Fujikura 100R Fusion Splicer



The Fujikura 100R mass fusion splicer introduces Intelligent Alignment Control to deliver more reliable, uniform splices by automatically correcting fiber placement, end-face gaps, and axis alignment across all fibers.

Intelligent Alignment Control in the 100R enhances splice reliability by automatically correcting improper fiber seating, minimizing end-face gap variation, and stabilizing fiber-axis alignment across all fibers. Adjustable control levels allow the system to balance precision and cycle time, ensuring the best splice results across broadband or hyperscale applications.

Auto Placement Correction automatically detects and corrects fibers that are improperly seated in the V-groove prior to fusion. By automatically lifting the clamp and adjusting the Z-stage as needed, the system ensures proper fiber placement, reducing splice variability, and minimizing manual intervention.

Gap Alignment Correction automatically reduces variation in endface gaps across fibers prior to fusion. By continuously adjusting alignment until the target range is met, the 100R improves splice uniformity and consistency while completing the correction in as little as one second.

Axis Offset Correction reduces fiber axis position offsets across all fibers prior to fusion. By performing controlled, automatic alignment adjustments, the 100R improves splice uniformity and consistency while applying corrections only as needed to maintain efficient cycle times.



With the Fujikura 100R, you can keep your splicer in the field longer thanks to the included, field-replaceable V-grooves. With the AFL Tote Solution installed, the 100R transit case securely integrates with Milwaukee's PACKOUT™ system, offering faster transport, stability, and time savings for contractors and technicians.

Put our 100R to the test by contacting us to see its capabilities first-hand, 1-800-235-3423.

Features

- Intelligent Alignment Controls for hands-free alignment
- Auto Placement Correction for proper fiber seating
- Gap Alignment Correction for uniform endface gaps
- Axis Offset Correction for consistent fiber alignment
- Cleaver tracking and upkeep with wireless communication
- Automated wind protector, tube heater and splice operation
- User replaceable V-grooves
- Graphical User Interface with 5.0" Touchscreen
- Multi-function transit case with integrated workstation



Applications

- Data Center cable installation
- High fiber count metro and campus networks
- Long-haul network installs and repairs
- Trunk cable repair with Splice-on MPOs
- Ribbon splicing high-density cables with 200 µm loose fiber

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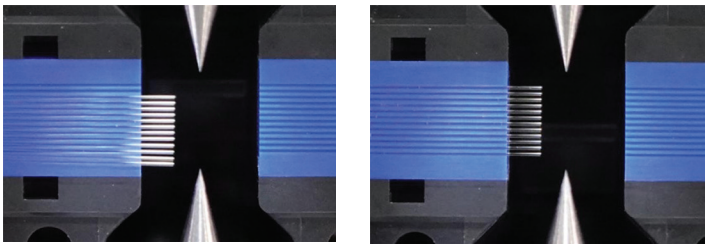
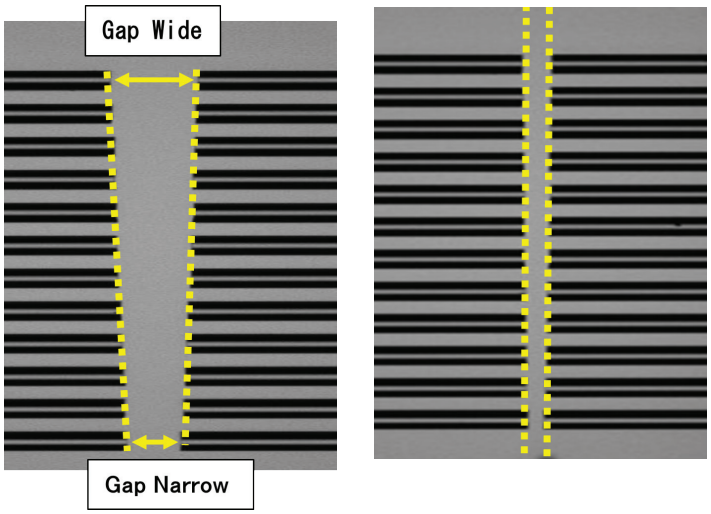
Sales & Support

Fujikura 100R Fusion Splicer

Intelligent Alignment Control Features



Auto Placement Correction
(before on left; after on right)



Gap Alignment Correction
(before on left; after on right)

