

# RL10

## Pneumatic-hydraulic tools for blind rivets

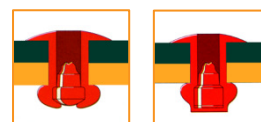
### Technical sheet

#### Technical parameters:

Type	RL 10
Maximum pressure	7 bar
Draw force	8 kN/6 bar
Working stroke	14 mm
Weight	1.4 kg
Output – Force / Weight	5.71 kN/kg
Height	243 mm
Length	273 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 rivet (with exhaustion)	1.2 l
Consumption of air per 1 rivet (without exhaustion)	0.2 l
Level of acoustic pressure	$L_{PA} < 70 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2.5 \text{ m/s}^2$

#### Scope of use:

Diameter of the rivet	2,4	3/3,2	4	4,8/5	6	6,4
Aluminium, Copper, Brass	✓	✓	✓	✓		
Steel	✓	✓	✓			
Stainless	✓	✓	✓			
Nosepiece in the package	✓	✓	✓	✓		

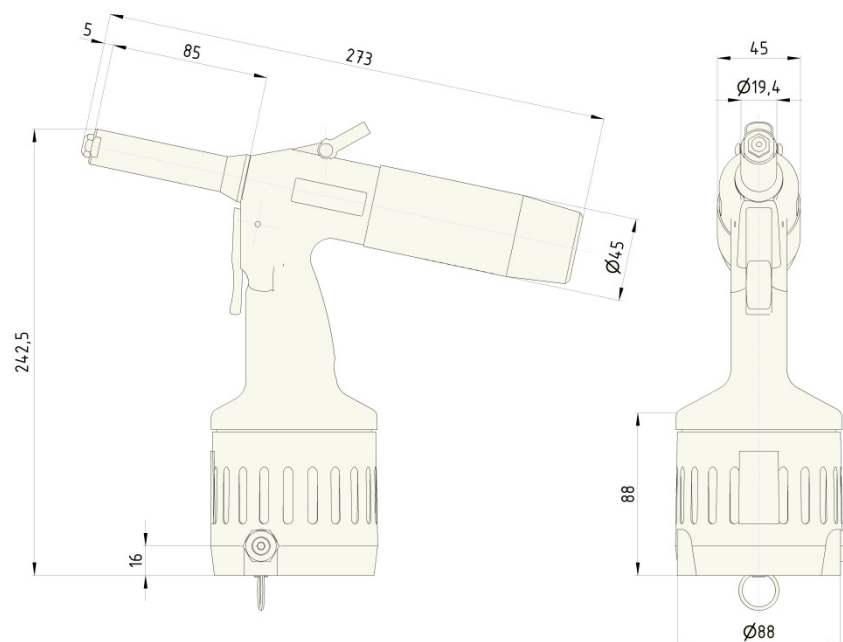


#### Description of tools:

- high output at small dimensions
- fluent regulation of the intensity of exhaustion
- low noise
- low maintenance demands
- simple operation
- large range of additional equipment
- ergonomic handle – fits into the hand well
- low value of transferred vibrations
- rotary joint air connection
- supply of pressured air optional from right or left which can be very easily modified for right or left-hand persons
- removable collecting vessel with adjustable turning of the outflow air from exhaustion curtain
- spare nosepieces on the bottom of the tools
- safety closure preventing release of the mandrel when the collecting vessel is removed
- safety over-pressure valve
- reliability verified in practice



## Dimensions of tools:

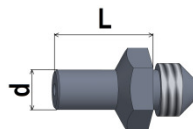


## Standard accessories:

- Nosepieces, see table + necessary wrenches for the replacement of nosepieces
- Set for adding oil
- Air joint connection + Allen wrench for tightening air connection
- User and Maintenance Manual, list of spare parts

## Other optional accessories:

- Jaws for stainless rivets
- Prolonged nosepieces by 5 mm from L = 10 to 25 mm
- Special nosepieces for certain types of rivets
- Prolonged noses  $\varnothing d = 19.5$  mm with lengths L = 120, 160, 200, 225, 250, 300 mm
- Noses with smaller  $\varnothing d = 16.4$  mm with lengths L = 75, 200 mm



- Angular head
- Shortened collecting vessel
- Collecting vessel with damper
- Adapter for removing mandrels by  $\varnothing 6$  and  $\varnothing 10$  mm hoses
- Inductive sensor for reading of removed rivet mandrels

# RL15A

## Pneumatic-hydraulic tools for blind rivets

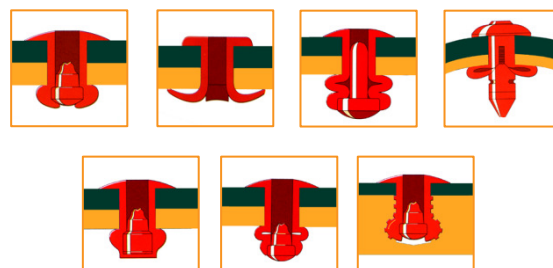
### Technical sheet

#### Technical parameters:

Type	RL 15A
Maximum pressure	7 bar
Draw force	9.5 kN/6 bar
Working stroke	21 mm
Weight	1.6 kg
Output – Force / Weight	5.58 kN/kg
Height	265 mm
Length	281 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 rivet (with exhaustion)	2 l
Consumption of air per 1 rivet (without exhaustion)	0.2 l
Level of acoustic pressure	$L_{PAI} < 70 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2.5 \text{ m/s}^2$

#### Scope of use:

Diameter of the rivet	2,4	3/3,2	4	4,8/5	6	6,4
Aluminium, Copper, Brass	✓	✓	✓	✓		
Steel	✓	✓	✓	✓		
Stainless	✓	✓	✓	✓		
Nosepiece in the package	✓	✓	✓	✓		

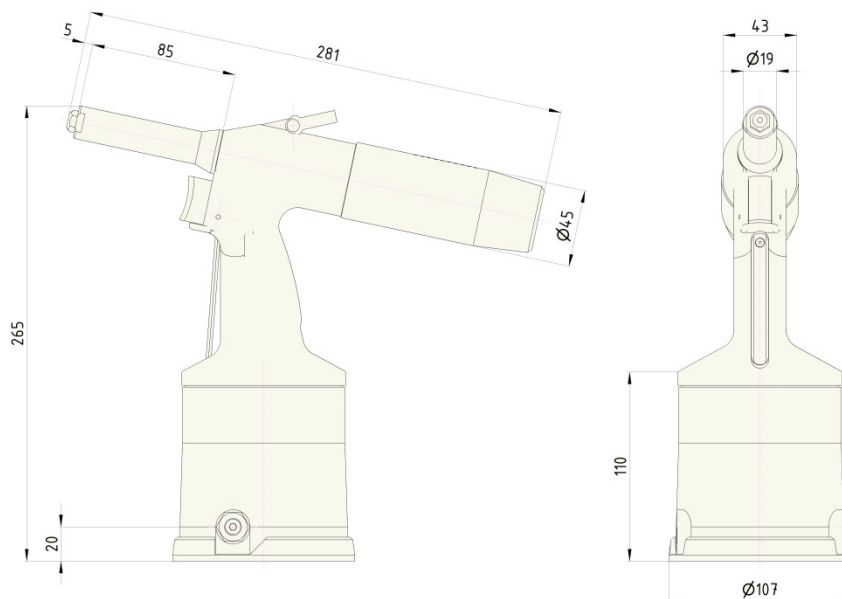


#### Description of tools:

- high stroke recommended for rivets with large range of catching area
- high output at small dimensions
- economic automatic exhaustion – activation during clamping
- low noise
- low maintenance demands
- simple operation
- large range of additional equipment
- ergonomic handle – fits into the hand well
- low value of transferred vibrations
- rotary joint air connection
- supply of pressured air optional from right or left which can be very easily modified for right or left-hand persons
- removable collecting vessel with adjustable turning of the outflow air from exhaustion
- curtain
- spare nosepieces on the bottom of the tools
- safety closure preventing release of the mandrel when the collecting vessel is removed
- safety over-pressure valve
- reliability verified in practice



## Dimensions of tools:

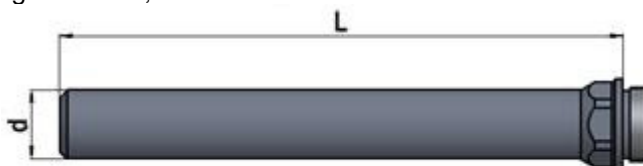
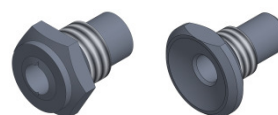
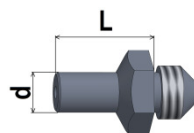


## Standard accessories:

- ◉ Nosepieces, see table + necessary wrenches for the replacement of nosepieces
- ◉ Set for adding oil
- ◉ Air joint connection + Allen wrench for tightening air connection
- ◉ User and Maintenance Manual, list of spare parts

## Other optional accessories:

- ◉ Jaws for stainless rivets
- ◉ Prolonged nosepieces by 5 mm from L = 10 to 25 mm
- ◉ Special nosepieces for certain types of rivets, e.g. Bulb-Tite
- ◉ Prolonged noses Ø d = 19.5 mm with lengths L = 120, 160, 200, 225, 250, 300 mm
- ◉ Noses with smaller Ø d = 16.4 mm with lengths L = 75, 200 mm



- ◉ Angular head
- ◉ Shortened collecting vessel
- ◉ Collecting vessel with damper
- ◉ Adapter for removing mandrels by Ø 6 and Ø 10 mm hoses
- ◉ Inductive sensor for reading of removed rivet mandrels

# RL20

## Pneumatic-hydraulic tools for blind rivets

### Technical sheet

#### Technical parameters:

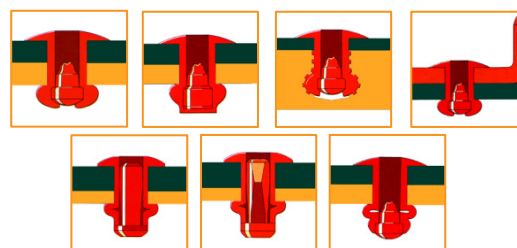
Type	RL 20A
Maximum pressure	7 bar
Draw force	13 kN/6 bar
Working stroke	16 mm
Weight	1.6 kg
Output – Force / Weight	8.12 kN/kg
Height	265 mm
Length	281 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 rivet (with exhaustion)	2 l
Consumption of air per 1 rivet (without exhaustion)	0.2 l
Level of acoustic pressure	$L_{PAI} < 70 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2.5 \text{ m/s}^2$

