

# F SERIES

your choice for:

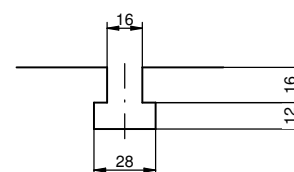
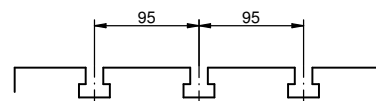
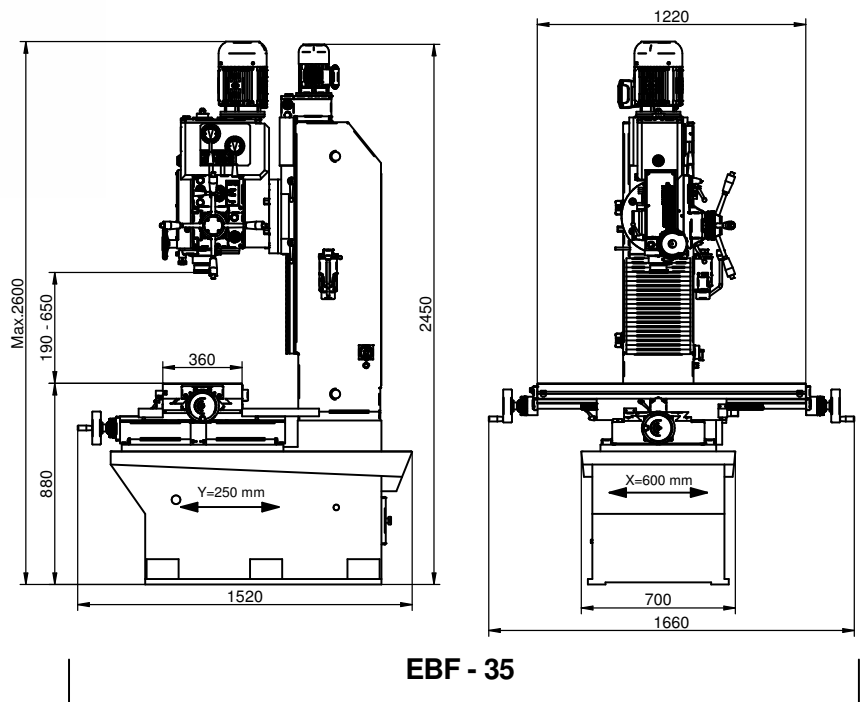
## || STANDARD EQUIPMENT

- Adjusting of the vertical position of the head by geared-motor
- 45° tilting head on both sides of the central axis
- Hardened and ground high quality steel gears
- Gear box lubrication by automatic pump
- Automatic guide greasing by manual pump
- High/low speed range selector
- Coolant tank and pump in machine base
- Worklight
- Co-ordinate cross table
- Automatic feed and cut-off by electromagnetic clutch
- Front hand wheel for fine feed work
- Depth scale and adjustable depth stop
- Automatic tool ejector
- Electric equipment integrated on machine's head
- Emergency STOP push button
- Spindle reversing switch
- Safety drill guard with microswitch
- CE mark



