

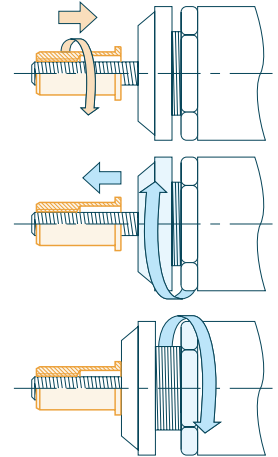


CLUFIX® blind rivet nuts SETTING PROCESS GUIDE

Prior to begin with production several adjustments and checkings must be performed:

1. Anvil position

- 1.1. Screw CLUFIX® onto the tie-rod so that all the CLUFIX® threads are engaged on the rod (move back the anvil if necessary).
- 1.2. Place in the anvil in contact with the CLUFIX® head.
- 1.3. Block the anvil in this position by the means of the counter-nut.



2. Stroke

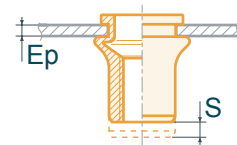
2.1. Stroke calculation

This adjustment guarantees proper crimping quality in line with the chosen CLUFIX® part and the thickness of the metal sheet workpiece to be assembled.

The crimping stroke S is calculated from the following formula: $S = X - Ep$

- where Ep is the thickness of workpiece in mm
- where X is given by the table on the next page

After calculation of S , carry out a crimping test (using your chosen installation tool) on a metal sheet sample matching the thickness used in your application.

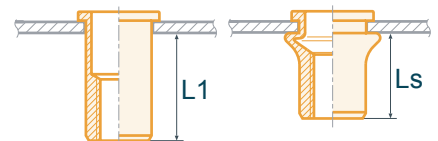


2.2. Stroke adjustment

Depending on crimping tool, adjust proper stroke value according to calculation of S .

2.3. Checking

- 2.3.1. First, measure the length of CLUFIX® body protrusion $L1$ before crimping as indicated.
- 2.3.2. Then, measure the length of CLUFIX® body protrusion Ls after crimping as indicated.
- 2.3.3. Finally, calculate $L1 - Ls$
 - 2.3.3.1. if $L1 - Ls > S$ then adjust gun stroke by reducing stroke
 - 2.3.3.2. if $L1 - Ls < S$ then adjust gun stroke by increasing stroke
- 2.3.4. Proceed again from 2.3.1. until $L1 - Ls = S$



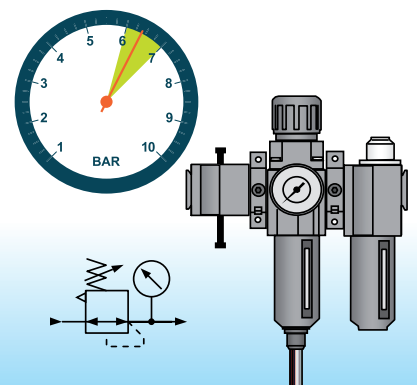
Note: Air Pressure

For oleopneumatic tools, the air supply pressure level determines the setting force of the installation tool.

To guarantee proper crimping, it is advised to use a manometer (positioned upstream of the tooling) linked to your air pressure supply network.

The minimum pressure required is 6 bars. This value corresponds to the usual pressure of an air pressure supply network.

However, for diameters M2.5 - M3 - M4, it is possible to reduce the supply pressure in order to limit crimping constraints (particularly for aluminium). To adjust this parameter, it is recommended to position a pressure reducing valve upstream of the crimping tool.



X values table:

