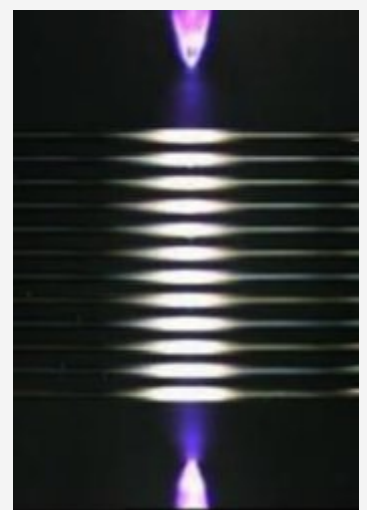
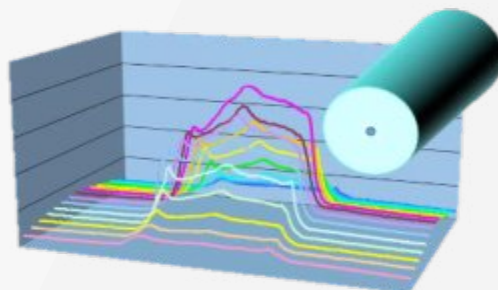




90R12 je zváračka pre hromadné zváranie schopná spájať až 12 plochých káblov súčasne

90R12 Zváračka pre hromadné zváranie

Zváračka hmoty 90R12 má širokú plochu ohrevu až pre 12 vlákien. Široká medzera medzi elektródami rovnomerne roztaví vlákna a má ovládanie oblúkového výboja v reál-nom čase pomocou analýzy intenzity jasú oblúka.



Analýza výkonu oblúka pozorovaním intenzity jasú

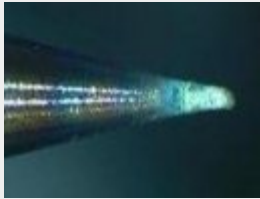
Pokročilá inovácia

Vymeniteľná V drážka

Hromadná zváračka 90R12 obsahuje náhradnú sadu 12 vláknových


V-drážok s nainštalovanými elektródami a pripravenými na spájanie ako súčasť štandardného balenia. Tieto náhradné V-drážky sú vymeniteľné na mieste, takže vaše prestroje sú minimalizované.

Glass deposition on Electrode




➔

Glass deposition on V-groove



Cause of Large Fiber Offset

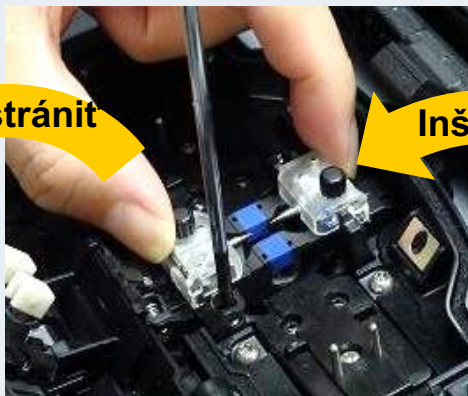
No.	Gap [μm]	Offset [μm]	Clearance L	Clearance R
1	68	0.9	1.4	1.9
2	63	0.3	0.5	1.1
3	55	1.3	0.7	0.9
4	54	5.2	1.7	1.2
5	54	0.4	1.3	0.4
6	62	1.1	0.4	0.7
7	48	1.2	1.9	0.3
8	48	2.7	1.0	1.5
9	48	0.8	1.9	0.1
10	43	6.7	0.9	0.3
11	42	0.7	0.4	1.8
12	40	2.8	2.0	0.5



Glass deposited V-groove and electrodes

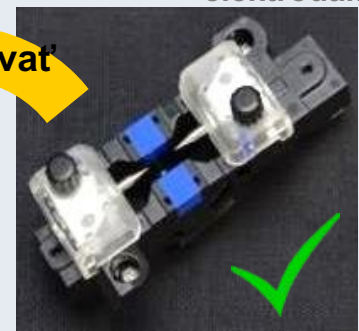


Odstrániť



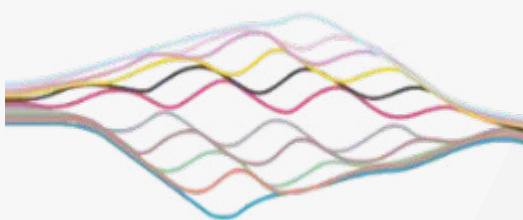
Inštalovať

Náhradná V-drážka so stabilizovanými elektródami



1. Univerzálny držiak na vlákna

Držiak vlákien FH-70-12 je kompatibilný s mnohými typmi 12-vláknových pásek, ako sú zapuzdrené pásky s hrúbkou 0,3 mm alebo 0,4 mm a 200μm alebo 250μm potiahnutá pavučina (SWR). V-drážky s rozstupom 250 μm v držiaku vlákna FH-70-12 zjednodušujú vkladanie SWR a prípravu pásky.

