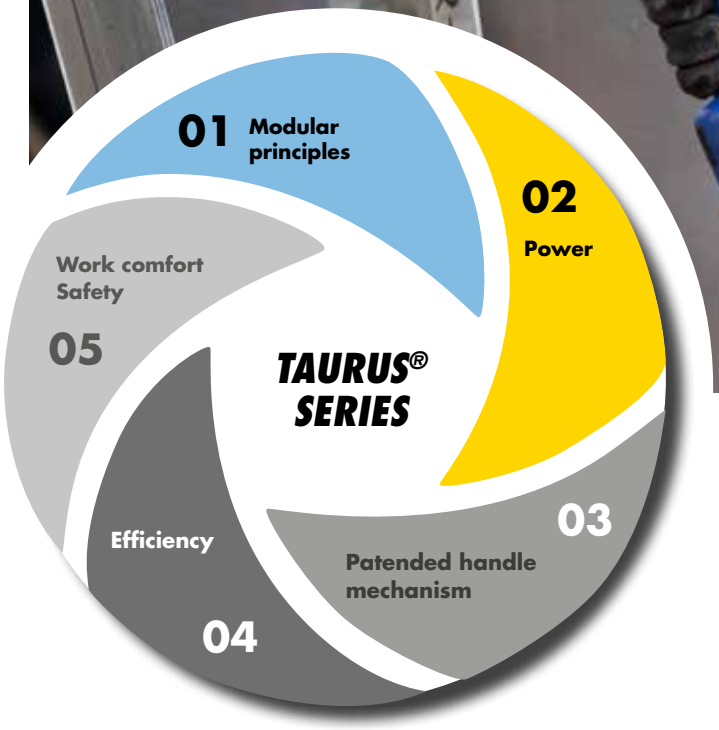
THE TAURUS® SERIES

The cost-efficient construction, perfect handling properties and practical accessories are what make the TAURUS® series so unique and flexible.



Since the market introduction of the **TAURUS® 2** in the year 2002, the TAURUS® series has managed to convince thousand times over in trade and industry. The TAURUS® 2 especially is a true all-rounder.

TAURUS®

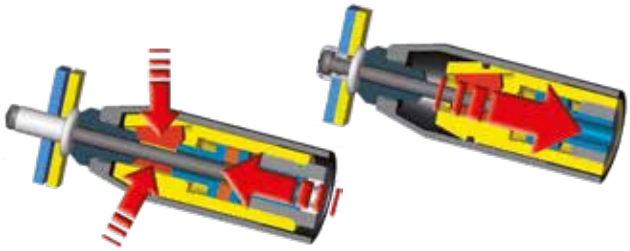
TAURUS® 1 | TAURUS® 2 | TAURUS® 3 | TAURUS® 4 | TAURUS® 5 | TAURUS® 6

ADVANTAGES WHICH SIMPLY CANNOT FAIL TO CONVINCE YOU!

01 MODULAR PRINCIPLES
- Widest possible parts commonality – low spare part stocks required and simple maintenance
- Flexible adaption to new applications

02 POWER
- High setting forces combined with low weight
- Fast work cycle
- Optimised stroke for the entire series

03 PATENTED HANDLE MECHANISM*
- With forcibly actuated jaws by pneumatic pressing
- Safe, non-slip gripping of the rivet mandrel
- Just one model of jaws for all tools
- Very long service lives



* Patented jaw system
> The three jaws move in separate channels while being under forced control.
> The jaws are pressed onto the mandrel by using compressed air instead of spring force – the force being ten times higher than usual.
> Due to the high pressure the jaws immediately cling to the mandrels upon triggering the riveting process, only then the pulling movement starts.

GESIPA®-system – decisive advantages
> The complete stroke of the tool is used for setting the rivet guaranteeing a reliable setting process.
> The immediate and non-slip grip of the mandrel reduces abrasion and troublesome soiling.
> Since the jaws do not slide along the mandrel, the wear and tear of the jaw profiles is reduced.

Lower costs due to longer service life and low requirements regarding maintenance and spare parts needed.

04 EFFICIENCY**
- Little compressed air consumption thanks to dual function: setting the rivets and extracting the spent mandrels use the same air
- Air suction needed only for vertical downwards riveting.
- Can be permanently switched-off if not needed.

** **Optimum use of compressed air ensures maximum efficiency and low operating costs**
Compressed air is used very often in industrial production because of its flexibility. It does, however, cause relatively high costs and its consumption damages the environment. These disadvantages are more than enough reason for GESIPA® to equip the TAURUS® tool series with a special technique that allows to save compressed air and is unique throughout the world. The GESIPA® System uses the compressed air required for the setting process twice. First, to set the blind rivet and secondly, to extract the spent mandrel. Dual use of the compressed air means no expensive, fresh compressed air is needed which other tools on the market constantly need just to extract the spent mandrel. And, last but not least, noise emission from the TAURUS®-tools is extremely low.

In two-shift operation and with compressed air costs of approximately € 0.03 per m^3 this innovative technique allows savings of up to € 720 per year and tool.
A TAURUS® 2 can pay for itself in less than one year.

05 WORK COMFORT / SAFETY
- Rubberised, moulded grip
- Balanced center of gravity
- Low-vibration and soundproof
- Little activation force required
- Spent mandrel container with swivelling air deflector
- Overpressure valve for prevention of overload
- Integrated protection feature prevents the ejection of spent
- mandrels while the spent mandrel container is removed

TAURUS® DEVICE SERIES – THE MODULAR CONCEPT

The TAURUS® series – unique modular principle. Minimal spare parts stocks, easy maintenance

Nosepieces
different sizes

Extension units
Free access to difficult-to-reach riveting points

Single-piece
(different sizes)

Multi-piece
(different sizes)

Hanger

Spring-loaded trigger system
for gap-free riveting

External trigger
for external triggering

Air suction function

Nosepiece allocation

GESIPA®-Interface

Setting process monitoring
for reliable setting processes

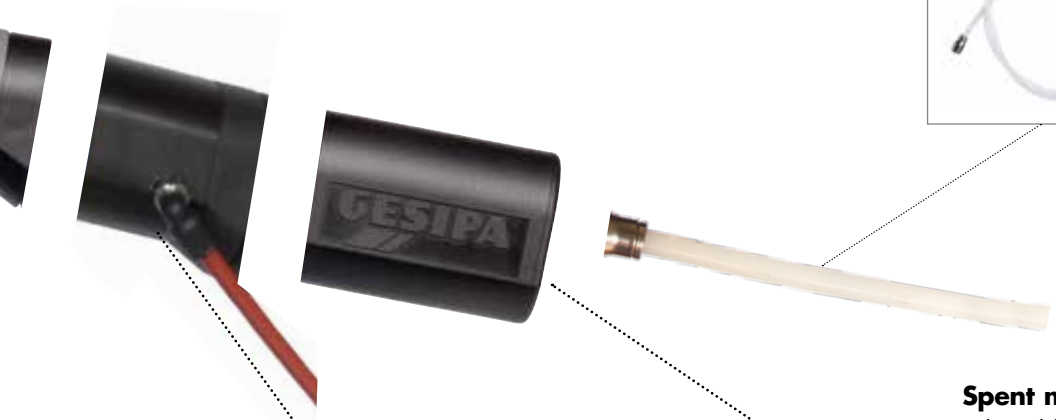
The TAURUS® device series – Versatile accessories complete the range

The modular concept for the TAURUS® series 1-4 lets the user customise the TAURUS® devices to match his individual requirements.

Many identical parts that can be used across all devices reduce the need to stock spare parts and make maintenance easy. This wide range of options provides the user with a high degree of flexibility. Each device in the TAURUS® series 1-4 can be fitted with many different spare parts or refitted according to the application.

Tool mount
for integration into automated applications

Rivet mandrel evacuation



Blind rivet counters

GRiv-Count

GRiv-Amp

Spent mandrel container
adoptable for TAURUS® tools1-4

TAURUS® 1-2

TAURUS® 3-4

PH-2000

TAURUS® 1-2

TAURUS® 3-4

Swivel air connector

Counter eco

Flexible base
Optimized stability

TAURUS® SERIES

With silencer

TAURUS® 1

No. 145 7665

TECHNICAL DATA

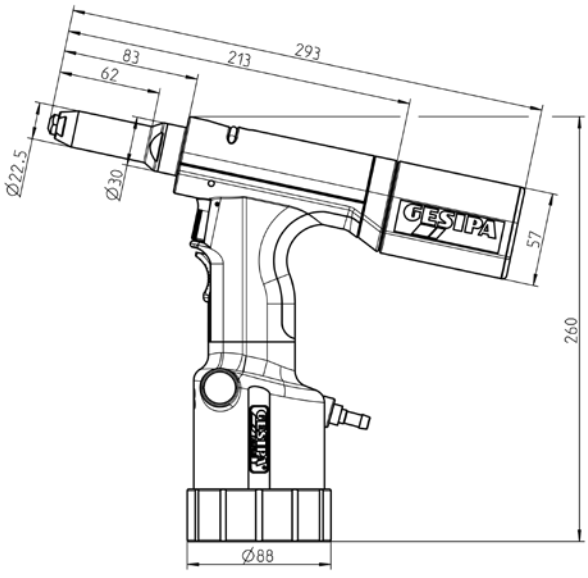
Weight:	1.3 kg
Operating air pressure:	5-7 bar
Air hose connection:	6 mm Ø (1/4")
Air consumption:	approx. 1.0 ltr. per rivet
Traction power:	5,500 N at 6 bar
Stroke:	15 mm

WORKING RANGE

Sets blind rivets from 2.4 up to 3.2 mm Ø all materials and up to 4 mm Ø alu/steel (max. mandrel Ø 2.5 mm)

SCOPE OF DELIVERY

Nosepieces:17/18, 17/20 and 17/22, maintenance wrench SW12/14, SW14/17, 1 hydraulic oil bottle 100 ml, 1 oil refill can, Operating instructions with spare parts list



Dimensions in mm

TAURUS® 2

No. 145 7771

TECHNICAL DATA

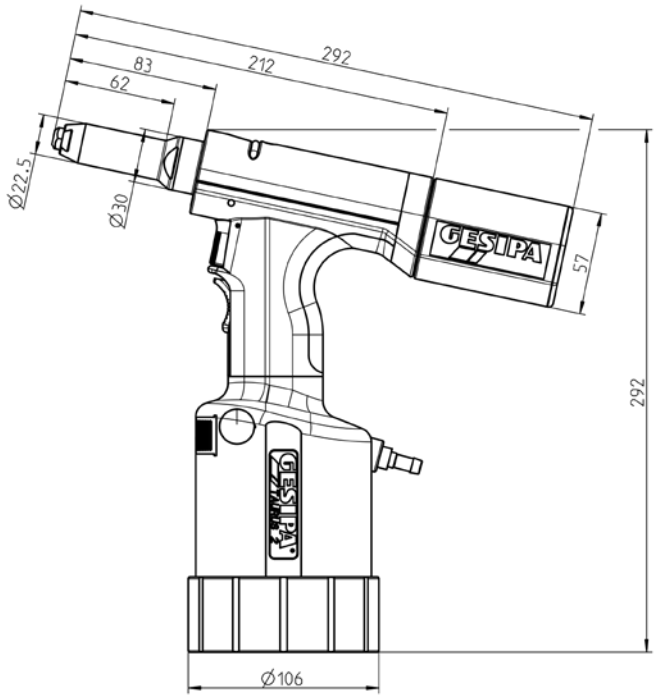
Weight:	1.6 kg
Operating air pressure:	5-7 bar
Air hose connection:	6 mm Ø (1/4")
Air consumption:	approx. 2.3 ltr. per rivet
Traction power:	11,000 N at 6 bar
Stroke:	18 mm

WORKING RANGE

Sets blind rivets up to 5 mm Ø all materials and up to 6 mm Ø alu/steel (max. mandrel Ø 3.2 mm)

SCOPE OF DELIVERY

Nosepieces:17/24, 17/27, 17/29 and 17/32, maintenance wrench SW12/14, SW14/17, 1 hydraulic oil bottle 100 ml,1 oil refill can, Operating instructions with spare parts list



Dimensions in mm

TAURUS® 3

No. 145 7871

TECHNICAL DATA

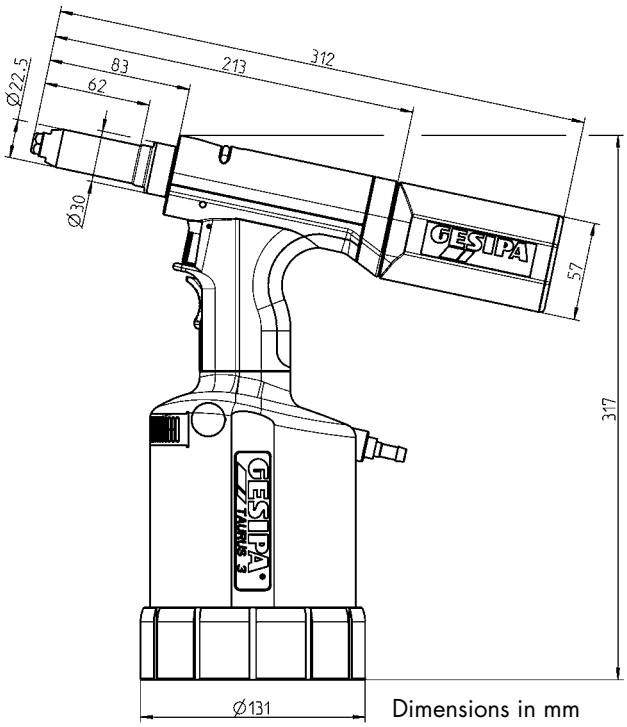
Weight:	1.9 kg
Operating air pressure:	5-7 bar
Air hose connection:	6 mm Ø (1/4")
Air consumption:	approx. 4.8 ltr. per rivet
Traction power:	18,000 N at 6 bar
Stroke:	25 mm

WORKING RANGE

Sets blind rivets up to 6.4 mm Ø all materials (max. mandrel Ø 4.3 mm)

SCOPE OF DELIVERY

Nosepieces:17/36, 17/40 and 17/45, maintenance wrench SW12/14, SW14/17, 1 hydraulic oil bottle 100 ml, 1 oil refill can, Operating instructions with spare parts list



Dimensions in mm

TAURUS® 4

No. 145 7964

TECHNICAL DATA

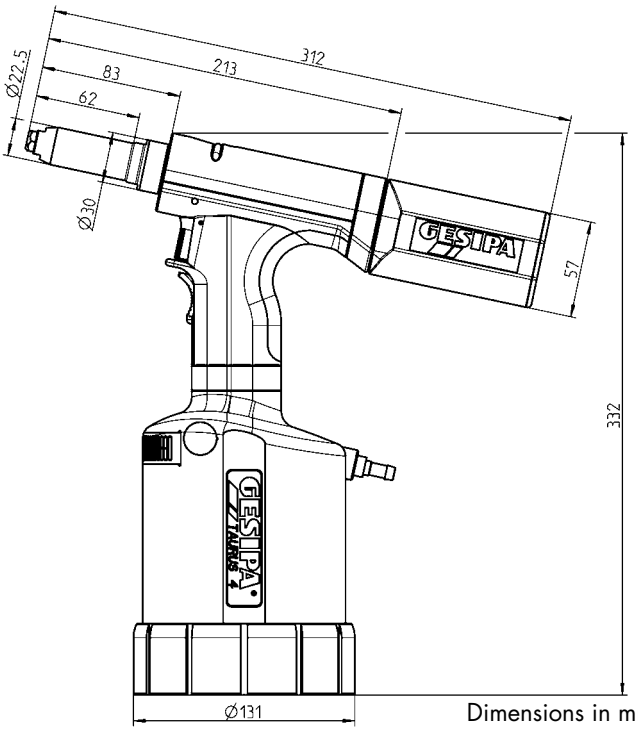
Weight:	2.0 kg
Operating air pressure:	5-7 bar
Air hose connection:	6 mm Ø (1/4")
Air consumption:	approx. 4.8 ltr. per rivet
Traction power:	23,000 N at 6 bar
Stroke:	19 mm

