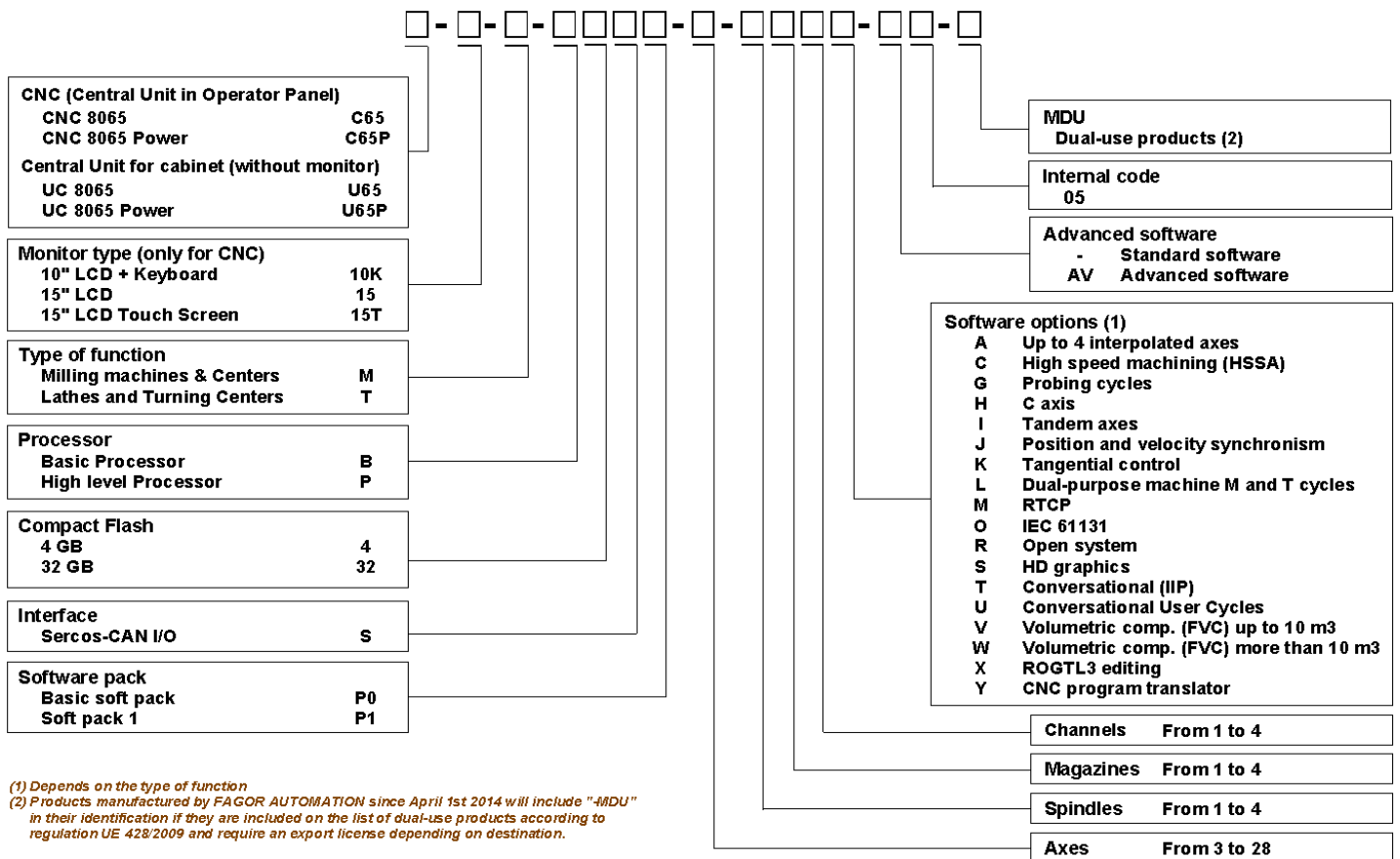


FAGOR 8065 CNC
Ordering Handbook.
Ref. 1505



CNC FAGOR 8065

Denominations



(1) Depends on the type of function

(2) Products manufactured by FAGOR AUTOMATION since April 1st 2014 will include "MDU" in their identification if they are included on the list of dual-use products according to regulation UE 428/2009 and require an export license depending on destination.

Central Unit in Frontal Panel

Monitor & Operator Panel

8065 CNC with 10.4" LCD and Operator Panel



Code	Model	Description
8360004	MONITOR-LCD-10K-001	10" LCD Monitor + Keyboard

15" LCD and Operator Panel



(1)

Monitor (choose one of them)

Code	Model	Description
83700053	MONITOR-LCD-15	15" LCD monitor
83700054	MONITOR-LCD-15-TOUCH	15" LCD Touch Screen monitor

(1)



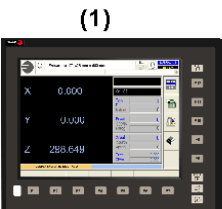
(2)

Keyboard (choose one of them)

Code	Model	Description
83760020	HORIZONTAL KEYB	Horizontal Qwerty keyboard
83760021	HORIZONTAL KEYB+MOUSE	Horizontal Qwerty keyboard with mouse
83760022	VERTICAL KEYB	Vertical alphanumeric keyboard
83760023	VERTICAL KEYB+MOUSE	Vertical alphanumeric keyboard with mouse

(2)

(3)



(1)

(3)

Operator Panel (choose one of them)