Ordering Information

Description	AFL No.
Fujikura 100R SpliceReady Splicer Kit **Includes:** Fujikura 100R Standard Kit (S018665), FP-05 40 mm protection sleeve, Splicer V-groove cleaning kit, AFL WFW wipes mini tub (90 wipes), FCC2 fiber cleaning fluid (3 oz.), RT-02 Ribbonizing tool	S018713
Fujikura 100R with 200 µm Accessories SpliceReady Kit **Includes:** Fujikura 100R Standard Kit (S018665), FP-05 40 mm protection sleeve, VG12-02-200 200 µm V-groove, FH-80-12PC 200 to 250 µm Pitch Conversion Fiber Holder, FH-80-12-200 fiber holders, RT-02 Ribbonizing tool, Splicer V-groove cleaning kit, FCC2 fiber cleaning fluid (3 oz.), AFL WFW wipes mini tub (90 wipes)	S018714
Fujikura 100R Fusion Splicer Kit with CT60 and RS03 **Includes:** BTR-19 Battery, ADC-22 AC Adapter, ACC-19 AC Cord, CT60 Cleaver, RS03 Stripper with internal BTR-12A battery, ADC-09A AC Adapter with ACC-09 cord, ELCT2-16C Spare Electrodes (pair), FH-80-12 Fiber Holders (pair), USB-02 Cable, Alcohol Dispenser, Quick Reference Guide, TS-04A Splicer Tripod Screw, TS-04B Cleaver Tripod Screw, On-board Instructional Manual, CC-48 Transit Case, ST-02 Fusion Splicer Strap and Two-year Warranty	S018665
Fujikura 100R Fusion Splicer (machine only) **Includes:** BTR-19 Battery, ADC-22 AC Adapter, ACC-19 AC Cord, ELCT2-16C Spare Electrodes (pair), FH-80-12 Fiber Holders (pair), USB-02 Cable, Alcohol Dispenser, Quick Reference Guild, TS-04A Splicer Tripod Screw, TS-04B Cleaver Tripod Screw, On-board Instructional Manual, Work Tray, CC-48 Transit Case, and Two-year Warranty	S018710
Fujikura 100R Fusion Splicer Kit without Bluetooth with CT60 and RS01 **Includes:** BTR-19 Battery, ADC-22 AC Adapter, ACC-19 AC Cord, CT-60 Cleaver, RS01 Stripper, ADC-09A AC Adapter with ACC-09 cord, ELCT2-16C Spare Electrodes (pair), FH-80-12 Fiber Holders (pair), USB-02 Cable, Alcohol Dispenser, Quick Reference Guide, TS-04A Splicer Tripod Screw, TS-04B Cleaver Tripod Screw, On-board Instructional Manual, CC-48 Transit Case, ST-02 Fusion Splicer Strap and Two-year Warranty	S018712
Fujikura 100R Fusion Splicer without Bluetooth **Includes:** BTR-19 Battery, ADC-22 AC Adapter, ACC-19 AC Cord, ELCT2-16C Spare Electrodes (pair), FH-80-12 Fiber Holders (pair), USB-02 Cable, Alcohol Dispenser, Quick Reference Guide, TS-04A Splicer Tripod Screw, TS-04B Cleaver Tripod Screw, On-board Instructional Manual, CC-48 Transit Case, and Two-year Warranty	S018711
One-Year Extended Warranty	S012996
Two-Year Extended Warranty	S013000

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Fujikura 100R Fusion Splicer

Recommended Products for the 100R

Description	AFL No.
Cleavers and Strippers	
CT-60 Cleaver	S018654
RS01 Thermal Stripper	S016815
RS02 Thermal Stripper	S016816
RS03 Thermal Stripper	S016817
Fiber Holders and V-Grooves	
FH-80-2 Fiber Holder	S018726
FH-80-4 Fiber Holder	S018727
FH-80-5 Fiber Holder	S018728
FH-80-6 Fiber Holder	S018729
FH-80-8 Fiber Holder	S018730
FH-80-9 Fiber Holder	S018731
FH-80-10 Fiber Holder	S018732
FH-80-12 Fiber Holder	S018733
FH-80-12-200 Fiber Holder	S018734
FH-80-12PC 200 to 250um Pitch Conversion Fiber Holder	S018735
FH-80-16 Fiber Holder	S018736
FH-80-16-200 Fiber Holder	S018737
FH-80-16PC 200 to 250um Pitch Conversion Fiber Holder	S018738
FH-70-250 (250 µm coated fiber)	S017111
FH-70-900 (900 µm jacketed fiber)	S017113
FH-70-160 (160 µm coated fiber)	S017095
FH-60-LT900 (Loose buffer 900 µm fiber)	S015181
VG16-02 16 Fiber/250 µm V-Groove	S018739
VG16-02-200 16 Fiber/200 µm V-Groove	S018740
VG12-02 12 Fiber/250 µm V-Groove	S018741
VG12-02-200 12 Fiber/200 µm V-Groove	S018742
VG08-02 8 Fiber/250 µm V-Groove	S018743
VG04-02 4 Fiber/250 µm V-Groove	S018744
FUSEConnect® Accessories	
FH-FC-20 (900 µm within 2.0 mm sheathing) (each)	S014696
FH-FC-30 (900 µm within 3.0 mm sheathing) (pair)	S014695
FH-FC-900 (900 µm cable) (each)	S014697
CLAMP-FC-2000 (pair)	S014705

