

**VMC 3016**  
**Vertical Machining Center**  
Fadal MP CNC Control



## SPECIFICATIONS

General	Imperial	Metric
FLOOR TO TABLE SURFACE	31"	787.4 mm
MACHINE WEIGHT	8,550 lbs.	3,878 kg
CONSTRUCTION	Cast Iron Box Way X/Y/Z	
<b>Table</b>		
TABLE SIZE	39" x 16"	990.6 mm x 406.4 mm
T-SLOTS (NO. x WIDTH x SPAN)	3 x .709" x 4.33"	3 x 18 mm x 110mm
CUTTING FEED RATE (X/Y/Z)	600 ipm max	15.24 mpm max
RAPID TRAVEL RATE (X/Y)	900 ipm	22.86 mpm
RAPID TRAVEL RATE (Z)	700 ipm	17.78 mpm
MAX. WEIGHT ON TABLE	2,736 lbs. <sup>c</sup>	1,241 kg <sup>c</sup>
BALL SCREW SIZE	1.58" Dia.	40 mm Dia.
LONGITUDINAL (X AXIS)	30"	762 mm
LATITUDINAL (Y AXIS)	16"	406.4 mm
VERTICAL (Z AXIS)	20" (Opt. 28")	508 mm (Opt. 711.2 mm)
SPINDLE NOSE TO TABLE	4" -24"	101.6 mm – 609.6 mm
	(4" -32" Opt.)	(101.6 mm – 812.8 Opt.)
SPINDLE CENTER TO COLUMN WAYS	16.1"	408.94 mm
<b>Accuracy</b>		
AXIS POSITIONING**	+/- .0002"	+/- .0050 mm
AXIS REPEATABILITY**	+/- .0001"	+/- .0025 mm
<b>Spindle</b>		
POWER TRANSFER	Automatic Mechanical, 2 speed VECTOR Drive	
SPINDLE SPEED	10-10,000 RPM	
SPINDLE ORIENTATION	Electromechanical	
SPINDLE TAPER	No. 40	
<b>Tools</b>		
ATC, NUMBER OF TOOLS	21	
ATC, TOOL SELECTION	Random / Bi-directional	
MAX. TOOL DIAMETER (WITHOUT ADJACENT TOOLS)	3"	76.2 mm
MAX. TOOL LENGTH	4.5"	114.3 mm
MAX. TOOL WEIGHT	15 lbs.	6.8 kg
<b>Motor</b>		
SPINDLE DRIVE MOTOR	AC, VECTOR Drive	
HORSEPOWER	10 HP / 15 HP*	7.5 kW / 11.2 kW*
TORQUE	60 ft.-lbs. / 160 ft.-lbs.*	81 N-m / 217 N-m*
OPT. HIGH TORQUE SPINDLE	22.5 HP* & 220 ft.-lbs.*	16.8 kW* / 298 N-m*
AXIS DRIVE MOTOR (X/Y/Z)	AC, 3,800 lbs.* thrust	AC, 1,724 kg* thrust
<b>Miscellaneous</b>		
AIR PRESSURE REQUIREMENT	80-120 PSI, 15 SCFM (Momentary)	5.5-8.3 Bar, .42m <sup>3</sup> /min (Momentary)
POWER REQUIREMENT (3-Phase)	42 A @ 230 VAC	
OPTIONAL SINGLE PHASE	60 A @ 220 VAC	
COOL POWER	Spindle, X, Y, Z Ballscrews	

<sup>c</sup> Evenly Distributed Weight

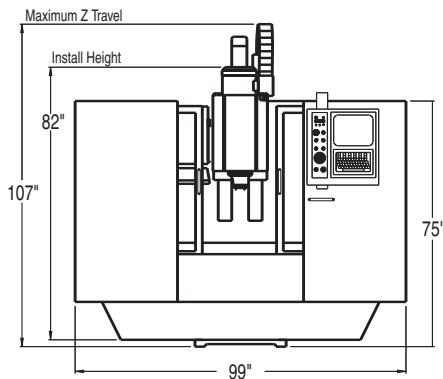
\* Peak

\*\* All accuracies are quoted at 68°F.

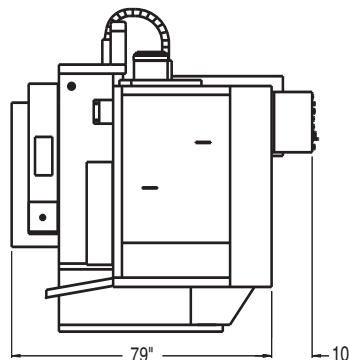
Fadal reserves the right to change standard and optional machine accessories.

Extended column add 8" to height

Continuous equivalent A-weighted sound pressure at workstation is 77 db(A) or less during normal cutting operations.



Front View

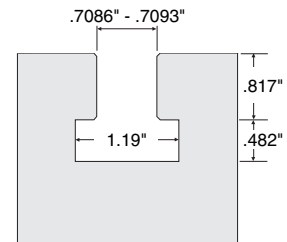
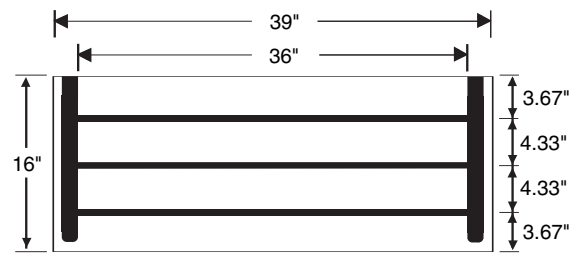


Side View

## Options

- 28" Z Travel & Column (Standard 20")
- Spindle Options
  - 7,500 RPM 1:1 Drive
  - 10,000 RPM High Torque
  - 10,000 RPM Air/Oil Spindle
  - 15,000 RPM Air/Oil Spindle
- No Cool Power Option
- Coolant thru Spindle (250 psi)
- Rigid Tapping
- Chip Conveyor System
- Flat Sheet Metal Cover
- Ship Machine Un-Caulked
- Auto Aim Servo Coolant
- Single Phase Transformer
- 480 Volt - 3 Phase Transformer
- Additional Work Light
- Remote Manual Pulse Generator
- 32MP Control
  - Ability to Network
  - High Capacity Hard Drive
  - Shop Floor Programming
- Expanded Memory Levels
  - 422K RAM Memory
  - 4 MB RAM Memory
  - 8 MB RAM Memory
  - 16 MB RAM Memory
- 3.5" Floppy Disk Drive
- Heidenhain Glass Scales
- Renishaw Touch Probes
  - TS-27R Tool Setter Probe
  - MP-11 Probe System
  - MP-12 Probe System
- Rotary Products
  - VH-5C
  - VH-165 mm
  - VH-175 mm
  - VH-225 mm
  - Rotary Accessories
- Midaco Pallet Changer
- Tooling Packages
  - (11) Tool Starter Package
  - (20) Tool Premium Package
  - Tooling Certificates

## VMC 3016 TABLE DIMENSIONS



T-SLOT

[www.fadal.com](http://www.fadal.com)



Fadal Machining Centers, LLC

20701 Plummer Street, Chatsworth CA 91311 USA

Telephone (818) 407-1400 • FAX (818) 407-0020