

# Fujikura 90R Fusion Splicer

The Fujikura 90R is the mass fusion splicer workhorse of the splicing world. As data demand continues to rise, the solution to handle the increased traffic is to increase fiber counts. As a result, fiber counts being utilized in enterprise data centers, campus, and metro networks have grown enough to make single fiber splicing too costly and timely. High density cabling made possible by SpiderWeb Ribbon® (SWR®) and others like it are spurring ribbon splicing activity in places that have traditionally used loose fiber. The 90R is the answer to these changes in splicing demand.

With automated splice start, tube heater, wind protector, cleave tracking, and blade rotations for up to 2 cleavers at a time, this splicer frees up operator time for other fiber preparation steps. With 16-fiber add-ons, the Fujikura 90R splicer enables customers to successfully splice 16-count ribbon fibers with a 200 µm pitch and size.

With the Fujikura 90R, you can keep your splicer in the field longer with field replaceable V-grooves. When V-grooves can no longer be cleaned after extended use, or are accidentally damaged, you can resume splicing in minutes by installing the spare set included with your 90R kit. With the AFL Tote Solution installed, the 90R transit case securely integrates with Milwaukee's PACKOUT™ system, offering faster transport, stability, and time-savings for contractors and technicians. Put our 90R to the test by contacting us to see its capabilities first-hand, 1-800-235-3423.

## Features

- Cleave tracking and upkeep with wireless communication
- Automated wind protector, tube heater and splice operation
- User replaceable V-grooves
- 200 µm and 250 µm SWR universal ribbon prep accessories
- Graphical User Interface with 5.0" Touchscreen
- PC software and 90R manual downloaded from splicer
- Multi-function transit case with integrated workstation

## Applications

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

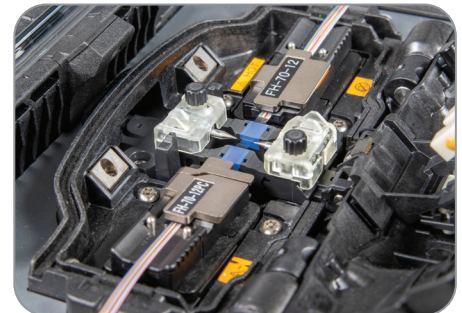


Bluetooth

90R



In Work Tray



Wind Protector Open

# Fujikura 90R Fusion Splicer

## Ordering Information

DESCRIPTION	AFL NO.
<b>Fujikura 90R Fusion Splicer (machine only) includes:</b> BTR-15 Battery, ADC-20 AC Adapter, ACC-14 AC Cord, ELCT2-16B Spare Electrodes (pair) with spare V-Grooves (VG12-01), FH-70-12 Fiber Holders (pair), USB Cable, Alcohol Dispenser, Quick Reference Guide, TS-03 Tripod Screw, Video Instruction Manual, Work Tray, CC-39 Transit Case, and Two-year Warranty	S017509
<b>Fujikura 90R Standard Fusion Splicer Kit (with cleaver &amp; thermal stripper) includes:</b> BTR-15 Battery, CT50 Cleaver, RS03 Stripper, ADC-20 AC Adapter, ACC-14 AC Cord, ELCT2-16B Spare Electrodes (pair) with spare V-Grooves (VG12-01), FH-70-12 Fiber Holders (pair), USB Cable, Alcohol Dispenser, Quick Reference Guide, TS-03 Tripod Screw, Video Instruction Manual, CC-39 Transit Case, and Two-year Warranty	S017511
<b>Fujikura 90R Fusion Splicer without Bluetooth (machine only) includes:</b> BTR-15 Battery, ADC-20 AC Adapter, ACC-14 AC Cord, ELCT2-16B Spare Electrodes (pair) with spare V-Grooves (VG12-01), FH-70-12 Fiber Holders (pair), USB Cable, Alcohol Dispenser, Quick Reference Guide, TS-03 Tripod Screw, Video Instruction Manual, CC-39 Transit Case, and Two-year Warranty	S017540
<b>Fujikura 90R Fusion Splicer Kit without Bluetooth (with cleaver &amp; thermal stripper) includes:</b> BTR-15 Battery, CT50 Cleaver, RS01 Stripper, ADC-20 AC Adapter, ACC-14 AC Cord, ELCT2-16B Spare Electrodes (pair) with spare V-Grooves (VG12-01), FH-70-12 Fiber Holders (pair), USB Cable, Alcohol Dispenser, Quick Reference Guide, TS-03 Tripod Screw, Video Instruction Manual, CC-39 Transit Case, and Two-year Warranty	S017510
<b>Fujikura SpliceReady 90R Splicer Kit includes:</b> Fujikura 90R Standard Kit (S017511), FP-05 40 mm (Ribbon-12) protection sleeve, Splicer V-groove cleaning kit, FH-70-12 Fiber holders (pair), AFL WFW wipes mini tub (90 wipes), FCC2 fiber cleaning fluid (3 oz.), RT-02 Ribbonizing tool	S018583
<b>Fujikura SpliceReady 90R 200 µm Splicer Kit includes:</b> Fujikura 90R Standard Kit (S017511), FP-05 40 mm (Ribbon-12) protection sleeve, VG12-01-200 200 µm V-groove, FH-70-12PC Fiber holders for 12-fiber pitch conversion (pair), FH-70-12-200 fiber holders for 200 µm pitch ribbons (pair), RT-02 Ribbonizing tool, Splicer V-groove cleaning kit, FCC2 fiber cleaning fluid (3 oz.), AFL WFW wipes mini tub (90 wipes)	S018584
One-year Extended Warranty	S012996
Two-year Extended Warranty	S013000

