

JBC

www.jbctools.com

INSTRUCTION MANUAL



Solder Feeder for Automation

Ref. SFR-B

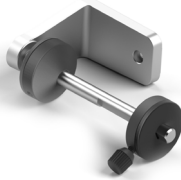
Packing List

The following items are included:

Solder Feeder for Automation 1 unit
Ref. SFR-B



Reel Support 1 unit
Ref. 0024561



Communications Cable 3 m..... 1 unit
Ref. 0024563



Allen Key 1,5 mm 1 unit
Ref. 0741610



Allen Key 2,5 mm 1 unit
Ref. 0012574



Allen Key 3 mm 1 unit
Ref. 0013609



Screws DIN 912 M4x65..... 2 units
Ref. 0024552



Screws DIN 912 M4x20..... 2 units
Ref. 0921890



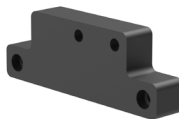
Screws DIN 7991 M4x10..... 1 unit
Ref. 0490180



Spanner 10 mm..... 1 unit
Ref. 0017631



Insulator 1 unit
Ref. 0024588

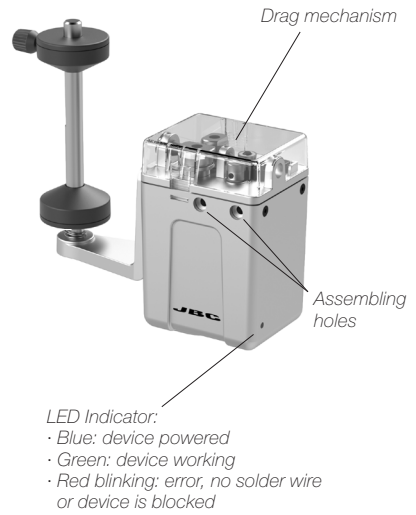


Manual 1 unit
Ref. 0024557



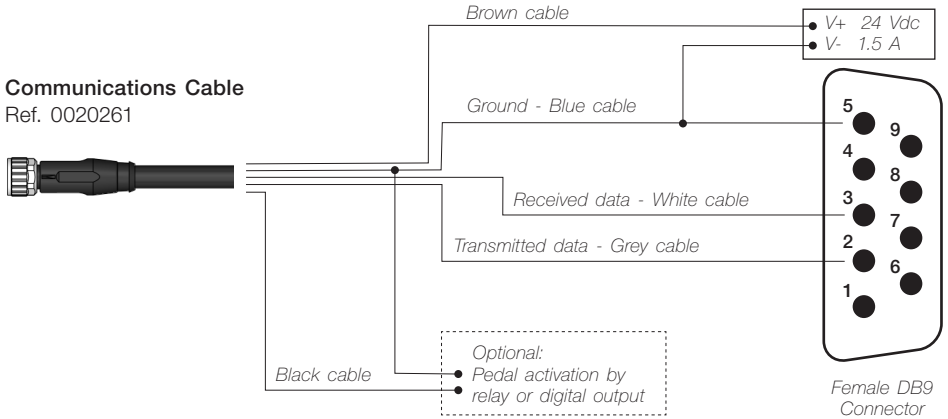
Features

The SFR Solder Feeder works together with one of the different GSFR Guide Kits, available for the various solder wire diameters, with or without solder wire perforation. GSFR kits are sold separately.

