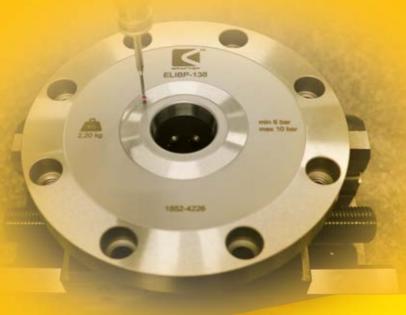


Zero point systems





Zero point systems

EASYLOCK





Innovation is our job



ENGINEERING DATA, expert in machining clamping and SMED techniques (quick change over) for more than a quarter of century, has always been focused on innovation With innovation and adaptability being at the heart of our mission

and our know how, our team of professionals has developed turnkey solutions to increase the autonomy of your machining centres and raising production output:

- > EASYBOX: a full range of robots for the transfer of pallets automatically to the machining centres 3, 4 and 5 axis, for companies that want to optimize the available machining time.
- ➤ EASYPROD: an automation solution, a 6-axis robot for loading and unloading workpieces of CNC lathes.
- > EASYCONNECT: Connected tables to clamp your workpieces directly through zero-point systems for a quick-change of production series. It is possible to work on different clamping zones making a great variety of fixtures combinations.
- > EASYLOCK: zero-point systems for a quick changeover of workpieces and fixtures by at least 5 $\mu m.$
- ➤ EASYCLAMP: Self-centring vices for your 5-axis machining operations.

Our experts at the R&D department study and design custom solutions for your specific operations.









EASYLOCKZero point systems

The SMED system (quick-change of tools) is well recognised for increasing productivity and helping the operator to perform a changeover of fixtures quickly and easily.

Benefits of using EASYLOCK zero point systems:

- > Repeat accuracy of less than 5 microns
- > Quick-change of production series
- > Modularity of tools and interchangeability between equipped with a SMED system machines.
- > Adaptability by project
- > Increase Overall Equipment Efficiency (OEE).

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> FUNCTIONAL OVERVIEW OF OUR EASYLOCK ZERO POINT SYSTEMS



- ➤ EASYLOCKS are available in steel or stainless steel. They are used with 3 kinds of clamping pins for centering, locating and positioning.
- Thanks to these clamping pins, tools can be clamped and positioned precisely on the EASYLOCK zero point system.
- The blow out system evacuates excess air and prevents cutting oil pollution inside the EASYLOCK..

The 3 following options are available:

> Blow-out system option:

*(-S)= Blow-out

This EASYLOCK option evacuates chips inside during unclamping the workpiece. The chips are projected outwards.

> Control Option:

*(-C)= Control

The control system checks EASYLOCK opening during unclamping. This option is mainly used for robotic systems.

> Indexing Option:

*(-I)= Indexing

The indexing function ensure an exact positioning every 90°.

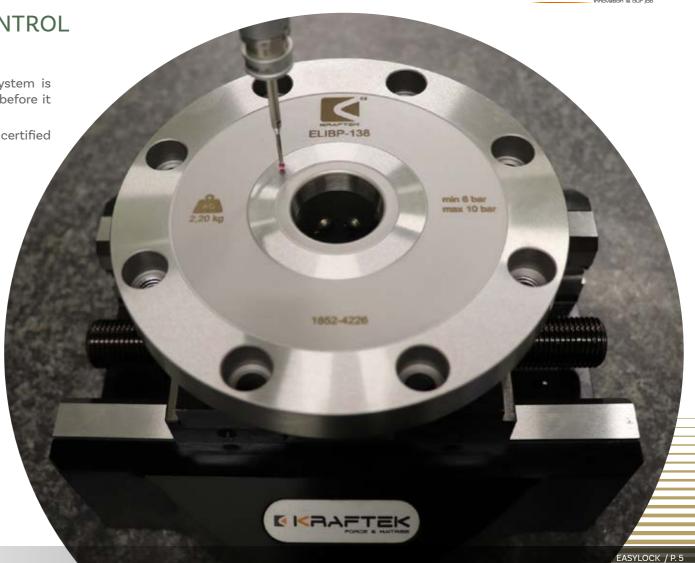
engineering pata

> QUALITY CONTROL

> Each zero point system is mounted and tested before it leaves our premises.

We are ISO 9001: 2015 certified





> ELxBx-138 (-S)(-C)(-I)



Technical Features

The Easylock ELxBx-138 clamping module positions and clamps workpieces or fixtures with a repeat accuracy of less than 5 μ m. Piston with central hole (holding nut in the piston base).

- > EASYLOCK system locks through spring forces the clamping pin in rest position. A safety system guarantee. It can be opened hydraulically (ELxBH-138) or pneumatically (ELxBP-138).
- This zero point system is in hardened steel (ELABx-138), or treated stainless steel (ELIBx-138).
- The unit can be equipped with a blow-out system (-S), an unlocking control system (-C), or an indexing system (-I).
- > The set screws, their cover caps, the seals and the indexing pin are delivered with the module.

The respective clamping pins are:

TELB-138 pull-stud pin

TDELB-138 positioning pin

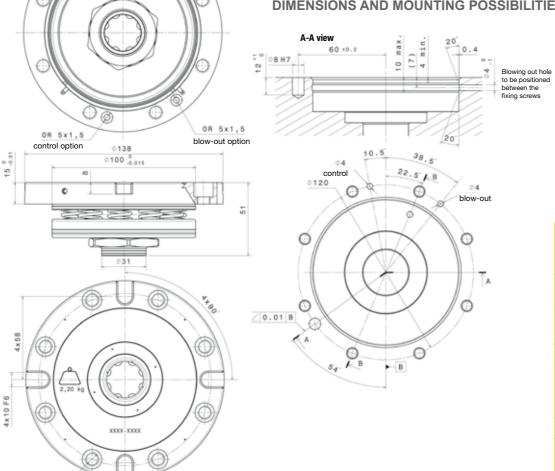
TCELB-138 centering pin

For clamping pins, see pages 12 and 13

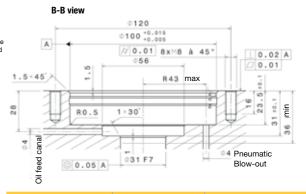


EASYLOCK >ELxBx-138 (-S)(-C)(-I)

DIMENSIONS AND MOUNTING POSSIBILITIES



10 for an extraction



Technical Features	ELxBHP-138(-S) (-C)(-I) Hydraulic	ELxBPP-138 (-S) (-C)(-I) Pneumatic
Repeat accuracy	0,005 mm	0,005 mm
Operating pressure for opening	30 bars	6 bars
Maximum pressure	60 bars	10 bars
Pull-in force up to	35 kN/50 kN (CHc M10/CHc M12)	35 kN/50 kN (CHc M10/CHc M12)
Holding force	25 kN	16 kN
Weight with set screws	2.92 kg	2.3 kg

> ELxBx2-138 (-S)(-C)(-I)



Technical Features

The Easylock ELxBx2-138 clamping module positions and clamps workpieces or fixtures with a repeat accuracy of less than 5 μ m.

