



## MSA 2.1

### Automatic Electrofusion Unit with protocols retrieval

The MSA 2.1 automatic electro fusion unit combines light weight and high efficiency, thanks to its inverter technology and furthermore provides fusion documentation in PDF. The unit is extremely fast and simple, with three basic operations required to operator: connect, scan, start the fusion. It is robust, safe and ergonomic.

All is meant to simplify the job: the barcode scanner, for long distance reading, the cooling system to joint in series, the icon system, to keep the interaction between user and machine intuitive. The entire welding process is controlled and regulated with energy output compensation depending on ambient temperature and the indication of cooling time.

The unit has 1000 protocols permanently stored in the internal memory. The user can copy the fusion reports in an USB stick to print them out in PDF format.

Scope of delivery includes: transport box, 1 pair of angle adapter clips 4.0 mm, 1 pair of angle adapter clips 4.7 mm, operating instructions, START/STOP badge and USB memory stick. The mini Welding Book is available as option.

#### Technical Data:

- Operating temperature: -20°C to +50°C
- Fusion data input mode: bar code, manual
- Mains voltage: 230V (190V - 265V)
- Mains frequency: 50-60 Hz
- Welding technique: Voltage controlled
- Fusion voltage: 8-42 V (48 V)
- Fusion current: 90 A (max)
- Suggested power generators: 3.5 kVA
- Internal memory capacity: 1000 protocols
- Fittings range: d20-1200 mm
- Protocols format: PDF and binary (compatible with mini Welding Book)
- USB Port: Type A
- Protection factor: Class 1 / IP 65
- Mains cable: 4 m
- Fusion cable: 4 m
- Weight: ca. 11.9 kg
- Display: Graphical LCD, adjustable contrast
- Languages support: all

Type	Code	SP	Weight (kg)
Barcode scanner, transport case, mini Welding Book	<b>790 156 003</b>	1	20.000
Barcode scanner, transport case, mini Welding Book, Swiss plug	<b>790 156 006</b>	1	20.000
Barcode scanner, transport case, mini Welding Book, 8m welding cables	<b>790 156 010</b>	1	21.000

The technical data are not binding. They neither constitute expressly warranted characteristics nor guaranteed properties nor a guaranteed durability. They are subject to modification. Our General Terms of Sale apply.

Georg Fischer Piping Systems Ltd, Postfach, CH-8201 Schaffhausen/Switzerland

Phone +41 -(0)52-631 1111

e-mail: [info.ps@georgfischer.com](mailto:info.ps@georgfischer.com)

Internet: <http://www.gfps.com>