

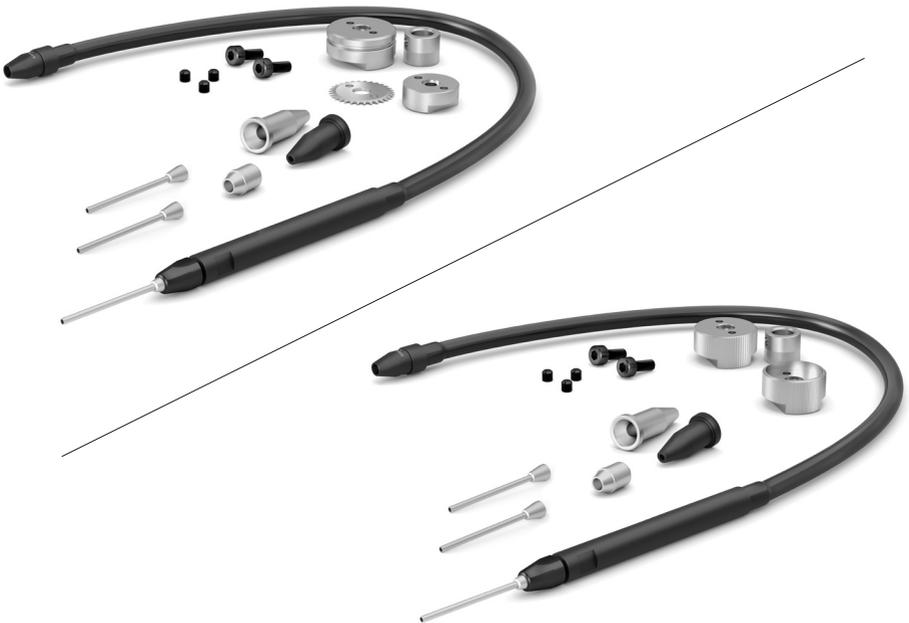
JBC

www.jbctools.com

Product
website



INSTRUCTION MANUAL



GSFR

Guide Kit for Robot with/without
Solder Wire Perforation

This manual corresponds to the following references:

GSFR[XX]V[LL]-B With Solder Wire Perforation

<u>Ref.</u>	<u>For solder wire diameter Ø</u>	<u>Tube length</u>
GSFR08V03-B	0.8 mm / 0.032 in	0.3 m / 11.81 in
GSFR08V05-B	"	0.5 m / 19.69 in
GSFR08V06-B	"	0.6 m / 23.62 in
GSFR08V07-B	"	0.7m / 27.56 in
GSFR08V10-B	"	1.0 m / 39.37 in
GSFR08V15-B	"	1.5 m / 59.06 in
GSFR10V03-B	1.0 mm / 0.040 in	0.3 m / 11.81 in
GSFR10V04-B	"	0.4 m / 15.75 in
GSFR10V05-B	"	0.5 m / 19.69 in
GSFR10V06-B	"	0.6 m / 23.62 in
GSFR10V07-B	"	0.7m / 27.56 in
GSFR10V10-B	"	1.0 m / 39.37 in
GSFR10V15-B	"	1.5 m / 59.05 in
GSFR12V03-B	1.2 mm / 0.047 in	0.3 m / 11.81 in
GSFR12V05-B	"	0.5 m / 19.69 in
GSFR12V07-B	"	0.7m / 27.56 in
GSFR12V10-B	"	1.0 m / 39.37 in
GSFR15V03-B	1.5 mm / 0.059 in	0.3 m / 11.81 in
GSFR15V04-B	"	0.4 m / 15.75 in
GSFR15V05-B	"	0.5 m / 19.69 in
GSFR15V07-B	"	0.7m / 27.56 in
GSFR15V10-B	"	1.0 m / 39.37 in
GSFR15V15-B	"	1.5 m / 59.05 in
GSFR16V03-B	1.6 mm / 0.063 in	0.3 m / 11.81 in
GSFR16V04-B	"	0.4 m / 15.75 in
GSFR16V05-B	"	0.5 m / 19.69 in
GSFR16V15-B	"	1.5 m / 59.05 in

This manual corresponds to the following references:

