

# FAGOR 8055 CNC

Ordering Handbook.  
Ref. 1502



**CNC FAGOR 8055**

**FAGOR**   
FAGOR AUTOMATION

# DENOMINATIONS

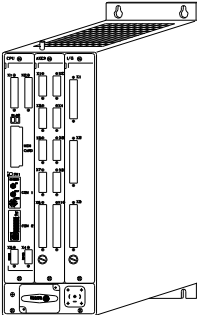

**UC55** □ - □ - □ - □ - □ - □ - □ - □ - □ - □ - □ - □

<b>Type of CNC (CNC 8055 Central Unit)</b>		<b>MDU</b> Dual-use products (3)	
<b>CPU type</b>	FL Power	F W	<b>Advanced software</b> - Standard software AV Advanced software
<b>Type of function</b>		<b>Software options (2)</b>	
General purpose (1)	GP	A	Remote hard disk
Milling machines & Centers (1)	M	B	Ethernet
Conversational model for Milling (1)	MC	E	Rigid tapping
Open conversational for Milling (1)	MCO	G	Tool life monitoring
Lathes and Turning Centers	T	H	Probing canned cycles
Conversational model for Lathes	TC	J	4-axis interpolation
Open conversational for Lathes (1)	TCO	K	Telediagnosis
<b>Chassis (power supply included)</b>		O	External CAN Drive System
For 3 modules (PSB3)	3	Q	C axis on lathe
For 6 modules (PSB6)	6	S	Tool radius compensation
<b>Axis module</b>		T	Y axis on lathe
Complete	A	U	TCP option
Single	SA	V	Tangential control
<b>I/O module</b>		X	Retracing
None	-	<b>Axes</b>	
1 I/O module	1I	2	Lathe
2 I/O modules	2I	4	Mill and lathe
3 I/O modules	3I	7	Mill and Lathe (Power models)
4 I/O modules	4I	<b>KEYCF board</b>	
<b>Digital servo drives</b>		B	Basic (512 MB)
None (analog only)	-	L	Large (2 GB)
Sercos board	SB	<b>Field bus for remote modules</b>	
CAN servos board	CD	-	Not available

(1) Not available with FL model  
(2) Depends on the CPU type and function  
(3) 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.

# CONFIGURATIONS

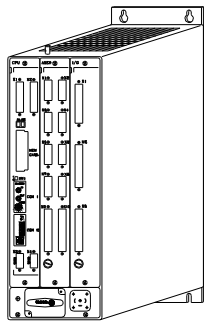
**Central Unit + (Monitor + Keyboard + Operator Panel)**


+


**Central Unit      (Monitor + Keyboard + Operator Panel)**

<b>83480204</b>	<b>MONITOR-55M-11-USB</b>	For Milling machines & Centers
<b>83480205</b>	<b>MONITOR-55MC-11-USB</b>	Conversational model for Milling
<b>83480206</b>	<b>MONITOR-55T-11-USB</b>	For Lathes & Turning Centers
<b>83480207</b>	<b>MONITOR-55TC-11-USB</b>	Conversational model for Lathes

## Central Unit + (Monitor) + (Keyboard + Operator Panel)

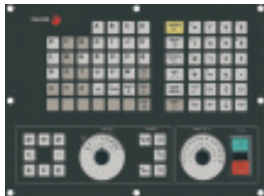


Central Unit



### Monitor

83480115 MONITOR-8055



### (Keyboard + Operator Panel)

83540044 OP-8055-ALFA

For Milling machines, Centers,  
Lathes & Turning Centers

83540045 OP-8055-MC

Conversational model for Milling

83540046 OP-8055-TC

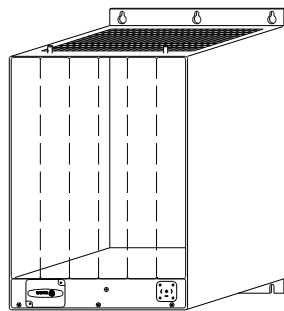
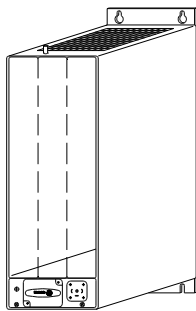
Conversational model for Lathes