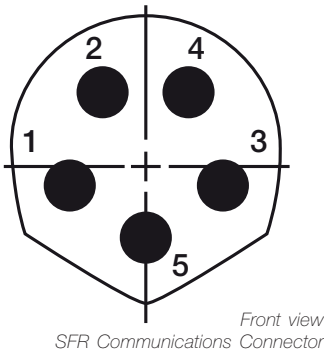


Connection

- The SFR unit can be connected to a PLC by a five-pin Communications Cable (Ref. 0020261).
- Connect the cables to the corresponding pins to match your PLC connection. To communicate with a computer use a DB9 female connector.
- Download the Robot Communication Protocol at www.jbctools.com



For detailed information about pin distribution see following table:



Pin Distribution		
Pin	Color	Description
1	Brown	Power supply input: 24Vdc (±5%). 1.5 A current required
2	White	Serial input: RS232 RX
3	Blue	Common reference: GND for RS232 and witch
4	Black	Switch input: 0V or 24V to start feeding. Leave it open to stop
5	Grey	Serial output: RS232 TX

Assembly: GSFR* Wheels to SFR

For this operation, disconnect the device, and dismantle the cover by pushing the tabs at both sides of the lid. Use the allen key and the spanner to assemble the following components.

1. Insert the Intermediate Nozzle until its collar rests against the housing and tighten the screw.
2. Assemble the Guide Wheel and tighten the screw. If you use a Guide Kit without Solder Wire Perforation assemble the Support Wheel.

Attention: Always use the correct wheel set for each wire thickness.

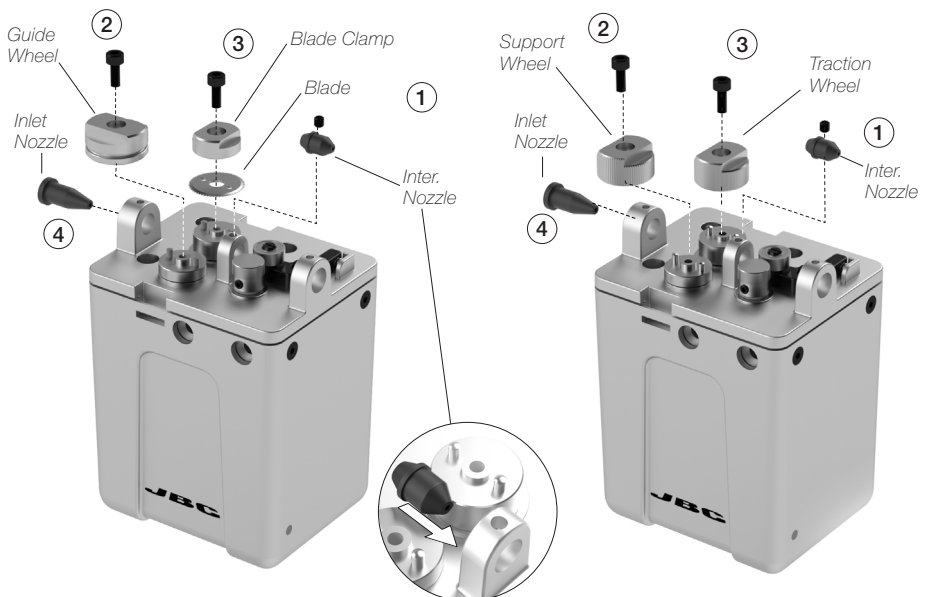
3. If you have a Guide Kit with Solder Wire Perforation assemble the Blade first, then mount the Blade Clamp onto the same axis and tighten the screw. If you use a Guide Kit without Solder Wire Perforation, assemble the Traction wheel.

Caution: handle the blade carefully to avoid injury.