Code	Model	Description
83760024	OP PANEL	JOG Panel
83760025	OP PANEL+SPDL RATE	JOG Panel with Spindle override

(4)



(4)

Central Unit

Code	Model	Description
83700111	8065-M-ICU	Integrate Central Unit for Milling machines
83700115	8065 Power-M-ICU	Integrate Central Unit for Milling machines
83700112	8065-T-ICU	Integrate Central Unit for Lathes
83700116	8065 Power-T-ICU	Integrate Central Unit for Lathes

(1)

(1) Choose one of them

Central Unit components

Code	Model	Description
83700065	SER-CAN-8I-8IO-A	Sercos-Can module
83700200	MP-BASIC-4	Basic Processor
83700201	MP-PLUS-4	High level Processor
83701061	CF-DMA-4GB	4 GB Compact Flash for Basic Processor
83701059	CF-DMA-8GB	8 GB Compact Flash for Basic Processor
83701062	CF-DMA-32GB	32 GB Compact Flash for Basic Processor
83701064	CF-DMA-P-4GB	4 GB Compact Flash for High level Processor
83701066	CF-DMA-P-8GB	8 GB Compact Flash for High level Processor
83701065	CF-DMA-P-32GB	32 GB Compact Flash for High level Processor
83701081	CF-DMA-P7-8GB	8 GB Win 7 Compact Flash for High level Processor
83701080	CF-DMA-P7-32GB	32 GB Win 7 Compact Flash for High level Processor

(1)

(1) Required always

(2) Choose one of them

Central Unit in Electrical cabinet

Central Unit



Code	Model	Description	
83700113	8065-M-MCU	Cabinet Central Unit for Milling machines	(1)
83700117	8065 Power-M-MCU	Cabinet Central Unit for Milling machines	
83700114	8065-T-MCU	Cabinet Central Unit for Lathes	
83700118	8065 Power-T-MCU	Cabinet Central Unit for Lathes	

(1) Choose one of them

Central Unit components

Code	Model	Description	
83700065	SER-CAN-8I-8IO-A	Sercos-Can module	(1)
83700200	MP-BASIC-4	Basic Processor	(2)
83700201	MP-PLUS-4	High level Processor	
83701061	CF-DMA-4GB	4 GB Compact Flash for Basic Processor	(1)
83701059	CF-DMA-8GB	8 GB Compact Flash for Basic Processor	
83701062	CF-DMA-32GB	32 GB Compact Flash for Basic Processor	
83701064	CF-DMA-P-4GB	4 GB Compact Flash for High level Processor	
83701066	CF-DMA-P-8GB	8 GB Compact Flash for High level Processor	
83701065	CF-DMA-P-32GB	32 GB Compact Flash for High level Processor	
83701081	CF-DMA-P7-8GB	8 GB Win 7 Compact Flash for High level Processor	
83701080	CF-DMA-P7-32GB	32 GB Win 7 Compact Flash for High level Processor	

(1) Required always

(2) Choose one of them

15" LCD-VGA and Operator Panel



Code	Model	Description	
83700055	MONITOR-SVGA-15	15" SVGA LCD monitor	(1)
03780215	CABLE VGA 15M	15 meters cable from VGA external monitor	
03780230	CABLE VGA 30M	30 meters cable from VGA external monitor	
83760020	HORIZONTAL KEYB	Horizontal Qwerty keyboard	(2)
83760021	HORIZONTAL KEYB+MOUSE	Horizontal Qwerty keyboard with mouse	
83760022	VERTICAL KEYB	Vertical alphanumeric keyboard	(3)
83760023	VERTICAL KEYB+MOUSE	Vertical alphanumeric keyboard with mouse	
83760024	OP PANEL	JOG Panel	(4)
83760025	OP PANEL+SPDL RATE	JOG Panel with Spindle override	



VGA video cables have normal flexibility, they are not meant for cable carrying chains. For further information, refer to the installation and start-up manual.

Models & Software Options

The new sales configuration of the CNC 8065 is based on the machine's configuration. It offers the most appropriate configuration (hardware and software) for the application and machine type.

We offer different models.

CNC 8065 M	or UC 8065 M	with basic features for Milling machines & VMC
CNC 8065 Power M	or UC 8065 Power M	with power features for Milling machines & VMC
CNC 8065 T	or UC 8065 T	with basic features for Lathes
CNC 8065 Power T	or UC 8065 Power T	with power features for Lathes

Machine configurations with more than 8 axes or various magazines or channels required the "CNC 8065 Power" model. Also, there are some features, like volumetric compensation, axis or spindle synchronism, or PC applications, that required the "CNC 8065 Power" model.

Considering the requirements of the most typical applications, the features have been grouped by packages. Which:

- Simplifies the product configuration.
- Prevents placing wrong purchase orders.
- The package system allows to have several offers for different models

Configurations for Milling machine & VMC

8065 M basic

- For simple 3 axes machines up to 6 axes maximum
- Focused on VMC with ARC and rotary table
- Optional features: Probing canned cycles, HD graphics, IIP conversational programming system

8065 M with Feature pack 1

- For 5 axes machines up to 8 axes maximum.
- Focused on gantry machines with tandem and RTCP optional
- Standard features: Probing canned cycles, Tangential control
- Optional features: Tandem axes, Dynamic RTCP, HD graphics, IEC 61131 language, IIP conversational programming system

8065 Power M basic

- For 5 axes machines up to 12 axes, up to 4 spindles
- Standard features: Probing canned cycles, Tandem axes, Tangential control, HD graphics
- Optional features: Axis or spindle synchronism, Dual purpose for milling and lathe operations, Dynamic RTCP, IEC 61131 language, Open System for PC applications, IIP conversational programming system, FVC volumetric compensation.

