



tooling for punch presses

JETFORM



INDEX

●	JETFORM	2
●	LUBRICATION: A MUST	3
●	COMMON FORMING	4
●	SPECIAL FORMING	5
●	CONTINUOUS FORMING AND SPECIAL APPLICATIONS	6
●	JETFORM	
	B and C Stations	8
	D and E Stations	9
●	INSERTS SETS	
	M01 Forming - Engraved Countersink	10
	M02 Forming - Extruded Hole	12
	M03 Forming - Round Emboss	14
	M04 Forming - Round Countersink	16
	M09 Shearing & Forming - Shelf Clip	18
	M10 Shearing & Forming - Knockout	20
	M12 Shearing & Forming - Radius Back Louver	22
	M13 Shearing & Forming - Shear Button	24
	M14 Engraving - Electrical Ground Symbol	26
	M15 Shearing & Forming - Cont. Radius Back Louver	28
	M17 Shearing & Forming - Thread Loop	30
	M20 Forming - Continuous Obround Emboss	32
	M22 Forming - Custom Logo	34
	M23 Engraving - Dot Scriber	36
	M24 Shearing & Forming - Clip with Button	38
	M25 Shearing & Forming - Strengthened Clip	40
	M26 Shearing & Forming - Emboss for Electr. Cables	42
	M27 Shearing & Forming - Bridge & Extruded Hole	44
	M28 Forming - Bending Tool	46
	M29 Forming - Hinge	48
	M31 Forming - Deburr	50
	M32 Engraving - Foil Slitting Tool	52



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MATRIX

Via Ponte d'Oro, 8 • 36015 • Schio • Vicenza • Italy

T. +39 0445 67.10.15 • F. +39 0445 67.10.35

www.matrixtools.eu • sales@matrixtools.eu



JETFORM



Jetform, line of tools for sheet metal forming, for **efficient machine performances**. Processings available from extrusions to engravings, clips and embosses and many others.

JETFORM inserts holder line is available on B, C, D and E station, with interchangeable inserts to reduce the costs for a new forming.

To better adapt to the specific customer's needs, Matrix' offer includes two types of inserts holders.

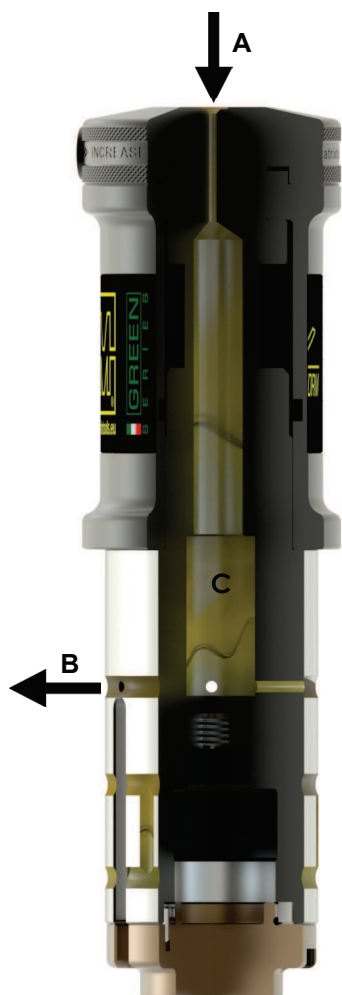
The Green Series characterized by an **accurate step adjusting of tool height**; the best choice for punching machines with imprecise or missing stroke adjusting.

The White series, **without adjusting**, exploits the stroke adjusting of the most recent punching machines.

All inserts holders are manufactured with a **total components lubrication system**; this works by getting a specific oil from the top, either automatically or manually.

LUBRICATION: A MUST

It's the first rule to apply; being punching a shearing and extrusion process, in order to get a good result, lubrication of the shearing area is a must. Lubrication has an essential role on punching machines, particularly on punching stamps.



During punching phases, small quantities of material get stuck to the tool surface.

A lubricant oil with proper characteristics acts as a barrier between tool and material reducing significantly both friction and material build up on the tool surface, improving therefore the tool life.

On machines without an automatic lubricating system please daily fill up the central bore with sliding oil and always to each equipping.

Inobservance of this rule will cause an excessive insert holders wearing.

With the schema on the left, valid for B station, you can see the course of the lubricant.

The letters respectively indicate:

- A** Bore for lubricant liquid
- B** Bore to let the lubricant liquid into the outer punch holder walls and its housing contact area
- C** Tank for lubricant

The oil, by lubricating the tool cutting part, improves shearing and pulling

Matrix can supply lubricant and shearing oils for different working requirements. Evaporable oils are also available whenever grease waste parts must be avoided.

COMMON FORMING - JETFORM

The most common forming are embosses, countersinks, engravings, logos, louvers and many others. The great diffusion of these forming allows to handle a **wide offer of standardized products**, reducing drastically delivery times. This type of forming is continuously growing, so please contact our sales department for assistance.



M01
ENGRAVED COUNTERSINK
FORMING



M02
EXTRUDED HOLE
FORMING



M03
ROUND EMBOSS
FORMING



M04
ROUND COUNTERSINK
FORMING



M09
SHELF CLIP
SHEARING AND FORMING



M12
RADIUS BACK LOUVER
SHEARING AND FORMING



M13
SHEAR BUTTON
SHEARING AND FORMING



M14
ENGRAVING
ENGRAVING



M23
DOT SCRIBER
ENGRAVING

SPECIAL FORMING - JETFORM

Our technical department is available to develop the **best solutions** for our customer's requirements. Thanks to this versatility we have no limits to satisfy the most complex requirements. The constant research of **new solutions** extends the possibility on the forming field, adding to normal engraving also **tridimensional images**.



**M24 - STRENGTHENED CLIP UP
WITH SAFETY BUTTON**
SHEARING AND FORMING



**M25
STRENGTHENED SPECIAL CLIP UP**
SHEARING AND FORMING



**M10
MULTIPLE KNOCKOUT**
SHEARING AND FORMING



**M22
CUSTOM LOGO**
RELIEF



**M26
EMBOSS FOR ELECTRICAL CABLES**
SHEARING AND FORMING



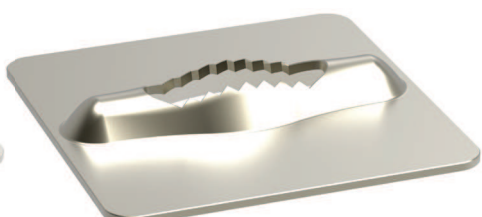
**M27
BRIDGED & EXTRUDED HOLE DOWN**
SHEARING AND FORMING



**M28
BENDING TOOL**
FORMING



**M29
HINGE**
FORMING



ANTI-SLIP TREAD PLATE
SHEARING AND FORMING

CONTINUOUS FORMING AND SPECIAL APPLICATIONS - JETFORM

The most recent technical solutions implemented on the modern punching machines for **much better tools control than in the past**, gives great impulse to new applications. New special tools have been developed to shear the protecting film laid on the sheet metal or continuous embosses or to deburr sheared parts.

These are only some examples of what you could get from your punching machine just using Matrix products.



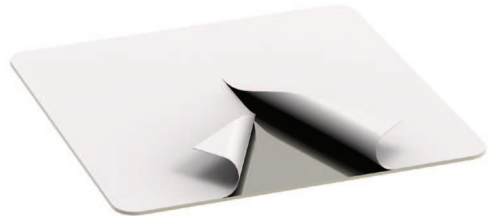
M15
CONTINUOUS RADIUS BACK LOUVER
SHEARING & FORMING



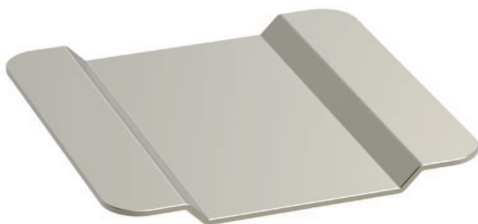
M20
CONTINUOUS OBOUND EMBOSS
FORMING



M30
SCRIBER
FORMING



M31
DEBURR
ENGRAVING



ROLLFORM
OFFSET
FORMING



ROLLFORM
RIB
FORMING



JETFORM HOLDERS AND INSERTS SETS



JETFORM - WHITE SERIES and GREEN SERIES (ADJUSTABLE HEIGHT)

B STATION MAX Ø ∅ = mm 25

C STATION MAX Ø ∅ = mm 40



WHITE SERIES

White Series insert holders, for extremely advantageous forming processes on punching machines recently manufactured, taking advantage from the stroke adjusting.

GREEN SERIES

Accurate tool height adjusting by mean of 0.08 mm steps which characterize Green Series insert holders, for the maximum performances on punching machines with imprecise or without stroke adjusting.

D STATION
MAX Ø ∇ = mm 70

E STATION
MAX Ø ∇ = mm 105



FAR0BA00
upper insert holder for
round and shaped insert

FB12BA00
upper insert holder for
round and shaped insert



FAR1BA00
upper insert holder for
round and shaped insert

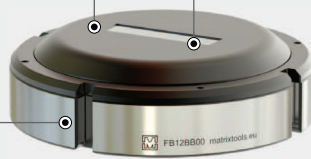
FB14BA00
upper insert holder for
round and shaped insert

VARYING CODE
inserts kit

VARYING CODE
inserts kit

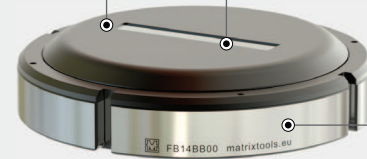
FB12BB00
round and shaped
lower insert holder

FB12BY00
louver lower
insert holder



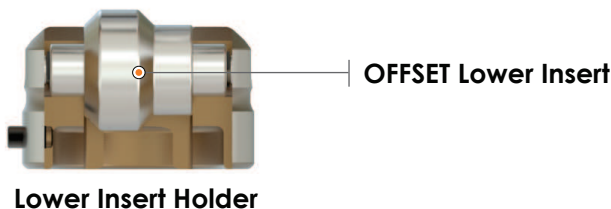
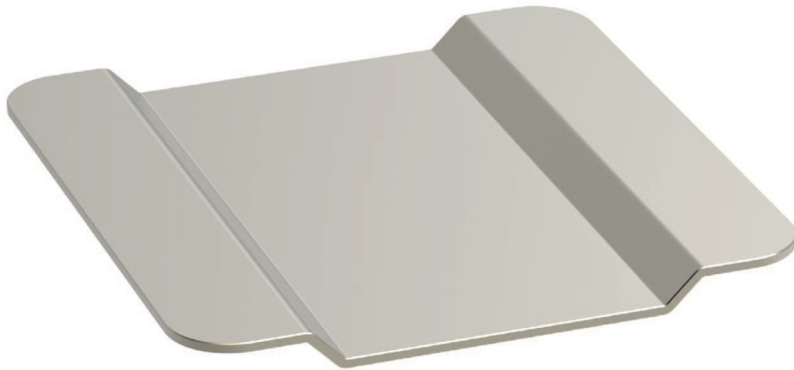
FB14BB00
round and shaped
lower insert holder

FB14BY00
louver lower
insert holder



Tools for the most common formings are available for a quick delivery.
Our sales department is at your complete disposal to provide you with updated list.

ROOLFORM - OFFSET



○ **INSERTS SET**

RollFORM tooling are an evolution of our JetFORM range for high speed deformations processing on punch press machines.

An efficient solution for emboss and offsets production on sheet metal, RollFORM tooling grants costs reduction with interchangeable inserts.

Insert sets to work on a wide range of materials and designed to be used on specific material and thickness.

Standard insert sets are designed to produce a mm 3,2 height deformation, while special insert sets are designed for heights between mm 1,5 and 4,7.

RollFORM tooling require hydraulic or electrical punching machines with ram stroke control and proper software.



