

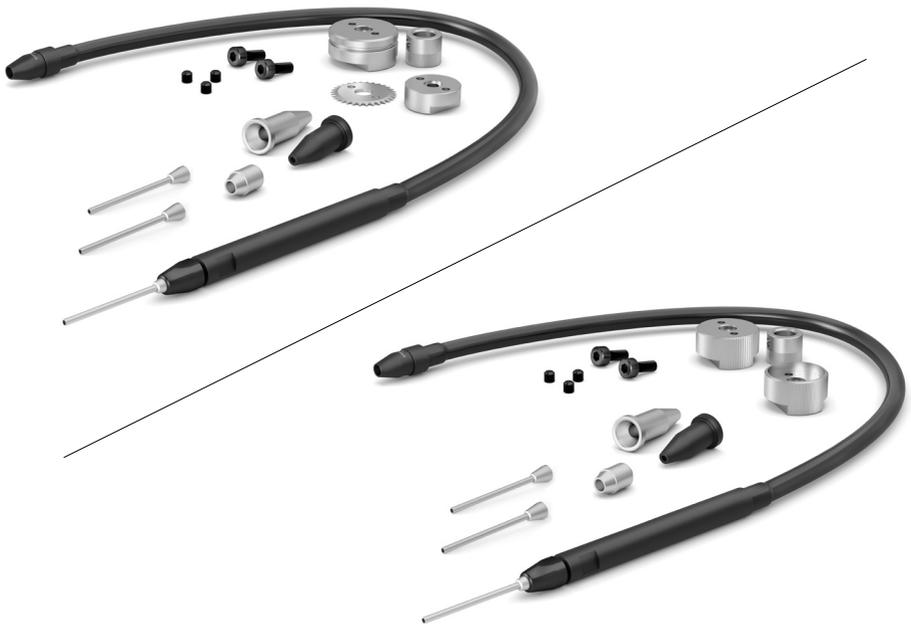
JBC

www.jbctools.com

Product
website



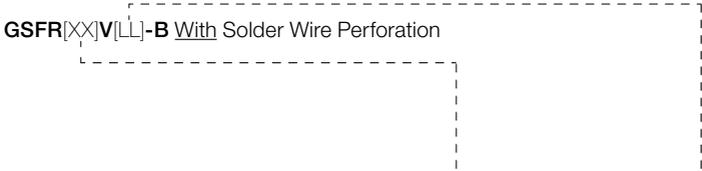
INSTRUCTION MANUAL



GSFR

Guide Kit for Robot with/without
Solder Wire Perforation

This manual corresponds to the following references:



<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:

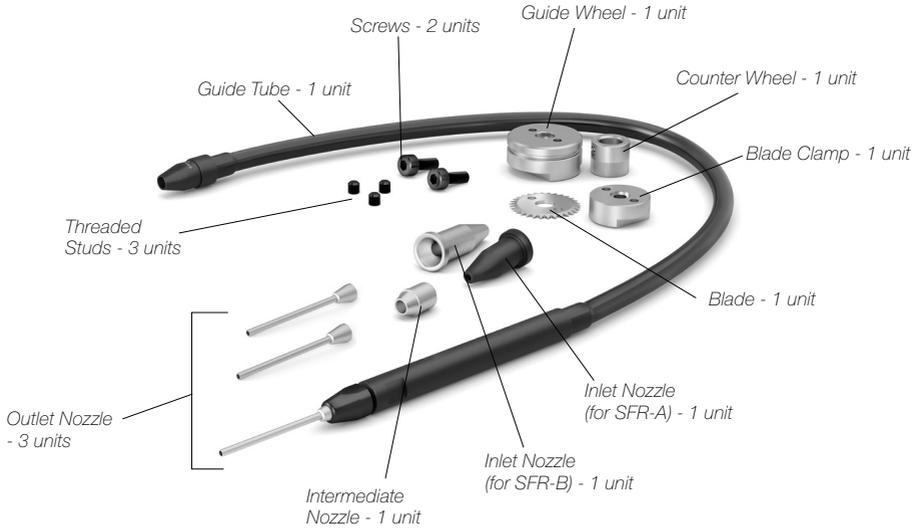
GSFR[XX]D[LL]-B Without Solder Wire Perforation