WORKING RANGE

Sets blind rivets up to 6.4 mm Ø all materials and BULB-TITE®-rivets up to 7.7 mm Ø all materials (max. mandrel Ø 4.3 mm)

SCOPE OF DELIVERY

Nosepieces:17/36, 17/40 and 17/45, maintenance wrench SW12/14, SW14/17, 1 hydraulic oil bottle 100 ml, 1 oil refill can, Operating instructions with spare parts list



Dimensions in mm

TAURUS® SERIES

TAURUS® 5

Basic tool

No. 145 8002

TECHNICAL DATA

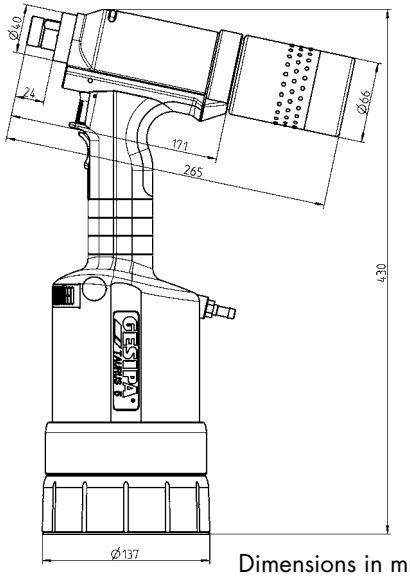
Weight:	3.4 kg
Operating air pressure:	5-7 bar
Air hose connection:	6 mm Ø (1/4")
Air consumption:	approx. 6.9 ltr. per rivet
Traction power:	42,000 N at 7 bar
Stroke:	17 mm

WORKING RANGE

Blind rivets above 6.4 mm Ø all materials and lockbolts up to10 mm Ø with corresponding pulling heads (look on page 125).

SCOPE OF DELIVERY

1 hydraulic oil bottle 100 ml
1 oil refill can
Operating instructions with spare parts list



Dimensions in mm

TAURUS® 5 and 6 need to be fitted with nosepieces to match the application. Will be produced on request.

125 The pulling heads can be found on **page 125**.

TAURUS® 6

Basic tool

No. 145 8022

TECHNICAL DATA

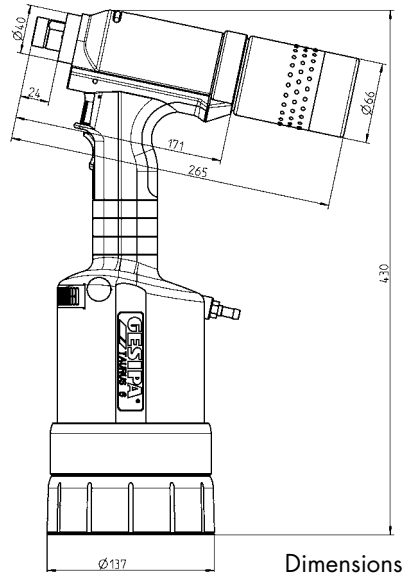
Weight:	3.4 kg
Operating air pressure:	5-7 bar
Air hose connection:	6 mm Ø (1/4")
Air consumption:	approx. 6.9 ltr. per rivet
Traction power:	50,000 N at 7 bar
Stroke:	15 mm

WORKING RANGE

Blind rivets above 6.4 mm Ø all materials and lockbolts up to10 mm Ø with corresponding pulling heads (look on page 125).

SCOPE OF DELIVERY

1 hydraulic oil bottle 100 ml
1 oil refill can
Operating instructions with spare parts list



Dimensions in mm

TAURUS® 5 and 6 need to be fitted with nosepieces to match the application. Will be produced on request.

125 The pulling heads can be found on **page 125**.

NOSEPIECES

For long mandrels, special blind rivets and other challenges

The use of the correct nosepiece is essential for ensuring reliable riveting and a neat riveted joint. A large selection of standard and special nosepieces makes it possible to quickly adapt to various types of blind rivet. Even special versions are generally available on request. All nosepiece allocation data relate to DIN and GESIPA® blind rivets.

The name of the nosepiece (e.g. 17/32) can be found directly on the nosepiece.

128 Extended nosepieces, special lengths and special nosepieces on **page 128.**

NOSEPIECE ASSIGNMENT

D	Material	Nosepiece	No.
STANDARD			
2.4	Alu	17/18	**143 4976**
3.2	CAP®-Alu, CAP®-Cu	17/18	**143 4976**
3	Alu/Cu	17/20	**143 4994**
3	Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu	17/22	**143 5018**
3 and 3.2	Alu, Cu, Steel, Stainless steel, Stinox, PG-Alu, PG-Steel, PG-Stainless steel	17/24	**143 4955**
4	Alu, Cu, CAP®-Alu, CAP®-Cu	17/24	**143 4955**
4	Steel, Alu, PG-Alu	17/27	**143 4973**
4	Stainless steel, Stinox, PG-Steel, PG-Stainless steel	17/29	**143 4974**
4.8 and 5	Alu, CAP®-Alu, CAP®-CU, PG-Alu	17/29	**143 4974**
4.8 and 5	Steel, Alu	17/32	**143 4975**
4.8 and 5	Stainless steel, Stinox, PG-Steel, PG-Stainless steel, G-Bulb	17/36	**143 4977**
6	Alu	17/36	**143 4977**
6	Steel	17/40	**143 4999**
6.4	Alu	17/40	**143 4999**
6.4	Steel, Alu, Stainless steel, PG-Stainless steel, G-Bulb	17/45	**143 4860**
8	Alu	17/45	**143 4860**
BULB-TITE®			
4	Alu	17/26 BT	**143 4985**
5.2	Alu	17/32 BT	**143 4986**
6.3	Alu, Steel, Monel	17/42 BT	**143 4988**
7.7	Alu	17/48 BT	**143 4989**
MEGA GRIP®			
4.8	Alu, Steel, Stainless steel	17/31 MG	**143 4993**
6.4	Alu, Steel, Stainless steel	17/41 MG	**143 4865**
PLASTIC			
3	Plastic	17/30 K	**143 4933**
4	Plastic	17/35 K	**143 5824**
5		17/40 K	**143 4998**

SPARE PARTS / SPECIAL ACCESSORIES TAURUS® SERIES 1-4

SWIVEL AIR CONNECTOR
For the complete TAURUS® series in 1/8"

No. 143 5479

SET OF JAWS (3 PCS.)

Patented jaw system for the complete TAURUS® series

No. 143 5568

FLEXIBLE BASE FOR TAURUS® 1 AND 2

With the flexible base made from MBR and the larger surface area, the TAURUS® tools are standing even more stably.

T1 No. 143 6394

T2 No. 143 6371

SMALL JAW ASSEMBLY TAURUS® 1-2

The small jaw assembly is particularly suitable where rivet sites are difficult to access. The TAURUS® 1 with the small jaw assembly handles aluminium/steel blind rivets up to Ø 4 mm and steel/steel blind rivets up to Ø 3.2 mm. The small jaw assembly for the TAURUS® 2 handles aluminium/steel blind rivets up to Ø 5 mm and steel/steel blind rivets up to Ø 4 mm. The jaw assembly is 100 mm long and the diameter of the steel head sleeve is 18 mm.

T1 No. 145 7705

T2 No. 145 7846

Nosepieces to be used

NOSEPIECE	TAURUS® 1	TAURUS® 2
10/18	**143 4055**	**143 4055**
10/24	**143 4061**	**143 4061**
10/27	-	**143 4062**
10/29	-	**143 4064**

TOOL MOUNT FOR TAURUS® 1-4

For integration into automated systems or connection to handling modules.

*Device support not available individually. The tool is delivered pre-mounted on a new device or can be retrofitted on an existing device at the GESIPA® Walldorf site.

Can only be mounted by GESIPA®

No. 143 5538*

PROTECTIVE SLEEVE

The plastic-dipped steel head sleeve protects sensitive workpiece surfaces (e.g. painted surfaces) from being scratched by the nosepiece or the steel head sleeve during riveting.

for **TAURUS® standard tools** **No. 156 7289**

TRANSPARENT COLLECTING CONTAINER FOR TAURUS® 1-4

T1-T2 No. 145 7744

T3-T4 No. 145 7951

The classic residual mandrel collecting container in the TAURUS® series is also available in a transparent version.The transparent collecting container allows the amount of residual mandrels to be monitored constantly.

The transparent collecting container will be available in a small version for the TAURUS® devices 1-2 and a large version for the TAURUS® devices 3-4.

MANDREL EXTRACTION TUBE

For the full TAURUS® series

No. 145 7864

By attaching a special-purpose hose nipple, the spent mandrel container can be replaced by the spent mandrel evacuation hose*. In stationary use, this can be of great advantage as frequent disposal is not required. The spent mandrels are collected in a container so that the work place remains clean and tidy, with no interruption to the work.

*The use of TAURUS® tools with a 1.5 m long evacuation hose requires permanent employment of the suction unit.

TAURUS® CONVERSION KIT

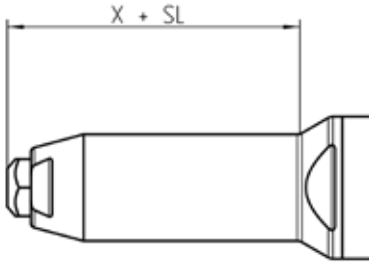
For conversion to the PH 2000 spent mandrel container (description and full offer on page 121).

T1 No. 145 7700

T2-T4 No. 145 7703

EXTENSION UNITS

Allows easy access to rivet sites which are difficult to reach.
The extension units are used for riveting sites which are situated low down or are difficult to access. We offer one-piece extension units of 35, 85, 135 and 185 mm length for the TAURUS® 1-4.
The extension units consist of three parts.



The variable X can be found in the dimension drawings of the devices.

Dimension X = Standard steel head sleeve length (with standard nosepiece)

ONE-PIECE
Example: TAURUS® 1 + SL 35 mm

Steel head sleeve length =
62 mm (X) + SL 35 mm = 97 mm

TOOL	+35 mm	+85 mm	+135 mm	+185 mm
TAURUS® 1	**146 4345**	**146 4346**	**146 4347**	-
TAURUS® 2	**145 8042**	**146 4350**	**146 4351**	**146 4352**
TAURUS® 3 and 4	**145 7932**	**145 7933**	**145 7937**	**-**

TOOL	+ 50 mm	+ 100 mm
TAURUS® 1 with spring loaded trigger system	**145 0880**	**145 7727**
TAURUS® 2 with spring loaded trigger system	**145 7857**	**145 7858**
TAURUS® 3 and 4 with spring loaded trigger system	**145 7959**	**145 7960**

MULTI-PIECE
Example: TAURUS® 1 + SL 100 mm

Steel head sleeve length = 62 mm (X) + SL 100 mm = 162 mm
On TAURUS® 1-4 the steel head sleeve can be extended variably in steps of 100 mm.

TOOL	+100 mm
TAURUS® 1	**145 7743**
TAURUS® 2	**145 7848**
TAURUS® 3 and 4	**145 7947**

ANGLE HEAD 90° AND ANGLE HEAD 90° COMPACT

The **angle head 90°** and the **angle head 90° compact** are designed for use in tight spaces. Its sturdy design allows it to apply large setting forces when setting blind rivets even in difficult of access work areas. The angle head 90° for TAURUS® 1-4 allows to set all Types of standard blind rivets up to Ø 6.4 mm all materials and Ø 8 mm alu, depending on the tool type. The minimum edge clearance is 15 mm, the head length is 110 mm.

The angle head 90° compact for the TAURUS® 1 and 2 allows to set standard blind rivets of all Types of material up to 5 mm in diameter and alu/steel blind rivets up to 6 mm in diameter, depending on the tool Type. The minimum edge clearance is 12 mm, the head length is 90 mm. Both angle heads can be freely fixed in any position aroand the TAURUS® tensile axis (360° free rotation).

ANGLE HEAD 90° for TAURUS® 1-4

TECHNICAL DATA

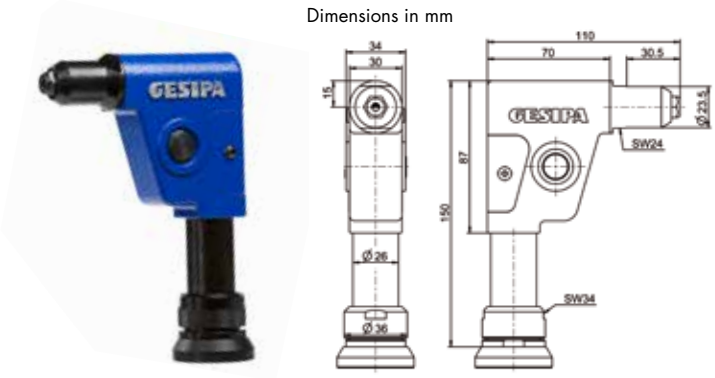
Weight:	1.1 kg
Stroke:	20 mm (TAURUS® 1,2 and 4)
Stroke:	25 mm (TAURUS® 3)
Traction power:	up to 20 kN

SCOPE OF DELIVERY

Nosepiece 17/45 WK

Jaws up to rivet-Ø 4mm (Nosepiece 17/24)

Dimensions in mm



TAURUS® 1, 2, 4 **No. 155 9513**

TAURUS® 3 **No. 155 9512**

JAWS (3 PARTS) for TAURUS® 1-4

rivet-Ø 4.0 mm up to Ø 6.4 mm of all materials, Ø 8.0 mm Alu

No. 143 4173

rivet-Ø 2.4 mm up to 4 mm (Nosepiece 17/24)

No. 143 4958

ANGLE HEAD 90° COMPACT for TAURUS® 1-2

TECHNICAL DATA

Weight:	0.7 kg
Stroke:	20 mm
Traction power:	up to 10 kN

SCOPE OF DELIVERY

Nosepieces:17/36

Dimensions in mm

TAURUS® 1, 2 **No. 145 7921**

JAWS (3 PARTS) for TAURUS® 1-2

No. 143 4958

TAURUS® VERSIONS

A wide variety of options means higher flexibility. All of the TAURUS® varieties are customized and designed and made to fit the application. Please contact our team from the Technical Sales department should you require individual advice or have any further queries or need information on prices.

TAURUS® 2/K

No. 145 7804

The TAURUS® 2/K has been designed for setting plastic rivets. In its functionality the TAURUS® 2/K is identical to the standard tool, however has a stroke of 24 mm instead of 18 mm. Plastic rivets only need a low setting force, however, normally require large setting strokes due to the toughness of the plastic material. The TAURUS® 2/K allows to safely set plastic rivets with only one setting stroke! The TAURUS® 2/K comes with 3 nose pieces for plastic rivets 17/30 K, 17/35 K and 17/40 K included.

TECHNICAL DATA

Strength:	24 mm
Tensile strength:	8,400 N

WORKING RANGE
Blind rivets plastic from 4 up to 6 mm Ø.

