



# **Electrofusion Products Brochure**

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# **EF Processor Technical Data by Manufacturer**

Parameter	120 Volt Version	240 Volt Version	
Supply Voltage	97 VAC to 150 VAC	180 VAC to 264 VAC	
	47 Hz to 70 Hz		
	Sine Wave or Square Wave		
	30 Amps at 60 Amps Output (120 VAC)	25 Amps at 80 Amps Output (240 VAC)	
	8 VAC to 48 1	VAC +/- 1.5%	
	4 AAC to 60 AAC +/- 1.5% (80 AAC @ 42 VAC output)	4 AAC to 80 AAC +/- 1.5%	
	60% (based on four 15 min. cycles, 9 min. ON and 6 min. OFF for 1 hour)		
	0°F to 140°F		
	Barcode, Manual, Manual Barcode, Resistor ID		
	YES		
	12 feet		
	12 feet		
	1000 Fusions		
	USB A type connector for attaching a USB flash drive to download fusion data.		
	USB B type connector for attaching the AutoCal® field calibration system.		
	English/Spanish		
	90 degree non-rotating		
	IP54 Splash-Proof		
	3 Years		
	1 Year		
	Interchangeable Smart Scan/Smart Scan with GPS		
	Optional		
	Code 128 A, B or C barcodes		
	Class 1 Grounded		
	Field calibration capable		
Weight	48 pounds	57 pounds	

Source: IPEX Friatec

ISO 12176-2 Class	P2 4 U S1 V AK D X
Input Voltage	230V ~/AC, (185V-3
Input Current	16A
Input Frequency	50Hz (40-70Hz)
Power Factor	cos p < 0.6 - 0.9 (P
Output Voltage	8-48V AC/~
Output Current	80A (max.: 110A)
Energy Adjustment	Temperature Comper
Power Consumption	3600VA
Temperature Range	-10°C - 50°C
Protection Class	CE, IP54, Class 2
Weight incl. Cables	20kg
Main Supply Cable	5 m (Euro-Plug)
Welding Cable	5m
Welding Terminals	4.7mm /4.0mm
Display	4 x 20 Characters (al
Dimension	440mm x 380mm x 3

**Technical Data** 

#### 230V ~/AC, (185V-300V) 16A 50Hz (40-70Hz) cos p < 0.6 - 0.9 (Phase Angle Control) 8-48V AC/~ 80A (max.: 110A) Temperature Compensation 3600VA -10°C - 50°C CE, IP54, Class 2 20kg 5 m (Euro-Plug) 5m 4.7mm /4.0mm 4 x 20 Characters (alphanumerical), background lighting 440mm x 380mm x 320mm

#### [echnical specifications MSA 340 (115 V & 230 V)

Input voltage and frequency	115 V and 230 V (+/- 20%)
Frequency range	50-70 Hz
Suggested generator power requirements	6kVA—all fittings including up to 26" IPS/660mm couplings 3.5kVA coupling up to 8"/225mm, all reducers, and all saddles [service tapping tees, high volume tapping tees and branch]
Input Waveform	AC (sine, square or quasi- sine)
Fusion technique	Voltage controlled
Fusion voltage	8-48V~
Operating temperature	-10°F - 120°F
Internal temperature	-10°F - 180°F
Power cable length	12 ft
Fusion cables length	25 ft
Fusion data input mode	Bar code, Manual, CP mode
Capacity of internal memory	1000 fusions
USB port	Type A
Barcode reader port	Dedicated inputs, DIN 5 con- nector
Protection factor	IP 54
Dimensions	13.5" x 12.5" x 16.8"
Weight	52 lbs
Revision/calibration interval	2 years
Warranty	1 year
4.7mm to 3.0mm connector tip adapters	Part # 10001004 (optional)
4.7mm to 4.0mm connector tip adapters	Part # 10001005 (optional)
4.7mm Standard connector tip	Part # 10001727 (equipped)
4.7mm Connector tip with pogo-pin	Part # 10001728 (equipped)
Standards	ISO 12176-2 ISO 12176-3 ISO 12176-4 EN 60335-1 [Safety] EN 61000-6-2 (EMC) EN 61000-6-4 and others IEMC]

Source: Plasson

Source: Georg Fischer Central Plastics

Pipe, Fittings and Fusion Equipment is available from stock locally! Fusion Training Available Locally - Easily Learned, Retained and Duplicated

#### Please Contact for Additional Technical Information or Tailored Presentation

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# Universal Electrofusion Processor for Gas, Municipal, Energy and Industrial Applications

### **Fusion Made Easy**

Sophisticated electrofusion technology in a refined box that is quick, simple, reliable and intuitiative to operate

### **Automated Fusion**

Processor's recognition system automatically detects EF fittings and fused with a fully monitored welding process

### Safety in Mind

Automatic thermal switch, internal fuse protection and emergency stop button designed to protect operator

### **Robust Design**

Processor is self contained in a hard shell case with high quality components to prevent electrical damage in rugged environments – Available IP52 rating for dust and moisture resistance

### Do it Once – Do it Right – Forget About it!

Properly made EF fusion joints create a durable, restrained and smooth ID connection that eliminate Leaks, Roots, Infiltration and Joint Separation

### **Tracking and Traceability**

Multi operational mode with the ability to decipher and scan ASTM barcode and fusion data for a customized traceability work flow with built in GPS

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Source: Integrity Fusion

# Electrofusion (EF) 45° Elbow

## **Fusion Simplified**

FM

APPROVED

Electrical current through copper wires from an EF Processor creates heat and melts the PE pipe OD to the ID of the EF fitting