#### Scope of use:

Diameter of the rivet	2,4	3/3,2	4	4,8/5	6	6,4
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Aluminium, Copper, Brass	✓	✓	✓	✓		
Steel	✓	✓	✓	✓		
Stainless	✓	✓	✓	✓		

Nosepiece in the package	✓	✓	✓	✓		
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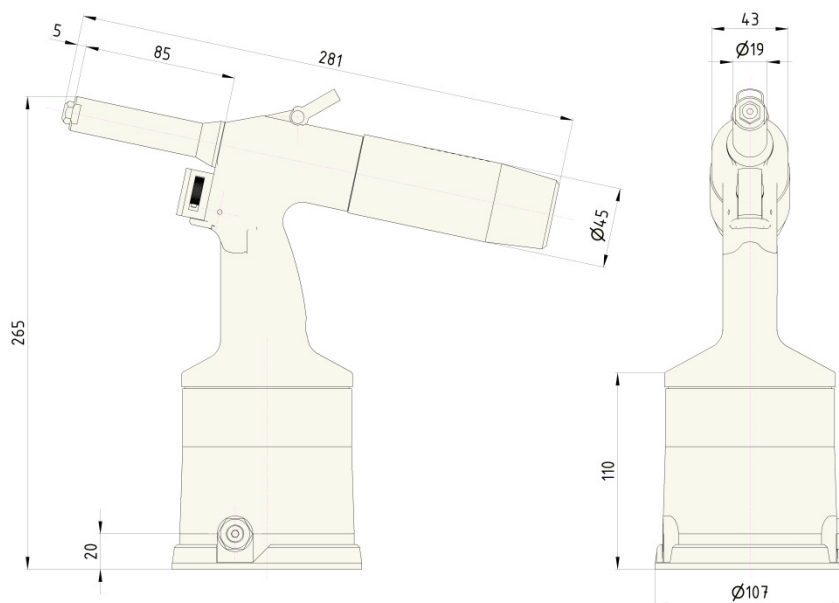


#### Description of tools:

- unrivalled output – ratio force / weight
- fluent regulation of the intensity of exhaustion
- low noise
- low maintenance demands
- simple operation
- large range of additional equipment
- ergonomic handle– fits into the hand well
- low value of transferred vibrations
- rotary joint air connection
- supply of pressured air optional from right or left which can be very easily modified for right or left-hand persons
- removable collecting vessel with adjustable turning of the outflow air from exhaustion
- curtain
- spare nosepieces on the bottom of the tools
- safety closure preventing release of the mandrel when the collecting vessel is removed
- safety over-pressure valve
- reliability verified in practice



## Dimensions of tools:

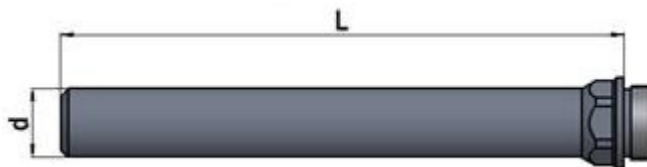
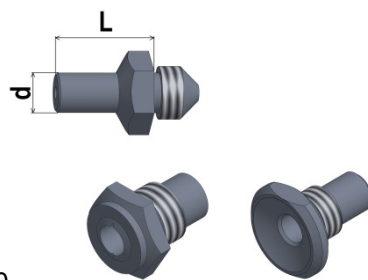


## Standard accessories:

- ⊙ Nosepieces, see table + necessary wrenches for the replacement of nosepieces
- ⊙ Set for adding oil
- ⊙ Air joint connection + Allen wrench for tightening air connection
- ⊙ User and Maintenance Manual, list of spare parts

## Other optional accessories:

- ⊙ Jaws for stainless rivets
- ⊙ Prolonged nosepieces by 5 mm from  $L = 10$  to 25 mm
- ⊙ Special nosepieces for certain types of rivets, e.g. Bulb-Tite
- ⊙ Prolonged noses  $\varnothing d = 19.5$  mm with lengths  $L = 120, 160, 200, 225, 250, 300$  mm
- ⊙ Noses with smaller  $\varnothing d = 16.4$  mm with lengths  $L = 75, 200$  mm



- ⊙ Angular head
- ⊙ Shortened collecting vessel
- ⊙ Collecting vessel with damper
- ⊙ Adapter for removing mandrels by  $\varnothing 6$  and  $\varnothing 10$  mm hoses
- ⊙ Inductive sensor for reading of removed rivet mandrels

# RL20A

## Pneumatic-hydraulic tools for blind rivets

### Technical sheet

#### Technical parameters:

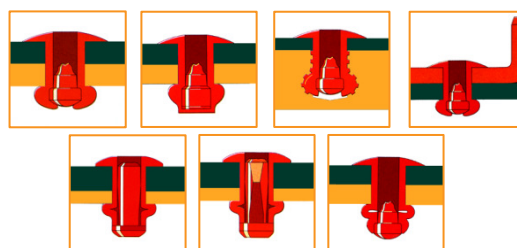
Type	RL 20A
Maximum pressure	7 bars
Draw force	13 kN/6 bar
Working stroke	16 mm
Weight	1.6 kg
Output – Force / Weight	8.12 kN/kg
Height	265 mm
Length	281 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 rivet (with exhaustion)	2 l
Consumption of air per 1 rivet (without exhaustion)	0.2 l
Level of acoustic pressure	$L_{PAI} < 70 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2.5 \text{ m/s}^2$

#### Scope of use:

Diameter of the rivet	2,4	3/3,2	4	4,8/5	6	6,4
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Aluminium, Copper, Brass	✓	✓	✓	✓		
Steel	✓	✓	✓	✓		
Stainless	✓	✓	✓	✓		

Nosepiece in the package	✓	✓	✓	✓		
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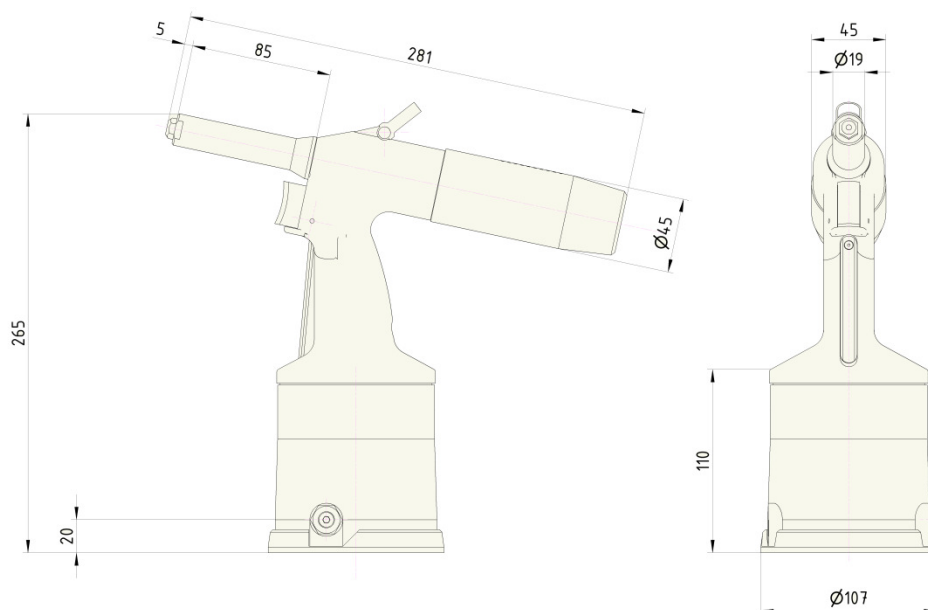


#### Description of tools:

- unrivalled output – ration force / weight
- economic automatic exhaustion – activation during clamping
- low noise
- low maintenance demands
- simple operation
- large range of additional equipment
- ergonomic handle – fits into the hand
- low value of transferred vibrations
- rotary joint air connection
- supply of pressured air optional from right or left which can be very easily modified for right or left-hand persons
- removable collecting vessel with adjustable turning of the outflow air from exhaustion
- curtain
- spare nosepieces on the bottom of the tools
- safety closure preventing release of the mandrel when the collecting vessel is removed
- safety over-pressure valve
- reliability verified in practice



## Dimensions of tools:

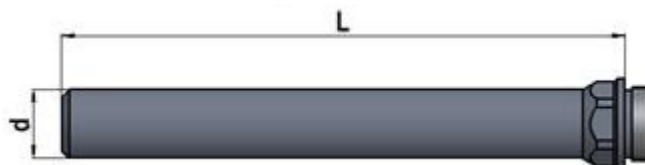
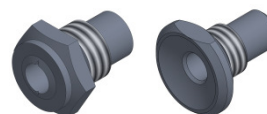
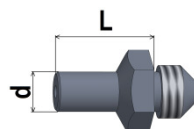


## Standard accessories:

- Nosepieces, see table + necessary wrenches for the replacement of nosepieces
- Set for adding oil
- Air joint connection + Allen wrench for tightening air connection
- User and Maintenance Manual, list of spare parts

## Other optional accessories:

- Jaws for stainless rivets
- Prolonged nosepieces by 5 mm from L = 10 to 25 mm
- Special nosepieces for certain types of rivets, e.g. Bulb-Tite
- Prolonged nose Ø d = 19.5 mm with lengths L = 120, 160, 200, 225, 250, 300 mm
- Noses with smaller Ø d = 16.4 mm with lengths L = 75, 200 mm



- Angular head
- Shortened collecting vessel
- Collecting vessel with damper
- Adapter for removing mandrels by Ø 6 and Ø 10 mm hoses
- Inductive sensor for reading of removed rivet mandrels



# RL40

## Pneumatic-hydraulic tools for blind rivets

### Technical sheet

#### Technical parameters:

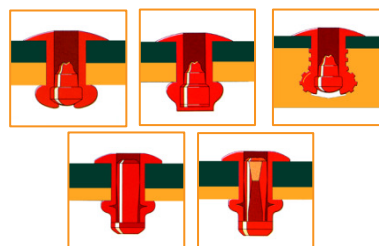
Type	RL 40
Maximum pressure	7 bar
Draw force	14.7 kN/6 bar
Working stroke	14 mm
Weight	2.0 kg
Output – Force / Weight	7.35 kN/kg
Height	280 mm
Length	302 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 rivet (with exhaustion)	2 l
Consumption of air per 1 rivet (without exhaustion)	0.2 l
Level of acoustic pressure	$L_{PAI} < 70 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2.5 \text{ m/s}^2$

