

**Tengri Fasteners Group**  
Metal Products Specialists



# Blind Rivet

Quality assurance is our culture

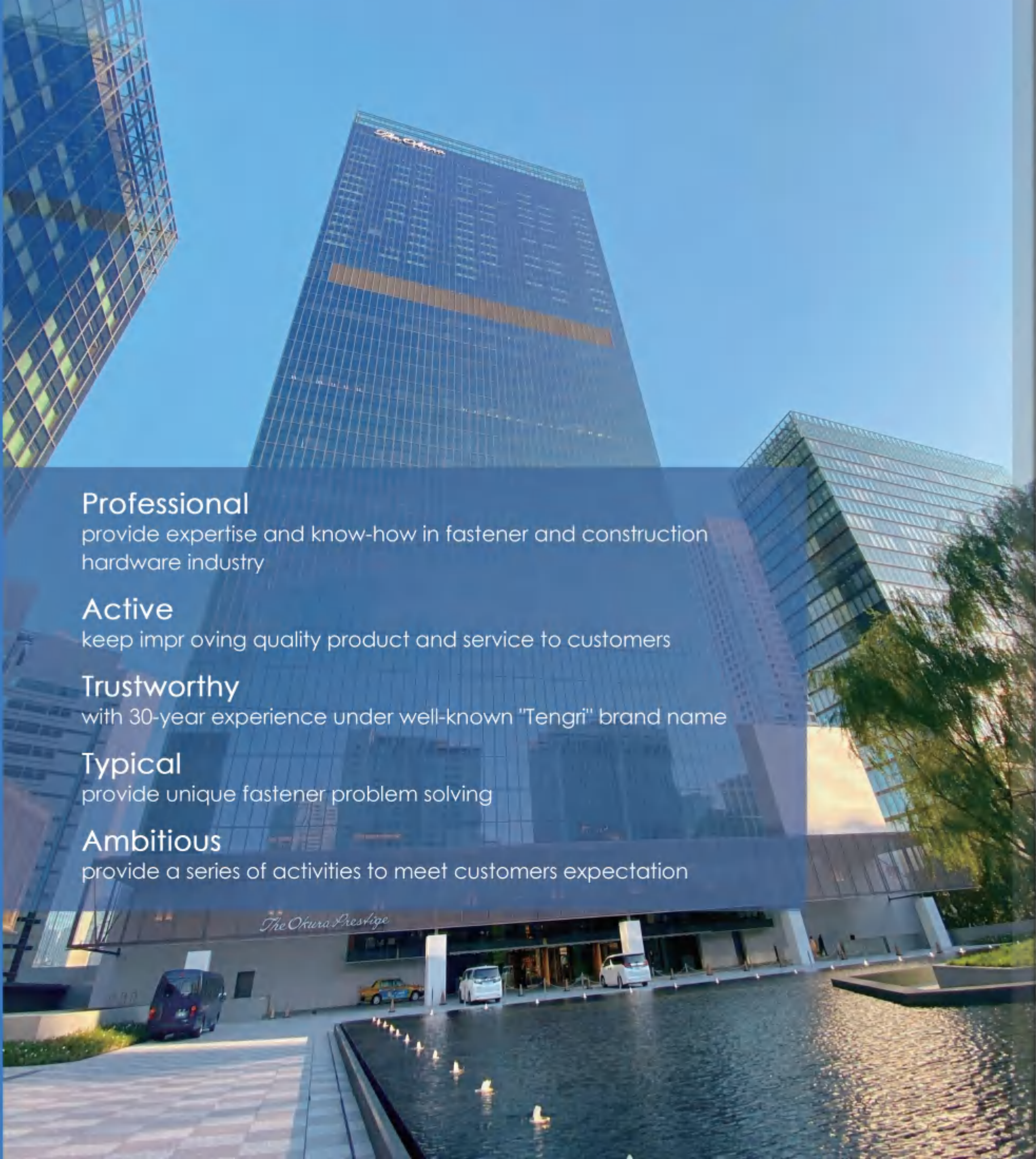
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### Professional

provide expertise and know-how in fastener and construction hardware industry

### Active

keep improving quality product and service to customers

### Trustworthy

with 30-year experience under well-known "Tengri" brand name

### Typical

provide unique fastener problem solving

### Ambitious

provide a series of activities to meet customers expectation

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# CERTIFICATIONS

Quality assurance is our culture

ISO 9001



API



IATF 16949



SGS Certifications





## Benefits of Blind Rivet and Structural Blind Rivet



Begin

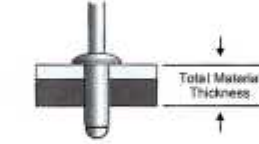
End

- Fast assembly
- Retained and locked stems
- Used in different materials
- Excellent hole fill capabilities
- Multi-Grip capability

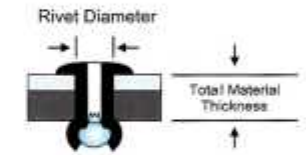
## How to select the right blind rivets



**Drill Hole**  
Select proper size of drilling diameter.



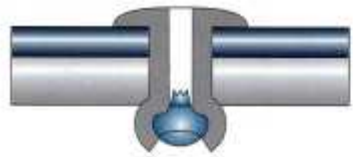
**Length**  
Select rivet length per thickness of fastened material.



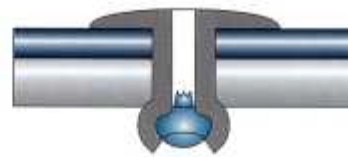
**Blind Rivet Diameter and Material**  
Select rivet in right diameter and material per mechanics and compatibility of fastened material.

## Blind Rivet Overview

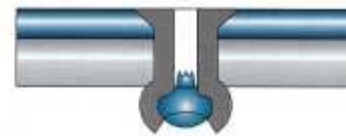
Dome Head



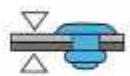
Large Flange Head



Countersunk Head



## Mechanical Data



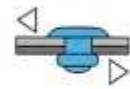
**Grip Range**

Grip range is the minimum to maximum total thickness of Material which can be joined properly with a blind rivet of a given length.



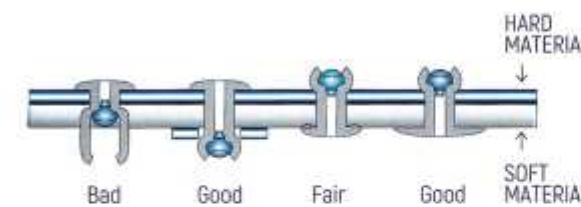
**Tensile**

The ultimate tensile strength of blind rivet is the maximum tensile load in pound or newton.



**Shear**

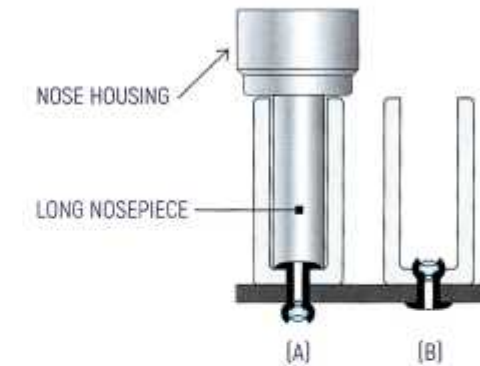
The ultimate shear strength of a blind rivet is the maximum shear load in pound or newton.



**Hard to Soft Materials**

The following illustration is a guide for using standard blind rivets to fasten hard materials to soft materials.

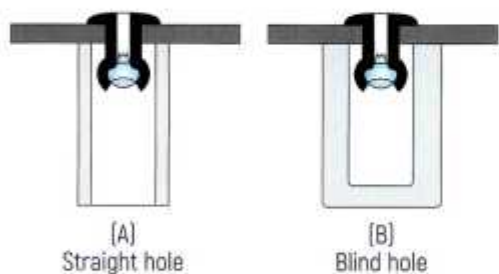
EXTEND



**Channel material**

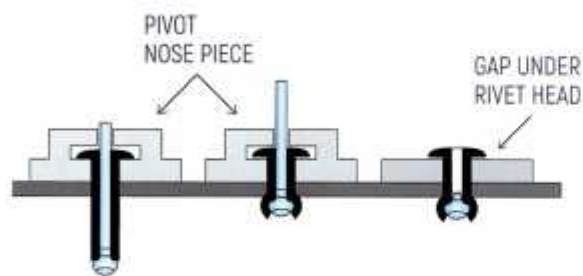
- If the nose housing of the tool is too large in diameter to reach the bottom of channel, use a long nosepiece on the tool.
- Install the rivet from the opposite side.