83540047 OP-8055MCO/TCO

Customizable

## MAKING UP THE CENTRAL UNIT

### Power Supply and Box



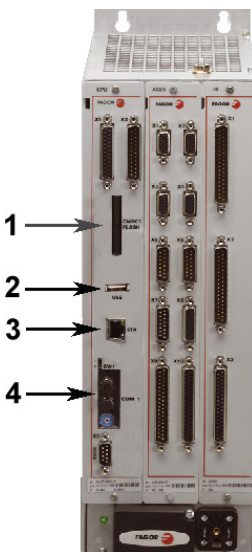
83060100 PSB3-8055

For three modules

83060101 PSB6-8055

For six modules

### CPU module



83090514 CPU-8055 FL-T

For Lathes & Turning Centers

83090520 CPU-8055 Power-GP

For General Propourse

83090513 CPU-8055 Power-M

For Milling machines & Centers

83090515 CPU-8055 Power-T

For Lathes & Turning Centers

#### 1.- KEYCF

Compact Flash memory to store: OEM programs, PLC program, screen customizing programs, tables, parameters, etc

The basic KEYCF has 512 Mb

Optional 2 GB KEYCF:

83240131 KEY CF 8055 FL LARGE

83240133 KEY CF 8055 Power LARGE

#### 2.- USB

#### 3.- Ethernet connexion (Require software option)

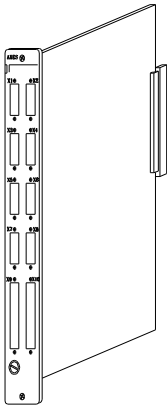
#### 4.- Digital interface option

83160110 SER-INT-BOARD

83160135 CAN-AXES-BOARD-8055

## AXES module

It must be present in all the configurations



**83150110 AXES 8055 VPP** with 8 analog outputs and 8 feedback inputs.

Module to process the signals to control the axes, the spindle and the handwheels.

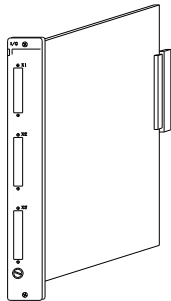
- 8 analog outputs and 8 feedback inputs.
- Probe input and 8 analog inputs.
- 40 PLC opto-coupled digital inputs
- 24 PLC opto-coupled digital outputs (24 Vdc)

**83240203 AXES 8055 VPP SB** with 8 analog outputs and 8 feedback inputs.

Module to process the signals to control the axes, the spindle and the handwheels.

- 4 analog outputs and 4 feedback inputs.
- Probe input and 8 analog inputs.
- 40 PLC opto-coupled digital inputs
- 24 PLC opto-coupled digital outputs (24 Vdc)

## Additional modules



### I/O Module

**83210100 I/O 8055**

Digital I/O expansion module

- 64 PLC opto-coupled digital inputs
- 32 PLC opto-coupled digital outputs (24 Vdc)



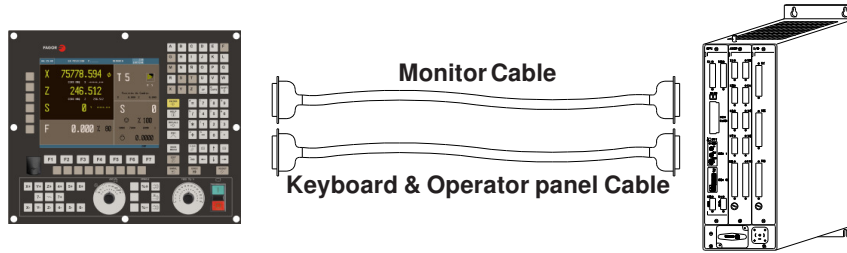
### Front Cover

**83300100 COVER 8055**

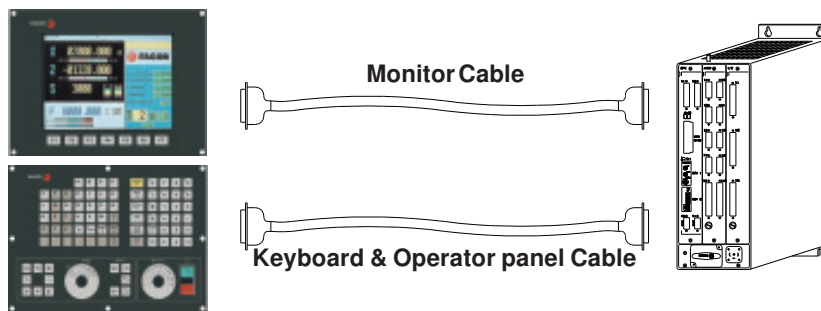
The front of the box must be completed with front covers.

