



FAGOR 8040 CNC

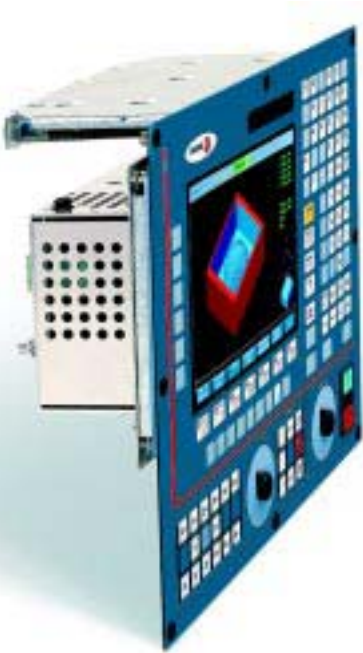
FAGOR 

FAGOR 8040 CNC

The FAGOR 8040 CNC is ideal for simple Machine-tool applications and offers a great feature/cost ratio.
The FAGOR 8040 CNC integrates a CNC, a PLC and a 10.4" LCD monitor.

Compact configuration (K)

CPU+Monitor+Integrated Keyboard(K)



Modular Configuration

Operator Panel

The FAGOR 8040 CNC offers different operator panels depending on the application.

Monitor+CPU

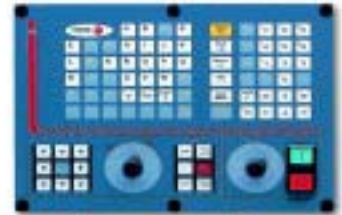
Monochrome LCD monitor



Color LCD monitor



OPERATOR PANEL Alphanumeric



TC-MC OPERATOR PANEL (conversational models)



TCO - MCO OPERATOR PANEL (customizable models)



The most competitive FAGOR package

With all FAGOR servo drive families:
analog and digital.

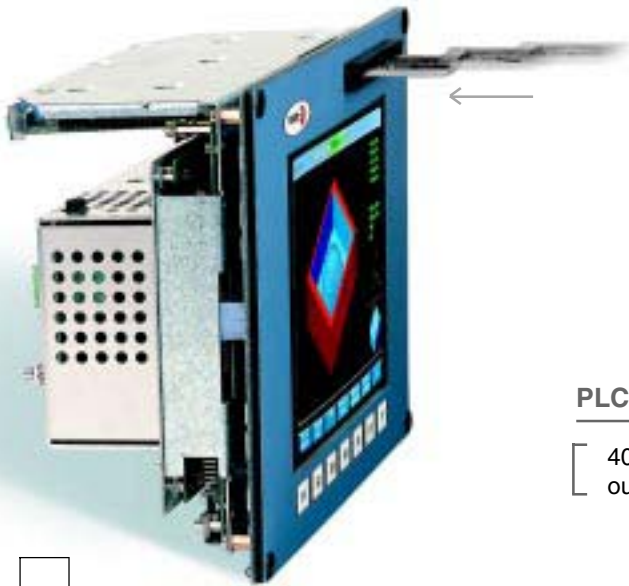


Architecture (Hardware)

Central Unit (CPU)

CPU and monitor integrated into a single module saving a lot of space in the electrical cabinet. The compact configuration integrates the CPU and the monitor to the keyboard.

- Up to 1Mb of user RAM memory.
- Removable Memkey Card of up 24 Mb, with flash memory to store: OEM programs, PLC programs, screen customizing programs, tables, parameters, etc.

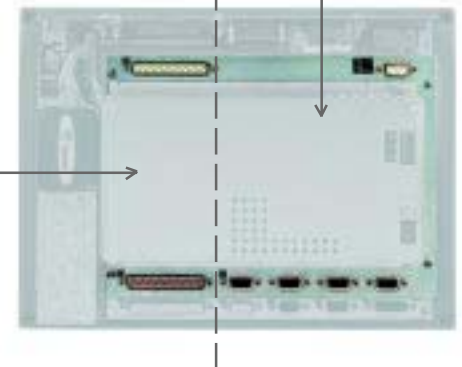


PLC I/O EXPANSION (Opt.)

- 40 digital inputs and 24 digital outputs (24 Vdc)

ANALOG EXPANSION (Opt.)

- 4 1Vpp/TTL Feedback inputs and 4 analog outputs

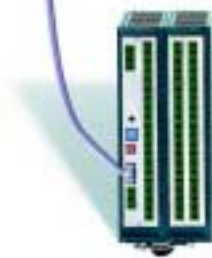


DIGITAL INTERFACE (Opt.):

- Interface for connection with FAGOR drives



CAN INTERFACE (Opt.)