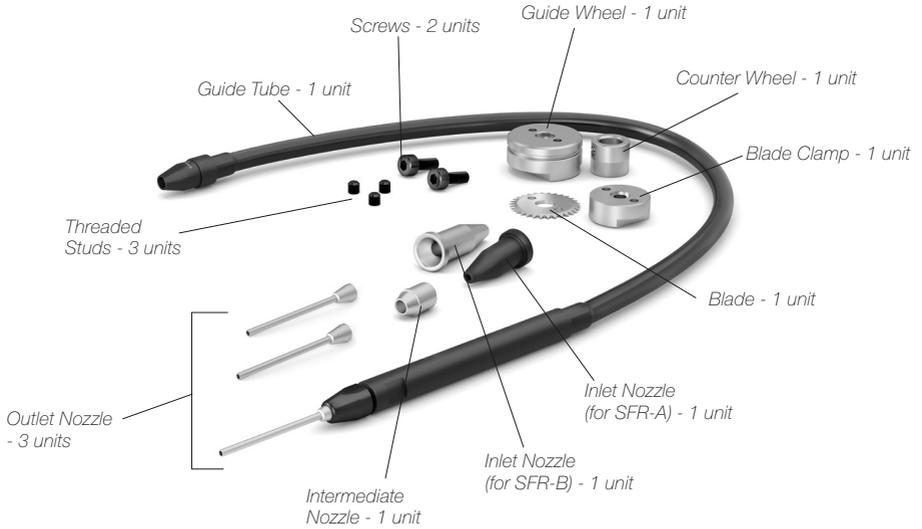
GSFR[XX]D[LL]-B Without Solder Wire Perforation

Ref.	For solder wire diameter Ø	Tube length
GSFR05D03-B	Ø0.46 - 0.56 mm / Ø0.018 - 0.022 in	0.3 m / 11.81 in
GSFR05D05-B	"	0.5 m / 19.68 in
GSFR05D07-B	"	0.7 m / 27.92 in
GSFR05D10-B	"	1.0 m / 39.37 in
GSFR06D03-B	Ø0.60 - 0.64 mm / Ø0.023 - 0.025 in	0.3 m / 11.81 in
GSFR06D05-B	"	0.5 m / 19.68 in
GSFR07D03-B	Ø0.70 - 0.78 mm / Ø0.028 - 0.031 in	0.3 m / 11.81 in
GSFR07D07-B	"	0.7 m / 27.92 in
GSFR08D03-B	Ø0.80 - 0.82 mm / Ø0.032 - 0.033 in	0.3 m / 11.81 in
GSFR08D05-B	"	0.5 m / 19.68 in
GSFR08D06-B	"	0.6 m / 23.62 in
GSFR08D07-B	"	0.7 m / 27.92 in
GSFR08D10-B	"	1.0 m / 39.37 in
GSFR10D03-B	Ø0.90 - 1.10 mm / Ø0.036 - 0.044 in	0.3 m / 11.81 in
GSFR10D06-B	"	0.6 m / 23.62 in
GSFR10D07-B	"	0.7 m / 27.92 in
GSFR10D10-B	"	1.0 m / 39.37 in
GSFR12D03-B	Ø1.14 - 1.27 mm / Ø0.045 - 0.051 in	0.3 m / 11.81 in
GSFR12D05-B	"	0.5 m / 19.68 in
GSFR12D10-B	"	1.0 m / 39.37 in
GSFR15D03-B	Ø1.50 - 1.57 mm / Ø0.060 - 0.063 in	0.3 m / 11.81 in
GSFR15D04-B	"	0.4 m / 15.75 in
GSFR15D05-B	"	0.5 m / 19.68 in
GSFR15D10-B	"	1.0 m / 39.37 in
GSFR15D15-B	"	1.5 m / 59.05 in
GSFR16D03-B	Ø1.60 - 1.63 mm / Ø0.063 - 0.065 in	0.3 m / 11.81 in
GSFR16D04-B	"	0.4 m / 15.75 in
GSFR16D05-B	"	0.5 m / 19.68 in
GSFR16D07-B	"	0.7 m / 27.92 in
GSFR16D15-B	"	1.5 m / 59.05 in

Packing List

Guide Kit for Robot with Solder Wire Perforation

The following items are included (*more information at page 11*).

