~2.0	11.1	11.0	12.0	0.7	15.0	27,500	44.1	100	M8×1.25
NTK-8M40	2.5~4.0	11.1	11.0	12.0	0.7	17.2	27,500	44.1	100	M8×1.25
NTK-10M	0.3~2.0	13.1	13.0	14.0	0.7	15.7	29,400	49.0	100	M10×1.5
NTK-10M40	2.5~4.0	13.1	13.0	14.0	0.7	17.7	29,400	49.0	100	M10×1.5

#### **LOBSTER Serrated Rivet Nuts**

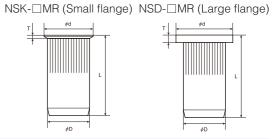
- > Tapered tip means ease-of-insert into holes, making rivet nuts suitable for use with auto riveting.
- > The serrations on the shaft ensure snug fit into the base material and virtually eliminate loosening.

#### NSK·NSD series

Soft clamping makes the rivet nut perfect for use with thin or soft boards. 30% less clamping strength than standard rivets enables more delicate fastening.







	Model	Nut Setting	Hole diameter		Outer din	nensions		Tensile	Torque	per	Compatible
		Capacity	mm	D( <b><i>\phi</i></b> mm)	d( <i>ф</i> mm)	T(mm)	L(mm)	N	N•m	package	screws
	NSK-4MR	0.5~2.0	6.1	6	7	0.5	10.0	5,400	5.9	1,000	M4×0.7
V +	NSK-5MR	0.5~3.2	7.1	7	8	0.5	12.0	8,500	9.3	1,000	M5×0.8
K type (Small flange)	NSK-6MR	0.5~3.2	9.1	9	10	0.6	15.0	14,100	17.6	1,000	M6×1.0
(Siliali lialige)	NSK-8MR	1.0~4.0	11.1	11	12	0.5	16.0	15,700	34.3	1,000	M8×1.25
	NSK-10MR	1.0~4.0	13.1	13	14	0.6	20.5	16,700	44.1	500	M10×1.5
	NSD-4MR	0.5~3.0	6.1	6	9	0.8	11.0	5,400	5.9	1,000	M4×0.7
D type (Large flange)	NSD-5MR	0.5~3.2	7.1	7	10	1.0	13.0	8,500	9.3	1,000	M5×0.8
	NSD-6MR	0.5~3.2	9.1	9	12	1.5	16.0	14,100	17.6	1,000	M6×1.0
	NSD-8MR	1.0~4.0	11.1	11	14	1.5	17.5	15,700	34.3	1,,000	M8×1.25

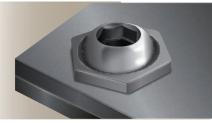
- \* Tensile strength and destructive torque display average values. The test board thickness uses 2 mm steel plate. Since tensile strength displays deformation in the base material first, these rivets should be used with caution.
- \* NSK-6MR/8MR/10MR and NSD-6MR/8MR rivet nuts cannot be used with the HND-005 rivet nut setter.

For all Rivet nuts

- Be sure that you understand all of the work conditions involved before using rivet nuts.
   Before starting work, ALWAYS read the instruction manual for your rivet nut setter.

#### ST Lock





"LOBSTER" ST Lock makes your work easy and overwhelmingly speedy by one-side action high-tensile fastening.

By switching from standard Bolt/Nut joint or Welding to "LOBSTER" ST Lock one-side action high-tensile fastening, significant cost reduction and work efficiency even for beginners are realized!

For a closed space beyond your reach, where standard Bolt/ Nut joint can not work well.

For workpieces which require high-strength fastening, which can not be achieved by blind rivets.

One-sided operation, high-strength fastening!

Quick and tight structural Lock with a simple tool (Cargo Nutrunner or Attachment ST Lock Nut Runner), special technique like welding is not required.









from joint by bolt/nut to "Lobster" ST Lock

#### What is "LOBSTER" ST Lock?

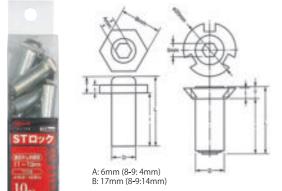
- One-sided operation
- Excellent vibration-resistance mechanism
- High fastening power
- Zero marring or scratching of material surfaces
- Eco-Friendly finish
- Beautiful and massive appearance
- Various applications

#### **Typical Applications**

- Steel frame housing beam join
- Steel frame stairways
- **Curtain walls**
- Switchboard cabinets
- Sirocco fans
- Distribution equipments truss joints
- **Products for highway facilities**
- Hinge joints
- **Transport equipments**







#### Work procedure

Drill a hole in the base material









Base materials ST Lock

No. del	Appropriate Hole	Hole diameter	Dimensions					Stre	per	
Model material thick			<b>D</b> ømm	<b>L</b> ømm	I ømm	<b>T</b> ømm	t ømm	Tensile kN	Shearing kN	package
CNSH109P	7~9	10.2~10.5		31	24.0		3	16.5	27.5	12
CNSH1013P	11~13		10	36	28.0	6.5				10
CNSH1016P	14~16			37.5	31.0	1				8