OFFSET Upper Insert



Support



OFFSET Lower Insert



Lower Insert Holder

ROLLFORM - RIB

INSERTS SET

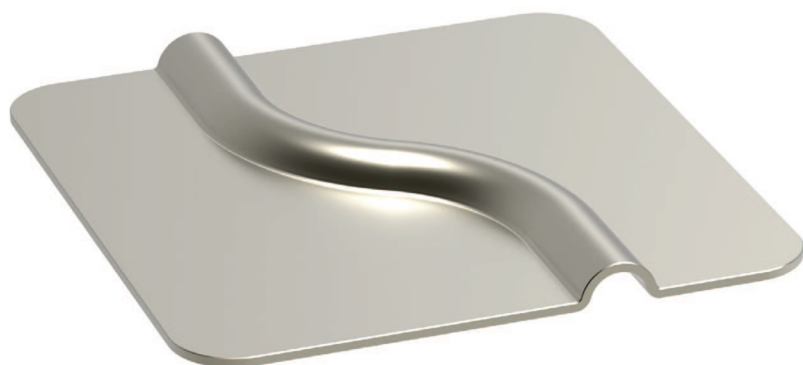
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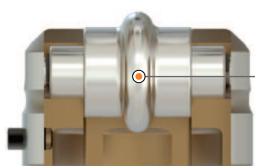
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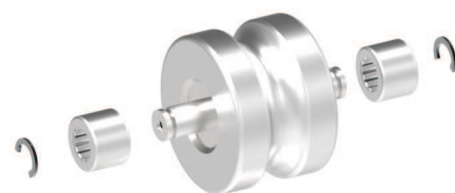
Upper Insert Holder



Lower Insert Holder

RIB Upper Insert
Support

RIB Lower Insert



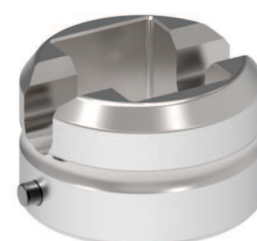
RIB Upper Insert



Support



RIB Lower Insert



Lower Insert Holder

M01 ENGRAVED COUNTERSINK

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

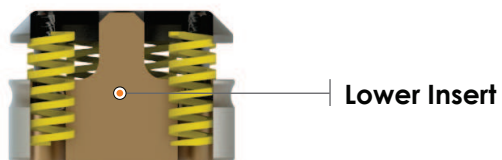
INSERTS SET

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**

It is necessary to supply technical sheet of the screw in case the purpose of the forming is to house a screw with the top part under the sheet plan.



Upper Insert Holder



Lower Insert Holder



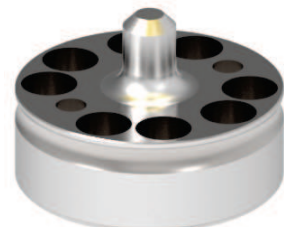
Upper Insert



Stripper



Springs

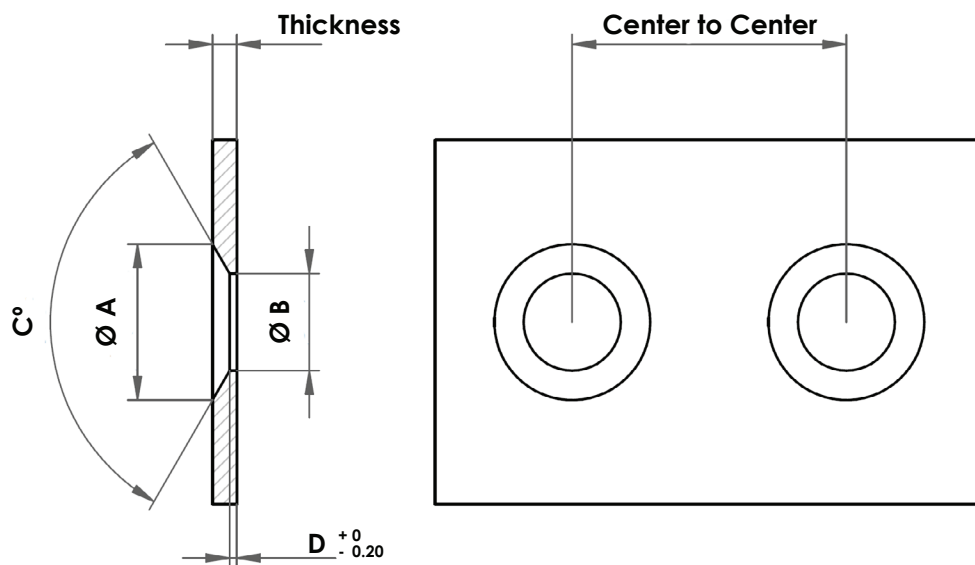


Lower Insert



Screws

M01 ENGRAVED COUNTERSINK



Required Measures (indicate the most important ones)

A	B	C°	D	Thickness	C. to C.

Dimensional Limits

Material	C°	Thickness	Maximum Deformation (Thickness - D)
Mild Steel	Maximum 100°	1.20÷3.00	85 %
		3.10÷5.00	60 %
		Over 5.00	50 %
Aluminium	Maximum 100°	Over 1.50	85 %
Stainless Steel	Maximum 100°	1.20÷2.00	85 %
		2.10÷3.00	60 %
		Over 3.00	50 %

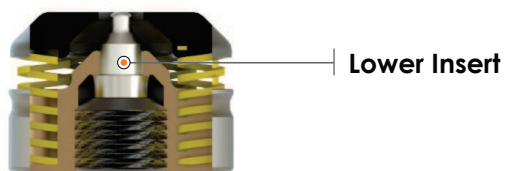
All measures are in mm

M02 EXTRUDED HOLE

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.



Upper Insert Holder



Lower Insert Holder

● INSERTS SET

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**

This forming requires a suitable pre hole.

Multiple close formings might bend the sheet metal.

Each set of insert is composed of all the following parts.



Spring



Ejector

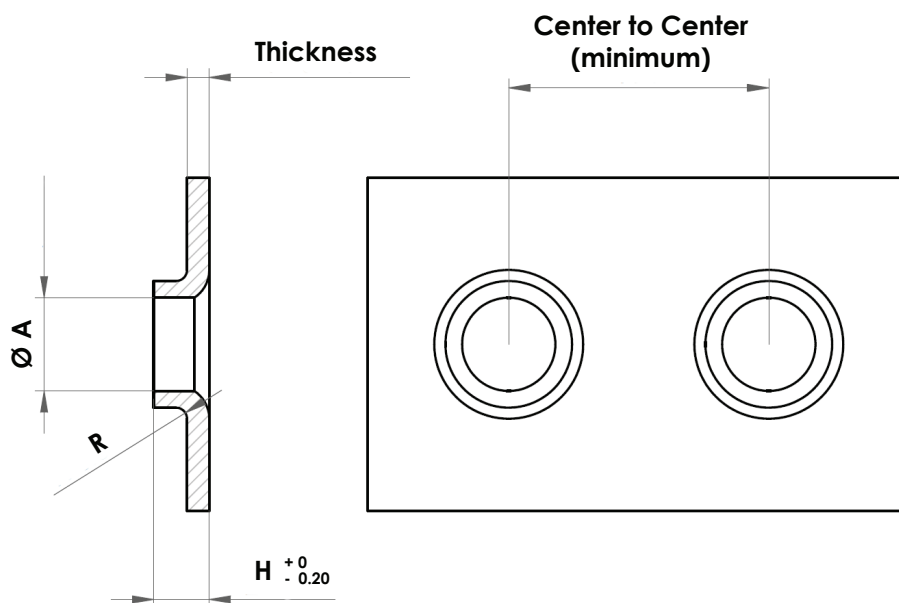


Upper Insert



Lower Insert

M02 EXTRUDED HOLE



Required Measures (indicate the most important ones)

Thread	A	Thickness	H	R	C. to C.

Dimensional Limits

A	H	Thickness
Maximum 10	Maximum 2,5 x Thickness	Maximum 5

Thick Turret B Station Standard Insert Sets

Thread	A	Pre Hole	Thickness	Inserts Set Code	B	R	C. to C.
M4	3.3	2.0 ±10%	0.80÷1.00	FB09237421.305	2.5	0.5	10.8
			1.10÷1.30	FB09237421.979	3.0	0.6	11.1
			1.40÷1.60	FB09237421.A43	3.75	0.75	11.55
M5	4.2	2.5 ±10%	0.80÷1.00	FB09237422.305	2.5	0.5	11.7
			1.10÷1.30	FB09237422.979	3.0	0.6	12.0
			1.40÷1.60	FB09237422.A43	3.75	0.75	12.45
M6	5.0	3.0 ±10%	0.80÷1.00	FB09237423.305	2.5	0.5	12.5
			1.10÷1.30	FB09237423.979	3.0	0.6	12.8
			1.40÷1.60	FB09237423.A43	3.75	0.75	13.25
M8	6.8	4.1 ±10%	0.80÷1.00	FB09237424.305	2.5	0.5	14.3
			1.10÷1.30	FB09237424.979	3.0	0.6	14.6
			1.40÷1.60	FB09237424.A43	3.75	0.75	15.05
			1.90÷2.10	FB09237424.217	5.0	1.0	15.8
M10	8.5	5.1 ±10%	0.80÷1.00	FB09237424.305	2.5	0.5	16.0
			1.10÷1.30	FB09237424.979	3.0	0.6	16.3
			1.40÷1.60	FB09237424.A43	3.75	0.75	16.75
			1.90÷2.10	FB09237424.217	5.0	1.0	17.5

All measures are in mm

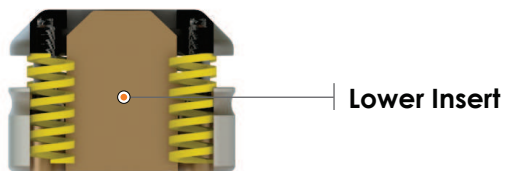
Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M03 ROUND EMBOSS

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.



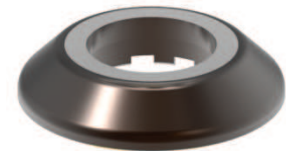
Upper Insert Holder



Lower Insert Holder



Upper Insert



Stripper



Springs



Lower Insert



Screws

● INSERTS SET

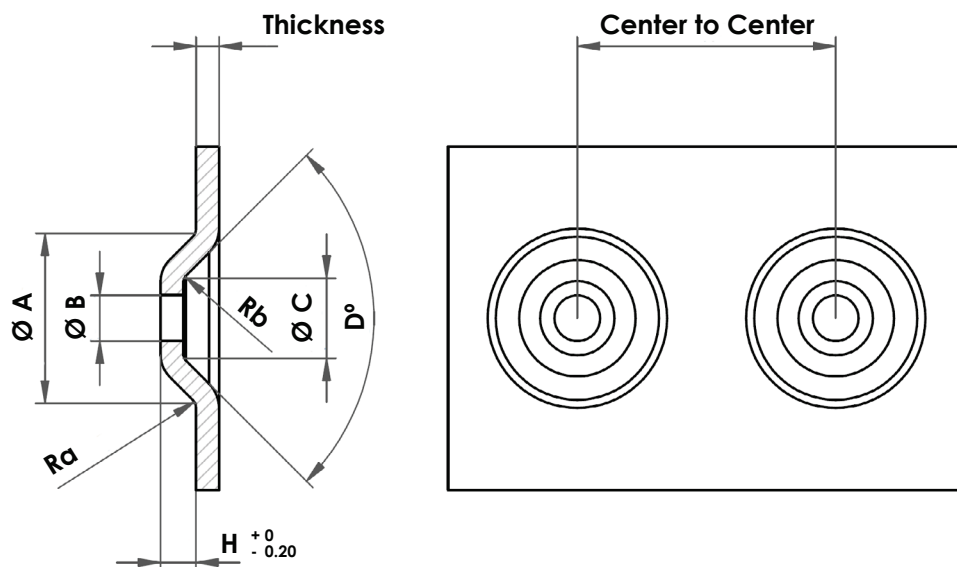
To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**

This forming requires a suitable pre hole.
Multiple close formings might bend the sheet metal.

