

Numerical control for shear

## CybTouch 12 G

### Hardware specifications

CybTouch 12 G is a multi axes control for automatic or swing beam shears. It manages up to 2 back gauges axes and 2 front gauges axes, as well as the angle and cutting length using potentiometers, linear encoders or a timer. Additionally the CybTouch 12 G handle full sheet supports 2 or 3 positions cycles and many other shears features as Return to sender function.

#### Housing or panel version

Delivered as a robust panel ready to be integrated, or optionally directly integrated into a sleek and modern housing specially designed to be attached to a swiveling arm.

#### Integrated cycle management

Reduce the electrical wiring, electrical cabinet size and equipment for lower set-up costs on each shear. Can easily be integrated into the electrical box diagrams. Possibility to manage the angle and cutting length using potentiometers, linear encoders or a timer.

#### Electrical connections

Earthing and wiring of the cables designed to make the process as straightforward as possible.

#### New indexing functions

Wizard functions make the definition of indexes a lot simpler, quicker and more precise.

#### Wireless communication

RFlink wireless radio frequency data communication allows backup, restoring and firmware upgrades operations without any cable connection to the numerical control.

#### Energy

Energy saving thanks to the integrated Eco mode function that automatically stops the main pump after a chosen time of inactivity.

#### Original parameters

Internal backup in a special safe memory allows the user to restore at any time the original parameters; machine is running again in an extremely short time in the event of a memory loss or involuntary parameter modification.

#### Encoders

CybTouch 12 for Shears accepts encoders with or without complementary signals.



## Axis and cutting functions

The following elements are available and can be configured on the CybTouch 12 for Shears by the OEM. However, some functions depend on the machine construction.

**i** Features availability depends on the number of available axes and inputs/outputs.

BACK / FRONT GAUGE AXIS
Wizards and auto-tuning of the axes.
High precision and fast positioning algorithm for frequency converter axes.
Retraction of the back gauge during the cutting process can be configured.
Back gauge management or front gauge management.
Indexing in several modes.
Inch / mm.

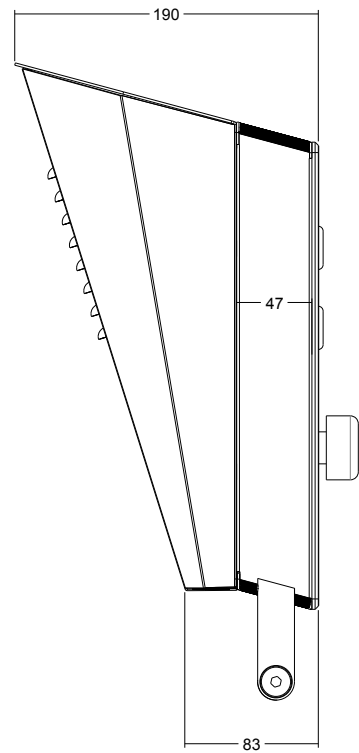
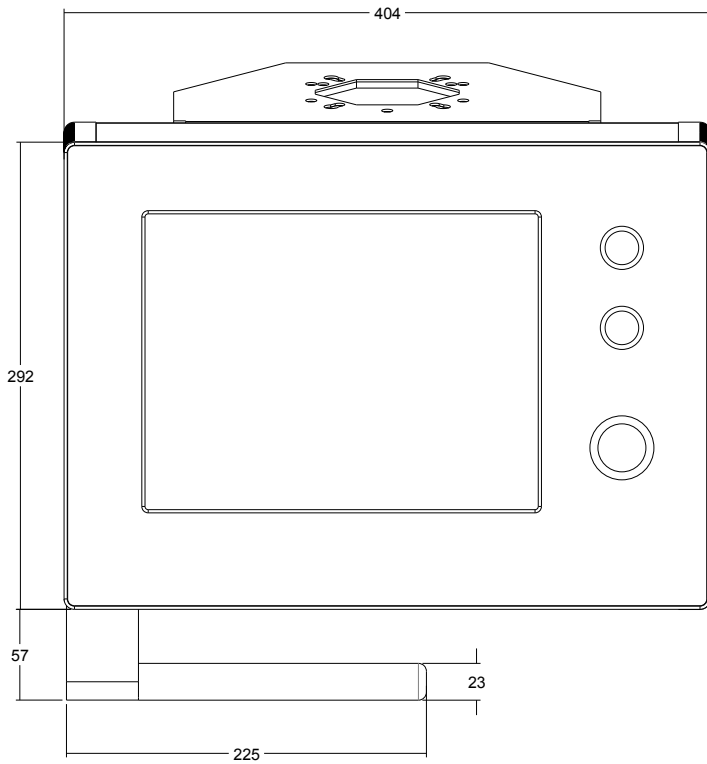
SHEAR FEATURES
Eco mode.
Linearization of the blade gap curve for optimal positioning accuracy.
Blade gap with 1 actuator.
Blade gap with 2 actuators.
Backgauge clearance during the cutting process (yes / no).
Management of sheet support with 2 or 3 positions integrated in machine cycle.
RTS (Return to sender) function.
Mechanical foldaway. (parking position)
Hydraulic foldaway.
Cutting length management by potentiometer.
Cutting length management by encoder.
Cutting length management by timer.
Sequence repetition.
AutoCut (Flying Cut or continuous cut) function.
Anti-twist management.
Screen button for cutting laser / light guide.
Counting of the parts up or down, with auto-stop. (user selectable Up or Down counter )
Time and stroke counters for oil service.
Sheet offset (multiple-cuts in the middle of the machine with reduced TDC).
Automatic management of blade gap.
Automatic management of cutting angle and cutting length.
System pressure management with ramp for pressure proportional valve.
Pump start button.
Auxiliary function.