8065 Power M with Feature pack 1

- For 8 axes machines up to 28 axes, several magazines, several channels
- Standard features: Probing canned cycles, Tandem axes, Axis or spindle synchronism, Tangential control, Dual purpose for milling and lathe operations, Dynamic RTCP, HD graphics
- Optional features: IEC 61131 language, Open System for PC applications, IIP conversational programming system, FVC volumetric compensation.

Configurations for Lathes

8065 T basic

- For simple 2 axes machines up to 5 axes maximum
- XZC axes, tailstock, auxiliary axis and live tool.
- Optional features: HSSA machining system, Probing canned cycles, C axis, HD graphics, IIP programming system

8065 T with Feature pack 1

- Focused on machines with tailstock tandem, up to 7 axes maximum or simple double channel lathes.
- Live tool, tandem, tailstock and magazine axis.
- Standard features: HSSA machining system, Probing canned cycles, C axis.
- Optional features: Tandem axes, Axis or spindle synchronism, HD graphics, IEC 61131 language, IIP programming system.

8065 Power T basic

- For machines up to 12 axes, up to 2 channels, several spindles
- Live tool, C and Y axes
- Standard features: HSSA machining system, Probing canned cycles, C axis, Tandem axes, HD graphics
- Optional features: Spindle synchronism, Tangential control, Milling cycles for Y axis (dual purpose), Dynamic RTCP, IEC 61131 language, Open System for PC applications, IIP programming system, FVC volumetric compensation.

8065 Power T with Feature pack 1

- For machines up to 28 axes, several magazines, several channels
- Standard features: HSSA machining system, Probing canned cycles, C axis, Tandem axes, Spindle synchronism, Tangential control, Milling cycles for Y axis (dual purpose), Dynamic RTCP, HD graphics
- Optional features: IEC 61131 language, Open System for PC applications, IIP programming system, FVC volumetric compensation.

Software Options for Milling machine & VMC

CNC 8065 M or UC 8065 M

- For simple 3 axes machines up to 6 axes maximum

CNC 8065 M, or UC 8065 M, with Feature pack 1

- For 5 axes interpolation RTCP machines, up to 8 axes maximum
- Gantry axis, tandem axes and magazine axis.

CNC 8065 Power M or UC 8065 Power M

- For 5 axes machines up to 12 axes, up to 4 spindles

CNC 8065 Power M, or UC 8065 Power M, with Feature pack 1

- For 8 axes machines up to 28 axes, several magazines, several channels

Software Pack		8065 M		8065 M Power	
		Basic	Pack 1	Basic	Pack 1
Processor		MP-Basic	MP-Basic	MP-Plus	MP-Plus
Compact Flash (GB)		4, 32	4, 32	4, 32	4, 32
AXES (minimum - maximum)		3 to 6	5 to 8	5 to 12	8 to 28
SPINDLES (minimum - maximum)		1	1 to 2	1 to 4	1 to 4
MAGAZINES (minimum - maximum)		1	1	1 to 2	1 to 4
CHANNELS (minimum - maximum)		1	1	1	1 to 4
83740008	SOFT 4 AXES INTERPOLATION LIMIT	()	()	()	()
83740011	SOFT TOOL RADIUS COMP	(S)	(S)	(S)	(S)
83740013	SOFT HSSA MACHINING SYSTEM	(S)	(S)	(S)	(S)
83740019	SOFT EDIT/SIMUL	(S)	(S)	(S)	(S)
83740018	SOFT PROFILE EDITOR	(S)	(S)	(S)	(S)
83740021	SOFT DIGITAL SERCOS	(S)	(S)	(S)	(S)
83740007	SOFT PROBING CANNED CYCLES	()	(S)	(S)	(S)
83740010	SOFT C AXIS	(S)	(S)	(S)	(S)
83740034	SOFT TANDEM AXES	(-)	()	(S)	(S)
83740035	SOFT SYNCHRONISM	(-)	(-)	()	(S)
83740012	SOFT TANGENTIAL CONTROL	(-)	(S)	(S)	(S)
83740036	SOFT DUAL-PURPOSE (milling & lathe cycles)	(-)	(-)	()	(S)
83740009	(*) SOFT RTCP	(-)	()	()	(S)
83740070	(*) SOFT IEC 61131 LANGUAGE	(-)	()	()	()
83740043	SOFT OPEN SYSTEM	(-)	(-)	()	()
83740076	(*) SOFT HD GRAPHICS (High Definition)	()	()	(S)	(S)
83740077	SOFT IIP (Interactive Icon-based Pages) CONVERSATIONAL (only with 1 channel)	()	(S)	(S)	(S)
83740072	SOFT CONVERS USER CYCLES	()	()	()	()
83740078	SOFT FVC (Fagor Volumetric compensation) UP TO 10m3	(-)	(-)	()	()
83740079	SOFT FVC (Fagor Volumetric compensation) MORE 10m3	(-)	(-)	()	()
83740074	SOFT PROGTL3	()	()	()	()
83740075	SOFT PPTRANS	()	()	()	()

- (-) Not available
 - () Optional feature
 - (S) Standard
- Optical Feature RTCP and SOFT IEC 61131 LANGUAGE features requires a MP-PLUS (High level Processor)
Standarding more than one channel, SOFT HD GRAPHICS features requires a MP-PLUS (High level Processor)

Software Options for Lathe

CNC 8065 T or UC 8065 T

- For simple 3 axes machines up to 6 axes maximum

CNC 8065 T, or UC 8065 T, with Feature pack 1

- For machines with tailstock tandem, up to 7 axes maximum
- Live tool, tandem, tailstock and magazine axis.

