

## F50M.1 F30L2 / F37L2 / F50L2 boring unit (on request)

(ux5-hde\_1.2\_n1.1)



***This chapter has been dedicated at 3 different kind of boring heads: the difference between the three heads are easier identifiable while the other information are common.***

- F30 boring unit: 24 vertical spindles / 2+2 horizontal spindles on X axis / 1+1 horizontal spindles on Y axis
- F30L2 boring unit: 24 vertical spindles / 2+2 horizontal spindles on X axis / 1+1 horizontal spindles on Y axis / 0/90° blade unit
- F37L2 boring unit: 25 vertical spindles / 4+4 horizontal spindles on X axis / 2+2 horizontal spindles on Y axis / 0/90° blade unit
- F50L2 boring unit: 38 vertical spindles / 4+4 horizontal spindles on X axis / 2+2 horizontal spindles on Y axis / 0/90° blade unit

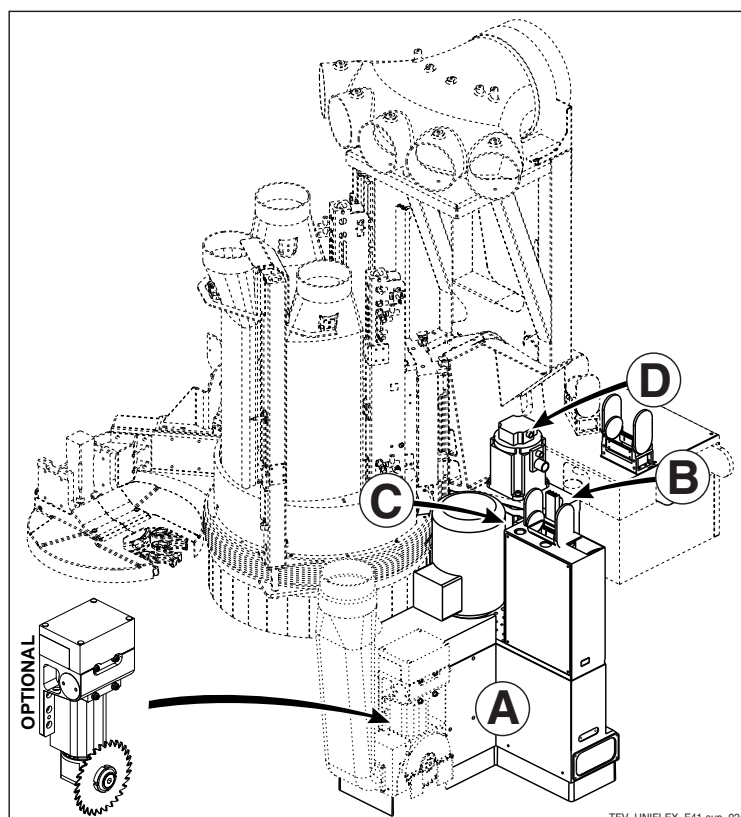
- boring head A .
- Support B on which the slide C glides through recirculating ball screws, moved by a brushless engine D and a recirculating ball nut.

The selection of the vertical spindles takes place in a pneumatic way.

The boring head is used in workings to execute vertical borings on the panel face 1 and horizontal borings on panel faces 2-3-4-5.

The blade unit is used for milling (channels or cuts) on the X — Y axis.

The boring head is preset for mounting optional operator units .



TFV\_UNIFLEX\_F41-sup\_02a

**INFORMATION FOR USE:**

The drill allows you to perform multiple vertical and horizontal drilling.

However, you should keep in mind that the finish quality of the drilling made, is influenced by the geometry of the tool profile, tool length and diameter (if a bit is too long it tends to move more than a short bit) by its degree of wear, the cutting speed and processing feed parameters, the type of material, the condition of the surface to be drilled.

As a general reference criterion, to assure optimum finishing of the drilled holes, it is recommended not to perform simultaneous vertical drilling with more than 14 spindles and bits with a maximum diameter of 8mm.

It is in any case the user's responsibility to perform an assessment on a case by case basis, considering all the operating mode variables.

