

Masterfix Hand tools for blind rivets

Distinguish themselves by

- Wide choice
- High professional quality
- Competitive price levels
- Continuous product development and innovations
- Complete supply of tools with full set of nose pieces
- Wide selection of service packs (tool-sets)

The table below shows which hand tool we recommend for particular rivet sizes and materials.

In case of questions we will of course be pleased to give you further advice.

	Ø 2.4			Ø 3.0 - 3.2			Ø 4.0			Ø 4.8 - 5.0			Ø 6.0 - 6.4			Ø 8.0	
	Aluminium	Steel	Stainl. steel	Aluminium	Steel	Stainl. steel	Aluminium	Steel	Stainl. steel	Aluminium	Steel	Stainl. steel	Aluminium	Steel	Stainl. steel	P-Lock steel	Stainl. steel
MFX 150																	
MFX 10000																	
MFX 80																	
MFX 260																	
MFX 280																	

Recommended capacity
 Additional option

Info

Hand tools for blind rivets



MFX 150A item nr. 43105150A

Professional blind riveting tool for small and light assembly work.

Capacity	ø2,4 - 5,0 mm
Weight	0,6 kg
Length	250 mm
Body material	Aluminium
Lever material	Steel
Equipment incl.	Nose pieces ø3,0 - 5,0 mm
Separately available	Nose piece ø2,4 mm
Also available	As set with assorted PLIA rivets item nr. 43105150AS



MFX 150B item nr. 43105150B

Professional blind riveting tool for small and light assembly work.
Equipped with an opening spring.

Capacity	ø2,4 - 5,0 mm
Weight	0,6 kg
Length	250 mm
Body material	Aluminium
Lever material	Steel
Equipment incl.	Nose pieces ø3,0 - 5,0 mm
Separately available	Nose piece ø2,4 mm
Also available	As set with assorted PLIA rivets item nr. 43105150BS



Hand tools for blind rivets



MFX 10000 item nr. 43105100

Practical blind riveting tool for small & light assembly work. The front sleeve can be positioned horizontally as well as vertically.

Capacity	ø2,4 - 5,0 mm
Weight	0,85 kg
Length	300 mm
Body material	Aluminium
Lever material	Steel
Equipment	Nose pieces ø2,4 - 5,0 mm



MFX 80 item nr. 43106080

Improved Lazy Tong blind riveting tool for "one" handed setting. With reinforced links and capacity increase to 6,4 mm rivets in steel. This tool requires only minimal physical effort.

Capacity	ø3,0 - 6,4 mm
Weight	2,4 kg
Length	310 mm (folded)
Body material	Aluminium
Lever material	Steel
Equipment	Nose pieces ø3,0 - 6,4 mm



MFX 260 item nr. 43106260

Heavy duty long arm riveter with adjustable front sleeve, allowing the breaking point to be set in the most ideal position.

Capacity	ø3,0 - 6,4 mm
Weight	1,9 kg
Length	520 mm
Body material	ABS (plastic) with steel parts
Lever material	Steel
Equipment	Nose pieces ø3,0 - 6,4 mm



MFX 280 item nr. 43108280

Heavy duty long arm riveter with adjustable levers for easier setting of large rivets. The adjustable front sleeve, allows the breaking point to be set in the most ideal position.

Capacity	ø4,0 - 8,0 mm ø4,8 - 6,5 mm P-LOCK, Magna Lok® & Monobolt®
Weight	2,6 kg
Length	660 mm max.
Body material	ABS (plastic) with steel parts
Lever material	Steel
Equipment incl.	- Nose pieces ø4,0 - 6,4 mm - Monobolt® ø4,8 - 6,4 mm - Magna-Lok® ø4,8 - 6,5 mm

Masterfix EZM Power tools for blind rivets

ZM 1000 / EZM 2000

The new generation EZMaster hydraulic/pneumatic tools combine strength and reliability with a sleek, attractive and ergonomically sound design and are very well suited for continuous use.

The hydraulic 'house' is made of ABS and the pneumatic 'house' is made of a revolutionary new synthetic material with the strength and rigidity of cast metals or alloys. The tool is equipped with a pressure relief valve and the high-tech sealing makes this tool 'oil service free'.

The tools are equipped with an easy to use vacuum retraction system which is activated by simply turning the mandrel collection cup.

Position 1 (1st click) = mandrel collector is locked onto the tool - no retraction yet.

Position 2 (2nd click) = vacuum retraction is activated.

The collection cup is equipped with a silicon bottom providing an escape for excess air as well as a welcome sound reduction when the rest mandrel is released into the cup.

All Masterfix Power tools meet the current CE-standard.

The table below shows which tool we recommend for a particular rivet size and material.

	Ø 2.4			Ø 3.0 - 3.2			Ø 4.0			Ø 4.8 - 5.0			Ø 6.0 - 6.4		
	Aluminium	Steel	Stainl. steel	Aluminium	Steel	Stainl. steel	Aluminium	Steel	Stainl. steel	Aluminium	Steel	Stainl. steel	Aluminium	Steel	Stainl. steel
EZM 1000															
EZM 2000															

Recommended capacity

Info

Power tools for blind rivets



EZM 1000 item nr. 451EZM1000

New hydraulic/pneumatic blind riveting tool with extraction, mandrel collector and suspension bracket.