Material	Steel / Aluminium				Stainless Steel / 316L			
	Flush		Flanged / Countersunk		Flush		Flanged / Countersunk	
	Part number	X	Part number	X	Part number	X	Part number	X
M 2.5	01X025AXX011X	2.4	01X025XXX011X	2.4	01X025AXX011X	2.4	01X025XXX011X	2.4
	01X025AXX017X	3.0	01X025XXX017X	3.0	01X025AXX017X	3.0	01X025XXX017X	3.0
M 3	01X030AXX011X	2.4	01X030XXX011X	2.2	01X030AXX011X	2.3	01X030XXX011X	2.3
	01X030AXX023X	3.6	01X030XXX017X	2.8	01X030AXX023X	3.4	01X030XXX017X	2.9
	01X030AXX032X	4.7	01X030XXX023X	3.4	01X030AXX032X	4.7	01X030XXX023X	3.5
	01X030AXX041X	5.6	01X030XXX030X	4.0	01X030AXX041X	5.7	01X030XXX030X	4.1
M 4	01X040AXX013X	2.6	01X040XXX013X	2.6	01X040AXX013X	2.6	01X040XXX013X	2.6
	-	-	-	-	01X040AXX023X	3.6	-	-
	01X040AXX030X	4.3	01X040XXX021X	3.4	01X040AXX030X	4.3	01X040XXX021X	3.3
	01X040AXX042X	5.5	01X040XXX030X	4.3	01X040AXX042X	5.5	01X040XXX030X	4.3
	01X040AXX055X	6.8	01X040XXX037X	5.0	01X040AXX055X	6.8	01X040XXX037X	5.0
M 5	01X050AXX015X	3.0	01X050XXX015X	3.0	01X050AXX015X	3.1	01X050XXX015X	3.1
	01X050AXX025X	4.0	01X050XXX025X	4.0	01X050AXX025X	4.1	01X050XXX025X	4.1
	01X050AXX035X	5.0	01X050XXX035X	5.0	01X050AXX035X	5.1	01X050XXX035X	5.1
	01X050AXX045X	6.0	01X050XXX045X	6.0	01X050AXX045X	6.1	01X050XXX045X	6.1
M 6	01X060AXX015X	3.4	01X060XXX015X	3.4	01X060AXX015X	3.5	01X060XXX015X	3.5
	01X060AXX035X	5.4	01X060XXX025X	4.4	01X060AXX035X	5.5	01X060XXX025X	4.5
	01X060AXX045X	6.4	01X060XXX035X	5.4	01X060AXX045X	6.5	01X060XXX035X	5.5
	01X060AXX055X	7.4	01X060XXX045X	6.4	01X060AXX055X	7.5	01X060XXX045X	6.5
	01X060AXX065X	8.4	01X060XXX055X	7.4	01X060AXX065X	8.5	01X060XXX055X	7.5
M 8	01X080AXX018X	3.7	01X080XXX018X	3.7	01X080AXX018X	4.0	01X080XXX018X	4.0
	01X080AXX030X	4.9	01X080XXX030X	4.9	01X080AXX030X	5.2	01X080XXX030X	5.2
	01X080AXX042X	6.2	01X080XXX042X	6.1	01X080AXX042X	6.4	01X080XXX042X	6.4
	01X080AXX050X	6.9	01X080XXX050X	6.9	01X080AXX050X	7.2	01X080XXX050X	7.2
	01X080AXX065X	8.4	01X080XXX065X	8.4	01X080AXX065X	8.7	01X080XXX065X	8.7
M 10	01X100AXX032X	6.0	01X100XXX025X	5.3	01X100AXX032X	6.2	01X100XXX025X	5.5
	01X100AXX055X	8.3	01X100XXX040X	6.8	01X100AXX055X	8.5	01X100XXX040X	7.0
	01X100AXX065X	9.3	01X100XXX055X	8.3	01X100AXX065X	9.5	01X100XXX055X	8.5
	01X100AXX075X	10.3	01X100XXX070X	9.8	01X100AXX075X	10.5	01X100XXX070X	10.0
M 12	01X120AXX042X	7.3	01X120XXX042X	7.3	01X120AXX042X	8.1	01X120XXX042X	8.1
	01X120AXX060X	9.1	01X120XXX060X	9.1	01X120AXX060X	9.9	01X120XXX060X	9.9
	01X120AXX076X	10.7	01X120XXX076X	10.7	01X120AXX076X	11.5	01X120XXX076X	11.5
	01X120AXX092X	12.3	01X120XXX092X	12.3	01X120AXX092X	13.1	01X120XXX092X	13.1
M 14	01X140AXX030X	7.0	01X140XXX030X	7.0	01X140AXX030X	7.3	01X140XXX030X	7.3
	01X140AXX050X	9.0	01X140XXX050X	9.0	01X140AXX050X	9.3	01X140XXX050X	9.3
	01X140AXX070X	11.0	01X140XXX070X	11.0	01X140AXX070X	11.3	01X140XXX070X	11.3
	01X140AXX090X	13.0	01X140XXX090X	13.0	01X140AXX090X	13.3	01X140XXX090X	13.3
M 16	01X160AXX032X	8.2	01X160XXX032X	8.2	01X160AXX032X	8.4	01X160XXX032X	8.4
	01X160AXX057X	10.7	01X160XXX057X	10.7	01X160AXX057X	10.9	01X160XXX057X	10.9
	01X160AXX082X	13.2	01X160XXX082X	13.2	01X160AXX082X	13.4	01X160XXX082X	13.4
	01X160AXX110X	16.0	01X160XXX110X	16.0	01X160AXX110X	16.2	01X160XXX110X	16.2