



## Fusion Splicing



Bluetooth®

90R

### 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. New to the 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. Put our 90R to the test by contacting us to see its capabilities first-hand, 1-800-235-3423.



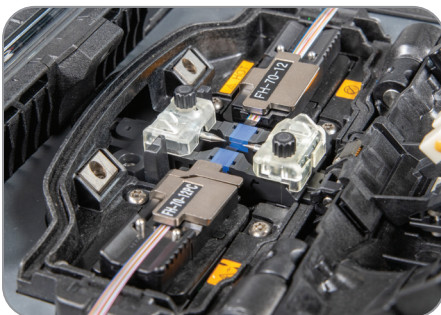
In Work Tray

#### 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



Wind Protector Open

## Fujikura 90R Fusion Splicer

### Ordering Information

DESCRIPTION	AFL NO.
<b>90R Fusion Splicer (machine only)</b> <b>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, Splicer Carrying Strap, Quick Reference Guide, TS-03 Tripod Screw, Video Instruction Manual, Work Tray, CC-39 Transit Case with Carrying Strap and Two Year Warranty	S017509
<b>90R Fusion Splicer Kit (with cleaver &amp; thermal stripper)</b> <b>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, Splicer Carrying Strap, Quick Reference Guide, TS-03 Tripod Screw, Video Instruction Manual, CC-39 Transit Case with Carrying Strap and Two Year Warranty	S017511
<b>90R Fusion Splicer without Bluetooth (machine only)</b> <b>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, Splicer Carrying Strap, Quick Reference Guide, TS-03 Tripod Screw, Video Instruction Manual, CC-39 Transit Case with Carrying Strap and Two Year Warranty	S017540
<b>90R Fusion Splicer Kit without Bluetooth (with cleaver &amp; thermal stripper)</b> <b>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, Splicer Carrying Strap, Quick Reference Guide, TS-03 Tripod Screw, Video Instruction Manual, CC-39 Transit Case with Carrying Strap and Two Year Warranty	S017510
One Year Extended Warranty	S012996
Two Year Extended Warranty	S013000

### Recommended Products for the 90R


DESCRIPTION	AFL NO.
<b>Cleavers and Strippers</b>	
CT50 Cleaver	S017030
RS01 Thermal Stripper	S016815
RS02 Thermal Stripper	S016816
RS03 Thermal Stripper	S016817
<b>Fiber Holders (pair)</b>	
FH-70-2	S017114
FH-70-4	S017115
FH-70-6	S017116
FH-70-8	S017117
FH-70-10	S017118
FH-70-12	S017119
FH-70-12PC (pitch conversion holder for 200 µm loose fibers)	S017464
FH-70-12-200 (200 µm pitch ribbons)	S017681
FH-70-16	S017533
FH-70-250 (250 µm coated single fiber)	S017111
FH-70-900 (900 µm jacketed single fiber)	S017113
FH-60-LT900 (Loose buffer 900 µm fiber)	S015181
<b>FUSEConnect® Accessories</b>	
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
<b>Batteries and Power Cords</b>	
ADC-20 AC Adapter	S017513
BTR-15 Battery	S017512
DCC-11 splicer to ribbon stripper power cord	S013852
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

DESCRIPTION	AFL NO.
<b>Miscellaneous</b>	
SS01 Single fiber stripper (1 hole)	S017099
ELCT2-16B Electrodes	S017103
Portable Tripod Workstation (see product profile for more detail)	S014773
ASW-02 Splicing Workstation (see product profile for more detail)	S010532
WT-09R Work Tray Right	S017515
WT-09L Work Tray Left	S017516
JP-09 Work Tray J-Plate	S017517
JP-10 J-Plate (Cooling tray attaches to splicer)	S017522
JP-10-FC J-Plate with Fiber Clamps	S017523
TS-03 Tripod Screw (90 Series)	S017524
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
VG12-01 12 fiber V-groove	S017548
VG12-01-200 12 fiber V-groove (200µm pitch ribbons)	S017680
VG04-01 4 fiber V-groove	S017551
VG08-01 Spare 8 fiber V-grooves	S017508
VG16-01 16 fiber V-groove	S017552
FAA-03A Ribbon Forming Adhesive (4 oz. bottle)	S008720
FAA-03A Ribbon Forming Adhesive (0.5 liter bottle)	S008622
CC-39 Transit Case	S017514
Splicer V-Groove Cleaning Kit	S014397



**Fiber Arrangement Tool**

- Features an easy-to-use fiber arrangement method utilizing linear travel
- Includes a spare paste applicator



**V-Groove Cleaning Kit**

- Removes environmental contamination from the v-groove of the splicer
- Maintains performance and ensures fiber alignment

# Fujikura 90R Fusion Splicer

## Fusion Splicing

### 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 Multi mode optical fiber
	Cladding Dia.	Approx. 125 μm
Applicable Coating	Sheath Clamp	Coating shape. : Refer to options Cleave length : 10mm
	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. 0.05 dB
Fiber Splice Performance	Splice Time	SM FAST mode : Avg. 14 to 15 sec. SM AUTO mode : Avg. 19 to 20 sec.
	Sleeve Type	Heat-shrinkable sleeve
Applicable Protection 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. Single 60 mm mode: Avg. 13 to 15 sec.
	Fiber Tensile Test Force	Approx. 2.0 N
Electrode Life	Approx. 1,500 splices	
Physical Description	Dimensions W	Approx. 170 mm without projection
	Dimensions D	Approx. 173 mm without projection
	Dimensions H	Approx. 150 mm without projection
	Weight	Approx. 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 Adaptor	Input	AC100 to 240 V, 50/60 Hz, Max. 1.5 A
Battery Pack	Type	Rechargeable Lithium Ion
	Output	Approx. DC14.4V / 6,380 mAh
	Capacity	Approx. 165 splice and heat cycles
	Temperature	Recharge : 0 to 30°C Storage : -20 to 30°C
	Battery Life	Approx. 500 recharge cycles
	Recharge Time	Approx. 5 – 8 hours from empty
Display	LCD Monitor	TFT 5 inches with touch screen
	Magnification	Approx. 20X : 12 Ribbon to 60X : Single
Illumination	V-Grooves	LED lamp
Interface	PC	USB2.0 Mini B type
	External Led Lamp	USB2.0 A type, Approx. DC5V, 500 mA
	Ribbon Stripper	Mini DIN 6 pin, DC12V, Max. 1A
	Wireless	Bluetooth 4.1 LE
Data Storage	Splice Mode	100 splice modes
	Heat Mode	30 heat modes
	Splice Result	10,000 splices
	Splice Image	100 images
Screw Hole For Tripod		1/4-20 UNC
Other Features	Automatic Functions	Splice mode select by fiber type analysis
		Discharge power calibration
		Wind protector : open/close
		Sheath clamp : open
	Heater lid : open/close	
Heater clamp : open/close		
Reference Guide	Video and PDF file stored in splicer	
Electrode	Replaceable without tool	