



COST-EFFECTIVE AUTOMATION

COMPACT UNITS FOR

- **DRILLING**
- **TAPPING**
- **MILLING**

www.e2systems.com

**AIR HYDRAULIC
DRILLING UNIT BE 33**



AIR HYDRAULIC DRILLING UNIT BE 33

The basic design of the BE 33 consists of a vane motor powered by compressed air, a pneumatic cylinder, and a closed hydraulic system. The total stroke length can be variably subdivided into rapid advance and working feed over the whole range. The throttle/check valve in the hydraulic system permits exact setting of the feed rate and high speed return.



- VERY COMPACT DESIGN
- BUILT-IN HYDRAULICS FOR CONTROLLED WORKING FEED
- ADJUSTMENT OF DRILLING DEPTH WITH POSITIVE STOP GUARANTEES A HIGH DEGREE OF ACCURACY
- EXTRA STABLE SPINDLE BEARINGS
- LOW NOISE LEVEL
- MINIMAL AIR CONSUMPTION

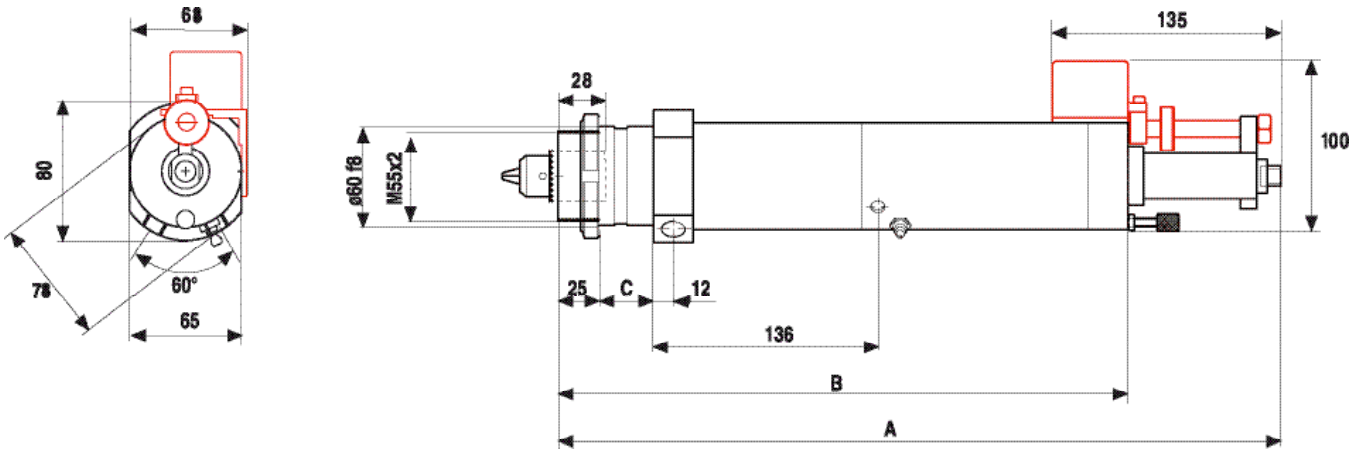
Guidelines for choice of unit												[Ø, mm]
DRILLING UNIT	CAPACITY IN STEEL				CAPACITY IN ALUMINIUM/BRASS				CAPACITY IN WOOD/PLASTICS			
No of Spindles	1	2	3	4	1	2	3	4	1	2	3	4
BE 335	10	6	4	3	14	10	8	5	20	12	10	9
BE 337	10	6	4	3	14	10	8	5	20	12	10	9
BE 3313	9	6	4	2.5	12	10	8	5	16	12	10	9
BE 3326	7	4	3	2	10	8	6	4	13	10	9	8
BE 3333	6	3	3	2	9	7	5	4	13	10	8	7
BE 3360	3	2	2	1	7	5	4	3	8	8	6	5
BE 33210	2.5				4				5			