#### Scope of use:

Diameter of the rivet	2,4	3/3,2	4	4,8/5	6	6,4
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Aluminium, Copper, Brass			✓	✓	✓	✓
Steel			✓	✓	✓	✓
Stainless			✓	✓	✓	✓

Nosepiece in the package			✓	✓	✓	✓
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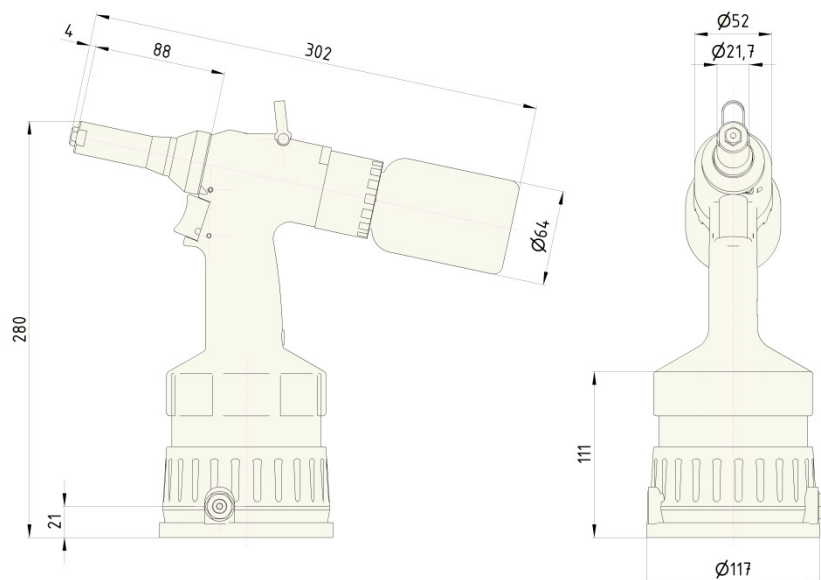


#### Description of tools:

- high output at small dimensions
- fluent regulation of the intensity of exhaustion
- low noise
- low maintenance demands
- simple operation
- ergonomic handle – fits into the hand well
- low value of transferred vibrations
- rotary joint air connection
- supply of pressured air optional from right or left which can be very easily modified for right or left-hand persons
- removable collecting vessel
- curtain
- spare nosepieces on the bottom of the tools
- safety closure preventing release of the mandrel when the collecting vessel is removed
- safety over-pressure valve
- reliability verified in practice



## Dimensions of tools:

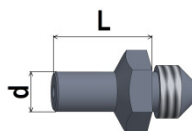


## Standard accessories:

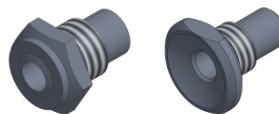
- ⊙ Nosepieces, see table + necessary wrenches for the replacement of nosepieces
- ⊙ Set for adding oil
- ⊙ Air joint connection + Allen wrench for tightening air connection
- ⊙ User and Maintenance Manual, list of spare parts

## Other optional accessories:

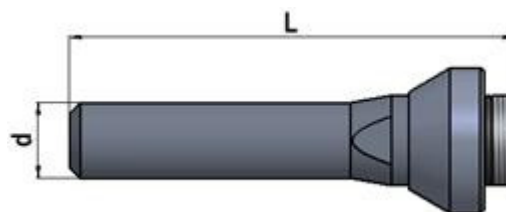
- ⊙ Prolonged nosepieces by 5 mm from  $L = 10$  to 25 mm



- ⊙ Special nosepieces for certain types of rivets, e.g. Bulb-Tite



- ⊙ Prolonged noses  $\varnothing d = 22$  mm with lengths  $L = 130, 170, 210, 235, 260, 310$  mm



- ⊙ Shortened collecting vessel
- ⊙ Collecting vessel with reinforced bottom
- ⊙ Adapter for removing mandrels by  $\varnothing 6$  and  $\varnothing 10$  mm hoses
- ⊙ Inductive sensor for reading of removed rivet mandrels

# RL60

## Pneumatic-hydraulic tools for blind rivets

### Technical sheet

#### Technical parameters:

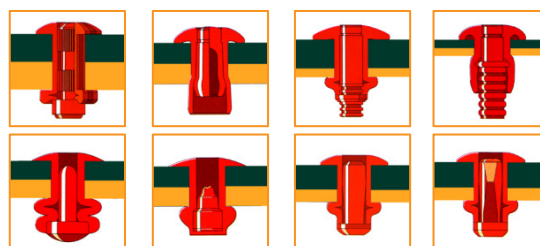
Type	RL 60
Maximum pressure	7 bar
Draw force	18.2 kN/6 bar
Working stroke	26 mm
Weight	2.6 kg
Output – Force / Weight	7 kN/kg
Height	340 mm
Length	323 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 rivet (with exhaustion)	4.8 l
Consumption of air per 1 rivet (without exhaustion)	3 l
Level of acoustic pressure	$L_{PAI} < 70 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{HW} < 2.5 \text{ m/s}^2$

#### Scope of use:

Diameter of the rivet	4	4,8/5	6	6,4	6,4*	8
Aluminium, Copper, Brass	✓	✓	✓	✓	✓	✓
Steel	✓	✓	✓	✓	✓	
Stainless	✓	✓	✓	✓	✓	
Nosepiece in the package	✓	✓	✓	✓	✓	

\* structural rivets: TIBULB, M-LOCK, MAGNA-BULB,

#### HUCKLOCK

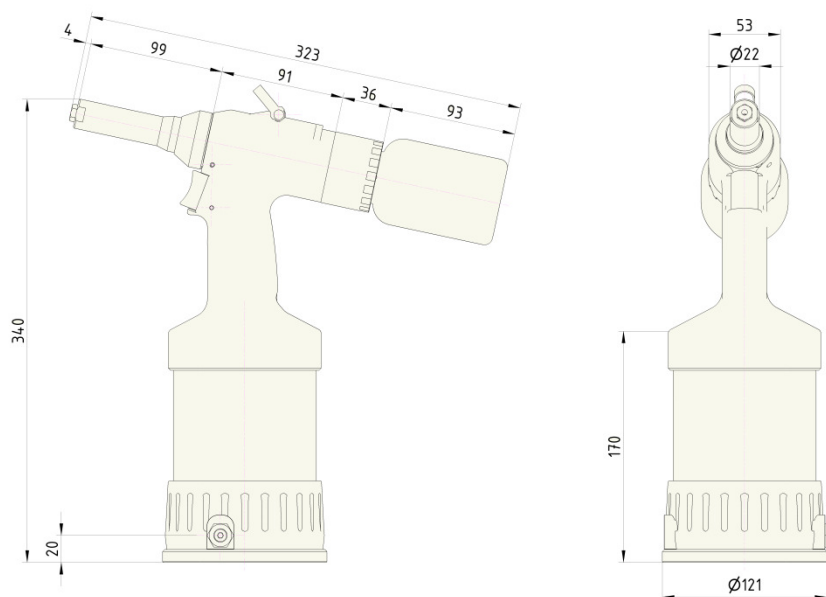


#### Description of tools:

- high output
- high working stroke
- fluent regulation of the intensity of exhaustion
- low noise
- low maintenance demands
- simple operation
- ergonomic handle – fits into the hand well
- low value of transferred vibrations
- rotary joint air connection
- supply of pressured air optional from right or left which can be very easily modified for right or left-hand persons
- removable collecting vessel
- curtain
- spare nosepieces on the bottom of the tools
- safety closure preventing release of the mandrel when the collecting vessel is removed
- safety over-pressure valve
- reliability verified in practice



## Dimensions of tools:

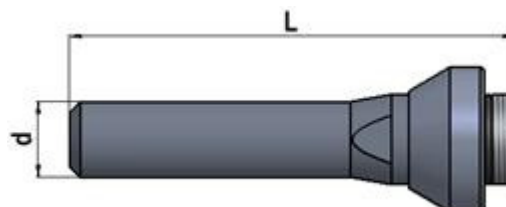
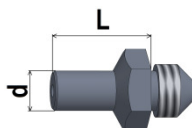


## Standard accessories:

- ◉ Nosepieces, see table + necessary wrenches for the replacement of nosepieces
- ◉ Set for adding oil
- ◉ Air joint connection + Allen wrench for tightening air connection
- ◉ User and Maintenance Manual, list of spare parts

## Other optional accessories:

- ◉ Shredding head for rivets with grooved mandrel 0.8 mm
- ◉ Prolonged nosepieces by 5 mm from L = 10 to 25 mm
- ◉ Special nosepieces for certain types of rivets, e.g. Monobolt
- ◉ Prolonged noses Ø d = 22 mm with lengths L = 130, 170, 210, 235, 260, 310 mm



- ◉ Reinforced collecting vessel
- ◉ Adapter for removing mandrels by Ø 6 and Ø 10 mm hoses
- ◉ Inductive sensor for reading of removed rivet mandrels

# RL50

## Pneumatic-hydraulic tools for threaded rivets

### Technical sheet

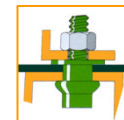
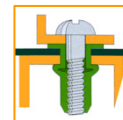
#### Technical parameters:

Type	RL 50
Maximum pressure	7 bar
Draw force	23.5 kN/6 bar
Working stroke	1.5 – 5.8 mm
Weight	2.2 kg
Output – Force / Weight	10.68 kN/kg
Height	255 mm
Length	292 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 rivet	4.6 l
Consumption of engine air	23.3 l/min
Level of acoustic pressure	$L_{pA} = 86 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2.5 \text{ m/s}^2$

#### Scope of use:

Rivet thread	M3	M4	M5	M6	M8	M10	M12
Aluminium	✓	✓*	✓*	✓*	✓*	✓	✓
Brass	✓	✓*	✓*	✓*	✓*	✓	
Steel	✓	✓*	✓*	✓*	✓*	✓	
Stainless	✓	✓*	✓*	✓*	✓*	✓	
Mandrels and noses included in the package		✓	✓	✓	✓	✓	