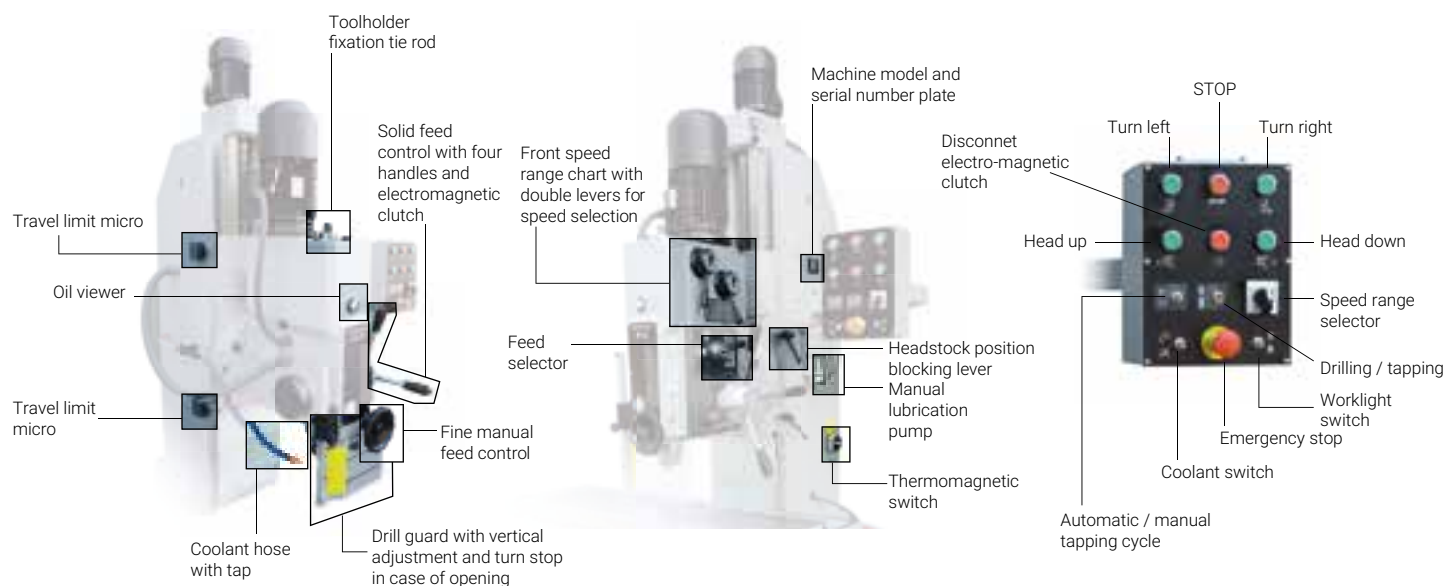
ø 35 mm    45 cm<sup>2</sup>    M30    0,9/1,5 Kw    MT 4    200 mm    383 mm

## || DIMENSIONS



# F SERIES

Drilling/Milling machine/Prismatic Column/ Gear transmission



## || CHARACTERISTICS

## EBF-35

Maximum drilling capacity in steel St. 50/60	[ø mm]	35
Maximum milling capacity in steel St. 50/60	[cm³/min]	55
Maximum tapping capacity in steel St. 50/60	[mm]	M 35
ISO taper (upon request)	[Nr.]	30
Morse Taper MT	[Nr.]	4
Maximum spindle stroke (drilling depth)	[mm]	180
Main motor power	[HP (Kw)]	1,2 / 2 (0,9/1,5)
Transmission		Gear box
Number of speeds		16
Speed range with motor at 750/1500 rpm 50 Hz 3Ph. Upon request: Motor at 1800/3600 rpm 60 Hz 3Ph.	[rpm]	94-135-189-207-271-303-347-416-497-606-695-760-995-1112-1520-2225  113-162-226-248-324-363-417-496-597-726-834-912-1194-1335-1824-2670
Speed range with inverter motor at 750/1500 rpm 50 Hz Tri.	[rpm]	A)152-608 B) 223-890 C) 559-2236 D 818-3272
Feed		Automatic by electromagnetic clutch
Nr. of automatic feeds		3
Automatic feed range	[mm/rev]	0,1 - 0,18 - 0,24
Worktable dimensions (LxW).	[mm]	360 x 1220
Longitudinal movement of the table (X)	[mm]	700
Cross movement of the table (Y)	[mm]	360
Distance from spindle centre to column face	[mm]	390
Net weight	[Kg]	910
Gross weight with packing	[Kg]	1400
Packing dimensions (length x width x height)	[m]	1,68 x 1,68 x 2,52