- ➤ EASYLOCK system locks through spring forces the clamping pin in rest position. A safety system guarantee. It can be opened hydraulically (EL-BH2-138) or pneumatically (EL-BP2-138).
- This zero point system is in hardened steel (ELABx2-138), or treated stainless steel (ELIBx2-138).
- The unit can be equipped with a blow-out system (-S), an unlocking control system (-C), or an indexing system (-I).
- > The set screws, their cover caps, the seals and the indexing pin are delivered with the module.

The respective clamping pins are:

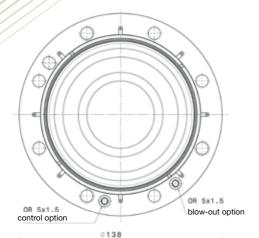
TELB-138 pull-stud pin

TDELB-138 positioning pin

TCELB-138 centering pin

For clamping pins, see pages 12 and 13





0100 .0.015

M10 for an extraction

0

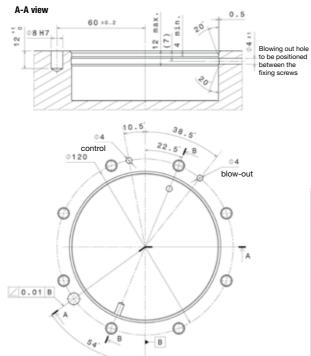
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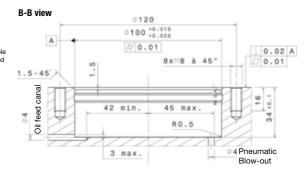
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EASYLOCK

> ELxBx2-138 (-S)(-C)(-I)

DIMENSIONS AND MOUNTING POSSIBILITIES





Technical Features	ELxBx2-138-S-C-I	ELxBx2-138-S-C-I
Repeat accuracy	0,005 mm	0,005 mm
Operating pressure for opening	30 bars	6 bars
Maximum pressure	60 bars	10 bars
Pull-in force up to	35 kN/50 kN (CHc M10/CHc M12)	35 kN/50 kN (CHc M10/CHc M12)
Holding force	25 kN	16 kN
Weight with set screws	3.1 KG	2.5 kg

> ELxBxP -85(-S)(-C)(-I)



Technical Features

The Easylock ELxBxP-85 clamping module positions and clamps workpieces or fixtures with a repeat accuracy of less than 5 µm.

- ➤ EASYLOCK system locks through spring forces the clamping pin in rest position. A safety system guarantee. It can be opened hydraulically (ELxBHP-85) or pneumatically (ELxBPP-85).
- This zero point system is in hardened steel (ELABxP-85), or treated stainless steel (ELIBxP-85).
- The unit can be equipped with a blow-out system (-S), an unlocking control system (-C), or an indexing system (-I).
- > The set screws, their cover caps, the seals and the indexing pin are delivered with the module.

The respective clamping pins are:

TELB-138 pull-stud pin

TDELB-138 positioning pin

TCELB-138 centering pin

For clamping pins, see pages 12 and 13



OR 3x1,5

blow-out option

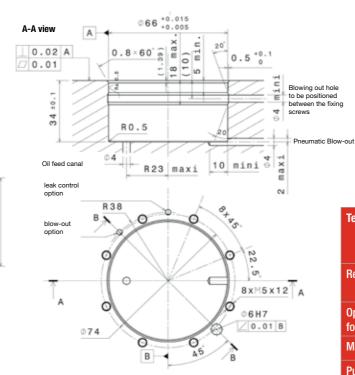
066 .0.015

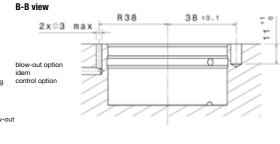
for an extraction

control option

> ELxBxP - 85(-S)(-C)(-I)

DIMENSIONS AND MOUNTING POSSIBILITIES



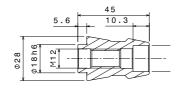


Technical Features	ELxBHP-85(-S) (-C)(-I) Hydraulic	ELxBPP-85 (-S) (-C)(-I) Pneumatic
Repeat accuracy	0,005 mm	0,005 mm
Operating pressure for opening	30 bars	6 bars
Maximum pressure	60 bars	10 bars
Pull-in force up to	30 kN/40 kN (CHc M10/CHc M12)	30 kN/40 kN (CHc M10/CHc M12)
Holding strength	12 kN	7 kN
Weight with set screws	1.06 kg	1.02 kg

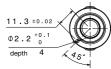
> CLAMPING PINS

FOR EASYLOCK Ø85 AND Ø138 WITH

CLAMPING BALLS



TDELB clamping pin only housing for a Ø2 alignement bore

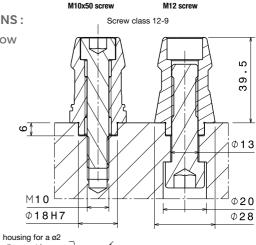


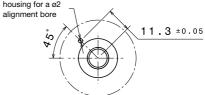
CLAMPING PINS FOR:

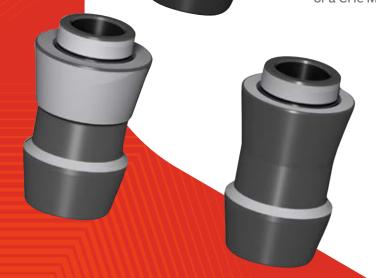
- > ELxBx-138 (-S) (Easylock with Ø138 clamping balls)
- > ELxBxx85 (-S) (Easylock with Ø85 clamping balls)

2 WAYS TO SCREW THE CLAMPING PINS:

Attachement of a M12 screw from below or a CHc M10 screw from above









EASYLOCK> CLAMPING PINS INSTALLATION AND POSITIONING





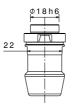






Positioning pin TDELB-138





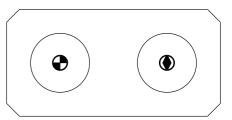


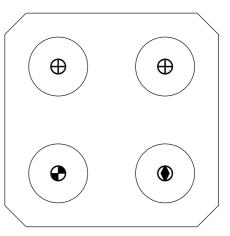
Pull-stud pin TELB-138











> ELxBP-112 (-S)(-C)(-I)



Technical Features

The Easylock ELxBP-112 clamping module positions and clamps workpieces or fixtures with a repeat accuracy of less than 5 µm.

- ➤ EASYLOCK systems lock through spring forces the clamping pin in rest position. A safety guarantee! ELxBP-112 is pneumatic.
- > This zero point system is in hardened steel (ELABP-112), or treated stainless steel (ELIBP-112).
- The unit can be equipped with a blow-out system (-S), an unlocking control system (-C) and an indexing system (-I).
- The set screws, and their cover caps, the seals and the indexing pin are delivered with the module.