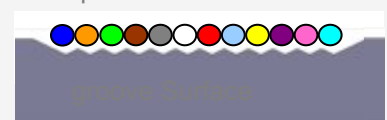


SWR



FH-70-12

250μm coated SWR V-

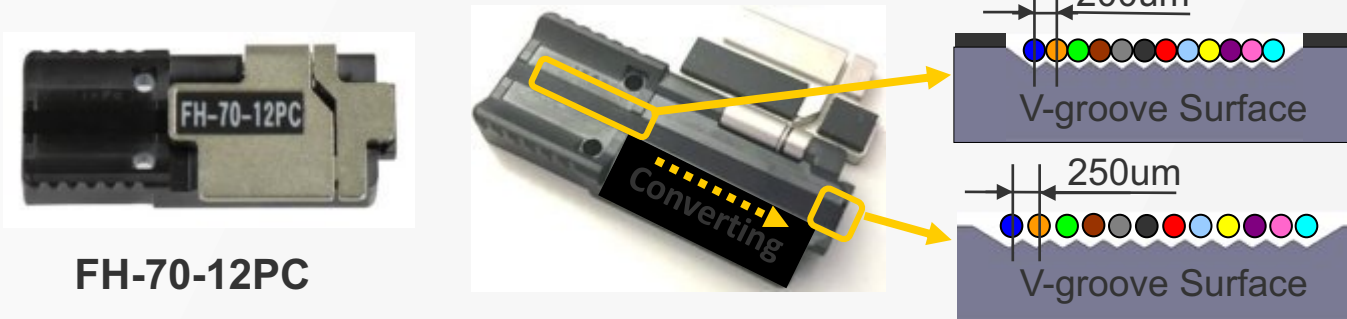


200μm coated SWR



2. Rozsah konverzie držiaku na vlákna

Držiak vlákien na konverziu rozstupu, FH-70-12PC, umožňuje konverziu rozstupu jednotlivých 200 µm potiahnutých vlákien z rozstupu 200 µm na 250 µm. Konvertované 200µm vlákna možno teraz vložiť do zváračky hromadnej fúzie 90R12.



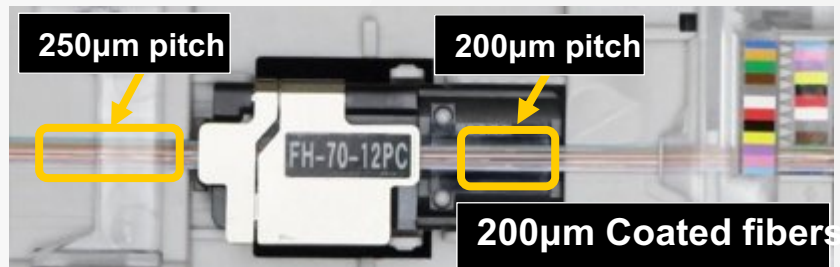
FH-70-12PC

3. Nástroj na stuhovanie

RT-02 je nástroj, ktorý umožňuje rýchlu a jednoduchú stuhnúť 12 jednotlivých vlákien do dočasnej ochrany, ktorú je možné spájať pomocou 90R12. Pri použití tohto páskovacieho nástroja nie je potrebné žiadne adhezívne lepidlo, pretože usporiadané vlákna sú okamžite vložené do držiaka vlákien. RT-02 nevyžaduje, aby používateľ vložil vlákna v sekvencii farebného kódu, čo je potrebné pri iných nástrojoch na usporiadanie pásek. Používateľ si môže vybrať ľubovoľné vlákno náhodne a umiestniť ho do správneho slotu podľa štítku s farebným kódom na nástroji. RT-02 je použiteľný na stuhnúť vlákien potiahnutých 200 µm aj 250 µm. Je tiež schopný stuhnúť vlákna potiahnuté 200 µm na pásku s rozstupom 250 µm pomocou držiaka vlákna na konverziu rozstupu FH-70-12PC.