## CABINETS / BASES / CONTAINERS / LIGHT



**PKC**  
Base cabinet (only for models with intermediate table). Available for **EK/T** series



**PKA**  
Floor cabinet with 2 shelves (only for bench drilling models without coolant). Available for **EK/T** series.



**PKB**  
Floor cabinet with door and shelves. Available for **EK/T** series.



**ERB**  
"T" slotted machine base with coolant pump. Standard for **Z/X/A/B/C** series.

## TABLES INCLUDING SUPPORTS



**MF**  
Fixed table. Standard for **EK/T/Z/X(32-34)** series.



**MG**  
Rotating table plate. Optional for **EKL/TL** series.



**MGI**  
Rotating table plate and tilting support. Available for **Z/X/A/B/C** series.



**MGM**  
Reversible rotating tiltable with vice. Available for **Z/X (32/34)** series.

## CROSS TABLES



**340 XY**  
Cross table.  
X = 220 mm.  
Y = 140 mm.  
Table net weight = 25 kg.  
Available for **EK/T** series.



**430 XY**  
Cross table.  
X = 280 mm.  
Y = 180 mm.  
Table net weight = 40 kg.  
Available for **Z/X** series.



**600 XY**  
Cross table.  
X = 400 mm.  
Y = 180 mm.  
Table net weight = 52 kg.  
Available for **Z/X(32-34)** series.



**800 XY**  
Cross table.  
X = 500 mm.  
Y = 250 mm.  
Table net weight = 93 kg.  
Available **Z/X/A/B/C** series.



**PV**  
Safety drill guard against chips  
with a micro-switch.  
**Standard in all series.**



**EL**  
Worklight.  
**Standard in all series. Except  
professional series.**



**1000 XY**  
Cross table.  
X = 700 mm.  
Y = 250 mm.  
Table net weight = 150 kg.  
Available for **Z/X(40)/A/B/C** series.

# EQUIPMENT

## SPEED CONTROL / MEASURE / TAPPING



**VE**  
Standard for **Z(34-40)**, **BC-40VE** and **BC-50VE**.  
Available for other models upon request.



**TAK**  
Digital rpm counter.  
Standard for **Z (34-40)** and **C** serie.  
Available for other models upon request.



**LBC**  
Depth scale read-out system.  
Available for all series.



**LDG**  
Digital read-out system for the table.

## SPEED CONTROL / MEASURE / TAPPING



**CN**  
Pneumatic counterbalance for spindle return (recommended with multi-spindle head applications).  
Available for **X/A/B** series.



**ACNL**  
Automatic drilling cycle with rapid approach, working feed and rapid retract.  
Available for **B** models on **Z/X/B** series.



**CI**  
Integral drilling cycle with encoder (recommended for tube and profile drilling, deep drilling operations, etc.).  
Available for **B** models on **Z/X/B** series.



**HB**  
Hydro-pneumatic power feed unit.  
Available for **EK/T/Z/X** series (only for manual feed models).

## STANDARD ASSEMBLY FOR JOBS USING MULTI-SPINDLE HEADS

### Accessories and functions

**ACNL**  
Automatic drilling cycle with rapid approach, working feed and rapid retract, with additional pneumatic counterweight function for the multi-spindle head.

**UC**  
Union, dragging cone and assembly of the multi-spindle head.

**CM**  
Multi-spindle head with fixed or adjustable (see picture) spindles.

**GM**  
Multi-spindle head guide rod.

**PM**  
START/STOP and emergency STOP control extensión.

**SC**  
Column riser of 200 mm for greater distance between spindle nose and worktable.



**IR/RS**  
Manual tapping system.  
Standard for **Z(34-40)** y **C** serie.  
Available for all series.



**RHP**  
Automatic threading system by  
master spindle (includes one tapping  
pitch)  
Available for **X/A/B** series.



**HGP**  
Master guide spindle and nut set.  
Available for **X/A/B** series.



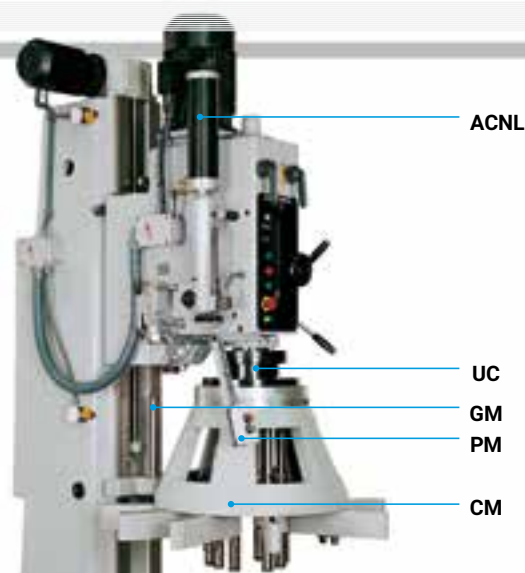
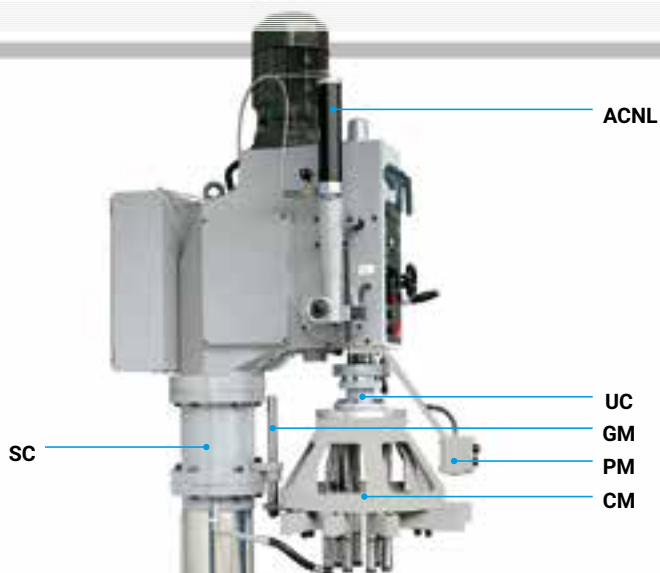
**CM**  
Multi-spindle drilling heads with  
fixed or adjustable spindles.  
Available for all series.