# CABLES

## Central Unit + (Monitor + Keyboard + Operator Panel)



## Central Unit + (Monitor) + (Keyboard + Operator Panel)



### Monitor cables

2m	<b>C.MON.50/55-2M</b> .....	03630019
5m	<b>C.MON50/55 5M</b> .....	03630020
10m	<b>C.MON50/55 10M</b> .....	03630021
15m	<b>C.MON50/55 15M</b> .....	03630022
20m	<b>C.MON50/55 20M</b> .....	03630023
25m	<b>C.MON50/55 25M</b> .....	03630024
30m	<b>CABLE MON.30M</b> .....	03630025
35m	<b>CABLE MON.35M</b> .....	03630026
40m	<b>CABLE MON.40M</b> .....	03630027

### Keyboard & Operator panel cables

2m	<b>JOG CABLE-2M</b> .....	03630002
5m	<b>JOG CABLE-5M</b> .....	03630004
10m	<b>JOG CABLE-10M</b> .....	03630005
15m	<b>JOG CABLE-15M</b> .....	03630006
20m	<b>JOG CABLE-20M</b> .....	03630008
25m	<b>JOG CABLE-25M</b> .....	03630009
30m	<b>C.JOG 30M</b> .....	03630045
35m	<b>C.JOG 35M</b> .....	03630046
40m	<b>C.JOG 40M</b> .....	03630047
45m	<b>C.JOG 45M</b> .....	03630048
50m	<b>C.JOG 50M</b> .....	03630049

### SERCOS cables

#### *Sercos optic fiber*

1m	<b>SFO-1</b> .....	03900001
2m	<b>SFO-2</b> .....	03900002
3m	<b>SFO-3</b> .....	03900003
5m	<b>SFO-5</b> .....	03900005
7m	<b>SFO-7</b> .....	03900007
10m	<b>SFO-10</b> .....	03900010
12m	<b>SFO-12</b> .....	03900012

#### *Flexible Sercos optic fiber*

10m	<b>SFO-FLEX-10</b> .....	03910010
15m	<b>SFO-FLEX-15</b> .....	03910015
20m	<b>SFO-FLEX-20</b> .....	03911030
25m	<b>SFO-FLEX-25</b> .....	03911035
30m	<b>SFO-FLEX-30</b> .....	03910030
35m	<b>SFO-FLEX-35</b> .....	03910035
40m	<b>SFO-FLEX-40</b> .....	03910040
40m	<b>SFO-V-FLEX-40</b> .....	03920040
50m	<b>SFO-V-FLEX-50</b> .....	03920050
60m	<b>SFO-V-FLEX-60</b> .....	03920060
75m	<b>SFO-V-FLEX-75</b> .....	03920075
100m	<b>SFO-V-FLEX-100</b> .....	03920100

# KEYCF AND SOFTWARE FEATURES.

The KEYCF include the software features by means of a special code.

It must be used to store critical data used for customizing the CNC for that machine, parameters, PLC programs and screens.

The remaining memory space is free for storing User programs.

## Basic 512 MB KEYCF

For 8055i FL model ..... **KEY CF 8055 FL BASIC** ..... **83240130**  
 For 8055i Power model ..... **KEY CF 8055 Power BASIC** ..... **83240132**

## Opcional 2GB KEYCF

For 8055i FL model ..... **KEY CF 8055 FL LARGE** ..... **83240131**  
 For 8055i Power model ..... **KEY CF 8055 Power LARGE** ..... **83240133**

## Software options for CNC 8055 FL model

Code	Software features	T	TC
	Block processing time	3.5 ms	
	Loop time	4 ms	
	Look ahead	100 blocks	
80501010	Number of axes with standard software	(2)	(2)
80501000	Number of axes with optional software	(4)	(4)
	Save, Edit & Execute programs in KEYCF	(1)	(1)
	Electronic threading	(1)	(1)
	Tool magazine management	(1)	(1)
	Machining canned cycle	(1)	(1)
83240166	Remote Hard disk	( )	( )
83240167	Ethernet	( )	( )
80501004	Rigid tapping	( )	( )
80501006	Tool life monitoring	( )	( )
80501007	Probing canned cycles	( )	( )
83240501	Telediagnosis	( )	( )
83240556	External CAN Drive System	( )	( )
83270003	Tool radius compensation	(1)	(1)
83240145	Tangential Control	( )	( )
83240155	Retracing	( )	( )
83240148	T Basic Software	(1)	(1)
83240142	TC Conversational Software	(-)	(1)
80501002	Line and Solid graphics	(1)	(1)
80501008	DNC Communications	(1)	(1)
83270002	Profile editor	(1)	(1)
83240156	Setup assistance	(1)	(1)