\* including threaded bolts

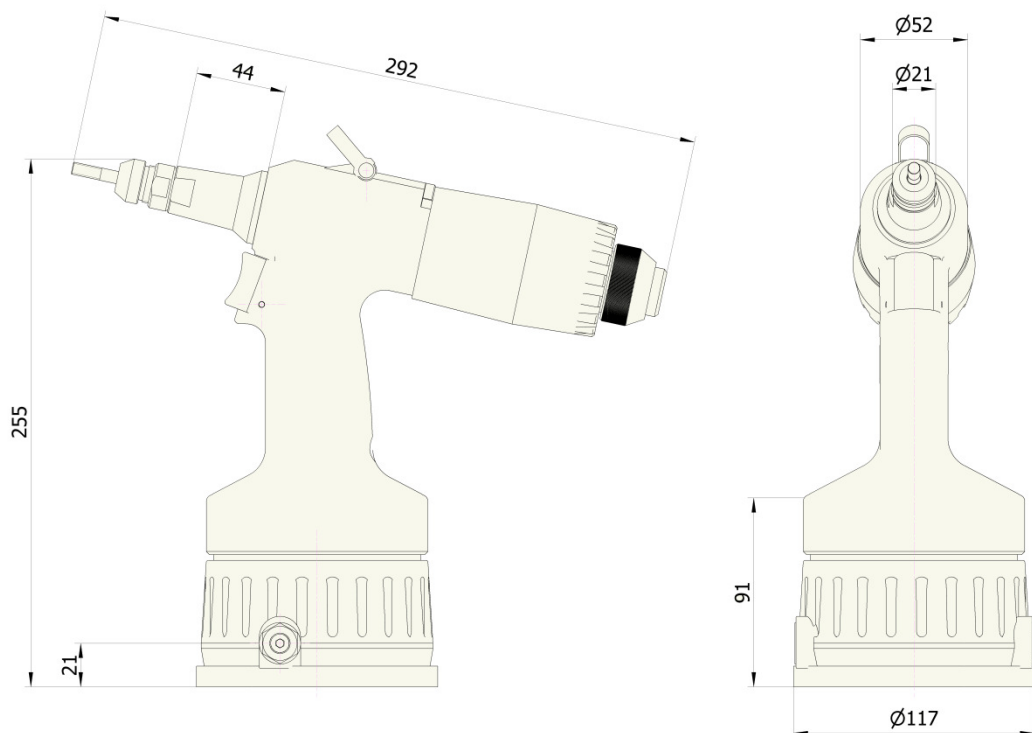


#### Description of tools:

- ⊙ high output at small dimensions
- ⊙ one button control
- ⊙ exact fluent stroke adjustment
- ⊙ simple operation
- ⊙ low noise
- ⊙ low maintenance demands
- ⊙ ergonomic handle – fits into the hand well
- ⊙ low value of transferred vibrations
- ⊙ rotary joint air connection
- ⊙ supply of pressured air optional from right or left which can be very easily modified for right or left-hand persons
- ⊙ button for manual running of left engine revolutions
- ⊙ curtain
- ⊙ safety over-pressure valve
- ⊙ reliability verified in practice



## Dimensions of tools:



## Standard accessories:

- ⦿ Noses and mandrels – see table
- ⦿ Set for adding oil
- ⦿ Air joint connection + Allen wrench for tightening air connection
- ⦿ User and Maintenance Manual, list of spare parts

## Other optional accessories:

- ⦿ Internal-thread mandrels for threaded bolts M4 – M8
- ⦿ Prolonged mandrels and noses
- ⦿ Mandrels with metric thread with finer pitch
- ⦿ Mandrels with UNC, UNF thread

# RL100

Pneumatic-hydraulic tools for threaded rivets

Technical sheet

## Technical parameters:

Type	RL 100
Maximum pressure	7 bar
Draw force	34 kN/6 bar
Working stroke	2.5 – 9 mm
Weight	2.9 kg
Output – Force / Weight	11.72 kN/kg
Height	306 mm
Length	329 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 rivet	6.2 l
Consumption of engine air	23.3 l/min
Level of acoustic pressure	$L_{PAI} = 86 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2.5 \text{ m/s}^2$

## Scope of use:

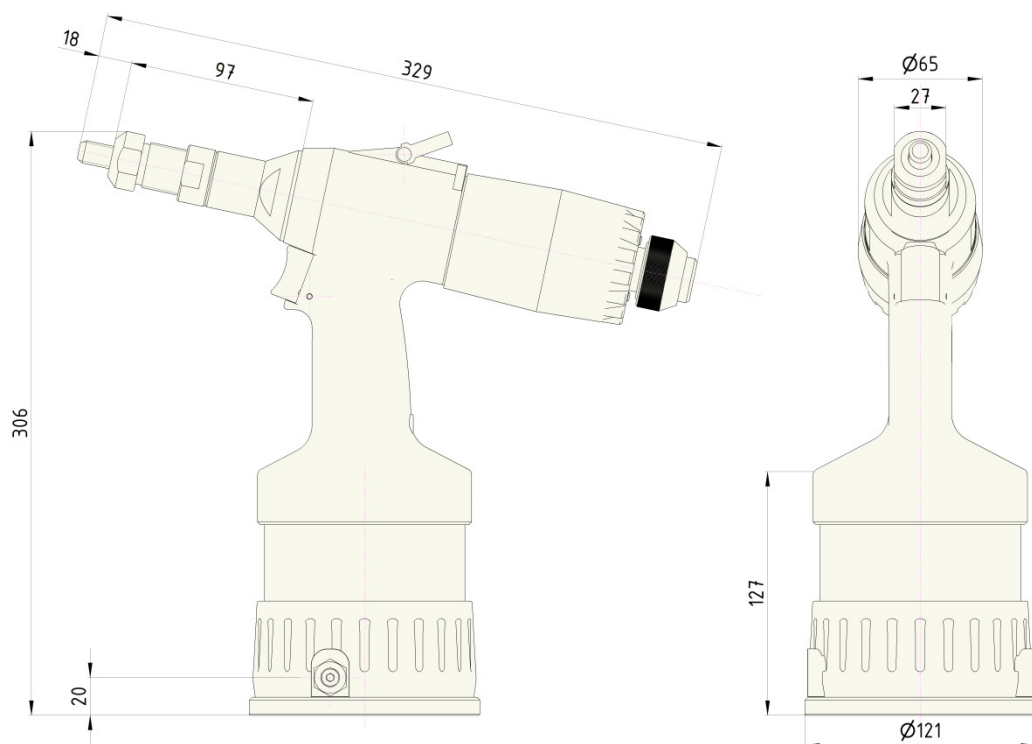
Rivet thread	M6	M8	M10	M12	M14	M16
Aluminium	✓*	✓*	✓	✓	✓	✓
Brass	✓*	✓*	✓	✓	✓	✓
Steel	✓*	✓*	✓	✓	✓	✓
Stainless	✓*	✓*	✓	✓	✓	✓
Mandrels and noses included in the package		✓	✓	✓	✓	

## Description of tools:

- the only tools with this range worldwide
- high output at small dimensions
- one button control
- exact fluent stroke adjustment
- simple operation
- low noise
- low maintenance demands
- ergonomic handle – fits into the hand well
- low value of transferred vibrations
- rotary joint air connection
- supply of pressured air optional from right or left which can be very easily modified for right or left-hand persons
- button for manual running of left engine revolutions
- curtain
- safety over-pressure valve
- reliability verified in practice



## Dimensions of tools:



## Standard accessories:

- ⦿ Noses and mandrels – see table
- ⦿ Set for adding oil
- ⦿ Air joint connection + Allen wrench for tightening air connection
- ⦿ User and Maintenance Manual, list of spare parts

## Other optional accessories:

- ⦿ Internal-thread mandrels for threaded bolts M6 – M8
- ⦿ Prolonged mandrels and noses
- ⦿ Mandrels with metric thread with finer pitch
- ⦿ Mandrels with UNC, UNF thread



# RL75

## Pneumatic-hydraulic tools for two-part rivets

### Technical sheet

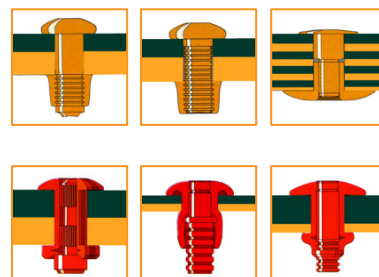
#### Technical parameters:

Type	RL 75
Maximum pressure	7 bar
Draw force	22 kN/6 bar
Working stroke	15 mm
Weight	2.2 kg
Output – Force / Weight	10 kN/kg
Height	319 mm
Length	235 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 rivet	2.8 l
Level of acoustic pressure	$L_{PAI} < 70 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2.5 \text{ m/s}^2$

#### Scope of use:

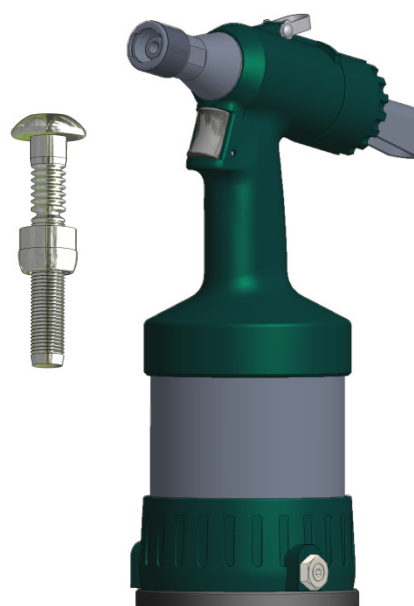
Type of rivet	SRB Standard		SRB Multigrip		Hucktainer PLUS	Blind rivets
Ø of the rivet	5	6 6,5	5	6,5	10	6,4 *
Aluminium	✓	✓	✓	✓		✓
Steel	✓	✓	✓	✓	✓	✓
Stainless	✓	✓				✓

\* structural blind rivets: TIBULB, M-LOCK, MAGNA-BULB, HUCKLOCK.