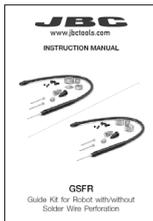
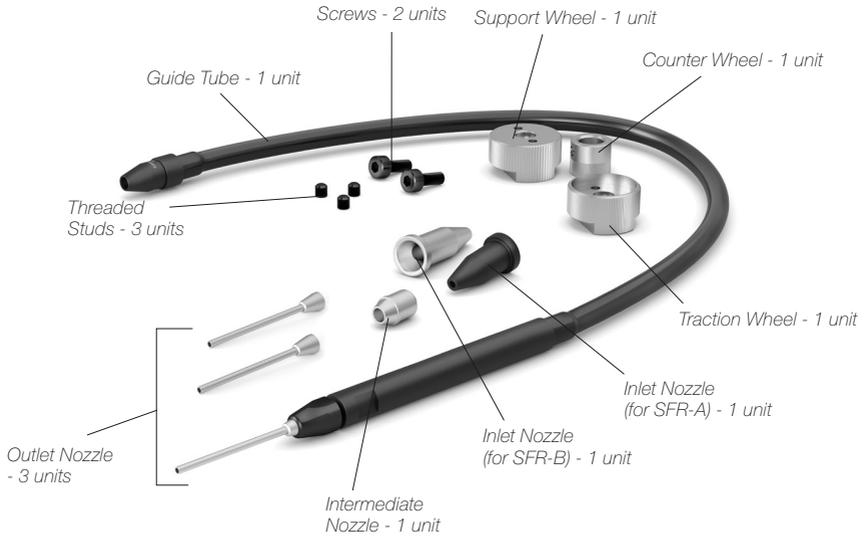


Manual 1 unit
Ref. 0030637

Packing List

Guide Kit for Robot without Solder Wire Perforation

The following items are included (*more information at page 12*).