( - ) Not available  
 ( ) Optional feature  
 ( 1 ) Standard feature

# Software options for CNC 8055 Power model

Code	Software features	GP	M	MC	MCO	T	TC	TCO
	Block processing time	1 ms						
	Loop time	2 ms						
	Look ahead	200 blocks						
80501010	Number of axes with standard software	(4)	(4)	(4)	(4)	(2)	(2)	(2)
80501000	Number of axes with optional software	(7)	(7)	(7)	(7)	(4)	(4)	(4)
80501001	Number of axes with optional software	(-)	(-)	(-)	(-)	(7)	(7)	(7)
	Save, Edit & Execute programs in KEYCF	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	Electronic threading	(-)	(1)	(1)	(1)	(1)	(1)	(1)
	Tool magazine management	(-)	(1)	(1)	(1)	(1)	(1)	(1)
	Machining canned cycle	(-)	(1)	(1)	(-)	(1)	(1)	(-)
	Multiple machining canned cycle	(-)	(1)	(1)	(-)	(-)	(-)	(-)
83240166	Remote Hard disk	(-)	(-)	(-)	(-)	(-)	(-)	(-)
83240167	Ethernet	(-)	(-)	(-)	(-)	(-)	(-)	(-)
80501004	Rigid tapping	(-)	(-)	(-)	(-)	(-)	(-)	(-)
80501006	Tool life monitoring	(-)	(-)	(-)	(-)	(-)	(-)	(-)
80501007	Probing canned cycles	(-)	(-)	(-)	(-)	(-)	(-)	(-)
80501009	4-axis interpolation	(-)	(-)	(-)	(-)	(-)	(-)	(-)
83240501	Telediagnosis	(-)	(-)	(-)	(-)	(-)	(-)	(-)
83240556	External CAN Drive System	(-)	(-)	(-)	(-)	(-)	(-)	(-)
83270001	C Axis for Lathe	(-)	(-)	(-)	(-)	(-)	(-)	(-)
83270003	Tool radius compensation	(-)	(1)	(1)	(1)	(1)	(1)	(1)
83270009	Y Axis for Lathe	(-)	(-)	(-)	(-)	(-)	(-)	(-)
83240500	Opción TCP // TCP Option	(-)	(-)	(-)	(-)	(-)	(-)	(-)
83240145	Tangential Control	(-)	(-)	(-)	(-)	(-)	(-)	(-)
83240155	Retracing	(-)	(-)	(-)	(-)	(-)	(-)	(-)
83240220	GP Basic Software	(1)	(-)	(-)	(-)	(-)	(-)	(-)
83240149	M Basic Software	(-)	(1)	(1)	(1)	(-)	(-)	(-)
83240141	MC Conversational Software	(-)	(-)	(1)	(-)	(-)	(-)	(-)
83240143	MCO Conversational Software	(-)	(-)	(-)	(1)	(-)	(-)	(-)
83240148	T Basic Software	(-)	(-)	(-)	(-)	(1)	(1)	(1)
83240142	TC Conversational Software	(-)	(-)	(-)	(-)	(-)	(1)	(-)
83240144	TCO Conversational Software	(-)	(-)	(-)	(-)	(-)	(-)	(1)
80501002	Line and Solid graphics	(-)	(1)	(1)	(1)	(1)	(1)	(1)
80501003	Pockets with islands	(-)	(1)	(1)	(1)	(-)	(-)	(-)
80501008	DNC Communications	(1)	(1)	(1)	(1)	(1)	(1)	(1)
83270002	Profile editor	(1)	(1)	(1)	(1)	(1)	(1)	(1)
83240156	Setup assistance	(1)	(1)	(1)	(1)	(1)	(1)	(1)