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		

Packing List

Guide Kit for Robot with Solder Wire Perforation

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

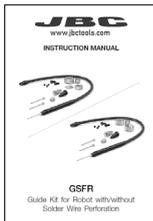
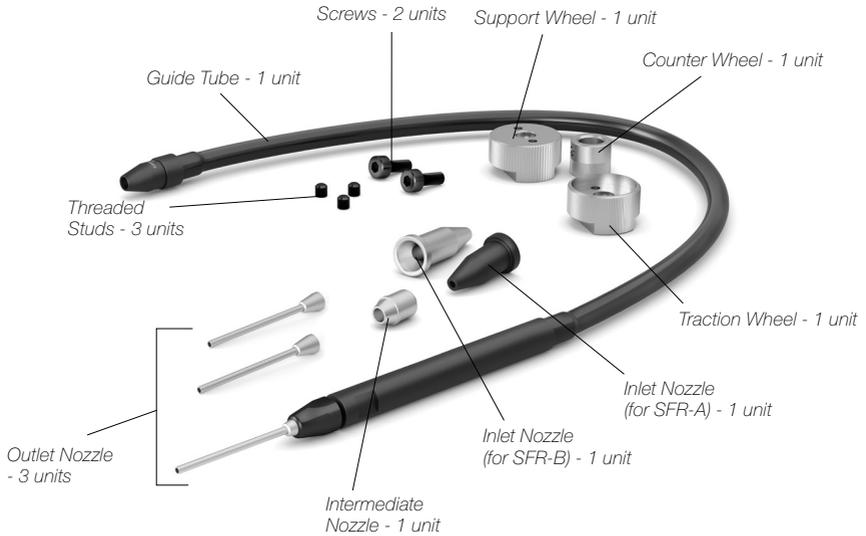