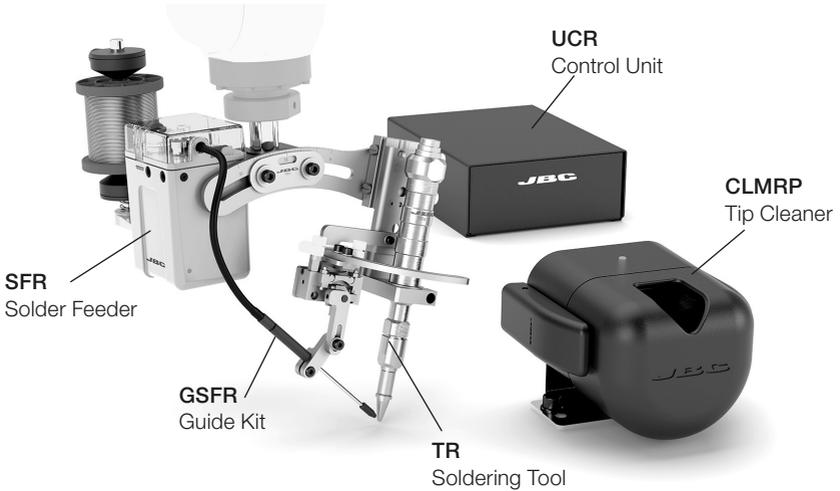


Manual 1 unit
Ref. 0030637

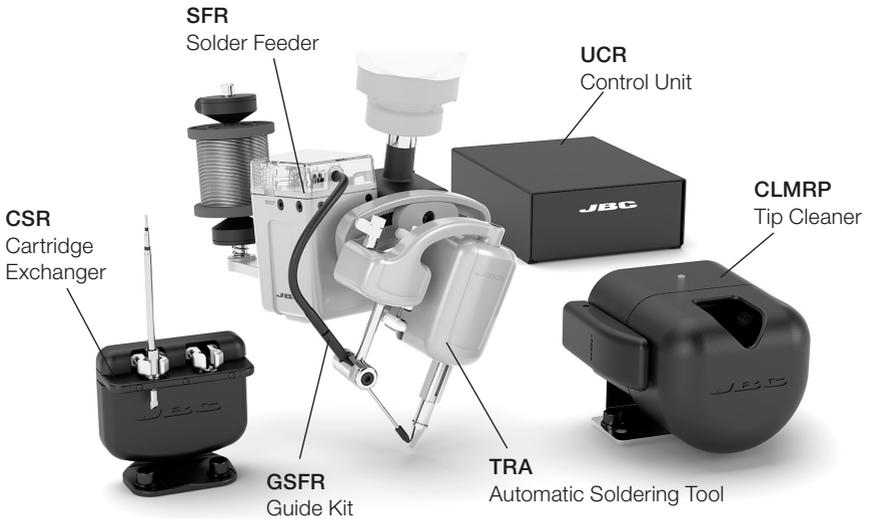
Features

The Guide Kit GSFR is designed to be used with the Solder Feeder SFR in automatic soldering processes.

Work Place Examples with TR Soldering Tool



Work Place Examples with TRA Automatic Soldering Tool and CSR Cartridge Exchanger



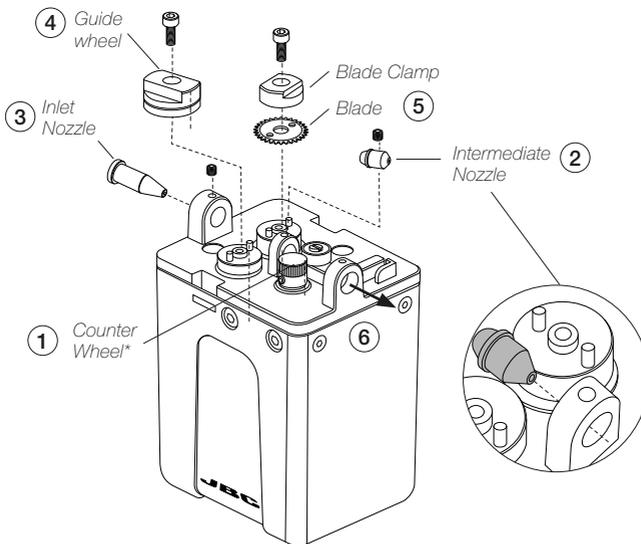
Assembly: GSFR Wheels to SFR

For this operation, disconnect the device, and take off the cover by pressing the tabs.

Use the allen key and the spanner provided with SFR for the following steps. First disassemble the guide tube (6), the Support and Traction wheels or the Guide Wheel, Blade and Blade Clamp (4)+(5). Then, disassemble the nozzles (2)+(3). Disassemble the Counter Wheel (1) if needed*.

Assembly with Solder Wire Perforation

1. Assemble the counter wheel (1) if needed*.
2. Insert the intermediate nozzle (2) until its collar rests against the housing and tighten the screw.
3. Assemble the inlet nozzle (3) and tighten the screw.
4. Assemble the guide wheel (4) and tighten the screw. **Attention:** Always use the correct wheel set for each wire thickness.
5. Assemble the blade first, then mount the blade clamp (5) onto the same axis and tighten the screw. **Caution:** handle the blade carefully to avoid injury.