4. Insert the Inlet Nozzle into the hole and tighten the screw.

GSFR* with Solder Wire Perforation

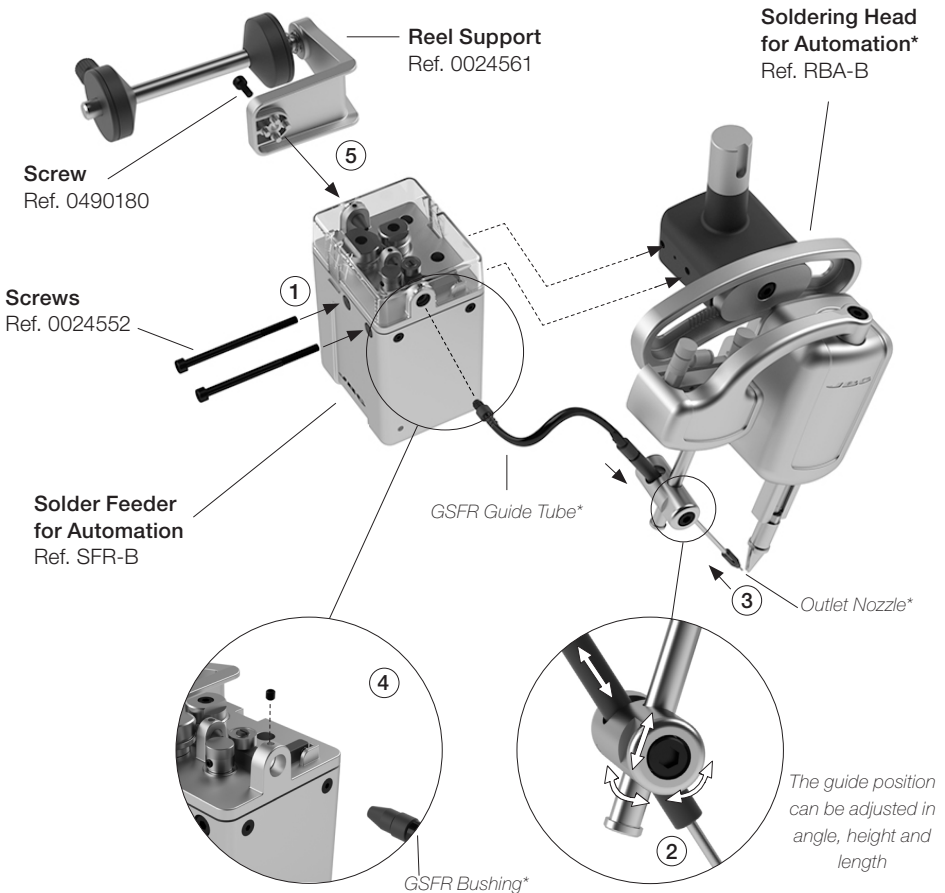
GSFR* without Solder Wire Perforation



*Not included, sold separately

Assembly: SFR to TRA*

1. Assemble the SFR to the TRA with the screws.
2. Assemble the GSFR Guide Tube to the TRA and adjust its position, then tighten the screw.
3. Assemble the Outlet Nozzle onto the Dispensing Tube.
4. Assemble the GSFR Bushing into the SFR hole and tighten the screw.
5. Attach the Reel Support to the SFR with its screws.



*Not included, sold separately

Assembly: Reel support positions

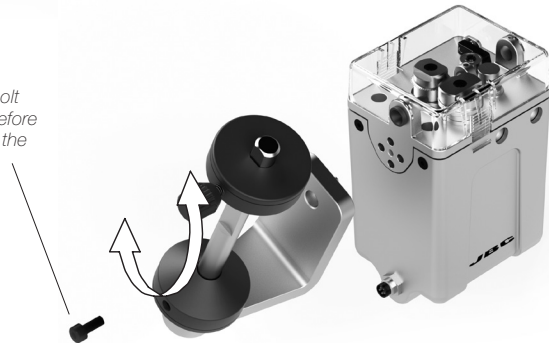
The reel support can be installed both vertically and horizontally to match your preferences.

Unscrew the bolt using a 3mm allen key and set the support as desired.
Tighten the bolt to lock the support.