# How to Select the Right Blind Rivets

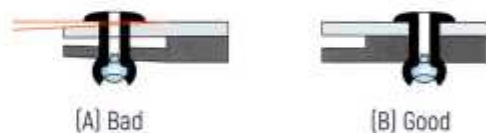


**Fastening in a blind hole**  
Blind rivets may be set in blind hole or milled slot. The success of this depends on the material of the parts to be riveted and the material of the rivet.

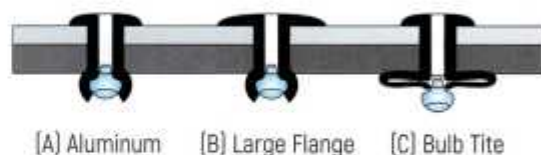
## Straight hole



**Pivot Fastening**  
When the fastened part must rotate on the rivet, a "Pivot Style" nosepiece on the rivet tool may be necessary to provide a small gap under the rivet head.



**Gap Fastening**  
Avoid riveting unsupported internal sections which may result in collapsing, dimpling or buckling the material.



**Riveting Plastic Material Select**  
A. aluminum blind rivets.  
B. "Large Flange" blind rivets.  
C. "Bulb Tite" blind rivets.

# Problems & Suggested Solutions





| Possible Cause   | Problems   | Suggested Solutions   |
|--|--|---|
| <b>Joint Failure / Rivet Loose in Assembly</b>   |  |   |
| <ul style="list-style-type: none"> <li>Oversized hole</li> <li>Hole in material is too big</li> <li>Rivet is too short</li> <li>Rivet is too long</li> </ul> | <ul style="list-style-type: none"> <li>Oversized hole</li> <li>Rivet is too long or short</li> </ul> | <p><b>Select correct drill size for rivet</b></p>   |
| <b>Mandrel Heads Popping Out</b>   |  |   |
| <ul style="list-style-type: none"> <li>Rivet is too short</li> </ul>   | <ul style="list-style-type: none"> <li>Oversized hole</li> <li>Rivet is too short</li> </ul>         | <p><b>Select proper length rivet</b></p>  |
| <b>Rivet Shearing</b>  |  |   |
| <ul style="list-style-type: none"> <li>Select incorrect material or diameter</li> </ul>  | <ul style="list-style-type: none"> <li>Rivet used is too soft</li> <li>Undersized hole</li> </ul>    | <p>Select rivets in right diameter and material per mechanics &amp; compatibility of fastened material</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Shear</p> </div> <div style="text-align: center;"> <p>Tensile</p> </div> </div> |

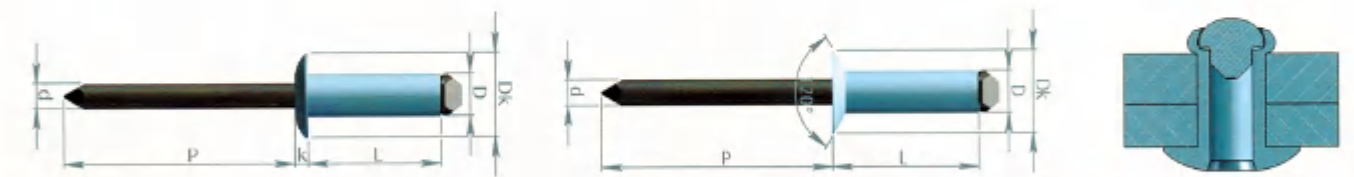


## OPEN END RIVETS



| Tengri Code | Rivet Body                |             | Mandrel         |             |
|-------------|---------------------------|-------------|-----------------|-------------|
|             | Material                  | Finish      | Material        | Finish      |
| K/K2        | Aluminium                 | Polished    | Carbon Steel    | Zinc Plated |
| H2K/H2K2    | AluminiumVIIMg2.5%VIII    | Polished    | Carbon Steel    | Zinc Plated |
| H3K/H3K2    | AluminiumVIIMg3.5%VIII    | Polished    | Carbon Steel    | Zinc Plated |
| HK/HK2      | AluminiumVIIMg5%VIII      | Polished    | Carbon Steel    | Zinc Plated |
| HLKHL/K2    | AluminiumVIIMg2.5%VIII    | Polished    | Aluminium       | Polished    |
| HBK/HBK2    | AluminiumVIIMg5%VIII      | Polished    | Stainless Steel | Polished    |
| BK/BK2      | Stainless Steel Stainless | Polished    | Carbon Steel    | Zinc Plated |
| QBK/QBK2    | Steel                     | Polished    | Stainless Steel | Polished    |
| CGK/CGK2    | Copper                    | Polished    | Carbon Steel    | Zinc Plated |
| CBK/CBK2    | Copper                    | Polished    | Stainless Steel | Polished    |
| GK/GK2      | Carbon Steel              | Zinc Plated | Carbon Steel    | Zinc Plated |

| D   |   | K    | H2K  | H3K  | HK   | HLK  | HBK  | BK   | QBK  | CGK  | CBK  | GK   |
|-----|---|------|------|------|------|------|------|------|------|------|------|------|
| 2.4 |  | 258  | 350  | 450  | 550  | 350  | 550  | -    | -    | -    | -    | 700  |
|     |  | 172  | 250  | 350  | 350  | 250  | 350  | -    | -    | -    | -    | 650  |
| 3.2 |  | 700  | 800  | 1000 | 1100 | 800  | 1100 | 2500 | 2500 | 1000 | 1000 | 1200 |
|     |  | 360  | 500  | 700  | 750  | 500  | 750  | 1900 | 1900 | 800  | 800  | 1100 |
| 4.0 |  | 850  | 1200 | 1200 | 1800 | 1200 | 1800 | 3500 | 3500 | 1800 | 1800 | 2200 |
|     |  | 540  | 850  | 1200 | 1250 | 850  | 1250 | 2700 | 2700 | 1500 | 1500 | 1700 |
| 4.8 |  | 1050 | 1700 | 2400 | 2600 | 1700 | 2600 | 5000 | 5000 | 2500 | 2500 | 3100 |
|     |  | 935  | 1200 | 1800 | 1850 | 1200 | 1850 | 4000 | 4000 | 2000 | 2000 | 2900 |
| 6.4 |  | 2050 | 3150 | 4800 | 4850 | 3150 | 4850 | 9354 | 9354 | -    | -    | 5700 |
|     |  | 1460 | 2200 | 3100 | 3400 | 2200 | 3400 | 7572 | 7572 | -    | -    | 5500 |



| D(mm) | Hole Dia(mm) | DK(mm) | Dk-L(mm) | L    |
|-------|--------------|--------|----------|------|
| 2.4   | 2.5~2.6      | 4.8    |          | 3-10 |
| 3.2   | 3.3~3.4      | 6.3    | 9.5      | 4-20 |
| 4     | 4.1~4.2      | 8      | 12 & 14  | 5-28 |
| 4.8   | 4.9~5.0      | 9.5    | 14 & 16  | 6-45 |
| 6.4   | 6.5~6.6      | 12.7   | 16 & 19  | 7-45 |


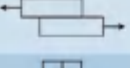
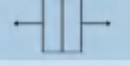
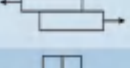
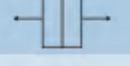
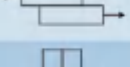
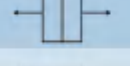
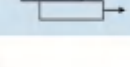
Note: All dimensions are in millimeters  
All force are in N.

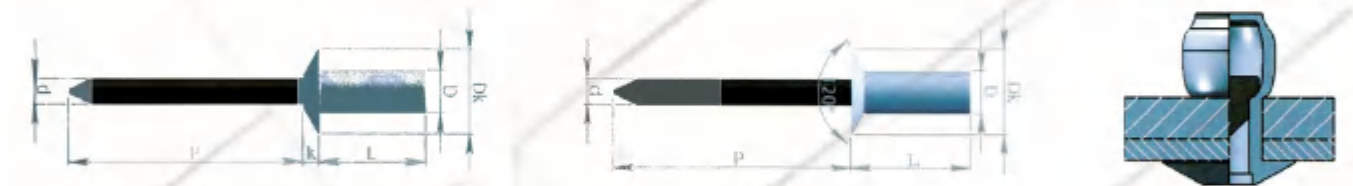


## CLOSED END RIVET

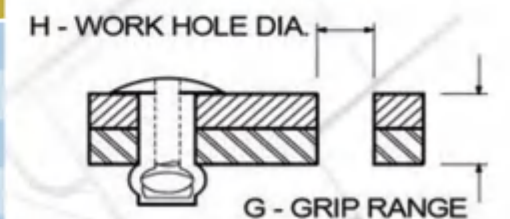


| Tengri Code | Rivet Body              |             | Mandrel         |             |
|-------------|-------------------------|-------------|-----------------|-------------|
|             | Material                | Finish      | Material        | Finish      |
| HF/HF2      | Aluminium VII Mg5% VIII | Polished    | Carbon Steel    | Phosphate   |
| HBF/HBF2    | Aluminium VII Mg5% VIII | Polished    | Stainless Steel | Polished    |
| QLF/QLF2    | Aluminium               | Polished    | Aluminium       | Polished    |
| CGF/CGF2    | Copper                  | Polished    | Carbon Steel    | Phosphate   |
| CBF/CBF2    | Copper                  | Polished    | Stainless Steel | Polished    |
| QBF/QBF2    | Stainless Steel         | Polished    | Stainless Steel | Polished    |
| GF/GF2      | Carbon Steel            | Zinc Plated | Carbon Steel    | Zinc Plated |