SCOPE OF SUPPLY
Nosepieces 17/30K; 17/35K; 17/40K

TAURUS® 2/AS

No. 145 7794

The TAURUS® 2/AS is a special version of theTAURUS® 2 with a VAS slide switch which does not engage when in its highest position, thus achieving that vacuum absorption is automatically deactivated once the tool is not in use. This way, unintentional activation of the vacuum absorption with unnecessary air consumption can be effectively avoided.

Other TAURUS® sizes upon request.

TAURUS® 2/24

No. 145 7803

As far as technology and functionality are concerned, the TAURUS® 2/24 is identical to the standard tool, however has a stroke of 24 mm instead of 18 mm. This tool provides the advantage of being able to safely set critical rivet Types requiring a large setting stroke with only one setting stroke without re-engagement. This applies, for example, to our BULB-TITE® or similar rivets.

TECHNICAL DATA

Strength:	24 mm
Tensile strength:	8,400 N

WORKING RANGE
Blind rivets up to Ø4 mm all materials,
Ø5 mm steel; Ø 6 mm alu.

TAURUS® 1-4 WITH COUNTER DEVICE

TAURUS® 1-4 (with counter device)

The TAURUS® series 1-4 with counter device – detects and counts the spent mandrels

The tools are equipped with a sensor which detects and counts the spent mandrels after the setting process has been finished. The sensor is positioned on the tool head in front of the spent mandrel container.

For a completely independent workstation, the amplifier GRivAmp or the counter and display unit GRivCount can be used for processing and analysing the signals.

For retrofitting existing tools a conversion kit suitable for all TAURUS® Types (except TAURUS® with PH 2000 spent mandrel container) is available:

GRiv-Count

GRiv-Amp

Conversion kit TAURUS® 1 with sensor
No. 145 7698

Conversion kit TAURUS® 2-4 with sensor
No. 151 6858

GRiv-Count
No. 146 3062

GRiv-Amp
No. 145 7699

Power supply (24 V) is to be provided on site.

TAURUS® 1-4 WITH COUNTER ECO

TAURUS® 1-4 with counter – the cost-effective variant for monitoring the number of setting strokes

In contrast to the TAURUS® with counter, the eco counter only counts the number of setting strokes and not the spent mandrels. The sensor is fitted on the air cylinder. The counter is not available on its own. It is supplied mounted on a new tool or it can be retrofitted at the Walldorf factory.

Retrofit kit for the eco counting device

TOOL	No.
TAURUS® 1	**145 0892**
TAURUS® 2	**145 0933**
TAURUS® 3	**145 0963**
TAURUS® 4	**145 0993**

*eco counting device is not available separately. It can be retrofitted to an existing tool at the Walldorf plant or in a qualified GESIPA® workshop.

Can only be mounted by GESIPA®.

The TAURUS® series 1-4 in axial version – for special applications

TAURUS® 1-4 AXIAL

TECHNICAL DATA

Operating pressure:	5 to 7 bar
Air hose connection:	6 mm (1/4")
Noise emission:	max. 79 dB
Vibrations:	< 2.9 m/s²
Weight:	
TAUREX 1 Axial compact	3.1 kg
TAUREX 2 Axial compact	3.4 kg
TAUREX 3 Axial compact	3.7 kg
TAUREX 4 Axial compact	4.1 kg

APPLICATIONS

The special pistols of TAURUS® Axial offer the option of installation in production systems and simultaneously allow flexible and handheld ergonomic work in applications with restricted accessibility that require a vertical, downwards oriented riveting action.

In order to ensure that no gap is left between the components to be riveted and the setting head effectively makes contact with the application, the TAURUS® Axial can be additionally supplied with a spring loaded-trigger system. A compressed air supply is additionally required for reliable mandrel evacuation. Depending on the application, this is preferably achieved via the balancer with valve or the time delay valve (see page 125).

WORKING RANGE

- Processing blind rivets up to 6.4 mm Ø all materials and up to 8 mm Ø alu (max. mandrel dia. 4.5 mm)
- Same performance and technical data as the respective individual units in the TAURUS® series 1-4

ADVANTAGES

- Pressure transducer attached in a space-saving manner directly to the device, i.e. also for applications in tight spaces
- Technical design close to the TAUREX Axial
- Also perfectly designed for fixed installation in production lines or semi-automatic workstations
- Very practical for processing blind rivets in positions that require a vertical rivet setting process
- The tool can be equipped with almost all TAURUS® series options: e.g. extension units, blind rivet counter, spring loaded trigger system and remote control
- The handle in the rivet axis allows ergonomic work – especially in vertical applications
- Can be suspended on a balancer

TOOL	No.
TAURUS® 1 Axial	**145 7682**
TAURUS® 2 Axial	**145 7795**
TAURUS® 3 Axial	**145 7893**
TAURUS® 4 Axial	**145 0981**
TAURUS® 1 Axial with spring-loaded trigger system	**145 7683**
TAURUS® 2 Axial with spring-loaded trigger system	**145 7796**
TAURUS® 3 Axial with spring-loaded trigger system	**145 7894**
TAURUS® 4 Axial with spring-loaded trigger system	**145 0982**

The TAURUS®-series 1-4 in axial version – the cost-efficient introductory version for special applications

TAURUS® 1-4 AXIAL ECO

TECHNICAL DATA

Operating air pressure:	5 to 7 bar
Air hose connection :	6 mm (1/4“)
Noise emission:	max. 79 dB
Vibrations:	< 2.9 m/s²
Weight:	
TAURUS® 1 Axial eco	2.0 kg
TAURUS® 2 Axial eco	2.3 kg
TAURUS® 3 Axial eco	2.6 kg
TAURUS® 4 Axial eco	3.0 kg

APPLICATIONS
Analog to the TAURUS® 1-4 Axial (S. 119)

WORKING RANGE
Analog to the TAURUS® 1-4 Axial

ADVANTAGES
Analog to the TAURUS® 1-4 Axial

ADDITIONAL ADVANTAGES
- Cost-efficient basic version
- Integrated mandrel evacuation for disposal of the spent mandrel

TOOL	No.
TAURUS® 1 Axial eco	**145 7676**
TAURUS® 2 Axial eco	**145 7798**
TAURUS® 3 Axial eco	**145 7898**
TAURUS® 4 Axial eco	**145 7980**
TAURUS® 1 Axial eco with spring-loaded trigger system	**145 7677**
TAURUS® 2 Axial eco with spring-loaded trigger system	**145 7799**
TAURUS® 3 Axial eco with spring-loaded trigger system	**145 7899**
TAURUS® 4 Axial eco with spring-loaded trigger system	**145 7981**

TAURUS® 1-4 C AV - with integrated setting process monitoring

TAURUS® 1-4 C AV

TAURUS® C 1-4 (with setting process monitoring)

Setting process monitoring is achieved by direct real-time analysis of traction force and traction course recorded during the setting of the rivet. All system components necessary for this operation are integrated in the tools. Analysing a setting process takes less than 1 µs.The results are directly shown by a green or red LED installed in the tool base and optionally by an acoustic signal. In addition to this individual analysis the system also provides collective analysis for the complete workpiece. The tool stores more than 260,000 setting process data which can be retrieved at any time. The system also identifies failure patterns and memorizes them for failure analysis and troubleshooting. The tools can be operated as stand-alone devices or as integrated part of a customer´s production system via the GESIPA® interface.

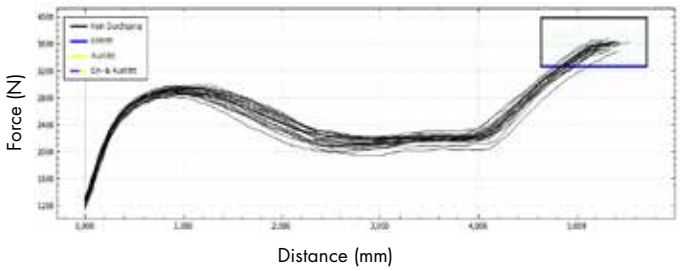
GESIPA®-INTERFACE 4.0

The GESIPA-Interface has been developed in-house at GESIPA® based on an embedded PC system. It features 16 digital inputs and outputs for communication with a PLC. Other new features compared to the Interface 2.0 are:

- 2 x Ethernet interfaces, router functions
- 1 x USB and 1 x USB-OTG
- Screen connection, graphic output via DVI
- Wi-Fi, as access point and as client, Wi-Fi router function
- Local OLED display to show status and error messages
- M.2 SSD interface, the module can be retrofitted with an SSD (large databases)
- PCIe connector for Hilscher netJACK modules (i.e. direct connection to industrial buses such as PROFINET, SERCOS and EtherCAT possible)

HIGH-GRADE GESIPA® BLIND RIVET WITH MINIMAL SCATTER:

- Minimal scatter of the graphs
- All graphs end in the break-off window
- 20x OK riveting



WinTech – multi-window technology with up to three assessment windows

TAURUS® WINTECH

Ideal for demanding joining technology used for safety components such as in the aviation industry. The basis for monitoring the WinTech setting process is the tried and tested TAURUS® C. The setting process is evaluated with the aid of position and force sensors as well as integrated electronic circuitry. Up to three evaluation windows can be configured with special setup software. A coloured LED on the tool shows the result of setting process monitoring. With a data line, the values can also be recorded and further processed.

Consultation, price and delivery time on request

APPLICATION

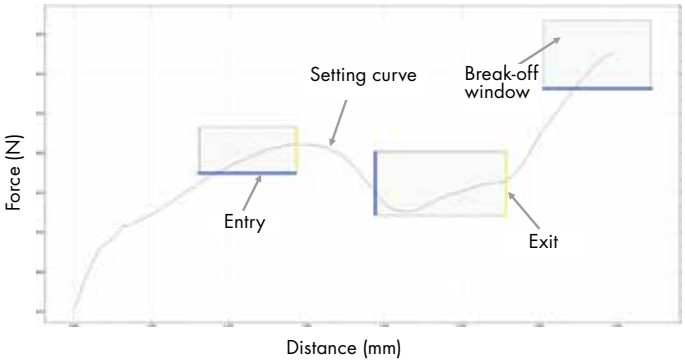
In the production of critical components as well as in automatic setting processes, the TAURUS® C can facilitate monitoring and documentation of the results.

ADVANTAGES

- High process reliability
- Documentation of each individual setting operation
- Less scrap as faults are detected immediately
- Avoidance of additional costs/quality costs due to NOK parts
- The customer can configure how to enter and exit the assessment window
- Flush-break rivets (MEGA GRIP®) can also be monitored

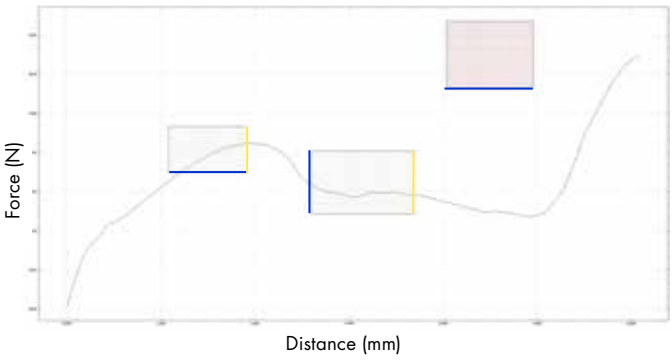
EXAMPLE OF OK PROCESS

Window entry and exit at customer-defined positions



EXAMPLE OF NOT OK PROCESS

Material to be joined too thin due to missing compo-



VIDEO

The whole TAURUS® series with remote pressure transducer – for even more flexibility, versatility and ergonomy

TAUREX 1-6

Now with even more flexible hose

COMMON TECHNICAL DATA

Operating air pressure:	5 to 7 bar
Air hose connection:	6 mm (1/4")
Noise emission:	max. 79 dB
Vibrations:	< 2.9 m/s²

WORKING RANGE

- All blind rivets and lockbolts up to a mandrel
- breaking force of 50 kN
- Same performance and technical characteristics as the respective individual units in the TAURUS® series 1-4, 5-6 with different stroke
- 3 metres hose length between pressure transducer and setting pistol

ADVANTAGES

- Low weight of the hand held tool
- Tubing connection with quick-connect feature (upon request) on the pressure transducer side:
- No oil leak and no air bleeding
- Ideally suited for setting of blind rivets and lockbolts in poorly accessible locations
- Also perfectly designed for fixed installation in production lines or semi-automatic workstations
- Can be combined with almost all supplements and options of the TAURUS® series: head extensions, mandrel containers, rivet counting units, process control, pressure trigger and remote control

TOOL	No.
TAUREX 1	**145 8025**
TAUREX 2	**145 8031**
TAUREX 3	**145 8044**
TAUREX 4	**145 8058**
TAUREX 5*	**145 8060**
TAUREX 6*	**145 8062**

*TAUREX 5 and 6 tools must be equipped with heads that are specially designed for their application field. Production on request.

The TAURUS® series 1-4 with remote mounted pressure transducer in axial version – making it more flexible, versatile and ergonomic

TAUREX 1-4 AXIAL

TECHNICAL DATA

Operating air pressure:	5 to 7 bar
Air hose connection:	6 mm (1/4")
Noise emission:	max. 79 dB
Vibrations:	< 2.9 m/s²
Weight:	
TAUREX 1 Axial	2.4 kg
TAUREX 2 Axial	2.7 kg
TAUREX 3 Axial	3.0 kg
TAUREX 4 Axial	3.1 kg

APPLICATIONS

The TAUREX Axial is a particular advantage in restricted spaces due to the separate pressure transducer mounted in the working direction. The special pistols of TAUREX Axial offer the option of installation in production systems and simultaneously allow flexible and handheld ergonomic work in applications with restricted accessibility that require a vertical, downwards oriented riveting action.
In order to ensure that no gap is left between the components to be riveted and the setting head effectively makes contact with the application, the TAUREX Axial can be additionally supplied with a spring-loaded trigger system.
It is essential to use an external suction system with the TAUREX Axial!

A compressed air supply is additionally required for reliable mandrel evacuation. Depending on the application, this is preferably achieved via the balancer with valve or the time delay valve (see page 130).

WORKING RANGE

- Sets blind rivets up to 6.4 mm Ø all materials and up to 8 mm Ø alu (max. mandrel dia 4.5 mm)
- Same performance and technical data as the respective TAURUS® series 1-4
- 3 metre hose length between pressure transducer and setting pistol

ADVANTAGES

- Also perfectly designed for fixed installation in production lines or semi-automatic workstations
- Very practical for processing blind rivets in positions that require a vertical rivet setting process
- Low weight of the hand held tool
- Tubing connection with quick-connect feature (upon request) on the pressure transducer side: No oil leak and no air bleeding
- The tool can be equipped with almost all TAURUS® series options: e.g. extension units, blind rivet counter, spring loaded trigger system and remote control
- The handle in the rivet axle allows ergonomic work – especially in vertical applications
- Can be suspended on a balancer

TOOL	No.
TAUREX 1 Axial	**145 8026**
TAUREX 2 Axial	**145 8032**
TAUREX 3 Axial	**145 8047**
TAUREX 4 Axial	**145 1019**
TAUREX 1 Axial with spring-loaded trigger system	**145 1002**
TAUREX 2 Axial with spring-loaded trigger system	**145 8033**
TAUREX 3 Axial with spring-loaded trigger system	**145 1016**
TAUREX 4 Axial with spring-loaded trigger system	**145 1020**

The TAURUS® series 1-4 with an axial pressure transducer mounted directly on the device – for use in tight working spaces

TAUREX 1-4 AXIAL COMPACT

TECHNICAL DATA

Operating pressure:	5 to 7 bar
Air hose connection:	6 mm (1/4")
Noise emission:	max. 79 dB
Vibrations:	< 2.9 m/s²
Weight:	
TAUREX 1 Axial compact	3.1 kg
TAUREX 2 Axial compact	3.4 kg
TAUREX 3 Axial compact	3.7 kg
TAUREX 4 Axial compact	4.1 kg

APPLICATIONS

The TAUREX Axial compact is a particular advantage in enclosed spaces due to the pressure transducer mounted close and parallel to the tool's axis. The special pistols of TAUREX Axial compact offer the option of installation in production systems and simultaneously allow flexible and handheld ergonomic work in applications with restricted accessibility that require a vertical, downwards oriented riveting action. In order to ensure that no gap is left between the components to be riveted and the setting head effectively makes contact with the application, the TAUREX Axial compact can be additionally supplied with a spring-loaded trigger system (see page 130).