(-) Not available

(1) Standard feature

(-) Optional feature

# IN ORDER TO COMPLETE ITS ORDER

## Monitor + Keyboard + Operator panel

83480204	MONITOR-55M-11-USB	83480206	MONITOR-55T-11-USB
83480205	MONITOR-55MC-11-USB	83480207	MONITOR-55TC-11-USB

## SEPARATE: Monitor

83480115	MONITOR-8055
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## Keyboard + Operator panel

83540044	OP-8055-ALFA
83540045	OP-8055-MC
83540046	OP-8055-TC
83540047	OP-8055-MCO/TCO

## Power Supply and Box

83060100	PSB3-8055	For three modules
83060101	PSB6-8055	For six modules

## CPU module

83090514	CPU-8055 FL-T	83090520	CPU-8055 Power-GP
		83090513	CPU-8055 Power-M
		83090515	CPU-8055 Power-T

## Digital interface option

83160110	SER-INT-BOARD
83160135	CAN-AXES-BOARD-8055

## Modules

83150110	AXES 8055 VPP	83210100	I/O 8055
83240203	AXES 8055 VPP SB	83300100	COVER 8055

## KEYCF

83240130	KEY CF 8055 FL BASIC	83240131	KEY CF 8055 FL LARGE
83240132	KEY CF 8055 Power BASIC	83240133	KEY CF 8055 Power LARGE

## SOFTWARE FEATURES

80501010	4 axes for Milling / 2 axes for Lathe	
80501000	7 axes for Milling / 4 axes for Lathe	7 axes only for CNC 8055 Power
80501001	7 axes for Lathe	Only for CNC 8055 Power
83240166	Remote Hard disk	
83240167	Ethernet	
80501004	Rigid tapping	
80501006	Tool life monitoring	No available for GP model
80501007	Probing canned cycles	No available for GP model
80501009	4-axis interpolation limit	Only for CNC 8055 Power
83240501	Telediagnosis	
83240556	External CAN Drive System	
83270001	C Axis for Lathe	Only for CNC 8055 Power
83270003	Tool radius compensation	
83270009	Y Axis for Lathe	Only for CNC 8055 Power
83240500	TCP Option for Milling	Only for CNC 8055 Power
83240145	Tangential Control	
83240155	Retracing	
83240220	GP Basic Software	
83240149	M Basic Software	
83240141	MC Conversational Software	
83240143	MCO Conversational Software	
83240148	T Basic Software	
83240142	TC Conversational Software	
83240144	TCO Conversational Software	