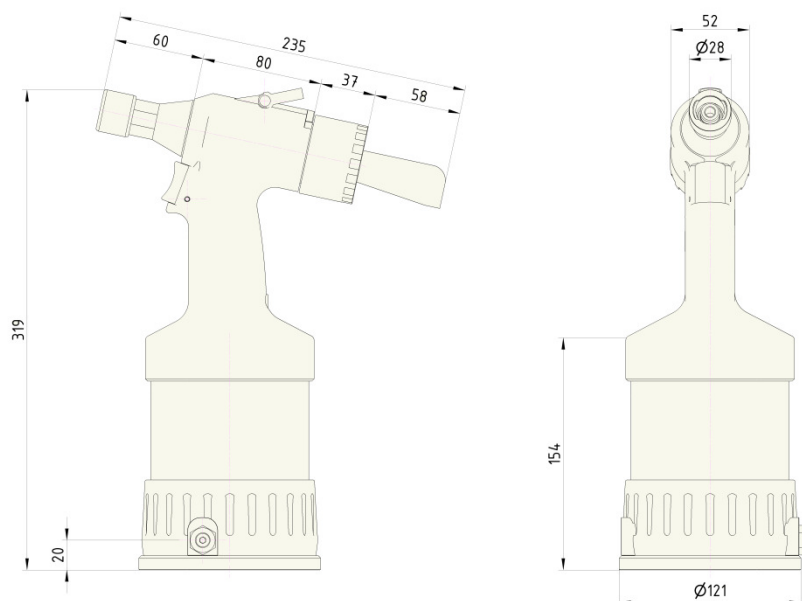


#### Description of tools:

- ◉ high output
- ◉ integrated reducer of the piston speed due to optimal riveting
- ◉ removable collecting vessel or catching rubber
- ◉ low noise
- ◉ low maintenance demands
- ◉ simple operation
- ◉ ergonomic handle – fits into the hand well
- ◉ low value of transferred vibrations
- ◉ rotary joint air connection
- ◉ supply of pressured air optional from right or left which can be very easily modified for right or left-hand persons
- ◉ curtain
- ◉ safety over-pressure valve
- ◉ reliability verified in practice



## Dimensions of tools:



## Standard accessories:

- Hick adapter for heads
- Set for adding oil
- Air joint connection + Allen wrench for tightening air connection
- User and Maintenance Manual, list of spare parts

## Shredding heads:

Type of rivet	Ø of the rivet mm	Type of head	Warehouse number
SRB - Standard	5,0	99-3003	371 680
	6,0/6,5	99-3006	371 705
SRB - Multigrip	5,0	99-1456	372 985
	6,5	99-1477	371 980
HUCKTAINER-PLUS	10	99-3465	371 730*
Blind rivets			
MAGNA-LOCK MAGNA-BULB TIBULB	5,0	99-3303	371 805
MAGNA-LOCK MAGNA-BULB TIBULB	6,5	99-3305	371 815
BOM	5,0	99-994	372 780
TIBULB	7,8	Rivetec	385 150

\* necessary to additionally order another nose number: 10-1095

## Other optional accessories:

- Reinforced collecting vessel
- Adapter for removing mandrels by hoses Ø 10 mm
- Turn around sensor for reading of removed rivet mandrels

# HL69

## Manual tools for cutting hexagonal holes

### Technical sheet

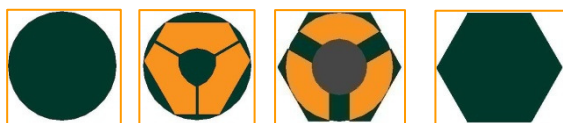
#### Technical parameters:

Type	HL 69
Working stroke	7 mm
Weight	2.1 kg
Width	150 mm
Height	510 mm

#### Scope of use:

Strength of material (in MPa)		100	200	300	400	500	600
		Thickness of material (in mm)					
M6 * Ø9,1	Steel			2,1	1,8	1,6	1,5
	Brass		2,4	2,2	2	1,8	
	Aluminium	2,8	2,5	2,3	2,1	2	
M5 * Ø7,1	Steel			2,5	2,1	1,9	1,8
	Brass		2,9	2,7	2,4	2,2	
	Aluminium	3	3	2,8	2,6	2,4	
M4 * Ø6,1	Steel			2,9	2,5	2,2	2
	Brass		3	3	2,8	2,6	
	Aluminium	3	3	3	3	2,8	

\* size of rivet, hole before punching



#### Description of tools:

- simple operation
- simple exchange of puncher
- reliability



# RL6100

Pneumatic-hydraulic tools for cutting hexagonal holes

## Technical sheet

### Technical parameters:

Type	RL 6100
Maximum pressure	7 bars
Draw force	34 kN/6 bar
Working stroke	9 mm
Weight	2.9 kg
Output – Force / Weight	11.72 kN/kg
Height	306 mm
Length	320 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 hole	6.2 l
Level of acoustic pressure	$L_{PAI} = 86 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2.5 \text{ m/s}^2$

### Scope of use:

Strength of material (in MPa)		100	200	300	400	500	600
		Thickness of material (in mm)					
M8* ø11,1	Steel			3,5	3,1	2,8	2,6
	Brass		4,1	3,7	3,5	3,2	
	Aluminium	4,6	4,2	3,9	3,7	3,5	
M6* ø9,1	Steel			4,1	3,5	3,2	2,9
	Brass		4,8	4,4	4	3,7	
	Aluminium	5,5	5	4,6	4,3	4	
M5* ø7,1	Steel			5	4,3	3,9	3,5
	Brass		5,9	5,3	4,9	4,5	
	Aluminium	6	6	5,6	5,2	4,9	
M4* ø6,1	Steel			5,8	5	4,5	4
	Brass		6	6	5,7	5,3	
	Aluminium	6	6	6	6	5,7	

\* size of rivet, hole before punching



### Description of tools:

- ⊙ high output at small dimensions
- ⊙ control of the whole process with only one button
- ⊙ robust construction
- ⊙ simple operation
- ⊙ simple exchange of puncher
- ⊙ low noise
- ⊙ low maintenance demands
- ⊙ ergonomic handle – fits into the hand well
- ⊙ low value of transferred vibrations
- ⊙ rotary joint air connection
- ⊙ supply of pressured air optional from right or left which can be very easily modified for right or left-hand persons
- ⊙ curtain
- ⊙ safety over-pressure valve
- ⊙ reliability



# TC20

Riveting tools for blind rivets with checking of the TC process

Technical sheet

## Technical parameters:

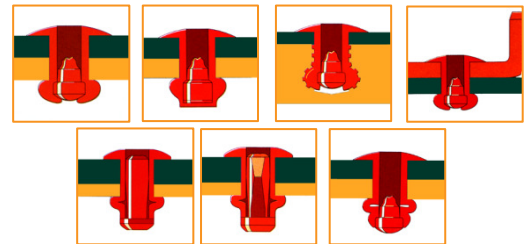
Type	TC20
Maximum pressure	7 bar
Draw force	12,5 kN/6 bar
Working stroke	15,8 mm
Weight	2,4 kg
Height	274 mm
Length	362 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 rivet (with exhaustion)	2 l
Consumption of air per 1 rivet (without exhaustion)	0,2 l
Level of acoustic pressure	$L_{PAI} < 70 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2,5 \text{ m/s}^2$

## Scope of use:

Diameter of the rivet	2,4	3/3,2	4	4,8/5	6	6,4
-----------------------	-----	-------	---	-------	---	-----

Aluminium, Copper, Brass	✓	✓	✓	✓		
Steel	✓	✓	✓	✓		
Stainless	✓	✓	✓	✓		

Nosepieces in the package	✓	✓	✓	✓		
---------------------------	---	---	---	---	--	--



## Description of tools:

- ◉ integrated **TC** system which together with evaluation of the KRB unit ensures the perfect tool for monitoring and evaluation of the riveting process
- ◉ low weight
- ◉ economic automatic exhaustion – activation during clamping
- ◉ low noise
- ◉ low maintenance demands
- ◉ simple operation
- ◉ large range of additional equipment
- ◉ ergonomic handle – fits into the hand well
- ◉ low value of transferred vibrations
- ◉ rotary joint air connection
- ◉ supply of pressured air optional from right or left which can be very easily modified for right or left handed persons
- ◉ curtain
- ◉ spare nosepieces on the bottom of the tools
- ◉ safety over-pressure valve
- ◉ reliability

## TC system manages to distinguish:

- ◉ absence of rivets
- ◉ rivets which do not correspond to the specification
- ◉ damaged or defective rivets
- ◉ absence of joining materials
- ◉ change in the quality of pre-drilled holes for rivets
- ◉ incorrect placing of the rivet into material
- ◉ incorrect placing of joined materials
- ◉ damaged or defective function of the riveting equipment



## KRB evaluating unit

- ⦿ Necessary equipment for evaluation of the riveting process which can be connected to a PC

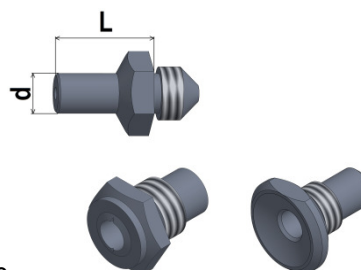


## Standard accessories:

- ⦿ Nosepieces, see table + necessary wrenches for the replacement of nosepieces
- ⦿ Set for adding oil
- ⦿ Air joint connection + Allen wrench for tightening air connection
- ⦿ User and Maintenance Manual, list of spare parts

## Other optional accessories:

- ⦿ Jaws for stainless rivets
- ⦿ Prolonged nosepieces by 5 mm from  $L = 10$  to  $25$  mm
- ⦿ Special nosepieces for certain types of rivets, e.g. Bulb-Tite
- ⦿ Prolonged noses  $\varnothing d = 19.5$  mm with lengths  $L = 120, 160, 200, 225, 250, 300$  mm
- ⦿ Noses with smaller  $\varnothing d = 16.4$  mm with lengths  $L = 75, 200$  mm



- ⦿ Angular head
- ⦿ Adapter for removing mandrels by  $\varnothing 6$  and  $\varnothing 10$  mm hoses

# TC60

## Riveting tools for blind rivets with checking of the TC process

### Technical sheet

#### Technical parameters:

Type	TC 60
Maximum pressure	7 bar
Draw force	18,2 kN/6 bar
Working stroke	26 mm
Weight	3,4 kg
Height	340 mm
Length	323 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 rivet (with exhaustion)	4,8 l
Consumption of air per 1 rivet (without exhaustion)	3 l
Level of acoustic pressure	$L_{PAI} < 70 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2,5 \text{ m/s}^2$

#### Scope of use:

Diameter of the rivet	4	4,8/5	6	6,4	6,4*	8
Aluminium, Copper, Brass	✓	✓	✓	✓	✓	✓
Steel	✓	✓	✓	✓	✓	
Stainless	✓	✓	✓	✓	✓	
Nosepieces in the package	✓	✓	✓	✓	✓	

