Ordering Guide of the Small Optical Distribution Frame (FIST-SODF2)

This document provides assistance with the selection of the small ODF. It includes the following sections:

1 Product description

FIST-SODF2 is a metal rack designed to serve as small optical distribution frame. It accommodates modules that provide the functions of splicing and patching. Its footprint is 0.3 x 0.3 m and its height is 2.2 m.
The rack is typically used in equipment rooms to store splices of indoor cable and to provide a patching facility with jumpers to equipment.
The rack includes a patchcord management system that covers both random patchcord overlength storage (limited capacity) and functional patchcord overlength storage that is needed to re-patch between modules within the same rack.
The rack can accommodate 4 modules for splicing & patching. Each module has a capacity of maximum 36 fiber splices on SC level and 36 push-pull type connectors. Its capacity is limited to 24 for other connector types.
Pre-installed flextubes (typically used for loose tube cables) are routed from the cable attachment plate at the rack entrance towards each splice & patch module. These modules can almost be fully slid out of the rack to allow good access at the splicing and patching area.
Termination of Intrafacility Cable (IFC) is possible too.
The splicing and patching modules include:

- FIST-SOSA2 splicing sub-assemblies with single circuit splicing trays (not pre-installed – except if pre-fibered)
- Pre-installed tubing between the splicing and patching area
- A patch panel that accepts adapters with retainer
- Splice protectors (SMOUV or ANT)
- Adapters and pigtails can be included in the kit (conform the name string).

Positive fiber management of the pigtails and fibers is guaranteed inside the rack by bend controls on the modules and in the splicing trays.
The rack includes always side and back panels and a transparant plexi door. A lock can be ordered separately.
Cable entrance is standard at the rack top (but can as well be at the rack bottom), close to which provision for cable attachment is provided. Patchcord exit is always at the same side as the cable entrance (top or bottom).
Brushes are provided at the rack entrances for dust protection.
Earthing facility is provided in every rack.

Racks and modules have to be ordered separately.

2 Ordering information

2.1 Small optical distribution frame

FIST-SODF2-2 X

Rack height

2	2.2 m

Cable and patchcord entrance

B	Bottom
T	Top

Racks with pre-installed or pre-fibered splice & patch modules are also available. Contact your local sales engineer for more information.

Standard kit content

- Me tal rack
- Wall connection kit
- G round fixing bolts
- Cable attachment plate at the cable entrance (top or bottom of rack)
- 20 tie-wraps and 3 universal strength member connectors for cable attachment
- 4 pre-installed identified flextubes towards the splicing modules
- Patchcord management system
- I nstallation instructions

2.2 Splicing & patching module for FIST-SODF2

FIST-SODF2-M-X XX-XX XX

Splice holder type

S	for SMOUV splice protectors
A	for ANT splice protectors

Pigtails

NN	no pigtails included
PT	pigtails included
PR	pigtails pre-installed

Module capacity

24	
36	(only possible for push-pull connector types)

Connector adapter type

Min. return loss	Standard connector type SC	FC	E2000	ST	none
45 dB (PC)				**T0**	**NN**
50 dB (UPC)	**S1**	**F1**			
60 dB (APC 8°)	**S2**	**F2**	**E9**		
60 dB (APC 9°)	**S3***				
Min. return loss	**Low loss connector type SC**	**FC**	**E2000**	**ST**	
50 dB (PC)	**S6**	**F6**			
60 dB (APC 8°)	**S7**	**F7**	**E8**		
60 dB (APC 9°)	**S8***				

* In case of adapters only (no pigtails), select adapter ref. S2 or S7.