The respective clamping pins are:

TELB-112 pull-stud pin

TDELB-112 positioning pin

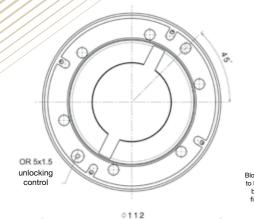
TCELB-112 centering pin

For clamping pins, see pages 16 and 17



0.02 A

0.01



078 .0.015

4×8F6

M8

for an extraction

0 9 0

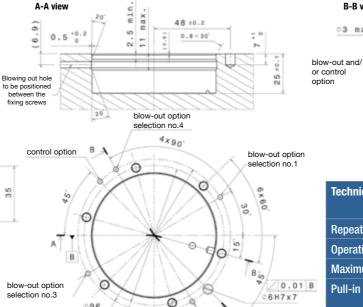
EASYLOCK

096

6xM6x14

> ELxBP-112 (-S)(-C)(-I)

DIMENSIONS AND MOUNTING POSSIBILITIES



blow-out option selection no.2



078 +0.015 +0.005

A 0.01

RO.5

B-B view

Holding force

Weight with set screws

⊕3 max

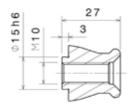
(FHc M8/CHc M10)

10 kN

1.09 kg

> CLAMPING PINS

FOR EASYLOCK WITH CLAMPING BALLS ELXBP-112

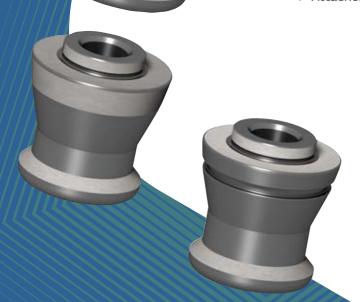


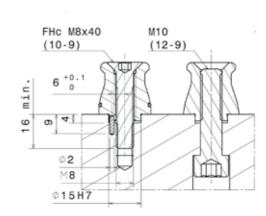




2 WAYS TO SCREW THE CLAMPING PINS:

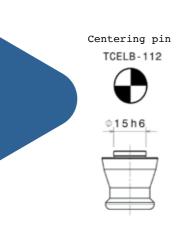
> Attachement of a M10 screw from below or a FHc M8 screw from above

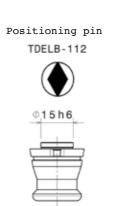




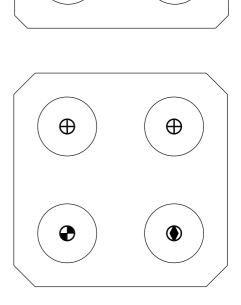


EASYLOCK> CLAMPING PINS INSTALLATION AND POSITIONING









> ELxBx2-112 (-S)(-C)(-I)



Technical Features

The Easylock ELxBx2-112 clamping module positions and clamps workpieces or fixtures with a repeat accuracy of less than 5 µm.

- > EASYLOCK systems lock through spring forces the clamping pin in rest position. A safety system guarantee. ELxBH2-112 can be opened hydraulically and ELxBP2-112 pneumatically.
- This zero point system is in hardened steel (ELABx2-112), or treated stainless steel (ELIBx2-112).
- The unit can be equipped with a blow-out system (-S), an unlocking control system (-C), or an indexing system (-I).
- The set screws, their cover caps, the seals and the indexing pin are delivered with the module.

The respective clamping pins are:

TELB2-112 pull pin

TDELB2-112 positioning pin

TCELB2-112 centering pin

For clamping pins, see pages 20 and 21



OR 5x1.5

unlocking

control

4x 8 F6

0112

080 0 -0.015

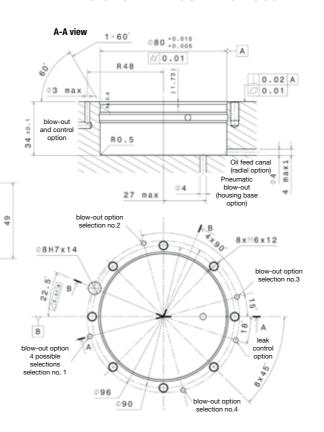
for an extraction

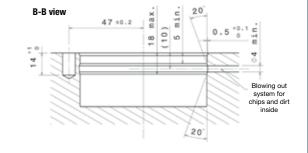
0.0-

5

> ELxBx2-112 (-S)(-C)(-I)

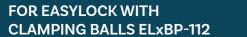
DIMENSIONS AND MOUNTING POSSIBILITIES

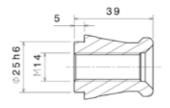


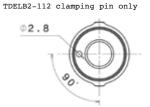


Technical Features	ELxBHx2-112 (-S)(-C)(-I)	ELxBPx2-112 (-S) (-C)(-I)
	Hydraulic	Pneumatic
Repeat accuracy	0,005 mm	0,005 mm
Operating pressure for opening	30 bars	8 bars
Maximum pressure	60 bars	12 bars
Pull-in force up to	40 kN/50 kN	40 kN/50 kN
	(FHc M12/CHc M14)	(FHc M12/CHc M14)
Holding force	20 kN	17 kN
Weight with set screws	1.75 kg	1.75 kg

> CLAMPING PIN ACCESSORIES

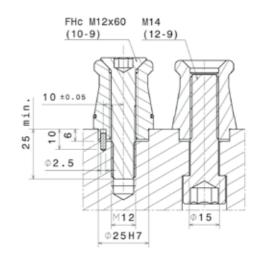






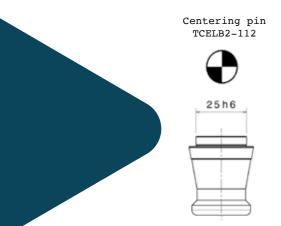
2 WAYS TO SCREW THE CLAMPING PINS:

> Attachement of an M10 screw from below or a FHc M8 screw from above





EASYLOCK> CLAMPING PINS INSTALLATION AND POSITIONING

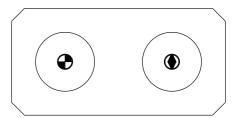


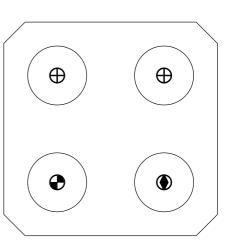
Positioning pin TDELB2-112



Pull-stud pin TELB2-112







> ELxBxG-112 (-S)(-C)(-I)



Technical Features

The Easylock ELxBxG-112 clamping module positions and clamps workpieces or fixtures with a repeat accuracy of less than 5 µm.

- ➤ EASYLOCK systems lock through spring forces the clamping pin in rest position. A safety system guarantee. ELxBHG-112 can be opened hydraulically, ELxBPG-112 pneumatically.
- This zero point system is in hardened steel (ELABxG-112), or treated stainless steel (ELIBxG-112).
- > The thickness of this module has been reduced to gain more height.
- The unit can be equipped with a blow-out system (-S), an unlocking control system (-C), or an indexing system (-I).
- > The set screws, their cover caps, the seals and the indexing pin are delivered with the module.