**PLASTICS** 

PIPE INSTITUTE<sup>®</sup>

### Leak Free

Fusion of EF products to PE pipe create a homogenous bond, restrained connection and a leak free piping system

# **Tracking and Traceability**

EF Fitting are marked for tracking and traceability via a scannable bar code

## **Extreme Temperature Range**

Allowable operational temeprature range between -25°F to 140°F with compensation for expansion and contraction

### Available Sizing Chart

Pressure Rating – Water @ 73F	200 psi	125 psi
Standard Dimensional Ratio (SDR)	11	17
Electrofusion IPS Sizing	4"-8"	4"-8"

Natural Gas – 100 psi (DR 11) @ 73°F Pressure Rating

Please Contact for Additional Technical Information or Tailored Presentation

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#### Source: Integrity Fusion

# Electrofusion (EF) 90° Elbow

## **Fusion Simplified**

FM

APPROVED

Electrical current through copper wires from an EF Processor creates heat and melts the PE pipe OD to the ID of the EF fitting

**PLASTICS** 

PIPE INSTITUTE<sup>®</sup>

### Leak Free

Fusion of EF products to PE pipe create a homogenous bond, restrained connection and a leak free piping system

## **Tracking and Traceability**

EF Fitting are marked for tracking and traceability via a scannable bar code

### **Extreme Temperature Range**

Allowable operational temeprature range between -25°F to 140°F with compensation for expansion and contraction

#### Available Sizing Chart

Pressure Rating – Water @ 73F	200 psi	125 psi
Standard Dimensional Ratio (SDR)	11	17
Electrofusion IPS Sizing	4"-8"	4"-8"

Natural Gas - 100 psi (DR 11) @ 73°F Pressure Rating

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Source: Integrity Fusion

# **Electrofusion (EF) Coupler**

# **Fusion Simplified**

FM

APPROVED

Electrical current through copper wires from an EF Processor creates heat and melts the PE pipe OD to the ID of the EF fitting

**PLASTICS** 

PIPE INSTITUTE<sup>®</sup>

### Leak Free

Fusion of EF products to PE pipe create a homogenous bond, restrained connection and a leak free piping system

# **Tracking and Traceability**

EF Fitting are marked for tracking and traceability via a scannable bar code

## **Extreme Temperature Range**

Allowable operational temeprature range between -25°F to 140°F with compensation for expansion and contraction

### Available Sizing Chart

Pressure Rating – Water @ 73F	335 psi	200 psi	125 psi
Standard Dimensional Ratio (SDR)	7	11	17
Electrofusion IPS Sizing	2"-24"	1"-48"	22"-54"

Natural Gas – 100 psi (DR 11) @ 73°F Pressure Rating

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**PLASTICS** 

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# **Electrofusion (EF) Reducer**

## **Fusion Simplified**

FM

APPROVED

Electrical current through copper wires from an EF Processor creates heat and melts the PE pipe OD to the ID of the EF fitting

### Leak Free

Fusion of EF products to PE pipe create a homogenous bond, restrained connection and a leak free piping system

## **Tracking and Traceability**

EF Fitting are marked for tracking and traceability via a scannable bar code

## **Extreme Temperature Range**

Allowable operational temeprature range between -25°F to 140°F with compensation for expansion and contraction

### Available Sizing Chart

Pressure Rating – Water @ 73F	200 psi	125 psi
Standard Dimensional Ratio (SDR)	11	17
Electrofusion IPS Sizing	1"-4" x 3/4"-3"	1"-4" x 3/4"-3"

Natural Gas – 100 psi (DR 11) @ 73°F Pressure Rating

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Source: Integrity Fusion

# **Electrofusion (EF) Equal Tee**

# **Fusion Simplified**

FM

APPROVED

Electrical current through copper wires from an EF Processor creates heat and melts the PE pipe OD to the ID of the EF fitting

**PLASTICS** 

INSTITUTE

PIPE

### Leak Free

Fusion of EF products to PE pipe create a homogenous bond, restrained connection and a leak free piping system

# **Tracking and Traceability**

EF Fitting are marked for tracking and traceability via a scannable bar code

## **Extreme Temperature Range**

Allowable operational temeprature range between -25°F to 140°F with compensation for expansion and contraction

### Available Sizing Chart

Pressure Rating – Water @ 73F	200 psi	125 psi
Standard Dimensional Ratio (SDR)	11	17
Electrofusion IPS Sizing	3/4"-8"	3/4"-8"

Natural Gas - 100 psi (DR 11) @ 73°F Pressure Rating

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**PLASTICS** 

INSTITUTE

PIPE



# Electrofusion (EF) Branch Saddle

## **Fusion Simplified**

FM

APPROVED

Electrical current through copper wires from an EF Processor creates heat and melts the PE pipe OD to the ID of the EF fitting

### Leak Free

Fusion of EF products to PE pipe create a homogenous bond, restrained connection and a leak free piping system

# **Tracking and Traceability**

EF Fitting are marked for tracking and traceability via a scannable bar code

## **Extreme Temperature Range**

Allowable operational temeprature range between -25°F to 140°F with compensation for expansion and contraction

### Available Sizing Chart

Pressure Rating – Water @ 73F	200 psi	125 psi
Standard Dimensional Ratio (SDR)	11	17
Electrofusion IPS Sizing	2"-6" (Outlet) x 3"-10" (Base)	2"-6" (Outlet) x 3"-10" (Base)

Natural Gas - 100 psi (DR 11) @ 73°F Pressure Rating

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