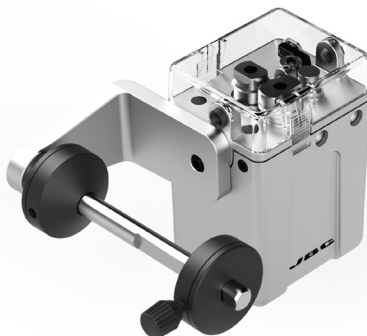
Vertical Reel Support



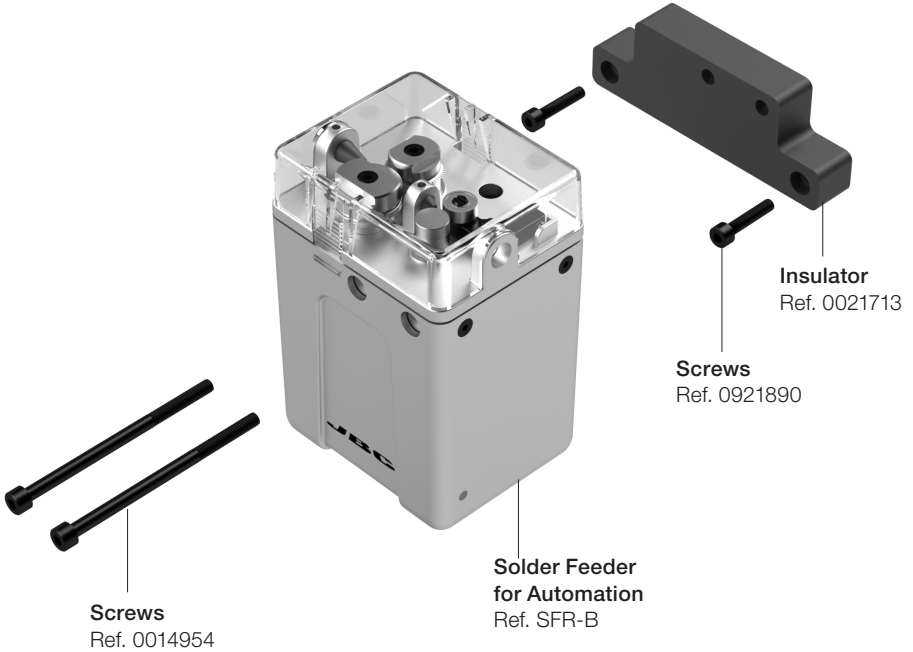
Loosen the bolt completely before repositioning the support.



Horizontal Reel Support



Assembly: SFR independent from TRA*



If mounting SFR independently from TRA, the Electrical Insulator is required.

Assemble the Insulator to your device with its screws, followed by the SFR to The insulator with its screws.

The Electrical Insulator must be assembled for the tool to work properly.



Do not use the SFR without insulator if it is mounted without the TRA.

