

WS XPress 800™

Pneumatic-hydraulic universal actuator

Original instruction manual

GB

US



MV Marketing und Vertriebs-GmbH & Co.KG
Wieländer+Schill
Professionelle Karosserie-Spezialwerkzeuge

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1.1 Notes regarding this manual

Notice

Legislation stipulates that workers handling hydraulic driven riveting tools must be trained and instructed. The training and instruction must be carried out by a Wieländer+Schill instructor or an officially authorized W+S representative.

State-of-the-art technology

This riveting tool represents state-of-the art technology. To ensure the functionality of the equipment, it must be operated in a proper and safe manner.

Handling

All handling necessary to ensure correct operation is described in the instruction manual. No work method other than that expressly approved by the manufacturer may be used.

Faults

In the event of a fault, the user may only carry out repair work for the faults for which the relevant maintenance process is described in this manual.

Read the instruction manual

Read the instruction manual carefully before using the riveting tool



1.2 Explanation of symbols

There are some sections of this manual that use internationally known warning symbols, warning notes and general instructional symbols.

The individual symbols are explained below. **Follow all instructions and safety advice..**

	Observe instruction manual		Warning! General source of danger		Please note the following!
	Observe general instructions		Warning! Hand could become trapped		Arrow to clarify compression
	Wear face mask		Warning! Fingers could become trapped		Arrow showing direction
	Wear gloves		Warning! Danger of environmental contamination		For further information see chapter
	Note arrow		Warning! System under pressure		Audibly engage

1.3 Marking

Marking on the modular Actuator

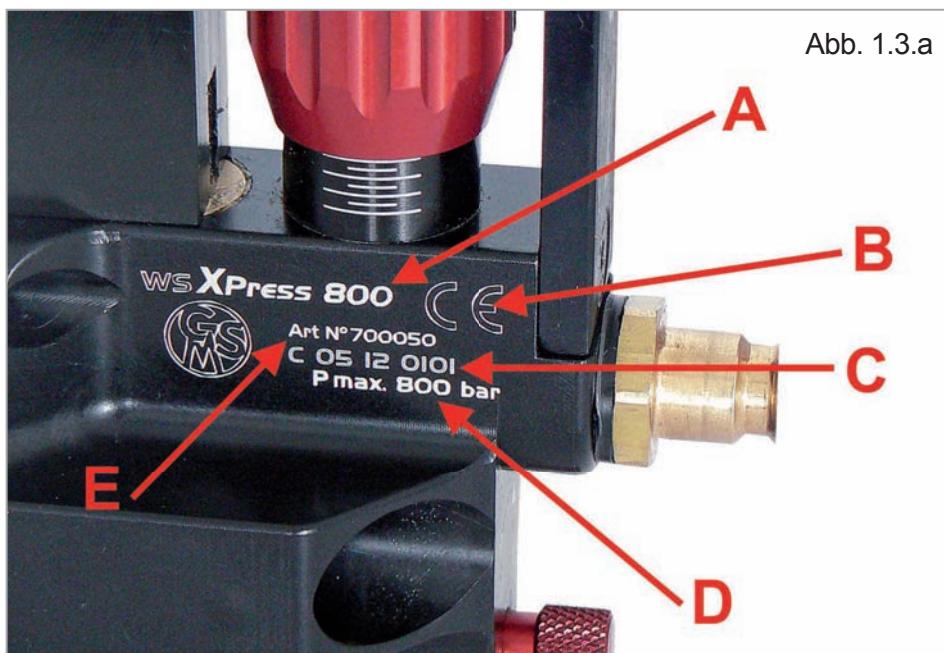


Abb. 1.3.a

A Type designation

B CE mark

C Serial number and manufacturing date

D Maximum admissible operation pressure

E item N° XPress Power Pack

2

2.1 Operating mode

The modular layout of this equipment allows the adaptation of various tools for different applications. The basic Actuator unit **XPress 800** is a pneumatic-hydraulic pressure intensifier.

The equipment can be used optionally with an appropriate pressure cylinder and corresponding C arms. There are also a number of modules to set blind rivets and blind rivet nuts with a force of 20 – 50 kN.

In addition to that there are some special tools for customer-specific application.

The Actuator is a pneumatic hydraulic pressure intensifier with a two step high pressure pump with a transformation ratio of 1:133 (2nd step) and 1:55 (1st step).

This means that a hydraulic output pressure of 800 bar is generated with an input air pressure of 6 bar.

The first step of the pump with high delivery volume generates a high in-feed speed and the second step generates a high pressing power during the working process.

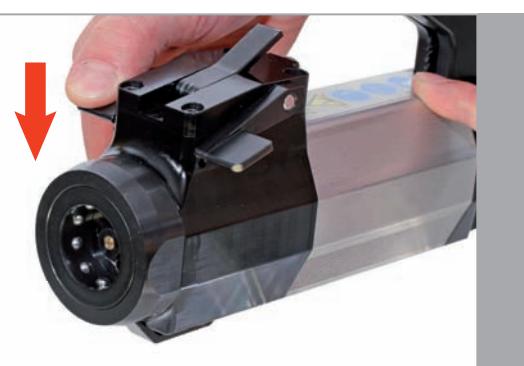
When the equipment's preset final pressure is reached, the pump stops automatically and keeps this pressure constant.

The actuator has a pneumatically controlled pressure relief valve which can be also activated manually by using the correspondent pressure relief lever.

The hydraulic pump is activated by pressing the release button and automatically deactivated when letting loose this button. The system is then decompressed.

The actuator also does have a **STOP** key. With this key you can stop advancing the connected tool for possible corrections without releasing the pressure from the pump.

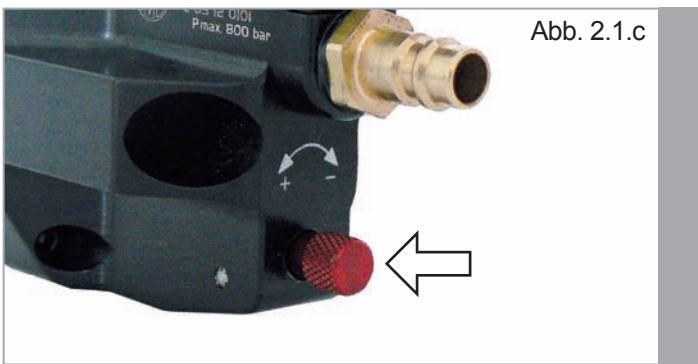
Abb. 2.1.a



All tools are adapted via the leakage free fast coupling system to the actuator. This is only possible when the pump is depressurized. The locking mechanism of the coupling system opens by turning the locking lever 30 Grad to the left and it is closed by turning the locking lever to the right. The locking lever must be closed for operation!

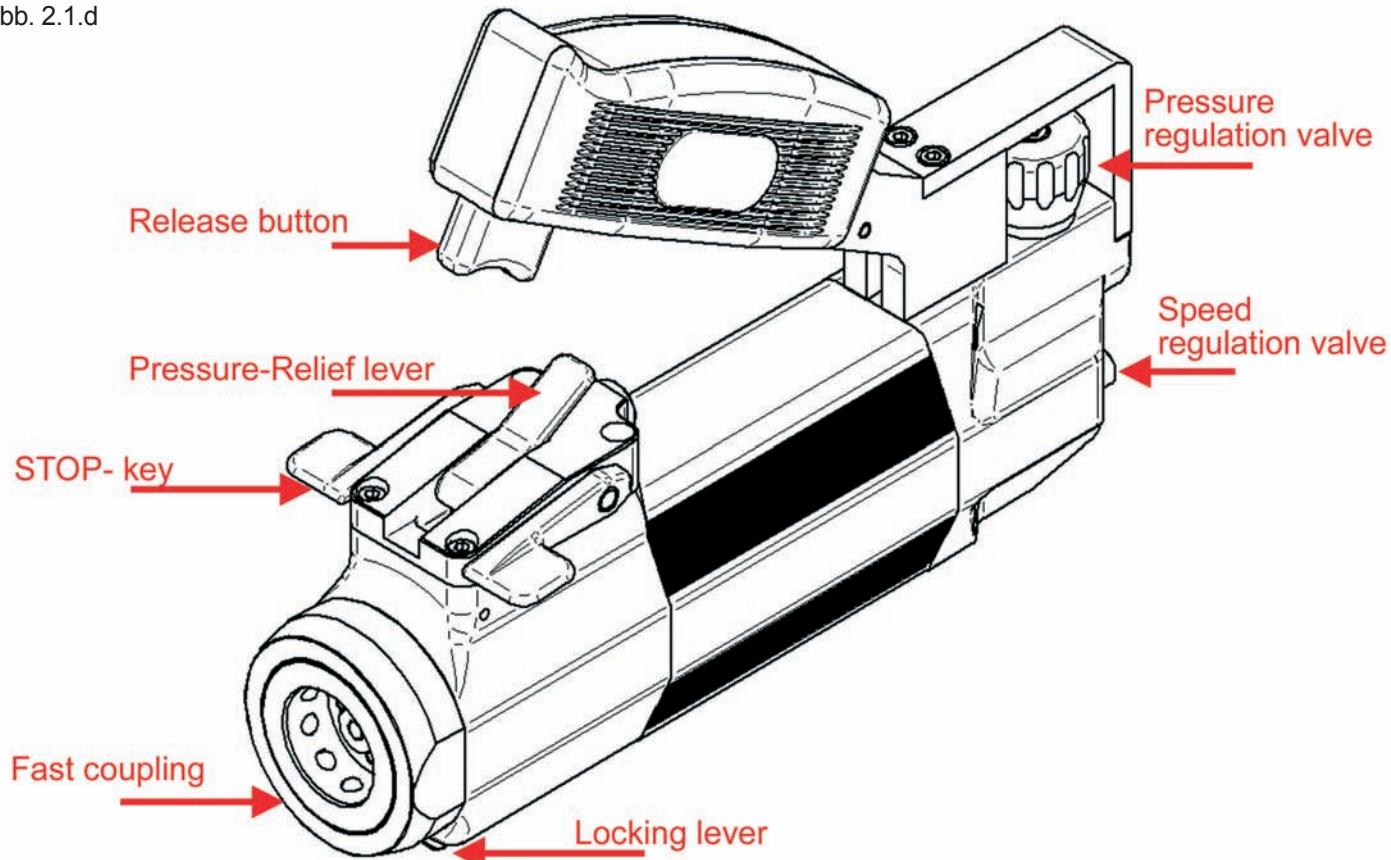


The **pressure regulation valve** of the actuator allows setting the operating pressure and therefore the working pressure on the different tools. The pressure regulation valve limits the working pressure at maximum 6 bar no matter how high the incoming air pressure is.



The **speed regulation valve** allows selecting the working speed of the actuator. By turning the regulation screw inwards, it lowers the working speed, and turning it outwards will increase the working speed.