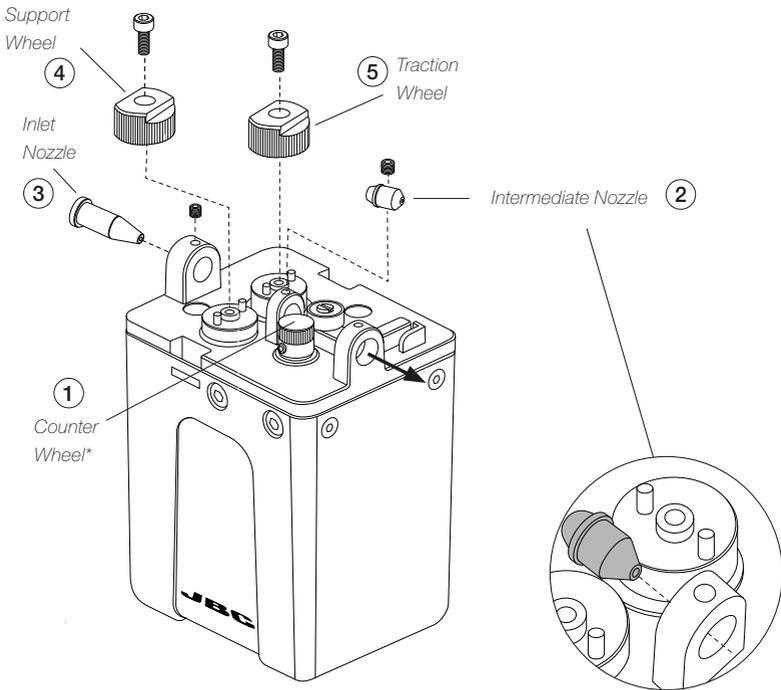


* SFR is supplied with the counter wheel ref. 0026693 already fitted. This counter wheel works for wire diameters $\lt; \varnothing 1.2 \text{ mm } (\varnothing 0.047 \text{ in})$.

Only replace the counter wheel if you want to work with diameters $\geq \varnothing 1.2 \text{ mm } (\varnothing 0.047 \text{ in})$ that is outside the working range of the counter wheel already fitted to the SFR.

Assembly without Solder Wire Perforation

1. Assemble the counter wheel (1) if needed*.
2. Insert the intermediate nozzle (2) until its collar rests against the housing and tighten the screw.
3. Assemble the inlet nozzle (3) and tighten the screw.
4. Assemble the support wheel (4) and tighten the screw. **Attention:** Always use the correct wheel set for each wire thickness.
5. Assemble the traction wheel (5) onto the axis and tighten the screw.

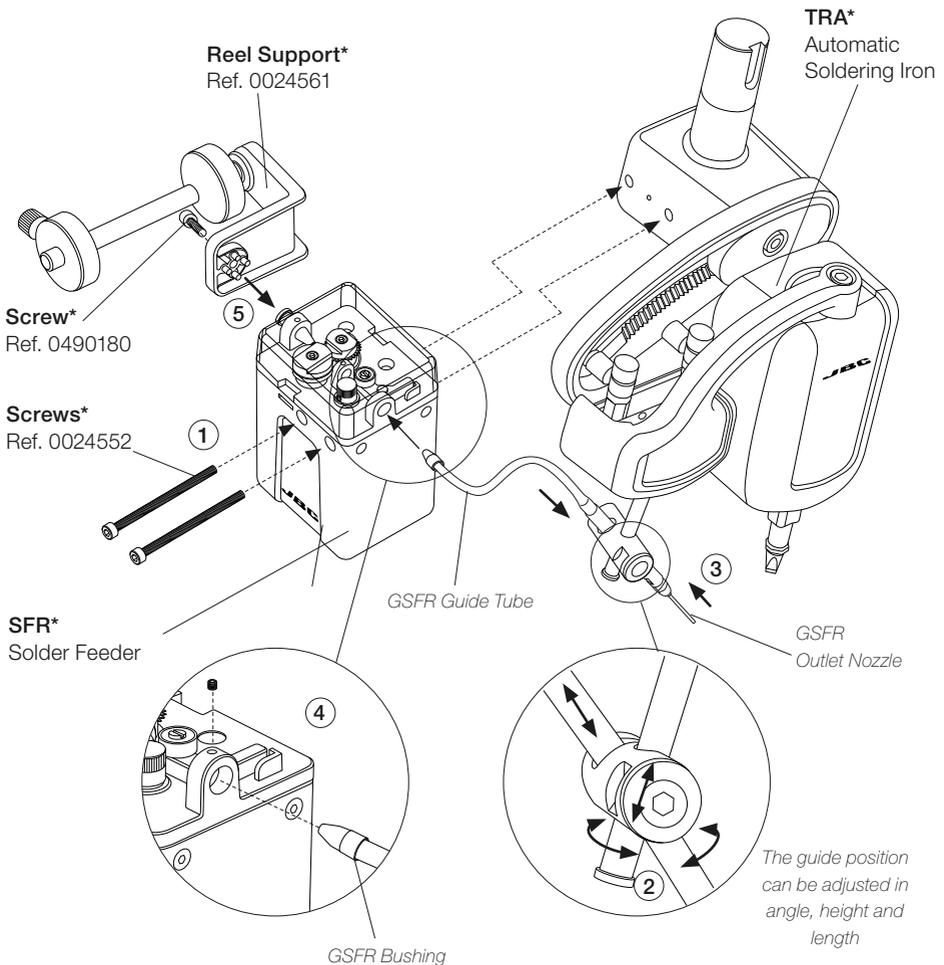


* SFR is supplied with the counter wheel ref. 0026693 already fitted. This counter wheel works for wire diameters $< \varnothing 1.2$ mm ($\varnothing 0.047$ in).