## Recommended Products for the 90R

DESCRIPTION	AFL NO.	DESCRIPTION	AFL NO.
<b>Cleavers and Strippers</b>		<b>Miscellaneous</b>	
CT50 Cleaver	S017030	SS01 Single fiber stripper (1 hole)	S017099
RS01 Thermal Stripper	S016815	ELCT2-16B Electrodes	S017103
RS02 Thermal Stripper	S016816	Portable Tripod Workstation (see product profile for more detail)	S014773
RS03 Thermal Stripper	S016817	ASW-02 Splicing Workstation (see product profile for more detail)	S010532
<b>Fiber Holders (pair)</b>		WT-09R Work Tray Right	S017515
FH-70-2	S017114	WT-09L Work Tray Left	S017516
FH-70-4	S017115	JP-09 Work Tray J-Plate	S017517
FH-70-6	S017116	JP-10 J-Plate (Cooling tray attaches to splicer)	S017522
FH-70-8	S017117	JP-10-FC J-Plate with Fiber Clamps	S017523
FH-70-10	S017118	TS-03 Tripod Screw (90 Series)	S017524
FH-70-12	S017119	ST-02 Fusion Splicer Strap	S017525
FH-70-12PC (pitch conversion holder for 200 µm loose fibers)	S017464	CLAMP-DC-12 (Drop Cable clamp on work tray)	S017550
FH-70-12-200 (200 µm pitch ribbons)	S017681	FST-12 Fiber Separation Tool	S014012
FH-70-16	S017533	FAT-04 Fiber Arrangement Tool	S010212
FH-70-16-200 (200 µm pitch for 16 fiber ribbon)	S018610	RT-02 Fiber Arrangement Tool	S017465
FH-70-16PC (Pitch conversion holder for 200 µm loose 16 fibers)	S018611	VG12-01 12 fiber V-groove	S017548
FH-70-250 (250 µm coated single fiber)	S017111	VG12-01-200 12 fiber V-groove (200 µm pitch ribbons)	S017680
FH-70-900 (900 µm jacketed single fiber)	S017113	VG04-01 4 fiber V-groove	S017551
FH-60-LT900 (Loose buffer 900 µm fiber)	S015181	VG08-01 Spare 8 fiber V-grooves	S017508
<b>FUSEConnect® Accessories</b>		VG16-01 16 fiber V-groove	S017552
FH-FC-20 (900 µm within 2.0 mm sheathing) (each)	S014696	VG16-01-200 16 Fiber V-groove	S018612
FH-FC-30 (900 µm within 3.0 mm sheathing) (pair)	S014695	(200 µm pitch for 16 fiber ribbons)	
FH-FC-900 (900 µm cable) (each)	S014697	FAA-03A Ribbon Forming Adhesive (4 oz. bottle)	S008720
CLAMP-FC-2000 (pair)	S014705	FAA-03A Ribbon Forming Adhesive (0.5 liter bottle)	S008622
<b>Batteries and Power Cords</b>		CC-39 Transit Case	S017514
ADC-20 AC Adapter	S017513	Splicer V-groove Cleaning Kit	S014397
BTR-15 Battery	S017512	ST-03 Case and Work Tray Strap	S017549
DCC-11 splicer to ribbon stripper power cord	S013852	AFL Tote Solution - Cleat Installation Service	S018623
DCC-20 Power Cord	S017527		
Connects ADC-20 to cigarette lighter socket			
DCC-21 Power Cord	S017528		
Connects ADC-20 to power source via alligator clips			
ACC-14 AC Power Cord	S014536		