Abb. 2.1.d



2.2 Scope of supply and accessories

Scope of supply XPress 800 Basis Set

1 pc	Power pack XPress 800
1 pc	Short stroke cylinder SSC 35/25
1 pc	C-Arm GC 80/40
1 Set	Tool Box RS-03
1 pc	Transportation case
1 pc	Instruction manual
Item N° 700000	

Scope of supply XPress 800 Standard Set

1 pc	Power pack XPress 800
1 pc	Short stroke cylinder SSC 35/25
1 pc	C-Arm GC 80/40
1 pc	C-Arm GC 80/120
1 pc	C-Arm GC 140/240
1 Set	Tool Box RS-03
1 pc	Transportation case
1 pc	Instruction manual
Item N° 700001	

Accessories (optional)

1 pc	C-Arm GC 80/120	Item N° 700071
1 pc	C-Arm GC 140/240	Item N° 700072
1 pc	Short stroke cylinder 35/50	Item N° 700061
1 pc	PushPull cylinder PP90	Item N° 700105
1 pc	Blind rivet module BR 20	Item N° 700100
1 pc	Blind rivet module BR 50	Item N° 700101
1 pc	Blind rivet nuts module BRN 50	Item N° 700110
1 Set	Tool Box RS-03 (identifier colour -blue)	Item N° 700200
1 Set	Tool Box RS-04	Item N° 700201
1 Kit	Tool Box RS-05 (identifier colour -red)	Item N° 700202
1 Kit	Tool Box RS-05 (identifier colour -green)	Item N° 700203
1 Kit	Tool Box RS-07 (identifier colour-blue)	Item N° 700205
1 Set	Service Kit EB-XP 800	Item N° 700334

2.3 Technische Spezifikationen

Permissible hydraulic OIL	Hydraulic OIL according to DIN 51524 AFT-OIL according to DIN 51562-2 Type HLP 22 - HLP 36
Viscosity of the OIL	ca. 22 - 36 mm ² /s bei 40°C
OIL filling capacity	100 ccm
Air pressure max.	6 bar / 87 psi
Compressed air	Quality class 2 (according to ISO 8573-1)
Ambient temperature	5 - 50 C° / 41 - 122°F
Prescribed safety clothing	Protective gloves, face mask
Noise emission level	75 dB (A) LPAI

The effective value of the acceleration assessed at the hydraulic tool measured in accordance with ISO/FDIS B662-11 is < 2,5m/s².

2.4 Safety instructions



The hydraulic tool kit is strictly approved only for the purpose intended by the manufacturer.



Only genuine accessories maybe used. Use of non-genuine tools or accessories represents a major safety hazard.



Ensure that only trained and instructed personnel use this equipment. Use of the equipment by personnel that have not been trained and instructed is prohibited.



Ensure that the instruction manual is made available to operating personnel.



Observe the applicable national regulations for accident prevention.



Because metallic parts can break up and fly off with high energy if the tool is faulty or operated incorrectly, protective gloves and face mask must strictly be worn for all applications of the equipment.



As a result there is a risk of severe physical injury. See also ANSI Z87.1-1989.



Never throw the tool or allow it to fall. Never misuse the tool or let it to untrained personnel.



The tool must only be used in ambient temperature of above 5 °C (41°F) and up to maximum 50 °C (122°F).



The tool must never be used in potentially explosive areas.



Route all supply lines in a manner that prevents people from tripping over them. Correctly route and attach the compressed air hose. If a compressed air hose whips around wildly, it could cause severe physical injury..



Before starting work, check the pre-set air pressure! Incorrect air pressure could cause equipment damage or physical injury!



Make sure that the actuator XPress 800 is always supplied with clean and dry compressed air; quality class 2 as per ISO 8573-1.



Always disconnect the riveting tool from the compressed air supply when leaving the work site!



The manufacturer accepts no liability for damage or injury caused by improper repair or the use of replacement parts made by other manufacturers..

2.5 Maintenance

The tool's hydraulic system, including fast couplings and hoses must be kept free of dirt and other contamination.



Foreign materials in the hydraulic oil or in the compressed air can cause the tool system to malfunction.



All maintenance and service work must only be performed once the pump has been disconnected.



All service and maintenance work may only be performed by trained and instructed technicians or by the manufacturer. If you should have technical problems or need a service technician please contact the service number below:

:

MV Marketing und Vertriebs GmbH & Co. KG

Wieländer+Schill

Professionelle Karosserie-Spezialwerkzeuge

Siederstraße 50

D-78054 VS-Schwenningen

Telefon: +49 (0)7720 / 8317-0

Telefax: +49 (0)7720 / 1255

E-Mail: info@wielanderschill.com



Basically this tool system is maintenance free. It may be necessary to refill some oil occasionally. Please observe the technical specifications of the recommended oil.

See chapter 2.3



De-airing and re-filling devices for hydraulic Power Pack
(accessory Item № 700334)

2.5 Warranty

The hydraulic tools of Wielander + Schill come with a 12 month warranty against material and manufacturing defects. This does not cover normal wearing parts of the actuator and adapters.

The warranty period begins from the date of delivery, as specified on the invoice or delivery note.

The warranty is valid for the user / buyer provided that the tool is obtained from an authorized sales outlet and is used as described in the instruction manual and for the purpose for which it was designed.

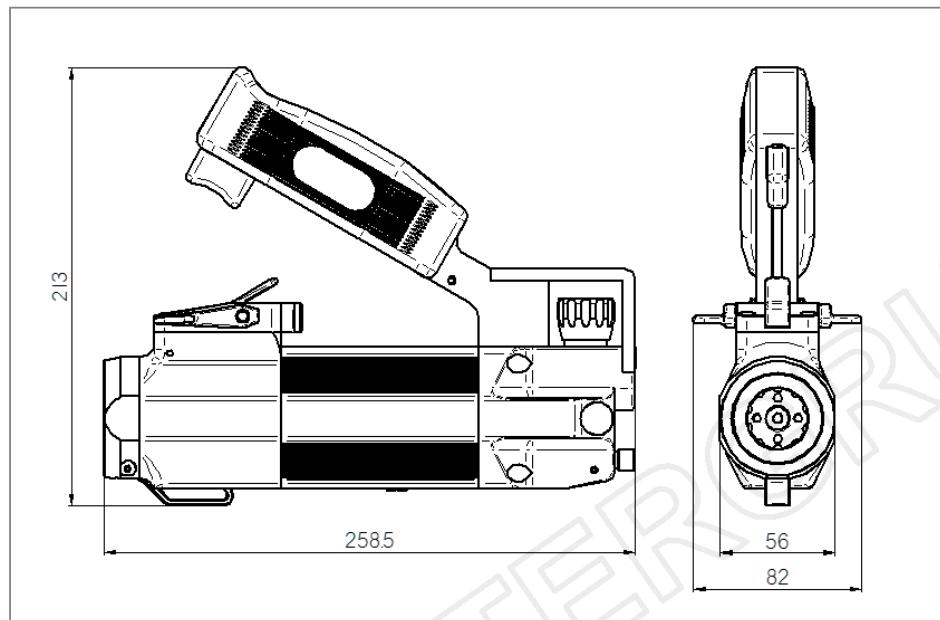
The warranty becomes invalid if the tool is used for purposes other than those for which it was designed.

In addition, the warranty becomes invalid if the tool is not used as described in the instruction manual.

In the event of defect or fault, Wielander & Schill will only repair or replace faulty parts at its own discretion..

3

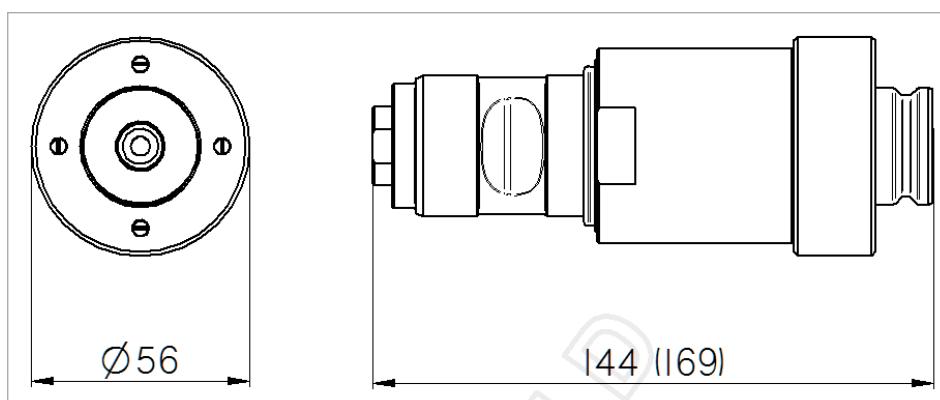
3.1 Technical data basic unit (actuator) XPress 800



Length	259 mm
Wide	56 (82) mm
Height	213 mm
Weight	2,65 kg
PB max.	800 bar
OIL capacity	100 cm³

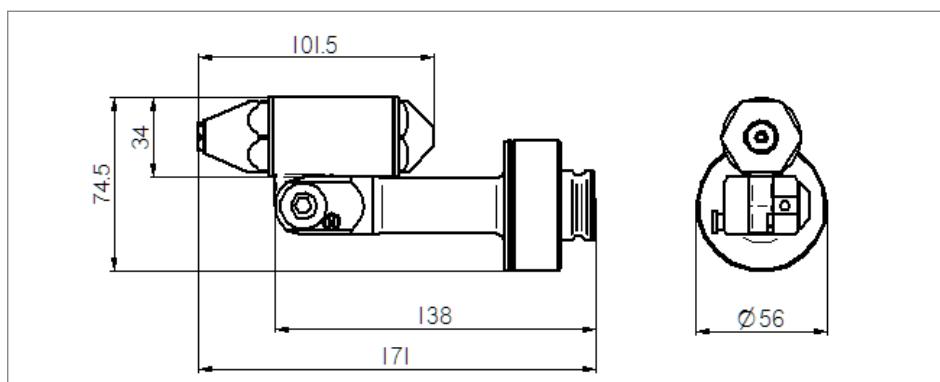
3.2 Pressure adapter and technical data

3.2.1 Short stroke cylinder SSC 35/25 / SSC 35/50



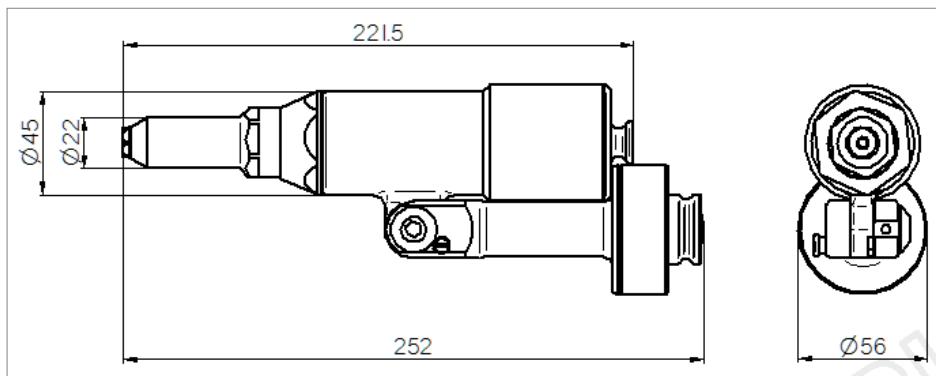
Length	144 / 169 mm
Diameter Ø	56 mm
PB max.	800 bar
Stroke	25 / 50 mm
Pressure max.	77 kN
Weight	1,4 kg

3.2.2 Blind rivet module BR 20



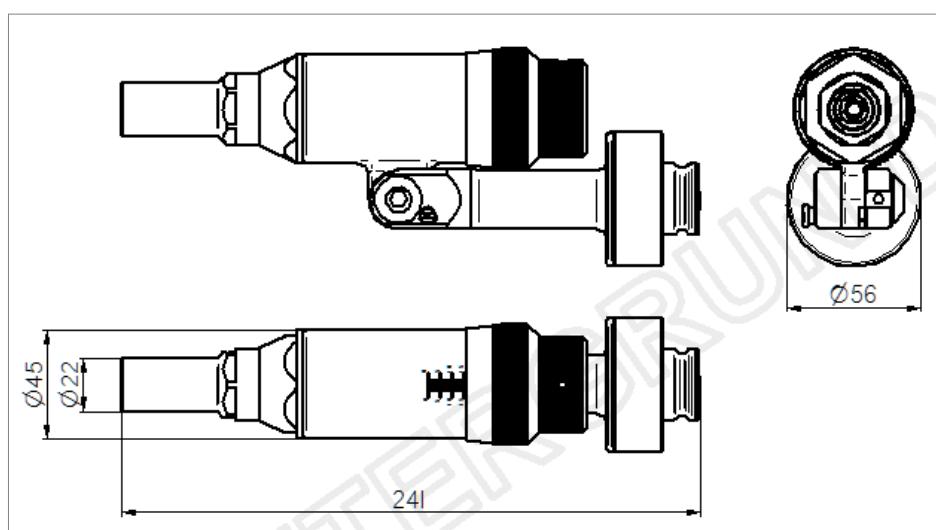
Length	171 mm
Wide	56 mm
Pull force max.	20 kN
Stroke	22 mm
Radius/Angle	120°
Interlock steps	30°
Weight	1 kg

