

## Product Brochure For M649

### Mini Opti-Mill Drill - Geared & Tilting Head - BF-16V

Table Travel: (X) - 220mm (Y) - 160mm (Z) - 210mm

Electronic Variable Speeds & Dovetail Column



OPTIMUM



On Sale

Ex GST

Inc GST

~~\$1,574.00~~

~~\$1,810.10~~

\$1,360.00

\$1,564.00

ORDER CODE:	M649
MODEL:	BF-16V
Digital Readout:	Optional
Type:	Vertical
Table Size (mm):	400 x 120
Column Type:	Dovetail
Spindle Taper - Vertical:	3MT
Spindle Taper - Horizontal:	~
Longitudinal Travel (X-Axis) (mm):	220
Cross Travel (Y-Axis) (mm):	160
Vertical Travel (Z-Axis) (mm):	210
Type of Slides:	Dovetail
Ram Travel (mm):	~
Spindle to Table (mm):	270
Spindle to Base:	~
Spindle Travel / Diameter (mm):	50 / 60
Throat Depth (max.) (mm):	170
Tilting Head (Left ~ Right):	±90°
Tilting Head (Forward ~ Back):	Fixed
Drilling Capacity (mm):	16
End Milling Capacity (mm):	20
Face Milling Capacity (mm):	63
Power Feed - Quill (mm/rev):	~
Power Feed - Longitudinal (X-Axis) (mm/min):	~
Power Feed - Cross (Y-Axis) (mm/min):	~
Power Feed - Vertical (Z-Axis) (mm/min):	~
Table T-Slot Size (inch / mm):	10
Work Table Load Capacity (kg):	25
Spindle Speeds Vertical (No./ rpm):	Variable (100 - 3000)
Spindle Speeds Horizontal (No./ rpm):	~
Spindle Speeds - Universal Head:	~
Motor Power - Vertical Spindle (kW / hp):	0.5 / 0.66
Motor Power - Horizontal Spindle (kW / hp):	~
Motor Power - Universal Head:	~
Voltage / Amperage (V / amp):	240 / 10
Nett Weight (kg):	78

#### Description

Excellent quality mini mill drill machine designed for the model engineer

#### Features

- Electronic infinitely variable speed (100-3000rpm)
- Tilting head to ±90° from vertical
- 3MT spindle taper
- Adjustable dovetail slideways on all 3 axis
- Heavy duty cast iron body and base for better stability
- 2-speed gearbox (high/low) drive system to maximise torque
- IP54 with low-voltage release switch

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- Scale collars for all axis are adjustable
- 400 x 120mm cast iron work table with T-slots
- Adjustable table and drill length stops
- Metric dial graduations on X & Y Axis
- Rear slideway cover and slide clamps on all axis

### Includes

- 3MT x JT6 drill chuck arbor
- Safety cutter guard
- Bracket kit for optional digital readout
- 1/2" x 12tpi whitworth drawbar

### Specific Features



Tilting Head



Left View



Front View



Control Panel



Safety Guard



Quill Feed Handle



High Low Gearbox Drive



Vertical Height Scale



Z-Axis Adjustment Dial



Quill Lock



Tilting Head Lock



Drawbar

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Rear Slide Cover



Dovetail Column



Work Table



Table Limit Stop



Table Longitudinal Dial



Table Cross Feed Dial



Toolbox



Shown on Optional Stand M651

**Recommended Accessories**

M651  
Mill Drill Stand



D695  
3-Axis Optimum Digital Readout Counter - 1µm



D694  
1500mm Optimum Magnetic Digital Readout Scale



D697  
Optimum Magnetic Digital Readout Reader Head



Product Brochure For M649

**T773**  
Industrial Mobile Tooling  
Cabinet Workstation



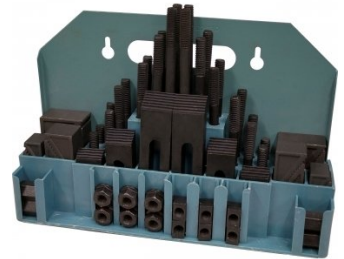
**C922B**  
Collet & Chuck Set - 8 Piece



**C926**  
Collet & Chuck Set - 20 Piece



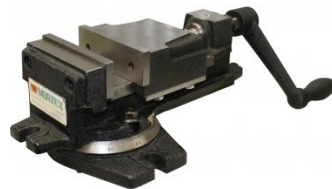
**C0945**  
Clamp Kit 58 piece - Workshop  
Series



**C0948**  
Mini Clamp Kit 10 piece -  
Workshop Series



**V104**  
Vertex K-Type Milling Vice



**M3301**  
Metric HSS Slot Drill & End Mill  
Set - 10 Piece



**M3321**  
Imperial HSS Slot Drill & End  
Mill Set - 10 Piece



**M3280**  
13mm HSS End Mill Long  
Series



**M182**  
Precision Boring Head Kit



**M192**  
Boring Head Shank



**M180**  
Boring Bar Set - 9 piece



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M250  
Parallel Set - 8 Piece



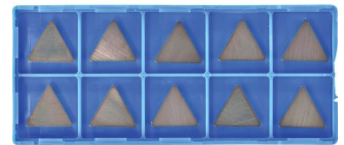
M530  
Universal Milling Kit - 4 Piece



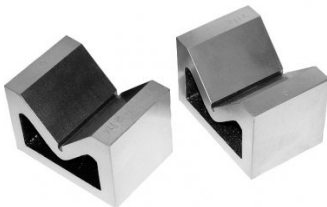
M528  
Face Mill 90° - Positive Rake



L066  
KYOCERA Carbide Inserts - Milling



V004  
Cast Iron Vee Block



R001  
Rotary Table



R0014  
Tilting Rotary Table



P235  
Coolant Pump & Tank



S090A  
Soluble Metal Cutting Fluid - 1 Litre



S090  
Soluble Metal Cutting Fluid - 5 Litre



L341  
Fitting and Machining Technical Book

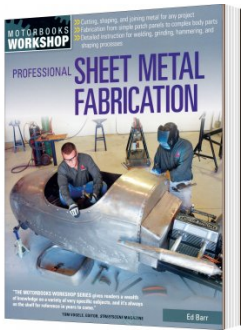


L345  
Handy Workshop Tips & Techniques - 1st Edition



Product Brochure For M649

**L3455**  
Professional Sheet Metal Fabrication Book



**L300**  
Magnetic Swarf Remover



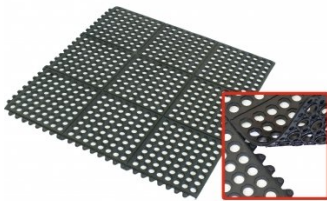
**M9991**  
Magnetic Floor Sweeper



**M800**  
Rubber Mat - Anti-Fatigue



**M805**  
Rubber Mat - Anti-Fatigue



**O043**  
Rust & Corrosion Preventive



**O042**  
General Purpose Lubricant & Corrosion Inhibitor



**O044**  
Rust & Corrosion Preventive