**AR**  
50% lowered feed rate range.  
Available for **A/B/C** series.



**MQL**  
Microlubrication system.  
Available for all series.





## STANDARD VICES



**L-100**  
Vise with fixed base (Light Series).  
Maximum opening: 116 mm  
Jaw width: 105 mm  
Jaw height: 31,5 mm  
Net weight: 8,5 kg.  
Available for **EK/T/Z/X/A/B/C** series.



**L-125**  
Vise with fixed base (Light Series).  
Maximum opening: 160 mm  
Jaw width: 125 mm  
Jaw height: 41,5 mm  
Net weight: 4,7 kg.  
Available for **EK/T/Z/X/A/B/C** series.



**M-116**  
Vise with fixed base.  
Maximum opening: 116 mm.  
Jaw width: 100 mm.  
Jaw height: 31,5 mm.  
Net weight: 9 Kg.  
Available for **Z/X/A/B/C** series.



**M-157**  
Vise with fixed base.  
Maximum opening: 157 mm.  
Jaw width: 125 mm.  
Jaw height: 41,5 mm.  
Net weight: 15 Kg.  
Available for **Z/X/A/B/C** series.

## RAPID CLOSE AND SELF-CENTERING VICES



**FR-80**  
Opening-cam rapid close vice.  
Maximum opening: 80 mm.  
Jaw width: 80 mm.  
Jaw height: 20 mm.  
Net weight: 6 Kg.  
Available for all series.



**FR-125**  
Opening-cam rapid close vice.  
Maximum opening: 125 mm.  
Jaw width: 125 mm.  
Jaw height: 30 mm.  
Net weight: 23 Kg.  
Available for all series.



**FK-103**  
Self-centering vice.  
Maximum opening: 103 mm.  
Jaw width: 103 mm.  
Jaw height: 20 mm.  
Net weight: 12 Kg.  
Available for all series.

## CHUCKS, FOOT PEDALS...



**PIC**  
Cycle or spindle turn START foot pedal.

**PSR**  
Spindle turn reverse foot pedal (for tapping)  
Available for all series.



**PPE**  
Emergency STOP foot pedal.  
Available for all series.



**PF-150**

Vise with fixed base  
(Heavy Series).  
Maximum opening: 160 mm.  
Jaw width: 150 mm.  
Jaw height: 44 mm.  
Net weight: 28 Kg.  
Available for **A/B/C/F** series.



**PG-150**

Vise with swiveling base  
(Heavy Series).  
Maximum opening: 160 mm.  
Jaw width: 150 mm.  
Jaw height: 44 mm.  
Net weight: 37 Kg.  
Available for **A/B/C/F** series.

**TOOL HOLDERS**



**DRILL-CHUCKS**

Self-centering drill-chuck from dia. 3 to dia.16 Morse taper 3 & 4.  
Available for all series.



**TAPHOLDER**

Morse taper, tapholder and tapping collets.



**REDUCING SLEEVES**

Self-centering drill-chuck from dia.1 to 16 Morse taper 3-4 & 5.  
Available for all series.



**ISO 40**

Spindle with quick change nut.  
Available for **EBF-35** models.