The respective pulling devices are:

TELBG-90M10 or M12 pull-stud pin

TDELBG-90-M10 or M12 positioning pin

TCELBG-90-M10 or M12 centering pin

For clamping pins, see pages 26 and 27



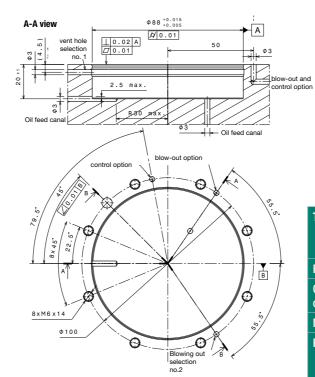
OR 5x1.5

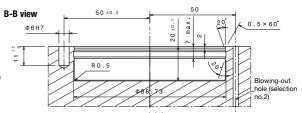
blow-out option

Blowing out system selection no. 2

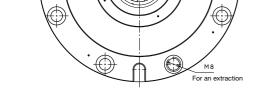
ELxBxG-112 (-S)(-C)(-I)

DIMENSIONS AND MOUNTING POSSIBILITIES





Technical Features	ELxBHG-112 (-S)(-C)(-I) Hydraulic	ELxBPG-112 (-S)(-C)(-I) Pneumatic
Repeat accuracy	0,005 mm	0,005 mm
Operating pressure for opening	30 bars	6 bars
Maximum pressure	60 bars	10 bars
Pull-in force up to	30 kN/40 kN	30 kN/40 kN
	(FHc M10/CHc M12)	(FHc M10/CHc M12)
Holding force	17 kN	10 kN
Weight with set screws	1160 gr	1160 gr



Φ88 .0.015

> ELxBxG-90 (-S)(-C)(-I)



Technical Features

The Easylock ELxBxG-90 clamping module positions and clamps workpieces or fixtures with a repeat accuracy of less than 5 µm.

- > EASYLOCK systems lock through spring forces the clamping pin in rest position. A safety system guarantee. ELxBHG-90 can be opened hydraulically, ELxBPG-90 pneumatically.
- This zero point system is in hardened steel (ELABxG-90), or treated stainless steel (ELIBxG-90).
- > The thickness of this module has been reduced to gain more height.
- The unit can be equipped with a blow-out system (-S), an unlocking control system (-C), or an indexing system (-I).
- > The set screws, their cover caps, the seals and the indexing pin are delivered with the module.

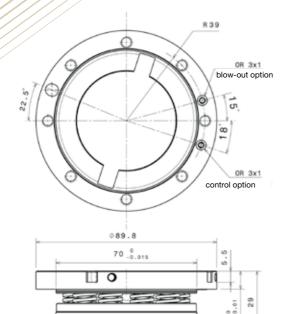
The respective clamping pins are:

TELBG-90-M10 or M12 pull-stud pin

TDELBG-90-M10 or M12 positioning pin

TCELBG-90-M10 or M12 centering pin

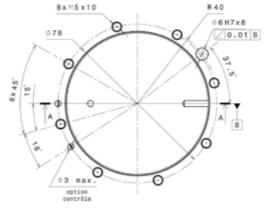
For clamping pins, see pages 26 and 27



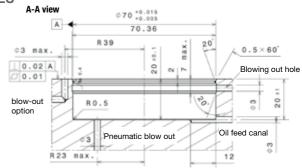


> ELxBxG-90 (-S)(-C)(-I)

DIMENSIONS AND MOUNTING POSSIBILITIES





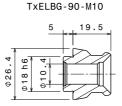


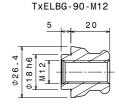
Technical Features	ELxBHG-90 (-S) (-C)(-I) Hydraulic	ELxBPG-90 (-S) (-C)(-I) Pneumatic
Repeat accuracy	0,005 mm	0,005 mm
Operating pressure for opening	30 bars	6 bars
Maximum pressure	60 bars	10 bars
Pull-in force up to	30 kN/40 kN (FHc M10/CHc M12)	30 kN/40 kN (FHc M10/CHc M12)
Holding force	11 kN	6.5 kN
Weight with set screws	715 gr	715 gr

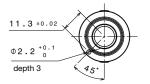
> CLAMPING PINS

FOR EASYLOCK WITH Ø112 AND Ø90

CLAMPING BALLS







CLAMPING PINS FOR:

> ELxBxG-112

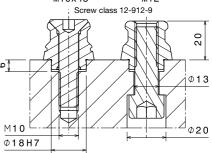
> ELxBxG-90

2 WAYS TO SCREW THE CLAMPING PINS:

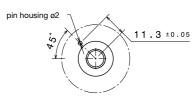
> Attachement of a M12 screw from below a FHC M10 x 40 screw from above

There are 6 different clamping pins, 3 M10 clamping pins, 3 M12 clamping pins



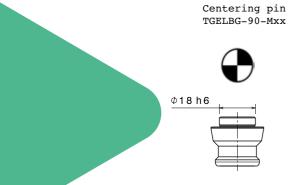


Clamping pin TDELBG-90-Mxx only



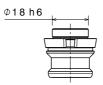


EASYLOCK> CLAMPING PINS INSTALLATION AND POSITIONING



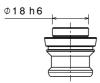
Positioning pin TDELBG-90-Mxx

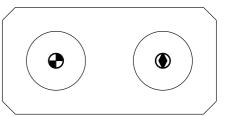


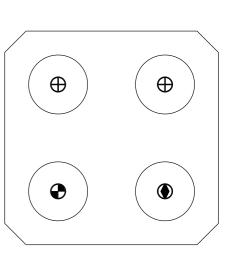


Pull-stud pin TELBG-90-Mxx









> ELxBxP-62 (-S)(-C)(-I)



Technical Features

The Easylock ELxBxP-62 clamping module positions and clamps workpieces or fixtures with a repeat accuracy of less than 5 µm.

- ➤ EASYLOCK systems lock through spring forces the clamping pin in rest position. A safety system guarantee. ELxBHP-62 can be opened hydraulically and ELxBPP-62 pneumatically.
- This zero point system is in hardened steel (ELABxP-62), or treated stainless steel (ELIBxP-62).
- The unit can be equipped with a blow-out system (-S), an unlocking control system (-C), or an indexing system (-I).
- > The set screws, their cover caps, the seals and the indexing pin are delivered with the module.