Description	AFL No.
Batteries and Power Cords	
ADC-22 AC Adapter	S018666
BTR-19 Battery	S018670
DCC-11 splicer to ribbon stripper power cord	S013852
DCC-20 Power Cord Connects ADC-20 to cigarette lighter socket	S017527
DCC-21 Power Cord Connects ADC-20 to power source via alligator clips	S017528
ACC-19 AC Power Cord	S018667
Miscellaneous	
SS01 Single fiber stripper (1 hole)	S017099
ELCT2-16C Electrodes	S018669
Portable Splicing Worktray (see product profile for more detail)	S014773
ASW-02 Splicing Workstation (see product profile for more detail)	S010532
WT-11R Work Tray Right	S018674
WT-11L Work Tray Left	S018673
JP-12 Work Tray J-Plate (Splicer Mount)	S018681
JP-11 J-Plate (Cooling tray attaches to splicer)	S018675
TS-04B Cleaver Tripod Screw	S018691
TS-04A Splicer Tripod Screw (90 Series)	S018677
ST-02 Fusion Splicer Strap	S017525
CLAMP-DC-12 (Drop Cable clamp on work tray)	S017550
FST-12 Fiber Separation Tool	S014012
FAT-04 Fiber Arrangement Tool	S010212
RT-02 Fiber Arrangement Tool	S017465
FAA-03A Ribbon Forming Adhesive (4 oz. bottle)	S008720
FAA-03A Ribbon Forming Adhesive (0.5 liter bottle)	S008622
CC-48 Transit Case	S018672
Splicer V-groove Cleaning Kit	S014397
ST-03 Case and Work Tray Strap	S017549
Mobile Splicing Workstation	S018625
AFL Tote Solution - Cleat Installation Service	S018623



Fujikura 100R Fusion Splicer Kit with CT60 and RS03 (S018665)

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Fujikura 100R Fusion Splicer

Specifications

Parameter		Value
Fiber Alignment Method		Self-Cladding alignment with Surface Melting Tension
Fiber Count Can Be Spliced		Single and up to 16 Fiber Ribbon with Applicable V-groove
Applicable Fiber	Fiber Type	Single-mode Fiber
		Multimode Fiber
	Cladding Diameter	Approx. 125 µm
Applicable Coating	Fiber Holder	Coating Shape: Refer to Options Cleave Length: Approx. 10 mm
Fiber Splice Performance	Splice Loss	ITU-T G.652: Avg 0.05 db
		ITU-T G.651: Avg 0.02 db
		ITU-T G.653: Avg 0.08 db
		ITU-T G.655: Avg 0.08 db
		ITU-T G.657: Avg 0.08 db
	Splice Time	SM Fast Mode: Avg 16 to 18 Seconds
		SM Auto Mode: Avg 19 to 21 Seconds
Applicable Protection Sleeve	Sleeve Type Sleeve Length Sleeve Diameter	Heat Shrinkable Sleeve Max. 66 mm Max. 6.0 mm before Shrink
Sleeve Heat Performance	Heat Time	40 mm FP-05 Mode: Avg 33 to 40 Seconds
		40 mm FP-04T Fast Mode: Avg 19 to 26 seconds
		Single 60 mm Mode: Avg. 8 to 15 Seconds
Fiber Tensile Test Force		Approx. 2.0 N
Electrode Life		Approx. 1,500 Splices
Physical Description	Dimensions W Dimensions D Dimensions H Weight	157 mm 178 mm 171 mm 2.6 kg including Battery
Environmental Condition	Temperature	Operate: -10 to +50°C Storage: -40 to +80°C
	Humidity	Operate: 0 to 95% RH non-condensing Storage: 0 to 95% RH non-condensing
	Altitude	Max. 3,700 m
AC Adapter	Input Output	AC100 to 240V, 50/60Hz, Max. 1.5A Approx. DC 12V, max. 7A
Battery Pack	Type	Rechargeable Lithium Ion
	Output	Approximately DC 12 V, Max 5A
	Capacity	Approximately 165 Splices with Heat Shrink
	Temperature	Operate: -10 to +50°C Recharge: 0 to +40°C Storage < One (1) Year: -20 to +20°C Storage < Three (3) Months: -20 to +40°C Storage < One (1) Month: -20 to +50°C
	Recharge Time	≤ Six (6) Hours from Empty
	Battery Life	Approximately 500 Recharge Cycles
Display	LCD Monitor Magnification	TFT 4.95 inch Tough Screen Approx. 30x: 12-Fiber Ribbon Approx. 90x: Single Fiber
Illumination	V-Grooves	LED Lamp
Data Storage	Splice Mode Heat Mode Splice Result Splice Image	100 splice modes 30 heat modes 20,000 splices 100 images

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Specifications (cont.)

Parameter		Value
Other Features	Automatic Functions	Splice-mode Select by Fiber Count Analysis
		Fusion Power Calibration
		Fully Automatic Cleaver Blade Management
		Wind Protector: Open and Close
		Clamp: Auto Clamping Force Adjustment
		Z-Holder Base: Auto Placement Correction
		Z-Holder Base: Gap Alignment Correction
		Splice Start
		Heater Lid: Open and Close
		Heater Clamp: Open and Close
		Heater Start
	Reference Guide	Video and PDF Store on Splicer
	Electrode	Replaceable without Tool
	Software for PC	Splicer Update via Internet
		Parameter Upload and Download
		Operating Splicer with PC
		Splice Image Download to PC
	GPS	Splice Location Recorded to Memory
		GEO Fencing
	Screw Hole for Tripod	1/4-20 UNC

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