It is necessary to supply technical sheet of the screw in case the purpose of the forming is to house a screw with the top part under the sheet plan.

Each set of inserts is composed of all the following parts.

M03 ROUND EMBOSS



Required Measures (indicate the most important ones)

A	B	C	D°	H	Ra	Rb	Thickness	C. to C.

Dimensional Limits

Station	D°	H	Thickness	Recommended C. to C.
B	Minimum 80°	Maximum 6 + Thickness	0.50÷3.00	Minimum A + 3 x Thickness
C	Minimum 80°	Maximum 7 + Thickness	0.50÷3.00	Minimum A + 3 x Thickness
D	Minimum 80°	Maximum 7 + Thickness	0.50÷3.00	Minimum A + 3 x Thickness

All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

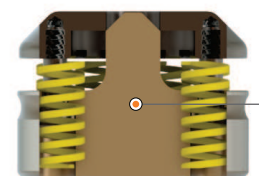
M04 ROUND COUNTERSINK

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.



Upper Insert Holder

Upper Insert

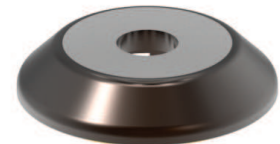


Lower Insert Holder

Lower Insert



Upper Insert



Stripper



Springs



Lower Insert



Screws

INSERTS SET

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**

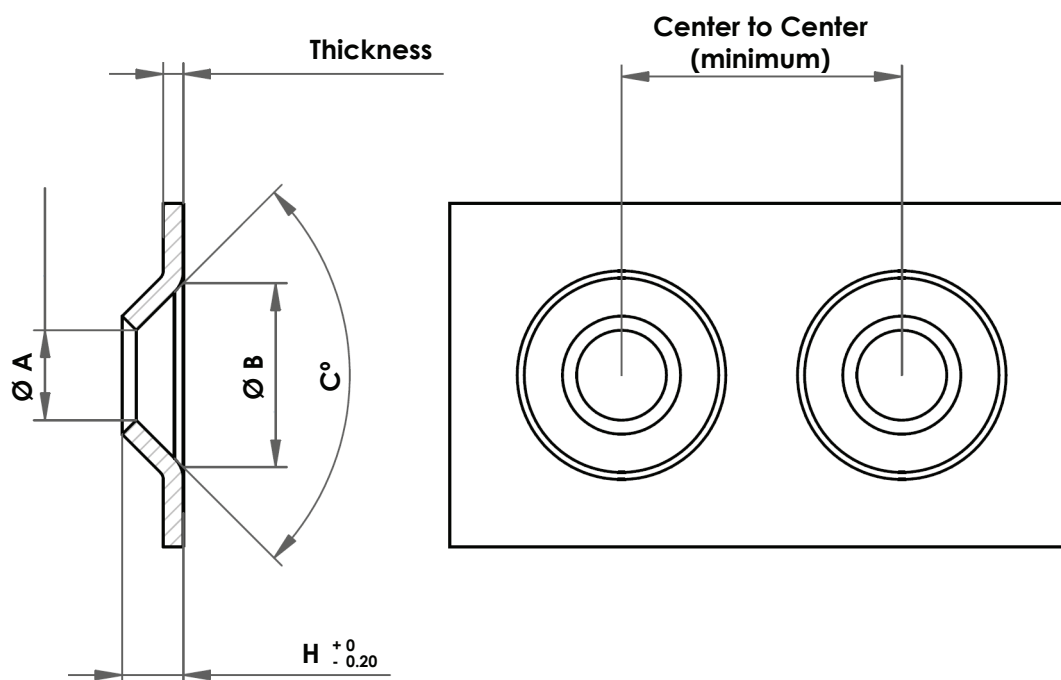
This forming requires a suitable pre hole.

Multiple close formings might bend the sheet metal.

It is necessary to supply technical sheet of the screw in case the purpose of the forming is to house a screw with the top part under the sheet plan.

Each set of inserts is composed of all the following parts.

M04 ROUND COUNTERSINK



Required Measures (indicate the most important ones)

A	B	Thickness	H	C°	C. to C.

Thick Turret B Station Standard Insert Sets

Screw	A	B	Pre Hole	Thickness	Inserts Set Code	H	C°	C. to C.
M4	4.5	9.2	3.66 ±10%	0.80÷1.20	FB09237239.305	3.06	90°	14.0
			4.43 ±10%	1.50÷1.90	FB09237239.BP5	3.55	90°	14.61
			4.43 ±10%	2.00÷2.50	FB09237239.844	3.91	90°	15.0
M5	5.5	11.2	4.25 ±10%	0.80÷1.20	FB09237240.305	3.56	90°	16.0
			5.02 ±10%	1.50÷1.90	FB09237240.BP5	4.05	90°	16.6
			5.57 ±10%	2.00÷2.50	FB09237240.844	4.41	90°	17.0
M6	6.5	13.2	4.83 ±10%	0.80÷1.20	FB09237241.305	4.06	90°	18.0
			5.61 ±10%	1.50÷1.90	FB09237241.BP5	4.55	90°	18.6
			6.16 ±10%	2.00÷2.50	FB09237241.844	4.91	90°	19.0
M8	8.5	17.4	5.92 ±10%	0.80÷1.20	FB09237242.305	5.16	90°	22.2
			6.70 ±10%	1.50÷1.90	FB09237242.BP5	5.65	90°	22.8
			7.25 ±10%	2.00÷2.50	FB09237242.844	6.01	90°	23.2
M10	12	21.6	9.13 ±10%	0.80÷1.20	FB09237243.305	5.51	90°	26.4
			9.91 ±10%	1.50÷1.90	FB09237243.BP5	6.0	90°	27.0
			10.46 ±10%	2.00÷2.50	FB09237243.844	6.36	90°	27.4

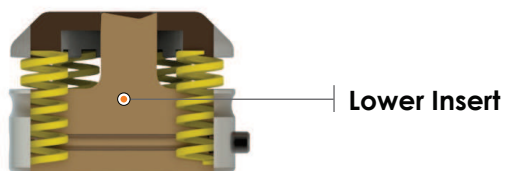
All measures are in mm

M09 SHELF CLIP

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.



Upper Insert Holder



Lower Insert Holder

○ **INSERTS SET**

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**



Spring



Ejector



Upper Insert



Stripper



Springs

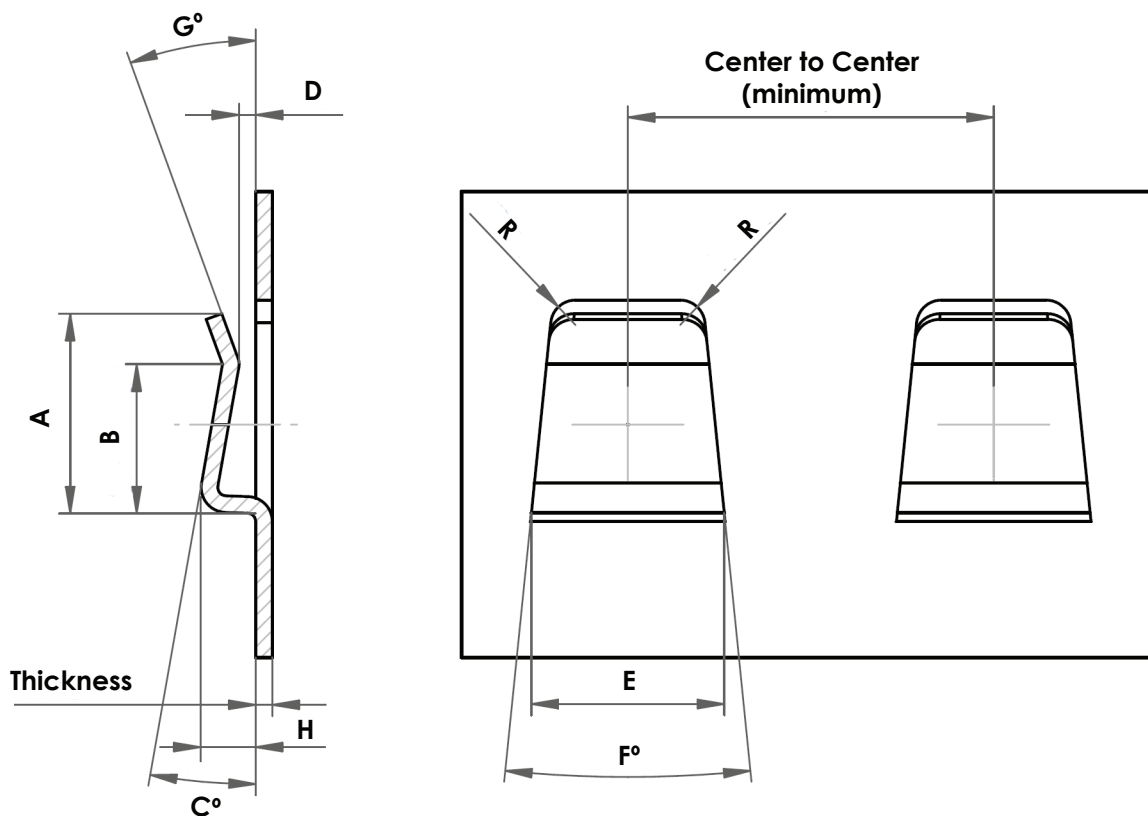


Lower Insert



Screws

M09 SHELF CLIP



Required Measures (indicate the most important ones)								
A	Thickness	B	C°	D	E	F°	H	C. to C.

Dimensional Limits	
F°	H
Minimum 10°	Maximum 5

Thick Turret B Station Standard Insert Sets									
A	Thickness	Inserts Set Code	B	C	D	E	F°	H	C. to C.
12	0.80÷1.00	FB08237255.305	5.34	3.63	1.00	11.599	11.592	4.30	22.00
	1.10÷1.30	FB08237255.979	5.46	3.70	1.20	11.600	11.408	4.90	
	1.40÷1.60	FB08237255.A44	5.64	3.81	1.50	11.603	11.144	5.80	

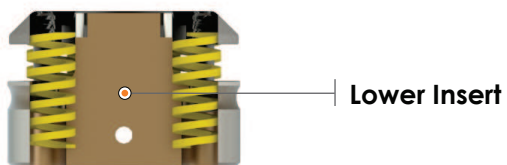
All measures are in mm

M10 KNOCKOUT

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.



Upper Insert Holder



Lower Insert Holder

○ **INSERTS SET**

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**



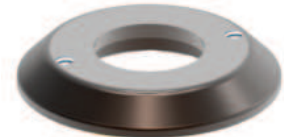
Spring



Ejector



Upper Insert



Stripper



Springs

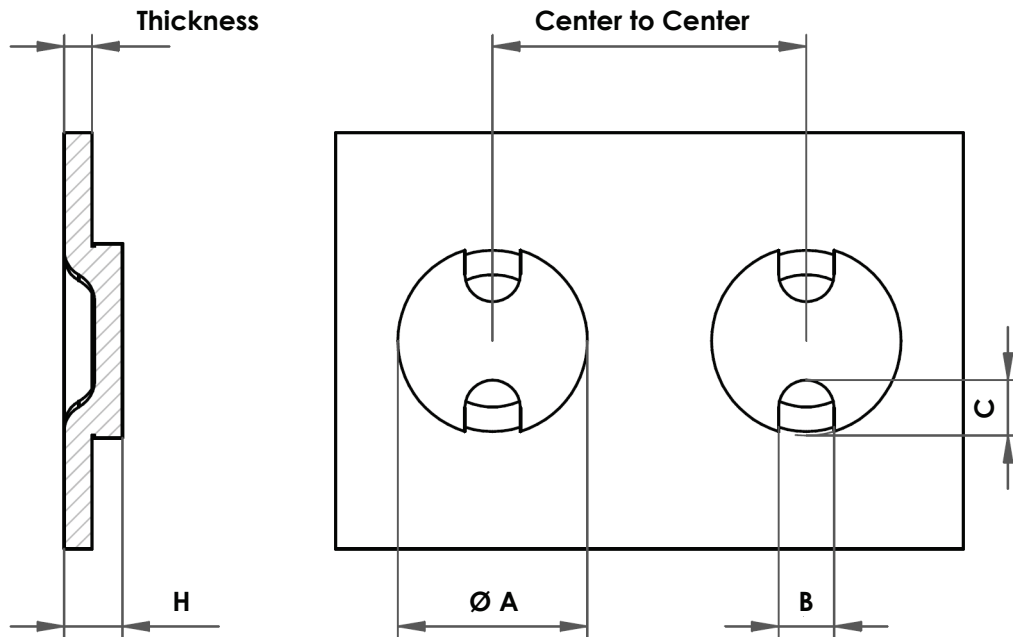


Lower Insert



Screws

M10 KNOCKOUT



Required Measures (indicate the most important ones)

A	B	C	H	Thickness	C. to C.