The respective clamping pins are:

TELB-62 pull-stud pin

TDELB-62 positioning pin

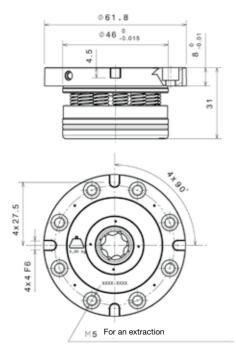
TCELB-62 centering pin

For clamping pins, see pages 32 and 33



OR 3x1,5 OR 3x1,5 blow-out option

control option



EASYLOCK

8×45°

R27

> ELxBxP-62 (-S)(-C)(-I)

DIMENSIONS AND MOUNTING POSSIBILITIES

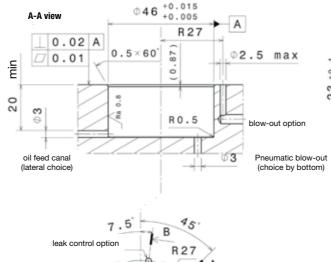
blow-out option

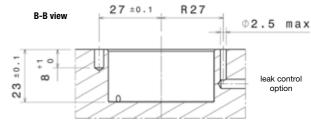
Φ52 8xM4x10

Ø4 H7

В

0.01 B





Technical Features	ELxBxP-62 (-S) (-C)(-I) Hydraulic	ELxBxP-62 (-S) (-C)(-I) Pneumatic
Repeat accuracy	0,005 mm	0,005 mm
Operating pressure for opening	30 bars	6 bars
Maximum pressure	60 bars	10 bars
Pull-in force up to	8 kN/12 kN (CHc M5/CHc M6)	8 kN/12 kN (CHc M5/CHc M6)
Holding force	1.6 Kn	1 kN
Weight with set screws	330 gr	320 gr

> ELxBxF-62 (-S)(-C)(-I)



Technical Features

The Easylock ELxBxG-112 clamping module positions and clamps workpieces or fixtures with a repeat accuracy of less than 5 µm.

- > This model for flanging and its system lock through spring forces the clamping pin in rest position a safety guarantee!
- >ELxBPF-62 is pneumatic and ELxBHF-62 can be opened hydraulically, in hardened steel (ELABxF-62) or treated stainless steel (ELIBxF-62).
- The unit can be equipped with a blow-out system (-S), an unlocking control system (-C), or an indexing system (-I).
- > The set screws, their cover caps, the seals and the indexing pin are delivered with the module.

The respective clamping pins are:

TELB-62 - pull-stud pin

TDELB-62 - positioning pin

TCELB-62 - clamping pin



blow-out option Ø10

07x1.5 o-ring

26 20

R27

22.5

03x1.5 o-ring

blow-out

option

PRA PO

0

8 CHc screws

Φ62 0 -0.01

(M5

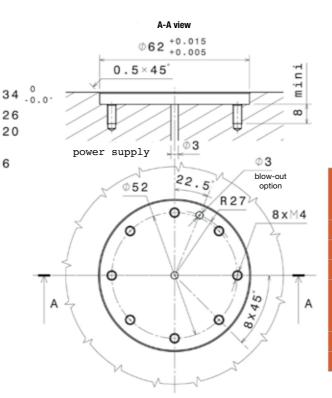
M4 x 3 5

Ø52

for an extraction

> ELxBxF-62 (-S)(-C)(-I)

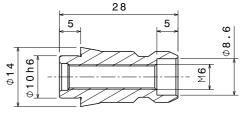
DIMENSIONS AND MOUNTING POSSIBILITIES



Technical Features	ELxBxF-62 (-S)(-C)(-I) Hydraulic	ELxBxF-62 (-S)(-C)(-I) Pneumatic
Repeat accuracy	0,005 mm	0,005 mm
Operating pressure for opening	30 bars	6 bars
Maximum pressure	60 bars	10 bars
Pull-in force up to	8 kN/12 kN	8 kN/12 kN
	(CHc M5/CHc M6)	(CHc M5/CHc M6)
Holding force	1.6 Kn	1 kN
Weight with set screws	620 gr	610 gr

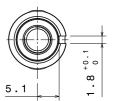
> CLAMPING PIN ACCESSORIES

FOR EASYLOCK WITH Ø62 CLAMPING BALLS



éch: 2/1

TDELB-62 clamping only for a 01.5 alignment bore

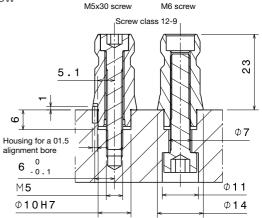


CLAMPING PINS FOR:

> ELIBxx-62

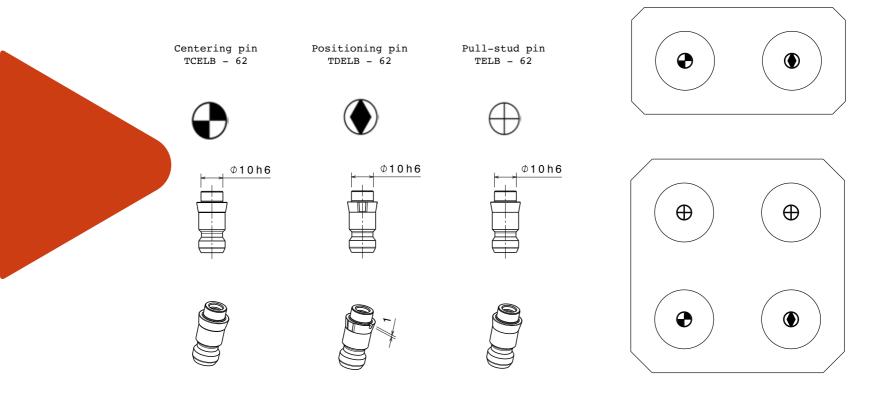
2 WAYS TO SCREW THE CLAMPING PINS:

> Attachement of a M6 screw from below a CHc M5 screw from above





EASYLOCK> CLAMPING PINS INSTALLATION AND POSITIONING



EASYLOCK WITH CLAMPING SLIDES

> ELID-x-138 (-S)(-I)



Technical Features

The Easylock ELID-x-138 clamping module positions and clamps workpieces or fixtures with a repeat accuracy of less than 5 µm.

- > The pins are locked by the clamping slides inside the EASYLOCK.
- > EASYLOCK system locks the clamping pins in rest position. A safety system guarantee.
- > Unclamping is pneumatic at 6 bars. The EASYLOCK can be equipped with a blow-out system (-S), an unlocking control system (-C), or an indexing system (-I).

Our three respective clamping pin models:

TELD: Centering Pin
TCELD: Positioning Pin
TDELD: Pull-stud Pin

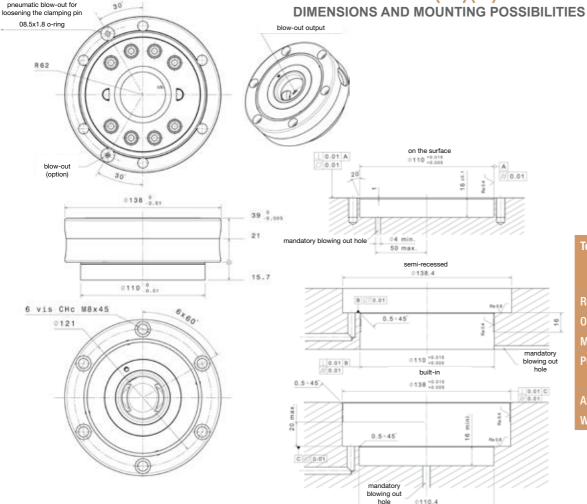
For pallets or base plates with hydraulic and/or pneumatic clamping fixtures on, our Easylock devices are available as follows:

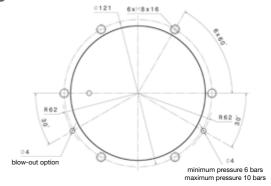
ELID - 1 - 138: Easylock with 1 female coupler ELID - 2 - 138: Easylock with 2 female couplers ELID - 3 - 138: Easylock with 3 female couplers The female couplers can be supplied as an extra.