| D   |   | HF   | HBF  | QLF  | CGF  | CBF  | QBF  | GF   |
|-----|---|------|------|------|------|------|------|------|
| 3.2 |    | 1450 | 1450 | 540  | 1300 | 1300 | 2500 | 1300 |
|     |  | 1100 | 1100 | 460  | 850  | 850  | 2000 | 1150 |
| 4   |  | 2200 | 2200 | 820  | 2000 | 2000 | 4000 | 1700 |
|     |  | 1600 | 1600 | 720  | 1350 | 1350 | 3000 | 1550 |
| 4.8 |  | 3100 | 3100 | 1400 | 2800 | 2800 | 5500 | 2800 |
|     |  | 2200 | 2200 | 1000 | 1950 | 1950 | 4500 | 2400 |
| 6.4 |  | 4900 | 4900 | 1580 | -    | -    | 8000 | 4000 |
|     |  | 3600 | 3600 | 1220 | -    | -    | 6000 | 3600 |



| D(mm) | Hole Dia(mm) | DK(mm) | Dk-L(mm) | L    |
|-------|--------------|--------|----------|------|
| 2.4   | 2.5~2.6      | 4.8    |          | 3-10 |
| 3.2   | 3.3~3.4      | 6.3    | 9.5      | 4-20 |
| 4     | 4.1~4.2      | 8      | 12 & 14  | 5-28 |
| 4.8   | 4.9~5.0      | 9.5    | 14 & 16  | 6-45 |
| 6.4   | 6.5~6.6      | 12.7   | 16 & 19  | 7-45 |

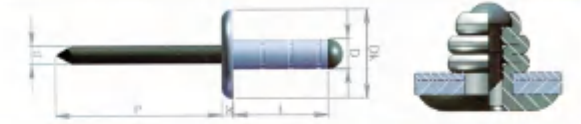


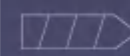





## MULTIGRIP RIVET

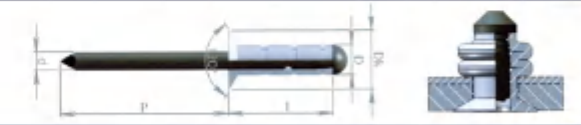


Alu./Steel Multigrip Rivet with large flange  
Alu./Stainless Steel Multigrip Rivet with large flange



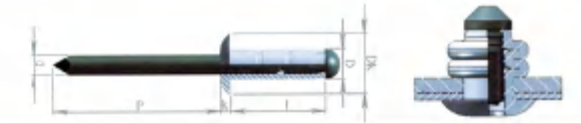
| D                             |  |  | DK  | k   | d   | P  |  |  |
|-------------------------------|---|---|-----|-----|-----|----|---|---|
| 3.2x7<br>3.2x9<br>3.2x11      | 3.3-3.4   | 1.0-3.0<br>3.0-5.0<br>5.0-7.0   | 6.3 | 1.3 | 2.1 | 27 | 1300  | 1200  |
| 4.0x8<br>4.0x10<br>4.0x12     | 4.1-4.2   | 1.0-3.0<br>3.0-5.0<br>5.0-7.0   | 8.0 | 1.5 | 2.7 | 27 | 2040  | 1530  |
| 4.8x9.5<br>4.8x12<br>4.8x14.5 | 4.9-5.0   | 1.5-3.5<br>3.5-6.0<br>6.0-8.5   | 9.5 | 1.7 | 3.4 | 27 | 3115  | 2140  |

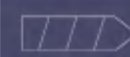



Alu./Steel Multigrip Rivet with CSK  
Alu./Stainless Steel Multigrip Rivet with CSK



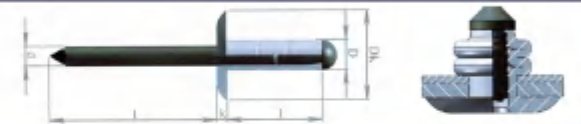
| D                             |  |  | DK         | d          | P  |  |  |
|-------------------------------|---|---|------------|------------|----|---|---|
| 3.2x10<br>4.0x11.3<br>4.0x9.5 | 3.3-3.4<br>4.1-4.2  | 2.4-6.4<br>2.9-7.9<br>1.2-6.4   | 5.4<br>6.3 | 1.8<br>2.3 | 27 | 690<br>1000   | 910<br>1330   |





Steel/Steel Multigrip Rivet



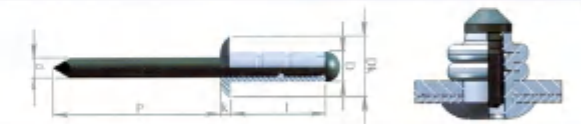
| D                                       |  |  | DK              | k                 | d                 | P  |  |  |
|---|---|---|-----------------|-------------------|-------------------|----|---|---|
| 3.2x9<br>4.0x11<br>4.8x10.3<br>4.8x12.7 | 3.3-3.4<br>4.1-4.2<br>4.9-5.0   | 1.1-4.0<br>1.4-5.0<br>1.2-4.8<br>4.0-6.3  | 7.2<br>8<br>9.8 | 0.9<br>1.2<br>1.8 | 2.1<br>2.7<br>3.4 | 27 | 1500<br>1950<br>3300  | 1700<br>2350<br>3600  |

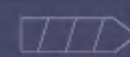

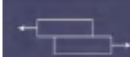

Steel/Steel Multigrip Rivet with Large Flange



| D                    |  |  | DK | k   | d   | P  |  |  |
|----------------------|---|---|----|-----|-----|----|---|---|
| 4.8x10.3<br>4.8x12.7 | 4.9-5.0   | 1.0-5.0<br>5.0-10   | 16 | 1.6 | 3.4 | 27 | 2050  | 2940  |

Stainless Steel/Stainless Steel Multigrip Rivet



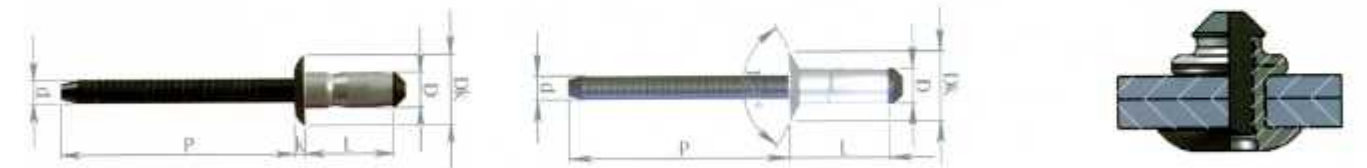
| D                         |  |  | DK       | k          | d          | P  |  |  |
|---------------------------|---|---|----------|------------|------------|----|---|---|
| 3.2x8<br>4.0x10<br>4.0x15 | 3.3-3.4<br>4.1-4.2  | 1.0-4.0<br>1.5-6.0<br>6.0-10.0  | 6.3<br>8 | 0.9<br>1.3 | 2.1<br>2.8 | 27 | 1600<br>2700  | 2000<br>3500  |
| 4.8x10.3<br>4.8x12.7      | 4.9-5.0   | 1.5-6.0<br>2.5-7.5  | 9.8      | 1.8        | 2.8        | 27 | 3900  | 5000  |







## SINGLE-GRIP RIVET







| Tengri   | Rivet Body      |             | Mandrel         |             |
|----------|-----------------|-------------|-----------------|-------------|
| Code     | Material        | Finish      | Material        | Finish      |
| GD/GD2   | Carbon Steel    | Zinc Plated | Carbon Steel    | Zinc Plated |
| QBD/QBD2 | Stainless Steel | Polished    | Stainless Steel | Polished    |



