

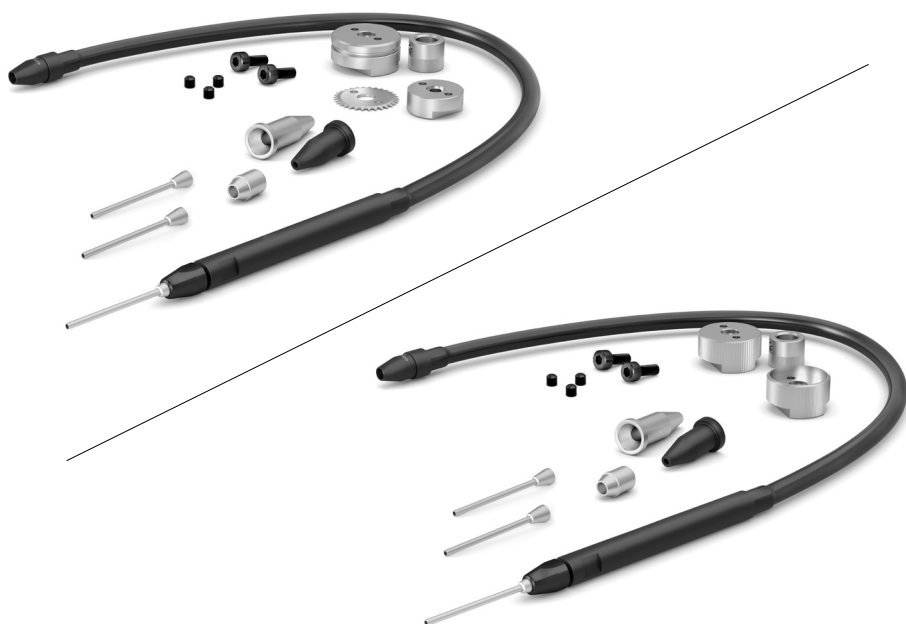
JBC

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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:

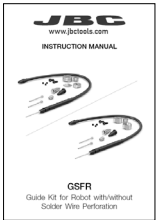
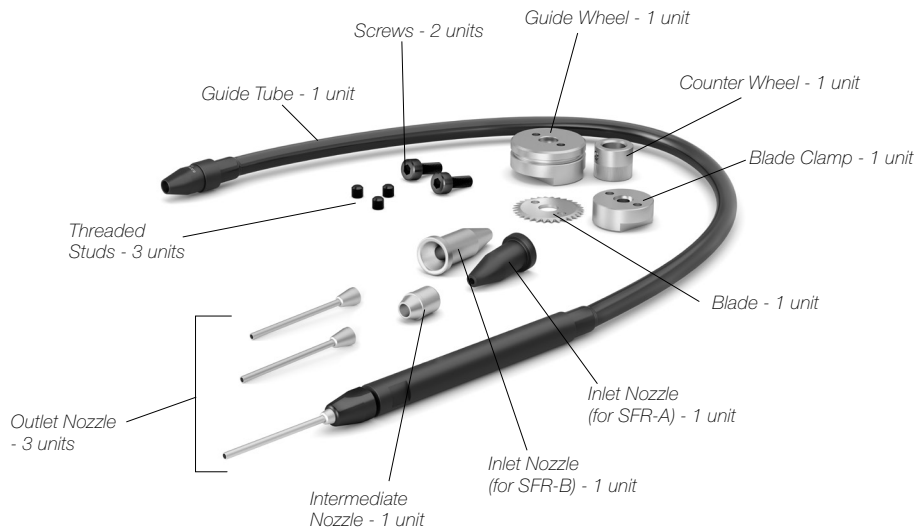
GSFR[XX]D[LL]-B Without Solder Wire Perforation

<u>Ref.</u>	<u>For solder wire diameter Ø</u>	<u>Tube length</u>
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*).