RT-02



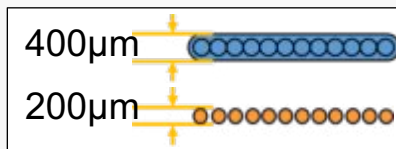
Ribbonizing 200µm coating fiber

4. Potrebne nástroje pre hromadné spájanie

12 Fiber Ribbon Structure		Fiber Holder	Ribbonizing Tool
SWR and Encapsulated Ribbon	250µm coating diameter with 250µm pitch	FH-70-12 	Not required
	200µm coating diameter with 250µm pitch		
Non-ribbonized Fibers	250µm coating diameter		RT-02 or FAT-04 
	200µm coating diameter	FH-70-12PC 	RT-02 

5. Univerzálny odizolovač plochých káblov

Pásové odstraňovače primárnej ochrany vlákna série RS sú kompatibilné s vláknami potiahnutými 200 μm až 400 μm bez výmeny nožov odstraňovača.



Dostupný rozsah hrúbky

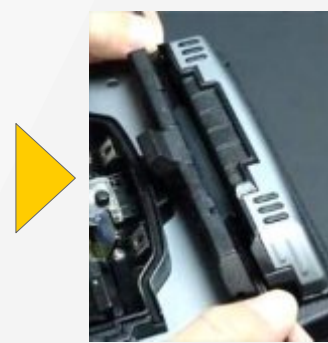


RS03

6. Univerzálny rúrkový ohrievač

Hromadná zváračka 90R12 môže pred zmrštením umiestniť tepelnú manžetu s priemerom maximálne 6,0 mm. Výsledkom je, že podporuje širokú škálu veľkostí ochranných rukávov.

Max. 6.0mm diameter before shrinking



Užívateľsky prívetivý

1. Automatizovaná funkčnosť

Automatizovaná ochrana proti vetru a svorky ohrievača podporujú operátora pri dokončení celého procesu zvárania s minimálnymi manuálnymi krokmi.



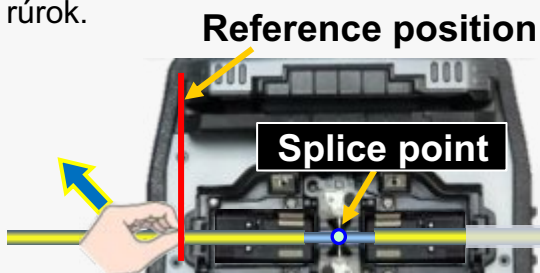
Automatizovaná ochrana proti vetru - otváranie a zatváranie



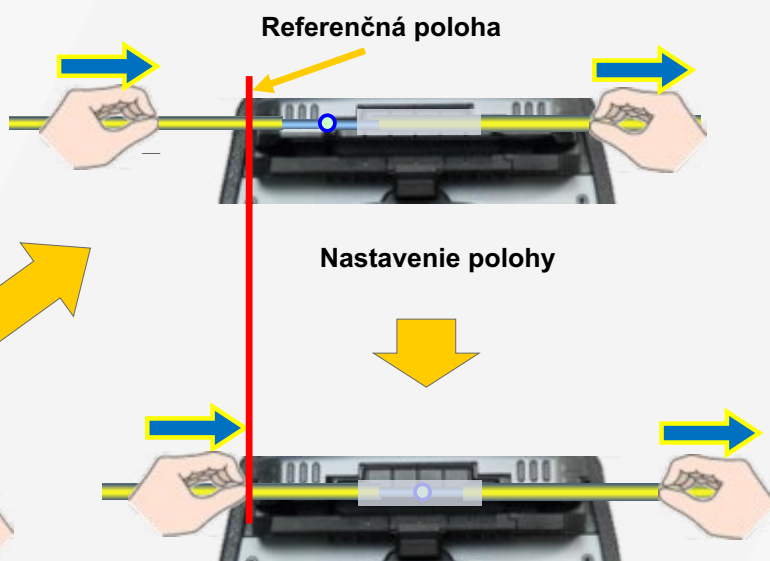
Automatizovaná svorka ohrievača trubice

2. Jednoduché centrovanie objímky

Zváračka na zváranie hmoty 90R12 sa vyznačuje jednoduchým umiestnením objímky s určenou strediacou oblasťou na vrchu ohrievača rúrok.



