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**Data Sheet**

August 2, 2026

FUJIKURA

## Fujikura 90R Ribbon Fiber Fusion Splicer

The Fujikura 90R is a mass fusion splicer for single fibers and ribbons up to 12 fibers. It uses self cladding alignment with melting surface tension (fixed V-groove class) rather than active core alignment. Automated wind protector, tube heater, and splice operation, plus Bluetooth cleaver tracking, support high-productivity ribbon work. Field-replaceable 12-fiber V-grooves with pre-installed electrodes minimize downtime. FH-70-12 holders support encapsulated ribbons and 200/250 um Spider Web Ribbon (SWR). Battery operation uses the BTR-15 class lithium pack on current kits. High-fiber-count ribbon splicing in data centers, campus, and metro networks; SWR and encapsulated 12-fiber ribbon plant; single-fiber splicing with matching holders when needed. Related Holders: FH-70-12, FH-70-12-200, FH-70-250, FH-70-900, FH-70-2/4/8/10, etc. Spare V-groove example: VG12-01-200 (12 fiber, 200-210 um spacing) Keep V-grooves clean; replace with spare set when damaged. Load SWR carefully into FH-70-12 pitch grooves. Use matched ribbon cleaver and stripper. Observe electrode and battery intervals. 90R is cladding-alignment mass fusion—not active core alignment like 90S. Confirm 90R vs 90R12 kit contents and installed V-groove pitch.



MODEL

**Fujikura 90R**

CALIBRATION

**Available on request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**90R**

LISTING

<https://aumictechlabs.com/products/90r-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

### This unit

The Fujikura 90R is a ribbon fiber fusion splicer engineered for high-volume precision splicing of single fibers, standard encapsulated ribbons, and SpiderWeb Ribbon® (SWR) fibers. Purpose-built

for data centers, telecommunications, and enterprise networks, the 90R automates splicing operations across 12-fiber and 16-fiber ribbon configurations while delivering consistent low splice loss and rapid cycle times. Technical Specifications Splicing Performance: Fiber alignment via self-cladding alignment using melting surface tension (passive, non-active core alignment) Compatible with single-mode (SM) and multi-mode (MM) fibers: ITU-T G.652, G.651, G.657 Supports 12-fiber and 16-fiber ribbon configurations plus single-fiber splicing Accommodates 200  $\mu\text{m}$  and 250  $\mu\text{m}$  coated fiber spacing with field-replaceable, switchable V-groove system Average splice loss: G.652 0.05 dB, G.651 0.02 dB, G.657 0.05 dB average Splice & Heat Timing: SM FAST mode splice time: 11–12 sec SM AUTO mode splice time: 16–17 sec or 19–20 sec FP-05 heat time (40 mm): 38–40 sec FP-04T heat time (40 mm): 17–19 sec or 17–18 sec Single fiber heat time (60 mm): 13–15 sec Single fiber heat time (40 mm): 14–16 sec Electrode life: approximately 1,500 splices Display & Interface: 4.9-inch or 5.0-inch color TFT display Key Features Passive surface-tension alignment eliminates active core alignment complexity Single platform handles ribbons and individual fibers Field-replaceable V-groove modules enable rapid fiber pitch conversion Fiber holder FH-70-12 supports 0.3 mm and 0.4 mm encapsulated ribbons, 200  $\mu\text{m}$  and 250  $\mu\text{m}$  SWR Pitch conversion holder (FH-70-12PC) converts 200  $\mu\text{m}$  to 250  $\mu\text{m}$  spacing Typical Applications Data center backbone splicing, high-density ribbon deployments, telecommunications infrastructure, enterprise fiber-to-the-building installations, and multi-fiber mass-termination projects. Compatibility & Integration Works with G.652, G.651, and G.657 standard fiber types. Fiber holder ecosystem accommodates multiple ribbon geometries and coated fiber diameters, enabling flexible deployment across mixed fiber inventories.

## Features & description

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From manufacturer datasheet

### Features

- Mass fusion up to 12-fiber ribbon; also single fiber
- Self cladding alignment with surface melting tension
- Field-replaceable V-grooves with electrodes
- Automated wind protector and tube heater
- FH-70 series holders including FH-70-12 for SWR
- Typical splice loss 0.05 dB G.652 / 0.02 dB G.651
- SM FAST about 11-15 s class (revision dependent)
- Bluetooth cleaver tracking (OEM)
- Multi-function transit case workstation

# 90R Characteristics / Specifications

| PARAMETER              | VALUE                                                                                   |
|------------------------|-----------------------------------------------------------------------------------------|
| Model                  | 90R / 90R12                                                                             |
| Manufacturer           | Fujikura / AFL                                                                          |
| Instrument Type        | Mass / ribbon fusion splicer                                                            |
| Fiber Alignment        | Self cladding alignment with melting surface tension                                    |
| Fiber Count            | Single and up to 12-fiber ribbon                                                        |
| Cladding Diameter      | approximately 125 um Typical Average Splice Loss (cut-back, identical Fujikura fibers): |
| Splice Time (examples) | SM FAST about 11-15 s; SM AUTO about 16-20 s (revision/environment dependent)           |
| Related Holders        | FH-70-12, FH-70-12-200, FH-70-250, FH-70-900, FH-70-2/4/8/10, etc.                      |

# 90R Specifications

| PARAMETER                                | VALUE                                                                                                                                     |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Fujikura 90R Ribbon Fiber Fusion Splicer | Overview                                                                                                                                  |
| Key Features                             | - Mass fusion up to 12-fiber ribbon; also single fiber                                                                                    |
| Technical Specifications                 | Model: 90R / 90R12                                                                                                                        |
| Operational Notes                        | 90R is cladding-alignment mass fusion—not active core alignment like 90S. Confirm 90R vs 90R12 kit contents and installed V-groove pitch. |

# Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Specifications

| PARAMETER         | VALUE                                                |
|-------------------|------------------------------------------------------|
| Model             | 90R / 90R12                                          |
| Manufacturer      | Fujikura / AFL                                       |
| Instrument Type   | Mass / ribbon fusion splicer                         |
| Fiber Alignment   | Self cladding alignment with melting surface tension |
| Fiber Count       | Single and up to 12-fiber ribbon                     |
| Cladding Diameter | approximately 125 um                                 |

Typical Average Splice Loss (cut-back, identical Fujikura fibers):  
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  
Splice Time (examples): SM FAST about 11-15 s; SM AUTO about 16-20 s (revision/environment dependent)  
Related Holders: FH-70-12, FH-70-12-200, FH-70-250, FH-70-900, FH-70-2/4/8/10, etc.  
Spare V-groove example: VG12-01-200 (12 fiber, 200-210 um spacing)

Standard Operating Conditions

Keep V-grooves clean; replace with spare set when damaged. Load SWR carefully into FH-70-12 pitch grooves. Use matched ribbon cleaver and stripper. Observe electrode and battery intervals.

Operational Notes

90R is cladding-alignment mass fusion-not active core alignment like 90S. Confirm 90R vs 90R12 kit contents and installed V-groove pitch.

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

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NIST-traceable calibration · SAM registered ·  
30-day returns  
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.