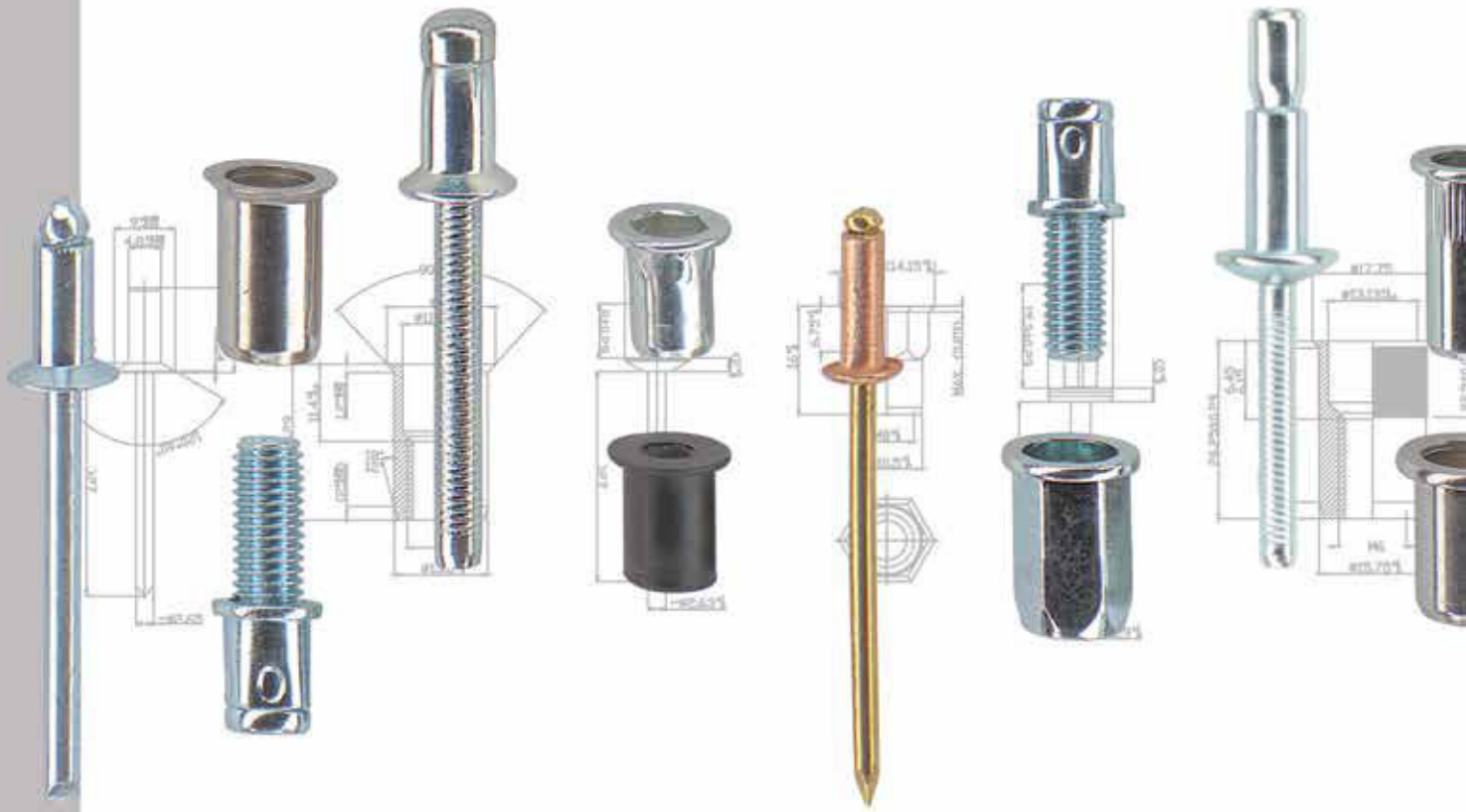
Capacity	ø3,0 - 5,0 mm
Weight	1,25 kg
Dimensions	264 x 272 x 102 mm
Stroke	17,0 mm
Pressure required	5 - 7 Bar
Traction power(6 bar)	7,3 kN (6 bar)
Equipment	Nose pieces ø3,0 - 5,0 mm



EZM 2000 item nr. 451EZM2000

New hydraulic/pneumatic blind riveting tool with extraction, mandrel collector and suspension bracket.