### Manuals

03M50000	M.CNC 8055 M OEM-CAS	8055 M CNC OEM Manual in Spanish
03M50001	M.CNC 8055 M OEM-ING	8055 M CNC OEM Manual in English
03M50004	M.CNC 8055 M OEM-ITA	8055 M CNC OEM Manual in Italian
03M50010	M.CNC 8055 M USER-CAS	8055 M CNC user Manual in Spanish
03M50011	M.CNC 8055 M USER-ING	8055 M CNC user Manual in English
03M50012	M.CNC 8055 M USER-FRA	8055 M CNC user Manual in French
03M50013	M.CNC 8055 M USER-ALE	8055 M CNC user Manual in German
03M50014	M.CNC 8055 M USER-ITA	8055 M CNC user Manual in Italian
03M50015	M.CNC 8055 M USER-BRA	8055 M CNC user Manual in Portuguese-Brazilian
03M50016	M.CNC 8055 M USER-HOL	8055 M CNC user Manual in Dutch
03M50020	M.CNC 8055 T OEM-CAS	8055 T CNC OEM Manual in Spanish
03M50021	M.CNC 8055 T OEM-ING	8055 T CNC OEM Manual in English
03M50024	M.CNC 8055 T OEM-ITA	8055 T CNC OEM Manual in Italian
03M50030	M.CNC 8055 T USER-CAS	8055 T CNC user Manual in Spanish
03M50031	M.CNC 8055 T USER-ING	8055 T CNC user Manual in English
03M50032	M.CNC 8055 T USER-FRA	8055 T CNC user Manual in French
03M50033	M.CNC 8055 T USER-ALE	8055 T CNC user Manual in German
03M50034	M.CNC 8055 T USER-ITA	8055 T CNC user Manual in Italian
03M50035	M.CNC 8055 T USER-BRA	8055 T CNC user Manual in Portuguese-Brazilian
03M50036	M.CNC 8055 T USER-HOL	8055 T CNC user Manual in Dutch
03M50040	M.CNC 8055 MC USER-CAS	8055 MC CNC user Manual in Spanish
03M50041	M.CNC 8055 MC USER-ING	8055 MC CNC user Manual in English
03M50042	M.CNC 8055 MC USER-FRA	8055 MC CNC user Manual in French
03M50043	M.CNC 8055 MC USER-ALE	8055 MC CNC user Manual in German
03M50044	M.CNC 8055 MC USER-ITA	8055 MC CNC user Manual in Italian
03M50045	M.CNC 8055 MC USER-BRA	8055 MC CNC user Manual in Portuguese-Brazilian
03M50046	M.CNC 8055 MC USER-HOL	8055 MC CNC user Manual in Dutch
03M50050	M.CNC 8055 TC USER-CAS	8055 TC CNC user Manual in Spanish
03M50051	M.CNC 8055 TC USER-ING	8055 TC CNC user Manual in English
03M50052	M.CNC 8055 TC USER-FRA	8055 TC CNC user Manual in French
03M50053	M.CNC 8055 TC USER-ALE	8055 TC CNC user Manual in German
03M50054	M.CNC 8055 TC USER-ITA	8055 TC CNC user Manual in Italian
03M50055	M.CNC 8055 TC USER-BRA	8055 TC CNC user Manual in Portuguese-Brazilian
03M50056	M.CNC 8055 TC USER-HOL	8055 TC CNC user Manual in Dutch
03M50060	M.CNC 8055 MCO/TCO USER-CAS	8055 MCO/TCO CNC user Manual in Spanish
03M50061	M.CNC 8055 MCO/TCO USER-ING	8055 MCO/TCO CNC user Manual in English
03M50062	M.CNC 8055 MCO/TCO USER-FRA	8055 MCO/TCO CNC user Manual in Spanish
03M50063	M.CNC 8055 MCO/TCO USER-ALE	8055 MCO/TCO CNC user Manual in Spanish
03M50064	M.CNC 8055 MCO/TCO USER-ITA	8055 MCO/TCO CNC user Manual in Italian
03M50065	M.CNC 8055 MCO/TCO USER-BRA	8055 MCO/TCO CNC user Manual in Spanish
03M50066	M.CNC 8055 MCO/TCO USER-HOL	8055 MCO/TCO CNC user Manual in Spanish

### Spare parts

83060110	PSB3-8055(R)	83160115	SERCOS-INT-BOARD(R)
83060111	PSB6-8055(R)	83160145	CAN-AXES-BOARD-8055 (RF)
83090516	CPU-8055 FL (R)	83150105	AXES 8055 VPP (R)
83090517	CPU-8055 Power (R)	83240204	AXES 8055 VPP SB (R)
80550045	I/O 8055(R)	83300101	COVER 8055(R)

### Monitor cables

03630019	C.MON.50/55-2M	03630024	C.MON50/55 25M
03630020	C.MON50/55 5M	03630025	CABLE MON.30M
03630021	C.MON50/55 10M	03630026	CABLE MON.35M
03630022	C.MON50/55 15M	03630027	CABLE MON.40M
03630023	C.MON50/55 20M		

**Keyboard & Operator panel cables**

03630002	JOG CABLE-2M
03630004	JOG CABLE-5M
03630005	JOG CABLE-10M
03630006	JOG CABLE-15M
03630008	JOG CABLE-20M
03630009	JOG CABLE-25M

03630045	C.JOG 30M
03630046	C.JOG 35M
03630047	C.JOG 40M
03630048	C.JOG 45M
03630049	C.JOG 50M

**Sercos optic fiber cables**

03900001	SFO-1
03900002	SFO-2
03900003	SFO-3
03900005	SFO-5

03900007	SFO-7
03900010	SFO-10
03900012	SFO-12

**Flexible Sercos optic fiber cables**

03910010	SFO-FLEX-10
03910015	SFO-FLEX-15
03910020	SFO-FLEX-20
03910025	SFO-FLEX-25
03910030	SFO-FLEX-30
03910035	SFO-FLEX-35
03910040	SFO-FLEX-40

03920040	SFO-V-FLEX-40
03920050	SFO-V-FLEX-50
03920060	SFO-V-FLEX-60
03920075	SFO-V-FLEX-75
03920100	SFO-V-FLEX-100