Dimensional Limits

B	C	Thickness
3 x Thickness	2,5 x Thickness	Maximum 3

All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M12 RADIUS BACK LOUVER

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

○ **INSERTS SET**

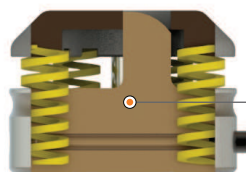
To be used on inserts holders **WHITE** and **GREEN** series, **not included in the standard set.**



Upper Insert Holder

Upper Insert

Upper Shearing Insert

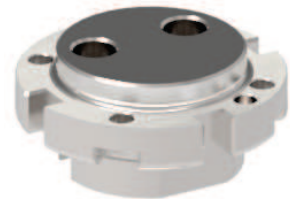


Lower Insert Holder

Lower Insert



Screws



Upper Insert



Upper Shearing Insert



Stripper



Springs

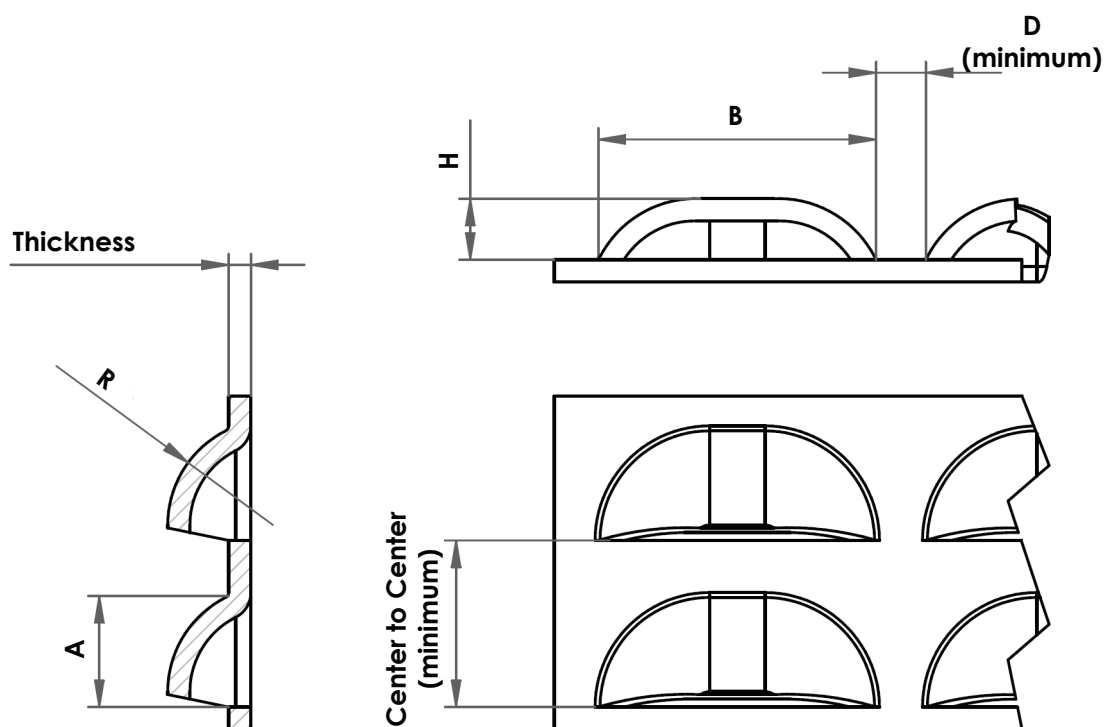


Lower Insert



Screws

M12 RADIUS BACK LOUVER



Required Measures (indicate the most important ones)							
Thickness	Station	A	B	C	H	R	C. to C.

Dimensional Limits		
Station	B	H
B	25.00	5.50
C	50.00	6.00
D	100.00	7.00

Thick Turret Standard Insert Sets								
Thickness	Station	Inserts Set Code	A	B	C	H	R	C. to C.
0.80±2.00	B	FB08236968	10.00	25.00	4.50	5.50	9.50	15.00
	C	FB10236968	12.00	50.00	10.50	6.00	10.00	17.00
	D	FB12236968	15.00	80.00	16.50	7.00	14.00	20.00

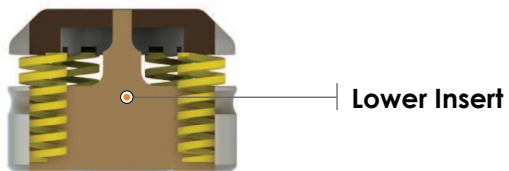
All measures are in mm

M13 SHEAR BUTTON

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.



Upper Insert Holder



Lower Insert Holder

○ **INSERTS SET**

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**



Spring



Ejector



Upper Insert



Stripper



Springs

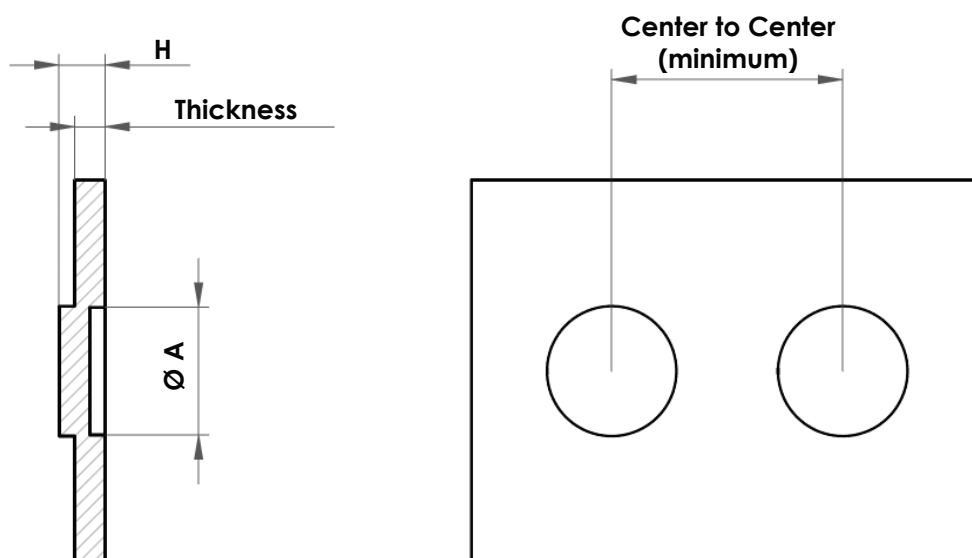


Lower Insert



Screws

M13 SHEAR BUTTON



Required Measures (indicate the most important ones)			
A	Thickness	H	C. to C.

Thick Turret B Station Standard Insert Sets				
A	Inserts Set Code	Thickness	H	C. to C.
5.00	FB09237471	1.00÷4.00	Maximum Thickness x1.5	9.10
8.00	FB09237470			12.10

All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

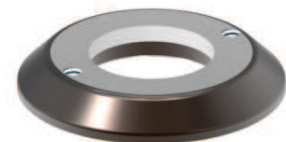
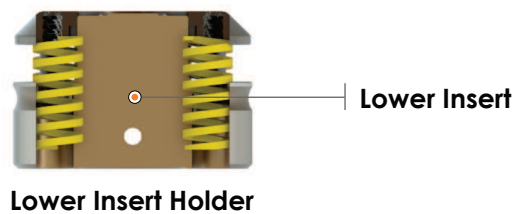
M14 ELECTRICAL GROUND SYMBOL

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

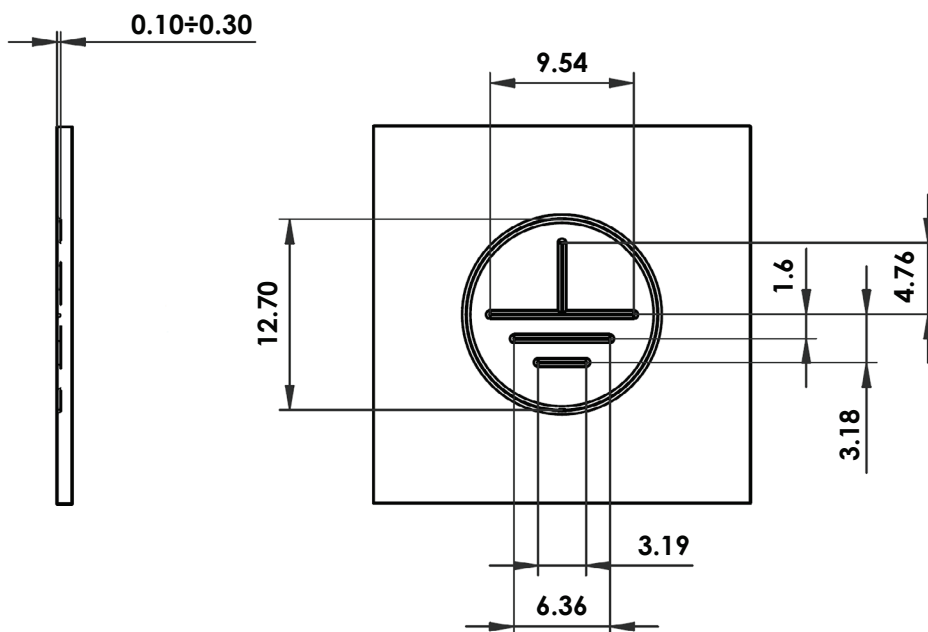
● INSERTS SET

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**

With the set of inserts proposed, it is possible to obtain a standard electrical ground symbol with or without circle, upwards or downwards.