Uchopte zvarené vlákno



Vycentrované správne

3. Prenosné puzdro

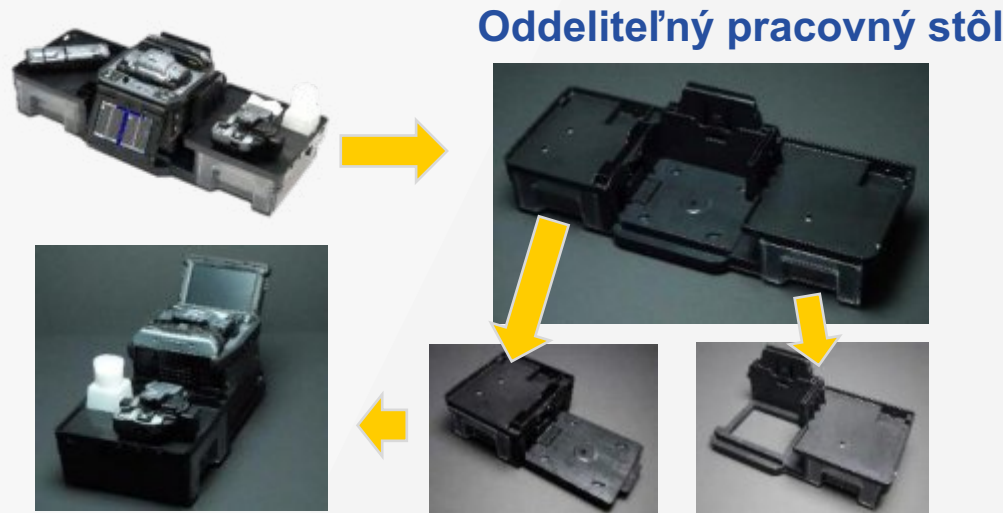
Existuje niekoľko spôsobov, ako využiť prenosný kufrík 90R12. 90R12 je pripravený na použitie jednoduchým otvorením kufríka, ale je tiež možné použiť 90R12 na vrchu kufríka alebo len s pracovným stolom v závislosti od pracovného prostredia.

Veko prenosného kufríka sa stáva pracovným stolom



4. Pracovný stôl

Novo navrhnutý pracovný stôl má mnoho funkcií. Na uskladnenie slúžia dve zásuvky, sú dostatočne veľké na uloženie náradia alebo akumulátorov. Pracovný stôl je tiež možné rozdeliť na dve časti, takže sa dá prispôbiť vášmu pracovnému priestoru.



Dostatok miesta v prenosnom kufríku



Sekač a odizolovač



Batérie



Veľký úložný priestor pod pracovným stolom

Active Blade Management Technology

1. Automatické otáčanie čepele

Zváračka 90R12 a štiepačka vlákien CT50 sú vybavené bezdrôtovým dátovým pripojením. Táto schopnosť umožňuje automatické otáčanie čepele štiepačky, keď zváračka vyhodnotí, že čepeľ je opotrebovaná. Zváračka 90R12 sa tiež môže pripojiť k dvom CT50 a RS03 súčasne.

Active Blade Management Technology



Motorizovaná čepeľ

No.	Splice	Clear	Clear	Clear
1	62	0.9	0.8	0.7
2	65	1.6	0.8	0.1
3	57	1.2	0.7	0.1
4	65	0.7	0.6	5.2
5	60	1.6	0.4	0.5
6	46	0.3	0.2	0.0
7	46	0.2	0.5	0.3
8	55	1.7	0.8	0.5
9	50	1.7	0.1	0.5
10	56	1.7	0.8	0.6
11	49	1.9	0.6	0.9
12	41	1.2	0.2	0.8



2. Živé riadenie čepele

Zváračka 90R12 zobrazuje zostávajúcu životnosť čepele a informuje používateľa, keď je potrebná zmena výšky čepele, zmena polohy alebo nová čepeľ.

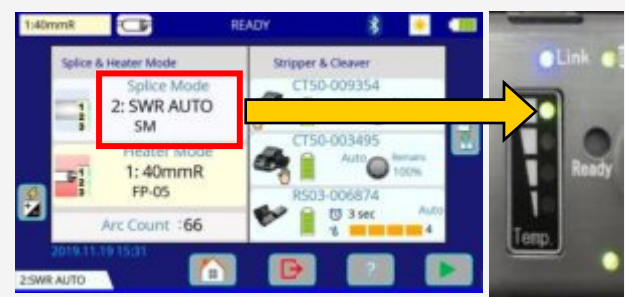
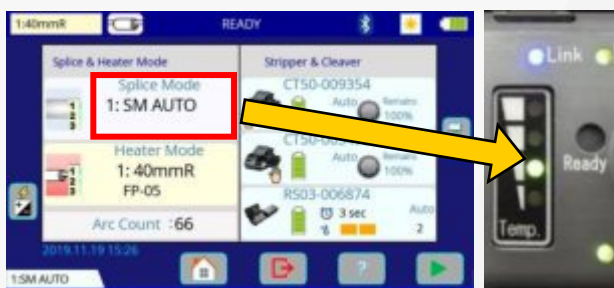
No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8
0	0	0	0	0	0	0	0
1014	1041	1175	1167	1522	1134	1530	1439
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
1185	1218	1025	1407	1338	1484	1250	1000