## F50M.2      Technical specifications

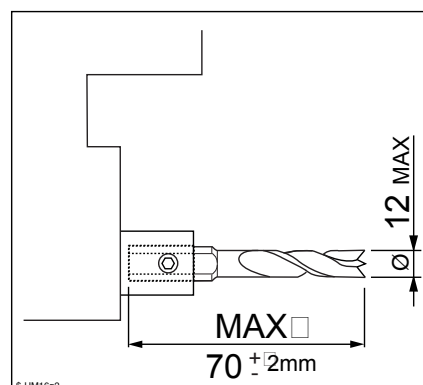
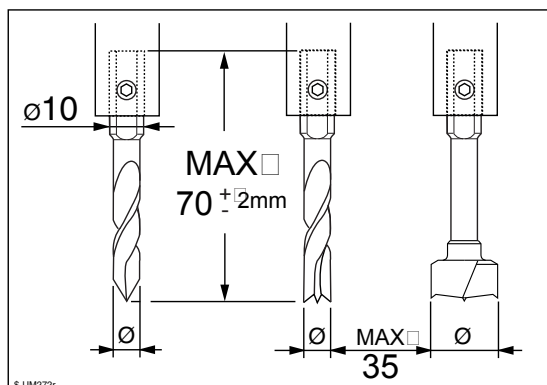
Wheelbase	32mm	(ux5-hde_1.1_n1.2)
Toolholder attachment type	hole Ø10mm + screw M8x6 12.9 UNI 5923 STEI	
Spindle rotation speed	2000÷8000rpm	
Rotation speed control	from CNC via an inverter	
Motor power <sup>(1)</sup>	3kW	
Vertical spindles pneumatic stroke	60mm	
Horizontal spindles pneumatic stroke	75mm	
Length of boring head	see figure	

<sup>(1)</sup> Technical data: see motor data plate

Excluded from energy efficiency constraints of Commission Regulation (EC) No. 640/2009

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(=gamma-2012 1 1 p1 2a inn)
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### Dimensions of drill bits



(for or corsa-75mm)

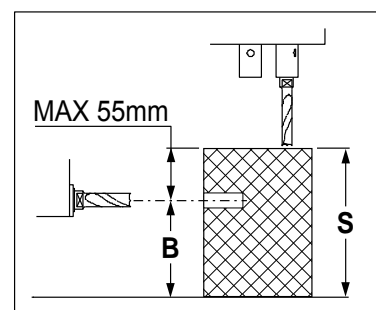
The horizontal boring from face 1 of the panel can be executed at 55 mm maximum distance.

B > (greater) S - 55

Es. :

$S = 80\text{mm}$

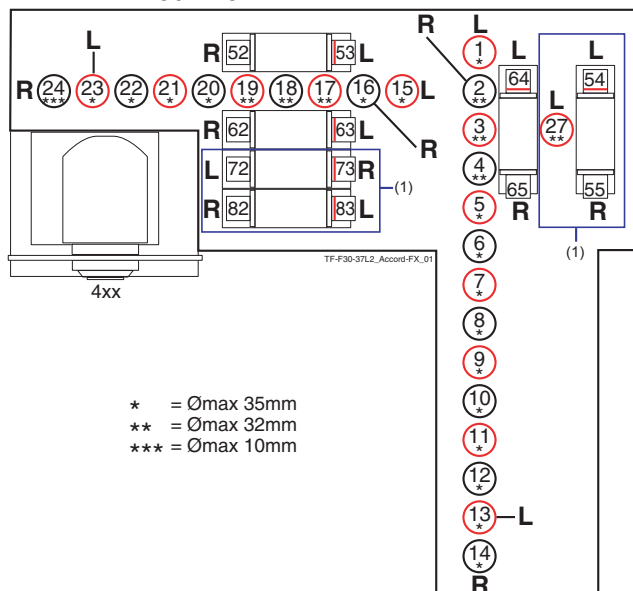
B minimum =  $80 - 55 = 25$



- (ux5-hde 1.2 n1.2b)