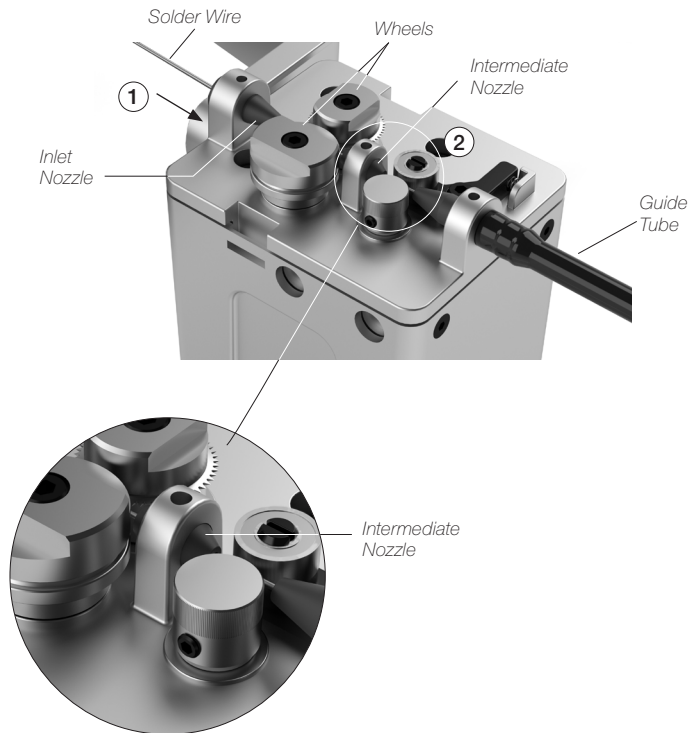
*Not included, sold separately

Solder Wire Loading

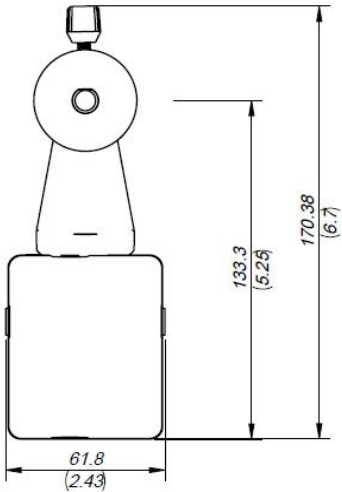
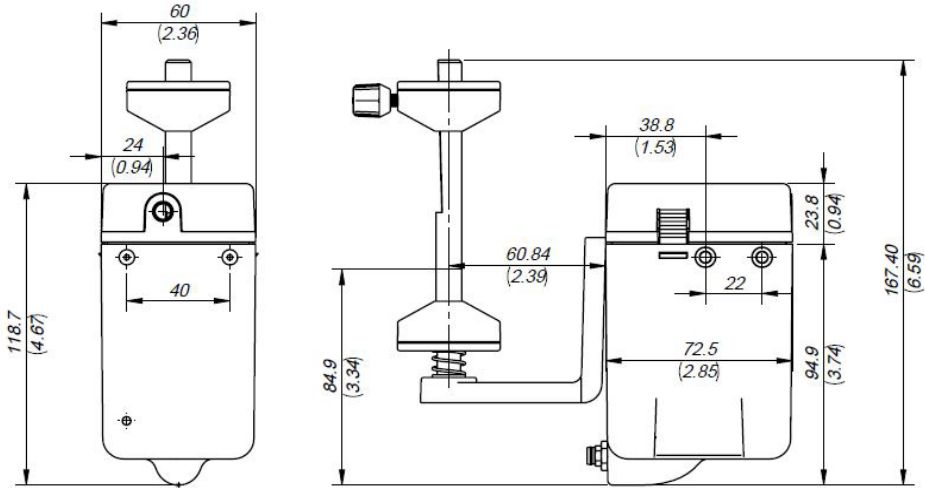
The GSFR must be assembled previously.

1. Feed the Solder Wire into the Inlet Nozzle until it reaches the wheels.
2. Make sure the wire passes through the Intermediate Nozzle and enters into the Guide Tube.

Wire feeding is controlled by an external controller (Robot/PLC/Computer). See the Robot Communication Protocol for SFR unit at www.jbctools.com/jbcsoftware.html