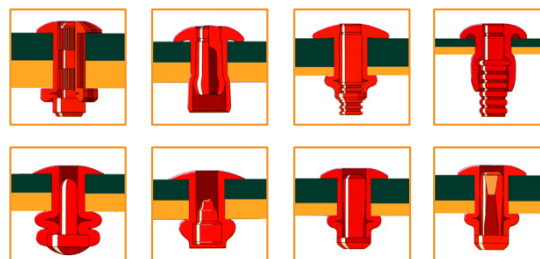
\* structural rivet of the type: MAGNA-BULB, HUCKLOCK, TIBULB, M-LOCK

#### Description of tools:

- integrated **TC** system which together with evaluation of the KRB unit ensures the perfect tool for monitoring and evaluation of the riveting process
- high output
- high working stroke
- used for processing structured and structural rivets
- low noise
- simple operation
- ergonomic handle – fits into the hand well
- low value of transferred vibrations
- rotary joint air connection
- supply of pressured air optional from right or left which can be very easily modified for right or left-handed persons
- removable collecting vessel
- curtain
- spare nosepieces on the bottom of the tools
- safety over-pressure valve
- reliability

#### TC system manages to distinguish:

- absence of rivets
- rivets which do not correspond to the specification
- damaged or defective rivets
- absence of joining materials
- change in the quality of pre-drilled holes for rivets
- incorrect placing of the rivet into material
- incorrect placing of joined materials
- damaged or defective function of the riveting equipment





## KRB evaluating unit

- Necessary equipment for evaluation of the riveting process which can be connected to a PC



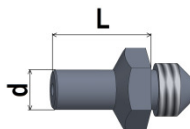
## Standard accessories:

- Nosepieces, see table + necessary wrenches for the replacement of nosepieces
- Set for adding oil
- Air joint connection + Allen wrench for tightening air connection
- User and Maintenance Manual, list of spare parts

## Other optional accessories:

- Shredding head for rivets with grooved mandrel 0.8 mm

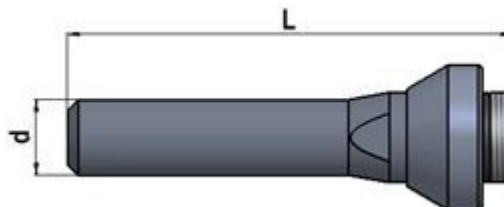
- Prolonged nosepieces by 5 mm from L = 10 to 25 mm



- Special nosepieces for certain types of rivets, e.g. Monobolt



- Prolonged noses  $\varnothing d = 22$  mm with lengths L = 130, 170, 210, 235, 260, 310 mm



- Reinforced collecting vessel
- Adapter for removing mandrels by  $\varnothing 6$  and  $\varnothing 10$  mm hoses



# TC50

Riveting tools for threaded rivets with checking of the TC process

Technical sheet

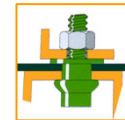
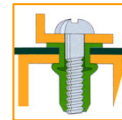
## Technical parameters:

Type	TC 50
Maximum pressure	7 bar
Draw force	23,5 kN/6 bar
Working stroke	1,5 – 5,0 mm
Weight	2,2 kg
Output – Force / Weight	10,68 kN/kg
Height	255 mm
Length	292 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 rivet	4,6 l
Consumption of engine air	23,3 l/min
Level of acoustic pressure	$L_{PAI} = 86 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2,5 \text{ m/s}^2$

## Scope of use:

Rivet thread	M3	M4	M5	M6	M8	M10	M12
Aluminium	✓	✓*	✓*	✓*	✓*	✓	✓
Brass	✓	✓*	✓*	✓*	✓*	✓	✓
Steel	✓	✓*	✓*	✓*	✓*	✓	
Stainless	✓	✓*	✓*	✓*	✓*	✓	
Mandrels and noses included in the package		✓	✓	✓	✓	✓	

\* including threaded bolts



## Description of tools:

- ◉ integrated **TC** system which together with evaluation of the KRB unit ensures the perfect tool for monitoring and evaluation of the riveting process
- ◉ high output at small dimensions
- ◉ one button control
- ◉ exact fluent stroke adjustment
- ◉ simple operation
- ◉ low noise
- ◉ ergonomic handle – fits into the hand well
- ◉ low value of transferred vibrations
- ◉ rotary joint air connection
- ◉ supply of pressured air optional from right or left which can be very easily modified for right or left-handed persons
- ◉ button for manual running of left engine revolutions
- ◉ curtain
- ◉ safety over-pressure valve
- ◉ reliability



## TC system manages to distinguish:

- ◉ absence of rivets
- ◉ rivets which do not correspond to the specification
- ◉ damaged or defective rivets
- ◉ absence of joining materials
- ◉ change in the quality of pre-drilled holes for rivets
- ◉ incorrect placing of the rivet into material
- ◉ incorrect placing of joined materials
- ◉ damaged or defective function of the riveting equipment

## KRB evaluating unit

- ⦿ Necessary equipment for evaluation of the riveting process which can be connected to a PC



## Standard accessories:

- ⦿ Noses and mandrels – see table
- ⦿ Set for adding oil
- ⦿ Air joint connection + Allen wrench for tightening air connection
- ⦿ User and Maintenance Manual, list of spare parts

## Other optional accessories:

- ⦿ Internal-thread mandrels for threaded bolts M4 – M8
- ⦿ Prolonged mandrels and noses
- ⦿ Mandrels with metric thread with finer pitch
- ⦿ Mandrels with UNC, UNF thread

# TC75

Riveting tools for two-part rivets with checking of the TC process

Technical sheet

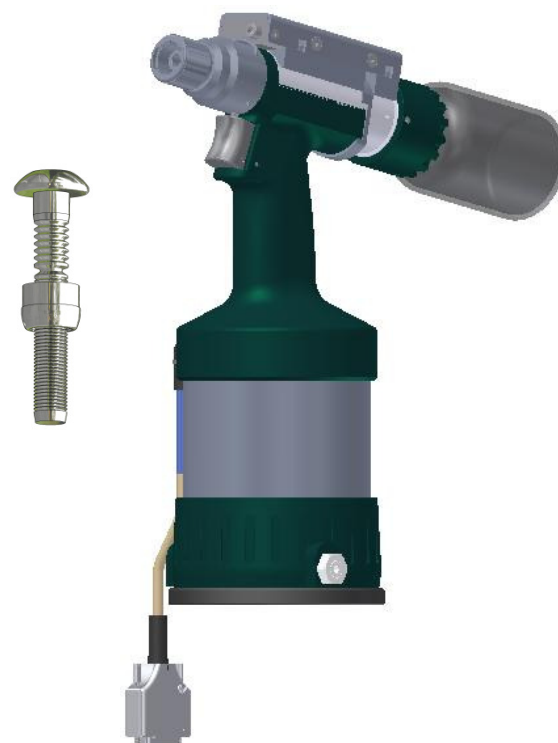
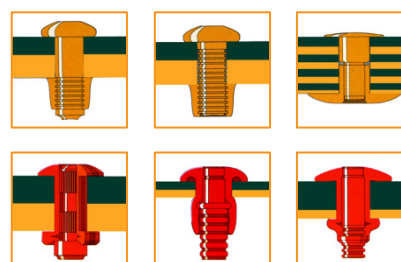
## Technical parameters:

Type	TC 75
Maximum pressure	7 bar
Draw force	22 kN/6 bar
Working stroke	15 mm
Weight	2,8 kg
Height	330 mm
Length	292 mm
Hose connection	ø 6 mm (G 1/4")
Consumption of air per 1 rivet	2,8 l
Level of acoustic pressure	$L_{PAI} < 70 \text{ dB(A)}$
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2,5 \text{ m/s}^2$

## Scope of use:

Type of rivet	SRB Standard		SRB Multigrip		Hucktainer PLUS	Blind rivets
Ø of the rivet	5	6 6,5	5	6,5	10	6,4 *
Aluminium	✓	✓	✓	✓		✓
Steel	✓	✓	✓	✓	✓	✓
Stainless	✓	✓				✓

\* structural blind rivets: TIBULB, M-LOCK, MAGNA-BULB, HUCKLOCK.



## Description of tools:

- integrated **TC** system which together with evaluation of the KRB unit ensures the perfect tool for monitoring and evaluation of the riveting process
- high output
- integrated reducer of the piston speed due to optimal riveting
- removable collecting vessel for catching rubber
- low noise
- low maintenance demands
- simple operation
- ergonomic handle – fits into the hand well
- low value of transferred vibrations
- rotary joint air connection
- supply of pressured air optional from right or left which can be very easily modified for right or left-handed persons
- curtain
- safety over-pressure valve
- reliability

## TC system manages to distinguish:

- absence of rivets
- rivets which do not correspond to the specification
- damaged or defective rivets
- absence of joining materials
- change in the quality of pre-drilled holes for rivets
- incorrect placing of the rivet into material
- incorrect placing of joined materials
- damaged or defective function of the riveting equipment

## KRB evaluating unit

- Necessary equipment for evaluation of the riveting process which can be connected to a PC



## Standard accessories:

- Hick adapter for heads
- Set for adding oil
- Air joint connection + Allen wrench for tightening air connection
- User and Maintenance Manual, list of spare parts

## Shredding heads:

Type of rivet	Ø of the rivet mm	Type of head	Warehouse number
SRB - Standard	5,0	99-3003	371 680
	6,0/6,5	99-3006	371 705
SRB - Multigrip	5,0	99-1456	372 985
	6,5	99-1477	371 980
Blind rivets			
MAGNA-LOCK MAGNA-BULB TIBULB	5,0	99-3303	371 805
MAGNA-LOCK MAGNA-BULB TIBULB	6,5	99-3305	371 815
BOM	5,0	99-994	372 780

## Other optional accessories:

- Reinforced collecting vessel
- Adapter for removing mandrels by hoses Ø 10 mm

# KRB

## Evaluating unit for tools with TC system

### Technical sheet

#### Technical parameters:

Type	KRB
Supply DC current	24 V
Connection to tools	connector 25 pins
Weight	7.2 kg
Height	370 mm
Length	240 mm
Width	300 mm
Communication	Ethernet, USB, PROFIBUS

#### Scope of use:

Type of riveting tools
TC 20
TC 60
TC 50
TC 75
HH50 TC
HH60 TC

#### Description of tools:

- intuitive software for setting the conditions for evaluation of the riveting process
- connection to PC through Ethernet or USB
- storage of data into PC
- slot for storage of data on MMC card
- identification of the status on the PLC display – OK, NOK, number of cycles
- automatic setting of the sensor values when connecting tools
- prepared for communication with the PLC master system