Performance specifications at 6.3 Bar			
Thrust	see below	Run-out at spindle nose (max.)	0.05 mm
Power	0.36 kW	Depth accuracy +/-	0.01 mm
Stroke (max. 100% controlled)	50 mm	Rapid advance rate	10 m/min
Min. Center to Center Spacing		Controlled feed rate	>0.01 m/min
Single Spindle	65 mm	Working pressure range	6–7 Bar
Double-Spindle Head	11 mm	Air consumption	<0.5 Nm ³ /min
		Sound level	70 dB(A)

DRILLING UNIT	SPEED (IDLE) [RPM]	SPEED (AT MAX OUTPUT) [RPM]	TORQUE (AT MAX OUTPUT) [NM]	THRUST [N]
BE 335	500	250	12.6	1 000
BE 337	700	350	10.4	1 000
BE 3313	1 300	650	5.7	1 000
BE 3326	2 600	1 300	2.9	800
BE 3333	3 300	1 650	2.3	800
BE 3360	6 000	3 000	1.3	800
BE 33210	21 000	10 500	0.37	800

Dimensions

[mm]



You can download 2D CAD-drawings and 3D CAD-models on www.e2systems.com.


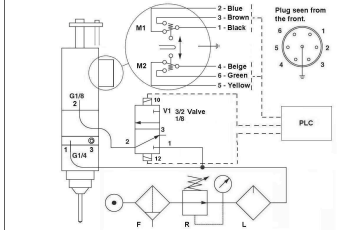

limit switch package.

DRILLING UNIT	A [MM]	B [MM]	C [MM]	WEIGHT [KG]
BE 335	472	380	67	7.1
BE 337				
BE 3313				
BE 3326	438	346	33	6.6
BE 3333				
BE 3360				
BE 33210				

Necessary components

CHUCKS	TYPE	PAGE
	Key chucks Ø 0.5–6.5 mm Ø 0.8–10.0 mm (Standard chuck)	50
	Collet Chucks Ø 1.0-8.0 mm Ø 1.0-15.0 mm Ø 2.0-20.0 mm	51
COLLETS	TYPE	PAGE
	ER11 Ø 1.0-8.0 mm ER20 Ø 1.0-15.0 mm ER32 Ø 2.0-20.0 mm	51
LIMIT SWITCHES	TYPE	PAGE
	Electric Pneumatic	56

Accessories

MULTI-SPINDLE HEADS	TYPE	PAGE
	Adjustable heads VH04-, VH06-, VH08-, MBK 6V- and MBKV 60-series	42 47
CONTROLS	TYPE	PAGE
	Controls for BE 33-units Electric Pneumatic	56
MOUNTINGS	TYPE	PAGE
	Mountings for the BE33	–

On www.e2system.com you can find more information as well as the same information as above in imperial units.

When requesting a quote or ordering please state: **Model, Chuck (collet size), Limit Switches** and if it is to be used for **Lubrication-free operation**.

You will find units for Drilling, Tapping and Milling installed wherever increased rates of production are required. They are a cost-effective means of automating drilling, tapping and milling operations.

E2 products are known world wide for their quality, durability, precision and power. Each series of E2 units are the most compact in the market today.

E2 customers benefit from the high quality of the E2 product line with less down-time and reduced operating costs. The compact design of the E2 units together with a good availability of CAD-drawings/-models makes the design of a machine more straight forward.

E2's concern for the worker and his environment is evident in all E2 products. Low noise levels and non-lubrication features eliminating oil mist in the air is a common feature of the E2 product line.

E2 self-feeding units utilizes a built-in hydraulic feed control system. They combine precision with power enabling a high level of precision also in multi-spindle head applications. The extremely compact Air hydraulic drilling units and Lead screw tappers are ideal for drilling/tapping smaller holes. E2's electro-pneumatic and –hydraulic units can to be used when more power is required. You will still have the E2 durability and precision. The E2 product line also includes non-feed pneumatic units perfect for drilling as well as milling, slitting and grinding.

Complementing the line of units, E2 also offers a full line of accessories for machining applications.

E2 also have supplementary product lines of

- Rotary actuators
- Air thrusters
- Pneumatic/Hydraulic components and systems

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