### Steel/Steel Single-grip Rivet

| D        |  |  | DK  | k   | d   | P  |  |  |
|----------|---|---|-----|-----|-----|----|---|---|
| 3.2x7    |   | 1.0-3.0   |     |     |     |    |   |   |
| 3.2x9    | 3.3-3.4   | 3.0-5.0   | 6.3 | 1.3 | 2.1 | 27 | 1300  | 1200  |
| 3.2x11   |   | 5.0-7.0   |     |     |     |    |   |   |
| 4.0x8    |   | 1.0-3.0   |     |     |     |    |   |   |
| 4.0x10   | 4.1-4.2   | 3.0-5.0   | 8.0 | 1.5 | 2.7 | 27 | 2040  | 1530  |
| 4.0x12   |   | 5.0-7.0   |     |     |     |    |   |   |
| 4.8x9.5  |   | 1.5-3.5   |     |     |     |    |   |   |
| 4.8x12   | 4.9-5.0   | 3.5-6.0   | 9.5 | 1.7 | 3.4 | 27 | 3115  | 2140  |
| 4.8x14.5 |   | 6.0-8.5   |     |     |     |    |   |   |

### Stainless Steel/Stainless Steel Single-grip Rivet

| D        |  |  | DK  | k   | d   | P  |  |  |
|----------|---|---|-----|-----|-----|----|---|---|
| 3.2x7    |   | 1.0-3.0   |     |     |     |    |   |   |
| 3.2x9    | 3.3-3.4   | 3.0-5.0   | 6.3 | 1.3 | 2.1 | 27 | 2200  | 1600  |
| 3.2x11   |   | 5.0-7.0   |     |     |     |    |   |   |
| 4.0x8    |   | 1.0-3.0   |     |     |     |    |   |   |
| 4.0x10   | 4.1-4.2   | 3.0-5.0   | 8.0 | 1.5 | 2.7 | 27 | 5000  | 3600  |
| 4.0x12   |   | 5.0-7.0   |     |     |     |    |   |   |
| 4.8x9.5  |   | 1.5-3.5   |     |     |     |    |   |   |
| 4.8x12   | 4.9-5.0   | 3.5-6.0   | 9.5 | 1.7 | 3.2 | 27 | 5500  | 4600  |
| 4.8x14.5 |   | 6.0-8.5   |     |     |     |    |   |   |







## HEMLOK RIVET





| Tengri | Rivet Body        |             | Mandrel      |             |
|--------|-------------------|-------------|--------------|-------------|
| Code   | Material          | Finish      | Material     | Finish      |
| WLG    | Carbon Steel      | Zinc Plated | Carbon Steel | Zinc Plated |
| WLH    | Aluminium(Mg2.5%) | Polished    | Aluminium    | Polished    |

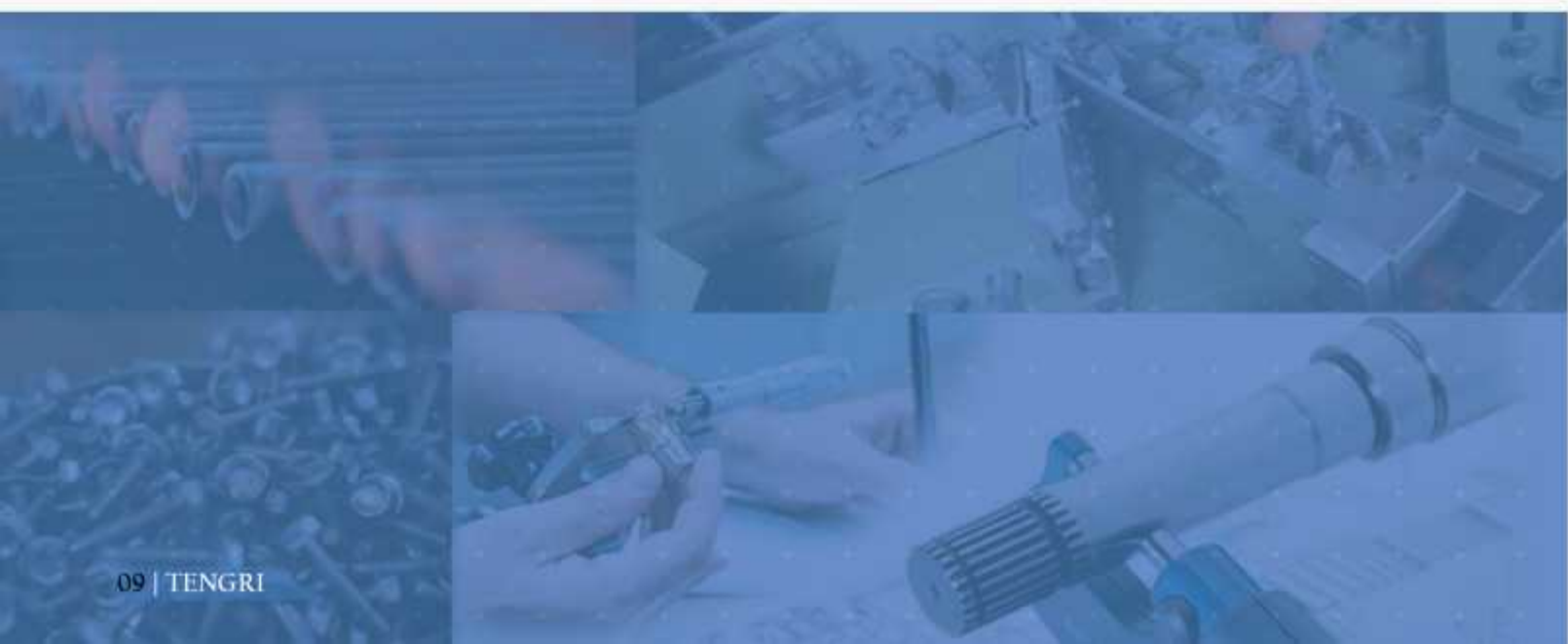


### Steel/Steel Hemlok Rivet

| D        |  |  | DK   | k   | d   | P  |  |  |
|----------|---|---|------|-----|-----|----|---|---|
| 6.4x9.0  | 6.7-6.9   | 1.5-3.5   | 12.7 | 2.6 | 4.0 | 30 | 10200   | 8000  |
| 6.4x10.5 |   | 2.8-4.8   |      |     |     |    |   |   |
| 6.4x12.5 |   | 4.8-6.8   |      |     |     |    |   |   |
| 6.4x14.5 |   | 6.8-8.8   |      |     |     |    | 13000   |   |
| 6.4x16.5 |   | 8.8-10.8  |      |     |     |    |   |   |
| 6.4x18.5 |   | 10.8-12.8   |      |     |     |    |   |   |
| 6.4x20.5 |   | 12.8-14.8   |      |     |     |    |   |   |

### Alu./Alu Hemlok Rivet

| D        |  |  | DK   | k   | d   | P  |  |  |
|----------|---|---|------|-----|-----|----|---|---|
| 6.4x9.0  | 6.7-6.9   | 1.5-3.5   | 12.7 | 2.6 | 4.0 | 30 | 5000  | 2700  |
| 6.4x10.5 |   | 2.8-4.8   |      |     |     |    | 6000  |   |
| 6.4x12.5 |   | 4.8-6.8   |      |     |     |    | 6200  |   |
| 6.4x14.5 |   | 6.8-8.8   |      |     |     |    | 6500  |   |
| 6.4x16.5 |   | 8.8-10.8  |      |     |     |    | 7000  |   |
| 6.4x18.5 |   | 10.8-12.8   |      |     |     |    |   |   |
| 6.4x20.5 |   | 12.8-14.8   |      |     |     |    |   |   |