M14 ELECTRICAL GROUND SYMBOL



Thick Turret B Station Standard Insert Sets			
Circle	Forming	Inserts Set Code	Thickness
Yes	downforming	FB08237273	0.50±4.00
	upforming	FB08238173	
No	downforming	FB08237274	0.50±4.00
	upforming	FB08238174	

All measures are in mm



M15 CONTINUOUS RADIUS BACK LOUVER

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

⦿ **INSERTS SET**

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**



Upper Insert Holder

Upper Insert

Upper Shearing Insert



Lower Insert Holder

Lower Insert



Screws



Upper Insert



Upper Shearing Insert



Stripper



Springs

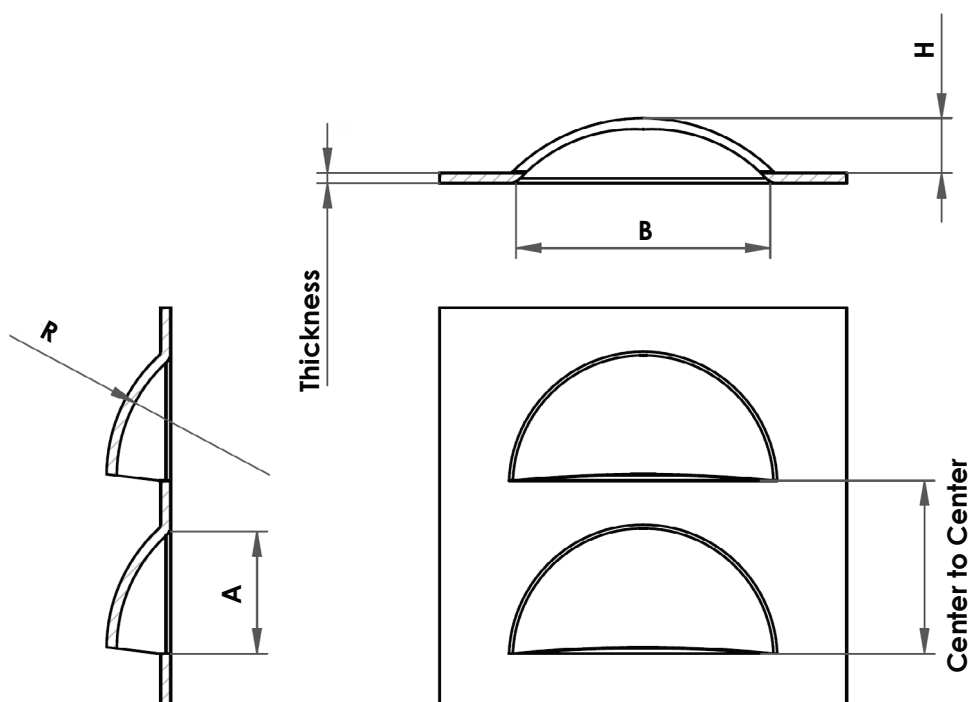


Lower Insert



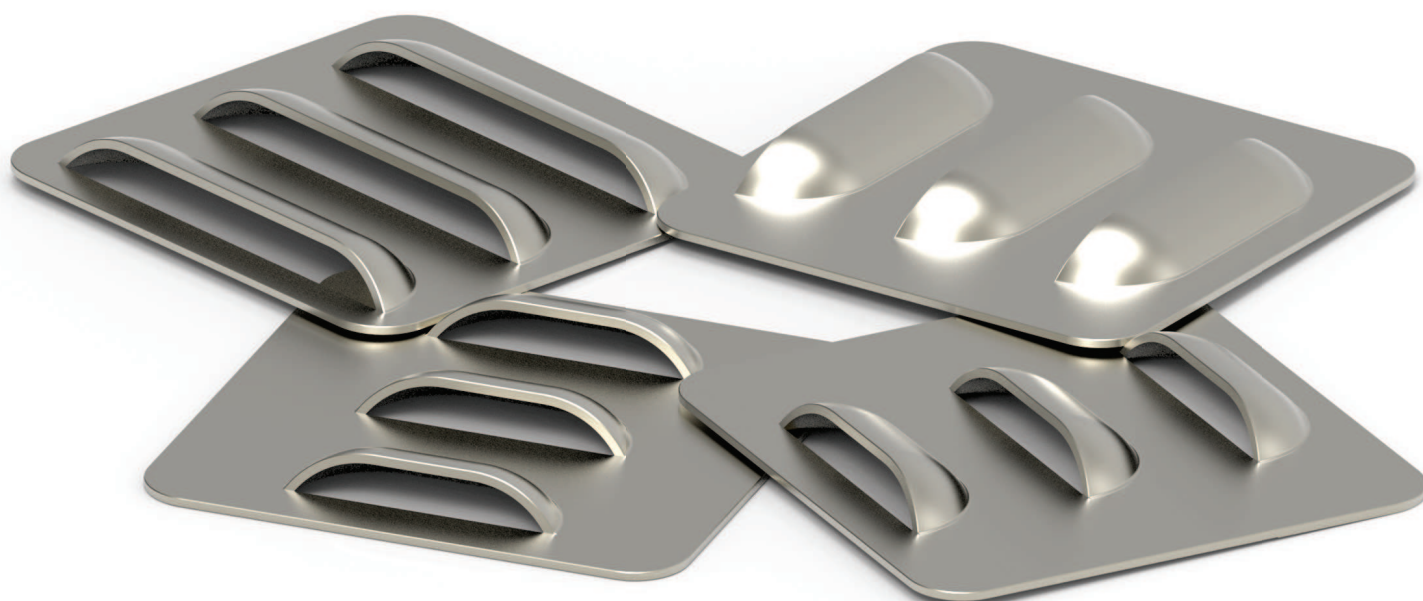
Screws

M15 CONTINUOUS RADIUS BACK LOUVER



<i>Thick Turret Standard Insert Sets</i>							
<i>Station</i>	<i>A</i>	<i>B</i>	<i>H</i>	<i>R</i>	<i>Thickness</i>	<i>Inserts Set Code</i>	<i>C. to C.</i>
B	12.00	25.00	5.30	15.00	0.80÷1.20	FB08237476.305	17.00
					1.30÷1.70	FB08237476.A43	17.00
					1.80÷2.50	FB08237476.844	17.00
C	15.00	32.00	6.00	21.00	0.80÷1.20	FB10237476.305	20.00
					1.30÷1.70	FB10237476.A43	20.00
					1.80÷2.50	FB10237476.844	20.00

All measures are in mm



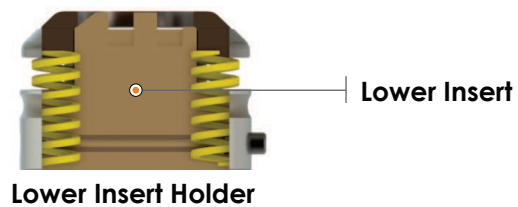
M17 THREAD LOOP

○ **INSERTS SET**

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**



Upper Insert Holder



Lower Insert Holder



Spring



Ejector



Upper Insert



Stripper



Springs

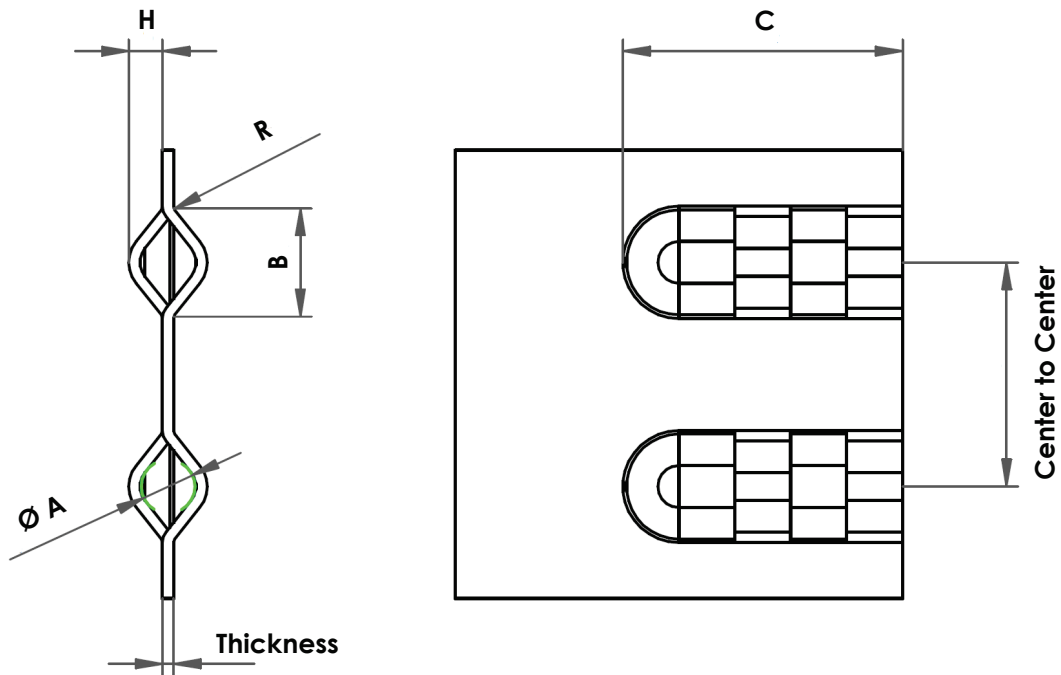


Lower Insert



Screws

M17 THREAD LOOP



Required Measures (indicate the most important ones)

Thickness	$\varnothing A$	B	C	H	R	C. to C.

All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

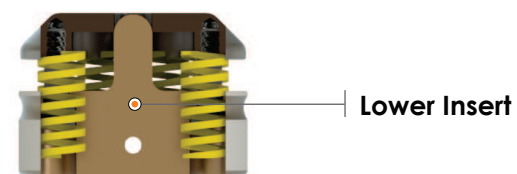
M20 CONTINUOUS OBROUND EMBOSS

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

- **INSERTS SET**
 To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**



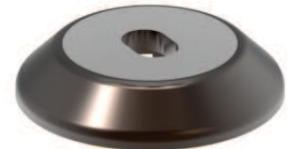
Upper Insert Holder



Lower Insert Holder



Upper Insert



Stripper



Springs

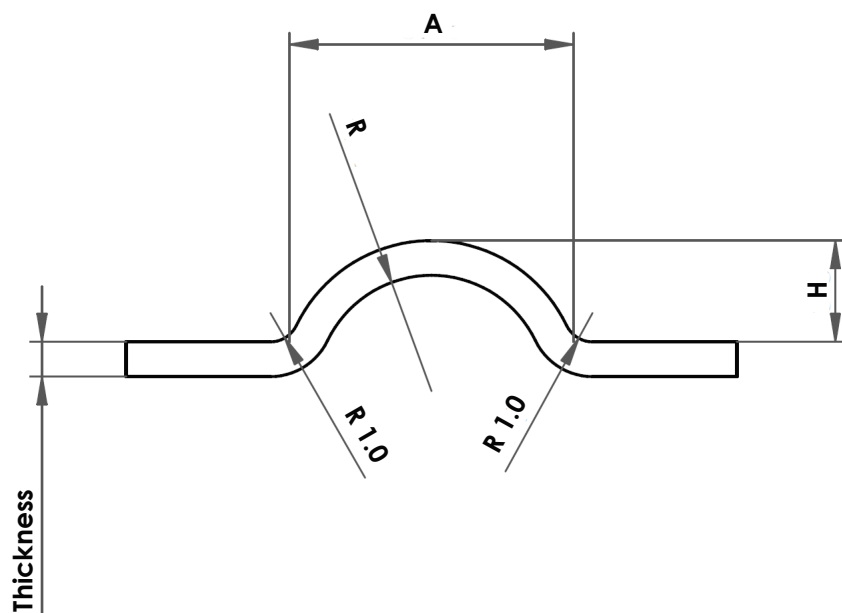


Lower Insert



Screws

M20 CONTINUOUS OBROUND EMBOSS

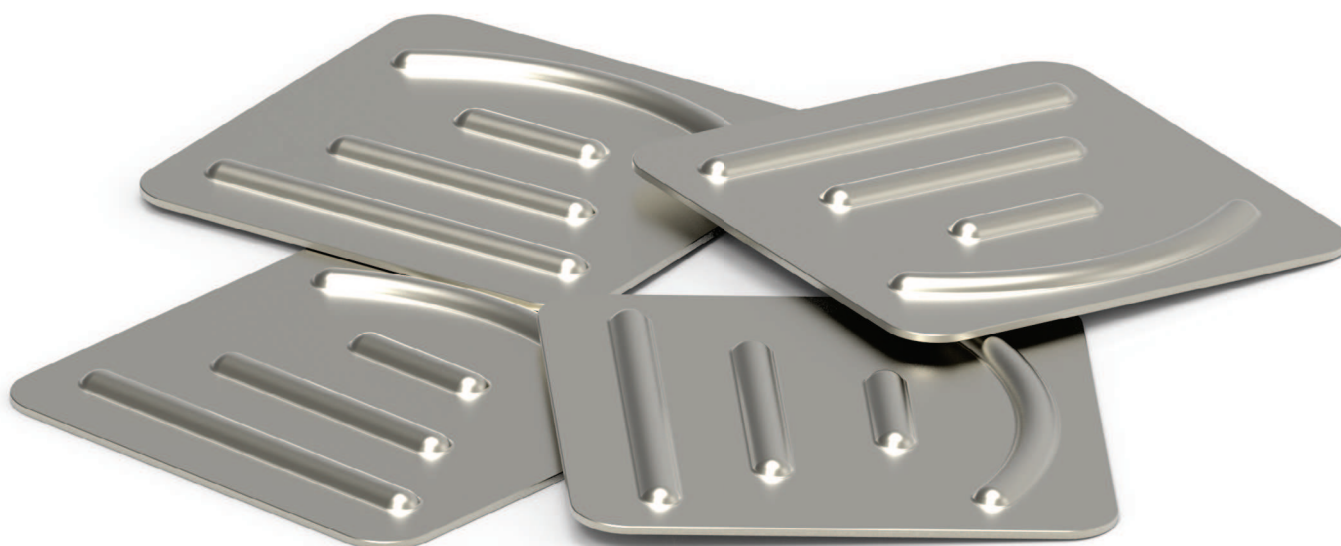


Required Measures (indicate the most important ones)			
R	A	Thickness	H

Dimensional Limits	
A	H
Minimum H x 2	Maximum 5,00

Thick Turret B Station Standard Insert Sets				
R	A	Thickness	Inserts Set Code	H
4.00	9.83	0.80÷1.60	FB08237291.979	3.50
	11,533	2.00÷3.00	FB08237291.218	

All measures are in mm



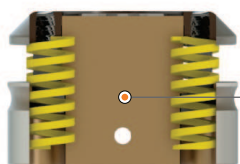
M22 CUSTOM LOGO

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.