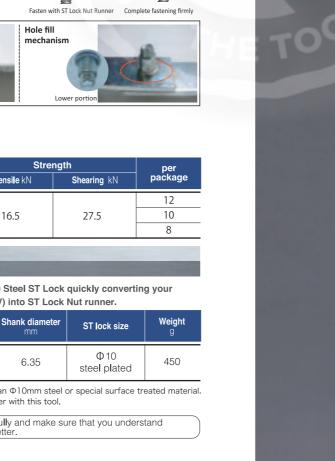
#### **Attachment ST Lock Nutrunner**





Model	<b>Length</b> mm	Shank diameter mm	ST lock size	<b>Weight</b> g
@RS-10i	190	6.35	Φ10 steel plated	450

 $<sup>^{*}</sup>$  Do not use the ST Lock other than  $\Phi10\text{mm}$  steel or special surface treated material. \* Impact drivers is not sold together with this tool.



# LOBSTER

long nosepiece

#### **Technical Data**

#### **Air Coupler Selection Table**

Model	Air insert type
All models	G1/4 (PF1/4) male screw

#### **Basic Compressor Selection Table**

#### **1. Unit without vacuum**

Selection of the appropriate compressor will differ depending upon the number of times riveting is to take place (the number of times the trigger is to be pulled).

Based on 10-rivets/minute operation, the number of riveters that can be used at one time with the corresponding compressor is listed in the following table. (At only 5-rivets/minute, twice the number of riveters indicated may be used.)

Communication of the state of		Number of riveters	s that can be used at	one time for 10-rivet	s/minute operation.	V 80.
Compressor output kW(PS)	AR-2000S AR-011S	AR-011M AR-011P	AR-2000M	AR-011H AR-021H	AR-2000H	AR-022M AR-021EX
0.2kW (1/4PS)	4	1	1	0	0	0
0.4kW (1/2PS)	8	3	2	1	1	1
0.75kW (1PS)	16	6	5	3	2	2
1.5kW (2PS)	33	13	11	6	5	4
2.2kW (3PS)	50	20	17	10	8	6
3.7kW (5PS)	83	33	29	17	13	10

<sup>\*</sup>Note: Air pressure: 0.6 MPa (6 kgf/cm2)

#### 2.Unit with vacuum

Regardless of the number of rivets per minute, refer to the following table when selecting compressor.

Compressor output kW(PS)	ARV-015S	R1A1 AR-2000SV·AR-2000MV ARV-015M·ARV-011M	ARV-025M VU-S VU-M	R1A2 ARV-022M·AR-2000HV VU-H48·VU-H64
0.75kW (1PS)	1	1	0	0
1.5kW (2PS)	3	2	1	1
2.2kW (3PS)	5	3	2	2
3.7kW (5PS)	8	5	4	3

<sup>\*</sup>Note: Air pressure: 0.6 MPa (6 kgf/cm2)

#### **3.Air Conditioning**

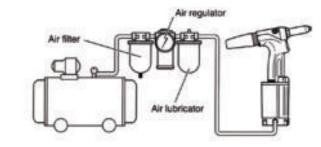
Set up the compressor, and be sure to install an air filter, air regulator, and air lubricator (3-device set) between the compressor and the tool.

■Adjust the drip-feed amount of the air lubricator to the minimum setting.

#### ATTENTION

In the case of usage in cold district/locations, the moisture contented air in the tool body may be frozen on the inside cylinder surface. As a result, it may not work.

To dehydrate, we recommend to add an air-dryer unit to the normal three units (Regulator, Filter, and Lubricator).



#### **4.0perating Air Pressure**

Use the air regulator to adjust the operating air pressure to the instruction manual.

#### ATTENTION

If the air pressure is too high, damage to parts may occur. If the pressure is too low, certain size rivet may not be correctly installed (cut).

#### Special used for blind rivets

#### For riveting problematic locations

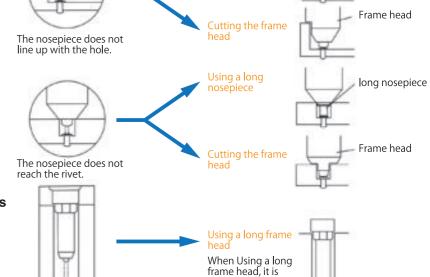


Fastening rivets in groove



Fastening rivets in deep settings



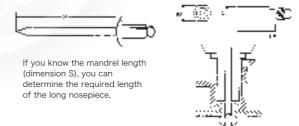


Using a long

## Using a long nosepiece

#### Mandrel length for long nosepieces

When using a long nosepiece, first verify the length of the mandrel (indicated as S in the diagram below) and then use a rivet with a mandrel that is longer than that indicated under "Required mandrel length" in the following table (in order to secure sufficient jaw bite).