3.2.3 Blind rivet module BR 50



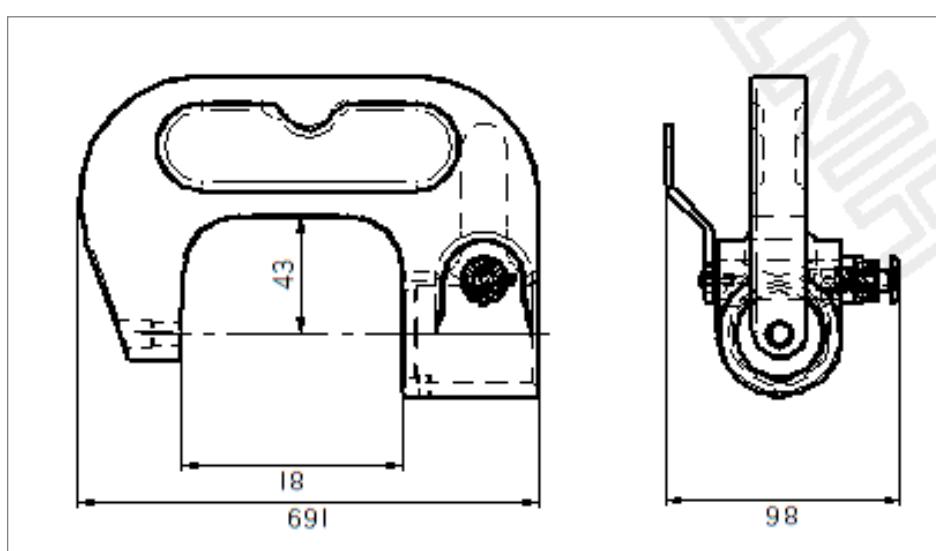
Length	252 mm
Wide	56 mm
Pull force max.	50 kN
Stroke	25 mm
Radius/Angle	120°
Interlock steps	30°
Weight	1,5 kg

3.2.4 Blind rivet nut module BRN 50



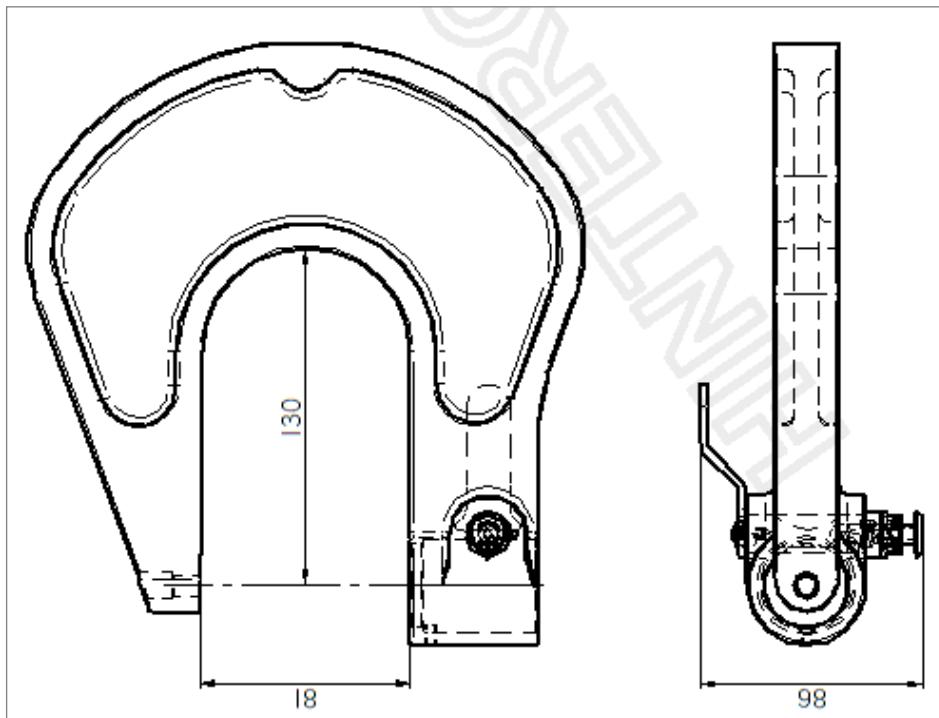
Length	241 mm
Wide	56 mm
Pull force max.	50 kN
Stroke	16 mm
Stroke range	0-16 mm
Radius/Angle	120°
Interlock steps	30°
Weight	1,65 kg

3.2.5 C-Arm GC 80/40



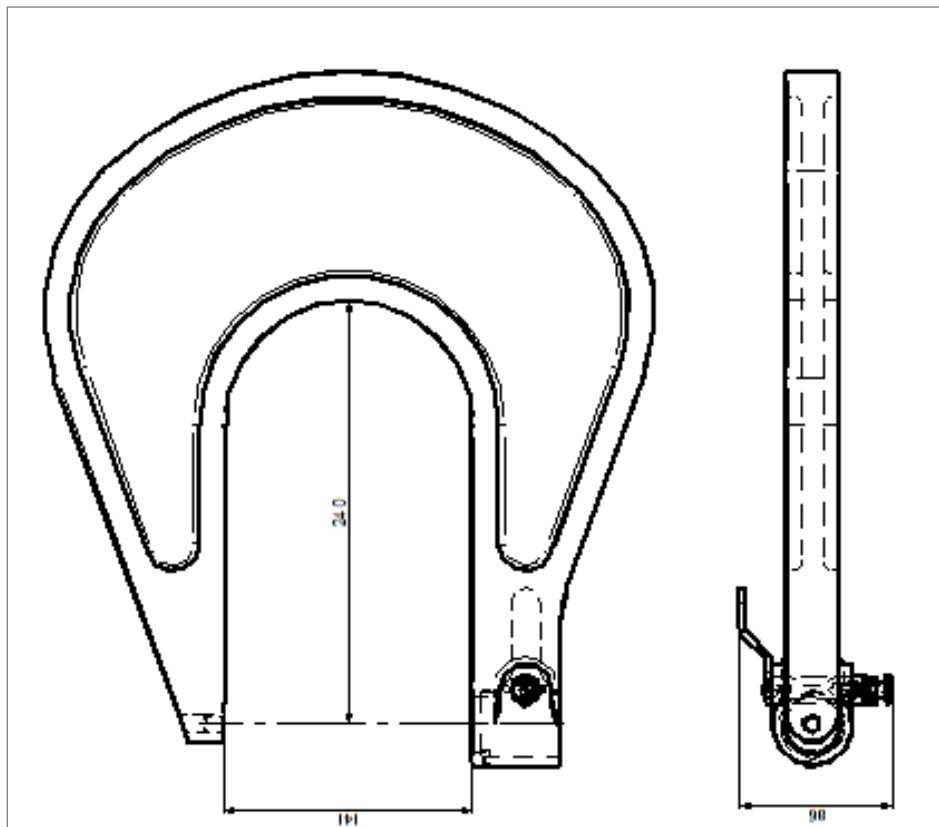
Wide	80 mm
Length	40 mm
Weight	2 kg
Safety locking	
additionally Hand grip	

3.2.6 C-Arm GC 80/120



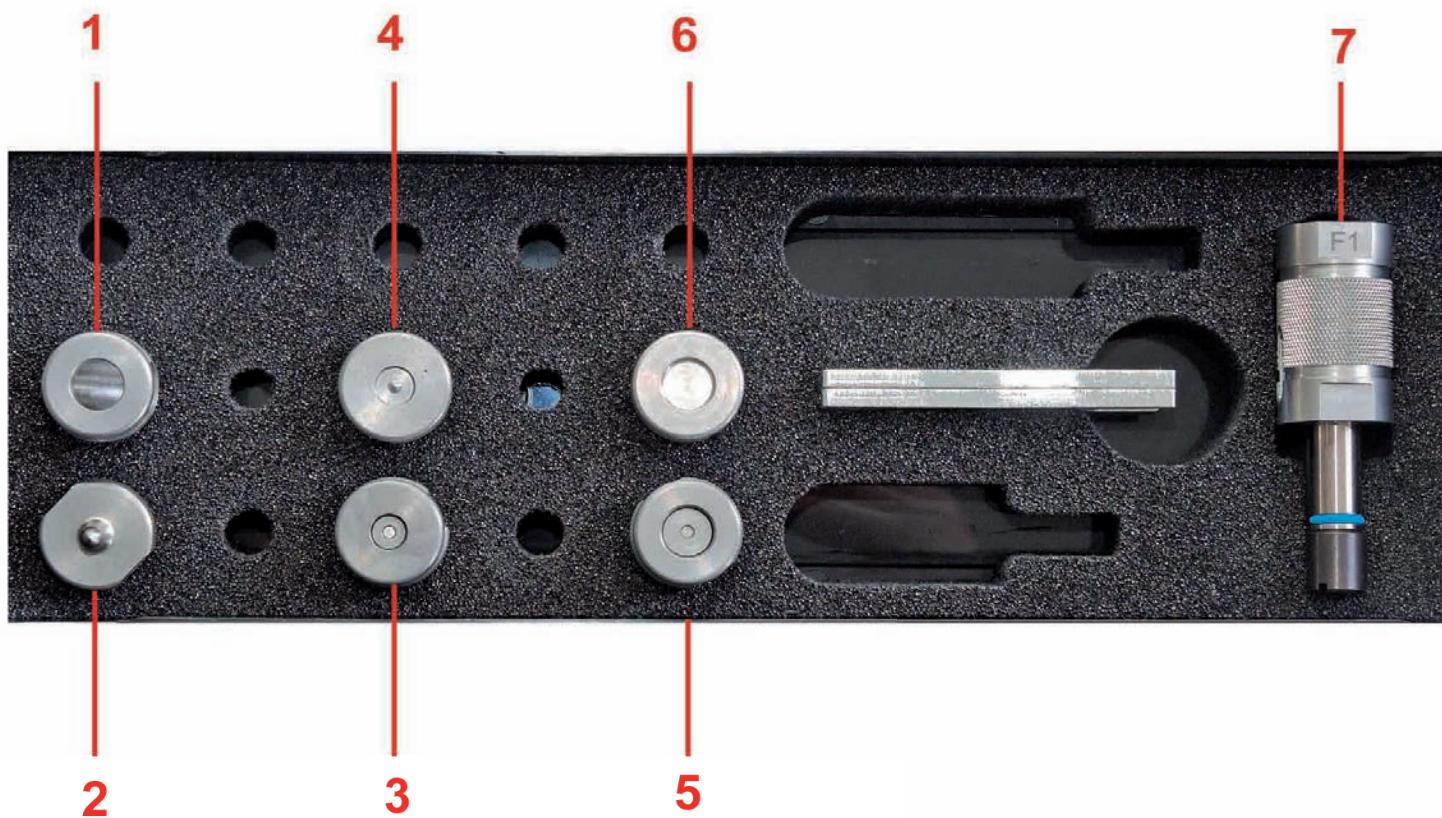
Wide	80 mm
Length	120 mm
Weight	4 kg
Safty locking	
additionally Hand grip	

3.2.7 C-Arm GC 140/240



Wide	140 mm
Length	240 mm
Weight	10 kg
Safty locking	
additionally Hand grip	

3.3 Special riveting accessories



Overview riveting insets

Nº	Designation	Code	Marking	Item N°	Item N° Set
1	Extraction mandrel	A1	1 ring	700250	700221
2	Extraction die	A2	1 ring	700251	
3	Die head Rivset Rivet 3 mm	D1		700263	700227
4	Closing head Rivset Rivet 3 mm	D2		700262	
5	Die head Rivset Rivet 5 mm	E1		700261	700226
6	Closing head Rivset Rivet 5 mm	E2		700260	
7	Spacing adapter with nut	F1		700220	
8	Set of installation wrenches			700299	

3.3.1. Riveting principles

Pressing-out tools for rivets

				
A1 + A2				

Necessary special accessories for semi tubular and punch rivets

			
D1 + D2	E1 + E2		F1

4.1 Preparation and start up

The hydraulic actuator **XPress 800** is supplied from the factory without a compressed air connection

When starting up please remove the closing cap and connect the appropriate air connector into the thread G1/4".