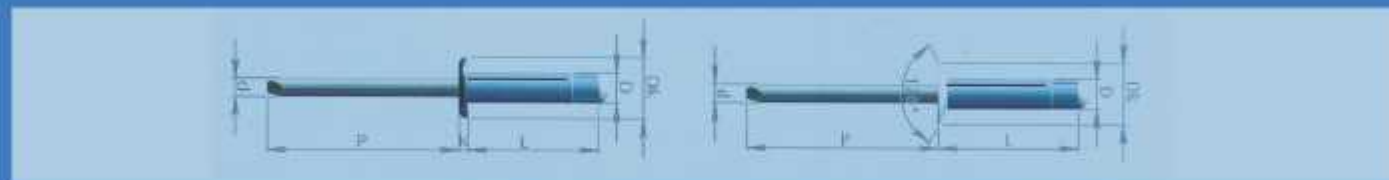
## FOLD RIVET



## PEEL TYPE BLIND RIVET

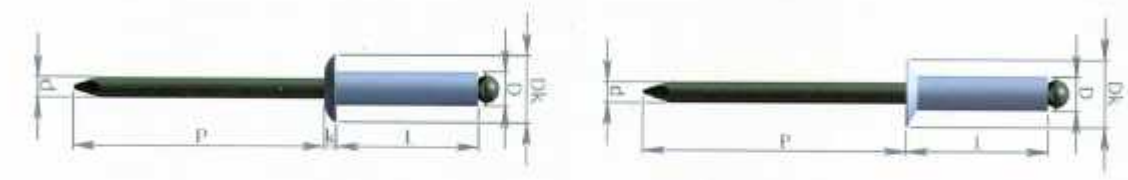


| Tengri   | Rivet Body        |          | Mandrel   |          |
|----------|-------------------|----------|-----------|----------|
| Code     | Material          | Finish   | Material  | Finish   |
| HZD/HZD2 | Aluminium(Mg3.5%) | Polished | Aluminium | Polished |



| D      |         |          | DK  | k   | d   | P  |     |      |
|--------|---------|----------|-----|-----|-----|----|-----|------|
| 4.0x14 |         | 1.0-3.0  |     |     |     |    |     |      |
| 4.0x19 | 4.2-4.3 | 3.0-7.0  | 8.0 | 1.6 | 2.3 | 27 | 500 | 800  |
| 4.8x16 |         | 1.0-4.0  |     |     |     |    |     |      |
| 4.8x21 | 5.1-5.3 | 4.0-9.0  | 9.5 | 2   | 2.9 | 27 | 900 | 1250 |
| 4.8x25 |         | 4.0-12.7 |     |     |     |    |     |      |

| Tengri | Rivet Body |          | Mandrel      |             |
|--------|------------|----------|--------------|-------------|
| Code   | Material   | Finish   | Material     | Finish      |
| HW/HW2 | Aluminium  | Polished | Carbon Steel | Zinc plated |



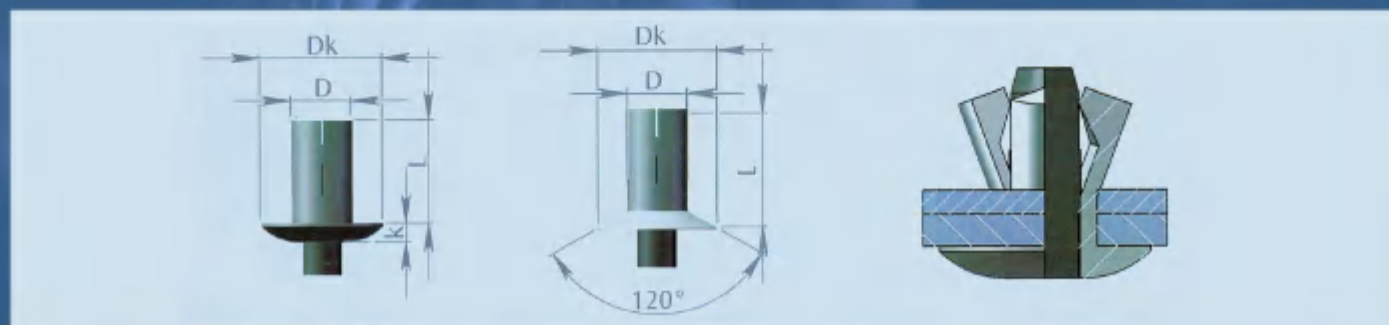
| D      |         |           | DK  | k   | d   | P  |      |      |
|--------|---------|-----------|-----|-----|-----|----|------|------|
| 3.2x8  |         | 1.0-4.0   |     |     |     |    |      |      |
| 3.2x10 | 3.4-3.5 | 3.0-6.0   | 6.2 | 1.3 | 1.9 | 27 | 760  | 720  |
| 3.2x12 |         | 5.0-8.0   |     |     |     |    |      |      |
| 4.0x10 |         | 1.0-3.0   |     |     |     |    |      |      |
| 4.0x12 | 4.2-4.3 | 2.0-5.0   | 8.0 | 1.5 | 2.4 | 27 | 1260 | 1150 |
| 4.0x15 |         | 6.0-10.0  |     |     |     |    |      |      |
| 4.8x10 |         | 1.5-4.0   |     |     |     |    |      |      |
| 4.8x12 |         | 4.0-6.0   |     |     |     |    |      |      |
| 4.8x15 | 5.2-5.3 | 6.0-9.0   | 9.5 | 1.8 | 2.9 | 27 | 1690 | 1600 |
| 4.8x18 |         | 9.0-12.0  |     |     |     |    |      |      |
| 4.8x20 |         | 12.0-14.0 |     |     |     |    |      |      |
| 4.8x25 |         | 14.0-19.0 |     |     |     |    |      |      |



## DRIVE RIVET



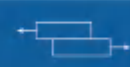
| Tengri     | Rivet Body |          | Mandrel         |          |
|------------|------------|----------|-----------------|----------|
|            | Code       | Material | Material        | Finish   |
| QLJX/QLJX2 | Aluminium  | Polished | Aluminium       | Polished |
| HBJX/HBJX2 | Aluminium  | Polished | Stainless Steel | Polished |






### Alu./Alu.Drive Rivet

| D   |  | DK   | k   | d   |  |  |
|-----|---|------|-----|-----|---|---|
| 4.8 | 4.9-5.0   | 9.6  | 2.2 | 2.9 | 1800  | 1400  |
| 6.4 | 6.5-6.6   | 12.7 | 2.9 | 4.2 | 4595  | 3100  |
| 9.5 | 9.6-9.7   | 19.0 | 4.5 | 6.2 | 10300   | 8000  |

### Alu./Stainless Steel Drive Rivet

| D   |  | DK   | k   | d   |  |  |
|-----|---|------|-----|-----|---|---|
| 3.2 | 3.3-3.4   | 6.3  | 1.2 | 1.9 | 1900  | 785   |
| 4   | 4.1-4.2   | 8    | 1.9 | 2.4 | 2500  | 1400  |
| 4.8 | 4.9-5.0   | 9.6  | 2.2 | 2.9 | 3850  | 1625  |
| 6.4 | 6.5-6.6   | 12.7 | 2.9 | 4.2 | 5230  | 4310  |

### Recommend length and grip range

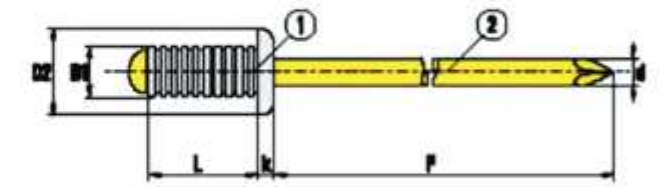
| D        |  | DK       | k         | d        |  |  |           |          |           |
|----------|---|----------|-----------|----------|---|---|-----------|----------|-----------|
| 3.2x6.4  | 3.6-4.4   | 4.0x6.4  | 2.8-3.6   | 4.8x6.4  | 1.2-3.6   | 6.4x6.4   | 1.2-3.6   |          |           |
| 3.2x7.1  | 4.4-5.2   | 4.0x7.1  | 3.6-4.4   | 4.8x7.1  | 2.0-4.4   | 6.4x7.1   | 2.0-4.4   |          |           |
| 3.2x7.9  | 5.2-6.0   | 4.0x7.9  | 4.4-5.2   |          |   |   |           |          |           |
| 3.2x8.7  | 6.0-6.8   | 4.0x8.7  | 5.2-6.0   | 4.8x8.7  | 3.6-6.0   | 6.4x8.7   | 3.6-6.0   |          |           |
| 3.2x9.5  | 6.8-7.5   | 4.0x9.5  | 6.0-6.8   |          |   |   |           |          |           |
| 3.2x10.3 | 7.5-8.3   | 4.0x10.3 | 6.8-7.5   | 4.8x10.3 | 5.2-7.5   | 6.4x10.3  | 5.2-7.5   |          |           |
| 3.2x11.1 | 8.3-9.1   | 4.0x11.1 | 7.5-8.3   |          |   |   |           |          |           |
| 3.2x11.9 | 9.1-9.9   | 4.0x11.9 | 8.3-9.1   | 4.8x11.9 | 6.8-9.1   |   |           |          |           |
| 3.2x12.7 | 9.9-10.7  | 4.0x12.7 | 9.1-9.9   |          |   | 9.5x12.7  | 3.2-6.4   |          |           |
| 3.2x13.5 | 10.7-11.5   | 4.0x13.5 | 9.9-10.7  | 4.8x13.5 | 8.3-10.7  | 6.4x13.5  | 8.3-10.7  |          |           |
|          |   | 4.0x14.3 | 10.7-11.5 |          |   |   |           |          |           |
|          |   | 4.0x15.1 | 11.5-12.3 | 4.8x15.1 | 9.9-12.3  | 6.4x15.1  | 9.9-12.3  | 9.5x15.1 | 5.5-8.7   |
|          |   | 4.0x15.9 | 12.3-13.1 |          |   |   |           |          |           |
|          |   | 4.0x16.7 | 13.1-13.9 | 4.8x16.7 | 11.5-13.9   | 6.4x16.7  | 11.5-13.9 |          |           |
|          |   | 4.0x17.5 | 13.9-14.7 |          |   |   |           | 9.5x17.5 | 7.9-11.1  |
|          |   | 4.0x18.3 | 14.7-15.5 | 4.8x18.3 | 13.1-15.5   | 6.4x18.3  | 13.1-15.5 |          |           |
|          |   | 4.0x19.1 | 15.5-16.3 |          |   |   |           |          |           |
|          |   |          |           | 4.8x19.8 | 14.7-17.1   | 6.4x19.8  | 14.7-17.1 | 9.5x19.8 | 10.3-13.5 |