Blade Height: L(1)
Recommended Position



3. Kontrola stavu odizolovania

Keď používateľ zmení režim zvarovania, napr. z režimu spájania pásov s 12 vláknami do režimu zvarovania vlákien SWR, odstraňovač pásov RS03 automaticky mení teplotu a čas ohrevu pomocou bezdrôtového príkazu zo zváračky.



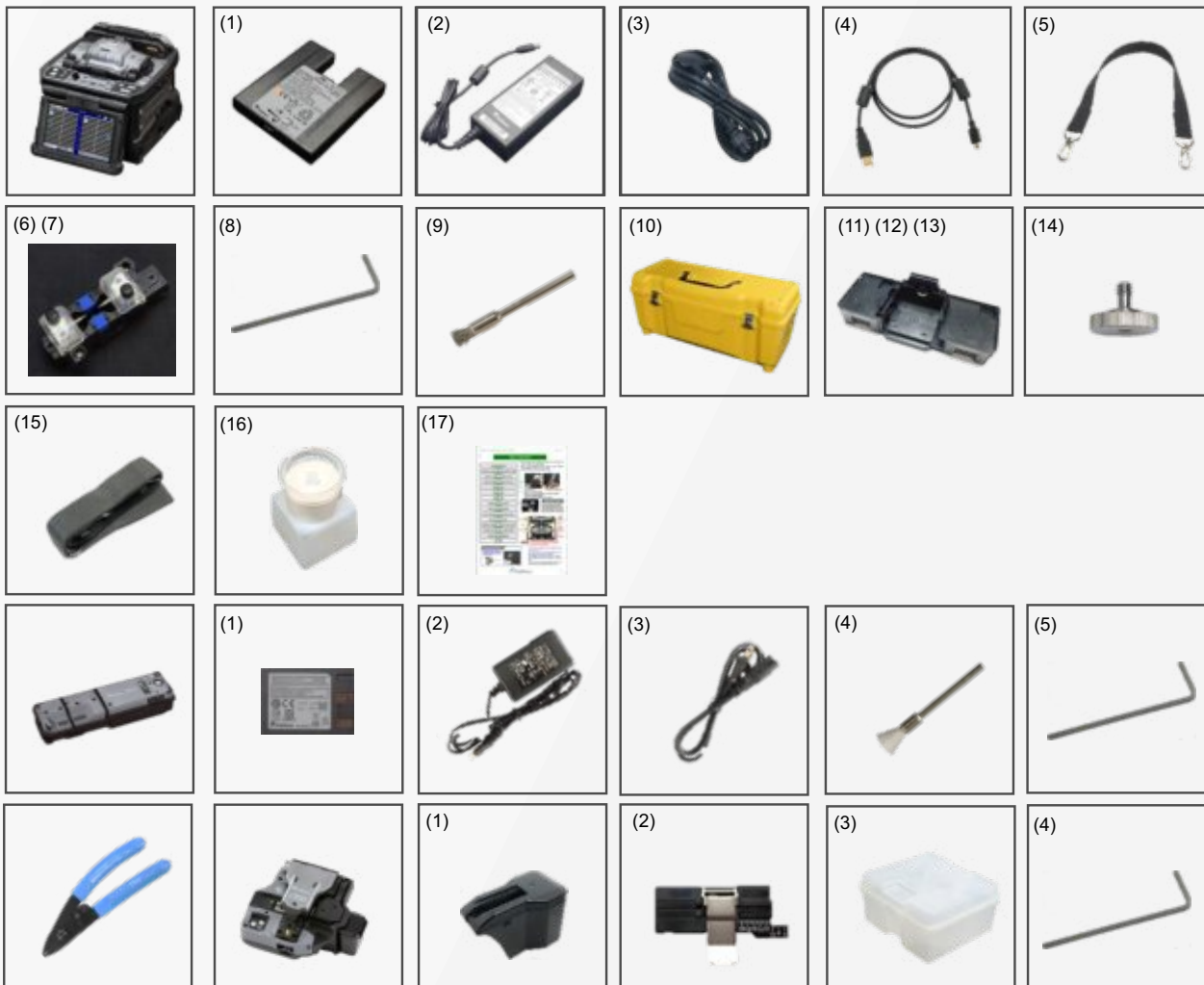
Hodnota teploty sa mení v súlade s režimom zvarovania