Upper Insert Holder

Upper Insert

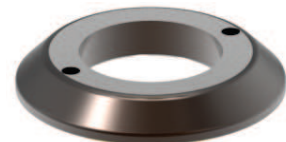


Lower Insert Holder

Lower Insert



Upper Insert



Stripper



Springs



Lower Insert



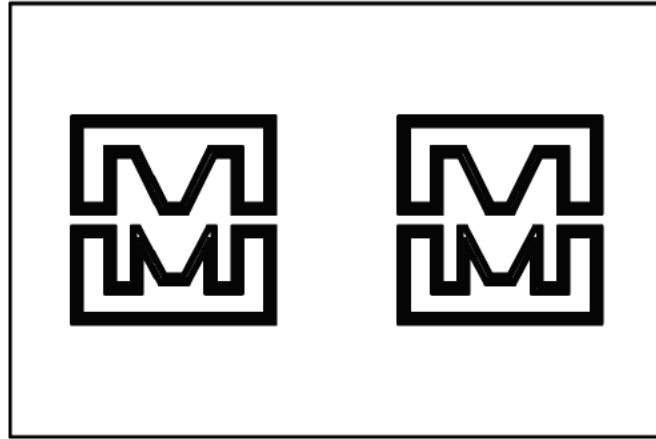
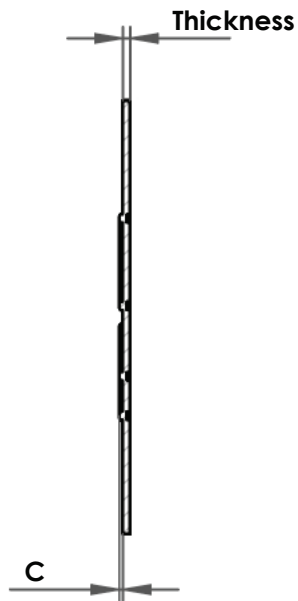
Screws

INSERTS SET

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**

Besides using technical drawings in .DWG or .DXF format, it is possible to produce tools for logos starting from images on the most common formats or even from file .PDF.

M22 CUSTOM LOGO



M23 DOT SCRIBER

The inserts are shown to obtain a down forming operation.
For up forming operations, please contact our sales department.



Upper Insert Holder



Die

INSERTS SET

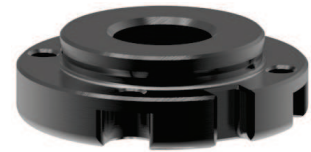
Available on both A and B Stations.

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**

This type of working requires hydraulic or electrical punching machine with ram stroke control and whenever not possible, an upper insert holder with compensating spring is available.

The penetration (H) depends on thickness and type of material as well as punching machine power.

Attention: reduce to the minimum the approaching speed of the insert to the sheet metal.



Upper Insert

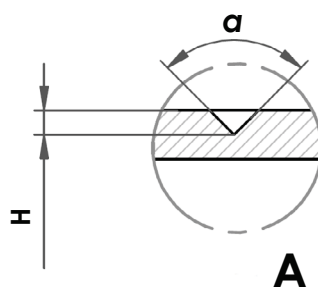


Insert



Die

M23 DOT SCRIBER



Thick Turret Standard Insert Sets

Station	Inserts Set Code	α
A	FAZL238197	90°
B	FB09238197	90°

All measures are in mm

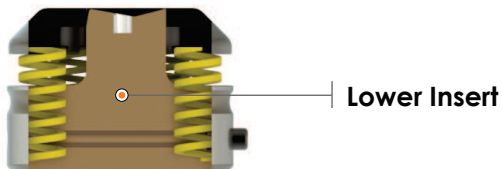


M24 CLIP WITH BUTTON

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.



Upper Insert Holder



Lower Insert Holder

○ **INSERTS SET**

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**

This solution allows to joint materials without using any screws, avoiding also welding and riveting operations.



Spring

Ejector

Upper Insert

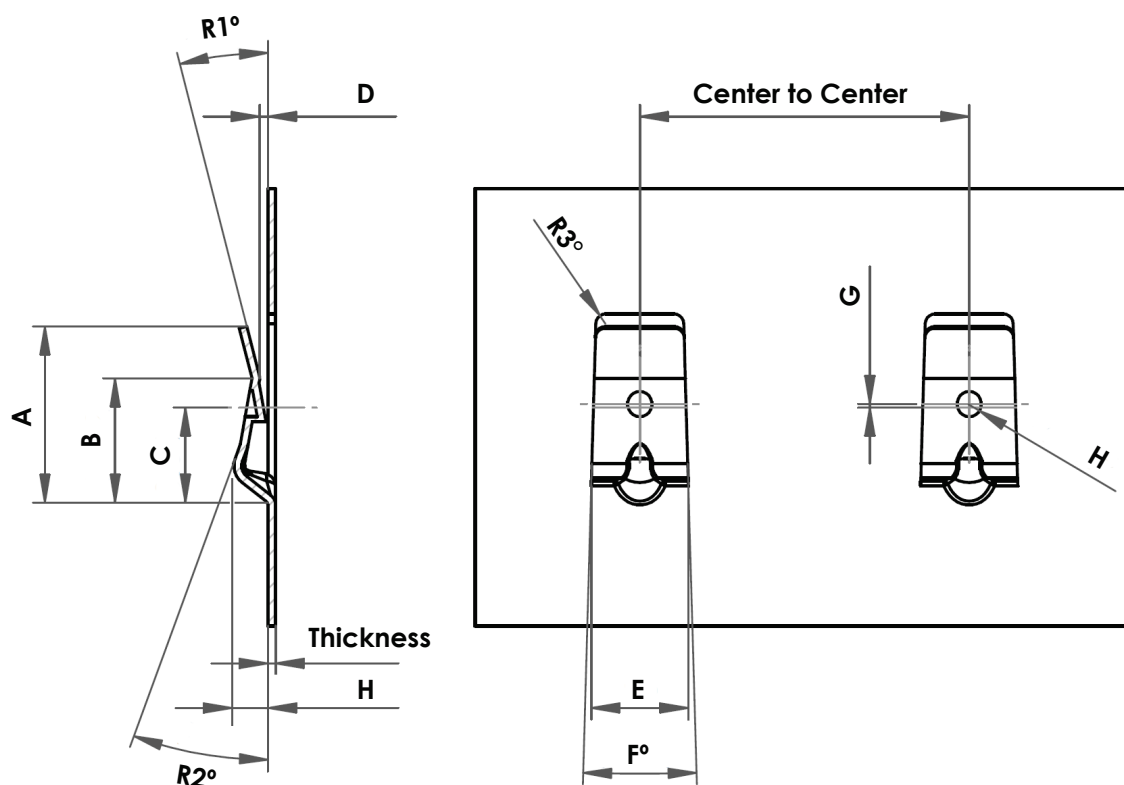
Stripper

Springs

Lower Insert

Screws

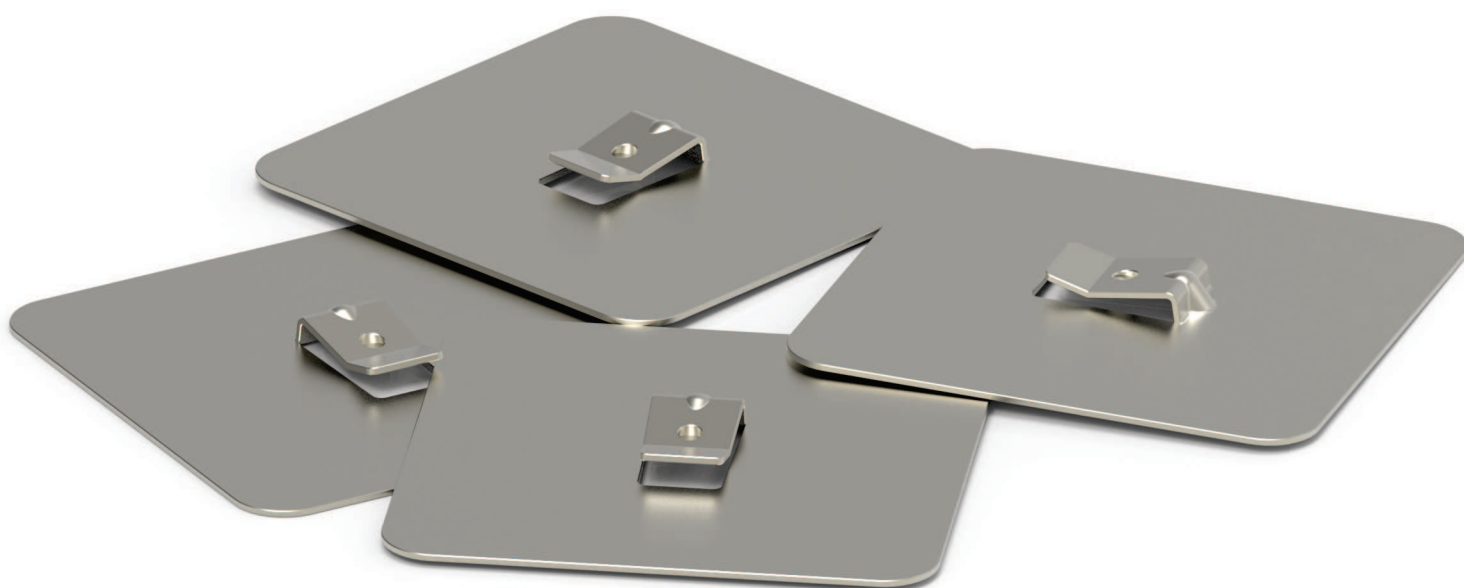
M24 CLIP WITH BUTTON



Required Measures (indicate the most important ones)

Thickness	A	B	C	D	E	F°	G	H	C. to C.

All measures are in mm



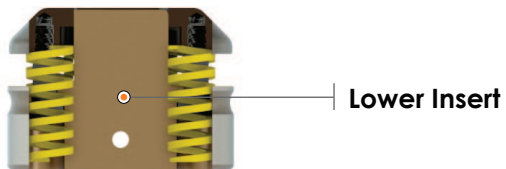
Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M25 STRENGTHENED CLIP

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.