CNC 8065 Power T or UC 8065 Power T

- For machines up to 12 axes, up to 4 spindles
- Live tool, C and Y axes

CNC 8065 Power T, or UC 8065 Power T, with Feature pack 1

- For machines up to 28 axes, several magazines, several channels

Software Pack		8065 T		8065 T Power	
		Basic	Pack 1	Basic	Pack 1
Processor		MP-Basic	MP-Basic	MP-Plus	MP-Plus
Compact Flash (GB)		4, 32	4, 32	4, 32	4, 32
AXES (minimum - maximum)		3 to 5	5 to 7	5 to 12	8 to 28
SPINDLES (minimum - maximum)		2	2	3 to 4	3 to 4
MAGAZINES (minimum - maximum)		1	1 or 2	1 or 2	1 to 4
CHANNELS (minimum - maximum)		1	1 or 2	1 or 2	1 to 4
83740008	SOFT 4 AXES INTERPOLATION LIMIT	()	()	()	()
83740011	SOFT TOOL RADIUS COMP	(S)	(S)	(S)	(S)
83740013	SOFT HSSA MACHINING SYSTEM	()	(S)	(S)	(S)
83740019	SOFT EDIT/SIMUL	(S)	(S)	(S)	(S)
83740018	SOFT PROFILE EDITOR	(S)	(S)	(S)	(S)
83740021	SOFT DIGITAL SERCOS	(S)	(S)	(S)	(S)
83740007	SOFT PROBING CANNED CYCLES	()	(S)	(S)	(S)
83740010	SOFT C AXIS	()	(S)	(S)	(S)
83740034	SOFT TANDEM AXES	(-)	()	(S)	(S)
83740035	SOFT SYNCHRONISM	(-)	()	()	(S)
83740012	SOFT TANGENTIAL CONTROL	(-)	(-)	()	(S)
83740036	SOFT DUAL-PURPOSE (milling & lathe cycles)	(-)	(-)	()	(S)
83740009	(*) SOFT RTCP	(-)	(-)	()	(S)
83740070	(*) SOFT IEC 61131 LANGUAGE	(-)	()	()	()
83740043	SOFT OPEN SYSTEM	(-)	(-)	()	()
83740076	(*) SOFT HD GRAPHICS (High Definition)	()	()	(S)	(S)
83740077	SOFT IIP (Interactive Icon-based Pages) CONVERSATIONAL (only with 1 channel)	()	(S)	(S)	(S)
83740072	SOFT CONVERS USER CYCLES	()	()	()	()
83740078	SOFT FVC (Fagor Volumetric compensation) UP TO 10m3	(-)	(-)	()	()
83740079	SOFT FVC (Fagor Volumetric compensation) MORE 10m3	(-)	(-)	()	()
83740074	SOFT PROGTL3	(-)	(-)	(-)	(-)
83740075	SOFT PPTRANS	(-)	(-)	(-)	(-)

- (-) Not available
- () Optional feature and SOFT IEC 61131 LANGUAGE features requires a MP-PLUS (High level Processor)
- (S) Standard, starting more than one channel, SOFT HD GRAPHICS features requires a MP-PLUS (High level Processor)

Software descriptions

Compact Flash (GB)

It may be of 4GB, or 32 GB. It must be present in all the configurations. By default, the option with the least capacity is always offered, the 4GB compact by default.

Live tool.

The live tool must always be set as another spindle, both in open loop and in threading operations.

SOFT 4 AXES INTERPOLATION LIMIT

It limits the number of axes that may be interpolated at the same time. When having this software option, they can interpolate a maximum of 4 axes at the same time.

SOFT TOOL RADIUS COMP (Standard on all models)

Tool compensation allows programming the contour to be machined based on part dimensions and without taking into account the dimensions of the tool that will be used later on. This avoids having to calculate and define the tool path depending on the radius of the tool.

SOFT HSS MACHINING SYSTEM

The acronym "HSSA" means High Speed Surface Accuracy. It is the new improved version of HSC (High Speed Cutting)

HSSA algorithm calculations make it possible to optimize high speed machining. This achieves higher cutting speeds, smoother contours, better surface finish and higher accuracy.

SOFT EDIT/SIMUL (Standard on all models)

It allows editing, modifying and simulating a part-program.

SOFT PROFILE EDITOR (Standard on all models)

It allows editing part profiles graphically and importing DXF files.

SOFT DIGITAL SERCOS (Standard on all models)

Sercos drive system bus

SOFT PROBING CANNED CYCLES

The CNC may have two probes; usually a tabletop probe to calibrate tools and a measuring probe to measure the part.

It also offers functions G100, G103 and G104 for programming probing moves.

This feature activates the probing canned cycles that help measuring part surfaces and calibrating tools updating their dimensions.

SOFT C AXIS

It activates the kinematics for working with C axis and their associated machining cycles.