WORKING RANGE

Processing blind rivets up to 6.4 Ø all materials and up to 8 mm Ø alu (max. mandrel dia. 4.5 mm)
Same performance and technical data as the respective individual units in the TAURUS® series 1-4

ADVANTAGES

- Pressure transducer attached in a space-saving manner directly to the device, i.e. also for applications in tight spaces
- Technical design close to the TAUREX Axial
- Also perfectly designed for fixed installation in production lines or semi-automatic workstations
- Very practical for processing blind rivets in positions that require a vertical rivet setting process
- The tool can be equipped with almost all TAURUS® series options: e.g. extension units, blind rivet counter, springloaded trigger system and remote control
- The handle in the rivet axis allows ergonomic work – especially in vertical applications.
- Can be suspended on a balancer

TOOL	No.
TAUREX 1 Axial compact	**145 1003**
TAUREX 2 Axial compact	**145 8034**
TAUREX 3 Axial compact	**145 8048**
TAUREX 4 Axial compact	**145 8059**
TAUREX 1 Axial compact with spring-loaded trigger system	**145 8027**
TAUREX 2 Axial compact with spring-loaded trigger system	**145 8035**
TAUREX 3 Axial compact with spring-loaded trigger system	**145 8049**
TAUREX 4 Axial compact with spring-loaded trigger system	**145 1022**

TAURUS® 1-4 WITH SPRING-LOADED TRIGGER SYSTEM

The spring-loaded trigger system ensures that the components which are to be riveted are reliably placed one on top of the other gapfree prior to the riveting process. Furthermore, this ensures that the blind rivet reaches its end position in the bore prior to the setting process and that the setting head is in the right position.
The pressure force can be variably applied depending on the application.
The spring-loaded trigger system cannot be retrofitted but is supplied completely attached.

TAURUS® 1 with spring-loaded trigger system
No. 145 7680

TAURUS® 2 with spring-loaded trigger system
No. 145 7778

TAURUS® 3 with spring-loaded trigger system
No. 143 5869

TAURUS® 4 with spring-loaded trigger system
No. 145 7965

New feature:
Adjustable range from 15 to 75 N / Guaranteed easy-to-apply contact / force by use of springs

TAURUS® 1-4 WITH PH2000 SPENT MANDREL CONTAINER

The fixed mounted, large PH 2000 mandrel container is very sturdy and particularly suited to long mandrels from 50 to 70 mm in length. The container fits all TAURUS® versions 1 to 4.

TAURUS® 1 with PH 2000 spent mandrel container
No. 145 7669

TAURUS® 2 with PH 2000 spent mandrel container
No. 145 7780

TAURUS® 3 with PH 2000 spent mandrel container
No. 145 7878

TAURUS® 4 with PH 2000 spent mandrel container
No. 145 7970

107 You will find the corresponding conversion kits on **page107**

TAURUS® TOOLS FOR STATIONARY USE IN PRODUCTION SYSTEMS

The TAURUS® tools can be integrated as stationary units in automatic production systems and operated by remote control, if required. As an option, a low-pressure connection can be used to detect the blind rivet in the nosepiece.

If required, the spent mandrel can be disposed of by means of an evacuation tube and also monitored by a sensor. In stationary production systems, several tools can be operated automatically and in parallel in order to achieve the highest possible level of efficiency.

PH 2

Hydro-pneumatic blind rivet setting tool

No. 145 6771

TECHNICAL DATA

Weight:	1.3 kg
Operating air pressure:	5 - 7 bar
Air hose connection:	6 mm Ø (1/4'')
Air consumption:	1.2 - 1.8 ltr. per rivet (0.3 ltr. compr. air)
Traction power:	8,800 N at 6 bar
Stroke:	15 mm

WORKING RANGE

Blind rivets from 3 up to 5 mm Ø all materials and blind rivets with 2.4 mm up to 3.2mm Ø with small jaws (page 155). **Not suitable for stainless steel CAP® blind rivets**.

SCOPE OF DELIVERY

Nosepieces: 16/24, 16/27, 16/29, 16/32 and 16/36
1 set of jaws, 1 spent mandrel bottle,
1 wrench each of MSU and MSZ,
Maintenance instructions with spare parts list

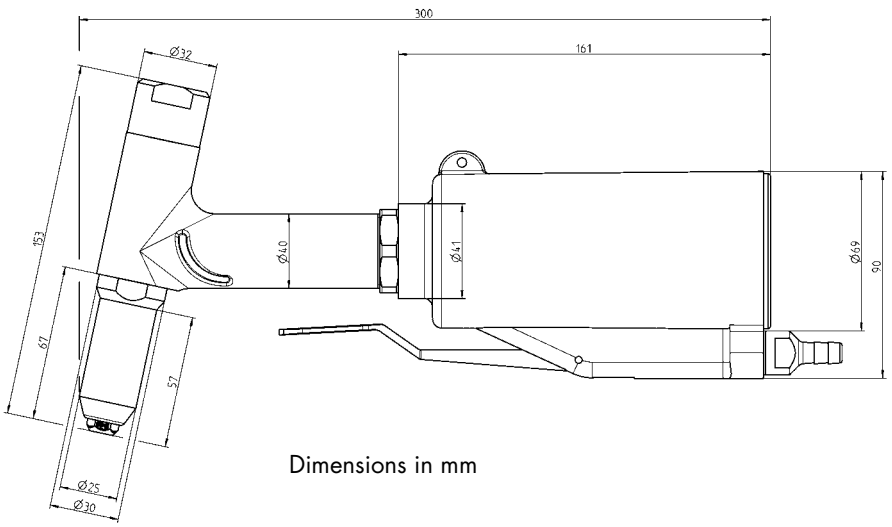
ADVANTAGES

- Hydraulic head made of aluminium with wear-proof cylinder surface
- Pneumatic cylinder made of die cast aluminium
- Pistons: Steel hardened and chrome-plated – smooth operation and wear-proof
- Compact seals are wear-proof for a long service life
- Fast venting valve for fast return and high working sequence
- Low-noise pneumatic switching
- Simple, low-interruption valve design
- Hydraulic head can be adjusted by 360°
- Favourable centre of gravity and handle design for fatigue-free handling

JAWS (3 PARTS)

for PH 2 and PH 2000

No. 143 4103



Dimensions in mm

PH 2-VK

Hydro-pneumatic blind rivet setting tool

No. 145 6774

TECHNICAL DATA

Weight:	1.3 kg
Operating air pressure:	5 - 7 bar
Air hose connection:	6 mm Ø (1/4'')
Air consumption:	1.2-1.8 ltr. per rivet (0.3 ltr. compr. air)
Traction power:	6,200 N at 6 bar
Stroke:	14 mm

WORKING RANGE
Blind rivets up to 4 mm Ø alu, steel and copper

SCOPE OF DELIVERY
Nosepieces: 10/18, 10/24 and 10/27
1spent mandrel bottle,
1 maintenance wrench of MSU and MSZ,
maintenance instructions with spare parts list

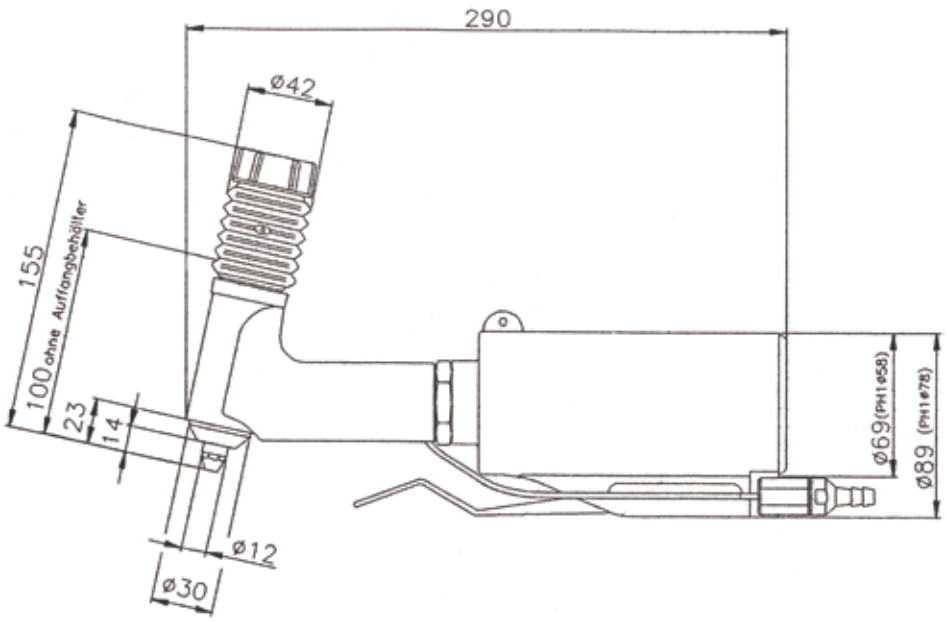
JAWS (2 PARTS)
for PH 2-VK

No. 143 4071

VK: Shorter version of the pistol head for difficult to access rivets

ADVANTAGES

- Due to the shortened gun head, the PH2-VK is ideal for difficult-to-access areas/riveting points

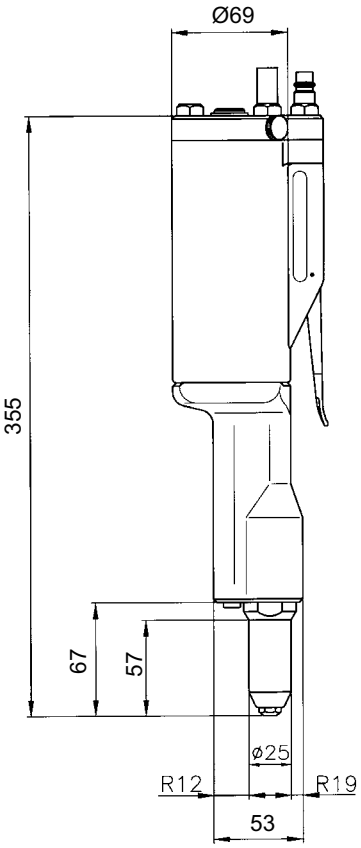


Dimensions in mm

PH AXIAL

Hydro-pneumatic blind rivet setting tool

No. 145 8063



Dimensions in mm

TECHNICAL DATA

Weight:	1.8 kg
Operating air pressure:	5 - 7 bar
Air hose connection:	6 mm Ø (1/4")
Air consumption:	1.2-1.8 ltr. per rivet (0.3 ltr. compr. air)
Traction power:	8,800 N at 6 bar
Stroke:	15 mm

WORKING RANGE

Blind rivets from 4 up to 5 mm Ø steel and 2.4 up to 3.2 mm Ø with small jaw assemly (page 132).

SCOPE OF DELIVERY

Nosepieces: 16/24, 16/27, 16/29 and 16/32
Jaw pusher with reducing tube no.125 for 4 mm Ø blind rivets in alu and copper
Ejection tube with socket for spent mandrels
Maintenance instructions and spare parts list

JAWS (3 PARTS) for PH Axial

No. 143 4103

ADVANTAGES

- Pneumatic cylinder and hydraulic head with jaw mechanism arranged axially behind each other: simple and easy handling when used vertically (e.g. desktop assembly points)
- Integrated blind rivet suction and rivet mandrel ejection system: does not need to be retrofitted, secure disposal of the spent mandrels in a central container via a hose
- Hydraulic head in aluminium with wear-proof cylinder surface
- Pneumatic cylinder made of die cast aluminium
- Working piston made of hardened and hard chromium plated steel macke the device easy to handle and wear-proof
- Compact seals are wear-proof with large scraper effect, long service life
- Fast venting system: faster return; high work sequence
- Low-noise pneumatic switching
- Simple valve structure: interruption free

HEAD MODULES FOR TAURUS® 5-6 AND TAUREX 5-6

Adaption takes priority
The TAURUS® 5 and 6 riveting tools must be adapted to the different kinds of rivets and lockbolts through specific pulling head modules

The suitability of nosepiece and fastener needs to be tested by the user and is user's own responsibility!

Head module for 7.8 mm Titgemeyer TIBULB*

No. 145 8008

Head module for 9.8 mm Huck Magna-Lok®*

No. 145 8009

* partly registered trademarks of TITGEMEYER GmbH & Co. KG or Alcoa Fastening Systems

Other head modules on request.

3

BALANCER AND TIME DELAY VALVE

for all TAURUS® 1-4-Axial- and TAUREX 1-4-Axial tools

To cover various requirements, two balancer models for suspending the TAURUS® Axial tools are available. If the tube for evacuating the spent mandrel can be kept very short, no external mandrel evacuation assistance is necessary which means a balancer without valve is sufficient.

However, if due to the tube length external evacuation assistance of the mandrel becomes necessary it can be switched on and off by means of the valve balancer in order to save cost-intensive compressed air.

Balancer without valve

No. 143 4734

BALANCER WITH DISCONNECTING VALVE

The balancer with disconnecting valve is used when the blind rivet is to be inserted into the tool. In this case the valve interrupts the compressed air necessary to generate negative pressure when in its highest position.

Balancer with disconnecting valveil

No. 145 7733

SPECIAL ACCESSORIES TAURUS®/TAUREX versions/PH tools

TIME DELAY VALVE
The time delay valve on the other hand is used when the blind rivet is to be inserted into the part. During the rivet setting procedure, the valve activates the compressed air required to create a vacuum and shuts it off after a set time.

Time delay valve
No. 145 0893

INTERFACE 4.0
FOR CONNECTION TO
EXTERNAL CONTROLLERS
The new communication interface between GESIPA® tools and production

No. 163 4326

SMALL JAW ASSEMBLY FOR PH 2, PH 2000 AND PH-AXIAL
With reduced head diameter (18 mm) and 2 part jaws.

Working range
up to 4 mm Ø stainless steel and 5 mm Ø alu
Scope of supply
Standard: nosepiece 10/24 (optional also with nosepiece 10/18.10/27, 10/29, 10/32)

PH 2
No. 145 6783

PH 2000
No. 143 4234

PH Axial
No. 145 8075

SPECIAL STEEL SLEEVE AF 20/AF 30
FOR TAURUS®SERIES
With reduced steel sleeve diameter to overcome installation space limitations.

Working capacity
All materials in all diameters

AF 20: TAURUS® 1-4
No. 145 8001

AF 30: TAURUS® 5-6
No. 160 8786

MULTI-PIECE EXTENSION UNITS

For riveted joints in low-lying places. Screwed in between the device and the existing steel case

Total length = steel head sleeve + extension + standard nosepiece

PH tools
The total length of the steel head sleeve, including the extension unit, is 157 mm for 100 mm.