Standard kit content

- Mounting accessories to build it into the FIST-SODF2
- Splicing trays, tube holders, patch panel, … as well as splice protectors
- If selected in the name string:
  - A dapters pre-installed
  - Pigtails included in the kit or pre-installed
- I nstallation instruction

2.3 Accessories

Name	Qty/Pk	Description
FISTV-TW-NN-188	100 pc	Tie-wrap, standard, not re-openable, 188 mm long
FIST-GR2-UCT-06	6 pc	Strength member fixations and mini allen key (additional, 3 strength member fixations already included in the standard rack kit content)
Splice protectors		See FIST-INSTALL KIT & CONSUMABLES ordering guide.
FISTV-E7187-6316	25 m	Velcro roll
FIST-GS-FLEX-12-50-S5027	50 m	Additional flexible tubing, Ø 12 mm
FIST-LOCK-XX	1 pc	Optional front door lock (XX= code)
Connector adapters with retainers		See the CABLE ASSEMBLIES ordering guide.
Pigtails		It is recommended to use 900µ pigtails with semi-tight secondary coating, 3 m long. See the CABLE ASSEMBLIES ordering guide for the ordering description.
Jumpers		It is recommended to use jumpers with diameter ≥ 2.0 mm. The length needed inside the FIST-SODF2 is 3 m (measured from the rack entrance). For internal crossconnect 4.6 -> 5.1 m is needed. See patchcord routing section for more details. See the CABLE ASSEMBLIES ordering guide for the ordering description.

2.4 Tools

Name	Qty/Pk	Description
FACC-ALLEN-KEY-5-350	1 pc	Allen key, diameter 5 mm, length 350 mm. Usage: - to mount the modules in the rack
FIST-GB-TORX-SD-SET	2 pc	Screw driver with TORX head. Usage: when the cable entrance side is bottom, to turn the drums of the splicing & patching module.

3 Product guide

3.1 Standard rack and splicing & patching module

The rack

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7N759016.JPG

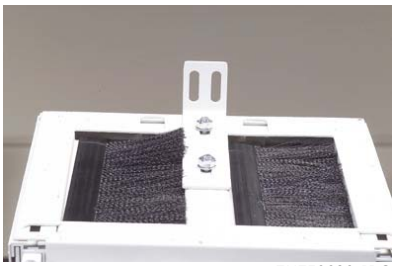
Cable attachment plate

The cable attachment plate is mounted in the rack top or bottom cfr the selected configuration (name string).

20 tie-wraps and 3 strength member attachments are included to attach some cables. Additional cable attachment accessories can be ordered separately.

4 pre-installed flextubes are routed towards the 4 mounting positions for splicing & patching modules.

The flextubes can be removed if IFC cable is used.



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Dust protection + wall connection kit
Brushes for dust protection are provided at the top of the rack.

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Splicing and patching module
The module can almost be fully slid out of the rack to allow good access at both sides: the left side is the splicing area, the right side is the patching area.

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Splicing side of the module
The flextubes, coming from the cable attachment plate, are attached with a flexclip. The tubes are fixed on a bracket before entering the FAS block on the splicing side of the module. The splicing area includes UMS profiles with a small FAS block and wraparound groove plates with 12 or 18 SC trays (depending on the module capacity). Fibers are spliced to 900µ pigtails that are guided in pre-installed tubes towards the right side of the module: the patching area.

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Splicing side of the module (with IFC cable)
Example with IFC cable.

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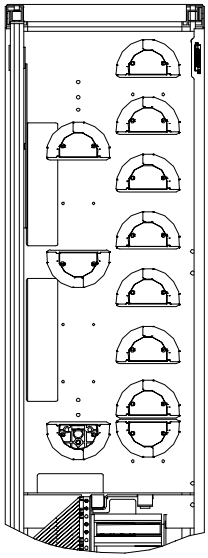
Patching side of the module

The patching area consists out of a patch panel with 6 rows of 4 (or 6) connectors, pointing front downwards.
The module's capacity is 36 push-pull type connectors, 24 for other connector types.
An identification system is provided next to the patch panel. (ID cards)



Patchcord management system

The 8 drums on the right provide functional overlength storage facility for the jumpers to allow re-patching within the same rack.
The 3 drums on the left provide random overlength storage of jumpers.

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Patchcord guiding brackets

Installation guideline

Do not install the left side of the rack immediately against the wall – leave 0.5 m space for rack and splicing access.