Only replace the counter wheel if you want to work with diameters $\geq \varnothing 1.2$ mm ($\varnothing 0.047$ in) that is outside the working range of the counter wheel already fitted to the SFR.

Assembly: GSFR Tube to SFR* and TRA*

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



*Not included, sold separately

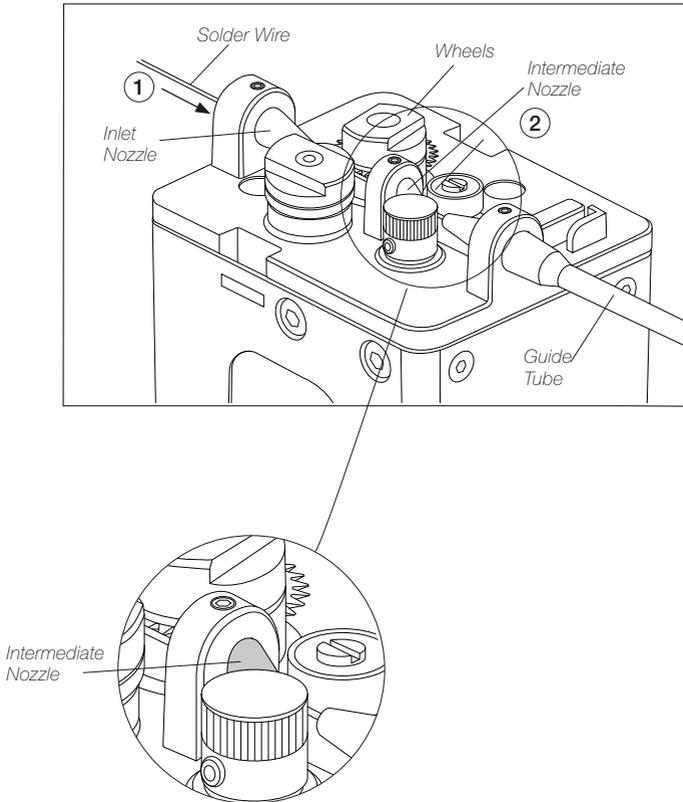
Solder Wire Loading

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.

Important: Set the wire thickness parameter before starting to dispense the wire. To set W-THI command see the Communication Protocol for SFR unit at www.jbctools.com/jbcsoftware.html.

Wire feeding is controlled by an external controller (Robot/PLC/Computer). To start wire loading process use W-SLD command. See the Communication Protocol for SFR unit at www.jbctools.com/jbcsoftware.html



Maintenance

- Before carrying out maintenance, always unplug the tool and the device.
- Use a damp cloth to clean the tool. Alcohol can only be used to clean the metal parts.
- Periodically check that the metal parts of the mechanism are clean.
- Keep Dispensing Nozzle Tip clean to avoid solder feeding obstruction.
- 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

