Fiber Optics

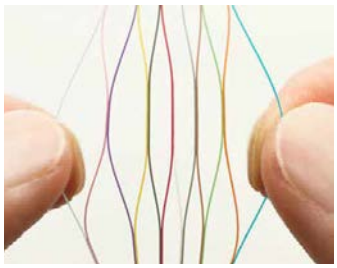
FITEL® FUSION SPLICERS

LASER COMPONENTS

S124M12

Ribbon Fiber Fusion Splicer

S124M12
Combining the functions of multiple machine's into one!



Rollable Ribbon - It bends, molds and rolls into shapes - combining benefits of loose and ribbon fibers, creating the best high-density platform for any application!

ofs A Furukawa Company

Authorized Distributor of FITEL Products in the Americas

Features and Benefits

- Easily exchangeable fiber guide V-grooves
- Up to 12-fiber ribbon splicing
- 15-second-high speed splicing operation
- Applicable for both 250 µm and 200 µm pitch ribbon fiber
- Simple operation with touch panel and GUI
- 3 Bright LED's to illuminate the operation area
- Wi-Fi connectivity for smartphone data management and control

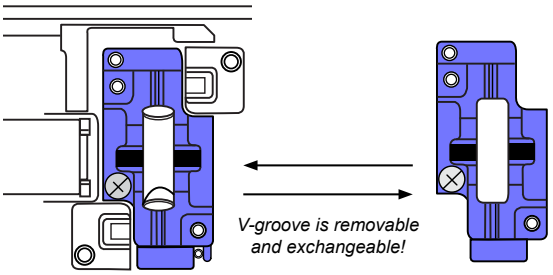
Overview

The powerful FITEL S124M12 Hand-Held Ribbon Fusion Splicer delivers fast and reliable optical splicing for both 200 and 250 µm pitched ribbon fiber even under rigorous environmental conditions. The S124M12 combines multiple functions into one machine, offering a wider range of capabilities that unites innovative technology, cost savings and opens the door to an entirely new range of applications.

Product Description

Designed with end users in mind, the FITEL S124M12 Fusion Splicer delivers rapid splicing/heating with reliable and consistent results. This fusion splicer is suitable for the use of hyper-scale ribbon cable, and is an excellent choice for a variety of deployments including Data Centers, Metro, Backbone and Long-Haul applications.

A broad range of new features that enhance communication, ease of use, portability and field durability have been combined together to make the S124M12 Fusion Splicer one of the most powerful and user-friendly fusion splicing machines available today.



V-groove is removable and exchangeable!

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Easily exchangeable 200 and 250 µm fiber guide V-grooves

3 LED's provide a bright operation environment

Detachable fiber clamp operation for easy fiber setting

Touch panel and Wi-Fi network connectivity

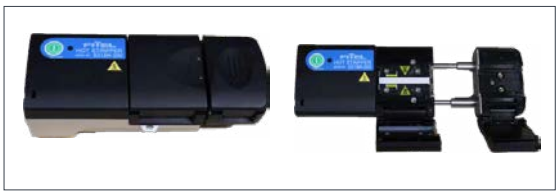
Drop Impact Resistance Performance and Environmental Resistance Performance

Drop impact	Vertical drop test (5 sides excluding the top side) is conducted from a height of 76 cm and the normal operation is confirmed.
Impact protection	The normal operation is confirmed after dropping a 500 grams weight of IK 07 grade from height of 40 cm onto the equipment.
Dust proof	The normal operation is confirmed after putting the equipment in a device containing dust of 25 µm or less for 8hours.
Drip proof	The normal operation is confirmed after exposing water droplet of IPX 2 grade with 3mm/min to 4 sides for 2.5 min or more tilted by 15 degrees.

Splicer and Tools for 12-Ribbon Splicing

Description	V-Groove	Fiber Holder	Stripper	Cleaver
200 µm pitch ribbon	FVG-12-P200	S712A-12e-P200	S218R-200	S326R
250 µm pitch ribbon	FVG-12-P250	S712A-012 (Flat) or S712A-12e (Rollable)	S218R-200	S326R
200 - 250 µm pitch conversion	FVG-12-P250	PCH-01-12e (L or R) and S712A-12e (Rollable, R or L)	S218R-200	S326R