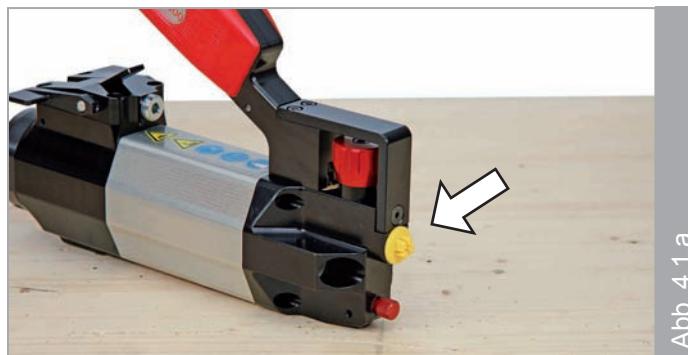


Abb. 4.1.a



Abb. 4.1.b

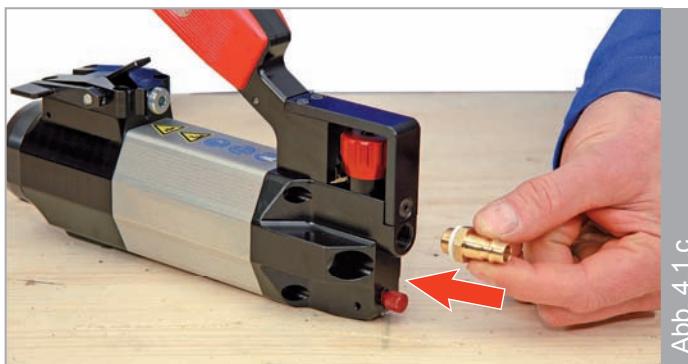


Abb. 4.1.c



Abb. 4.1.d



If you use the equipment with dry air it is necessary to use an oiler to lubricate the compressed air system!



Abb. 4.1.e



You can use a mini oiler item no. 637103 supplied by Wieländer+Schill. Connect the mini oiler between air supply hose and actuator. Take care that there is always sufficient pneumatic oil in the mini oiler. You can use pneumatic oil supplied by Wieländer+Schill with item no. 698001.



Abb. 4.1.f

4.2 Hydraulic actuator connection



Before using the equipment, check the condition of the tool for any damage – for example oil leakage or loosen components. Such damage could cause severe physical injuries during use.



Route all supply lines in a manner that prevents people from tripping over them!



Defective components or other damage must be repaired or replaced by qualified personnel.



Ensure that the hydraulic actuator is always placed on a non-slip surface and that the hoses are routed in a way that prevents them from getting damaged, pinched off or maulled - see picture. 4.2.a / 4.2.b



Never use pressure over the permitted value of 10 bar / 145 psi.



Make sure that the hydraulic actuator is set up in a work area that is free from heat sources (max. 50 °C/ 120 °F), and free of corrosive liquids, greases and oils.

The hydraulic actuator is only connected to the air supply hose.

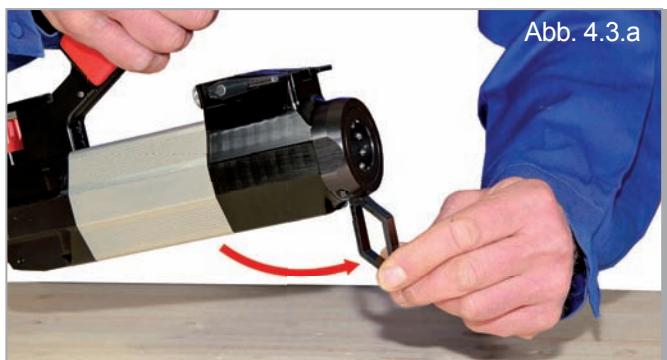


Abb. 4.2.a



Abb. 4.2.b

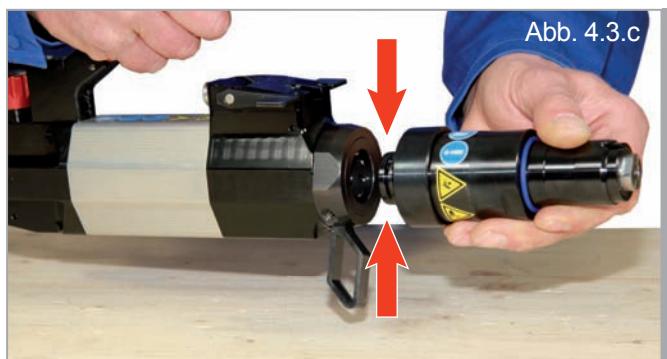
4.3 Connecting the short stroke cylinder



1. Open the locking lever at the actuator



2. Pivot the locking lever anti-clockwise.



3. Locate the short stroke cylinder in centre.



4. Insert the short stroke cylinder with little pressure into the coupler pocket.



5. Pivot the locking lever clockwise to lock.



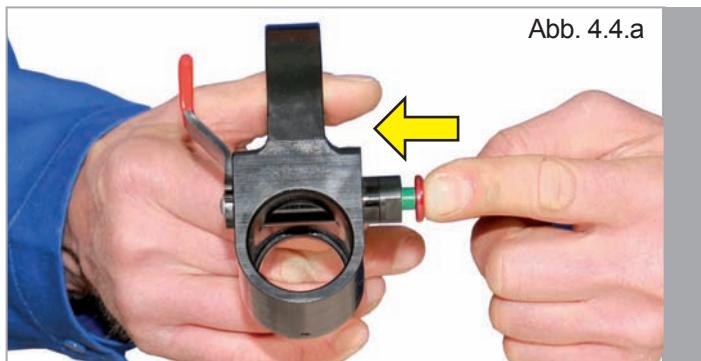
6. Close the locking lever.



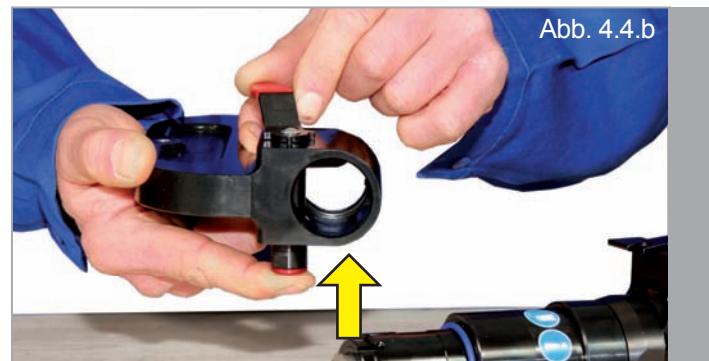
Attention!

The fast coupling of the actuator must be free from contamination and damage.
The locking mechanism must engage smoothly!

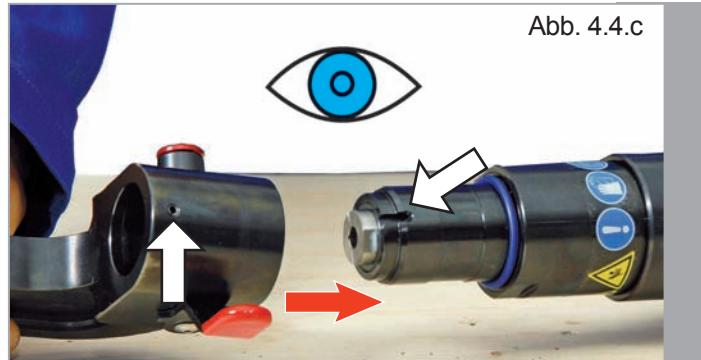
4.4 Connecting C-arm to actuator



1. Press the safety button at the locking mechanism.



2. Turn clockwise the locking lever while pressing the safety button.



3. Locate the C-Arm in the centre of the intake of the short stroke cylinder. The index pin must engage in the corresponding slot.



4. Push the C-arm onto the intake of the short stroke cylinder.



5. Close the locking lever clockwise to close



6. The C-arm is correctly mounted when the safety button jumps out completely and a green mark is visible. This action is accompanied by an audible click.



Attention!

The mounting hole of the C-arm must be free from contamination and damage. The locking mechanism must engage smoothly. It should not be possible to move the locking lever once the mechanism is engaged.

Damaged or defective components can cause physically injuries and must not be used under any circumstances!

5.1 Processing of self piercing and flow form rivets

Tool Box RS-03 with mandrels and dies

Mounting and intended user

Three C-arms are currently available to process rivets with the tool box RS03.

GC 80/40	Item N° 700070	Opening depth up to 40 mm (<i>included in the basic kit</i>)
GC 80/120	Item N° 700071	Opening depth up to 120 mm
GC 140/240	Item N° 700072	Opening depth up to 240 mm



Before each working operation, please check the set air pressure at the actuator. The pressure regulator does have marks which help as a guide line. *The settings can be found on the data sheet on the inner flap lid of the transport case..*



If the pressure is too low, the rivet will not be grouted completely. If the pressure is too high the sheets will be deformed.

Mounting the mandrel and die

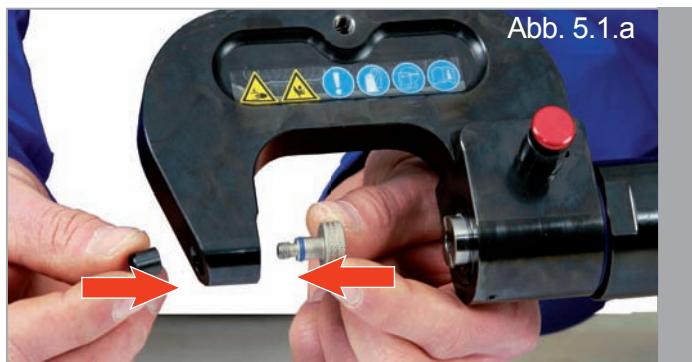


Abb. 5.1.a



Abb. 5.1.b

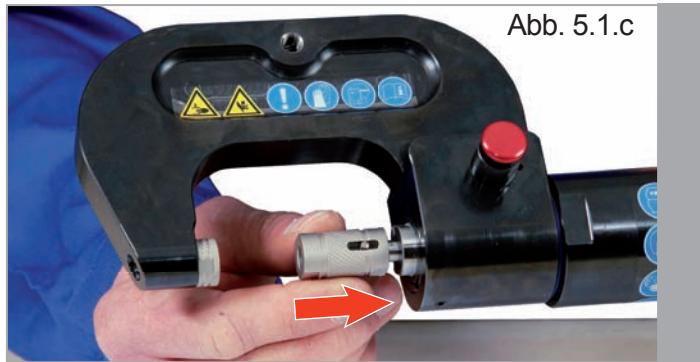


Abb. 5.1.c

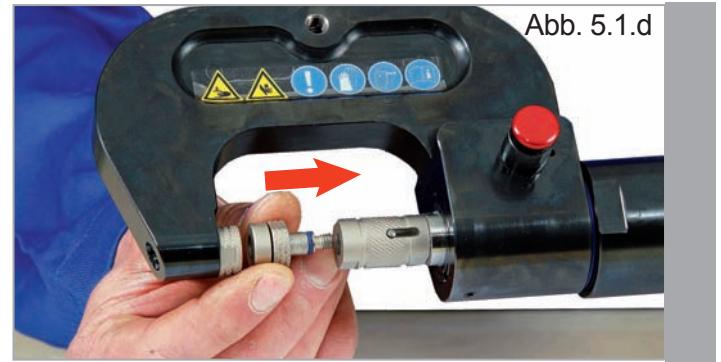


Abb. 5.1.d



Screw the required mandrel into the C-arm. Hand-tighten the riveting head using the special wrenches provided.

Apply no excessive force! Counter hold the nut using a screwdriver if necessary.



Screw the corresponding counterpart into the insert on the opposite side of the C-arm (plunger rod) with the included spacing adapter – hand tight.