Štandardné balenie 90R12 Štandardné balenie



Item	Model	Qty
Mass Fusion Splicer	90R12	1 pc
(1) Battery Pack *	BTR-15	1 pc
(2) AC Adapter	ADC-20	1 pc
(3) AC Power Cord	ACC-14, 15, 16 or 17	1 pc
(4) USB Cable	USB-01	1 pc
(5) Fusion Splicer Strap	ST-02	1 pc
(6) Electrodes (on spare V-groove)	ELCT2-16B	1 pair
(7) 12 fiber V-groove (spare)	VG12-01	1 pc
(8) Hexagonal Wrench	HEX-01	1 pc
(9) V-groove Cleaning Brush	VCB-01	1 pc
(10) Carrying Case	CC-39	1 pc
(11) Work Tray Left	WT-09L	1 pc
(12) Work Tray Right	WT-09R	1 pc
(13) Work Tray J-Plate	JP-09	1 pc
(14) Tripod Screw	TS-03	2 pcs
(15) Carrying Case Strap	ST-03	1 pc
(16) Alcohol Dispenser	AP-02	1 pc
(17) Quick Reference Guide	QRG-03-E, C or J	1 pc
Ribbon Fiber Stripper	RS03 or RS02	1 pc
(1) Battery Pack * (RS03 only)	BTR-12A	1 pc
(2) AC Adapter	ADC-09A	1 pc
(3) AC Power Cord	ACC-08, 09, 10, 11 or 12	1 pc
(4) Blade Cleaning Brush	BRS-02	1 pc
(5) Hexagonal Wrench	HEX-01	1 pc
Single Fiber Stripper	SS03 or SS01	1 pc
Optical Fiber Cleaver	CT50	1 pc
(1) Fiber Scrap Collector	FDB-05	1 pc
(2) Fiber Setting Plate	AD-10-M24	1 pc
(3) Case	CC-37	1 pc
(4) Hexagonal Wrench	HEX-01	1 pc

* Please follow IATA regulation when shipping the battery by air.



Specifications



90R12 Specifications

Item		Specification
Fiber alignment method		Self cladding alignment with melting surface tension
Fiber count can be spliced		Up to 12 fiber ribbon
Applicable fiber	Fiber type	Single mode optical fiber Multi mode optical fiber
	Cladding dia.	Approx. 125µm
Applicable coating	Fiber holder	Coating shape. : Refer to options Cleave length : 10mm
	Splice loss *1	ITU-T G.652 : Avg. 0.05dB ITU-T G.651 : Avg. 0.02dB ITU-T G.653 : Avg. 0.08dB ITU-T G.655 : Avg. 0.08dB ITU-T G.657 : Avg. 0.05dB
Fiber splice performance	Splice time *2	SM FAST mode : Avg. 14 to 15sec. SM AUTO mode : Avg. 19 to 20sec.
	Applicable protection sleeve	Sleeve type Heat shrinkable sleeve Sleeve length Max. 66mm Sleeve dia. Max. 6.0mm before shrinking
Sleeve heat performance	Heat time *3	40mm FP-05 mode : Avg. 38 to 40sec. 40mm FP-04T mode : Avg. 17 to 19sec. Single 40mm mode: Avg. 14 to 16sec. Single 60mm mode: Avg. 13 to 15sec.
		Fiber tensile test force
Electrode life *4		Approx. 1,500 splices
Physical description	Dimensions W	Approx. 170mm without projection
	Dimensions D	Approx. 173mm without projection
	Dimensions H	Approx. 150mm without projection
	Weight	Approx. 2.6kg including battery
Environmental condition	Temperature	Operate : -10 to 50 degreeC Storage : -40 to 80 degreeC
	Humidity	Operate : 0 to 95%RH non-condensing Storage : 0 to 95%RH non-condensing
	Altitude	Max.
3,700m AC adaptor	Input	AC100 to 240V, 50/60Hz, Max. 1.5A
Battery pack	Type	Rechargeable Lithium Ion
	Output	Approx. DC14.4V / 6,380mAh
	Capacity *5	Approx. 165 splice and heat cycles
	Temperature	Recharge : 0 to 30 degreeC Storage : -20 to 30 degreeC
	Battery life *6	Approx. 500 recharge cycles
Display	LCD monitor	TFT 5 inches with touch screen
	Magnification	Approx. 20X : 12 ribbon to 60X : single
Illumination	V-grooves	LED lamp
	PC	USB2.0 Mini B type
Interface	External LED lamp	USB2.0 A type Approx. DC5V, 500mA
	Ribbon Stripper	Mini DIN 6pin DC12V, Max. 1A
	Wireless *7	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		1/4-20UNC
Other features	Automatic functions	Splice mode select by fiber count analysis
		Discharge power calibration
		Wind protector : open/close
		Heater lid : open/close
	Heater clamp : open/close	
Reference guide	Video and PDF file stored in splicer	
Electrode	Replaceable without tool	