3.2 Rack dimensions and capacity

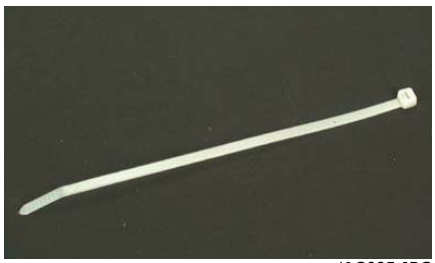
	FIST-SODF2
Dimensions	
Height	2.2 m
Depth	0.3 m
Width	0.3 m
Capacity*	4 modules + 1 patchcord management system

Important
Do not install the left side of the rack immediately against the wall – leave 0.5 m space for rack and splicing access.

3.3 Module dimensions and capacity

	FIST-SODF2-M
Dimensions	
Height	353 mm
Depth	236 mm
Width	290 mm
Capacity	
– Push pull connectors	36 fibers
– Non push-pull connectors	24 fibers
Pigtail	
Pigtail length in module(from splicing side to patch panel)	3 m (Ø 900µ)
Jumper	
Interconnect:Jumper length inside SODF2 (using patchcord management system) (Add length from SODF2 entrance to equipment to become total jumper length)	3 m
Internal crossconnect:	4.6 -> 5.1m

3.4 Accessories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Tie-wraps
FISTV-TW-NN-188
100 not re-openable tie-wraps, 188 mm long.


DSC00001.JPG

Universal strength member fixations
FIST-GR2-UCT-06
6 strength member fixations (1 shown on picture) + 1 mini allen key.

FRWR044.JPG

Velcro roll
FISTV-E7187-6316
Velcro to segment or secure pigtails. Supplied on a roll 25 m long (width 25 mm) to be cut to length as required.

RA11.JPG

Flexible tubing
FIST-GS-FLEX-12-50-S5027
The flexible tubing has a inner diameter of 12 mm and a capacity of up to 8 loose tubes. Length 50m.

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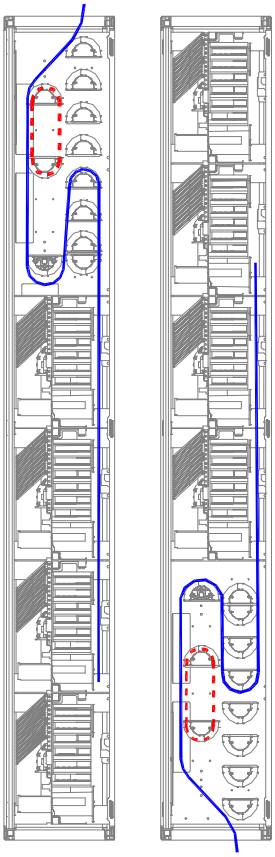
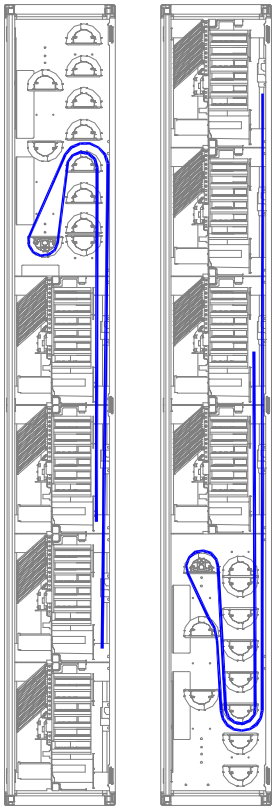
Door lock
FIST-LOCK-XX
This lock, supplied with two keys numbered XX (03 to 99), can be mounted in the front door. The standard Tyco lock key is coded 01.

3.5 Patchcord routing



Interconnect

Typical fiber length inside the rack (measured from the rack entrance) is minimum 3m. Longer lengths can be stored in the slack storage area. (limited)



Internal crossconnect

Patchcord length should be between 4.6 and 5.1m, typical length is 5m. Crossconnect between any connector position is possible, choose a suitable drum.

3.6 Tools

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Long Allen key
FACC-ALLEN-KEY-5-350
Long Allen key.
Usage: - to mount the modules in the rack

TO33.JPG

Torx screw driver set
FIST-GB-TORX-SD-SET
2 Torx screw drivers.
Usage: when the cable entrance side (top or bottom) is changed in the field, namely to replace the short drums of the patchcord management system and to turn the drums of the splicing & patching module.

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