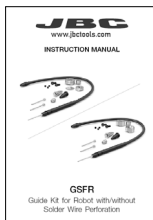
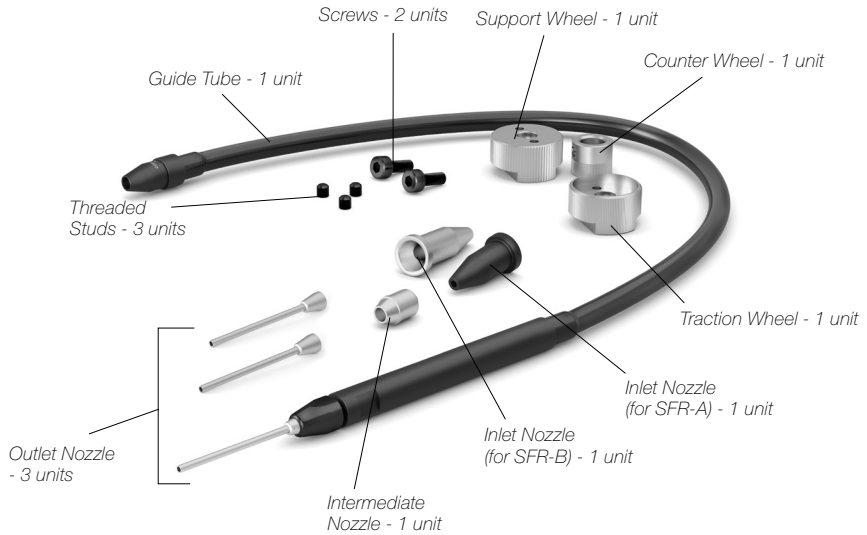


Manual 1 unit
Ref. 0030637

Packing List

Guide Kit for Robot without Solder Wire Perforation

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

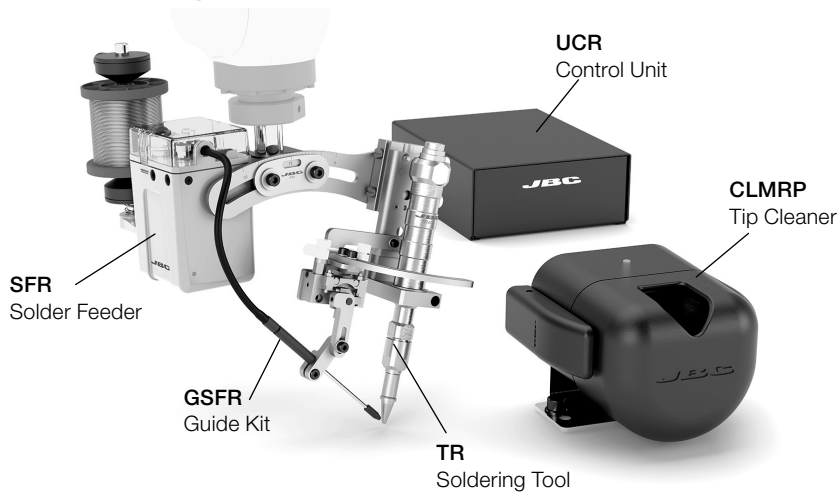


Manual 1 unit
Ref. 0030637

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



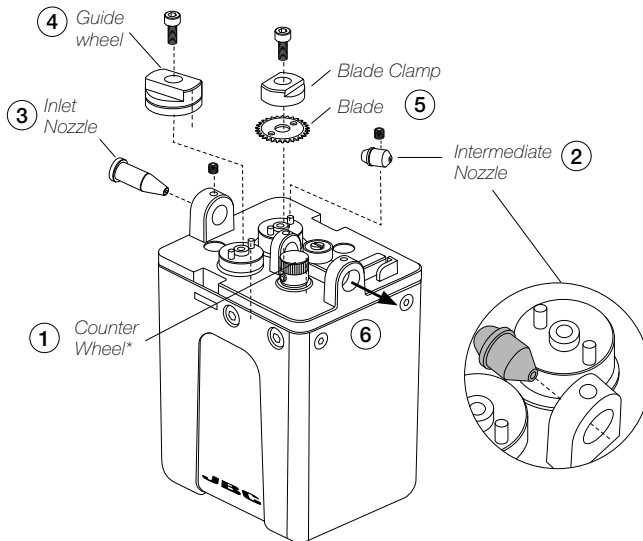
Assembly: GSFR Wheels to SFR

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.

