

# FastMig M

A new breed of industrial workhorse



# Proven reliability from the top of the welding technology

Top welding performance for industrial MIG/MAG welding.

Welding machine with various configurations and possibilities.

Two package options – regular easiness or synergic diversity.

## Welding equipment optimised to your production

FastMig M series is a combination of modularity, ease of use and wide range of usage.

These machines pack huge duty cycle performance into compact lean dimensions and weight, increasing productivity and work site mobility.

In industrial MIG/MAG welding, FastMig

M is the well known high-technology alternative to conventional designs. Its control technology ensures excellent arc ignition and welding performance, so you spend more time welding and less time removing spatter.

There are two product package options from which you can select the

optimal for your welding application: the synergic package for demanding advanced use, and the regular one for basic use.

Whenever your application changes, you can update your FastMig M setup to go along with your production needs.



## Benefits

- Modular design
- Two package options: Regular and Synergic
- Multi-voltage power supply version available
- WiseFusion™ option for easy and efficient welding out of position
- All Wise™ optimisation products
- MasterTig LT 250 and ArcFeed connection in power source with the optional AS kit
- SuperSnake sub feeder for extended reach
- MagTrac F 61 welding carriage for improved productivity



# Enjoy the magnificent ease of use – either synergic or regular

## Regular set-up for strong and reliable welding for affordable price

The basic MR 200 and MR 300 control panels offer a straightforward way of regulating the welding parameters.

Choose the MR type of control panel if you prefer simple and ordinary two-knob control of the wire feed speed and the welding voltage.



## FastMig M is a strong and reliable workhorse no matter which package you choose: Regular or Synergic.

You can choose either regular or synergic way of controlling the welding parameter values on your machine. Both control modes are available for any power source and wire feeder combination.

**Regular FastMig M packages** contain an MR control panel, representing the regular way of controlling the welding parameters. This package is suitable for basic welding applications in professional industrial welding.



**Synergic FastMig M packages** contain an MS control panel, which includes easy-to-use synergic functionality and a rich selection of additional features for optimising your welding work. These packages are suitable for professional use in more demanding industrial applications.

You can choose your wire feeder and control panel combination according to your present welding needs, and if your application changes later on, you can always refresh your FastMig M system with new power levels, wire feeder options and welding software.

## Synergic set-up for demanding industrial applications

The synergic MS 200 and MS 300 control panels offer super easy functions and a rich selection of features for optimising your welding system.

Clear visual presentation of the welding parameters, one-knob control of welding power, easy setup and selection of memory channels, and the overall ease of use of the MS control panels make your FastMig M system a versatile and efficient tool for any industrial MIG/MAG welding application.

## Choice of wire feeders

You have a choice of three wire feeder models to go with your Regular or Synergic FastMig M package.

FastMig MXF 63 is a small and light version for 200 mm wire spools, whereas MXF 65 and MXF 67 models fit 300 mm wire spools. FastMig MXF 67 has an extra strong dual-skin plastic casing.

Both regular and synergic control panel options are available for all wire feeder models.



## Boost your welding performance with auxiliary options

Take a step onto a new level of welding productivity: Combine the welding power of your FastMig M with the speed and reliability of Kemppi's MagTrac F 61 welding carriage.

To take the welding productivity one step further, you can combine your FastMig M and MagTrac F 61 setup with

the WiseFusion welding optimisation function. This is a welding combination that delivers quality welds with a very low heat input, resulting in significant reduction in straightening and other after work costs. It has been calculated that this solution can reduce your after work costs by up to 20 %.

Furthermore, the FastMig M solution offers a wide selection of remote control devices to make the welder's work more efficient and productive. And if you need more reach, you can connect the SuperSnake sub feeder, which gives you up to 30 meters wider work range.

# Technical specifications

		FastMig M 320	FastMig M 420	FastMig M 520
Connection voltage	3~, 50/60 Hz	400 V -15 %...+20 %	400 V -15 %...+20 %	400 V -15 %...+20 %
Rated power	60 % ED	-	20 kVA	27 kVA
	100 % ED	15 kVA	18 kVA	20 kVA
Output 40 °C	60 % ED	-	420 A	520 A
	100 % ED	320 A	380 A	430 A
Welding current and voltage range	MMA	15 A/20 V – 320 A/45 V	15 A/20 V – 420 A/44 V	15 A/20 V – 520 A/43 V
	MIG	20 A/12 V – 320 A/45 V	20 A/12 V – 420 A/44 V	20 A/12 V – 520 A/43 V
Max. welding voltage		45 V	45 V	45 V
Open circuit voltage MMA		U <sub>0</sub> = 48 – 53 V U <sub>av</sub> = 50 V	U <sub>0</sub> = 48 – 53 V U <sub>av</sub> = 50 V	U <sub>0</sub> = 48 – 53 V U <sub>av</sub> = 50 V
Open circuit voltage MIG/MAG		U <sub>0</sub> = 50 – 58 V	U <sub>0</sub> = 50 – 58 V	U <sub>0</sub> = 50 – 58 V
Idle power		25 W	25 W	25 W
Efficiency at max. current		88 %	89 %	89 %
Power factor at max. current		0.80	0.87	0.90
Operating temperature range		-20 ... +40 °C	-20 ... +40 °C	-20 ... +40 °C
Storage temperature range		-40 ... +60 °C	-40 ... +60 °C	-40 ... +60 °C
Degree of protection		IP23S	IP23S	IP23S
EMC class		A	A	A
Minimum short circuit power S <sub>SC</sub> of supply network*		-	5.6 MVA	5.8 MVA
External dimensions		590 x 230 x 430 mm	590 x 230 x 430 mm	590 x 230 x 430 mm
Weight		34 kg	35 kg	36 kg