## GROOVED TYPE BLIND RIVET



| Tengri | Rivet Body |          | Mandrel      |             |
|--------|------------|----------|--------------|-------------|
| Code   | Material   | Finish   | Material     | Finish      |
| H2G    | Aluminium  | Polished | Carbon Steel | Zinc Plated |



| D   |  |  | DK  | k   | d  | P    |  |  |
|-----|---|---|-----|-----|----|------|---|---|
| 3.2 | 3.6-3.7   | 6.0   | 1.2 | 1.9 | 27 | 525  | 930   |   |
| 4.0 | 4.4-4.5   | 8.0   | 1.5 | 2.5 | 27 | 885  | 1410  |   |
| 4.8 | 5.2-5.3   | 9.5   | 1.8 | 2.9 | 27 | 1185 | 1575  |   |

### Recommend length and grip range

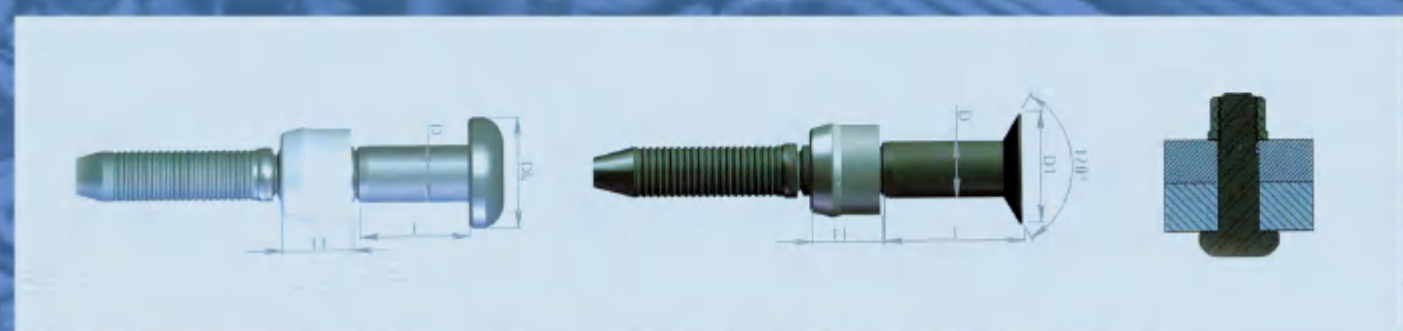
| Dxl    | Hole Depth | Dxl    | Hole Depth | Dxl    | Hole Depth |
|--------|------------|--------|------------|--------|------------|
| 3.2x10 | 13         | 4.0x10 | 13         | 4.8x10 | 13         |
| 3.2x12 | 15         | 4.0x12 | 15         | 4.8x12 | 15         |
| 3.2x14 | 17         | 4.0x14 | 17         | 4.8x14 | 17         |
| 3.2x16 | 19         | 4.0x16 | 19         | 4.8x16 | 19         |
| 3.2x18 | 21         | 4.0x18 | 21         | 4.8x18 | 21         |
|        |            |        |            | 4.8x20 | 23         |
|        |            |        |            | 4.8x22 | 25         |
|        |            |        |            | 4.8x24 | 27         |
|        |            |        |            | 4.8x26 | 29         |




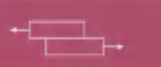

## RING-GROOVED RIVET




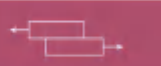
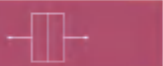
| Tengri   | Rivet Body      |             | Mandrel         |             |
|----------|-----------------|-------------|-----------------|-------------|
|          | Code            | Material    | Material        | Finish      |
| QLH/QLH2 | Aluminium       | Polished    | Aluminium       | Polished    |
| GH/GH2   | Carbon Steel    | Zinc Plated | Carbon Steel    | Zinc Plated |
| QBH/QBH2 | Stainless Steel | Polished    | Stainless Steel | Polished    |




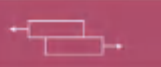

### Alu./Alu. Ring-Grooved Lockbolt

| D    |  | DK   | k   |  |  |
|------|---|------|-----|---|---|
| 5.0  | 5.1-5.3   | 9.5  | 6.0 | 3450  | 2360  |
| 6.4  | 6.5-6.7   | 12.5 | 8.0 | 6120  | 4340  |
| 10.0 | 10.1-10.3   | 19.0 | 9.4 | 18000   | 16000   |




### Steel/Steel Ring-Grooved Lockbolt

| D    |  | DK   | k   |  |  |
|------|---|------|-----|---|---|
| 5.0  | 5.1-5.3   | 9.5  | 6.0 | 7000  | 5000  |
| 6.4  | 6.5-6.7   | 12.5 | 8.0 | 10000   | 8500  |
| 10.0 | 10.1-10.3   | 19.0 | 9.4 | 25000   | 20000   |

### Stainless Steel/Stainless Steel Ring-Grooved Lockbolt

| D    |  | DK   | k   |  |  |
|------|--|------|-----|--|--|
| 5.0  | 5.1-5.3  | 9.5  | 6.0 | 9000   | 7000   |
| 10.0 | 10.1-10.3  | 19.0 | 9.4 | 30000  | 21500  |

### Recommend length and grip range

| DxL      |  | DxL      |  | DxL     |  |
|----------|---|----------|---|---------|---|
| 5.0x4.0  | 3.5-4.5   | 6.4x4.0  | 3.5-4.5   |         |   |
| 5.0x6.0  | 5.5-6.5   | 6.4x6.0  | 5.5-6.5   |         |   |
| 5.0x8.0  | 7.5-8.5   | 6.4x8.0  | 7.5-8.5   | 10x8.0  | 7.5-8.5   |
| 5.0x10.0 | 9.5-10.5  | 6.4x10.0 | 9.5-10.5  | 10x10.0 | 9.5-10.5  |
| 5.0x12.0 | 11.5-12.5   | 6.4x12.0 | 11.5-12.5   | 10x12.0 | 11.5-12.5   |
| 5.0x14.0 | 13.5-14.5   | 6.4x14.0 | 13.5-14.5   | 10x14.0 | 13.5-14.5   |
| 5.0x16.0 | 15.5-16.5   | 6.4x16.0 | 15.5-16.5   | 10x16.0 | 15.5-16.5   |
| 5.0x18.0 | 17.5-18.5   | 6.4x18.0 | 17.5-18.5   | 10x18.0 | 17.5-18.5   |
|          |   | 6.4x20.0 | 19.5-20.5   | 10x20.0 | 19.5-20.5   |
|          |   | 6.4x22.0 | 21.5-22.5   |         |   |
|          |   | 6.4x24.0 | 23.5-24.5   |         |   |
|          |   | 6.4x26.0 | 25.5-26.5   |         |   |

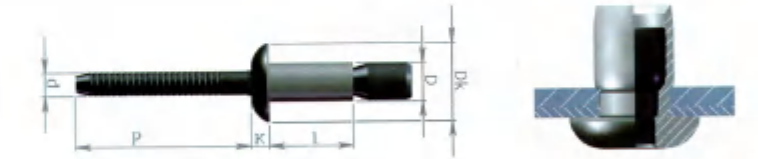


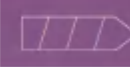

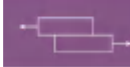

## ANLOCK BLIND RIVET



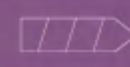



| Tengri   | Rivet Body   |             | Mandrel      |             |
|----------|--------------|-------------|--------------|-------------|
| Code     | Material     | Finish      | Material     | Finish      |
| MLG/MLG2 | Carbon Steel | Zinc Plated | Carbon Steel | Zinc Plated |
| MLH/MLH2 | Aluminium    | Polished    | Aluminium    | Polished    |