TOOL	100 mm
PH 2	145 6779

UNIVERSAL NOSEPIECE – 16

for blind rivet tools HN 2, PH 2, PH 2000

The universal nosepiece replaces five nosepiece sizes. The integrated rotary star in the steel sleeve can be unlocked easily without tools in order to select the appropriate size of nosepiece.

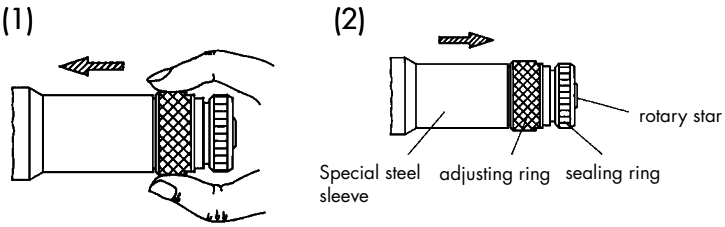
No. 145 6776

WORKING RANGE

Blind rivets from 2.4 up to 5 mm Ø alu, copper and steel and up to 4 mm Ø stainless steel.

OPERATION

Operate the tool and hold trigger, then push back adjusting ring to end position (1).
By turning the rotary star (2).



The universal nosepiece includes: Special steel sleeve, complete adjusting ring, rotary star and sealing ring.

VAS

Vacuum absorption system for PH2

No. 145 7579

This device absorbs the spent mandrel after the riveting operation and transports it automatically into the mandrel container. A further advantage is offered when the rivet, inserted into the nosepiece, is held in the jaw mechanism even if the tool head is in the vertical downwards position. The vacuum absorption device is available as a complete built-in and can also be retrofitted to existing GESIPA® riveting power tools at any time.

TECHNICAL DATA

Weight of kit:	430 g
Operating air pressure:	4-6 bar

SCOPE OF DELIVERY

1 air deflector
1 wrench MSU
Maintenance instructions with spare parts list

OFFSET HEAD FOR PH2

For setting rivets in places with difficult access and in corners

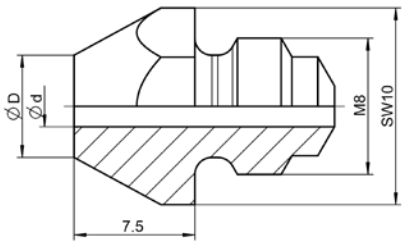
Offset head for PH2 with 3 part jaws
No. 145 6612

NOSEPIECES STANDARD + SPECIAL LENGTH

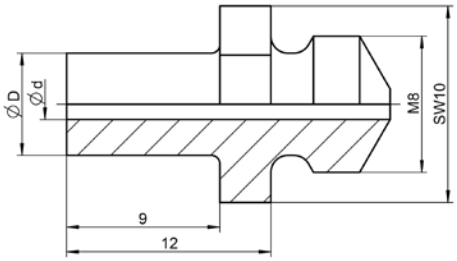
NTS, NTX, NTX-F, Flipper®, SN 1, PH 1, PH 2-VK

Ø	Material	Ø d	Ø D	Standard	No.	V (9mm)	No.
2.4	Alu	1.6	6.0	10/16	**143 4054**		
2.4	Alu	1.8	6.0	10/18	**143 4055**	V-10/18	**143 4096**
3.2	CAP®-Alu, CAP®-Copper	1.8	6.0	10/18	**143 4055**	V-10/18	**143 4096**
3 and 3.2	Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu, PG-Alu, PG-Steel	2.4	6.0	10/24	**143 4061**	V-10/24	**143 4097**
4	Alu, Cu	2.4	6.0	10/24	**143 4061**	V-10/24	**143 4097**
4	Steel, CAP®-Alu, CAP®-Cu, Alu/Alu, PG-Alu	2.7	6.0	10/27	**143 4062**	V-10/27	**143 4098**
4	Stainless steel, Stinox, PG-Steel	2.9	8.0	10/29	**143 4064**	V-10/29	**143 4099**
4.8	CAP®-Alu, CAP®-Cu	2.9	8.0	10/29	**143 4064**	V-10/29	**143 4099**
4.8 and 5	Alu, PG-Alu	3.2	8.0	10/32	**143 4065**	V-10/32	**143 4100**
4	Plastic	3.0	-	10/30 K	**143 4092**	-	**-**
5	Plastic	3.5	-	10/35 K	**143 4093**	-	**-**
6	Plastic	4.0	-	10/40 K	**143 4094**	-	**-**

Standard version
10/..... Nosepieces



Extended version (9mm)
V-10/.....Nosepieces



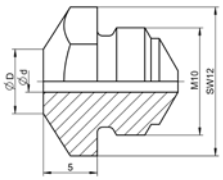
The name of the nosepiece (e.g. 17/32) can be found directly on the nosepiece.

NOSEPIECES STANDARD

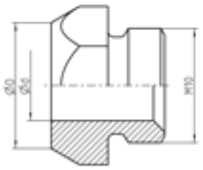
Flipper® Plus

Ø	Material	Ø d	Ø D	Standard	No.
2.4	Alu	2.0	6.0	12/20	**157 2920**
3.2	CAP®-Alu, CAP®-Cu	2.0	6.0	12/20	**157 2920**
3 and 3.2	Alu, Cu, Steel, Stainless steel, Stinox, Alu, PG-Alu, PG-Steel	2.4	6.0	12/24	**157 2924**
4	Alu, Cu	2.4	6.0	12/24	**157 2924**
4	Steel, CAP®-Alu, CAP®-Cu, Alu,	2.4	6.0	12/24	**157 2924**
4	Stainless steel, Stinox, PG-Steel	2.9	8.0	12/29	**157 2925**
4.8	CAP®-Alu, CAP®-Cu	2.9	8.0	12/29	**157 2925**
4.8 and 5	Alu, PG-Alu	3.2	8.0	12/32	**161 8800**
4.8 and 5	Steel, Alu	3.2	8.0	12/32	**161 8800**
BLIND RIVET NUTS					
M4	Alu, Steel	4.15	11.0	12/M4	**157 2926**
M5	Alu, Steel, PG-Alu, PG-Steel	5.15	11.0	12/M5	**157 2927**
M6	Alu, PG-Alu	6.15	11.0	12/M6	**157 2929**

Standard version
12/..... Nosepieces



Standard version BRN
12/M..... Nosepieces

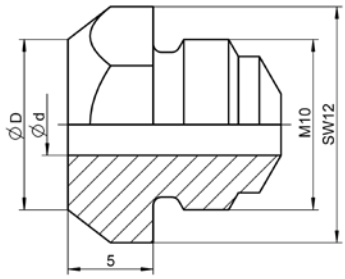


NEW: NOSEPIECE ALLOCATION CARD > Page 135

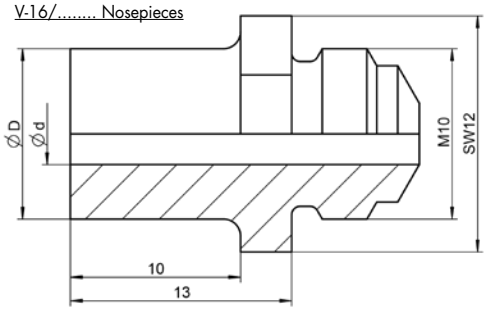
NOSEPIECES STANDARD + SPECIAL LENGTH HN 2, PH 1, PH 2, PH 2-VK, PH Axial, PH 2000

Ø	Material	Ø d	Ø D	Standard	No.	V (10 mm)	No.
2.4	Alu	1.8	**6.0**	16/18	**143 4285**	V-16/18	**143 4370**
3.2	CAP®-Alu, CAP® Copper	1.8	**6.0**	16/18	**143 4285**	V-16/18	**143 4370**
3	Alu/Cu	2.0	**6.0**	16/20	**143 4287**	V-16/20	**143 4371**
3 and 3.2	Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu, PG-Alu, PG-Steel	2.4	**6.0**	16/24	**143 4288**	V-16/24	**143 4372**
4	Alu, Cu, CAP®-Alu, CAP®-Cu	2.4	**6.0**	16/24	**143 4288**	V-16/24	**143 4372**
4	Steel, Alu/Alu, PG-Alu	2.7	**8.0**	16/27	**143 4289**	V-16/27	**143 4373**
4	Stainless steel, Stinox, PG-Steel	3.0	**8.0**	16/29	**143 4290**	V-16/29	**143 4374**
4.8 and 5	Alu, CAP®-Alu, CAP®-Cu, PG-Alu	3.0	**8.0**	16/29	**143 4290**	V-16/29	**143 4374**
4.8 and 5	Steel, Alu/Alu	3.35	**8.0**	16/32	**143 4291**	V-16/32	**143 4375**
4.8 and 5	Stainless steel, Stinox, PG-Steel	3.6	**10.0**	16/36	**143 4292**	V-16/36	**143 4376**
6	Alu	3.6	**10.0**	16/36	**143 4292**	V-16/36	**143 4376**
6	Steel	4.0	**10.0**	16/40	**143 4293**	V-16/40	**143 4369**
6.4	Alu, PG-Alu	4.0	**10.0**	16/40	**143 4293**	V-16/40	**143 4369**
6.4	Steel, Alu/Alu	4.5	**10.0**	16/45	**143 4300**	V-16/45	**143 4378**
4	Plastic	3.0	-	16/30 K	**143 4130**		
5	Plastic	3.5	-	16/35 K	**143 4131**		
6	Plastic	4.0	-	16/40 K	**143 4132**		

Standard version
16/..... Nosepieces

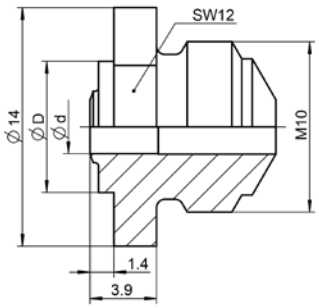


Extended version (10 mm)
V-16/..... Nosepieces



MEGA GRIP® / Monobolt®

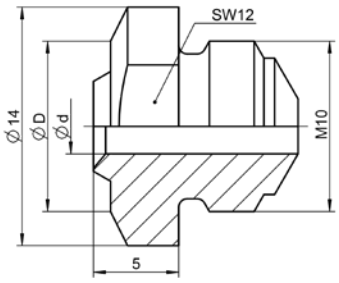
Ø	Material	Ø d	Ø D	Designation	No.
4.8	all MEGA GRIP®	3.1	8.0	16/31 MG	**143 4380**
6.4	all MEGA GRIP®	4.2	10.0	16/41 MG	**143 4381**
4.8	Monobolt®	3.15	7.7	16/31 MB	**143 4379**
6.4	Monobolt®	4.2	9.5	16/42 MB	**143 4163**



The suitability of nosepiece and fastener needs to be tested by the user and is user's own responsibility!

BULB-TITE®

Ø	Material	Ø d	Ø D	Designation	No.
4	all BULB-TITE®	2.64	8.0	16/26 BT	**143 4301**
5.2	all BULB-TITE®	3.23	10.0	16/32 BT	**143 4302**
6.3	all BULB-TITE®	4.2	11.0	16/42 BT	**143 4303**
7.7	all BULB-TITE®	4.8	10.0	16/48 BT	**143 4304**



NOSEPIECES STANDARD + SPECIAL LENGTH

SN2, AccuBird®, AccuBird® Pro, PowerBird®, PowerBird® Pro, PowerBird® Pro Gold Edition, TAURUS®

Ø	Material	Ø d	Ø D	Standard	No.	V (8mm)	No.
2.4	Alu	1.6	6.0	17/16	**143 4972**	-	-
2.4	Alu	1.8	6.0	17/18	**143 4976**	V-17/18	**143 4979**
3.2	CAP®-Alu, CAP® Copper	1.8	6.0	17/18	**143 4976**	V-17/18	**143 4979**
3	Alu/Cu	2.0	6.0	17/20	**143 4994**	V-17/20	**145 7315**
3	Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu	2.2	6.0	17/22	**143 5018**	V-17/22	**145 7323**
3 and 3.2	Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu, PG-Alu, PG-Stahl	2.4	6.0	17/24	**143 4955**	V-17/24	**143 4980**
4	Alu, Cu, CAP®-Alu, CAP®-Cu	2.4	6.0	17/24	**143 4955**	V-17/24	**143 4980**
4	Steel, Alu/Alu, PG-Alu	2.7	8.0	17/27	**143 4973**	V-17/27	**143 4981**
4	Stainless steel, Stinox, PG-Steel	3.0	8.0	17/29	**143 4974**	V-17/29	**143 4982**
4.8 and 5	Alu, CAP®-Alu, CAP®-Cu, PG-Alu	3.0	8.0	17/29	**143 4974**	V-17/29	**143 4982**
4.8 and 5	Steel, Alu/Alu	3.35	8.0	17/32	**143 4975**	V-17/32	**143 4983**
4.8 and 5	Stainless steel, Stinox, PG-Steel	3.6	10.0	17/36	**143 4977**	V-17/36	**143 4984**
6	Alu	3.6	10.0	17/36	**143 4977**	V-17/36	**143 4984**
6	Steel	4.0	10.0	17/40	**143 4999**	V-17/40	**143 5038**
6.4	Alu, PG-Alu	4.0	10.0	17/40	**143 4999**	V-17/40	**143 5038**
6.4	Steel, Alu/Alu	4.5	10.0	17/45	**143 4860**	V-17/45	**143 4866**
4	Plastic	3.0	-	17/30 K	**143 4933**	-	-
5	Plastic	3.5	-	17/35 K	**143 5824**	-	-
6	Plastic	4.0	-	17/40 K	**143 4998**	-	-

MEGA GRIP® / Monobolt®

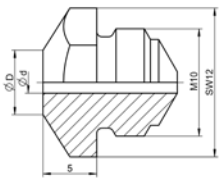
4.8	all MEGA GRIP®	3.1	8.0	17/31 MG	**143 4993**
6.4	all MEGA GRIP®	4.2	10.0	17/41 MG	**143 4865**
4.8	Monobolt®	3.1	8.0	17/31 MB	**143 4868**
6.4	Monobolt®	4.2	9.5	17/42 MB	**143 4869**

BULB-TITE®

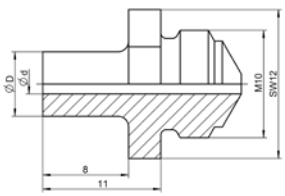
4	all BULB-TITE®	2.64	8.0	17/26 BT	**143 4985**
5.2	all BULB-TITE®	3.23	10.0	17/32 BT	**143 4986**
6.3	all BULB-TITE®	4.2	11.0	17/42 BT	**143 4988**
7.7	all BULB-TITE®	4.8	10.0	17/48 BT	**143 4989**

The name of the nosepiece (e.g. 17/32) can be found directly on the nosepiece.