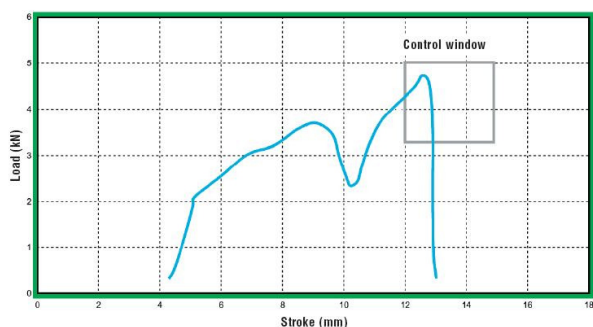
#### TC system manages to distinguish:

- absence of rivets
- rivets which do not correspond to the specification
- damaged or defective rivets
- absence of joining materials
- change in the quality of pre-drilled holes for rivets
- incorrect placing of the rivet into material
- incorrect placing of joined materials
- damaged or defective function of the riveting equipment

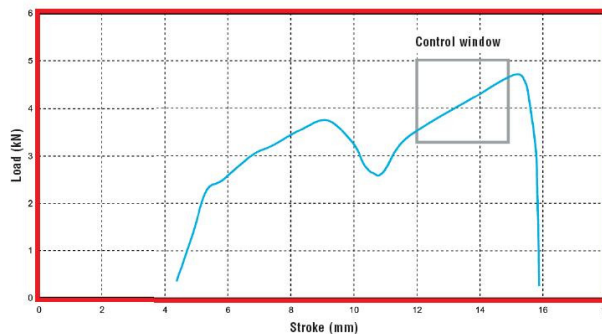


## Examples of each rivets sort curves and results:

### Steel blind rivet 4,8

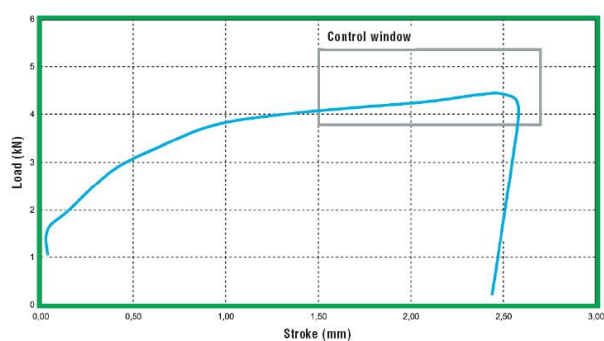


O.K. the rivet do correspond to the specification

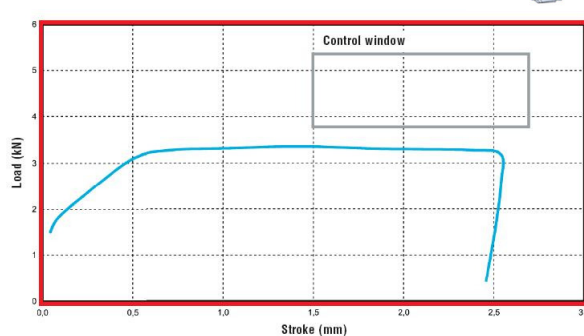


N.O.K. component with thickness 3 mm is missing,

### Steel rivet nut M6

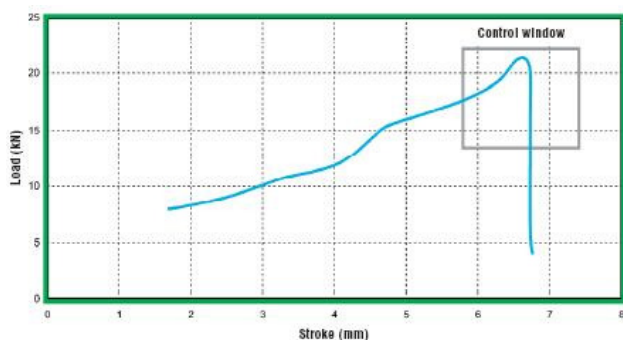


O.K. the rivet do correspond to the specification

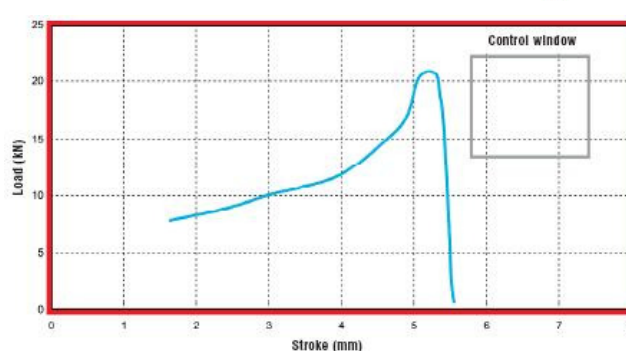


N.O.K. instalation without component

### Steel two-parts rivets Lockbolt 6,5



O.K. the rivet do correspond to the specification



N.O.K. collar is missing / collar installed oppositely



# Tios H75

Hydraulic riveting tool with checking of TC process

## Technical sheet

### Technical parameters:

Type	Tios H75
Drive	Tios H350
Draw force	26,5 kN
Working stroke	30 mm
Weight	2,5 kg
Maximum pressure	35 MPa
Height	225 mm
Length	268 mm
Length of hoses	2,5 m
Control of supply	24 V
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2,5 \text{ m/s}^2$

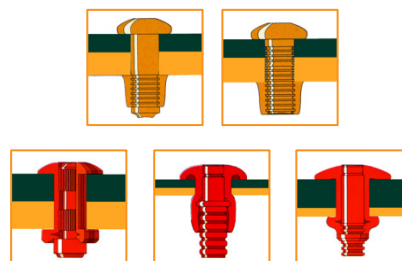
### Scope of use:

Type of rivet	SRB Standard		SRB Multigrip		Hucktainer PLUS	Blind rivets
Ø of the rivet	5	6 6,5	5	6,5	10	6,4 *
Aluminium	✓	✓	✓	✓		✓
Steel	✓	✓	✓	✓	✓	✓
Stainless	✓	✓				✓

\* structural blind rivets: TIBULB, M-LOCK, MAGNA-BULB, HUCKLOCK.

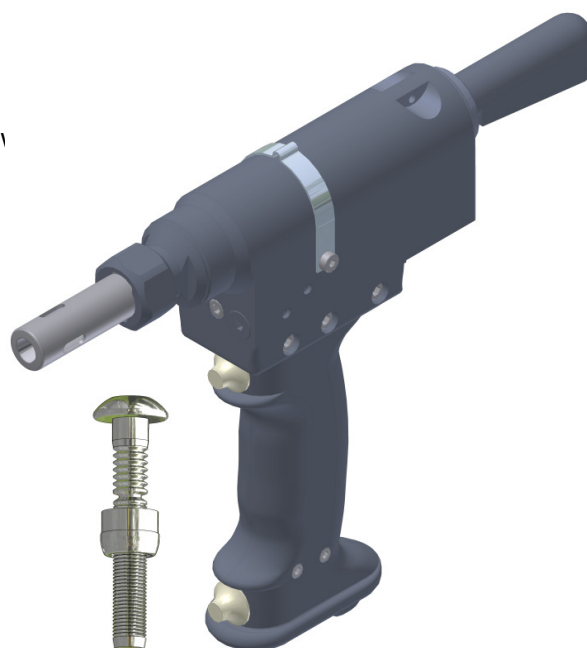
### Description of tools:

- tools are equipped with electronics for the monitoring of the TC process
- high output
- robust construction
- identification of the results of the process by colour diodes
- chip for automatically setting the values in the evaluation equipment
- electronically controlled movement of the hydraulic piston
- for these hydraulic hoses there is extremely easy manipulation
- two hinges for clamping in a standard manner or head-down
- second button for working in the head-downward position
- removable collecting vessel for catching rubber
- low maintenance demands
- simple operation
- ergonomic handle – fits into the hand well
- low value of transferred vibrations

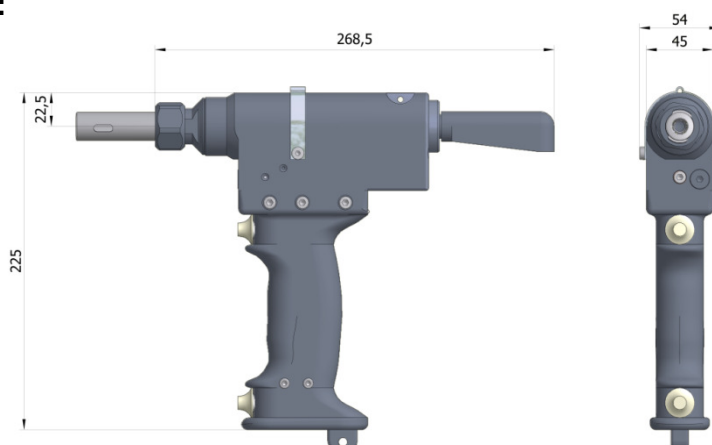


### TC system manages to distinguish:

- absence of rivets
- rivets which do not correspond to the specification
- damaged or defective rivets
- absence of joining materials
- change in the quality of pre-drilled holes for rivets
- incorrect placing of the rivet into material
- incorrect placing of joined materials
- damaged or defective function of the riveting equipment



## Dimensions of tools:



## Shredding heads:

Type of rivet	Ø of rivet mm	Type of head	Warehouse number
SRB - Standard	5,0	99-3003	371 680
	6,0/6,5	99-3006	371 705
SRB - Multigrip	5,0	99-1456	372 985
	6,5	99-1477	371 980
HUCKTAINER-PLUS	10	99-3465	371 730*
Blind rivets			
MAGNA-LOCK MAGNA-BULB TIBULB	5,0	99-3303	371 805
MAGNA-LOCK MAGNA-BULB TIBULB	6,5	99-3305	371 815
BOM	5,0	99-994	372 780

\* necessary to additionally order another nose

## Other optional accessories:

- Reinforced collecting bin with direct or angular adapter
- Diameter of hose mandrels Ø 10 mm, length 2 m

## Drive Tios H350:

This tool is used for the Drive **Tios H350** drive which has a built-in **KRB** evaluation unit. It contains PLC and the evaluation of sensor data. PLC can be connected to another master PLC by means of a HARTING connector. Data for riveting processes can be stored on a MMC card or through an Ethernet connection and monitored on a PC.