Apply no excessive force!



Abb. 5.1.e

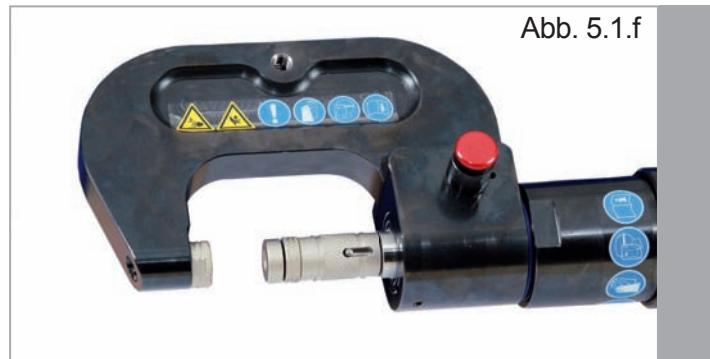


Abb. 5.1.f



Each time rivet inserts are to be installed, the mandrel and die must first be checked for a correct match!



Check that the riveting heads are firmly seated after each riveting operation. Rivet inserts that have become loose present a hazard and can lead to equipment damage or injuries.

5.2 Pressing out rivets

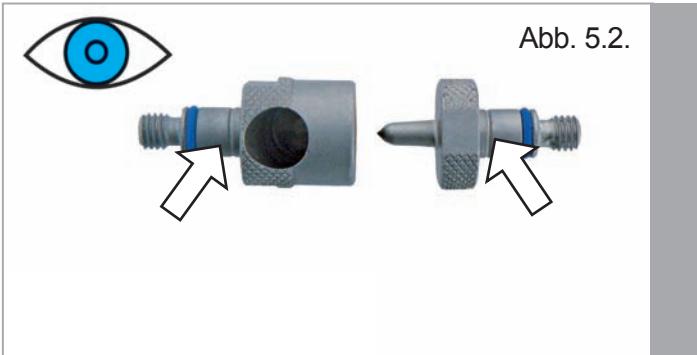


Abb. 5.2.

Old or defective rivets often need to be removed from the sheet metal structure when repairing body panels. Instead of drilling out the old rivets, they can be pressed out of the sheet metal structure using the extraction mandrel **A1** and the corresponding extraction die **A2**, thereby minimizing damage.



Abb. 5.2.a



Abb. 5.2.b



Abb. 5.2.c



Abb. 5.2.d



Punching and calibrating of sheet metals as described in chapter 5.3 can only be done with the tool box RS-07.

Accessory kit Tool Box RS-07 - item N° 700205 - see also operation manual XPress PushPull



5.3 Punching and calibration (new and old metal components)

In order to punch and calibrate the new metal combination (repaired metal + old intact sheet metal), remove the back shaping stamp from the punch stud and install the corresponding blanking bits.



Abb. 5.3.a

Tool Box RS-07 (available as accessory)



Abb. 5.3.b

Stamping and calibration tools



Check the pressure of the hydraulic actuator prior to each use!

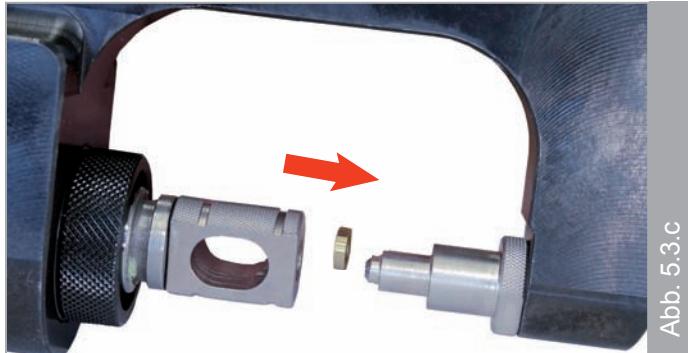


Abb. 5.3.c

Insert the blanking bit on the punch stud.

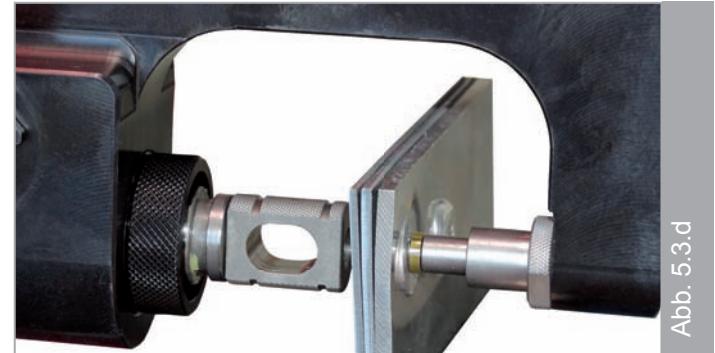


Abb. 5.3.d

Position blanking bit with punch crown centred on the back shaped closing head stud.

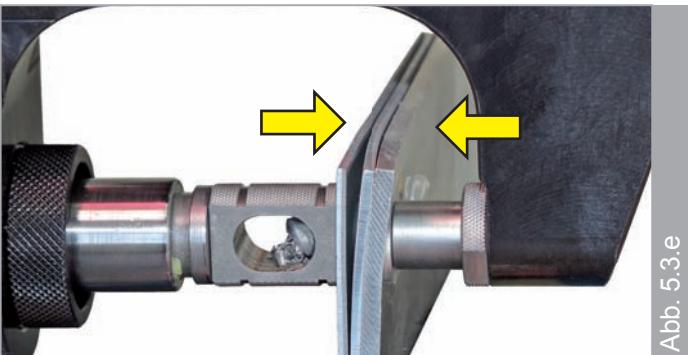


Abb. 5.3.e

Punch and calibrate of the new metal combinatio.



Abb. 5.3.f

The blanking bit can be used several times.



Die im Kapitel 5.4 beschriebene Anwendung „Verarbeiten von Fließ-Form Nieten“ kann nur unter Verwendung der Tool-Box RS-07 durchgeführt werden.



Accessory kit Tool Box RS-07 - item № 700205 - see also operation manual XPress PushPull

5.4 Setting flow-form-rivets



Check the pressure of the hydraulic actuator prior to each use!



Abb. 5.4.a



F3

Abb. 5.4.b

Tool Box RS-07 (*available as accessory*)

Screw the necessary rivet tool into the c-arm following the required working process.

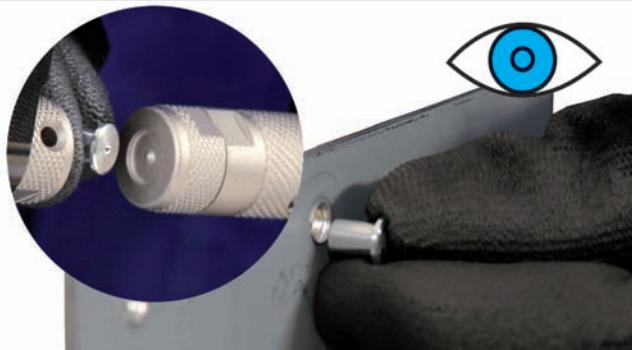


Abb. 5.4.c

It is important that the die head with the centering lug engages in the corresponding depression in the rivet.

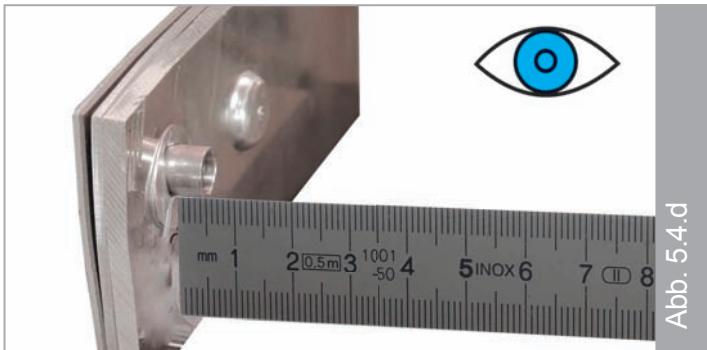


Abb. 5.4.d

The riveting operation with the new flow-form rivets must have a distance of 3 mm and a maximum distance of 4 mm.

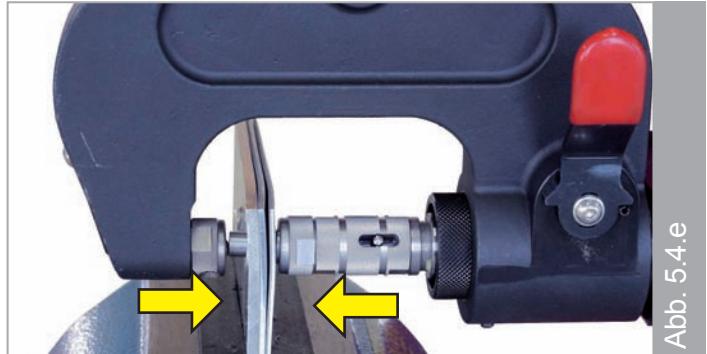


Abb. 5.4.e

During the riveting operation, the die head is positioned on the rivet until the closing head compresses the rivet. The diameter of the closing head should be at least 7.5 - 8 mm for a 6 mm flow form rivet.

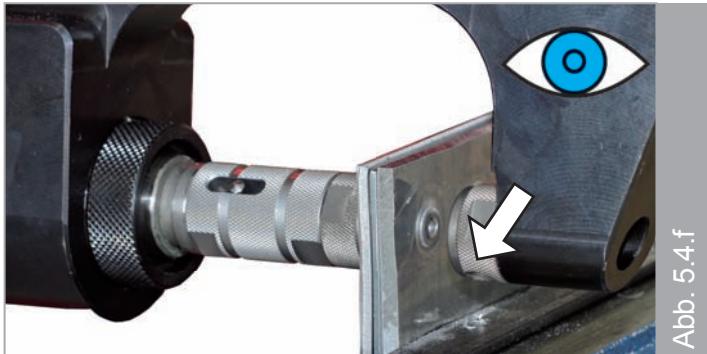


Abb. 5.4.f

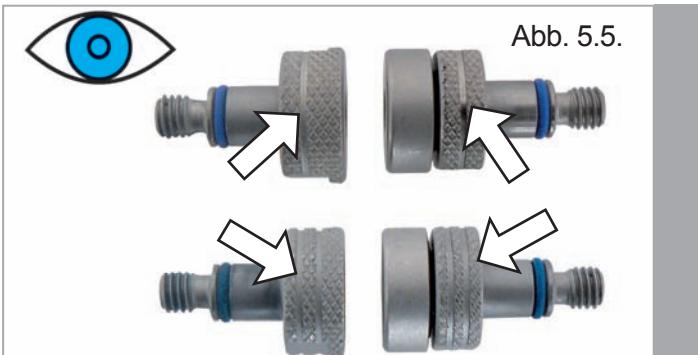
The closing head has a relief hole for adhesive residue. The hole must be blown clear after riveting; otherwise a successful riveting process can no longer be ensured.

5.5 Setting semi-tubular punch rivets



Vor jedem Arbeitsgang Einstellung des Luftdrucks am Hydraulik Aktuator überprüfen!

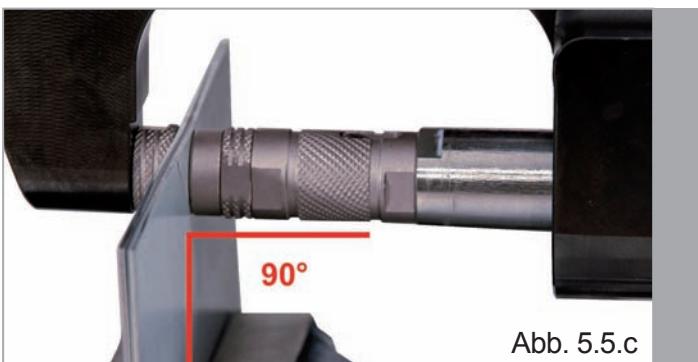
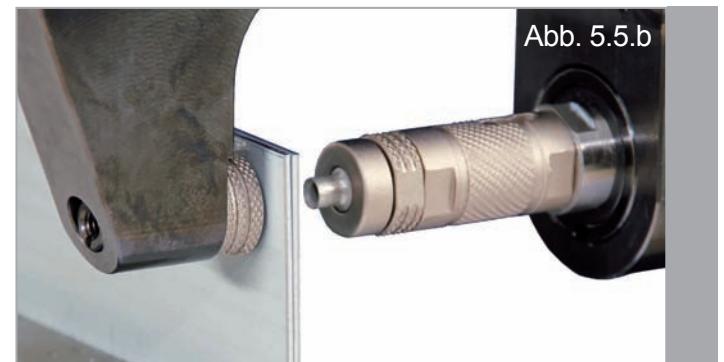
Extra care must be taken to ensure that the rivets that are used are properly seated when installing semi-tubular punch rivets.