## Technical Characteristics

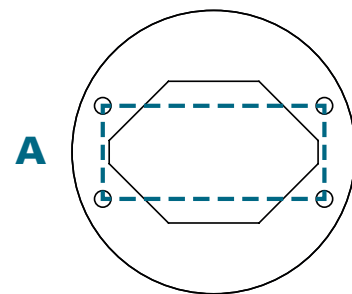
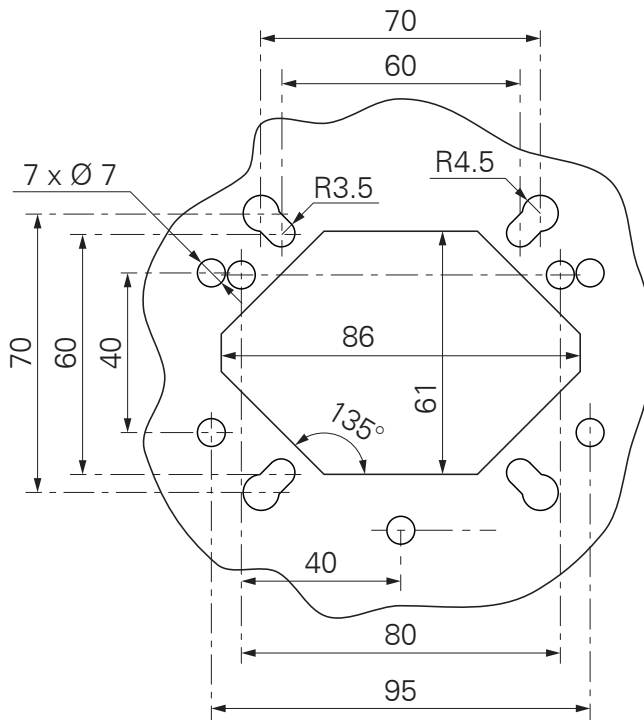
Touchscreen	12" color graphic TFT screen, 800 x 600 pixels with LED backlight control.	
Work memory	SRAM /SDRAM	
System memory	8 GB Micro SD Card with software update via RFLink.	
Communication	Cybelec RFLink (radio frequency link, optional). USB port (for memory stick only).	
Axis	<ul style="list-style-type: none"> <li>• <math>\pm 10</math>VDC</li> <li>• 0-10 VDC</li> <li>• SP-SN-HS</li> <li>• SP-SN 0-10 VDC</li> </ul>	management of AC/DC drives and motors. frequency converter for AC asynchronous motors. 2 speeds mode. 2 adjustable speeds.
Units	inch/mm conversion.	
Power supplies	<ul style="list-style-type: none"> <li>• Numerical control:</li> <li>• Digital inputs/outputs:</li> </ul>	stabilized + 24VDC -15% / + 20% 30W stabilized + 24VDC -15% / + 20%
Encoder inputs	4	5 VDC or 12 VDC* or 24 VDC* (* = external power supply). Complementary signals are not necessary, but recommended.
Power supplies for encoders	5 VDC	Supplied by CybTouch. Max. 250 mA for each encoder.
Digital inputs	16	Optocoupled.
Analog inputs	4	0-10 VDC.
Digital outputs	21	Optocoupled and short circuit proof. 12 x 24 VDC source mode, max. 0.5 A. 8 x 24 VDC source mode, max. 3.0 A. 1 x 24 VDC auxiliary output, max. 0.5 A, not protected. Possibility to configure twice the same output to double the current..
Analog outputs	6	$\pm 10$ VDC, axes, pressure. Impedance < 100 $\Omega$ , short circuit proof. Load $\geq 2$ k $\Omega$ (max 15 mA).
Reference voltage	10 VDC	Impedance < 100 $\Omega$ , short circuit proof. Load $\geq 2$ k $\Omega$ (max 15 mA).
Operating conditions	Min. 5° Celsius, max. 45° Celsius. Relative humidity 10 to 85% non-condensing.	
EC Directives	IEC61131-2.	
External button	Possibility to add up to 4 physical buttons on the left side	