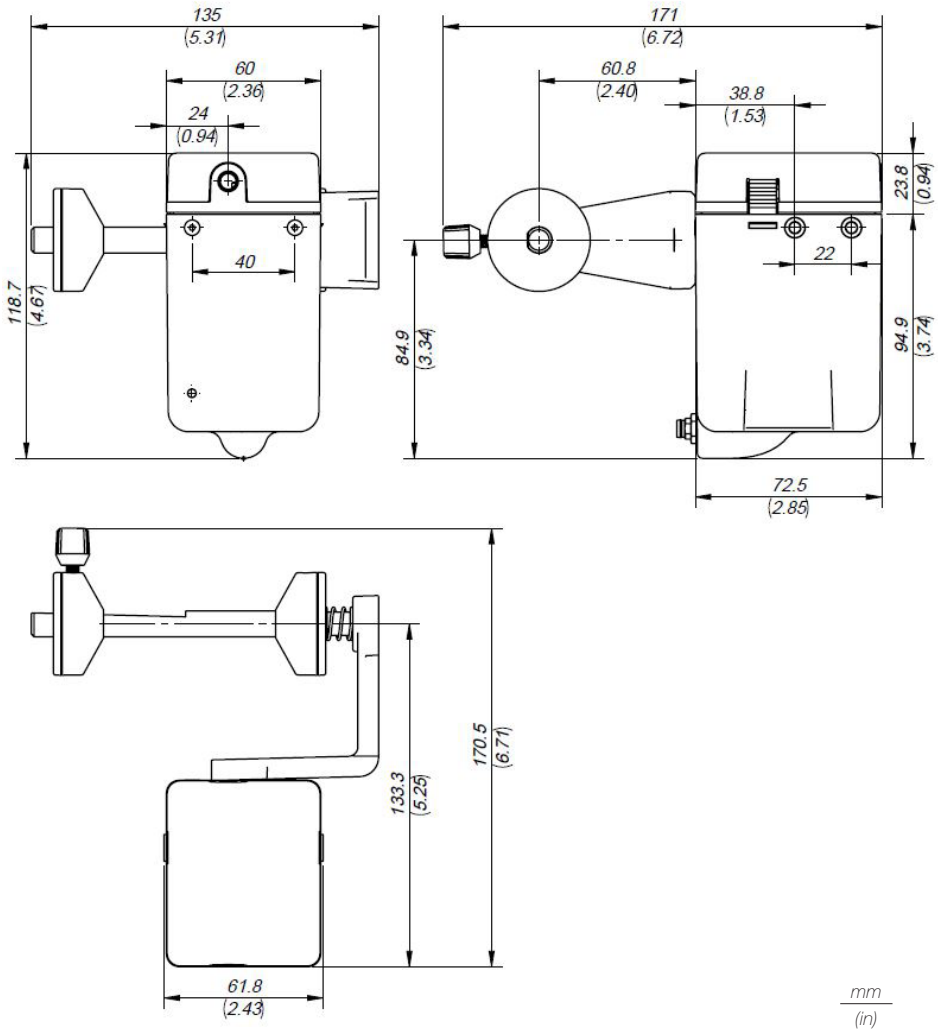
Dimensions (Vertical Reel Support)



mm
(in)

Solder Wire Reel dimensions: max. length 80mm (3.2 in), max. diameter 80mm (3.2 in), max. weight 1 kg (2.2 lb).

Dimensions (Horizontal Reel Suport)

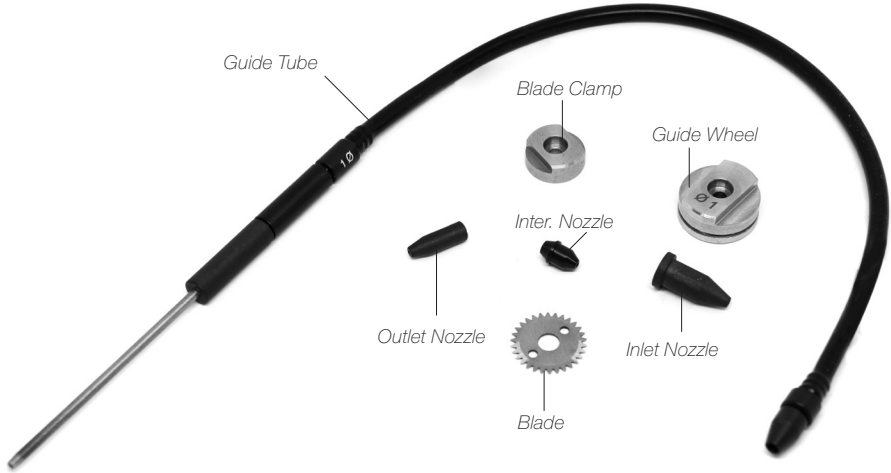


Solder Wire Reel dimensions: max. length 80mm (3.2 in), max. diameter 80mm (3.2 in), max. weight 1 kg (2.2 lb).