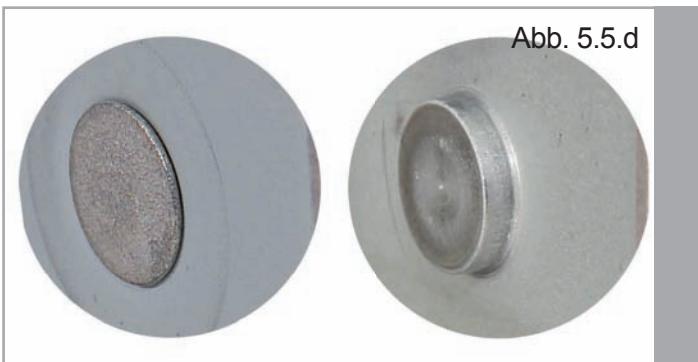
Die head D1 3 mm or
Die head E1 5 mm and
Closing head D2 3 mm
Closing head E2 5 mm

Item N° 700263
Item N° 700261
Item N° 700262
Item N° 700260

Dies and heads must not be damaged because this would make correct riveting impossible. If in doubt, always replace the defective rivet punch with genuine replacement parts. When using non-genuine parts the manufacturer does not accept any liability claims.



For each riveting operation, ensure that it is the rivet die – rather than the rivet – that is placed onto the sheets to be joined. It is also important that the C-arm (respectively the riveting tool) as close to a right angle as possible.



5.6 Cleaning and Maintenance

Abb. 5.6.a



Remove adhesive residue from all contaminated tools after each complete riveting process.



Abb. 5.6.b



To do this, remove all affected tool components and clean them by using acetone or other solvents



Hardened adhesive can eventually cause malfunction. Before starting work, the affected riveting tool needs to be replaced by a genuine part.

6.1 Setting blind rivets with the blind rivet module BR20

Abb. 6.1.



The blind rivet module BR20 is at the moment the smallest tool on the market for processing blind rivets and blind rivet bolts.

6.1.1. How to connect the module BR20

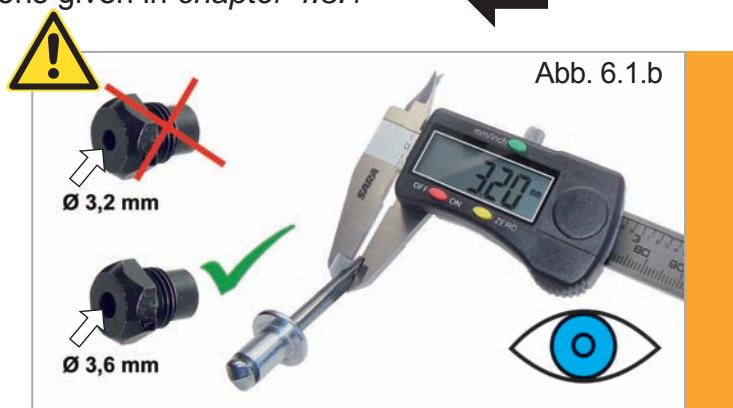
The blind rivet module BR20 has the same fast coupling mechanism as all other modules and adapters of the XPress system.

To connect the module, please follow the instructions given in *chapter 4.3.1*

Abb. 6.1.a



Abb. 6.1.b



With the module BR20 you can set all blind rivets with a shaft diameter from 2 to 4.2 mm and a maximum traction force of 20 kN. For the different shaft diameters of the blind rivets you have to change the mouth piece accordingly.

Attention should be paid to the mouth piece diameter: When using BR20 do not use the same diameter (\varnothing) mouth piece and rivet shaft but use always the next larger mouth piece.

In case of doubt compare the diameter of the mouth piece and the diameter of the shaft.



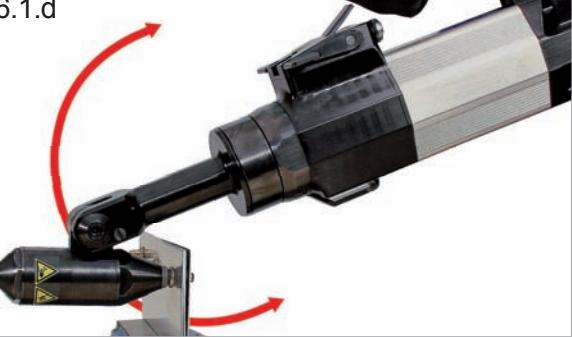
When assembling the mouth piece on the BR20 for the first time or changing the mouth piece always screw in the mouth piece together with the appropriate rivet so the chuck cone can come to a basic position.

Abb. 6.1.c



The head of the BR20 is 120° rotatable and can be interlocked in 30° steps.

Abb. 6.1.d



To rotate the head you first have to press the locking knob at the adapter. To interlock the head you release the knob so the head can engage again.

Abb. 6.1.e

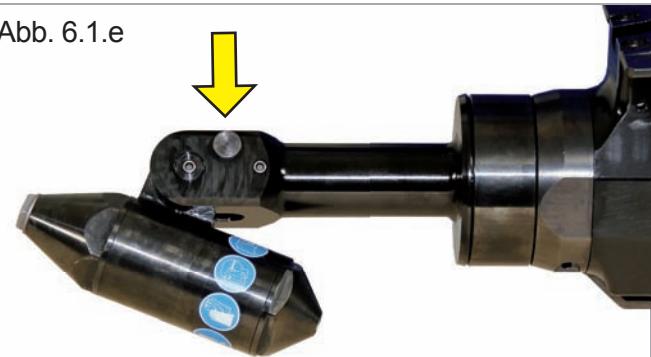


Abb. 6.1.f



6.1.2. Setting rivets with the module BR20



When using the module BR20 the pressure regulation at the actuator can be set to MAXIMUM (4 rings are visible). However the speed should be reduced to 50% so the material of the rivet head has enough time to flow respectively and to deform.

Abb. 6.1.g



Abb. 6.1.h



The module BR20 does eject the separated shafts of the blind rivets individually. When inserting the blind rivet into the module BR20 the ejection spring will be compressed. When starting the hydraulic actuator, the piston will pull the shaft of the blind rivet until it breaks. The rivet head has deformed correctly and the ejector of the module BR20 will release the extracted shaft of the blind rivet which can now be removed.

Abb. 6.1.i



Abb. 6.1.j



6.2 Setting rivets with the module BR50

Abb. 6.2.



The module BR50 is a blind rivet module with compact size and a maximum traction force of 50 kN. This module does have exchangeable heads and a collection container for the extracted shafts of the blind rivets.

6.2.1. How to connect the module BR50

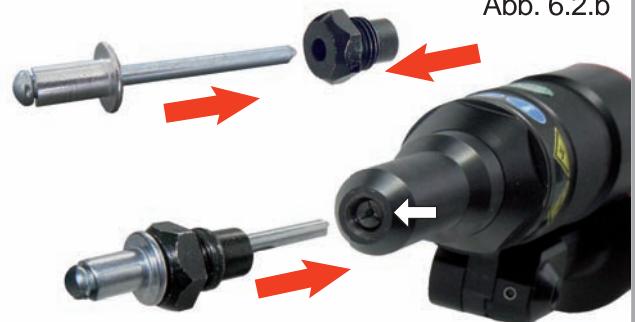
The blind rivet module BR50 has the same fast coupling mechanism as all other modules and adapters of the XPress system.

To connect the module BR50, please follow the instructions given in *chapter 4.3.1*

Abb. 6.2.a



Abb. 6.2.b



With the module BR50 you can set all blind rivets with a shaft diameter from 2 to 5 mm and a maximum traction force of 50 kN. For the different shaft diameter of the blind rivets you have to change the mouth piece accordingly.

Abb. 6.2.c



The head of the module BR50 is 120° rotatable and can be interlocked in 30° steps.

Abb. 6.2.e

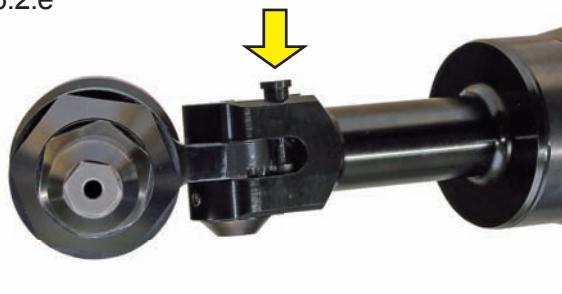
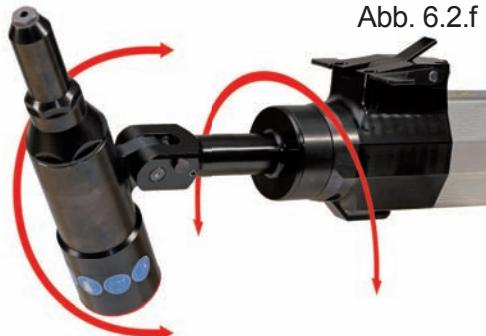


Abb. 6.2.f



To rotate the head you have to press the locking knob at the adapter. To interlock the head you release the knob so the head can engage again.

6.2.2. Setting rivets with the module BR50



When using the module BR50 the pressure regulation at the actuator can be set to MAXIMUM (4 rings are visible). However the speed should be reduced to 50% so the material of the rivet head has enough time to flow respectively and to deform.

Abb. 6.2.g



Abb. 6.2.h

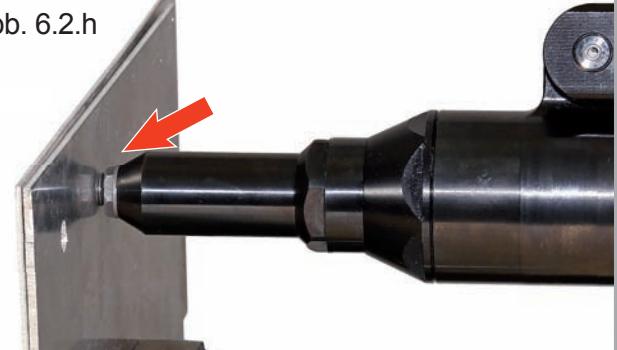


Abb. 6.2.i



Abb. 6.2.j



The module BR50 does have a collection container for the extracted shafts of the blind rivets. When starting the hydraulic actuator the piston will pull the shaft of the blind rivet until it breaks.

The rivet head has deformed correctly and extracted shaft of the blind rivet will be pushed into the collection container when inserting the next blind rivet.

7.1 Setting blind rivet nuts with the module BRN50

Abb. 7.1.



The module BRN50 is a blind rivet nut module with compact size and a maximum traction force of 50 kN. With the module BRN50 all types of blind rivet nuts from size M4 to M12 can be processed. You can limit the traction force and traction stroke. Furthermore with the module BRN50 and traction pliers you can extract impact bolts from the metal sheet.

7.1.1. How to connect the module BRN50

The blind rivet module BR20 has the same fast coupling mechanism as all other modules and adapters of the XPress system.

To connect the module, please follow the instructions given in *chapter 4.3.1*



Abb. 7.1.1.a



With the module BRN50 you can set all blind rivet nuts with a diameter of 4 mm to 12 mm and a maximum traction force of 50 kN.

Abb. 7.1.1.b



For the different diameters of the extraction shaft we offer the corresponding extraction adapter sizes M4, M5, M6, M8, M10 and M12 which are exchangeable.