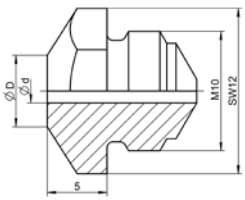
Standard version
17/.....Nosepieces



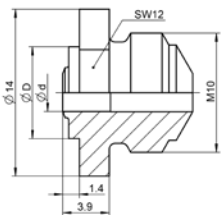
Extended version (8 mm)
V-17/.....Nosepieces



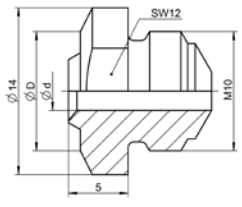
Special version
17/.....MG Nosepieces



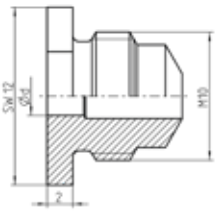
Special version
17/.....MB Nosepieces



Special version
17/.....BT Nosepieces



Special version
17/.....Plastic Nosepieces

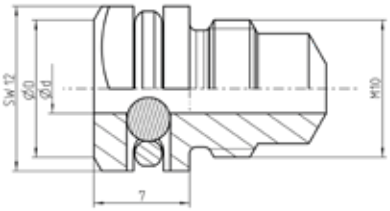


The suitability of nosepiece and fastener needs to be tested by the user and is user's own responsibility!

RETAINING NOSEPIECES

for SN 2, AccuBird®, AccuBird® Pro, PowerBird®, PowerBird® Pro, PowerBird® Pro Gold Edition

Ø	Material	Ø d	Designation	No.
2.4	Alu	1.85	17/18 R	**165 5422**
3.2	CAP®-Alu, CAP® Copper	1.85	17/18 R	**165 5422**
3	Alu/Cu Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu	2.0	17/20 R	**165 5424**
3	Alu, Cu, Steel, Stainless steel, Stinox	2.2	17/22 R	**165 5426**
3 and 3.2	Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu, PG-Alu, PG-Steel	2.4	17/24 R	**165 5427**
4	Alu, Cu, CAP®-Alu, CAP®-Cu	2.4	17/24 R	**165 5427**
4	Steel, Alu/Alu, PG-Alu	2.7	17/27 R	**165 5428**
4	Stainless steel, Stinox, PG-Steel	2.9	17/29 R	**165 5429**
4.8 and 5	Alu, CAP®-Alu, CAP®-Cu, PG-Alu	2.9	17/29 R	**165 5429**
4.8 and 5	Steel, Alu/Alu	3.2	17/32 R	**165 5430**
4.8 and 5	Stainless steel, Stinox, PG-Steel	3.6	17/36 R	**165 5431**
6	Alu	3.6	17/36 R	**165 5431**
6	Steel	4.0	17/40 R*	**165 5433**
6.4	Alu, PG-Alu	4.0	17/40 R*	**165 5433**
6.4	Steel, Alu/Alu	4.5	17/45 R*	**165 5434**

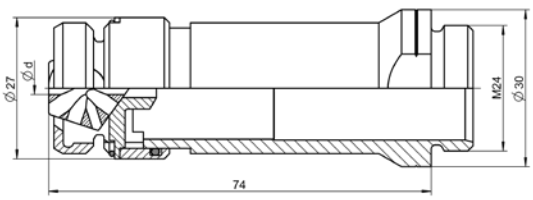


*Except AccuBird® and AccuBird® Pro

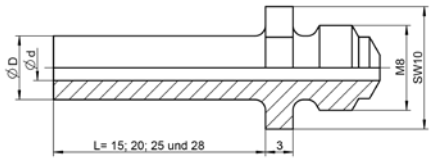
UNIVERSAL NOSEPIECE

HN2, SN 2, PH 1, PH 2, PH 2000, AccuBird®, PowerBird®

Ø	Material	Ø d	HN 2, SN 2, PH 1, PH 2, PH 2000	Bird® series
2.4	Alu	1.8	**No. 145 6776**	**No. 143 4960**
3.2	CAP®-Alu, CAP® Copper	1.8		
3 and 3.2	Alu, Cu, Stahl, Stainless steel, Stinox, Alu/Alu, PG-Alu, PG-Steel	2.4		
4	Alu, Cu, CAP®-Alu, CAP®-Cu	2.4		
4	Steel, Alu/Alu, PG-Alu	2.7		
4	Stainless steel, Stinox, PG-Steel	2.9		
4.8 and 5	Alu, CAP®-Alu, CAP®-Cu, PG-Alu	2.9		
4.8 and 5	Steel, Alu/Alu			

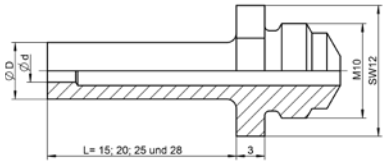


SPECIAL NOSEPIECES



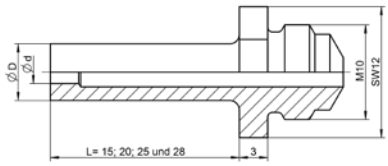
NTS, NTX, NTX-F, Flipper®, PH 1, PH 2-VK

Ø	Material	Ø d	Ø D	Designation	15 mm	20 mm	25 mm	28 mm
3 and 3.2	Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu, PG-Alu, PG-Steel	2.4	6.5	10/24 SL...	**145 6631**	**145 6630**	**145 6632**	**145 6633**
4	Alu, Cu	2.4	6.5	10/24 SL...	**145 6631**	**145 6630**	**145 6632**	**145 6633**
4	Steel, CAP®-Alu, CAP®-Cu, Alu/Alu, PG-Alu	2.7	7.0	10/27 SL...	**145 6634**	**145 6635**	**145 6636**	**145 6637**
4	Stainless steel, Stinox, PG-Steel	2.9	8.0	10/29 SL...	**145 6638**	**145 6639**	**146 4001**	**145 6640**
4.8	CAP®-Alu, CAP®-Cu	2.9	8.0	10/29 SL...	**145 6638**	**145 6639**	**146 4001**	**145 6640**
4.8 and 5	Alu, PG-Alu	3.2	8.0	10/32 SL...	**145 6641**	**145 6642**	**145 6643**	**145 6644**



HN 2, PH 1, PH 2, PH 2-VK, PH Axial, PH 2000

Ø	Material	Ø d	Ø D	Designation	15 mm	20 mm	25 mm	28 mm
3 and 3.2	Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu, PG-Alu, PG-Steel	2.4	6.0	16/24 SL...	**145 6812**	**145 6813**	**145 6814**	**145 6815**
4	Alu, Cu	2.4	6.0	16/24 SL...	**145 6812**	**145 6813**	**145 6814**	**145 6815**
4	Steel, PG-Alu	2.7	8.0	16/27 SL...	**145 6816**	**145 6817**	**145 6818**	**145 6819**
4	Stainless steel, Stinox, PG-Steel	3.0	8.0	16/29 SL...	**145 6820**	**145 6821**	**145 6822**	**145 6823**
4.8 and 5	Alu, PG-Alu	3.0	8.0	16/29 SL...	**145 6820**	**145 6821**	**145 6822**	**145 6823**
4.8 and 5	Steel	3.35	8.0	16/32 SL...	**145 6824**	**145 6825**	**145 6826**	-
4.8 and 5	Stainless steel, Stinox, PG-Steel	3.6	10.0	16/36 SL...	**145 6828**	**145 6829**	-	**145 6830**
6	Alu	3.6	10.0	16/36 SL...	**145 6828**	**145 6829**	-	**145 6830**
6.4	Alu, PG-Alu	4.0	10.0	16/40 SL...	**145 6807**	**145 6808**	-	-
6.4	Steel, Alu/Alu	4.5	10.0	16/45 SL...	**145 6805**	**145 6806**	-	-



SN2, AccuBird®, AccuBird® Pro, PowerBird®, PowerBird® Pro Gold Edition, TAURUS®

Ø	Material	Ø d	Ø D	Designation	15 mm	20 mm	25 mm	28 mm
2.4	Alu	1.8	6.0	17/18 SL...	**145 7367**	**145 7368**	**146 4039**	**146 4040**
3.2	CAP®-Alu, CAP® Copper	1.8	6.0	17/18 SL...	**145 7367**	**145 7368**	**146 4039**	**146 4040**
3	Alu/Cu	2.0	6.0	17/20 SL...	**145 7314**	**145 7305**	**146 4041**	**145 7369**
3	Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu	2.2	6.0	17/22 SL...	**145 7351**	-	**145 7349**	**145 0668**
3 and 3.2	Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu, PG-Alu, PG-Steel	2.4	6.0	17/24 SL...	**145 7370**	**145 7371**	**145 7372**	**145 7373**
4	Alu, Cu	2.4	6.0	17/24 SL...	**145 7370**	**145 7371**	**145 7372**	**145 7373**
4	Steel, PG-Alu	2.7	8.0	17/27 SL...	**145 7374**	**145 7376**	**145 7377**	**143 5035**
4	Stainless steel, Stinox, PG-Steel	3.0	8.0	17/29 SL...	**145 7378**	**145 7379**	**145 7381**	**145 7382**
4.8 and 5	Alu, PG-Alu	3.0	8.0	17/29 SL...	**145 7378**	**145 7379**	**145 7381**	**145 7382**
4.8 and 5	Steel	3.35	8.0	17/32 SL...	**145 7383**	**145 7385**	**145 7386**	**145 7388**
4.8 and 5	Stainless steel, Stinox, PG-Steel	3.6	10.0	17/36 SL...	**145 7390**	**145 7392**	**145 7393**	**145 7394**
6	Alu/Alu	3.6	10.0	17/36 SL...	**145 7390**	**145 7392**	**145 7393**	**145 7394**
6	Steel	4.0	10.0	17/40 SL...	**145 7399**	**145 7400**	**145 7401**	**145 7402**
6.4	Alu, Stainless steel, PG-Alu, PG-Steel und G-Bulb	4.5	10.0	17/45 SL...	**145 7265**	**145 0673**	**145 7404**	**145 7398**

CAUTION!
Blind rivets must be ordered as a custom-made product with extended mandrel!

DELIVERY TIMES ON REQUEST!

PLATE NOSEPIECES P WITHOUT CUT-OUT

for SN2, HN 2, PH 1, PH 2, PH Axial, PH 2000, Bird series, Bird Pro series, TAURUS®

Ø	Material	Ø d	Designation	HN 2, PH 1, PH 2, PH Axial, PH 2000 No.	Designation	TAURUS® Bird series Bird Pro series SN 2 No.
3 and 3.2	Alu, Cu, Stahl, Stainless steel, Stinox, Alu/Alu, PG-Alu, PG-Steel	2.4	P 16/24	**145 6649**	P 17/24	**145 7335**
4	Alu, Cu, CAP®-Alu, CAP®-Cu	2.4	P 16/24	**145 6649**	P 17/24	**145 7335**
4	Steel, Alu/Alu, PG-Alu	2.7	P 16/27	**145 6650**	P 17/27	**145 7336**
4	Stainless steel, Stinox, PG-Steel	3.0	P 16/29	**145 6651**	P 17/29	**145 7337**
4.8 and 5	Alu, CAP®-Alu, CAP®-Cu, PG-Alu	3.0	P 16/29	**145 6651**	P 17/29	**145 7337**
4.8 and 5	Steel, Alu/Alu	3.35	P 16/32	**145 6657**	P 17/32	**145 7338**
4.8 and 5	Stainless steel, Stinox, PG-Steel	3.6	P 16/36	**145 6656**	P 17/36	**145 7339**
6	Alu	3.6	P 16/36	**145 6656**	P 17/36	**145 7339**

For countersunk head blind rivets

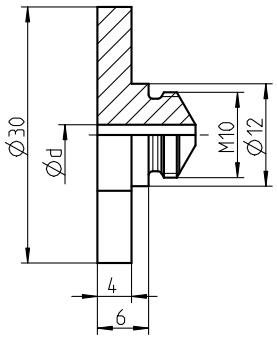
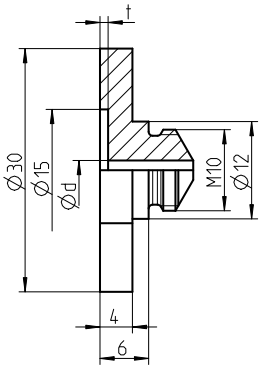


PLATE NOSEPIECE PA WITH CUT-OUT

for SN2, HN 2, PH 1, PH 2, PH Axial, PH 2000, Bird series, Bird Pro series, TAURUS®

Ø	Material	Ø d	Designation	t	HN 2, PH 1, PH 2, PH Axial, PH 2000 No.	Designation	t	TAURUS® Bird series Bird Pro series SN 2 No
3 and 3.2	Alu, Cu, Stahl, Stainless steel, Stinox, Alu/Alu, PG-Alu, PG-Steel	2.4	PA 16/24	1.0	**145 6659**	PA 17/24	1.0	**145 7330**
4	Alu, Cu, CAP®-Alu, CAP®-Cu	2.4	PA 16/24	1.0	**145 6659**	PA 17/24	1.0	**145 7330**
4	Steel, Alu/Alu, PG-Alu	2.7	PA 16/27	1.0	**145 6660**	PA 17/27	1.0	**145 7331**
4	Stainless steel, Stinox, PG-Steel	3.0	PA 16/29	1.1	**145 6661**	PA 17/29	1.1	**145 7341**
4.8 and 5	Alu, CAP®-Alu, CAP®-Cu, PG-Alu	3.0	PA 16/29	1.1	**145 6661**	PA 17/29	1.1	**145 7341**
5	Al-large flange K 11 and K 14	3.0	PA 16/29 K	1.5	**145 6652**	PA 17/29 K	1.5	**145 7332**
4.8 and 5	Steel, Alu/Alu	3.35	PA 16/32	1.1	**145 6653**	PA 17/32	1.1	**145 7333**
4.8 and 5	Stainless steel, Stinox, PG-Steel	3.6	PA 16/36	1.1	**145 6662**	PA 17/36	1.1	**145 7342**
6	Alu	3.6	PA 16/36	1.3	**145 6666**	PA 17/36	1.3	**145 7334**

For standard blind rivets (dome head)

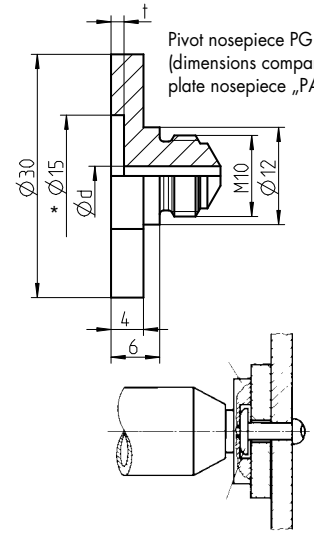


PIVOT NOSEPIECES PG (for the production of articular rivet connections)

for SN2, HN 2, PH 1, PH 2, PH Axial, PH 2000, Bird series, Bird Pro series, TAURUS®

Ø	Material	Ø d	Designation	t	HN 2, PH 1, PH 2, PH Axial, PH 2000 No.	Designation	t	TAURUS® Bird series Bird Pro series SN 2 No.
3 and 3.2	Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu, PG-Alu, PG-Steel	2.4	PG 16/24	1.6	**145 6663**	PG 17/24	1.6	**143 5002**
4	Alu, Cu, CAP®-Alu, CAP®-Cu	2.4	PG 16/24	1.6	**145 6663**	PG 17/24	1.6	**143 5002**
4	Steel, Alu/Alu, PG-Alu	2.7	PG 16/27	1.6	**145 6664**	PG 17/27	1.6	**143 5003**
4	Stainless steel, Stinox, PG-Steel	3.0	PG 16/29	1.6	**145 6655**	PG 17/29	1.6	**143 5007**
4.8 and 5	Alu, CAP®-Alu, CAP®-Cu, PG-Alu	3.0	PG 16/29	1.6	**145 6655**	PG 17/29	1.6	**143 5007**
5	Al-large flange K 11 and K 14	3.0	PG 16/29 K	2.0	**145 6658**	PG 17/29 K	2.0	**143 5004**
5	Al-large flange K 16	3.0	-	-	-	PG 17/29 K16*	2.0	**143 5009**
4.8 and 5	Steel, Alu/Alu	3.35	PG 16/32	1.6	**145 6654**	PG 17/32	1.6	**143 5005**
4.8 and 5	Stainless steel, Stinox, PG-Steel	3.6	PG 16/36	1.6	**145 6665**	PG 17/36	1.6	**143 5006**
6	Alu	3.6	PG 16/36	2.0	**146 4002**	PG 17/36	2.0	**145 7340**

Pivot nosepiece PG (dimensions compare plate nosepiece „PA")



*Please note: For PG 17/29 K16, the Ø is 17, not 15.