# Tios H85

Hydraulic riveting tool with checking of TC process

## Technical sheet

### Technical parameters:

Type	Tios H85
Drive	Tios H350
Draw force	30,7 kN
Working stroke	30,5 mm
Weight	3,7 kg
Maximum pressure	35 MPa
Height	232 mm
Length	311 mm
Length of hoses	2,5 m
Control of supply	24 V
Vibrations (ISO/FDIS 8662-11)	$a_{hw} < 2,5 \text{ m/s}^2$

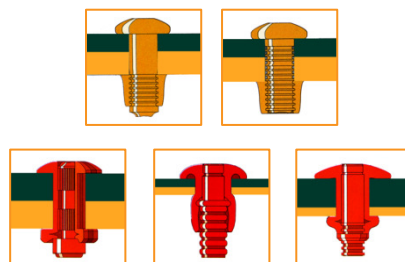
### Scope of use:

Type of rivet	SRB Standard				SRB Multigrip				Hucktainer PLUS	Blind rivets
	5	6,5	8	10	5	6,5	8	10	10	6,4/8*
Ø of rivet										
Aluminium	✓	✓	✓	✓	✓	✓	✓	✓		✓
Steel	✓	✓	✓		✓	✓	✓		✓	✓
Stainless	✓	✓	✓							✓

\* structural shredding single-sided rivets: TIBULB, M-LOCK, MAGNA-BULB, HUCKLOCK.

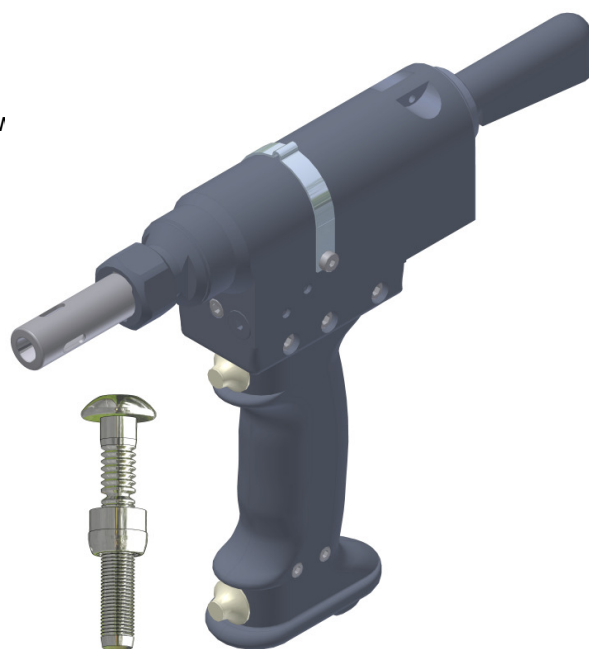
### Description of tools:

- tools are equipped with electronics for the monitoring of the TC process
- high output
- robust construction
- identification of the results of the process by colour diodes
- chip for automatically setting the values in the evaluation equipment
- electronically controlled movement of the hydraulic piston
- for these hydraulic hoses there is extremely easy manipulation
- two hinges for clamping in a standard manner or head-down
- second button for working in the head-downward position
- removable collecting vessel for catching rubber
- low maintenance demands
- simple operation
- ergonomic handle – fits into the hand well
- low value of transferred vibrations

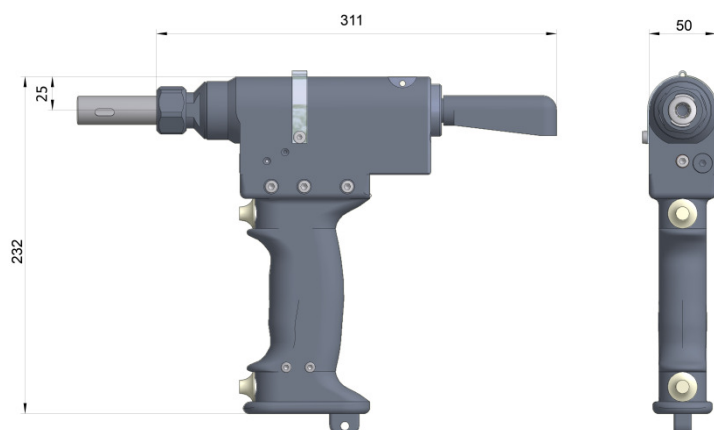


### TC system manages to distinguish:

- absence of rivets
- rivets which do not correspond to the specification
- damaged or defective rivets
- absence of joining materials
- change in the quality of pre-drilled holes for rivets
- incorrect placing of the rivet into material
- incorrect placing of joined materials
- damaged or defective function of the riveting equipment



## Dimensions of tools:



## Shredding heads:

Type of rivet	Ø of rivet mm	Type of head	Warehouse number
SRB - Standard	5	99-2558	99-2558
	6,5	99-2564	375845
	8	99-99-245	375885
	10	99-100-245	375945
SRB - Multigrip	5	99-3206	99-3206
	6,5	99-1290	371960
	8	99-1439	371965
	10	99-1440	371970
Blind rivets			
MAGNA-LOCK	9,8	99-3318	371904
MAGNA-BULB	8	99-3307	99-3307
BOM	5	99-1053	99-1053
	6,5	99-830-1	372550
	8	99-769	372705
HUCKTAINER	10	99-3438	371994*

\* necessary to additionally order another nose

## Other optional accessories:

- Reinforced collecting bin with direct or angular adapter
- Diameter of hose mandrels Ø 10 mm, length 2 m

## Drive Tios H350:

This tool is used for the Drive **Tios H350** drive which has a built-in **KRB** evaluation unit. It contains PLC and the evaluation of sensor data. PLC can be connected to another master PLC by means of a HARTING connector. Data for riveting processes can be stored on a MMC card or through an Ethernet connection and monitored on a PC.



## Tios H350 MINI

Hydraulic aggregate with KRB evaluation unit

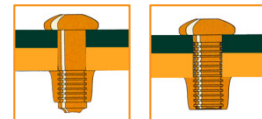
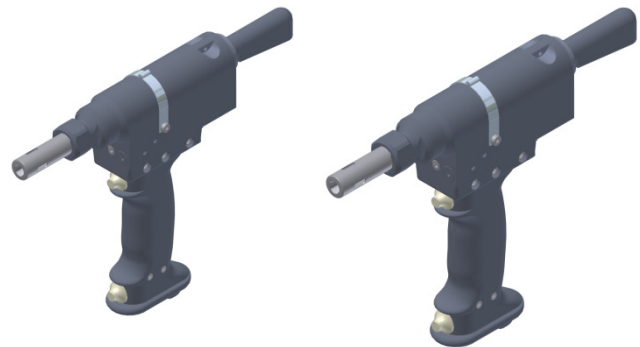
Technical sheet

### Technical parameters:

Type	Tios H350 MINI
Supply	400 V/50 Hz
Control of supply	24 V
Output of the engine	1,6 kW
Filler – mineral hydraulic oil	VG 32 ISO TC 28/SC4 (DIN 51524)
Oil viscosity at 40°C	32 mm <sup>2</sup> /s
Volume of oil	4 dm <sup>3</sup>
Output of pumps	1 l/min
Maximum pressure	35 MPa
Heating operating conditions	15-28 °C
Dimensions	780x400x660 mm
Length of hoses	2,5 m
Weight	90 kg

### Scope of use:

Tools Tios H75 and Tios H85



### Characteristics of the aggregate:

- high-performance industrial aggregate for shift operation
- equipped with **TC** system for monitoring and evaluation of the riveting processes
- communication with master PLC through a HARTING connector
- robust construction
- identification of maintenance or failures on the display
- slot for MMC card for storage of data from riveting processes
- connection through Ethernet to PC

### TC system manages to distinguish:

- absence of rivets
- rivets which do not correspond to the specification
- damaged or defective rivets
- absence of joining materials
- change in the quality of pre-drilled holes for rivets
- incorrect placing of the rivet into material
- incorrect placing of joined materials
- damaged or defective function of the riveting equipment





# RHP

## Pneumatic-hydraulic aggregate

### Technical sheet

#### Technical parameters:

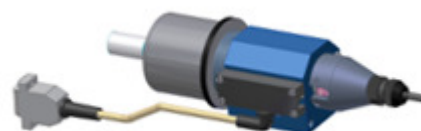
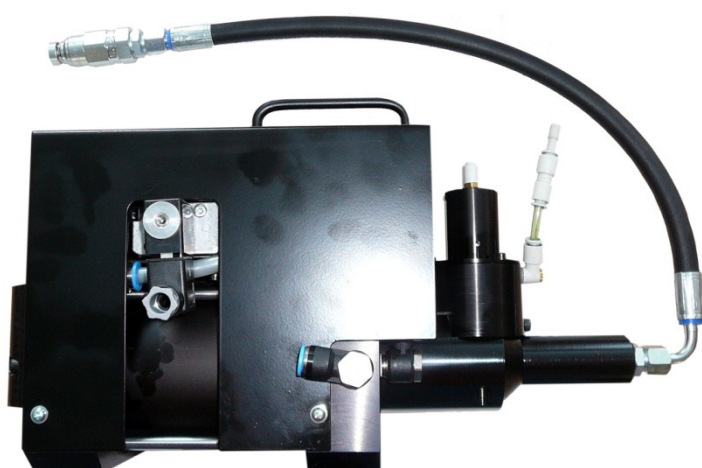
Type	RHP
Maximum pressure	7 bar
Hose connection	Ø 10 mm (G 1/4")
Minimum oil pressure	350 bar
Control of supply	24 V
Dimensions	740x450x630 mm
Weight	10 kg

#### Scope of use:

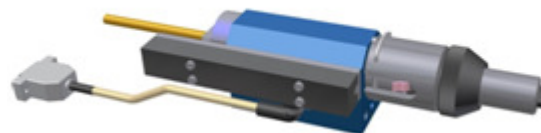
Type of riveting head	Using by sort of rivets
HH50	threaded rivets
HH60	blind rivets
HH50 TC	threaded rivets with checking of the TC
HH60 TC	blind rivets with checking of the TC

#### Characteristics of the aggregate:

- high-performance industrial aggregate for shift operation
- connection to riveting head by fast coupling
- automatic adding of oil from the vessel
- easy maintenance
- pneumatic piston terminal position reader
- electric or pneumatic start control



Riveting head HH50 TC



Riveting head HH60 TC



Riveting head HH50



Riveting head HH60