Accessories

Guide Kit for SFR with Solder Wire Perforation

Ref. GSFRXXVXX



GSFR XX V LL WITH SOLDER WIRE PERFORATION

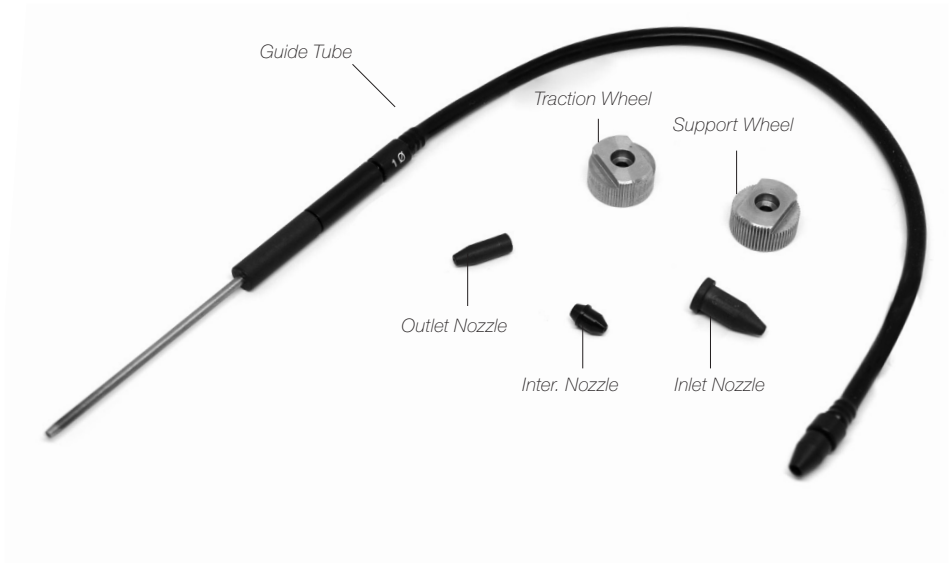
Tube lenght		
LL	Lenght	
03	0,3 m	11,81 in
04	0.4 m	15.74 in
05	0.5 m	19.68 in
07	0.7m	27.9 in
10	1,0 m	39,37 in
Wire diameter		
XX	Diameter of use	
08	Ø 0,8 mm	Ø 0,032 in
10	Ø 1,0 mm	Ø 0,040 in
12	Ø 1.2 mm	Ø 0.047 in
15	Ø 1,5 mm	Ø 0,059 in