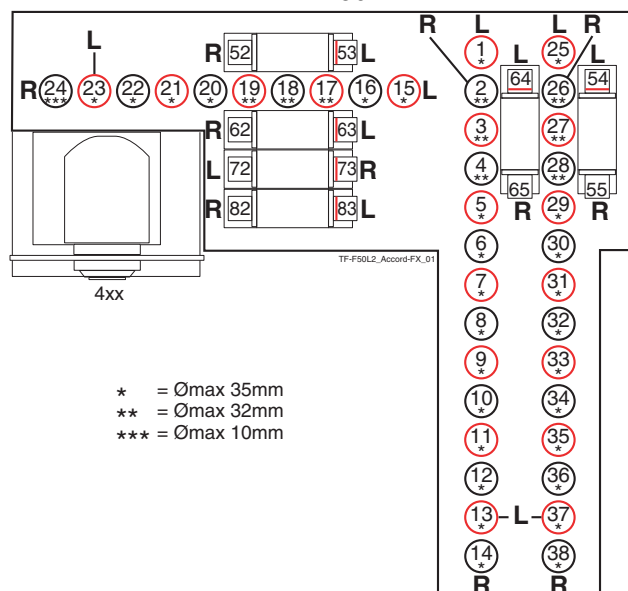
## SPINDLE NUMBERING AND SENSE OF ROTATION

## F30 / F37L2



\* = Ømax 35mm  
 \*\* = Ømax 32mm  
 \*\*\* = Ømax 10mm

## F50L2



\* = Ømax 35mm  
 \*\* = Ømax 32mm  
 \*\*\* = Ømax 10mm

**(1) Only on F37L2**

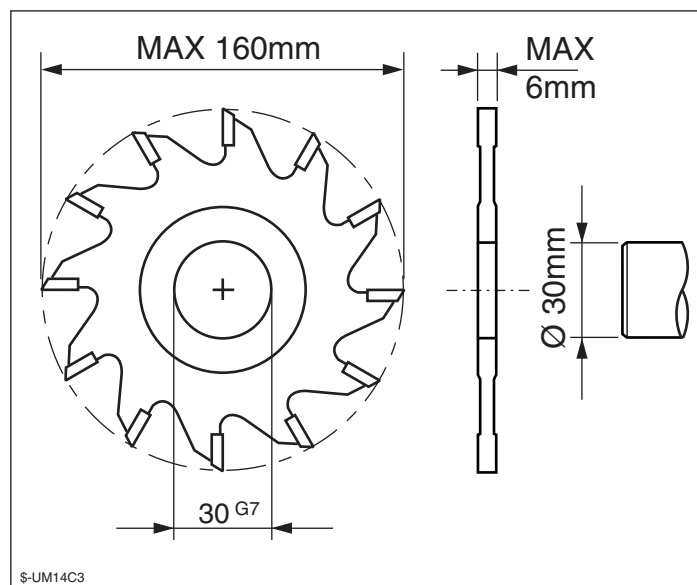


**THE DIAGRAMS ILLUSTRATE THE ORTHOGONAL PROJECTION OF THE BORING UNIT WITH PLAN VIEW (SEEN FROM ABOVE)**

(ux5-hde\_1.1\_n1.2b)

0-90° BLADE UNIT (on request):

Rotation speed	2000/6500rpm
Pneumatic vertical stroke	50mm
Tool coupling	Hole Ø30mm
Max disk cutter diameter	160mm
Body thickness of disk cutter	2,2-5mm
Tooth thickness	3,2mm (max 6mm)
Max cutting depth	45mm (with disk cutter Ø160mm)
Rotation	see figure

**Maximum diameter of disc-type cutters**

**CAUTION:** only use tools that conform to standards "EN 847-1:2005 and EN 847-2:2000/AC2003 (European Standards)" and follow all the manufacturer's instructions.

*Spindle rotation speeds, machining depths and forward speeds must be selected with great care by the operator on the basis of tool specifications and type of material and maximum tool speeds must never be exceeded.*



**use only tools with maximum speed rotation higher than 6500rpm.**