### Steel/Steel Lock

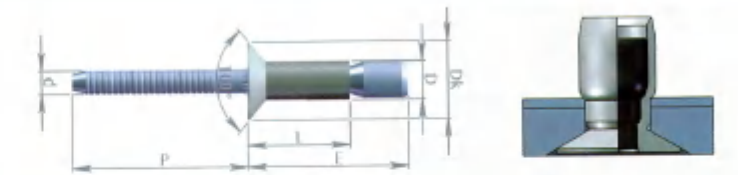


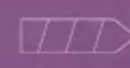



| D                |  |  | DK   | k   | d   | P  |  |  |
|------------------|---|---|------|-----|-----|----|---|---|
| 4.8x10<br>4.8x14 | 4.9-5.1   | 1.6-6.9<br>1.6-11.1   | 9.6  | 2.1 | 3.0 | 27 | 6200  | 4900  |
| 6.4x14<br>6.4x20 | 6.7-6.9   | 2.0-9.5<br>2.0-15.9   | 12.7 | 3.1 | 4.0 | 27 | 11700   | 9600  |

### Alu.Alu.Lock

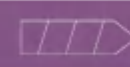

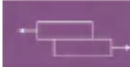

| D                |  |  | DK   | k   | d   | P  |  |  |
|------------------|--|--|------|-----|-----|----|--|--|
| 4.8x10<br>4.8x14 | 4.9-5.1  | 1.6-6.9<br>1.6-11.1  | 9.6  | 2.1 | 3.0 | 27 | 3100   | 2220   |
| 6.4x14<br>6.4x20 | 6.7-6.9  | 2.0-9.5<br>2.0-15.9  | 12.7 | 3.1 | 4.0 | 27 | 5780   | 3960   |

### Steel/Steel Lock With CSK



| D                |  |  | DK   | k   | d   | P  |  |  |
|------------------|---|---|------|-----|-----|----|---|---|
| 4.8x12<br>4.8x16 | 4.9-5.1   | 3.2-8.4<br>3.2-12.2   | 8.2  | 3.0 | 3.0 | 27 | 6200  | 4900  |
| 6.4x16<br>6.4x22 | 4.3-12  | 6.7-6.9<br>4.3-17   | 10.0 | 4.0 | 4.0 | 27 | 11700   | 9600  |

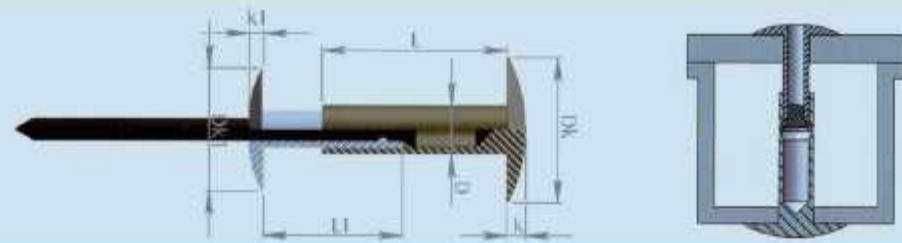
### Alu.Alu.Lock With CSK


| D                |  |  | DK   | k   | d   | P  |  |  |
|------------------|---|---|------|-----|-----|----|---|---|
| 4.8x12<br>4.8x16 | 4.9-5.1   | 3.2-8.4<br>3.2-12.2   | 8.2  | 3.0 | 3.0 | 27 | 3100  | 2220  |
| 6.4x16<br>6.4x22 | 6.7-6.9   | 4.3-12<br>4.3-17  | 10.0 | 4.0 | 4.0 | 27 | 5780  | 3960  |



## MATE RIVET

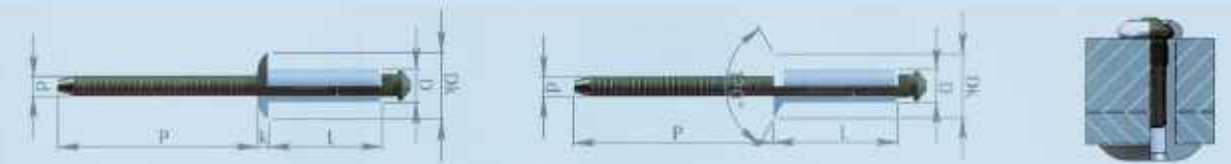
| Tengri | Blind Rivet  |             |              |             | Tubular     |             |
|--------|--------------|-------------|--------------|-------------|-------------|-------------|
|        | Rivet Body   |             | Mandrel      |             | Material    | Finish      |
|        | Material     | Finish      | Material     | Finish      |             |             |
| AAMT   | Aluminium    | Polished    | Aluminium    | Polished    | Aluminium   | Polished    |
| ASAMT  | Aluminium    | Polished    | Carbon Steel | Zinc Plated | Aluminium   | Polished    |
| SSMT   | Carbon Steel | Zinc Plated | Carbon Steel | Zinc Plated | Zinc Plated | Zinc Plated |



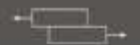



| D        |  | DK   | DKI         | K        | KI   |
|----------|---|------|-------------|----------|------|
| 4.8x15   | 14.9  | 13.3 | 15.87-19.05 | 6.4x15   | 14.7 |
| 4.8x16.5 | 16.4  | 13.3 | 17.47-22.23 | 6.4x18   | 17.7 |
| 4.8x21   | 21  | 13.3 | 22.23-27.00 | 6.4x21   | 20.8 |
| 4.8x26   | 25.7  | 13.3 | 27.00-31.75 | 6.4x27   | 27.2 |
| 4.8x30.5 | 30.5  | 13.3 | 31.75-36.53 | 6.4x33.5 | 33.5 |

## LOCK RIVET

| Tengri | Rivet Body   |             | Mandrel      |             |
|--------|--------------|-------------|--------------|-------------|
| Code   | Material     | Finish      | Material     | Finish      |
| GSD    | Carbon Steel | zinc Plated | Carbon Steel | Zinc Plated |



| D        |  |  | DK      | k   | d   | P   |  |  |
|----------|---|---|---------|-----|-----|-----|---|---|
| 3.2x7    |   |   | 1.5-3.0 |     |     |     |   |   |
| 3.2x8    | 3.3-3.4   |   | 2.5-5.0 | 6.3 | 1.2 | 2.0 | 27  | 1780  |
| 3.2x10   |   |   | 3.0-6.5 |     |     |     |   |   |
| 4.0x7.5  |   |   | 1.0-3.0 |     |     |     |   |   |
|          | 4.1-4.2   |   |         | 8.0 | 1.4 | 2.4 | 27  | 2440  |
| 4.0x10.5 |   |   | 3.0-6.5 |     |     |     |   |   |
| 4.8x8    |   |   | 1.5-3.0 |     |     |     |   |   |
| 4.8x12.5 |   |   | 3.5-8.0 |     |     |     |   |   |
|          | 4.9-5.0   |   |         | 9.5 | 1.7 | 2.9 | 27  | 3670  |
| 4.8x14.5 |   |   | 6.5-9.5 |     |     |     |   |   |
| 4.8x17.5 |   |   | 9.5-13  |     |     |     |   |   |

## STRUCTURAL BULB TITE RIVET



## HEX FLANGED POP RIVETS

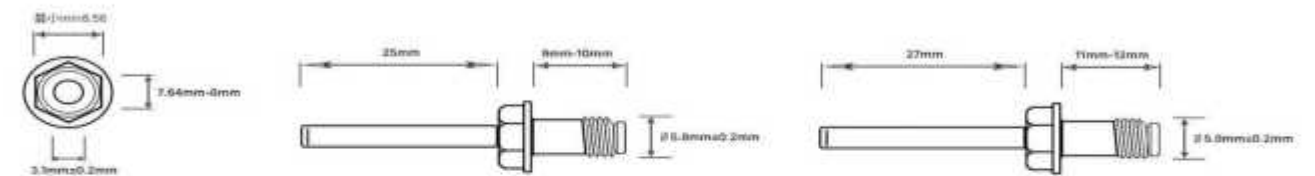


| Tengri   | Rivet Body        |          | Mandrel   |          |
|----------|-------------------|----------|-----------|----------|
| Code     | Material          | Finish   | Material  | Finish   |
| HZD/HZD2 | Aluminium(Mg3.5%) | Polished | Aluminium | Polished |



| D      |         |          | DK  | k   | d   | P  |     |      |
|--------|---------|----------|-----|-----|-----|----|-----|------|
| 4.0x14 |         | 1.0-3.0  | 8.0 | 1.6 | 2.3 | 27 | 500 | 800  |
| 4.0x19 | 4.2-4.3 | 3.0-7.0  |     |     |     |    |     |      |
| 4.8x16 |         | 1.0-4.0  |     |     |     |    |     |      |
| 4.8x21 | 5.1-5.3 | 4.0-9.0  | 9.5 | 2   | 2.9 | 27 | 900 | 1250 |
| 4.8x25 |         | 4.0-12.7 |     |     |     |    |     |      |

| Tengri | Rivet Body  |          | Mandrel     |          |
|--------|-------------|----------|-------------|----------|
| Code   | Material    | Finish   | Material    | Finish   |
| HF/HF2 | SS304/SS306 | Polished | SS304/SS306 | Polished |



| D     | DK   | d       | P  | L     |
|-------|------|---------|----|-------|
| 5.8-6 | 8.56 | 2.9-3.3 | 25 | 9-10  |
| 5.8-6 | 8.56 | 2.9-3.3 | 27 | 11-12 |
| 5.8-6 | 8.56 | 2.9-3.3 | 27 | 12-13 |