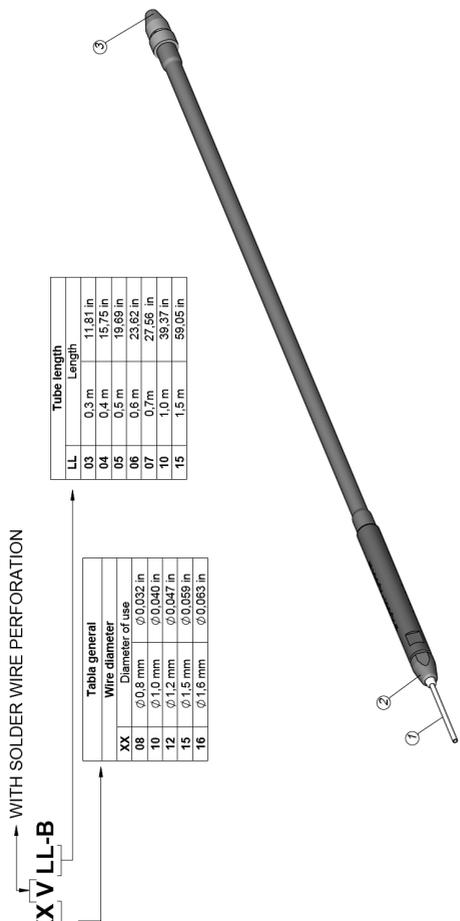


It is imperative to follow safety guidelines to prevent electric shock, injury, fire or explosion.

- Do not use the device for any other purpose.
- 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 components to avoid personal injury.
- Utmost care must be taken with liquid tin waste which can cause burns.

Exploded View

Kits with solder wire perforation



LL	Tube length
03	0.3 m
04	0.4 m
05	0.6 m
06	0.6 m
07	0.7 m
10	1.0 m
15	1.5 m

Tabella general	
Wire diameter	Wire diameter of tips
08	0.8 mm
10	1.0 mm
12	1.2 mm
15	1.5 mm
16	1.6 mm

Guide kit Ref.	Guide tube Ref.
GSFR08/03-B	0029648
GSFR08/05-B	0029649
GSFR08/06-B	0029650
GSFR08/07-B	0029651
GSFR08/10-B	0029652
GSFR08/15-B	0033759
GSFR10/03-B	0029653
GSFR10/04-B	0034478
GSFR10/05-B	0029681
GSFR10/06-B	0029654
GSFR10/07-B	0029655
GSFR10/10-B	0029656
GSFR10/15-B	0030926
GSFR12/03-B	0029657
GSFR12/05-B	0030517
GSFR12/10-B	0030518
GSFR15/03-B	0029658
GSFR15/04-B	0029659
GSFR15/05-B	0029660
GSFR15/06-B	0029661
GSFR15/07-B	0031538
GSFR15/10-B	0029662
GSFR15/15-B	0029663
GSFR16/03-B	0029664
GSFR16/04-B	0029665
GSFR16/05-B	0031468
GSFR16/15-B	0029666

Tube length	Wire Ø	Guide wheel Ref.	Blade Ref.	Blade clamp Ref.	Inlet nozzle Ref. (for SFR-A)	Interm. nozzle Ref.	Inlet nozzle Ref. (for SFR-B)	Counter-wheel Ref.	Screws Ref.	Threaded stud Ref.	Needle	Metal cap	Input tube guide
GSFR08/LL-B		0021866			0023740	0024955	0030537				0029943	0029944	0029950
GSFR10/LL-B		0021869			0023741	0024956	0030539				0029945	0029946	0029951
GSFR12/LL-B		0023738	0021555	0018638	0023736	0024957	0030540	0026693 (Provide with SFR)	0026695	0026696	0029947	0029948	
GSFR15/LL-B		0019696			0023855	0024958	0030541	0026694					
GSFR16/LL-B		0025922				0024959							

Exploded View

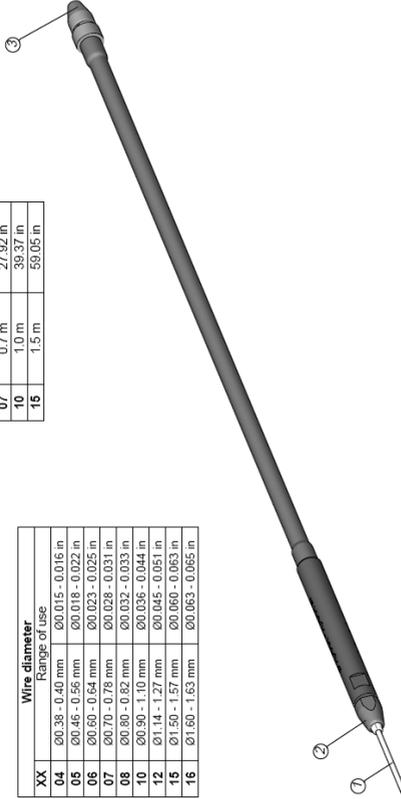
Kits without solder wire perforation

WITHOUT SOLDER WIRE PERFORATION

GSFR XX D LL-B

Tube length	
LL	Length
03	0.3 m / 11.81 in
04	0.4 m / 15.75 in
06	0.5 m / 19.68 in
08	0.6 m / 23.62 in
07	0.7 m / 27.92 in
10	1.0 m / 39.37 in
15	1.5 m / 59.05 in