# Fujikura 90R Fusion Splicer

## Specifications

PARAMETER		VALUE
Fiber Alignment Method		Self cladding alignment with melting surface tension
Fiber Count Can Be Spliced		Up to 16 fiber ribbon
Applicable Fiber	Fiber Type	Single mode optical fiber
	Cladding Dia.	Multi mode optical fiber
Applicable Coating	Fiber Holder	Approx. 125 μm
		Coating shape. : Refer to fiber holder options
Fiber Splice Performance	Splice Loss	Cleave length : 10 mm
		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
	Splice Time	ITU-T G.657 : Avg. 0.05 dB
SM FAST mode : Avg. 14 to 15 sec. SM AUTO mode : Avg. 19 to 20 sec.		
Applicable Protection Sleeve	Sleeve Type	Heat-shrinkable sleeve
	Sleeve Length	Max. 66 mm
	Sleeve Dia.	Max. 6.0 mm before shrinking
Sleeve Heat Performance	Heat Time	40 mm FP-05 mode : Avg. 38 to 40 sec.
		40 mm FP-04T mode : Avg. 17 to 19 sec.
Fiber Tensile Test Force		Single 60 mm mode: Avg. 13 to 15 sec.
Electrode Life		Approx. 2.0 N
Physical Description	Dimensions W	Approx. 1,500 splices
	Dimensions D	Approx. 170 mm without projection
	Dimensions H	Approx. 173 mm without projection
	Weight	Approx. 150 mm without projection
Environmental Condition	Temperature	Approx. 2.6 kg including battery
		Operate : -10 to 50°C
		Storage : -40 to 80°C
AC Adaptor	Input	Operate : 0 to 95% RH non-condensing
		Storage : 0 to 95% RH non-condensing
		Max. 3,700 m
Battery Pack	Type	AC100 to 240 V, 50/60 Hz, Max. 1.5 A
	Output	Rechargeable Lithium Ion
	Capacity	Approx. DC14.4V / 6,380 mAh
	Temperature	Approx. 165 splice and heat cycles
	Battery Life	Recharge : 0 to 30°C
Display	LCD Monitor	Storage : -20 to 30°C
		Approx. 500 recharge cycles
		Recharge Time
Illumination	V-Grooves	TFT 5 inches with touch screen
		Approx. 20X : 12 Ribbon to 60X : Single
Interface	PC	LED lamp
	External Led Lamp	USB2.0 Mini B type
	Ribbon Stripper	USB2.0 A type, Approx. DC5V, 500 mA
	Wireless	Mini DIN 6 pin, DC12V, Max. 1A
Data Storage	Splice Mode	Bluetooth 4.1 LE
	Heat Mode	100 splice modes
	Splice Result	30 heat modes
	Splice Image	10,000 splices
Screw Hole For Tripod		100 images
Other Features	Automatic Functions	1/4-20 UNC
		Splice mode select by fiber type analysis
		Discharge power calibration
		Wind protector : open/close
		Sheath clamp : open
Reference Guide	Electrode	Heater lid : open/close
		Heater clamp : open/close
		Video and PDF file stored in splicer
		Replaceable without tool