See *chapter 7.1.2*



Abb. 7.1.1.c

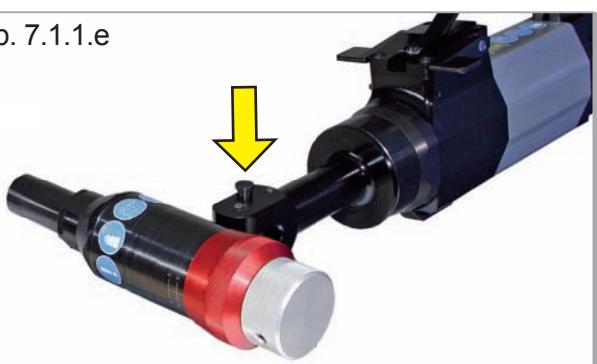


The head of the module BRN50 is 120° rotatable and can be interlocked in 30° steps.

Abb. 7.1.1.d



Abb. 7.1.1.e



To rotate the head you have to press the locking knob at the adapter. To interlock the head you release the knob so the head can engage again.



Abb. 7.1.1.f

7.1.2. How to mount extraction adapter for blind rivet nuts



Abb. 7.1.2.a

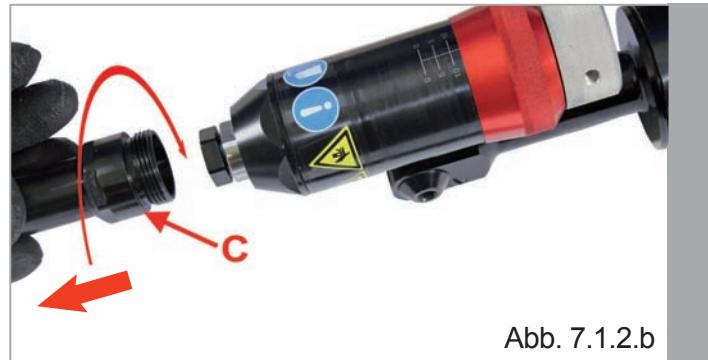


Abb. 7.1.2.b

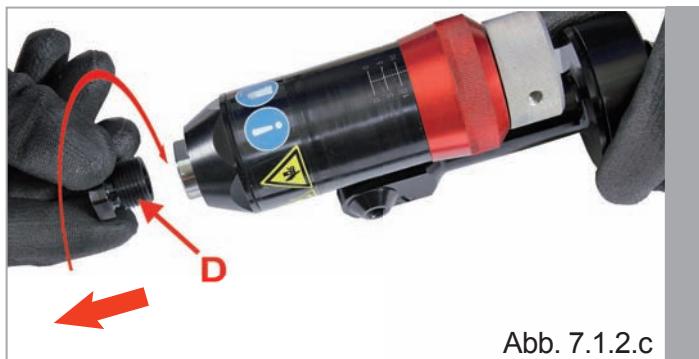


Abb. 7.1.2.c

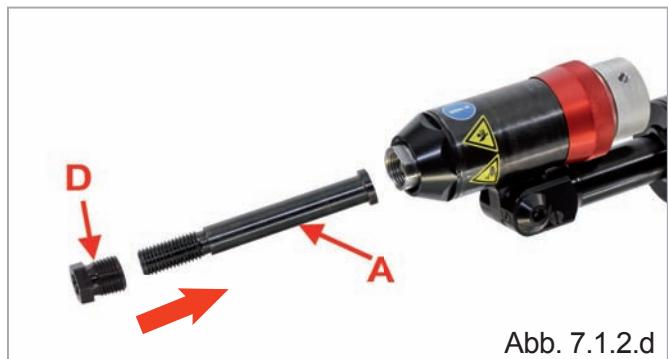


Abb. 7.1.2.d



Abb. 7.1.2.e

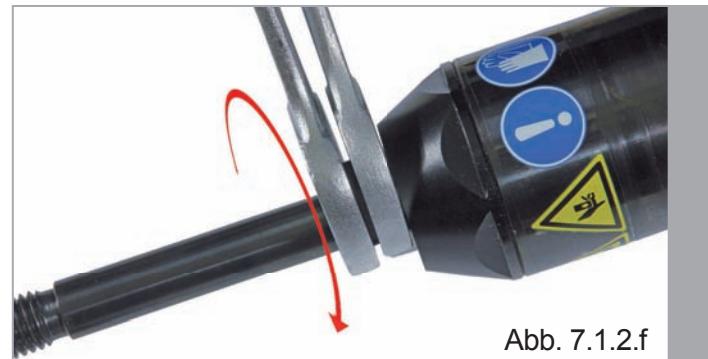


Abb. 7.1.2.f



Abb. 7.1.2.g

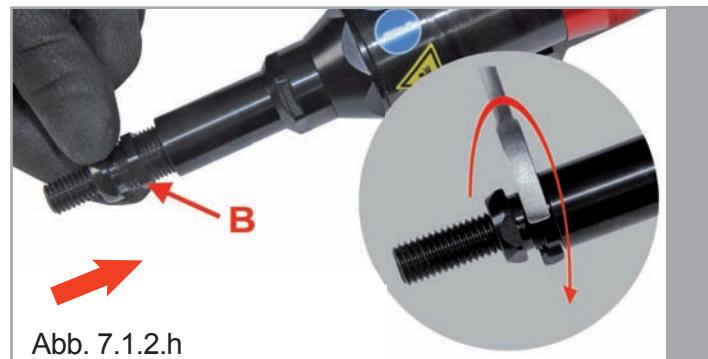


Abb. 7.1.2.h

7.1.3. How to set blind rivet nuts with module BRN50



When using the module BRN50 the pressure regulation at the actuator can be set to MAXIMUM (4 rings are visible). However the speed should be reduced to 50% so the material of the rivet head has enough time to flow respectively and to deform.

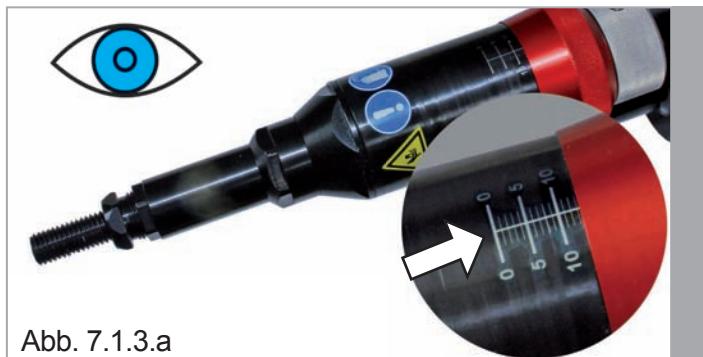


Abb. 7.1.3.a

Abb. 7.1.3.b

You can limit the traction stroke at the module BRN50 to process the different blind rivet nut sizes.

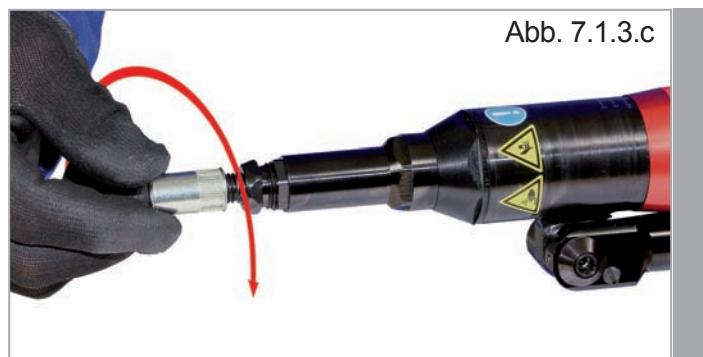


Abb. 7.1.3.c

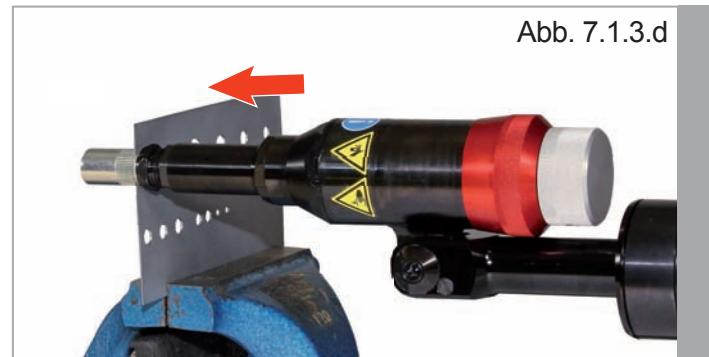


Abb. 7.1.3.d

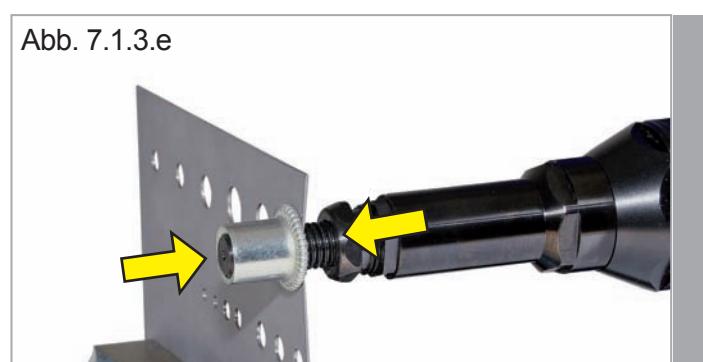


Abb. 7.1.3.e



Abb. 7.1.3.f



On threads smaller than M10 the stroke must be reduced – do not work at maximum stroke. If the stroke is not set correctly the extraction bolts up to M8 can be damaged due to excessive traction force.



You will find guide values in the **Tool Box RS04** to set the correct pressure of the hydraulic actuator.

8.1 Decommissioning and storage



Always disconnect the compressed air supply from the hydraulic actuator after riveting and during any work interruption.



Abb. 8.1.a



Then disconnect the module (adapter) and close with protection cap. Take care that the disconnected module (adapter) and the hydraulic actuator do not get in touch with dirt, dust, metal shavings or aggressive liquids.



Abb. 8.1.b



Before and after each operation, check the system for oil leaks. An oil leak indicates a fault in the system. In such cases, discontinue work and locate the fault or submit the equipment for repair at an authorized specialist dealer.



Abb. 8.1.c



Abb. 8.1.d



ATTENTION!

A small amount of residual oil inside the fast coupling system is normal and is no malfunction. Remove the oil with a clean cloth.

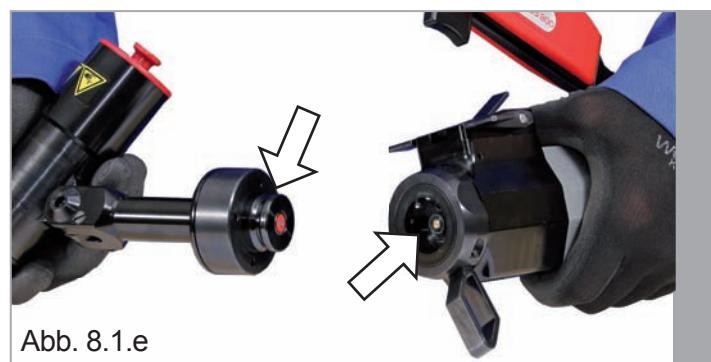


Abb. 8.1.e



Foreign bodies or contamination in the hydraulic system or in the coupling system can cause the equipment to malfunction.



Abb. 8.1.f



Always store the tool in the transport case designed for this purpose. Clean the tool, adapters and accessories after each use with a clean cloth.



Abb. 8.1.g



To protect the metallic surface from corrosion you can use a standard corrosion protection product such as Caramba, Ballistol or WD40.