		FastMig M 420 MV – 400 V range	FastMig M 420 MV – 230 V range
Connection voltage	3~, 50/60 Hz	380 V -10% ... 440 V +10%	220 V -10 % ... 230 V +10 %
Rated power	60 % ED	22kVa	21 kVa
	100 % ED	19 kVa	18 kVa
Output 40 °C	60 % ED	420 A	420 A
	100 % ED	380 A	380 A
Welding current and voltage range	MMA	15 A/20 V ... 420 A/44 V	15 A/20 V ... 420 A/48 V
	MIG	20 A/12 V ... 420 A/44 V	20 A/12 V ... 420 A/48 V
Max. welding voltage		44 V	48 V
Open circuit voltage MMA		U <sub>0</sub> = 48 ... 53 V U <sub>av</sub> = 50 V	U <sub>0</sub> = 48 ... 53 V U <sub>av</sub> = 50 V
Open circuit voltage MIG/MAG		U <sub>0</sub> = 53 ... 58 V	U <sub>0</sub> = 60 ... 65 V
Idle power		25 W	25 W
Efficiency at max. current		87 %	87 %
Power factor at max. current		0.82	0.85
Operating temperature range		-20 ... +40 °C	-20 ... +40 °C
Storage temperature range		-40 ... +60 °C	-40 ... +60 °C
Degree of protection		IP23S	IP23S
EMC class		A	A
Minimum short circuit power S <sub>SC</sub> of supply network*		5.6 MVA	-
External dimensions		590 x 230 x 580 mm	590 x 230 x 580 mm
Weight		49 kg	49 kg

		FastMig MXF 63	FastMig MXF 65	FastMig MXF 67
Output 40 °C	60 % ED	520 A	520 A	520 A
	100 % ED	440 A	440 A	440 A
Wire feed speed		0 – 25 m/min	0 – 25 m/min	0 – 25 m/min
Wire feed mechanism		4-roll	4-roll	4-roll
Diameter of feed rolls		32 mm	32 mm	32 mm
Filler wires	∅ Fe, Ss	0.6 – 1.6 mm	0.6 – 1.6 mm	0.6 – 1.6 mm
	∅ Cored wire	0.8 – 1.6 mm	0.8 – 2.0 mm	0.8 – 2.0 mm
	∅ Al	1.0 – 1.6 mm	1.0 – 2.4 mm	1.0 – 2.4 mm
Wire spool	max. weight / max. ∅	5 kg / 300 mm	20 kg / 300 mm	20 kg / 300 mm
External dimensions	L x W x H	510 x 200 x 310 mm	620 x 210 x 445 mm	625 x 243 x 476 mm
Weight		9.4 kg	11.1 kg	12.5 kg



## Ordering information:

Power sources					
FastMig M 320		6132320	Interconnection cable	1.8 m	6260401
FastMig M 420		6132420	Interconnection cable	5 m	6260405
FastMig M 520		6132520	Interconnection cable	10 m	6260326
FastMig M 420 MV		6132423	Interconnection cable	15 m	6260325
			Interconnection cable	20 m	6260327
			Interconnection cable	30 m	6260330
			Interconnection cable, water cooled	1.8 m	6260410
			Interconnection cable, water cooled	5 m	6260407
			Interconnection cable, water cooled	10 m	6260334
			Interconnection cable, water cooled	15 m	6260335
			Interconnection cable, water cooled	20 m	6260337
			Interconnection cable, water cooled	30 m	6260340
Wire feeders					
MXF 65 EL	To be used with MS panels	6152100EL	WiseFusion welding function		9991014
MXF 67 EL	To be used with MS panels	6152200EL	WisePenetration welding function		9991000
MXF 63 EL	To be used with MS panels	6152300EL	WiseRoot welding process		6265011
MXF 65	To be used with MR panels	6152100	WiseThin welding process		9991013
MXF 67	To be used with MR panels	6152200	WiseSynergicMig (for FastMig M)		9990420
MXF 63	To be used with MR panels	6152300	MatchLog		9991017
Panels for wire feeders					
FastMig MR 200		6136100	MatchPIN		6265026
FastMig MR 300		6136200	Transport unit P501		6185269
FastMig MS 200		6136300	Transport unit PM 500		6185291
FastMig MS 300		6136400	Transport unit PM 502		6185293
Accessories					
Earth return cable	5 m, 50 mm <sup>2</sup>	6184511	Transport unit T10 *		6185231
Earth return cable	5 m, 70 mm <sup>2</sup>	6184711	Transport unit T120 *		6185252
Cable for MMA welding	5 m, 50 mm <sup>2</sup>	6184501	KWF 200 hanging frame		6185285
Cable for MMA welding	5 m, 70 mm <sup>2</sup>	6184701	KWF 200 protection sliders		6185286
Remote control unit R10	5m	6185409	KV 200 mouting plate		6185249
Remote control unit R10	10m	618540901	MXF 63 hanging frame (incl. KPS mouting set)		6185285
Remote control unit R20	5m	6185419	MXF 65 hanging kit		W001694
R30 DataRemote	5m	6185420	MXF 63 protection sliders (incl. KPS mouting set)		6185286
R30 DataRemote	10m	618542001			
Remote control unit RMT 10		6185475			
Remote control cable	10m	6185481			
AS KIT		6264263			
Cooling unit FastCool 10		6068100			
Gun holder GH 30		6256030			
KV 401 Swing boom arm (PM 500)		6185248			
GG200/300 gas guard		6237406			
MXFSuperSnake synchronisation kit		W004030			

\* Mounting kit W002085 required

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