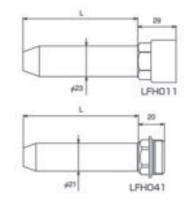
#### Standard long nosepiece

The frame head does not reach the rivet.

Rivet	Part number	Longthil	Tip	Required mandre	el length: S (mm)
size	Part number	Length: L	diameter: A	Riveter S. M	Riveter H. EX
	LN32-10	10		30	31
3.2	LN32-15	15	6.5	35	36
	LN32-20	20		40	41
	LN40-10	10		31	32
4.0	LN40-15	15	7.0	36	37
	LN40-20	20		41	42
	LN48-10	10		33	33
4.8	LN48-15	15	7.5	38	38
	LN48-20	20		43	43

necessary to use long parts within the frame head as well.

## Using a long frame head



#### Long frame head set

	-			
	Parts NO.	Added length (mm)	Total length (mm)	Compatible models
•	LFH011+85	85	143	AR011MX, ARV015MX, ARV025M*1
	LFH011+95	95	153	
	LFH011+142	142	200	
	LFH041+30	30	88	
	LFH041+70	70 128		
	LFH041+85	85	143	AR2000M, AR2000MV*1
	LFH041+100	100	158	
	LFH041+150	150	208	

Long frame head set consists of a long frame head and a jaw case adapter. %1 Models with vacuum system need long guide pipe separately.

<sup>\*</sup> Note: Long nosepieces other than those listed above are available upon consultation. (Production upon order)



#### **Technical Data**

#### **Galvanic corrosion**

When different metals come in contact and are in an electrically conductive fluid, the metal of lower voltage acts like the anode + (plus) and the higher voltage metal as the cathode – (minus) of a battery, and they constitute a "corrosion cell", with the plus side metal becoming ionized and dissolving (corroded). This type of corrosion is referred to as galvanic corrosion or electrochemical corrosion.

## ■Conditions conducive to galvanic corrosion (general environment)

- 1) Large difference in voltage
- 2) High temperatures and humidity, high acidity
- 3) The + side metal has small surface area
- 4) Salt particles exist in the atmosphere

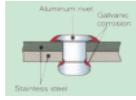
#### ■Acceptable metal combinations

There are limits to acceptable combinations of metal as indicated in the table on page 16 of the MIL-STD-171A standard. Normally, it is desirable for different metals to have less than a 0.1 V difference.

#### (Corrosion generated during contact between different metals)

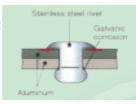
## Examples of galvanic corrosion in rivet joints (1) Aluminum rivet and stainless steel material

The aluminum rivet will corrode considerably at the point of contact with the stainless steel material. This is an extremely inappropriate application.



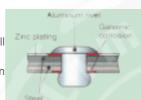
#### (2) Stainless steel rivet and aluminum material

The aluminum material will corrode at the point of contact with the stainless steel rivet. If, however, the surface area of that material is large, progress of the corrosion will be relatively slow, so this application may be acceptable depending upon environmental conditions.



#### (3) Aluminum rivet and zinc-plated steel material

The zinc plating on the steel material will corrode at the point of contact with the aluminum rivet, and corrosion will then advance on the aluminum rivet. This is a relatively poor application, but may still be applicable for long-term use depending upon environmental conditions.



#### (4) Zinc-plated steel rivet and aluminum material

The zinc plating on the steel rivet will corrode at the point of contact with the base material, and corrosion will then advance on the aluminum material. However, that advance will be extremely minimal, so this application may be acceptable depending upon environmental conditions.

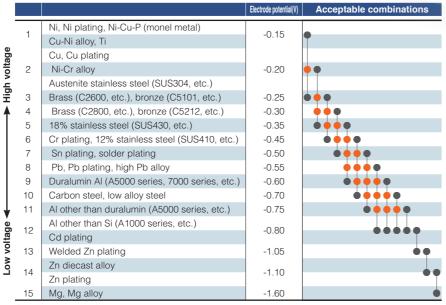


- The example combinations above apply to joining parts in outside installations, external parts on automobiles, boats, etc.
- Oln the case of general interiors or electric appliances, even these example combinations may be adequate.
- Contact our company representative or technical support if you have any technical questions.

#### Measures against galvanic corrosion

- Select rivet of the same voltage or only slight difference in voltage from the base material.
- ●Coat (plating, etc.) the rivet or material with a metal that has the same or only slight difference in voltage from the remaining
- ●Insulate the rivets and base material overall with some type of coating (paint, etc.).
- ●Employ resin or other material as insulation between the metals (coating, push, etc.).
- Employ some other metal that possesses voltage between that of the two materials to act as insulation between those materials (plating, coating, push, etc.)
- Make sure the rivet has a higher voltage than the base material.

#### Acceptable metal combinations (as per MIL-STD-171A)



● : Negative charge ● : Positive charge – Metals connected by a line indicate acceptable combinations