SPECIAL ACCESSORIES / NOSEPIECES Blind rivet setting tools with AV*

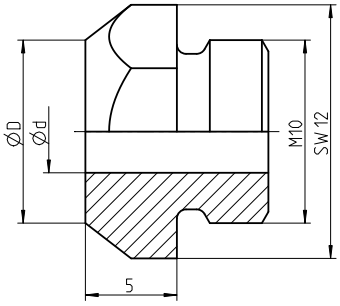
*AV = spring-loaded trigger system

NOSEPIECES FOR SETTING TOOLS WITH SPRING-LOADED TRIGGER SYSTEM
STANDARD + EXTENDED VERSION Bird Pro series and TAURUS®

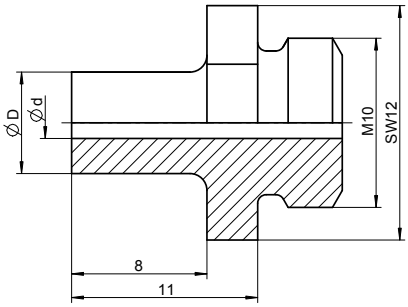
Ø	Material	Ø d	Ø D	Standard	No.	V (8mm)	No.
2.4	Alu	1.85	6.0	17/18 AV	**143 5591**	V-17/18 AV	**145 7291**
3.2	CAP®-Alu, CAP® Copper	1.85	6.0	17/18 AV	**143 5591**	V-17/18 AV	**145 7291**
3	Alu/Cu	2.0	6.0	17/20 AV	**143 4990**	V-17/20 AV	**145 0666**
3	Alu, Cu, Stahl, Stainless steel, Stinox, Alu/Alu	2.2	6.0	17/22 AV	**143 4991**	V-17/22 AV	**145 0667**
3 und 3.2	Alu, Cu, Stahl, Stainless steel, Stinox, Alu/Alu, PG-Alu, PG-Steel	2.4	6.0	17/24 AV	**143 5592**	V-17/24 AV	**145 7292**
4	Alu, Cu, CAP®-Alu, CAP®-Cu	2.4	6.0	17/24 AV	**143 5592**	V-17/24 AV	**145 7292**
4	Steel, Alu/Alu, PG-Alu	2.7	8.0	17/27 AV	**143 5593**	V-17/27 AV	**145 0628**
4	Stainless steel, Stinox, PG-Steel	3.0	8.5	17/29 AV	**143 5594**	V-17/29 AV	**145 0629**
4.8 and 5	Alu, CAP®-Alu, CAP®-Cu, PG-Alu	3.0	8.5	17/29 AV	**143 5594**	V-17/29 AV	**145 0629**
4.8 and 5	Steel, Alu/Alu	3.35	8.5	17/32 AV	**143 5595**	V-17/32 AV	**145 7725**
4.8 and 5	Stainless steel, Stinox, PG-Steel	3.6	10.0	17/36 AV	**143 5596**	V-17/36 AV	**145 0630**
6	Alu	3.6	10.0	17/36 AV	**143 5596**	V-17/36 AV	**145 0630**
6	Steel	4.0	10.0	17/40 AV	**143 5597**	V-17/40 AV	**145 7293**
6.4	Alu, PG-Alu	4.0	10.0	17/40 AV	**143 5597**	V-17/40 AV	**145 7293**
6.4	Steel, Alu/Alu	4.5	10.0	17/45 AV	**143 5598**	V-17/45 AV	**145 0631**

The name of the nosepiece (e.g. 17/32) can be found directly on the nosepiece.

Standard version
17/.....Nosepieces



Extended version (8 mm)
V-17/.....Nosepieces

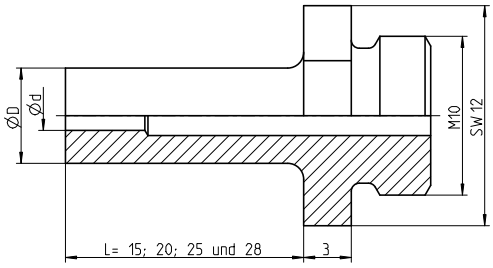


DELIVERY TIMES ON REQUEST!

NOSEPIECES EXTENDED VERSION FOR SETTING TOOLS WITH SPRING-LOADED TRIGGER SYSTEM Bird Pro series and TAURUS®

Ø	Material	Ø d	Ø D	Designation	15 mm	20 mm	25 mm	28 mm
2.4	Alu	1.85	6.0	17/18 AV SL...	**145 0634**	**145 0635**	**145 0636**	**145 0637**
3.2	CAP®-Alu, CAP® Copper	1.85	6.0	17/18 AV SL...	**145 0634**	**145 0635**	**145 0636**	**145 0637**
3	Alu/Cu	2.0	6.0	17/20 AV SL...	**145 0658**	**145 0659**	**145 0660**	**145 0661**
3	Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu	2.2	6.0	17/22 AV SL...	**145 0662**	**145 0663**	**145 0664**	**145 0665**
3 and 3.2	Alu, Cu, Steel, Stainless steel, Stinox, Alu/Alu, PG-Alu, PG-Steel	2.4	6.0	17/24 AV SL...	**145 0638**	**145 7321**	**145 0639**	**145 0640**
4	Alu, Cu	2.4	6.0	17/24 AV SL...	**145 0638**	**145 7321**	**145 0639**	**145 0640**
4	Steel, PG-Alu	2.7	8.0	17/27 AV SL...	**145 0641**	**145 7322**	**145 0642**	**145 7726**
4	Stainless steel, Stinox, PG-Steel	3.1	8.0	17/29 AV SL...	**145 7324**	**145 0643**	**145 7325**	**145 0644**
4.8 and 5	Alu, PG-Alu	3.1	8.0	17/29 AV SL...	**145 7324**	**145 0643**	**145 7325**	**145 0644**
4.8 and 5	Steel	3.35	8.0	17/32 AV SL...	**145 0645**	**145 7326**	**145 0646**	**145 0647**
4.8 and 5	Stainless steel, Stinox, PG-Steel	3.6	10.0	17/36 AV SL...	**145 0648**	**145 0649**	**145 0650**	**145 0651**
6	Alu/Alu	3.6	10.0	17/36 AV SL...	**145 0648**	**145 0649**	**145 0650**	**145 0651**
6	Steel	4.0	10.0	17/40 AV SL...	**145 7327**	**145 7328**	**145 0652**	**145 0653**
6.4	Alu, Stainless steel, PG-Alu, PG-Steel and G-Bulb	4.5	10.0	17/45 AV SL...	**145 0654**	**145 0655**	**145 0656**	**145 0657**

*AV= spring-loaded trigger system



CAUTION!
Blind rivets must be ordered as a custom-made product with extended mandrel!

DELIVERY TIMES ON REQUEST!

NOSEPIECE ALLOCATION CARD

You can also use our nosepiece allocation card. This makes it easier to select the correct nosepiece for the respective tools.

No. 168 9502

GESIPA® AUTOMATIC RIVETING MACHINES

GESIPA® automatic riveting machines – fully-automatic, practical, reliable

GAV 8000 ECO
GAV 8000 ELECTRONIC
GAV HF

- All GESIPA® blind rivet machines are perfectly suited for use in industrial large-scale production.
- GAVs can either be operated manually or used as component in a robot-controlled system; integration into a production system is also possible.
- The automatic riveting machines support the setting of a wide range of blind rivets from 2.4 – 6.4 mm in diameter.
- Up to 40 riveting processes per minute can be realized depending of the Type of application.

THE PRACTICAL MODULAR PRINCIPLE

THE PRACTICAL MODULAR PRINCIPLE GUARANTEES EFFICIENCY AND QUALITY

Individual conception for efficiency and flexibility

GESIPA®'s fully-automatic blind rivet processing systems are constructed to meet the customer's special production environment. All factors, such as workplace design, production Type, application, securing of flawless work processes, integration into the sequential organisation and also process documentation for safety-relevant parts, are taken into consideration.

GAV are therefore available with various pistol models, hose length packages, special accessories for various rivet dimensions and production requirements.
This results in a large variety of models and a high level of efficiency thanks to the solutions that are adapted to meet requirements. The GAV can be integrated into the system or operated independently. If the application changes, the system can be quickly and easily adapted to the new environment.

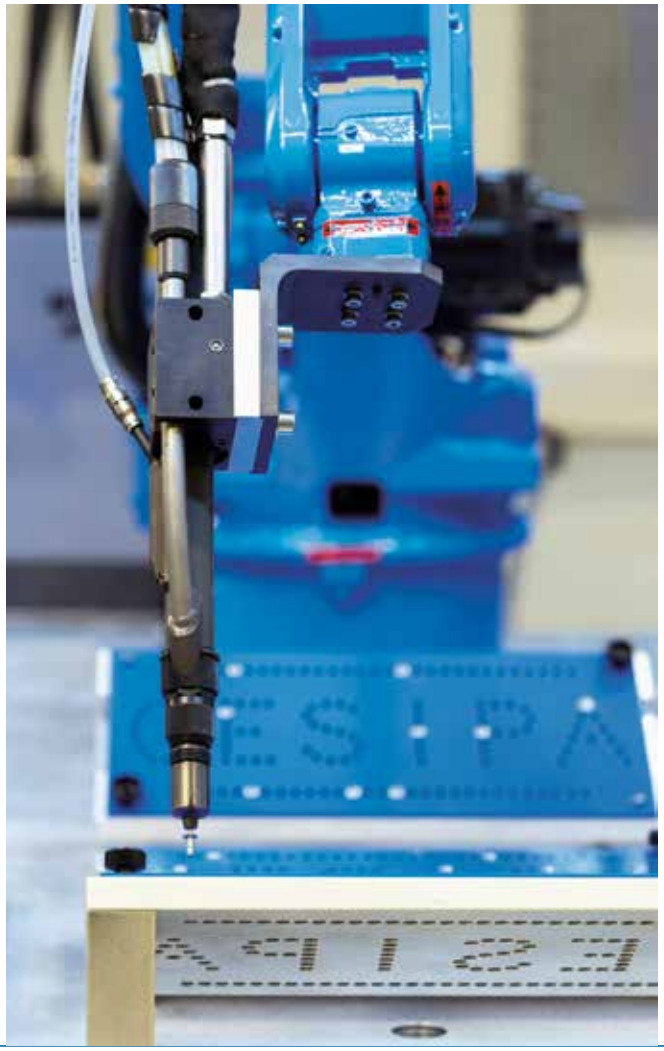
GAV – USE IN ROBOT APPLICATIONS

Use by industry in robot-controlled applications

Both versions of the GAV 8000 can be integrated into robot systems. Industrial robots are used almost everywhere in the production environment. They can be programmed to carry out various movements and can therefore be used highly efficiently in combination with the GESIPA® rivet equipment.

With the controlled, fast and secure production processes it is possible to achieve the following benefits by using a fully-automatic GAV combined with a multi-axle robot:

- **First rate precission**
- **High efficiency**
- **Short cycle times**
- **High flexibility**



BLIND RIVET FUNCTION DOCUMENTATION AND SETTING PROCESS MONITORING

THE INTEGRATED GESIPA® QUALITY MANAGEMENT SYSTEM GUARANTEES PRECISION AND ACCURACY RIGHT FROM THE VERY FIRST PRODUCTION STEP THROUGH TO THE PROCESSED BLIND RIVET.

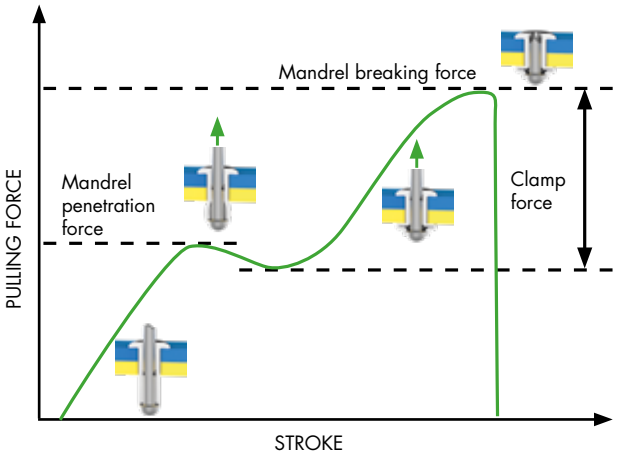
The combination of the use of function-documented blind rivets and the use of the setting process monitoring function of the GAV 8000 electronic guarantees processsecure connections.

The quality management system comprises of three areas:

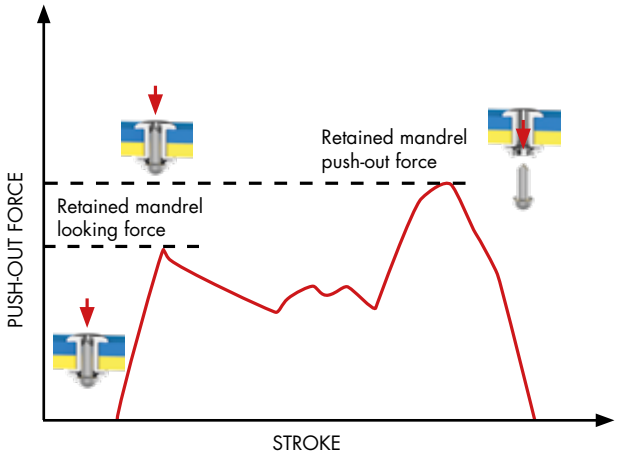
- Dimensional review
- Function test
- Setting process monitoring

.

(1)



(2)



Function documentation / Setting curve (1)
In addition to other parameters, the setting curve is measured using calibrated testing equipment for every batch of application-specific blind riveting. The measuring results of the shaft deformation, slip-in behaviour, mandrel break load and torque are compared to target values to ensure that the blind rivet in the application is deformed as required and creates a secure connection.

Monitored process – Reliable connection
100% inspections of the riveting processes are required for safety-relevant applications for industrial processing of blind rivets. In this case, the fully-automatic rivet device GAV 8000 electronic allows application-compatible efficient solutions ranging from the basic system through to a system with a barcode scanner.

Function documentation / Mandrel ejection force (2)
The remaining part of the mandrel enclosed in the set rivet is pressed out with the aid of a needle. The measured force can be used to determine whether the remaining part of the pin is properly locked and will not cause any rattling noises or fall out. The batch is only released if both these values are within tolerances.

THE CONCEPT TO THE INTEGRATED SETTING PROCESS MONITORING

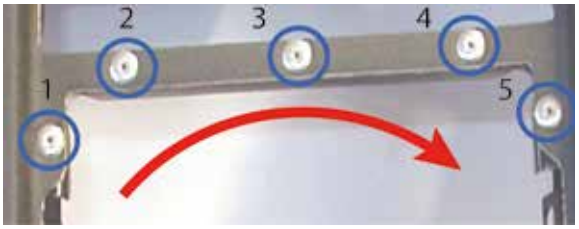
Display of a GAV 8000 electronic indicating the setting curve as part of the setting process monitoring

THE PROCESS MONITORING SYSTEM IS AN INTEGRAL PART OF THE GAV 8000 ELECTRONIC.