For clamping pins, see pages 36 and 37



> ELID-x-138 (-S)(-I)





Technical Features	ELID-x-138 (-S)(-I) Pneumatic
Repeat accuracy	0,005 mm
Operating pressure for opening	6 bars
Maximum pressure	10 bars
Pull-in force up to	35 kN/50 kN (CHc M10/CHc M12)
Axial clamping force	5 kN
Weight with set screws	4.4 kg

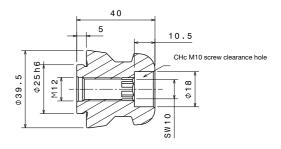
> CLAMPING PIN ACCESSORIES

FOR EASYLOCK WITH Ø138 CLAMPING SLIDES



CLAMPING PINS FOR:

- > ELID-0-138 (-S)
- > ELID-1-138
- > ELID-2-138
- > ELID-3-138

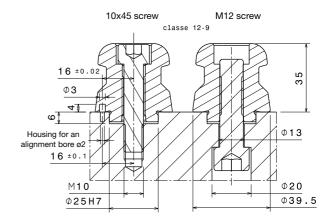


TxELD clamping pin catalogue

2 WAYS TO SCREW THE CLAMPING PINS:

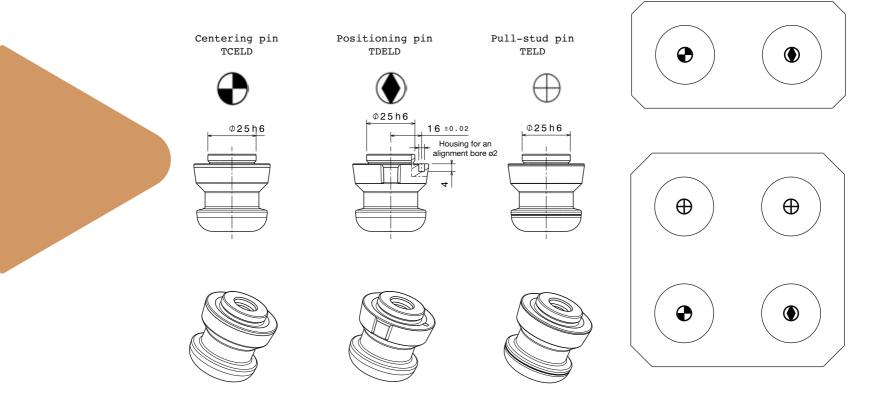
➤ Attachement of an M12 screw frome below or Crossing using a CHc M10 screw from above.







EASYLOCK> CLAMPING PINS INSTALLATION AND POSITIONING



EASYLOCK

> APPLICATIONS

Clamping vices and devices on an upper table with 6 EASYLOCK zero point systems.



EASYLOCK 138 with clamping slides on the pallet gripper of the robot EASYBOX L/R 250 for handling 250 kg pallets.

EASYLOCK

> APPLICATIONS

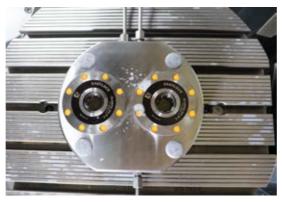




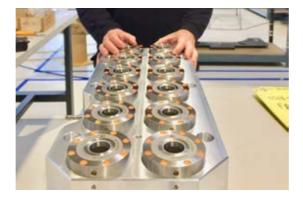
Upper table with 2 EASYLOCK



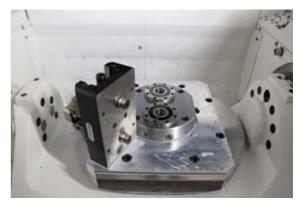
Upper table with 4 EASYLOCK



Upper table for automation system



Upper table with 12 EASYLOCK



Upper table + EASYCLAMP vice

> Standard upper table solutions with zero point systems are shown on pages 40 to 43. We can also provide customised solutions adapted to specific worpieces or machining process.

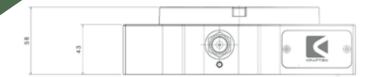
UPPER TABLE IN ALUMINIUM

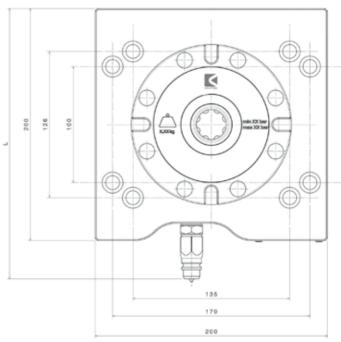
> WITH 1 EASYLOCK

This upper table in aluminium has one EASYLOCK with indexing option for fixture positioning on the zero-point system.

Pneumatic or hydraulic version available in two diameters EASYLOCK ELxBxP-138 or ELxBx2-112







Reference:

> Aluminium pallet with 1 clamping pin 200 x 200 PF00.200.200.40-1-138 or PF00.200.200.40-1-2112

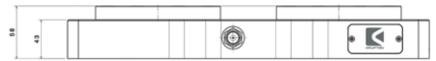
References	TF00.200.200.58- 1-BPI138-I	TF00.200.200.58- 1-BHI138-I	TF00.200.200.58- 1-BP2l112-l	TF00.200.200.58- 1-BH2l112-l
Holding force	16 kN	25 kN	17 kN	20 kN
Repeat accuracy	0.01 mm	0.01 mm	0.01 mm	0.01 mm
Pressure	6 à 10 bars	30 à 60 bars	8 à 12 bars	30 à 60 bars
Weight	6.6 Kg	7.2 Kg	6.2 Kg	6.2 Kg

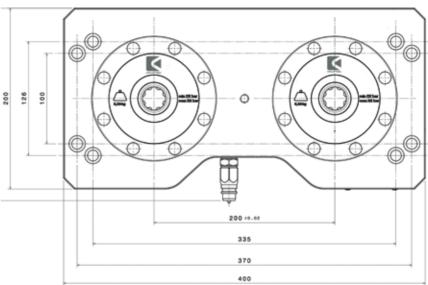
UPPER TABLE IN ALUMINIUM

> WITH 2 EASYLOCKS

This upper table in aluminium has 2 EASYLOCK in pneumatic or hydraulic version. Available in two diameters EASYLOCK ELxBxP-138 or ELxBx2-112