The 8065 CNC may be used with several C axis spindles. The parameters of each spindle indicate whether it will work as a C axis or not and it won't be necessary to activate another axis in the machine parameters.

SOFT TANDEM AXES

A tandem axis consists in two motors mechanically coupled (slaved) and making up a single transmission system (axis or spindle). This system is normally used to move the axes on large machines.

The CNC configuration contemplates both axes of the tandem. Only an axis is programmed (the master tandem). The other one (the slave tandem) cannot be programmed, but it is controlled by the CNC.

When activating this feature, it must be borne in mind that for each Tandem axis of the machine, another axis must be added to the whole configuration of the machine. For example, on a large 3-axis lathe (XZ and tailstock), if the tailstock is a Tandem axis, the final purchase order for the machine must indicate 4 axes.

SOFT SYNCHRONISM

Axes and spindles may be synchronized in 2 ways, in velocity or in position.

The CNC configuration contemplates 2 axes or 2 spindles that are synchronized. Once synchronized, only the master is displayed and programmed.

SOFT TANGENTIAL CONTROL

"Tangential Control" Keeps a rotary axis always in the same orientation with respect to the programmed path. The machining path is defined in the axes of the active plane and the CNC keeps the orientation of the rotary axis along the whole path.

SOFT DUAL-PURPOSE

It allows having milling and turning machining cycles.

On lathes with Y axis, it allows making pockets, bosses and even irregular pockets with islands with the Y axis using milling cycles. Turning cycles may be used on mills that have a rotary axis working as C axis.

This feature is only available on the "8065 Power CNC" model.

SOFT RTCP

The "DYNAMIC RTCP" option is a must for machining in RTCP (Rotating Tool Center Point) with 4, 5 or 6-axis interpolation.

This feature requires a MP-PLUS (High level Processor)

SOFT IEC61131 LANGUAGE

The IEC 61131 is PLC programming language, very popular on alternative markets and is entering the machine-tool market little by little.

When activating this feature, the PLC may be programmed either in the usual Fagor language or in IEC 61131 format.

This feature requires a MP-PLUS (High level Processor)

SOFT OPEN SYSTEM

The CNC is a closed system that offers all the features needed to machine parts. However, sometimes, specific customers use third-party applications for taking measurements, doing statistics or running other tasks besides machining a part.

This feature must be active when installing this type of applications, even if it is an Office file. Once the application has been installed, it is recommended to close the CNC back in order to prevent the operators from installing other kinds of applications that could slow the system down and affect the machining operations.

This feature is only available on the "8065 Power CNC" model.

SOFT HD GRAPHICS (High Definition)

It offers high definition solid 3D graphics during the execution and simulation of the machining operation.

While machining, a high definition 3D graphic simulation shows the tool removing material from the part. This is a real time graphic representation that shows the status of the part at all times. The image may be turned, rotated, enlarged or reduced, and even 2 or 4 views of the part may be displayed.

Having more than one channel, a MP-PLUS (High level Processor) is required to use this feature

SOFT IIP (Interactive Icon-based Pages) PROGRAMMING SYSTEM

This programming system is a conversational language, especially designed for people with no prior programming knowledge or not familiarized with Fagor CNC's. Therefore, an operator of a conventional machine can start working on Fagor CNC in a couple of hours.

Working in conversational mode is easier than in ISO mode. It ensures proper data entry and minimizes the number of operations to be defined. There is no need to work with part-programs.

SOFT CONVERS USER CYCLES

Allows to integrate user cycles in conversational mode.

SOFT FVC (Fagor Volumetric compensation) UP TO 10m3**SOFT FVC (Fagor Volumetric compensation) MORE 10m3**

5-axis machines are usually used to make large parts. The accuracy of the parts is limited by the machine manufacturing tolerances and by the effect of temperature while machining

In industries like aerospace, the machining demands render the classical compensation tools insufficient. Volumetric compensation FVC comes in to complement the machine adjusting tools. By mapping the total work volume of the machine, the CNC knows the exact position of the tool at all times. After applying the necessary compensations, the resulting part has the desired accuracy and tolerance.

There are 2 choices depending on the size of the machine, up to 10 m3 and over 10 m3

This feature is only available on the "8065 Power CNC" model.

SOFT PROGTL3

Profile programming using geometric language without having to use external CAD systems. Program integration and interaction with real-time simulation and creating solids defined by a plane profile and one or several section profiles.

SOFT PPTRANS

Part-program translator

Accessories

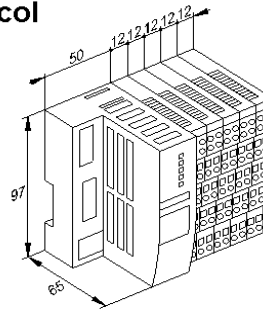
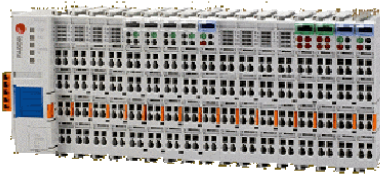
Code	Model	Description
83760005	CNC FPU	Fagor Power Unit
83700075	TRANSP-KEYS & EXTRACTOR	20 transparent key caps and an extractor tool
83700076	TRANSP-KEYS	20 transparent key caps
83700077	WHITE-KEYS	20 white key caps

Remote I/O modules

Are easy to install, they can be mounted at strategic points of the machine for having extra inputs and outputs distributed next to each device. They are distributed in groups and are connected to the central unit through the CAN bus.