Manual 1 unit
Ref. 0030637

Packing List

Guide Kit for Robot without Solder Wire Perforation

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

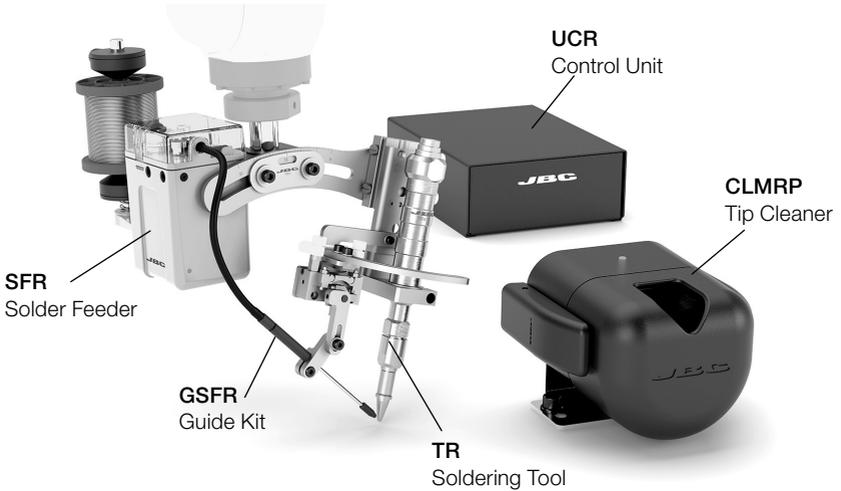


Manual 1 unit
Ref. 0030637

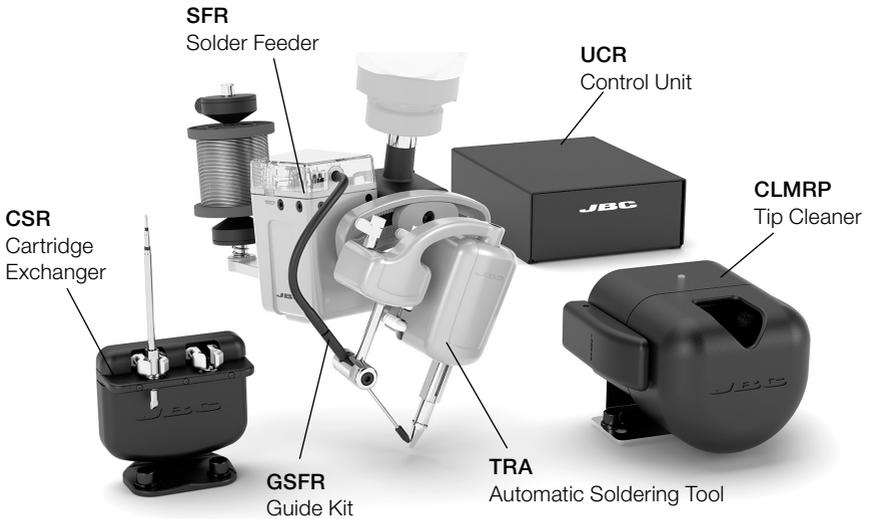
Features

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



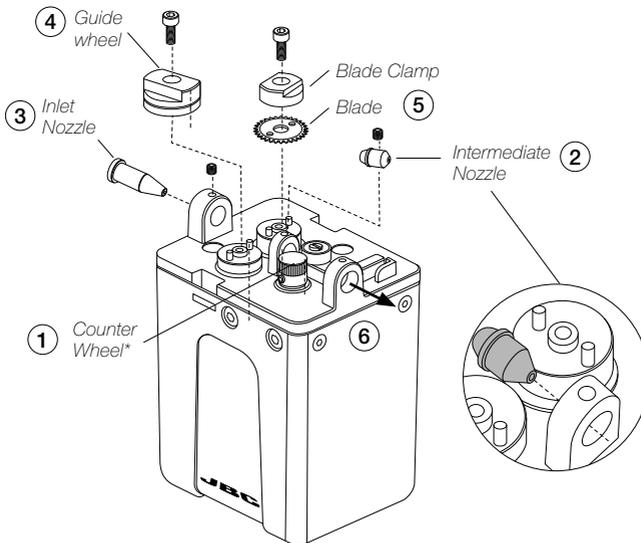
Assembly: GSFR Wheels to SFR

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.

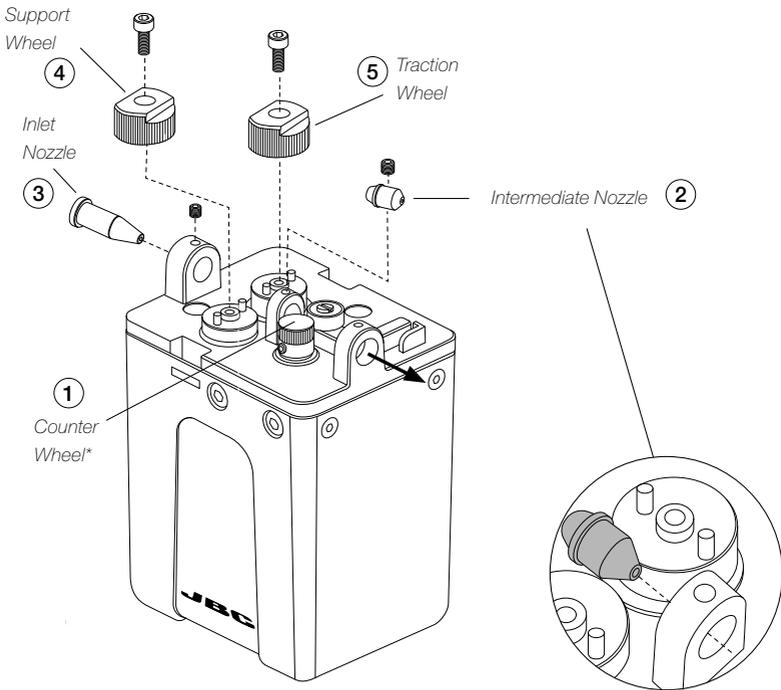


* SFR is supplied with the counter wheel ref. 0026693 already fitted. This counter wheel works for wire diameters $\lt; \varnothing 1.2 \text{ mm } (\varnothing 0.047 \text{ in})$.