References	TF20.400.200.58- 2-BPI138	TF20.400.200.58- 2-BHI138	TF20.400.200.58- 2-BP2l112	TF20.400.200.58- 2-BH2l112
Holding force	16 kN x 2	25 kN x 2	17 kN x 2	20 kN x 2
Repeat accuracy	0.01 mm	0.01 mm	0.01 mm	0.01 mm
Pressure	6 à 10 bars	30 à 60 bars	8 à 12 bars	30 à 60 bars
Weight	12.9 Kg	14.2 Kg	12 Kg	12 Kg



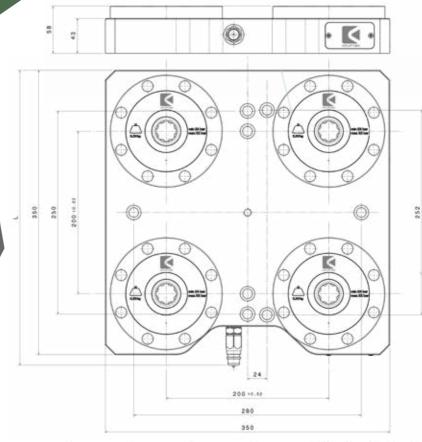
Reference:

> Aluminium pallets with 6 clamping pins 200 x 400 PF20.400.200.40-2-138 or PF20.400.200.40-2-2112

> WITH 4 EASYLOCK

This upper table in aluminium is equipped with 4 pneumatic or hydraulic EASYLOCK with EASYLOCK ELxBx-138 or ELxBx2-112





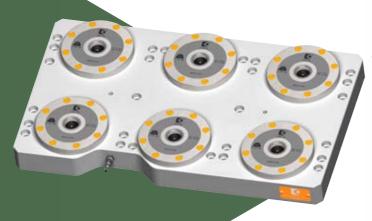
Reference:

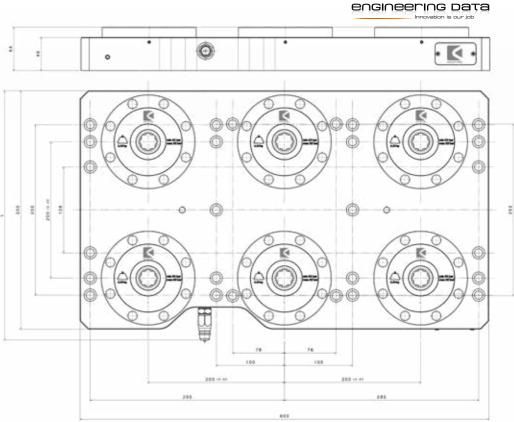
> Pallet with clamping pins 350 x 350 PF20.350.350.40-4-4138 or PF20.350.350.40-4-2112

Références	TF20.350.350.58- 4-BPI138	TF20.350.350.58- 4-BHI138	TF20.350.350.58- 4-BP2l112	TF20.350.350.58- 4-BH2l1112
Holding force	16 kN x 4	25 kN x 4	17 kN x 4	20 kN x 4
Repeat accuracy	0.01 mm	0.01 mm	0.01 mm	0.01 mm
Pression	6 à 10 bars	30 à 60 bars	8 à 12 bars	30 à 60 bars
Weight	22.3 Kg	24.7 Kg	20.5 Kg	20.5 Kg

> WITH 6 EASYLOCK

This upper table in aluminium has 6 EASYLOCK in pneumatic or hydraulic version. Available in two diameters EASYLOCK ELxBxP-138 or ELxBx2-112





Reference:

> Aluminium pallets with 6 clamping pins 350 x 650 PF20.600.350.40-6-138 or PF20.600.350.40-6-2112

Références	TF20.600.350.64- 6-BPI138	TF20.600.350.64- 6-BHI138	TF20.600.350.58- 6-BP2l112	TF20.600.350.58- 6-BH2I112
Holding force	16 kN x 6	25 kN x 6	17 kN x 6	20 kN x 6
Repeat accuracy	0.01 mm	0.01 mm	0.01 mm	0.01 mm
Pression	6 à 10 bars	30 à 60 bars	8 à 12 bars	30 à 60 bars
Weight	39.7 Kg	43.4 Kg	37 Kg	37 Kg

CONNECTED TABLES

> EASYCONNECT

Our connected tables EASYCONNECT clamp your workpieces directly to the zero point systems through clamping devices for a quick-change of series in your production. It is possible to work on different clamping zones making a great variety of fixtures combinations.

The dimensions of the EASYCONNECT tables are defined according to the customer's needs and the dimensions of the machine table. Multiple combinations can be realized with EASYCONNECT tables.

Benefits

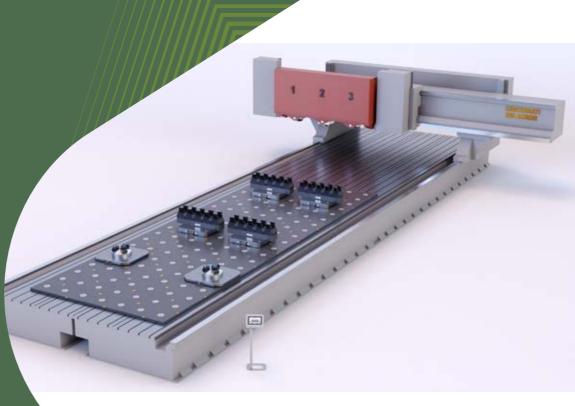
> EASYCONNECT tables are arranged in a mesh and connected to each other by bridges and plugs.

> It is possible to add additional modules according to customer's requests.

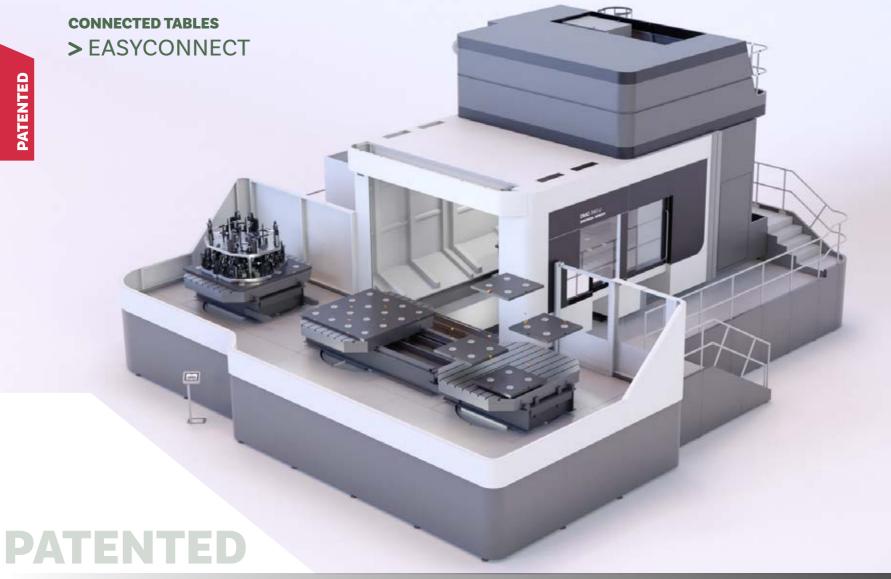
AS AN OPTION:

> EASYCONNECT tables have functions such as blowing and EASYLOCK chuck opening control.