Upper Insert Holder



Lower Insert Holder

○ **INSERTS SET**

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**



Spring



Ejector



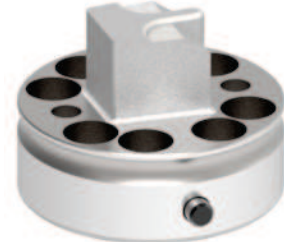
Upper Insert



Stripper



Springs

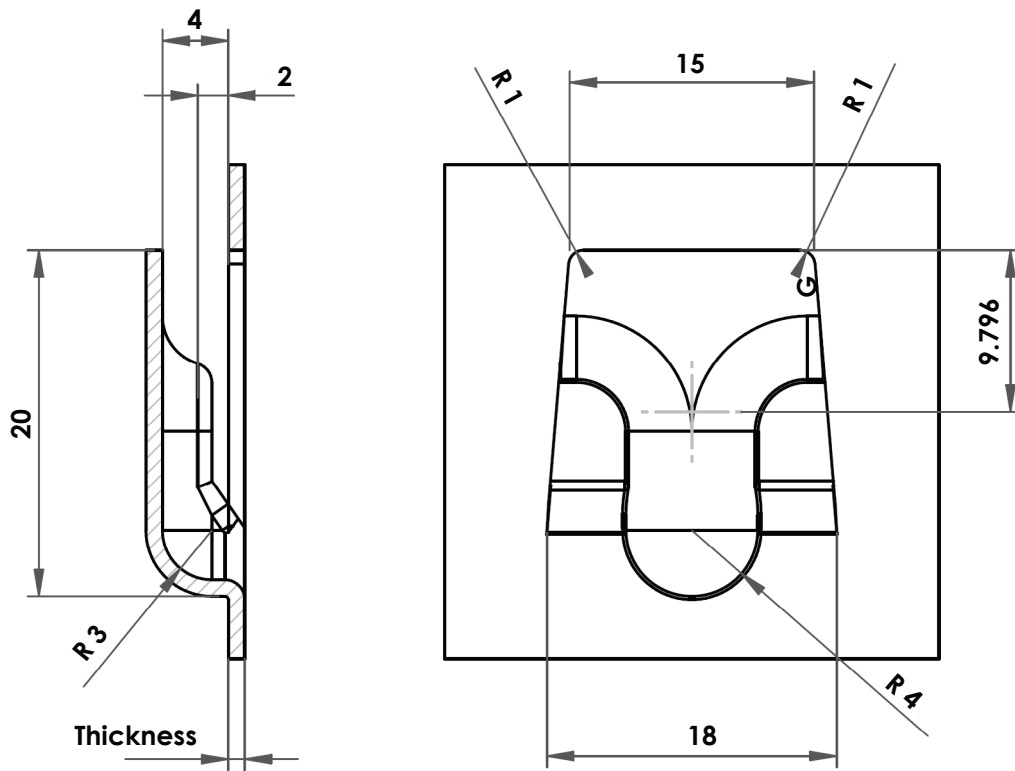


Lower Insert



Screws

M25 STRENGTHENED CLIP



Thick Turret B Station Standard Insert Sets

Thickness	Inserts Set Code
0.80÷1.00	FB082372AA.305

All measures are in mm



M26 EMBOSS FOR ELECTRICAL CABLE

The inserts are shown to obtain a down forming operation.
For up forming operations, please contact our sales department.

● INSERTS SET

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**

Before using this specific set of inserts, it is necessary to perform an extruded hole duly dimensioned type M02.



Upper Insert Holder



Die

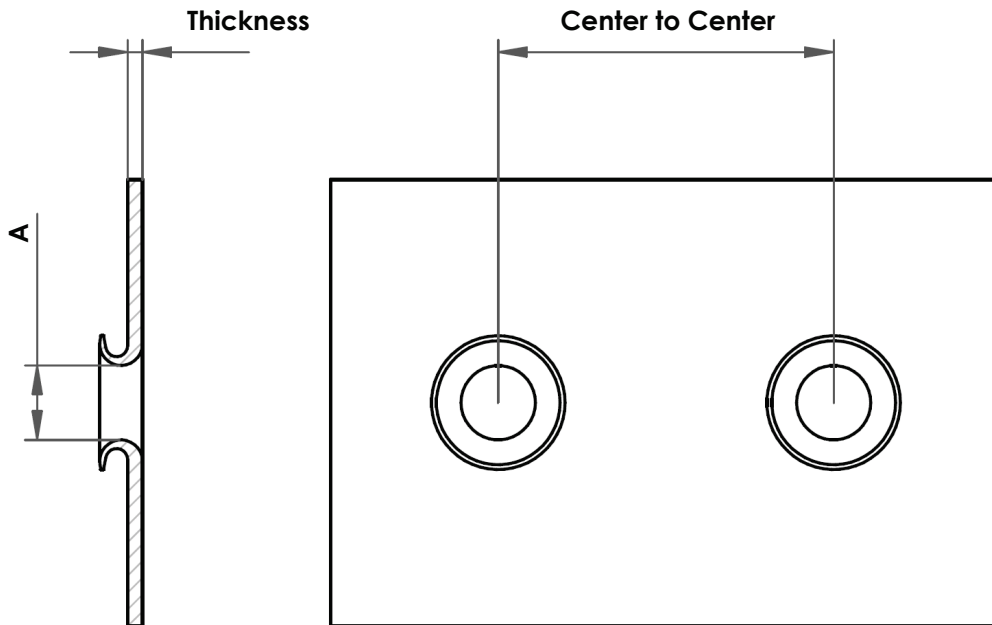


Upper Insert



Die

M26 EMBOSS FOR ELECTRICAL CABLE



Required Measures (indicate the most important ones)

Thickness	A	C. to C.

All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M27 BRIDGE & EXTRUDED HOLE

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.



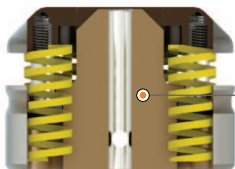
Upper Shearing Insert

Spring

Ejector

Upper Insert

Upper Insert Holder



Lower Insert

Lower Insert Holder



Upper Shearing Insert



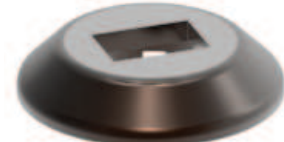
Spring



Ejector



Upper Insert



Stripper



Springs

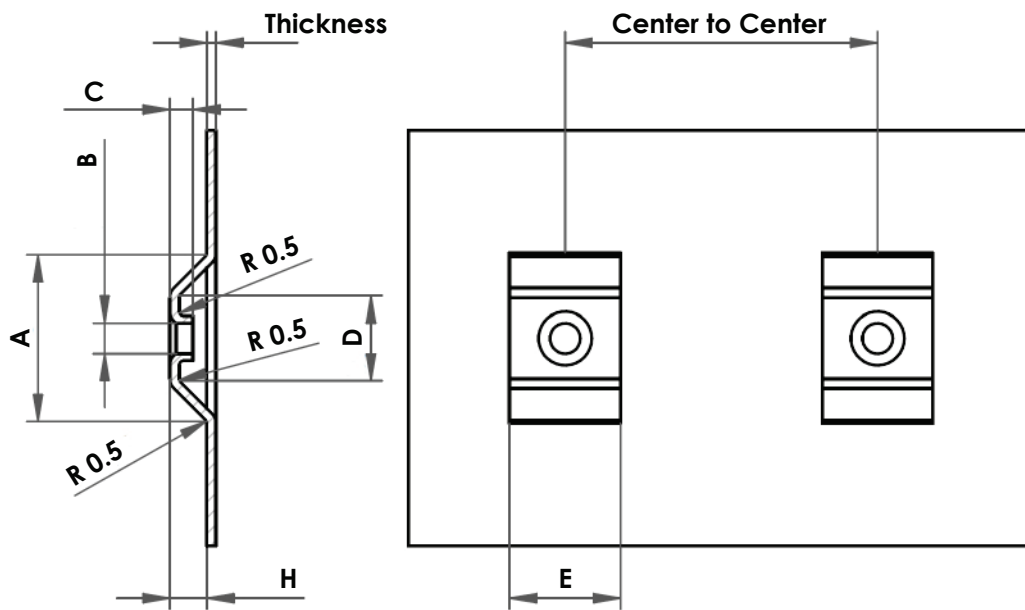


Lower Insert



Screws

M27 BRIDGE & EXTRUDED HOLE



Required Measures (indicate the most important ones)

Thickness	A	B	C	D	E	H	C. to C.

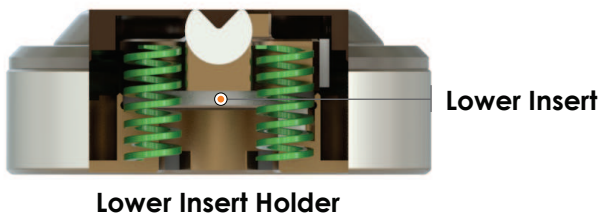
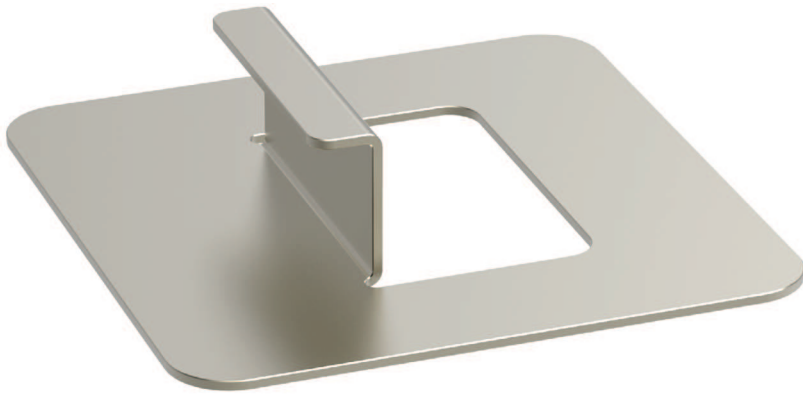
All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M28 BENDING TOOL

The inserts are shown to obtain an up forming operation.



○ **INSERTS SET**

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**

Before using this specific set of inserts, it is necessary to perform a shearing duly dimensioned.



Upper Insert



Stripper

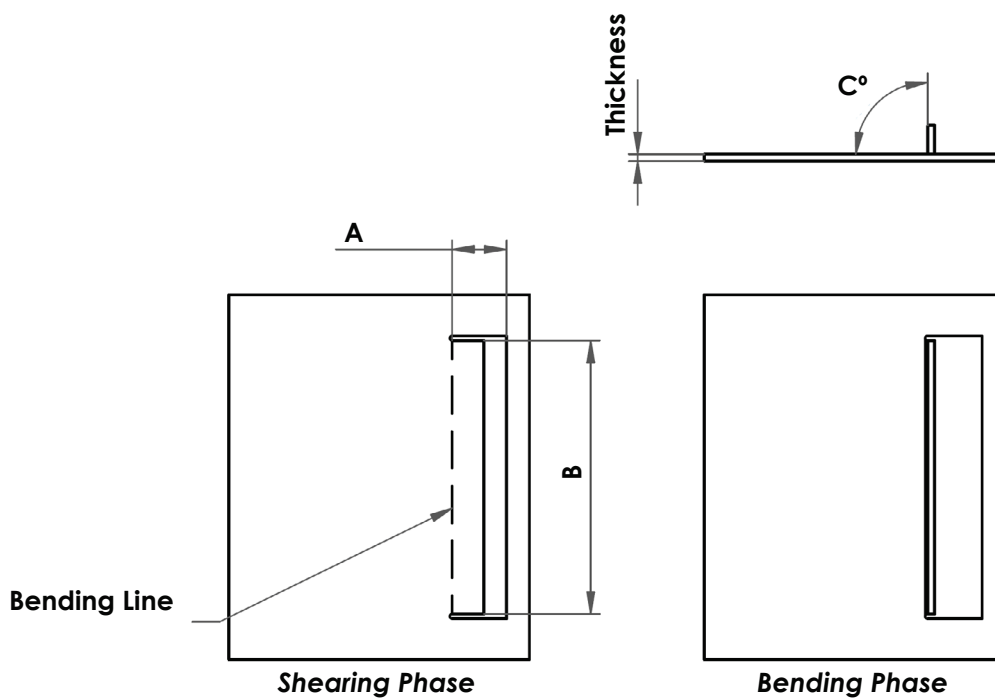


Lower Insert



Springs

M28 BENDING TOOL



Thick Turret Standard Insert Sets

Station	A	B	C°	Thickness	Total Height	Inserts Set Code
C	Min. 12	Max. 50	Max. 91	Max. 1.50	Minimum 8 - Maximum 17	FB102369AH
D	Min. 12	Max. 80	Max. 91	Max. 1.50	Minimum 10 - Maximum 16	FB122369AH

All measures are in mm



M29 HINGE

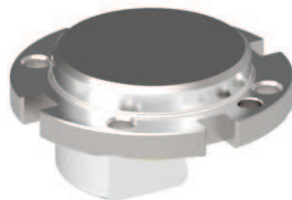


○ **INSERTS SET**

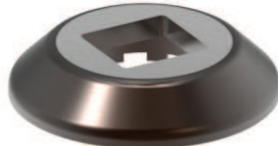
To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**

In order to obtain the shown result, it is necessary to proceed with two separate working steps, for which a specific set of inserts is required.