STANDARD

- Probe interface
- Feedback input and analog output for spindle
- Feedback inputs for 2 electronic handwheels
- 16 digital inputs and 8 digital outputs for the PLC
- Optocoupled RS-232 serial line (115,200 baud)

REMOTE MODULES

The remote modules may have the following configurations:

- (I) Power Supply module (24I /16O)
- (II) Power Supply module (24I /16O) + Single I/O module (24I/16O)
Total: 48 digital inputs and 32 digital outputs
- (III) Power Supply module (24I /16O) + Double I/O module (48I/32O)
Total: 72 digital inputs and 48 digital outputs

The system allows the connection of up to 4 of these groups / nodes. This way, it is possible to obtain up to 288 inputs and 192 outputs.

Digital input: 24V – 7mA
 Digital output: 24V – 500mA
 Terminal connection

General Characteristics

● Standard ▲ Option

CONFIGURATION

Axes and Spindle

Maximum axis configuration for lathes	2 ▲ 4
Maximum axis configuration for milling machines	4
Maximum spindle configuration	2
Maximum axes + spindle configuration (analog + digital)	5
Gantry axes	●
Axis coupling via PLC	●
Axis coupling by program	●

Memory

User memory (RAM)	256 K ▲ 1 MB
Mem Key Card	512 K ▲ 2 MB ▲ 24 M

Integrated PLC

PLC cycle time	3 ms / 1,000 instruc.
Equation programming system	●
Logic analyzer	●

Communication

RS-232 (up to 115,200 Bd)	●
DNC (via RS-232)	▲
Telediagnosis via modem	▲

Axis adjustment

Look Ahead	75 blocks
Jerk control	●
Feed forward / AC Forward	●
Oscilloscope function (setup assistance)	▲
Circle geometry test (setup assistance)	▲

System architecture

Hardware configuration	Central unit integrated into the monitor
Monitor	▲ 10,4" Color VGA LCD TFT ▲ 10,4" Monocromo LCD STN
Feedback inputs	1 specific for spindle 2 specific for electronic handwheels ▲ 4 for axes, spindles or handwheels
Analog outputs (±10 V)	1 specific for spindle ▲ 4 for axes or spindles
Probe inputs, 5 V (0.25mA) or 24V (0.30 mA)	2
Digital inputs and outputs (150 mA)	16 I / 8 O ▲ 56 I / 32 O
CAN for remote-module connection	▲
SERCOS for digital drive connection	▲

Remote I/O modules (option)

Possible nodes (CANopen))	4
Possible inputs / outputs at each node (24V 500 mA)	72 I / 48 O

System power supply

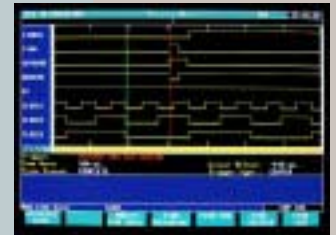
Central Unit	24 Vcc
Digital inputs and outputs	24 Vcc
Remote I/O modules	24 Vcc

Feedback inputs

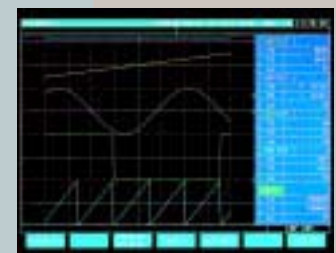
For axes	▲ 4 inputs TTL/1Vpp
For spindle	1TTL
For handwheels	2 TTL

Conversational models

Conversational models	▲ MC / ▲ TC
Customizable models	▲ MCO / ▲ TCO



Logic PLC analyzer



Oscilloscope function for axes



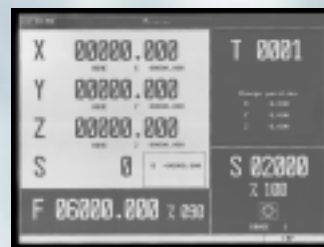
Circle geometry test

FAGOR 8040 M / 8040 MC / 8040 MCO / GP

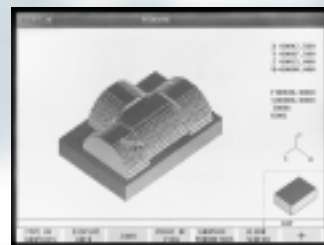
For Milling machines, Machining Centers and General Purpose Applications