Remote Modules - RIOW serie

RIOW series. Remote modules with CANopen protocol

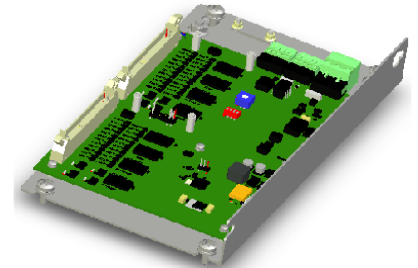


Header CANopen	RIOWCANOPEN STAND	03300010
Expansion module with 8 digital inputs	RIOW 8DI-51205053	03300008
Expansion module with 8 digital outputs	RIOW 8DO-51205043	03300007
Expansion module with 4 analog inputs	RIOW 4AI-51205050	03300006
Expansion module with 4 analog outputs	RIOW 4AO-51205039	03300005
Expansion module with 2 PT100 inputs	RIOW 2AI PT100-51205048	03300004
24V _{DC} 10A power supply for the modules	RIOW PS24-51205036	03300003
Line terminating module.	RIOW END-51205037	03300000

Remote Modules - RIOR serie

RIOR series. Remote modules with CANopen protocol

RIOR-48I32O 83720200
Module with 48 digital inputs and 32 digital outputs



Remote Modules - RCS-S

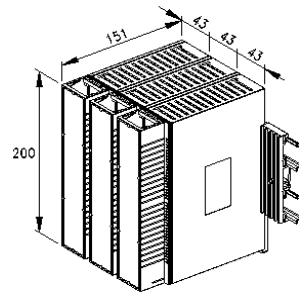
RCS-S series. Remote counter Station - Sercos protocol

RIOR-48I32O 83720200
Module with 48 digital inputs and 32 digital outputs



Remote Modules - RIO5 serie

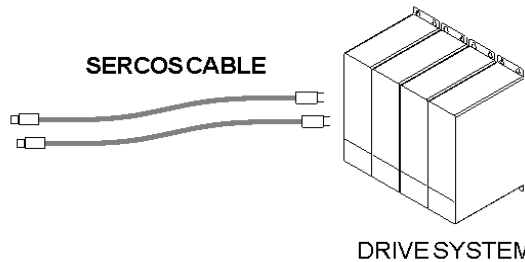
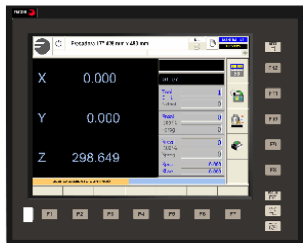
RIO5 series. Remote modules with CANopen protocol



- RIO5 PS-24I/16O** 83070015
Header module with power supply, 24 digital inputs and 16 digital outputs
- RIO5 PS-2PT100/4AI/4AO** 83070018
Header module with 4 analog inputs, 4 analog outputs and 2 inputs for PT100 temperature gages
- RIO5 24I/16O EXP MOD** 83070016
Expansion module with 24 digital inputs and 16 digital outputs
- RIO5 48I/32O EXP MOD** 83070017
Expansion module with 48 digital inputs and 32 digital outputs

Select the cables necessary for each configuration.

Ready Made cables for CAN Bus (CAN CABLE) and Sercos ring (SFO & SFO-FLEX).

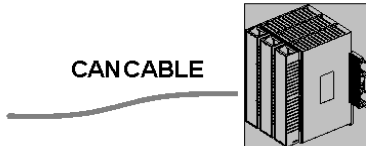


Each drive module having the Sercos interface option offers a small cable for connecting it to the adjacent module. Only the lines going to the CNC (Back and forth) or the ones joining the far between modules.

CANCABLE



Remote Modules Group



SERCOS cables

Sercos optic fiber

1m	SFO-1	03900001
2m	SFO-2	03900002
3m	SFO-3	03900003
5m	SFO-5	03900005
7m	SFO-7	03900007
10m	SFO-10	03900010
12m	SFO-12	03900012

Flexible Sercos optic fiber

10m	SFO-FLEX-10	03910010
15m	SFO-FLEX-15	03910015
20m	SFO-FLEX-20	03910020
25m	SFO-FLEX-25	03910025
30m	SFO-FLEX-30	03910030
35m	SFO-FLEX-35	03910035
40m	SFO-FLEX-40	03910040
40m	SFO-V-FLEX-40	03920040
50m	SFO-V-FLEX-50	03920050
60m	SFO-V-FLEX-60	03920060
75m	SFO-V-FLEX-75	03920075
100m	SFO-V-FLEX-100	03920100

CAN cable for Remote I/O's

5m	CANCABLE 5M	03780100
10m	CAN CABLE 10M	03780101
15m	CAN CABLE 15M	03780102
20m	CAN CABLE 20M	03780103
25m	CAN CABLE 25M	03780104
30m	CAN CABLE 30M	03780106
35m	CAN CABLE 35M	03780107
40m	CAN CABLE 40M	03780108
45m	CAN CABLE 45M	03780109
50m	CAN CABLE 50M	03780110
75m	CAN CABLE 75M	03780111
100m	CAN CABLE 100M	03780112
150m	CAN CABLE 150M	03780113

In order to complete its order

Central Unit in Frontal Panel

Monitor (choose one of them)