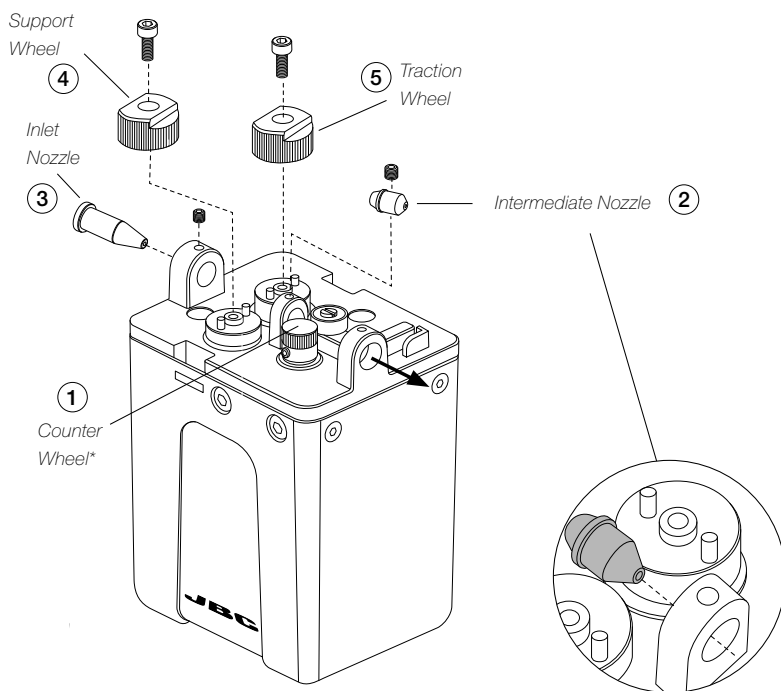


* SFR is supplied with the counter wheel ref. 0026693 already fitted. This counter wheel works for wire diameters < $\varnothing 1.2$ mm ($\varnothing 0.047$ in).

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 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.