90R12 Options

Item	Model	Remark
Fiber holder	FH-70-250	250µm coating diameter
	FH-70-900	900µm coating diameter
	FH-70-2	2 fiber ribbon
	FH-70-4	4 fiber ribbon
	FH-70-8	8 fiber ribbon
	FH-70-12	12 fiber ribbon
	FH-70-12PC	Pitch conversion for 12 fiber ribbon
	FH-FC-20	900µm in 2mm diameter jacket
Ribbonizing Tool	FH-FC-30	900µm in 3mm diameter jacket
	FH-60-LT900	900µm loose buffer fiber
	RT-02	200 to 250µm coating diameter
	FAT-04	250µm coating diameter with Glue
DC Adapter	DCA-03	Connect AC adapter not through battery
DC power cord	DCC-20	Car cigar socket to BTR15/DCA-03
	DCC-21	Car battery to BTR-15/DCA-03
	DCC-11	Splicer to ribbon stripper
Transfer Clamp	CLAMP-DC-12	Transferring drop cable on work tray
J-Plate	JP-10	Attaching to splicer, not to work tray
	JP-10-FC	JP-10 with fiber clamps
Protection sleeve ribbon	FP-04(T)	40mm up to 8 fiber
	FP-05	40mm up to 12

Notes

*1: Measured with a cut-back method relevant to ITU-T and IEC standard after splicing Fujikura identical fibers. The average splice loss changes depending on the environmental condition and fiber characteristics.

*2: Measured at room temperature. The definition of splice time is from the fiber image appeared in LCD monitor to the estimated loss displayed. The average splice time changes depending on the environmental conditions, fiber type, and fiber characteristics.

*3: Measured at room temperature with the AC adapter. The heat time is defined from the start beep sound to the finish beep sound. The average heat time changes depending on the environmental conditions, sleeve type and battery pack condition

*4: The electrode life changes depending on the environmental conditions, fiber type and splice modes.

*5: Test condition

- (1) Splice and heat time: 2 minutes cycle
With 12 fiber ribbon and FP-05 sleeve
- (2) Using the splicer power save settings
- (3) Using a not degraded battery
- (4) At room temperature

The battery capacity changes when testing with different conditions from the above.

*6: The battery capacity halves after approx. 500 discharge and recharge cycles. The battery life is shortened further when using outside of the storage temperature range, operating temperature range, or if completely discharged by storing for a long time without recharging.

*7: Bluetooth® mark and logos are the registered trademarks of Bluetooth SIG, Inc.

SS01/03 Specifications



Item	SS01	SS03
1) Stripping coating dia.	250µm	250µm
Fiber dia. after stripping	125µm cladding	125µm cladding
2) Stripping coating dia.	None	900µm
Fiber dia. after stripping	None	250µm coating
3) Stripping coating dia.	None	2000 to 3000µm
Fiber dia. after stripping	None	900µm coating
Dimension	Approx. 164 x 45 x 5mm	
Weight	Approx. 100g	

Fiber Protection Sleeve Specifications



Item	FP-03/FPS series	FP-04/05 series
Outer tube material	Polyethylene	
Inner tube material	Ethylene-Vinyl Acetate	
Strength member	Stainless	Quartz glass
	Temperature: -10 to 50 degreeC	
Heat shrink operation	Humidity: 0 to 95% non-condensing	
	Temperature: -40 to 60 degreeC	
Storage	Temperature: -40 to 60 degreeC	
	Humidity: 0 to 95% non-condensing	