V-Groove



Stripper

Cleaver

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Specifications

Applicable fibers*1	**SM** (ITU-T G.652 / G.657A1 / G.657A2), **MM** (ITU-T G.651), **DS** (ITU-T G.653) **NZD** (ITU-T G.655), **UBIF** (ITU-T G.657B3)
Fiber count	2, 4, 6, 8, 12
Cladding diameter	125 µm
Fiber coating diameter	**Single fiber:** 200 µm, 250 µm, 900 µm **Ribbon fiber:** 200 µm, 250 µm, 200-250 µm pitch transition (with holders)
Fiber cleaving length	10mm
Average splice loss*2	**SM:** 0.05dB **MM:** 0.03dB **DS:** 0.08dB **NZD:** 0.08dB **BIF:** 0.05dB
Typical splice time	**12-fiber ribbon:** 15sec. **Single fiber:** 13sec.
Typical heating time	**12-fiber ribbon:** 28sec. **Single fiber:** 13sec.
Splice program	Max. 300
Heat program	Max. 100
Applicable protection sleeve length	40mm / 60mm
Tension test	1.96N
Discharge compensation function	Automatic correction according to temperature and atmospheric pressure
Optical fiber observation method	Two-way observation from X and Y axes
Monitor	4.3 inch wide LCD monitor with touch screen
Magnification	24X magnification
Splice result storage / Image capture capacity	Last 10,000 splices / Last 100 images to be automatically captured
Dimensions	139W x 209D x 114H mm (not including shock absorber) 179W x 246D x 131H mm (including shock absorber)
Weight	1.8kg (with battery)
Data output	USB ver.2 mini B x 1 port, Standard A x 1 port
Power source	AC : 100-240V (50/60Hz) DC : 11-24V
Battery capacity*3	170 splice and heating cycles
Electrode life*4	2,000 splice
Operating condition	**Altitude:** 0-2,000m **Wind protection:** 15m/s **Operating temperature:** -10 to +50 °C (non-condensing)
Storage condition	-40 to +60 °C (non-condensing)

*1 Corresponding to optical fiber in compliance with ITU-T recommendation.
*2 This numerical number is the one when measured for the purpose to show the fusion splice characteristics in the testing method of IEC 61073-1, it is not the one to guarantee the splicing loss.
*3 Number of times that the fusion splicing of the fiber and the heat reinforcement can be performed continuously at a rate of once a 90seconds at the room temperature (20°C) condition when using a new 100% charged battery. The number of times you can use depends on the state of the battery and usage.
*4 The number of times will vary depending on the state of the electrode rod and the operating environment.

Standard Package

Item	Model No.	S124M12-3-0 (Qty)	S124M12-3-1 (Qty)
S124M12 main body	S124M12-X-A-0001	1	1
Hard carrying case	HCC-05	1	1
Battery pack	S947	1	1
Spare electrode	ELR-01	1	1
AC adapter	S979	1	1
AC power cord	–	1	1
Cooling tray	CTX-03	1	1
Cleaning blush	VGC-01	1	1
Electrode sharpener	D5111	1	1
Tool case	TCC-01	1	1
LCD anti-reflective sheet	ARS-01	1	1
Quick Reference guide	FTS-558	1	1
Instruction manual	UMC-03	1	1
Wi-Fi dongle	WFD-01	0	1

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Accessories

Item	Model No.
Thermal Stripper	S218R-200
Ribbon Cleaver	S326R
Fiber Wipes	FW-01
Fiber Preparation Fluid	FPF-01

Optional Components

Item	Model No.	Qty
Soft carrying case	SCC-01	1
Battery charger	S980	1
Angled stand	AGS-02	1
Work belt	WBT-01	1
Neck strap work table	NSB-03	1
Neck strap	NSB-04	1
Transport jig	TRP-07	1
Pedestal for transport holder	TRH-03	1
USB cable	USB-01	1
Car cigarettes cable	CDC-04	1

Fiber Holder

Item	Model No.	Qty
Single Fiber holder (250 µm coating fiber)	S712S-250	1 pair
Single Fiber holder (900 µm coating fiber)	S712S-900	1 pair
250 µm Fiber holder (2-fiber ribbon)	S712A-002	1 pair
250 µm Fiber holder (4-fiber ribbon)	S712A-004	1 pair
250 µm Fiber holder (6-fiber ribbon)	S712A-006	1 pair
250 µm Fiber holder (8-fiber ribbon)	S712A-008	1 pair
250 µm Fiber holder (12-fiber FLAT ribbon)	S712A-012	1 pair
250 µm Fiber holder (12-fiber rollable ribbon)	S712A-12e	1 pair
200 µm Fiber holder (12-fiber ribbon)	S712A-12e-P200	1 pair
200-250 µm Pitch Conversion Holder (12-fiber rollable ribbon)	PCH-01-12e PCH-01-12e-R PCH-01-12e-L	1 pair 1 piece 1 piece

Fiber Guide V-Groove

Item	Model No.	Qty
200 µm Pitch 12-fiber	FGV-P200	1
250 µm Pitch 12-fiber	FGV-P250	1

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OFS Marketing Communications
Doc ID: FITEL-S124M12
Date: 02/20

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