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.

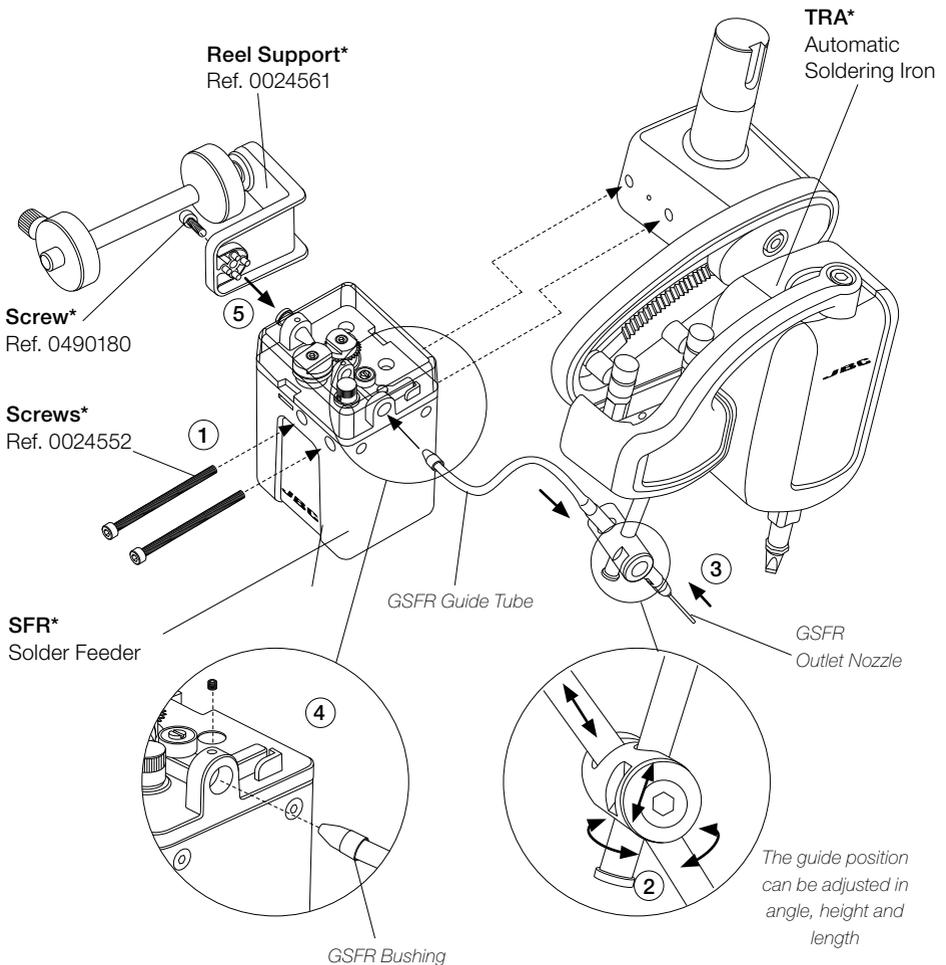


* SFR is supplied with the counter wheel ref. 0026693 already fitted. This counter wheel works for wire diameters $< \varnothing 1.2$ mm ($\varnothing 0.047$ in).