Specifications

CT50 Specifications



RS03 Specifications



Item		Specifications
Applicable fiber	Fiber type	Single mode optical fiber Multi mode optical fiber
	Fiber count	Up to 16 fiber ribbon
	Cladding dia.	Approx. 125µm
	Fiber plate	AD-10-M24 : Max. 900µm coating diameter AD-50 : Max. 3mm coating diameter
Applicable coating	Fiber holder	Coating shape. : Refer to splicer options
	Fiber plate	AD-10-M24 : 5 to 20mm *1 AD-50 [CD : coating diameter] CD= 250µm or less : 5 to 20mm *1 250µm < CD < 1000µm : 10 to 20mm 1000µm < CD < 3mm : 14 to 20mm
Cleave length	Fiber holder	Approx. 10mm
	Single fiber	Avg. 0.3 to 0.9 degrees
Cleave angle *2	Fiber ribbon	Avg. 0.3 to 1.2 degrees
	Approx. 60,000 fiber cleaves	
Blade life *3	Dimensions W	Approx. 120mm when closing the lever
	Dimensions D	Approx. 95mm when closing the lever
	Dimensions H	Approx. 58mm when closing the lever
	Weight	Approx. 305g including battery and AD-10-M24
Physical description	Temperature	Operate : -10 to 50 degreeC Storage : -40 to 80 degreeC
	Humidity	Operate : 0 to 95% non-condensing Storage : 0 to 95% non-condensing
	2 pieces of LR03/AAA dry battery	
	Bluetooth 4.1 LE	
Wireless interface *4		Bluetooth 4.1 LE
Screw hole for tripod		1/4-20UNC
Other features	Blade rotation	Motorized rotation Manual rotation dial
	Replaceable parts	Blade
		Clamp arm

Item		Specifications
Applicable fiber	Fiber type	Single mode optical fiber Multi mode optical fiber
	Fiber count	Up to 16 fiber ribbon
	Cladding dia.	Approx. 125µm
	Coating dia.	200 to 400µm
Strip length	Max. 35mm	
Heat time *1	Approx. 3sec Approx. 5sec with Eco-mode	
Heat temperature	85 to 140 degree C	
Physical description	Dimensions W	Approx. 156mm without projection
	Dimensions D	Approx. 49mm without projection
	Dimensions H	Approx. 37mm without projection
	Weight	Approx. 265g including battery
Environmental condition	Temperature	Operate : -10 to 50 degreeC Storage : -40 to 80 degreeC
	Humidity	Operate : 0 to 95%RH non-condensing Storage : 0 to 95%RH non-condensing
AC adaptor	Input	AC100 to 240V, 50/60Hz, Max. 0.58A
DC adaptor	Input	DC10 to 17V, Approx. 1A
Battery	Type	Rechargeable Lithium Ion
	Output	Approx. DC7.2V / 1,840mAh
	Capacity *2	Approx. 600 times with Eco-mode
	Temperature	Recharge : 0 to 40 degreeC Storage : -20 to 30 degreeC
	Battery life *3	Approx. 500 recharge cycles
Wireless interface *4	Bluetooth 4.1 LE	
Other features	Strip operation	Lower stripping force than previous model
	Setting change	Controlled from splicer or smartphone

CT50 Options

Item	Model Name	Remark
Blade	CB-08	Blade for replacement
Clamp Arm	ARM-CT50-01	Clamp arm with anvil for replacement
Fiber Scrap Collector	FDB-05	Spare scrap collector
Side cover	SC-CT50-01	Side cover instead of scrap collector

Notes

- *1: When the cleave length is from 5 to 10mm, the coating diameter should be 250µm or less. Also, a blade height adjustment is required before cleaving. The average cleave angle is worse than the specification when the cleave length is 5 to 10mm.
- *2: Measured with an interferometer at room temperature, not with a splicer. A new blade was used to cleave both the single fibers and 12 fiber ribbons. The cleave length is set from 10 to 16mm. The average cleave angle changes depending on the environmental conditions, blade condition, operating method, and cleanliness.
- *3: The blade life changes depending on the environmental conditions, operating method, and the fiber type cleaved.
- *4: Bluetooth® mark and logos are the registered trademarks of Bluetooth SIG, Inc.

RS03 Options

Item	Model Name	Remark
Spacer	SPA-RS02-08	Coating length 8mm
DC power cord	DCC-11	Splicer to ribbon stripper

Notes

- *1: Measured at room temperature. The heat time changes depending on the environmental conditions and fiber coating type.
- *2: Tested at room temperature with a not degraded battery and Eco-mode. The number of cycles changes depending on the environmental conditions, stripper settings and battery condition.
- *3: The battery capacity halves after approx. 500 discharge and recharge cycles. The battery life is shortened further when using outside of the storage temperature range, operating temperature range, or if completely discharged by storing for a long time without recharging.
- *4: Bluetooth® mark and logos are the registered trademarks of Bluetooth SIG, Inc.