> EASYCONNECT tables are controlled by a PLC with touch screen or a M function on the control unit of the machine. (contact us).



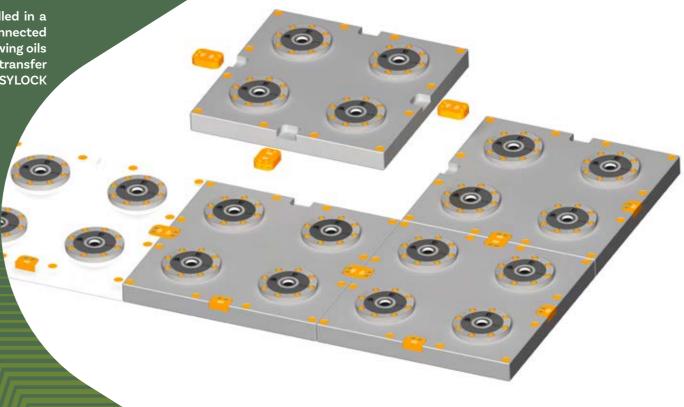
SOLUTION



CONNECTED TABLES

> EASYCONNECT

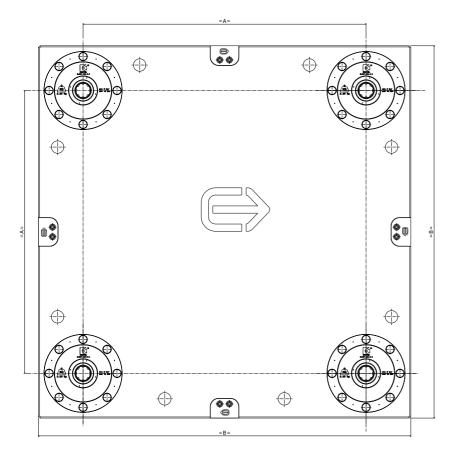
EASYCONNECT are installed in a grid pattern, they are connected by bridges and plugs allowing oils and pneumatic blow out transfer and open check of the EASYLOCK zero point systems.

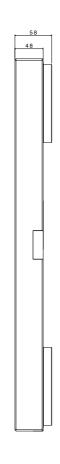


CONNECTED TABLES

> EASYCONECT







				////
	Center spacing	Dimensions (B)	Overal height	
Туре	between axes		Plate	With zero point
TC 25	250 mm	500 mm		58
TC 30	300 mm	600 mm	40	
TC 40	400 mm	558 mm	48	
TC 50	500 mm	658 mm		

CLAMPING FIXTURES

> 4-SIDED FIXTURES

Clamping tower out of cast alulminium or iron, machined and equipped with EASYLOCK zero point systems diameter 138.

Pallet positioning repeatability < $5 \, \mu m$. Pallet holding force: $4 \, x \, 1.6 \, kN$ in positive clamping.

Benefits

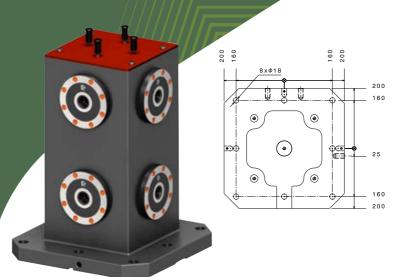
- > Very fast changeover of fixtures, no set-up.
- > Can be used in different machines.
- > Increase productivity.
- > Decrease machine shutdown time.

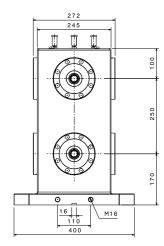
Specifications::

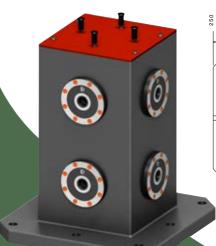
> Quick clamping/unclamping of pallets and fixtures.

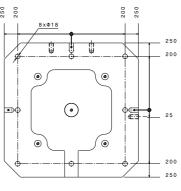
Optional extras:

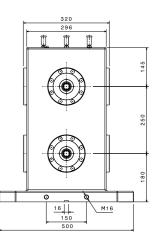
- > Hydraulic fluid flow, 250 bar maximum.
- > Customer can choose the type of oil feed canal for the modular clamping fixture (swivel coupling, center boring or manual operation)



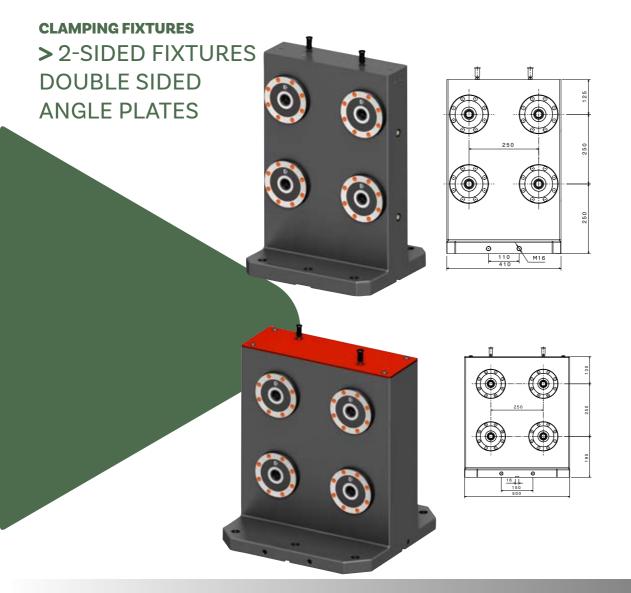


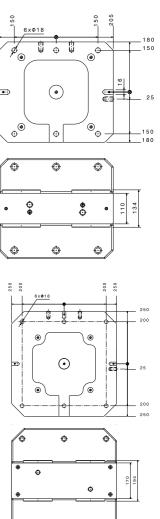












CLAMPING FIXTURES

> PALLETS

Delivery of smooth pallets:

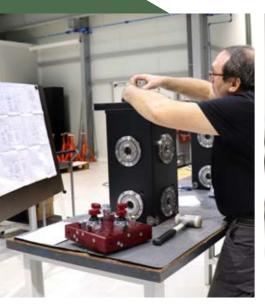
> According to customer's needs pallets can be customised in steel or aluminium. Their dimensions and the center distance can be adapted to customer's fixtures.

clamping fixtures > APPLICATIONS













Please visit our website www.engineering-data.fr to discover our products and solutions.



Innovation is our job

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