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

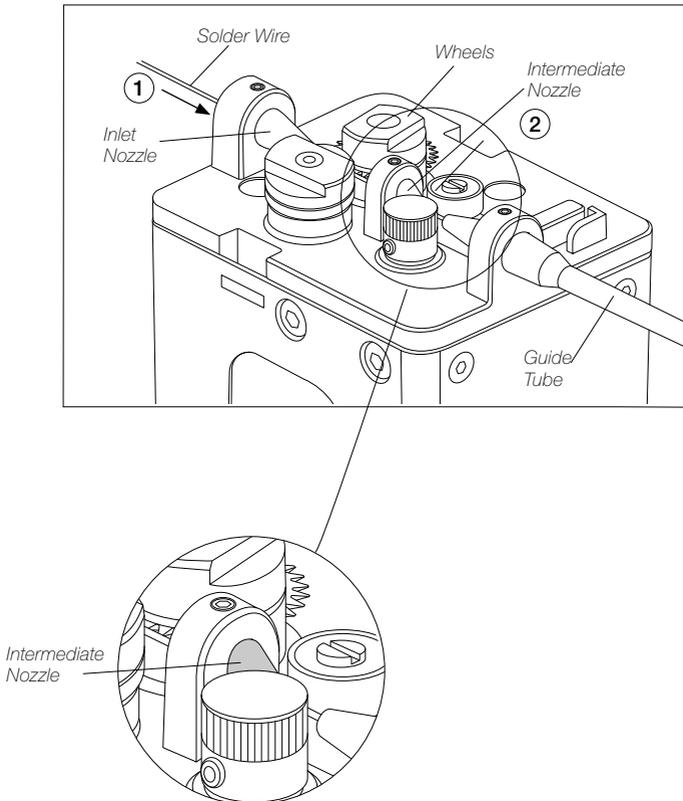
Solder Wire Loading

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



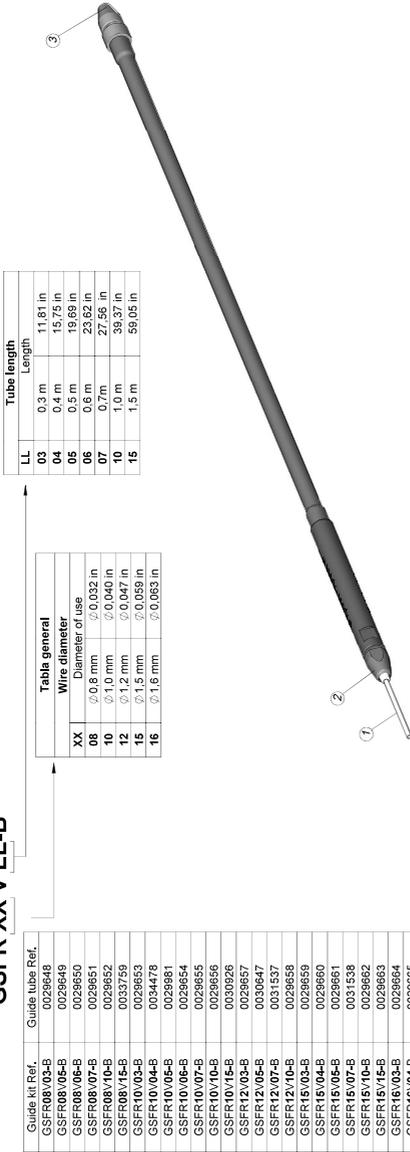
It is imperative to follow safety guidelines to prevent electric shock, injury, fire or explosion.

- 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

GSFR XX V LL-B WITH SOLDER WIRE PERFORATION



LL	03	04	05	06	07	10	15
	0.3 m	0.4 m	0.5 m	0.6 m	0.7 m	1.0 m	1.5 m
	11.81 in	15.75 in	19.69 in	23.62 in	27.95 in	39.37 in	59.05 in

Table general	
Wire diameter	Diameter of use
XX	\varnothing 0.8 mm \varnothing 0.032 in
08	\varnothing 1.0 mm \varnothing 0.040 in
10	\varnothing 1.2 mm \varnothing 0.047 in
12	\varnothing 1.5 mm \varnothing 0.059 in
15	\varnothing 1.6 mm \varnothing 0.063 in
16	\varnothing 1.8 mm \varnothing 0.071 in