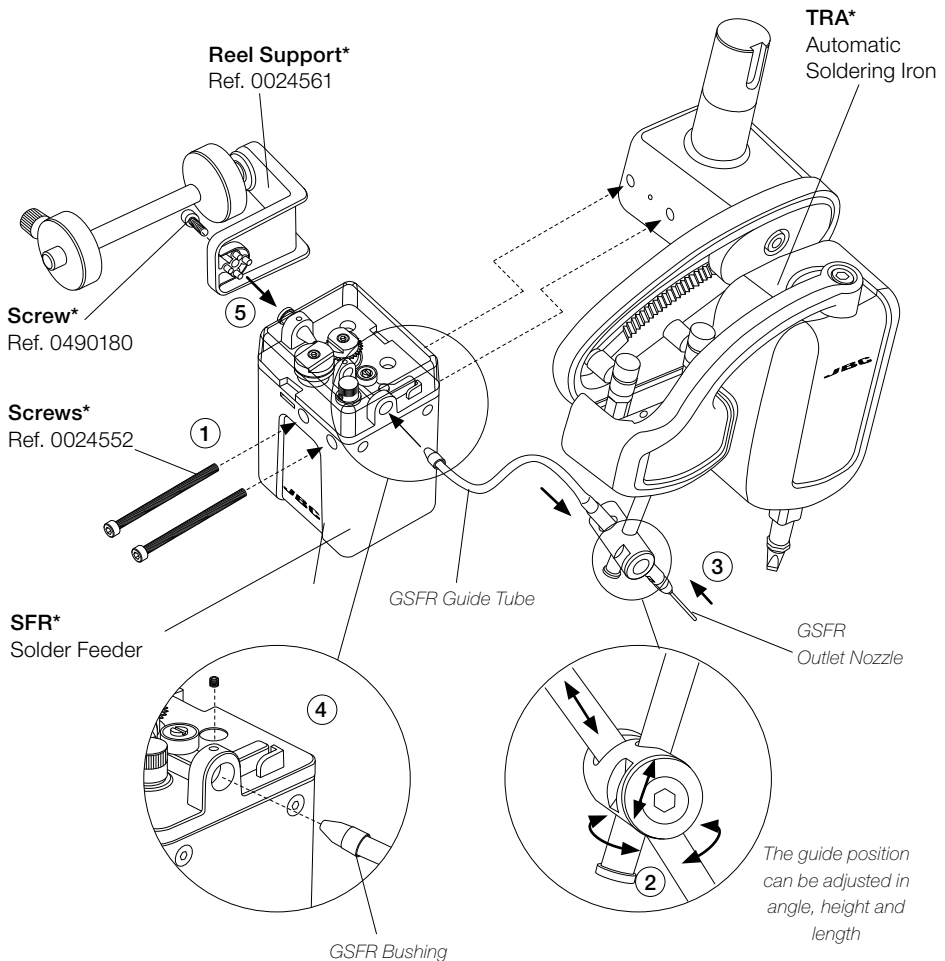


* SFR is supplied with the counter wheel ref. 0026693 already fitted. This counter wheel works for wire diameters $< \varnothing 1.2$ mm ($\varnothing 0.047$ in).

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

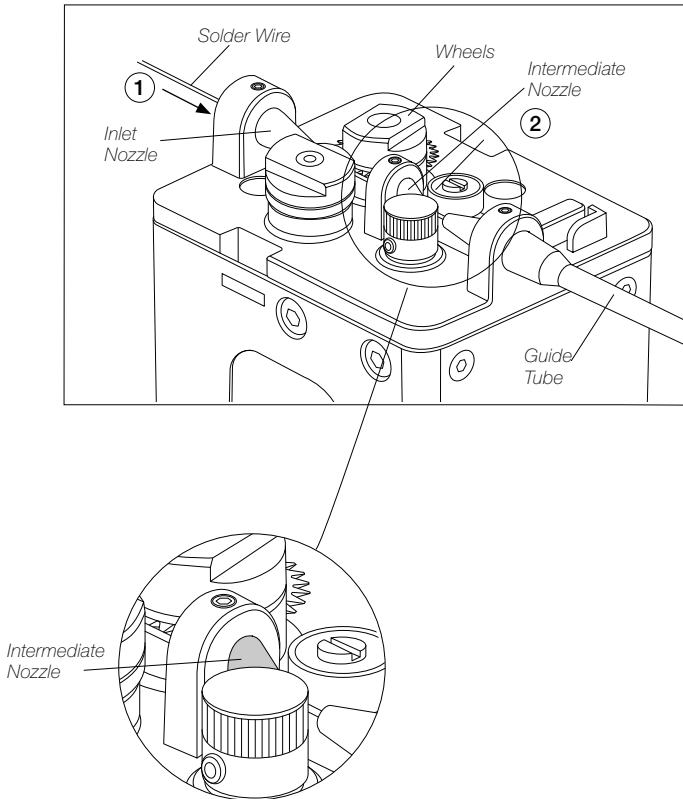
Solder Wire Loading

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

Guide kit Ref.