FEATURES	GP	M	MC	MCO
Spindle related				
Spindle orientation M19	-	●	●	●
Interpolation				
Linear, Circular, Helical	●	●	●	●
Tangential control	▲	▲	▲	▲
Retrace function	-	▲	▲	▲
Compensations				
Tool radius and length	▲	●	●	▲
Tool life monitoring	-	▲	▲	▲
Graphics				
Tool path	●	●	●	●
3 simultaneous views (with depth simulation)	●	●	●	●
Solid graphics	-	▲	▲	▲
Operation related				
Simulation with execution time estimate	●	●	●	●
N block look-ahead to avoid tool collision	●	●	●	●
Programming related functions				
Feedrate as an inverted function of time	●	●	●	●
Profile editor	▲	▲	●	▲
Canned cycles				
Machining canned cycles	-	●	●	-
Multiple positioning canned cycles	-	●	-	-
Probing canned cycles	-	▲	▲	▲
Irregular pockets with islands	-	▲	●	▲
Rigid tapping	▲	▲	▲	▲

● Standard ▲ Option



Jog mode



3D Graphic Simulation



Conversational Software 8040 MC:
It requires no programming knowledge

FAGOR 8040 T / 8040 TC / 8040 TCO

For Lathes and Turning Centers

FEATURES	T	TC	TCO
Spindle related			
Spindle orientation M19	●	●	●
Spindle synchronism	●	●	●
Interpolation			
Linear, Circular, Helical	●	●	●
Tangential control	▲	▲	▲
Retrace function	▲	▲	▲
Compensations			
Tool radius and length	●	●	●
Tool geometry	●	●	●
Tool life monitoring	▲	▲	▲
Graphics			
Tool path	●	●	●
Solid graphics	●	●	▲
Operation related			
Simulation with execution time estimate	●	●	●
N block look-ahead to avoid tool collision	●	●	●
Programming related functions			
Feedrate as an inverted function of time	●	●	●
Profile editor	▲	●	▲
Canned cycles			
Machining canned cycles	●	●	-
Probing canned cycles	▲	▲	▲
Rigid tapping	▲	▲	▲

● Standard ▲ Option



Graphic programming assistance:
Profile Editor and Interactive Editor

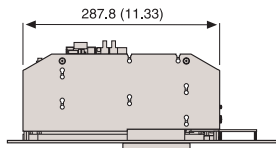
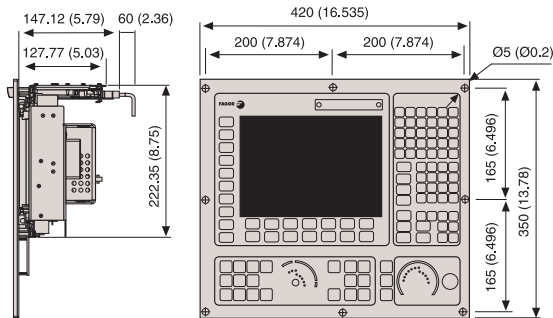


Conversational Software 8040 TC:
It requires no programming knowledge

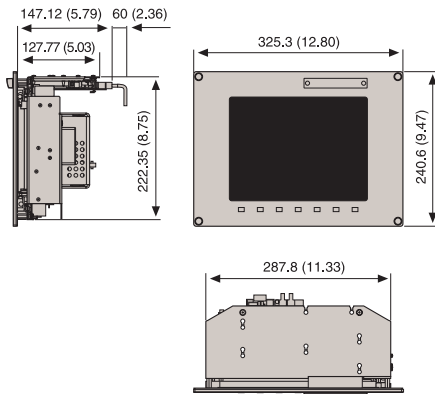
FAGOR 8040 CNC

Dimensions in mm (inches)

CPU + Monitor + Integrated Keyboard (k)

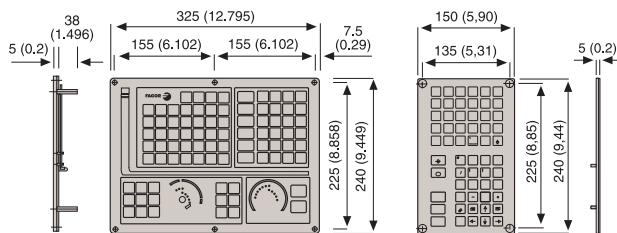


8040 CPU with 10.4" LCD Monitor

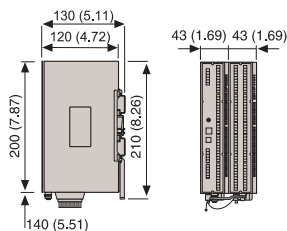


Operator Panels

Auxiliary Alphanumeric Keyboard



Digital remote I/O



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Worldwide reliability.