Guide kit Ref.	Guide tube Ref.
GSFR08/03-B	0229648
GSFR08/05-B	0229649
GSFR08/06-B	0229650
GSFR08/07-B	0229651
GSFR08/10-B	0229652
GSFR08/15-B	0237759
GSFR10/03-B	0229653
GSFR10/04-B	0344478
GSFR10/05-B	0229661
GSFR10/06-B	0229654
GSFR10/07-B	0229655
GSFR10/10-B	0229656
GSFR12/04-B	0229657
GSFR12/06-B	0229658
GSFR12/07-B	031557
GSFR12/10-B	0229658
GSFR15/03-B	0229659
GSFR15/04-B	0229660
GSFR15/05-B	0229661
GSFR15/07-B	031538
GSFR15/10-B	0229662
GSFR15/15-B	0229663
GSFR16/03-B	0229664
GSFR16/04-B	0229665
GSFR16/05-B	031468
GSFR16/15-B	0229666

Tube length	Wire \varnothing	Blade Ref.	Blade clamp Ref.	Inlet nozzle Ref. (for SFR-A)	Intern. 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	0021166			0023740	0030561	0030237				0029643	0029648	0029660
GSFR10/LL-B	0021169			0023741	0030562	0030238				0029644	0029648	0029661
GSFR12/LL-B	0023738	0021555	0018638	0023736	0030563	0030239	0029660 (C-ride with SFR)	0026695	0026696	0029645	0029648	0029661
GSFR16/LL-B	0019696			0023855	0030564	0030240	0026694	0026695	0026696	0029646	0029648	0029661
GSFR16/LL-B	0025922				0030565	0030241				0029647		

Exploded View

Kits without solder wire perforation

WITHOUT SOLDER WIRE PERFORATION

GSFR XX D LL-B

LL	Tube length
03	0.3 m / 11.81 in
04	0.4 m / 15.75 in
05	0.5 m / 19.68 in
06	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

XX	Wire diameter	Range of uses
04	Ø0.38 - 0.40 mm	Ø0.015 - 0.016 in
05	Ø0.46 - 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.	Traction wheel Ref.	Support wheel Ref.	Inlet nozzle Ref. (for SFR)	Internal nozzle Ref.	Inlet nozzle Ref. (for SFR)	Counter wheel Ref.	Screws Ref.	Threaded stud Ref.	Needle	Metal cap	Input tube guide
GSFR06003-5	0029667											
GSFR06004-5	0033133											
GSFR06006-5	0032362											
GSFR06007-5	0029668											
GSFR06010-5	0029669											
GSFR06003-5	0029670											
GSFR06006-5	0035794											
GSFR07003-5	0029671											
GSFR07007-5	0033776											
GSFR0715-5	0033846											
GSFR08003-5	0029648											
GSFR08006-5	0029649											
GSFR08006-5	0029650											
GSFR08007-5	0029651											
GSFR08010-5	0029652											
GSFR08015-5	0033759											
GSFR10003-5	0029653											
GSFR10006-5	0029654											
GSFR10007-5	0029655											
GSFR10010-5	0029656											
GSFR12003-5	0029657											
GSFR12006-5	0030647											
GSFR12010-5	0029658											
GSFR15003-5	0029659											
GSFR15004-5	0029660											
GSFR15006-5	0029661											
GSFR15010-5	0029662											
GSFR15015-5	0029663											
GSFR16003-5	0029664											
GSFR16004-5	0029665											
GSFR16006-5	0031468											
GSFR16007-5	0031548											
GSFR16015-5	0029666											
GSFR04DL-B			0020345		0024954	0030535	0030534					
GSFR05DL-B			0019519		0025293	0030534	0030534					0029949
GSFR06DL-B					0025291	0030536	0030536					
GSFR07DL-B					0024955	0030537					0029941	
GSFR08DL-B		0019479		0023740	0024956	0030539			0026695		0029948	
GSFR10DL-B				0023741	0024957	0030539						0029950
GSFR12DL-B				0023736	0024958	0030540						
GSFR15DL-B				0023855	0024959	0030541						0029951
GSFR16DL-B			0029367		0024959	0030541						

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:
(L x W x H) | 245 x 185 x 45 mm / 117 g
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.



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