GSFR08/03-B

0029648

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

0029759

GSFR10/03-B

0029653

GSFR10/04-B

0034478

GSFR10/05-B

0029681

GSFR10/06-B

0029654

GSFR10/07-B

0029655

GSFR10/10-B

0029656

GSFR12/03-B

0029657

GSFR12/05-B

0029658

GSFR12/10-B

0031537

GSFR15/03-B

0029659

GSFR15/04-B

0029660

GSFR15/05-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

Table general

Wire diameter

XX

08

10

12

15

16

Diameter of use

\varnothing 0.8 mm

\varnothing 1.0 mm

\varnothing 1.2 mm

\varnothing 1.5 mm

\varnothing 1.6 mm

\varnothing 0.032 in

\varnothing 0.040 in

\varnothing 0.047 in

\varnothing 0.059 in

\varnothing 0.063 in

Tube length

LL

03

04

05

06

07

10

15

Length

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

27.56 in

39.37 in

59.05 in

3

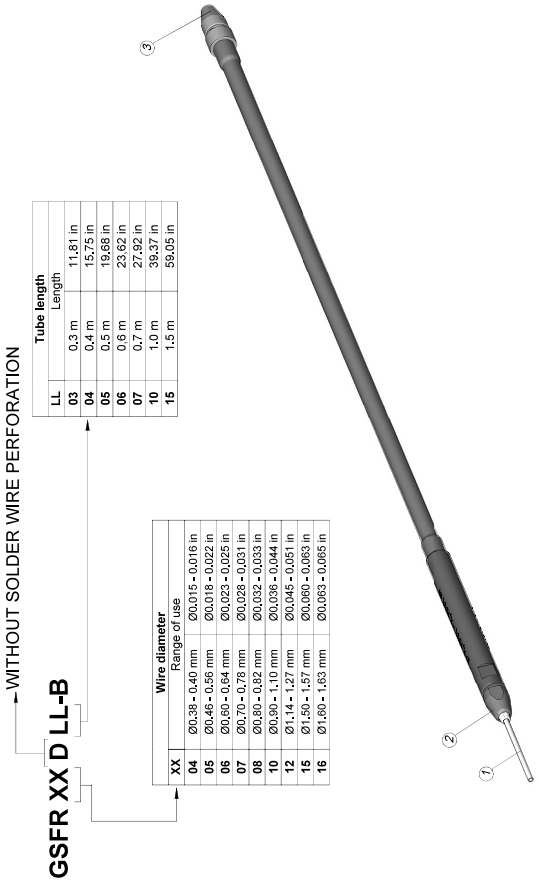
2

1

Tube length	Guide wheel Ref.	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	0021686			0023740	0030561	0030237	0029603 (Provide with SFR)	0026695	0026696	0029943	0029948	0029950
GSFR10/LL-B	0021689			0023741	0030562	0030238				0029944		
GSFR12/LL-B	0023738	0021555	0018638	0023736	0030563	0030239				0029945		0029951
GSFR16/LL-B	0019696			0023855	0030564	0030240	0026694	0026695	0026696	0029946	0029948	
GSFR16/LL-B	0025922				0030565	0030241				0029947		

Exploded View

Kits without solder wire perforation



Guide kit Ref.	Guide tube Ref.
GSFR060503-B	0029667
GSFR060504-B	0033133
GSFR060506-B	0032362
GSFR060507-B	0029668
GSFR060710-B	0029669
GSFR060503-B	0029670
GSFR060506-B	0035794
GSFR060703-B	0029671
GSFR070707-B	0037776
GSFR070715-B	0033646
GSFR080303-B	0029648
GSFR080306-B	0029649
GSFR080306-B	0029650
GSFR080307-B	0029651
GSFR080710-B	0029652
GSFR080715-B	0033759
GSFR100303-B	0029653
GSFR100306-B	0029654
GSFR100707-B	0029655
GSFR100710-B	0029656
GSFR120303-B	0029657
GSFR120306-B	0030647
GSFR120710-B	0029658
GSFR150303-B	0029659
GSFR150306-B	0029660
GSFR150306-B	0029661
GSFR150710-B	0029662
GSFR150715-B	0029663
GSFR160303-B	0029664
GSFR160306-B	0029665
GSFR160306-B	0031468
GSFR160707-B	0031548
GSFR160715-B	0029666

Traction wheel Ref.	Support wheel Ref.	Inlet nozzle Ref. (for SFR)	Interp. nozzle Ref.	Inlet nozzle Ref. (for SFR)	Counter wheel Ref.	Screws Ref.	Threaded stud Ref.	Needle	Metal cap	Input tube guide
GSFR040LL-B	0020345	0024954	0024954	0030535	0026693	0026695	0026696	0029940	0029940	0029949
GSFR050LL-B	0019519	0025293	0025293	0030534	0026693	0026695	0026696	0029941	0029941	0029949
GSFR060LL-B	0019480	0025291	0024955	0030536	0026693	0026695	0026696	0029942	0029942	0029950
GSFR080LL-B	0019479	0023740	0024955	0030537	0026693	0026695	0026696	0029943	0029943	0029950
GSFR100LL-B	0019481	0023741	0024957	0030539	0026693	0026695	0026696	0029944	0029944	0029951
GSFR120LL-B	0028367	0023736	0024958	0030540	0026693	0026695	0026696	0029945	0029945	0029951
GSFR150LL-B	0028367	0023855	0024959	0030541	0026693	0026695	0026696	0029946	0029946	0029951
GSFR160LL-B	0028367	-	0024959	0030541	0026693	0026695	0026696	0029947	0029947	0029951

Notes

[illegible]

Notes

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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.