Wire diameter	
XX	Range of use
04	Ø0.38 - 0.40 mm / Ø0.015 - 0.016 in
05	Ø0.45 - 0.56 mm / Ø0.018 - 0.022 in
06	Ø0.60 - 0.64 mm / Ø0.023 - 0.025 in
07	Ø0.70 - 0.78 mm / Ø0.028 - 0.031 in
08	Ø0.80 - 0.82 mm / Ø0.032 - 0.033 in
10	Ø0.90 - 1.10 mm / Ø0.036 - 0.044 in
12	Ø1.14 - 1.27 mm / Ø0.045 - 0.051 in
15	Ø1.50 - 1.57 mm / Ø0.060 - 0.063 in
16	Ø1.60 - 1.63 mm / Ø0.063 - 0.065 in



Guide kit Ref.	Guide tube Ref.
GSFR08D03-B	0029697
GSFR08D04-B	003133
GSFR08D05-B	003282
GSFR08D07-B	0029688
GSFR08D10-B	0029689
GSFR08D03-B	0029670
GSFR08D05-B	0035704
GSFR07D06-B	0029671
GSFR07D07-B	0031776
GSFR07D15-B	0039648
GSFR08D03-B	0029648
GSFR08D05-B	0029650
GSFR08D07-B	0029651
GSFR08D10-B	0029652
GSFR08D15-B	0037359
GSFR10D03-B	0029653
GSFR10D05-B	0029654
GSFR10D06-B	0029655
GSFR10D07-B	0029656
GSFR10D10-B	0029657
GSFR12D03-B	0030647
GSFR12D05-B	0029658
GSFR15D03-B	0029659
GSFR15D04-B	0029660
GSFR15D05-B	0029661
GSFR15D10-B	0029662
GSFR16D03-B	0029664
GSFR16D04-B	0029665
GSFR16D05-B	0031468
GSFR16D07-B	0031548
GSFR16D15-B	0029666

Tube length	Wire Ø	Traction wheel Ref.	Support wheel Ref.	Inlet nozzle Ref. (for SFR-A)	Interm. nozzle Ref.	Inlet nozzle Ref. (for SFR-B)	Counter wheel Ref.	Screws Ref.	Threaded stud Ref.	Needle	Metal cap	Input tube guide
GSFR04D11-B			0020345		0024954					1	2	3
GSFR05D11-B			0019519		0025293	0030535				0029940		0029949
GSFR06D11-B					0025291	0030534	0026693			0029941		
GSFR07D11-B					0024955	0030536	(Provided with SFR)			0029942		
GSFR08D11-B			0019480	0023740	0024955	0030537		0026695	0026696	0029943	0029948	0029950
GSFR10D11-B				0023741	0024956	0030538				0029944		
GSFR12D11-B			0019481	0023736	0024957	0030539				0029945		0029951
GSFR15D11-B				0023855	0024958	0030540	0026694			0029946		
GSFR16D11-B			0028367		0024959	0030541				0029947		

Specifications

GSFR

Guide Kit for Robot with/without Solder Wire Perforation

Ref.: **GSFR[XX]V[LL]-B** With Solder Wire Perforation *(ref. see page 2)*

Ref.: **GSFR[XX]D[LL]-B** Without Solder Wire Perforation *(ref. see page 3)*

- | | |
|--------------------------------------|----------------------------------|
| - Total Net Weight: | 42 g / 0.093 lb |
| - Total Package Dimensions / Weight: | 245 x 185 x 45 mm / 117 g |
| (L x W x H) | 9.65 x 7.28 x 1.77 in / 0.258 lb |

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 labor.

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.



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.