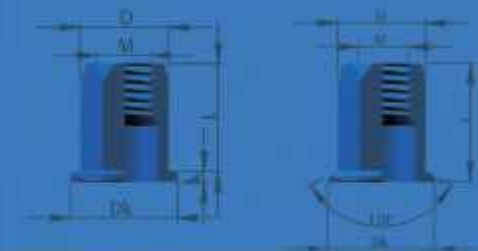
## INSERT NUT



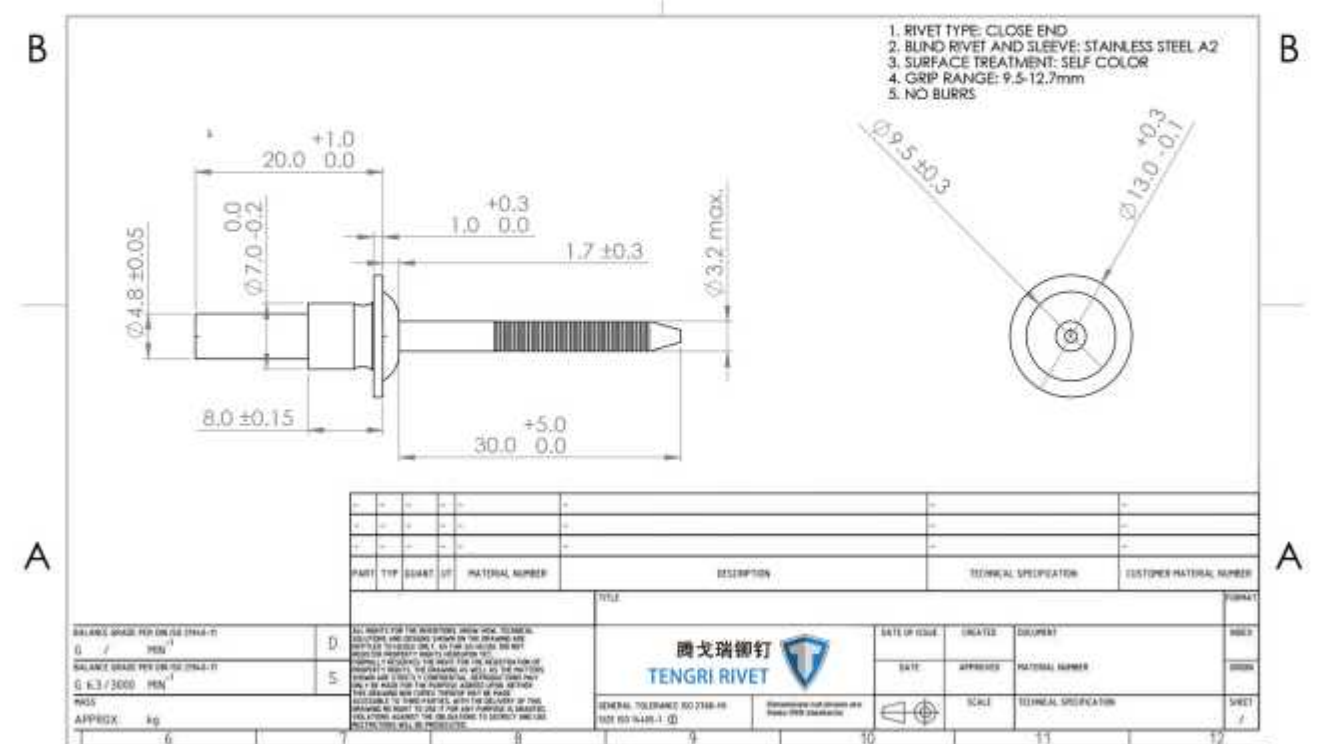
## SLEEVE RIVET



| Tengri | Rivet Body   |             |
|--------|--------------|-------------|
| Code   | Material     | Finish      |
| HM/HM2 | Aluminum     | Polished    |
| GM/GM2 | Carbon Steel | Zinc Plated |



| M   | D  | Image     | DK | k   | Alu. Insert Nut |       | Steel Insert Nut |       |
|-----|----|-----------|----|-----|-----------------|-------|------------------|-------|
|     |    |           |    |     | Image           | Image | Image            | Image |
| M3  | 5  | 5.1-5.2   | 8  | 0.8 | 1030            | 1242  | 1100             | 2240  |
| M4  | 6  | 6.1-5.2   | 9  | 0.8 | 1300            | 1789  | 2100             | 3220  |
| M5  | 7  | 7.1-7.2   | 10 | 1.0 | 1750            | 2435  | 2600             | 4350  |
| M6  | 9  | 9.1-9.2   | 12 | 1.5 | 2600            | 3416  | 3800             | 6150  |
| M8  | 11 | 11.1-11.2 | 14 | 1.5 | 3600            | 5016  | 5400             | 9040  |
| M10 | 13 | 13.1-13.2 | 16 | 1.8 | 4300            | 6626  | 6900             | 12000 |



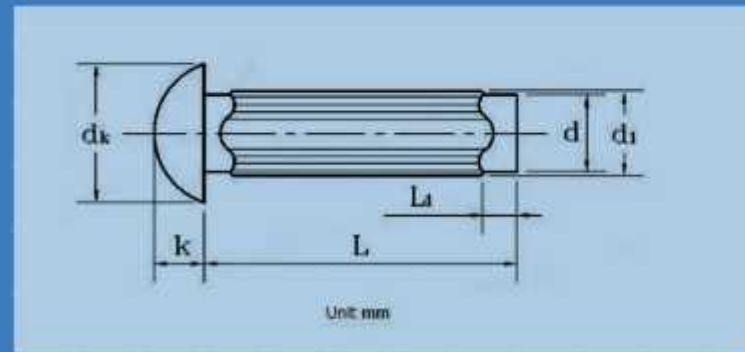
## KNURLED SOLID RIVET

## BIFURCATED RIVET



| Screw Thread |     | Ø1.6 | Ø2   | Ø2.5 | Ø3   | Ø4   | Ø5   |
|--------------|-----|------|------|------|------|------|------|
| d            |     |      |      |      |      |      |      |
| dk           | max | 3.2  | 3.74 | 4.84 | 5.54 | 7.39 | 9.09 |
|              | min | 2.8  | 3.26 | 4.36 | 5.06 | 6.81 | 8.51 |
| k            | max | 1.2  | 1.4  | 1.8  | 2    | 2.6  | 3.2  |
|              | min | 0.8  | 1    | 1.4  | 1.6  | 2.2  | 2.8  |
| d1           | min | 1.75 | 2.15 | 2.65 | 3.15 | 4.15 | 5.15 |
| L1           |     | 1    | 1    | 1    | 1    | 1.5  | 1.5  |

| Bifurcated Rivet |     |     |     |    |      |     |      |      |     |     |     |     |
|------------------|-----|-----|-----|----|------|-----|------|------|-----|-----|-----|-----|
| Head Diameter    | 5.8 | -   | -   | -  | -    | 8   | -    | -    | 9.5 | -   | 10  | -   |
| Shank Diameter   | 2.7 | -   | -   | -  | 2.9  | 3.2 | 3.5  | 3.8  | 3.5 | 3.8 | 3.5 | 3.8 |
| Length           | 6.5 | 8.0 | 9.5 | 11 | 12.7 | 14  | 15.8 | 17.5 | 19  | 20  | 23  | 26  |





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The main products are blind rivet, structural rivet and hammer rivet, covering open type, closed type and series products, etc. We manufacture products with material of Aluminium, steel, stainless steel, copper and Monel.

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We have advanced equipments imported from Taiwan and Italy, which ensure our high-quality products, e.g. 12 pieces of six-station, 19 pieces of 5-station, 12 pieces of 2-die 4-blow, 57 pieces of nail making machine, 35 pieces of threading, 55 pieces of assembly machine together several testing machines.

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Give us the opportunity to earn your business.

# RIVET

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