Guide kits are sold separately. Find our Guide kits at www.jbctools.com

Accessories

Guide Kit for SFR without Solder Wire Perforation

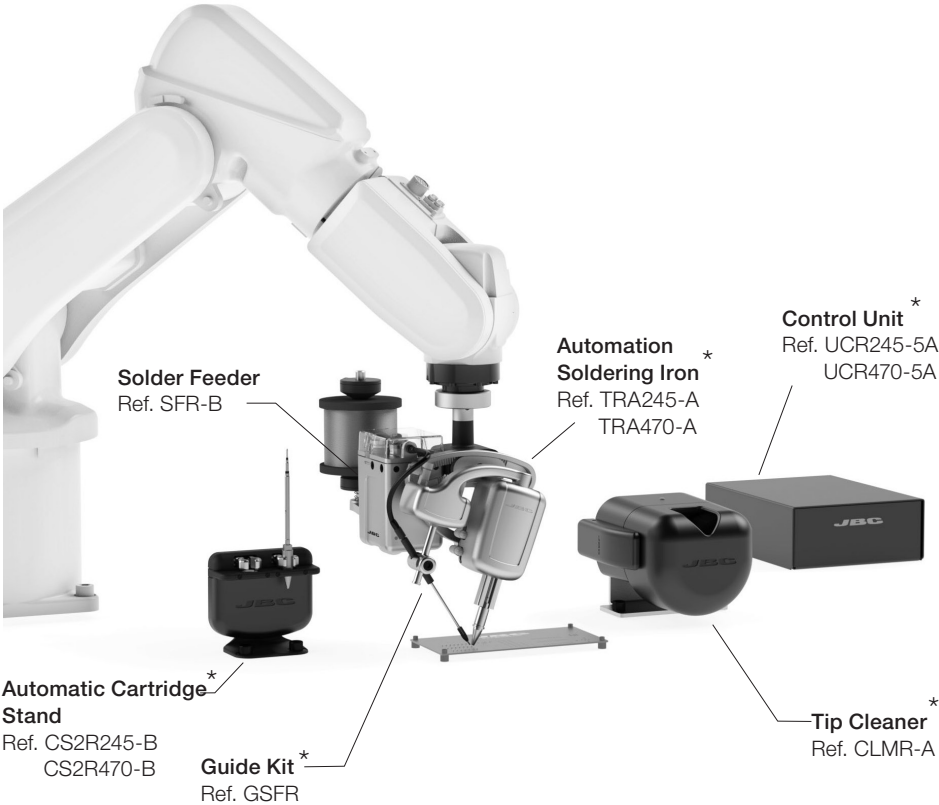
Ref. GSFRXXDXX



GSFR XX D LL WITHOUT SOLDER WIRE PERFORATION

Tube lenght		
LL	Lenght	
03	0.3 m	11.81 in
05	0.5 m	19.68 in
07	0.7m	27.92 in
10	1.0 m	39.37 in
Wire diameter		
XX	Range of use	
05	Ø 0,5 - 0,6 mm	Ø 0,020 - 0,025 in
08	Ø 0,7 - 0,8 mm	Ø 0,028 - 0,032 in
10	Ø 0,9 - 1,0 mm	Ø 0,035 - 0,040 in
15	Ø 1,2 - 1,5 mm	Ø 0,047 - 0,059 in

Components of the Soldering Unit



*Not included, sold separately

Maintenance

- Before carrying out maintenance, always unplug the tool and the device.
- Use a damp cloth to clean the Solder Feeder. Alcohol can only be used to clean the metal parts.
- Periodically check all cables and tube connections.
- Replace any defective or damaged parts. Use original JBC spare parts only.
- Repairs should only be performed by a JBC authorized technical service.

Safety



It is imperative to follow safety guidelines to prevent electric shock, injury, fire or explosion.

- Do not use the device for any other purpose.
- Do not leave the appliance unattended when it is on.
- Be sure that the power supply is disconnected before changing any spare part.
- Avoid flux coming into contact with skin or eyes to prevent irritation.
- Be careful of fumes produced while soldering.
- Keep your workplace clean and tidy. Wear appropriate protective glasses and gloves while handling any component to avoid personal injury.
- Utmost care must be taken with liquid tin waste which can cause burns.

Specifications

- Net Weight: 948 gr (2.09lb)
- Total Weight: 1246gr (2.4lb)
- Dimensions: 114 x 66 x 52 mm (4.49 x 2.60 x 2.05 in)
- Power Supply input: 24Vdc (±5%), 1.5 A current required
- Spool Capacity: Up to 1 kg (2.20 lb)
- Solder Wire Reel Dimensions: Max. length 80mm (3.2 in), max. diameter 80mm(3.2 in)
- Max. Speed: 120 mm/s (4.72 in/s)
- Ambient Operating Temp.: 10 - 50 °C (50 - 122 °F)
- Connections: M8-5 pin Communication Connector

Complies with CE Standards.
ESD safe.

JBC

Warranty

JBC's 2 year warranty covers this equipment against all manufacturing defects, including the replacement of defective parts and labour.

Warranty does not cover product wear or misuse.

In order for the warranty to be valid, equipment must be returned, postage paid, to the dealer where it was purchased.

Get 1 extra year JBC warranty by registering here:
<https://www.jbctools.com/productregistration/>
within 30 days of purchase.



This product should not be thrown in the garbage.

In accordance with the European directive 2012/19/EU, electronic equipment at the end of its life must be collected and returned to an authorized recycling facility.