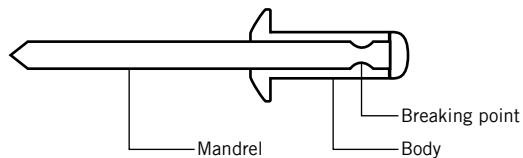
Capacity	ø4,0 - 6,4 mm
Weight	1,65 kg
Dimensions	275 x 272 x 125 mm
Stroke	21,0 mm
Pressure required	5 - 7 Bar
Traction power(6 bar)	12,5 kN (6 bar)
Equipment	Nose pieces ø4,0 - 6,4 mm



Technical info

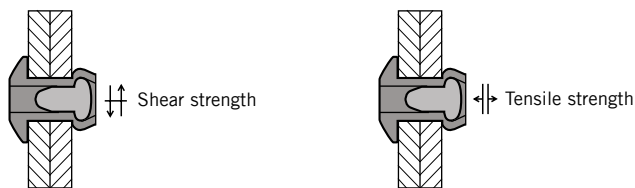
Blind rivet breaking point

The rivet is made of two parts namely, the body and the mandrel. The body is deformed when the rivet is set and it is this part which clamps the materials together. The function of the mandrel is to deform the body of the rivet. The mandrel is therefore always stronger than the body. The mandrel breaks off at its specific breaking point. The breaking point ensures that the mandrel breaks off at the right moment so that the body is correctly deformed. The breaking load can be adjusted so that the mandrel breaks at a sooner or a later point of time.



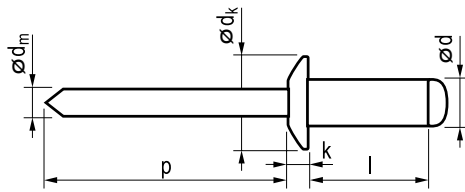
Tensile and shear strength

The tensile strength is the maximum force the rivet, rivet nut or rivet bolt can bear lengthways (see arrows) before it gives out. The tensile strength is obtained through tests and is always the smallest average value. The shear strength is the maximum force the rivet, rivet nut or rivet bolt can bear vertical to its length (see arrows) before it gives out. The shear strength is obtained through tests and is always the smallest average value. By changing the breaking point, the shear strength will be increased or decreased. Both tensile and shear strength are expressed in Newton (1 kg = 10 N).



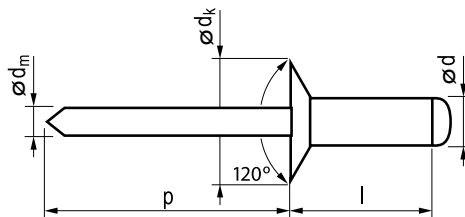
Technical details

Dimensioning rivets

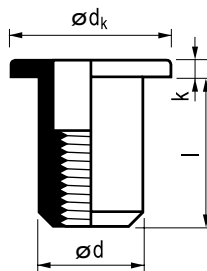


Standard rivet (all sizes in mm)

- $\varnothing d$ = Rivet body diameter
- $\varnothing d_k$ = Head diameter
- $\varnothing d_m$ = Mandrel diameter
- k = Head height
- l = Rivet body length
- p = Mandrel length

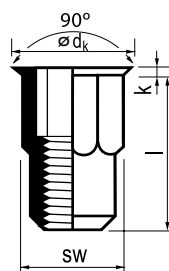


Dimensioning rivet nuts



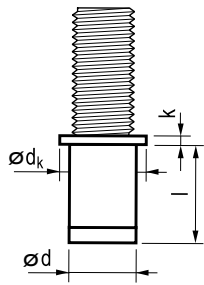
Standard rivet nut (all sizes in mm)

- $\varnothing d$ = Rivet nut body diameter
- $\varnothing d_k$ = Head diameter
- k = Head height
- l = Rivet nut body length
- sw = Key size



Technical details

Dimensioning rivet bolts



Standard rivet bolt (all sizes in mm)

$\varnothing d$ = Rivet nut body diameter

$\varnothing d_k$ = Head diameter

k = Head height

l = Rivet nut body length

Technical details

Aluminium AL 99,5

Low weight

Easy to deform

Highly electrical and warmth conductive

Aluminium alloys AlMg

Solid and strong - easy to polish

If the degree of Mg increases, the strength of the rivet increases and the deformability decreases

Steel

Suitable for heavy constructions

Easy to deform

Easy to coat (e.g. with anti-corrosion coating)

Stainless steel

Highly resistant to corrosion

Suitable for heavy constructions

A4 has a higher resistance to acids than A2

Copper

Highly electrical and warmth conductive

Easy to deform

Suitable for soldering

Material features

Contact corrosion

When different metals come in contact with each other, contact corrosion will arise. The table below shows how the different materials combine.

Material rivet body	Material to be connected			
	Aluminium	Copper	Steel	Stainl.steel
Aluminium	++	--	+	+
Copper	--	++	--	+
Steel	+	--	++	++
Stainl. steel	+	+	++	++
i Monell [®]	--	+	++	+

++ very good | + good | - moderate | -- bad

Coatings

Corrosion can never be reduced to 0%. However, coatings can help to reduce the chance of corrosion or delay corrosion:

Painting

2-Components painting is possible in many colors. All RAL-colours can be delivered on request.

Zinc plating

This is a coating obtained through electrolysis and consists of a Zinc-iron alloy. This coating is characterized by a high resistance to wear and tear.

Material features

STANLEY
Engineered Fastening

Edition September 2015