83600004	MONITOR-LCD-10K-001	10" LCD Monitor + Keyboard
83700053	MONITOR-LCD-15	15" LCD monitor
83700054	MONITOR-LCD-15-TOUCH	15" LCD Touch Screen monitor

Keyboard for 15" LCD Monitor (choose one of them)

83760020	HORIZONTAL KEYB	Horizontal Qwerty keyboard
83760021	HORIZONTAL KEYB+MOUSE	Horizontal Qwerty keyboard with mouse
83760022	VERTICAL KEYB	Vertical alphanumeric keyboard
83760023	VERTICAL KEYB+MOUSE	Vertical alphanumeric keyboard with mouse

Operator Panel for 15" LCD Monitor (choose one of them)

83760024	OP PANEL	JOG Panel
83760025	OP PANEL+SPDL RATE	JOG Panel with Spindle override

Central Unit (choose one of them)

83700111	8065-M-ICU	Integrate Central Unit for Milling machines
83700115	8065 Power-M-ICU	Integrate Central Unit for Milling machines
83700112	8065-T-ICU	Integrate Central Unit for Lathes
83700116	8065 Power-T-ICU	Integrate Central Unit for Lathes

Central Unit components

83700065	SER-CAN-8I-8IO-A	Sercos-Can module	<i>compulsory</i>
83700200	MP-BASIC-4	Basic Processor	(1)
83700201	MP-PLUS-4	High level Processor	
83701061	CF-DMA-4GB	4 GB Compact Flash for Basic Processor	(1)
83701059	CF-DMA-8GB	8 GB Compact Flash for Basic Processor	
83701062	CF-DMA-32GB	32 GB Compact Flash for Basic Processor	
83701064	CF-DMA-P-4GB	4 GB Compact Flash for High level Processor	
83701066	CF-DMA-P-8GB	8 GB Compact Flash for High level Processor	
83701065	CF-DMA-P-32GB	32 GB Compact Flash for High level Processor	
83701081	CF-DMA-P7-8GB	8 GB Win 7 Compact Flash for High level Processor	(1)
83701080	CF-DMA-P7-32GB	32 GB Win 7 Compact Flash for High level Processor	

(1) choose one of them

Central Unit in Electrical cabinet

Central Unit (choose one of them)

83700113	8065-M-MCU	Cabinet Central Unit for Milling machines
83700117	8065 Power-M-MCU	Cabinet Central Unit for Milling machines
83700114	8065-T-MCU	Cabinet Central Unit for Lathes
83700118	8065 Power-T-MCU	Cabinet Central Unit for Lathes

Central Unit components

83700065	SER-CAN-8I-8IO-A	Sercos-Can module	<i>compulsory</i>
83700200	MP-BASIC-4	Basic Processor	(1)
83700201	MP-PLUS-4	High level Processor	
83701061	CF-DMA-4GB	4 GB Compact Flash for Basic Processor	(1)
83701059	CF-DMA-8GB	8 GB Compact Flash for Basic Processor	
83701062	CF-DMA-32GB	32 GB Compact Flash for Basic Processor	
83701064	CF-DMA-P-4GB	4 GB Compact Flash for High level Processor	
83701066	CF-DMA-P-8GB	8 GB Compact Flash for High level Processor	
83701065	CF-DMA-P-32GB	32 GB Compact Flash for High level Processor	
83701081	CF-DMA-P7-8GB	8 GB Win 7 Compact Flash for High level Processor	(1)
83701080	CF-DMA-P7-32GB	32 GB Win 7 Compact Flash for High level Processor	

(1) choose one of them

15" LCD-VGA and Operator Panel

83700055	MONITOR-SVGA-15	15" SVGA LCD monitor
03780215	CABLE VGA 15M	15 meters cable from VGA external monitor
03780230	CABLE VGA 30M	30 meters cable from VGA external monitor
83760020	HORIZONTAL KEYB	Horizontal Qwerty keyboard
83760021	HORIZONTAL KEYB+MOUSE	Horizontal Qwerty keyboard with mouse
83760022	VERTICAL KEYB	Vertical alphanumeric keyboard
83760023	VERTICAL KEYB+MOUSE	Vertical alphanumeric keyboard with mouse
83760024	OP PANEL	JOG Panel
83760025	OP PANEL+SPDL RATE	JOG Panel with Spindle override

SOFTWARE FEATURES For Milling machine & VMC

83740082	SOFT 8065 M PACK1	83740008	SOFT 4 AXES INTERPOLATION LIMIT
83740084	SOFT 8065 Power M PACK1	83740007	SOFT PROBING CANNED CYCLES
83740030	SOFT ADDIT AXES	83740034	SOFT TANDEM AXES
83740033	SOFT ADDIT CHANNELS	83740035	SOFT SYNCHRONISM
83740031	SOFT ADDIT SPINDLES	83740012	SOFT TANGENTIAL CONTROL
83740032	SOFT ADDIT TOOL MAGAZ	83740036	SOFT DUAL-PURPOSE (M-T)
		83740009	SOFT RTCP
		83740070	SOFT IEC 61131 LANGUAGE
		83740043	SOFT OPEN SYSTEM
		83740076	SOFT HD GRAPHICS
		83740077	SOFT IIP CONVERSATIONAL
		83740072	SOFT CONVERS USER CYCLES
		83740078	SOFT FVC UP TO 10m3
		83740079	SOFT FVC MORE 10m3
		83740074	SOFT PROGT3
		83740075	SOFT PPTRANS