PHASE 1



Upper Insert



Stripper



Springs

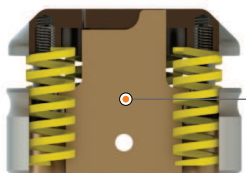


Lower Insert



Screws

Upper Insert Holder



Lower Insert Holder

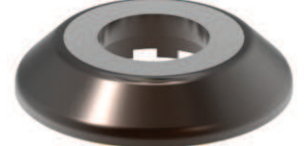
Upper Insert

Lower Insert

PHASE 2



Upper Insert



Stripper



Springs

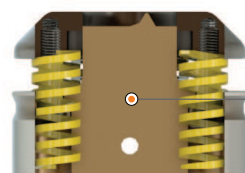


Lower Insert



Screws

Upper Insert Holder

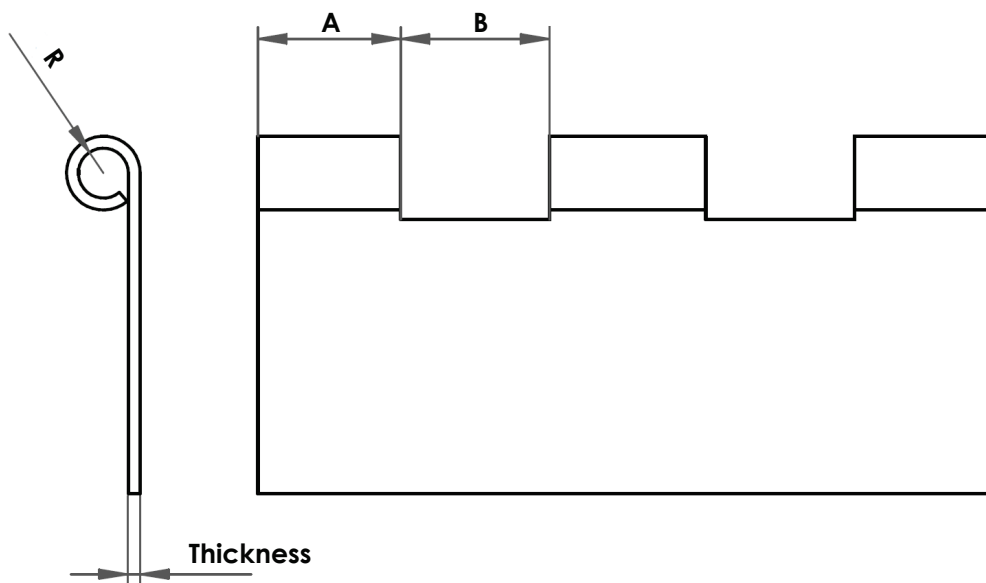


Lower Insert Holder

Upper Insert

Lower Insert

M29 HINGE



Required Measures (indicate the most important ones)

Thickness	A	B	R

Dimensional Limits

Thickness	R
0.80÷1.50	1.60÷4.77

All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M31 DEBURR



○ INSERTS SET

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**

This type of working requires hydraulic or electrical punching machine with ram stroke control and proper software.



Upper Insert Holder



Upper Insert

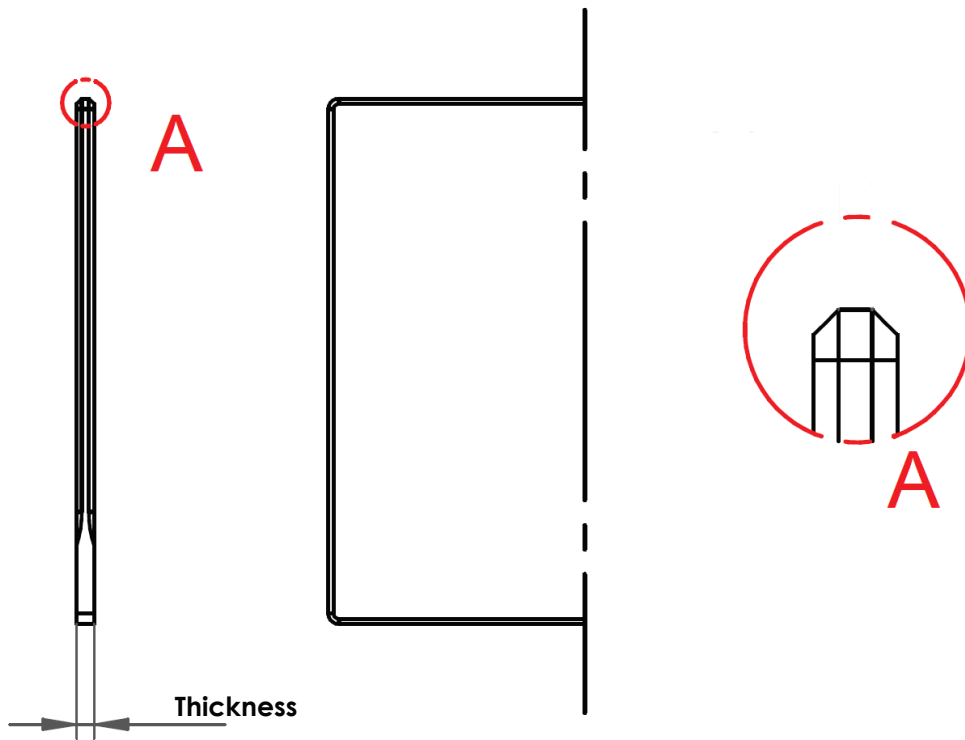


Lower Tool



Lower Tool

M31 DEBURR

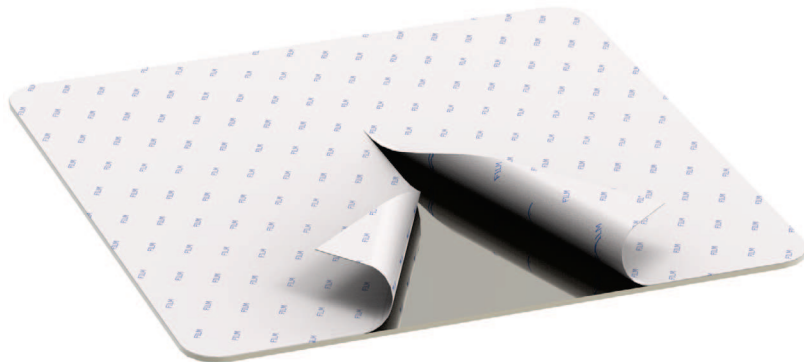


<i>Thick Turret B Station Standard Insert Sets</i>	
<i>Thickness</i>	<i>Inserts Set Code</i>
Max 6.00	FB092300AN

All measures are in mm



M32 FOIL SLITTING TOOL



Upper Insert Holder



Die

○ INSERTS SET

Available on both A and B Stations.

To be used on inserts holders WHITE and GREEN series, **not included in the standard set.**

This type of working requires hydraulic or electrical punching machine with ram stroke control and proper software. Recommended working speed between 2 and 6 m/min.

Attention: reduce to the minimum the approaching speed of the insert to the sheet metal.



Upper Insert



Screw



Spring



Shearing Insert

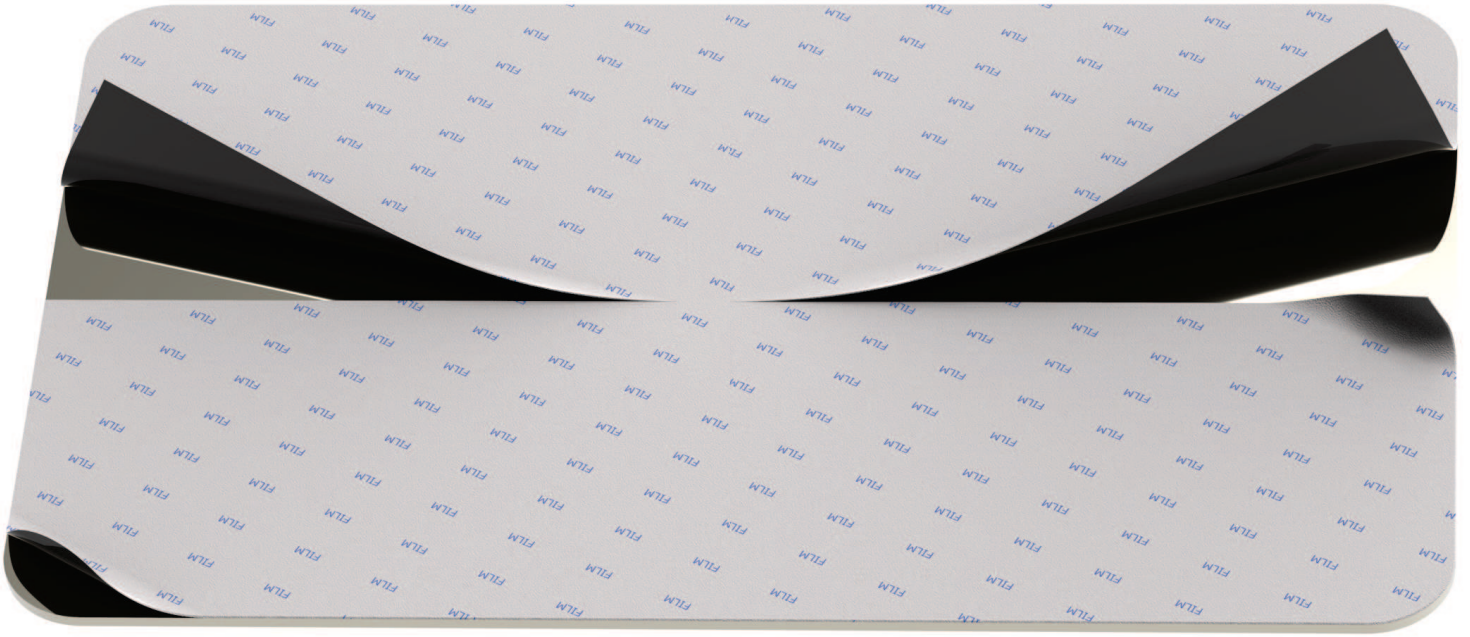


Insert Guide



Die

M32 FOIL SLITTING TOOL



Thick Turret Standard Insert Sets	
Station	Inserts Set Code
A	FAZL2381AP
B	FB092381AP





MATRIX

Via Ponte d'Oro, 8 • 36015 • Schio • Vicenza • Italy

T. +39 0445 67.10.15 • F. +39 0445 67.10.35

www.matrixtools.eu • sales@matrixtools.eu