# Dimensions

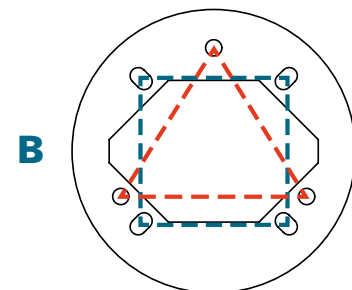
## Box version



## Attachment dimensions



40 x 95

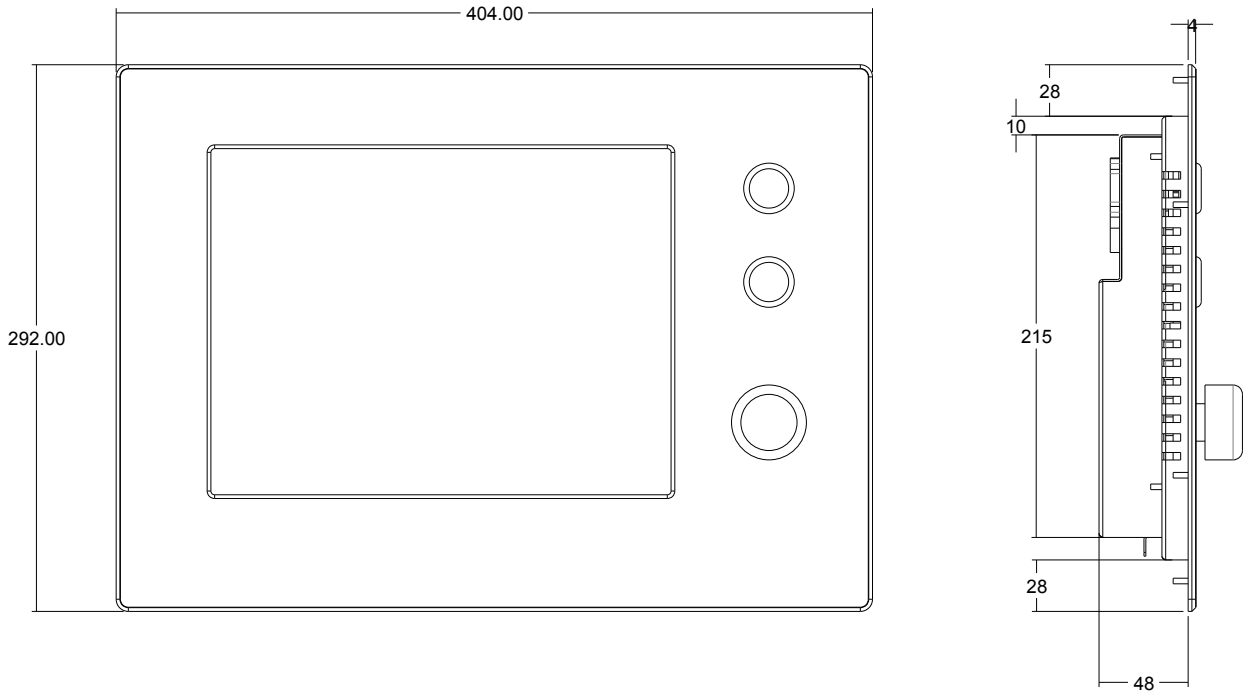


60 x 60 or 65 x 65

80 x 80 x 80

Two adapters are provided.  
Stick the appropriate one on  
top of the box.

## Panel version



## Integrating opening dimensions