SOFTWARE FEATURES For Lathes

83740086	SOFT 8065 T PACK1	83740008	SOFT 4 AXES INTERPOLATION LIMIT
83740088	SOFT 8065 Power T PACK1	83740013	SOFT HSSA MACHINING SYSTEM
83740030	SOFT ADDIT AXES	83740007	SOFT PROBING CANNED CYCLES
83740033	SOFT ADDIT CHANNELS	83740010	SOFT C AXIS
83740031	SOFT ADDIT SPINDLES	83740034	SOFT TANDEM AXES
83740032	SOFT ADDIT TOOL MAGAZ	83740035	SOFT SYNCHRONISM
		83740012	SOFT TANGENTIAL CONTROL
		83740036	SOFT DUAL-PURPOSE (M-T)
		83740009	SOFT RTCP
		83740070	SOFT IEC 61131 LANGUAGE
		83740043	SOFT OPEN SYSTEM
		83740076	SOFT HD GRAPHICS
		83740077	SOFT IIP CONVERSATIONAL
		83740072	SOFT CONVERS USER CYCLES
		83740078	SOFT FVC UP TO 10m3
		83740079	SOFT FVC MORE 10m3

MANUALS

03753900	M.CNC 8065 OEM-CAS	OEM manual in Spanish
03753901	M.CNC 8065 OEM-ING	OEM manual in English
03753910	M.CNC 8065 USER-CAS	User manual in Spanish
03753911	M.CNC 8065 USER-ING	User manual in English
03753912	M.CNC 8065 USER-FRA	User manual in French
03753913	M.CNC 8065 USER-ALE	User manual in German
03753914	M.CNC 8065 USER-ITA	User manual in Italian
03753915	M.CNC 8065 USER-BRA	User manual in Portuguese-Brazilian
03753920	M.CNC 8065 M CYC-CAS	Canned cycles manual in Spanish
03753921	M.CNC 8065 M CYC-ING	Canned cycles manual in English
03753922	M.CNC 8065 M CYC-FRA	Canned cycles manual in French
03753923	M.CNC 8065 M CYC-ALE	Canned cycles manual in German
03753924	M.CNC 8065 M CYC-ITA	Canned cycles manual in Italian
03753925	M.CNC 8065 M CYC-BRA	Canned cycles manual in Portuguese-Brazilian
03753930	M.CNC 8065 T CYC-CAS	Canned cycles manual in Spanish
03753931	M.CNC 8065 T CYC-ING	Canned cycles manual in English
03753932	M.CNC 8065 T CYC-FRA	Canned cycles manual in French
03753933	M.CNC 8065 T CYC-ALE	Canned cycles manual in German
03753934	M.CNC 8065 T CYC-ITA	Canned cycles manual in Italian
03753935	M.CNC 8065 T CYC-BRA	Canned cycles manual in Portuguese-Brazilian

ACCESSORIES

83760005	CNC FPU	Fagor Power Unit
83700075	TRANSP-KEYS & EXTRACTOR	20 transparent key caps and an extractor tool
83700076	TRANSP-KEYS	20 transparent key caps
83700077	WHITE-KEYS	20 white key caps

Spare parts

83700056	SER-CAN-8I-8IO-A (RF)
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REMOTE I/O MODULES

RIOR series

83720200	RIOR-48I32O
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RIOW series

03300010	RIOW CANOPEN STAND	Header module CANopen
03300008	RIOW 8DI-51205053	Expansion module with 8 digital inputs
03300007	RIOW 8DO-51205043	Expansion module with 8 digital outputs
03300006	RIOW 4AI-51205050	Expansion module with 4 analog inputs
03300005	RIOW 4AO-51205039	Expansion module with 4 analog outputs
03300004	RIOW 2AI PT100-51205048	Expansion module with 2 inputs for PT100
03300003	RIOW PS24-51205036	24 V DC 10 A power supply for the modules
03300000	RIOW END-51205037	Line terminating module.

RIO5 series

83070015	RIO5 PS-24I/16O	83070016	RIO5 24I/16O EXP MOD
83070018	RIO5 PS-2PT100/4AI/4AO	83070017	RIO5 48I/32O EXP MOD

CAN cable for Remote I/O's

03780100	CAN CABLE 5M	03780108	CAN CABLE 40M
03780101	CAN CABLE 10M	03780109	CAN CABLE 45M
03780102	CAN CABLE 15M	03780110	CAN CABLE 50M
03780103	CAN CABLE 20M	03780111	CAN CABLE 75M
03780104	CAN CABLE 25M	03780112	CAN CABLE 100M
03780106	CAN CABLE 30M	03780113	CAN CABLE 150M
03780107	CAN CABLE 35M		

Sercos optic fiber cables

03900001	SFO-1	03900007	SFO-7
03900002	SFO-2	03900010	SFO-10
03900003	SFO-3	03900012	SFO-12
03900005	SFO-5		

Flexible Sercos optic fiber cables

03910010	SFO-FLEX-10	03920040	SFO-V-FLEX-40
03910015	SFO-FLEX-15	03920050	SFO-V-FLEX-50
03910020	SFO-FLEX-20	03920060	SFO-V-FLEX-60
03910025	SFO-FLEX-25	03920075	SFO-V-FLEX-75
03910030	SFO-FLEX-30	03920100	SFO-V-FLEX-100
03910035	SFO-FLEX-35		
03910040	SFO-FLEX-40		