It offers the following benefits:

- Optimum process security thanks to integrated quality concept
- Blind rivet-specific process monitoring
- System can be operated independently
- No memory-programmable control system (SPS) required to operate the device
- No system calibration required when system is exchanged
- Little installation effort required
- Interfaces to the control integration

PROGRAMMING THE SETTING PROCESS MONITORING



The setting sequence

STEP 1:
Setting up blind rivet position-specific profiles
Recording and archiving of the relevant process parameters to create a blind rivet connection with reference process curves after defining the analysis window

STEP 2:
Generation of part-specific profile lists
Summary of the profile in the setting sequence as a control file for the process sequence and process assessment

STEP 3:
Operating the device
Online analysis and saving of the setting process data with process interruption if deviations are detected

GESIPA® AUTOMATIC RIVETING MACHINES

COMPARISON OF GAV 8000 ECO, ELECTRONIC AND GAV HF

PROPERTIES	GAV 8000 eco	GAV 8000 electronic
Range of possible sizes 2.4 mm - 6.4 mm (Alu)	x	x
Up to 40 rivet settings per minute	x	x
Independent system operation possible	x	x
PLC control possible	x	x
Intelligent control – excellent process safety	x	x
Setting of all operating parameters via the display	x	x
Customer-specific software modification	x	x
Maintenance display	x	x
Process monitoring		x
Process parameter memory for up to 9,999 different parts		x
Online transfer of the process data		x
The last 2 million rivet processes are saved in the device		x

COMPARISON OF GAV 8000 ECO, ELECTRONIC AND GAV HF

On request our technical sales team will send you more information about application possibilities in your company.

	GAV 8000 eco and GAV 8000 electronic	GAV HF
SUPPLY UNIT		
Weight	100 kg	270 kg
Spent mandrel container volume	approx. 1,800 to 5,500 pcs. (3.5 l) depending on size	approx. 1,800 to 5,500 pcs. (3.5 l) depending on size
ELECTRICS		
Nominal voltage	230 Volt ~ 50 Hz	230 Volt ~ 50 Hz
Nominal current	< 2.5 A	< 8 A
Protection class	IP 54	IP 54
PNEUMATICS		
Supply pressure	< 10 bar	< 10 bar
Operating pressure	6 bar	5 bar
Air consumption/riveting	15 NL	30 NL
Air consumption/ spent mandrel extraction	340 NL / min.	340 NL / min.
Connection line	½" (12.5 mm) max. length 5 m	¾ " (18.75 mm) max. length 5 m
Rest mandrel extraction tube	Outer Ø 8 mm/ Inner Ø 5 mm	Outer Ø 10 mm/ Inner Ø 6 mm
Pressure transducer	hydro-pneumatic	hydro-pneumatic
RIVET PISTOL		
Weight	ca. 2.5 kg	ca. 7 kg
Stroke	16 - 20 mm	20 mm
Traction power	12,000 N	25,000 N
Standard tube package length	3.75 m (max. 5.0 m)	6 m (max. 25 m)
Working cycle (theoretical)	1.25 sec.	2 Sek.

GAV 8000 ELECTRONIC / GAV 8000 ECO

Fully automatic blind rivet system for industrial production with and without setting process monitoring

Advice and delivery time on request

integrated setting process monitoring

WORKING RANGE GAV Electronik

- 2.4 mm up to 6.4 mm Ø alu and copper
- Up to 6 mm Ø steel
- Up to 5 mm Ø stainless steel
- Up to flange diameter 11.4 mm
- Rivet body lengths above 30 mm
- Traction power up to 12,000 N at 6 bar air pressure

SCOPE OF DELIVERY (both variants)
The scope of delivery always includes one setting pistol.
This can be freely modified as required.

SYSTEM DESCRIPTION (both variants)

- Electronic system controls
- Intuitive menu guidance via navigation and function keys
- Function display
- Maintenance display and simple fault diagnosis
- Customer-specific software modification is possible
- Rivet mandrels are disposed of by vacuum system
- Spring loaded trigger system as an optional extra
- available
- Can be integrated into the system or operated independently
- Interface for external memory programmable control system (SPS) can be realised via the GESIPA® interface

WITHOUT setting process monitoring Ideal for applications that do not require any process monitoring

Subsequent upgrade to GAV 8000 electronic possible in our Walldorf factory at extra price

Advice and delivery time on request

WORKING RANGE GAV eco

- 2.4 mm up to 6.4 mm Ø alu and copper
- Up to 6 mm Ø steel
- Up to 5 mm Ø stainless steel
- Up to flange diameter 11.4 mm
- Rivet body lengths above 30 mm
- Traction power up to 12,000 N at 6 bar air pressure

ADVANTAGES (both variants)

Productivity and savings potential

- Cost effective from an annual quantity of aroand 500,000 blind rivets (in relation to the german market)
- Up to 50 % time and costs savings compared to standard blind rivet devices
- Rivet pistol has a large action radius thanks to the hose package that is up to 5.0 m in length (Standard length 3.75 m)
- No trained personnel required for operation
- Can be easily integrated into fully-automatic production systems
- Up to 40 blind rivets can be processed every minute

PISTOL VERSION for GAV 8000 electronic / GAV 8000 eco

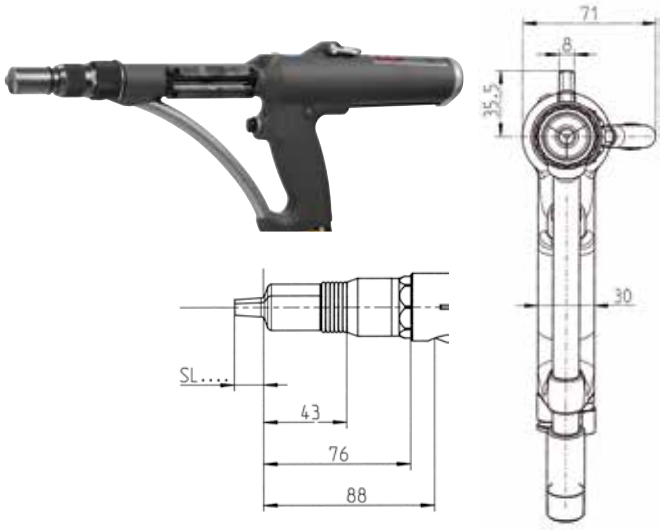
SPECIFIC WORKSTATION CONFIGURATION
For all GAV versions, three different setting pistol variants are available for the ideal configuration of the workstation. For manual workstations, pistols are available as overhead versions with overhead hose assembly or standard pistols with floor-mounted hose assembly. Both versions are equipped with a balancer to ensure fatigue-free working.

The robotic pistol has been developed exclusively for use in fully automatic production systems or robot-controlled systems. It is supplied from stock with corresponding drilled holes for easy installation. For further questions, please contact our Technical Sales team.
A setting pistol suitable for your application is supplied at time of delivery.

STANDARD PISTOL
Total length: 447 mm (+ SL nose)

The standard pistol is primarily used for **manual operator-controlled** use.

Advantages
- Can be used for vertical and horizontal riveting
- Inexpensive variant
- On request, it can be fitted with an extra handle to improve ergonomics, in particular for applications involving vertical riveting

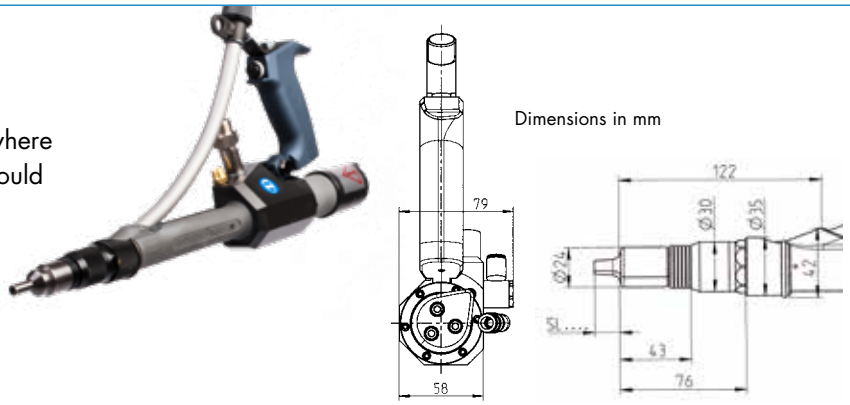


Dimensions in mm

OVERHEAD PISTOL
Total length: 447 mm (+ SL nose)

The overhead pistol can be used everywhere where the hose package is cumbersome or where it could come into contact with sensitive surfaces.

Advantage
- Available with contact pressure monitoring

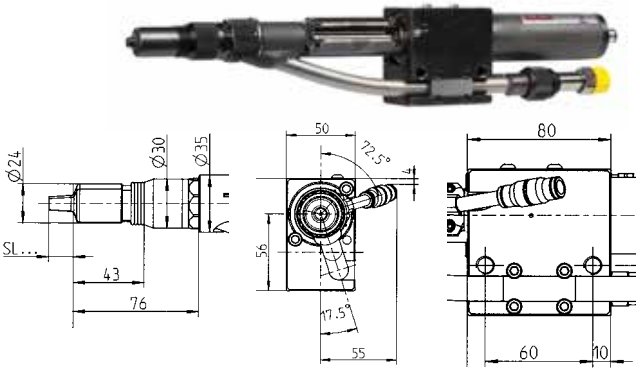


Dimensions in mm

ROBOTIC PISTOL
Total length: 441 mm (+ SL nose)

The robotic pistol has been developed primarily for use in fully automatic production applications/system (linear units/robots).

Advantages
- Ideal for integration in a production system
- On request, it can also be fitted with an extra handle (with trigger button) for vertical riveting so that it can be used manually



Dimensions in mm

GAV HF

Fully-automatic blind rivet system for very strong blind rivets

WORKING RANGE

- Blind rivet sizes from 4.8 mm to 6.4 mm Ø all materials
- Rivet body lengths up to 35 mm
- Setting head diameter up to 19 mm
- Mandrel up to 5.5 mm Ø
- Traction power up to 25,000 N at 6 bar air pressure

Size comparison between a possible blind rivet of the GAV HF, a GESIPA®-PolyGrip® and an 1 Euro coin.

ADVANTAGES

- Conveyor pot filling level display
- Operating pressure: 5 bar
- Vibration-dampened pressure intensifier attachment
- Multiple monitoring of the blind rivet pistol by means of sensors
- Industrial control with an 8" colour display
- Conveyor distances of up to 25 m are possible when used in fully-automatic production systems
- Electronic system controls
- Intuitive menu guidance via navigation and function keys
- Function display
- Maintenance display and simple fault diagnosis
- Customer-specific software modification is possible
- Ideal for applications that do not require any process monitoring
- Rivet mandrels are disposed of via a vacuum system
- Surface contact trigger available as an optional extra
- Can be integrated into the system or operated independently
- Interface for external memory-programmable control system (SPS) can be realised via the GESIPA®-Interface

Advice, price and delivery time on request

SPECIAL ACCESSORIES for GAV automatic riveting machines

INTERFACE 4.0 – FOR CONNECTION TO EXTERNAL CONTROL

The new features are:

- 2 x Ethernet interfaces, router functions
- 1 x USB and 1 x USB-OTG
- Screen connection, graphic output via DVI
- Wi-Fi, as access point and as client, Wi-Fi router function
- Local OLED display to show status and error messages
- M.2 SSD interface, the module can be retrofitted with an SSD (large databases)
- PCIe connector for Hilscher netJACK modules (i.e. direct connection to industrial buses such as PROFINET, SERCOS and EtherCAT possible)

No. 163 4326

ELECTRICAL FOOT PEDAL

The electrial foot pedal is a good solution wherever applications require both hands to affix the parts that need to be riveted.

MAINTENANCE AGREEMENT AND TRAINING

Ask us about our servicing and maintenance agreements. We can also provide training for your operating, servicing and maintenance personnel when you purchase a GESIPA® blind rivet processing system or at a later date.

ONLY FOR GAV 8000 (both variants)

SPECIAL LENGTH TUBE PACKAGES

A larger working radius can be achieved, e.g. for use on fully automatic production lines, by using packages of special hose lengths. These are available in various dimensions between 3.75 m and 5.0 m to meet the requirements of the various applications.

GAV carriage

The trolley that has been specially designed for the GAV enables it to be mobile thereby allowing the workplace to be changed quickly and easily.

GESIPA®-Balancer
For ergonomic and fatigue-free working, it is essential that the pistol and the hose package can be suspended. The Balancer from GESIPA® is the perfect solution.

ONLY FOR GAV HF

SURFACE CONTACT MONITORING WITH DUAL-HAND OPERATION
This special Type of surface contact monitoring guarantees the manipulation-proof processsecure joining of parts. In applications that are relevant for safety, it is often necessary to completely rule out manipulations in the riveting process.

GSM RADIO MODUL
In the event of any deviations to the target status e.g. nearly empty feed unit, the GSM radio module (GSM = Global System for Mobile Communications) reports this to a mobile telephone or a process control centre via a call or an SMS. This allows short response times.

ELECTRONIC KEY SYSTEM AND SAFETY SWITCH
An electronic key system and a safety switch guarantee safe access control for at least two user groups and lock the covering hood to prevent unauthorised access to the components in the supply unit.

SPECIAL LENGTH TUBE PACKAGES
A larger working radius can be achieved, e.g. for use on fully automatic production lines, by using packages of special hose lengths. These are available in various dimensions up to aroand 25 m to meet the requirements of the various applications.

OPERATINGSTATUS DISPLAY
The signal lamps attached to the device in the colours red, green and white indicate the operating status of the system. An empty rivet tank, any deviations from the target operating status etc. are indicated immediately.

GESIPA® ASSEMBLY CELL

THE NEW GESIPA® ASSEMBLY CELL GUARANTEES OPTIMUM, PRECISE HANDLING WITH A WIDE RANGE OF GESIPA® PROCESSING DEVICES AND A WORKSPACE TAILORED PERFECTLY TO THE CUSTOMER'S REQUIREMENTS.

The desk is adapted individually to customer requirements and designed ergonomically (e.g. adjustable height). Everything – be it the desk, work piece socket, compressed air supply, electrical supply or processing tools – comes from one source, with process monitoring on request.

The optimised work piece socket allows the desk to be converted for different products and processing tools easily, saving costs.

The GESIPA® assembly cell is produced from high quality materials and components. Needless to say, you also have the option of transferring system components already used at your company.

ADVANTAGES

- Ergonomic working
- Individually adjustable
- Existing work tools can be integrated
- Easy and time-saving conversion for other products from your portfolio
- Setting process monitoring possible

More information on the individually adjusted assembly cell on request. Contact person:
Uwe Herth, Head of BU Equipment Manufacturer,
uwe.herth@gesipa.com

Example:
Can be individually adjusted for each customer

Specifics

Operating status display
The signal light installed on the desk uses different colours to show the process status.

Counting device
The counting device registers and counts the torn off residual rivet mandrels.

GESIPA® setting tool
The setting tool is completely integrated in the assembly cell.

Individual work piece carrier
The optimised work piece carrier allows the desk to be converted for different products and processing tools easily, saving costs.

Foot pedal
The foot pedal allows you to use both hands to join individual parts and fasten the components to be riveted in place.