Abb. 8.1.h



8.2 International service and repair partners

- AE Al-Futtaim Workshop Equipment**
 P.O. Box 11052
 Dubai
 Contact Person: Rishi Savio
 Tel. : 04-2-859881
 Fax : 04-2-857568
 Email: rishi.savio@alfuttaim.ae
- AR veritec S.A.**
 Sarmiento 892
 1405 Buenos Aires
 Contact Person: Mario G. Dalle Palle
 Tel. : 011 4431 6811/8884
 Fax : 011 4431 0060
 Email : veritec@fibertel.com.ar
- AT W+S Gebietsvertretung**
 Ansprechpartner: Alexander Bittner
 Traxleckerweg 3/5
 AT-4820 Bad Ischl
 Tel. 0 664 135 90 45
 Fax 0 6132 21 368
 Email alexander.bittner@wielanderschill.com
- AU National Car Service**
 9 Watson Road
 Padstow NSW 2211
 Contact Person: Nigel Bonney
 0 403118855
 Email: nigel@nationalcarservice.com.au
- BE STRONG TOOLS AND EQUIPMENT**
 Postbus 256
 5050 NL Goirle
 Contact Person: Phillip Strong
 Tel. : 013 534 42 15
 Fax : 013 534 27 88
 Email : info@strong.nl
- BG IRIDIA Ltd.**
 h.d. Darvenitca bl.48, entr. A ap.5
 1756 Sofia
 Contact Person: Gavril Stilov
 Tel.: 02 875 1018
 Fax: 02 481 7949
 Email : iridia@bgb.bg
- BR Metroliner**
 Av. Joaquim Alves Correia 2522
 13271-430 Valinhos - SP
 Contact Person: Constantino Uliano
 Tel. : 019 3849 7956
 Email : constantino@metroliner.com.br
- CA Titanium Tools and Equipment**
 147 Citation Drive units 28&29
 Concord Ontario Canada; L4K 2P8
 Contact Person: Matthew Bannister
 Tel.: 01-416 587 1548
 Email: matt@titanium22.ca
- CH CARBESA AG**
 Route des Carronnet 5
 1525 Seigneux
 Contact Person: Mathias Dufaux
 Tel.: 021 905 8111
 Fax: 021 905 8110
 Email: m.dufaux@celette.ch
- CN Shanghai HoYe Auto Equipment Co.,Ltd**
 No. 539 Huaxu Rd., Qingpu District
 201702 Shanghai, People's Republic of China
 Contact Person: Patty Hu
 Tel. : 021 59766506
 Fax : 021 59884498
 Email : patty@sinewshoye.com
- CN Beijing Huacheng Lichang Auto Equipment Co.,Ltd**
 No. 16. 3rd Ring West Road South Fengtai District
 Beijing 100068
 Contact Person: Michael K F Li
 Tel. : 010 87576687
 Fax : 010 87576683
 Email: michaelkflitsm@gmail.com
- CN SUNSMART TRADING CO LTD**
 Unit 16, 18 Floor, Metropole Square, No. 2
 On Yiu Street, Shatin, N.T.
 Hong Kong
 Contact Person: Stephen Yeung
 Tel.: 02417 1228
 Fax: 02498 1366
 Email: stephen@sunsmart.hk
- CY Theodoros Ioannides Ltd.**
 33, Archermos Street
 1519 Nicosia
 Contact Person: Yiannis Ioannides
 Tel. : 022-343 777
 Fax : 022-343 732
 Email: marianna@th-ioannides.com
- CZ RPJ International s.r.o**
 Bavorská ul. 6
 155 00 Praha 5
 Contact Person: Marcela Povolna
 Tel. : 02-35 518 804
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 10617 Tallinn
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 89 Tereat El-Zomor St.,
 Ard El-Lewa, Mohandeseen
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ES Instalaciones FMG S.L.
 Avda. San Pablo 26 B, Nave 4
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 Contact: Juan Antonio Montes
 Tel. : 091 672 7055
 Fax : 091 669 4238
 Email : comercial@instalacionesfmg.es

ES ASTRA
 C. Cabrera 6
 08192 Sant Quirze del Vallés (Barcelona)
 Contact Person: Nicola Ballero
 Tel. : 0937 864 011
 Email : export@ballero.com

FI Finntest OY
 Olarinluoma 16
 02200 Espoo
 Contact Person: Esa Laakso
 Mobil : 050 410 9936
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 01310 Confrancon
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 Unit 9 Stephenson Close
 Daventry, Northants NN11 8RF
 Contact Person: Steve Knowles
 Tel. : 0 1327 300700
 Fax : 0 1327 300586
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GR Ninos Paraskevas L.T.D.
 67 Thermopylon & Axilleos Str.
 10436 Athens
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 Tel. : 0210-522 2556
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 Obrnicka 2
 10000 Zagreb
 Contact Person: Roman Crnic
 Tel. : 01-2406 246
 Fax : 01-2406 000
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HU Hondimpex Kft
 Kossuth L.u. 48-50
 8060 Mór
 Contact Person: Alex Herbák
 Tel.: 022-407852
 Fax: 0 22-407321
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IN AAM Automotives Private Ltd.
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 Email : ashish@aamautomotives.in

IS Málningarvörur ehf.
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 108 Reykjavik
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 Tel. : 0581 4200
 Fax : 0567 8344
 Email : karlj@malningarvorur.is

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 42122 Reggio Emilia
 Contact Person: Giovanni Giroldi
 Tel. : 0039 0522 514 777
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JP Yashima Corporation
 2-5-8 Fujimicho Chofu-Shi
 Tokyo 182-0033,
 Contact Person: Tim Takei
 Tel. : 0424-80-0840
 Fax : 0424-80-0811
 Email : tetsuya@yashima-net.co.jp

KR SMB Autowide Co., Ltd.
 164-7 Moonbongdong-Dong
 Ilsandong-Gu Goyang-Si
 410-560 Gyeonggi-Do
 Contact Person: Lee Hyun Woo
 Tel.: 031 976 4457
 Fax: 031 976 4460
 Email: smbautowide@nate.com

KW Gulf Resources General Trading
 Al Rai Street 22
 22020 Salmiya
 Contact Person: Jamal R. Al-Bader
 Tel. : 02471-9961
 Fax : 02471-9964
 Email : tec@qualitynet.net

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 02189 Vilnius
 Contact Person: Raimondas Valatkevicius
 Tel. : 0210 62010
 Fax : 0210 6211
 Email : raimondas@tecalemit.lt

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 6A, rue du commerce
 3895 Foetz
 Contact Person: Alex Schumacher
 Tel. : 026 55 11 22
 Fax : 026 55 13 22
 Email: mike.schumacher@spk.lu

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 Parka lela 21
 4701 Valka
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 Tel. : 64781114
 Fax : 64781114
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 Triq il-Linja
 Attard, BZN 04
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 Fax : 06258- 0833
 Email: jack@hungfong.net

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 Contact Person: Phillip Strong
 Tel. : 013 534 42 15
 Fax : 013 534 27 88
 Email : info@strong.nl

NO Würth Norge AS
 Postboks 84
 1483 Skytta
 Contact Person: Sven Olav Szallies
 Tel. : 06706-2522
 Fax : 06706-2511
 Email : Sven.Olav.Szallies@wuerth.no

NZ **Auto Body Equipment L.t.d.**
 PO Box 10-133 Te Rapa
 27 The Boulevard
 Hamilton 3241
 Contact Person: Shane Harvey
 Email: shane@abe.co.nz

PL **Blowtherm Polska Sp. Z.o.o**
 Ul. Oswobodzenia 1
 40-403 Katowice
 Contact Person: Marek Dzedzyk
 Tel.: 032 363 4601
 Fax: 032 363 4806
 Email: mdzedzyk@blowtherm.pl

PT **Lusilectra – Veiculos e Qquipamentos, S.A.**
 Rue Eng. Ferreira Dias, 953/993
 4100-247 Porto
 Contact Person: Antonio Garrido
 Tel. : 022 619 8750
 Fax : 022 615 8669
 Email : antonio.garrido@lusilectra.pt

RO **INTERSOFEX s.r.l.**
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SG **Newera Equipment Pte.Ltd.**
 53 Ubi Avenue #05-06
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 Tel. : 06241 0411
 Fax : 06441 1849
 Email : francis.tan@neweraequipment.com

SK **Homola s.r.a.**
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 Tel. : 02-4341 5450
 Fax : 02-4341 5461
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SI **SE-MA d.o.o. Novo mesto**
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 Tel.: 07 338 01 55
 Fax: 07 338 01 58
 Email: se-ma.doo@siol.net

TR **BAKIRCI OTOMOTIV San. ve Tic. Ltd. Sti**
 Ahi Evran Cad. Polaris Plaza
 34398 Maslak Istanbul
 Contact Person: Cihat Bakirci
 Tel.: 0212 34 6 42 00
 Fax: 0212 34 6 42 09
 Email: cihat.bakirci@bakirci.com.tr

(TH) SS Advance Tech Co. Ltd.

21 Soi Lasalle 29
 Bagna, Bangkok 10260
 Contact Person: Sirisambhand Tachphol
 Tel.: 02 399 13823
 Fax: 02 398 5771
 Email: path@ssinterproducts.com

(ZA) Silver Falcon Trading 176 (Pty) Ltd.

Hurricaneauto, 60 Devenish Street
 0699 Polokwane, Limpopo
 Contact Person: Andrew Mackie
 Tel. : +27 83 628 6639
 Fax : +27 86 502 1039
 Email : andrew@hurricaneauto.co.za

(TW) SINEWS W & H CO., Ltd.

NANKAN RD., LUCHU Township/3F-3, No. 9, Sec. 2
 338 Taoyuan County, Taiwan (R.O.C.)
 Contact Person: Patty Hu
 Tel. : 03-321 88 00
 Fax : 03-321 66 00
 Email: sinews@ms24.hinet.net

(US) Reliable Automotive Equipment, Inc.

58 Leonardville Rd
 Belford, N.J. 07718
 Contact Person: Dave Gruskos
 Tel.: 0732 495 7900
 Fax: 0732 495 7904
 Email: dave@rae1.com

(UY) ColorRed

Mary Beatriz Burgos
 Dr. Pouey y Colman
 Canelones
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 EMail: colorred03@yahoo.com

(VE) SOCINTEC C.A.

Av. Principal de la Urbina Edificio O.
 piso 13 Ofc 13-D Apartado 70270
 Caracas 1071
 Contact: Edmundo Rubilar Dussuel
 Tel. : 0212 2416748
 Fax : 0212 2427277
 Email : edmurubi382@cantv.net

(VN) HOANG HOANG ANH., CO LTD

27/44 ,Street 09 , Ward 16
 Go Vap Dist.,
 Ho Chi Minh (Saigon)
 Contact Person: Nguyen Hoang Khanh
 Tel.: 08 62573478
 Email: khanh-nguyen@hhac.com.vn

8.3. Declaration of conformity

EU Declaration of conformity

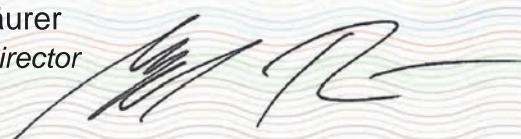
In accordance with the EU Machinery directive 98/37/EU

Manufacturer:	MV Marketing und Vertriebs GmbH & Co.KG Wieländer+Schill Siederstraße 50 D-78054 Villingen Schwenningen
Equipment type:	Hand held hydraulic tool
Tool type:	Pneumatic-hydraulic Universal tool with high pressing force
Model name:	WS XPress 800
	Developed and manufactured in accordance with the standards and guidelines listed below by
	WSEngineering GmbH & Co.KG Siederstraße 50 D-78054 Villingen Schwenningen
Applied harmonized standards:	Tool safety law (GPSG) EN 982; EN 983; EN 292; EN 693 EN 792-13 (14) ISO 11200; ISO 11202
EU-Machinery directive:	98/37/EG

As manufacturer we declare that : The products marked accordingly
comply with the requirements of the
referenced guidelines and standards.

Villingen Schwenningen 01.03.2012
Germany

Manfred Bäurer
Managing Director





MV Marketing und Vertriebs-GmbH & Co.KG

Wieländer+Schill

Professionelle Karosserie-Spezialwerkzeuge

Siederstraße 50 D-78054 Villingen-Schwenningen

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