

FastMig X Pipe

High-end multi-process welding equipment for high-quality welding on pipes and plates

Briefly

- High-quality welding on pipes and plates – From root to the top
- Root welding without backing
- Optimal weld penetration and weld shape in all positions
- Stable process – Easy to handle for welders on all skill levels
- Quick change of parameters during welding with MatchLog – More speed and productivity

Applications

- Pipe welding in all segments
- Sheet welding from one side
- Pressure vessels, tanks, heat exchangers (thick carbon steel)
- Harsh conditions, cold and hot, salt, dust



Product description

Kemppi's FastMig X product series is a versatile range of high-end multi-process welding equipment. It contains device and software components specially designed for certain welding applications.

There are three ready-made sample setups available for FastMig X: **Regular**, **Pipe** and **Intelligent**, all of them either air or liquid cooled.

This datasheet presents the FastMig X Pipe setup, which is intended for high-quality welding on pipes and plates and for root welding from one side. Please see also the datasheets for the Regular and Intelligent setups.

Sample setup: FastMig X Pipe

- Power source options: FastMig X 450, 350 or 350MV (multi-voltage), all of them including the MMA option.
- Fixed X 37 power source control panel contains 10 user profiles and 10 memory channels for each profile. Can be replaced with the Remote X 37 panel.
- Wire feeder options: WFX 200 P Fe/Ss or WFX 300 P Fe/Ss.
- Cool X cooling unit for liquid-cooled setups.
- Wire feeders available fitted for either steel (Fe) or stainless steel (Ss) welding.
- Includes WiseRoot+™, WiseFusion™ and MatchLog™ welding optimization software.
- Several optional extras. See the next page for further details.

NOTE: All wire feeders are delivered without feed rolls, liners and wire guide tubes. They can be ordered separately based on the welding application. For information, please visit go.kemppi.com/kitselect.



Compatible with these welding quality solutions

- Kemppi ARC System for managing welding production
- Arclnfo for monitoring the welding process
- Kemppi Universal WPS packages for MMA and MIG/MAG welding

Detailed technical information can be found in the technical data tables later in this datasheet.

For more product information, videos and news, please visit our website at www.kemppi.com

FastMig X Pipe

High-end multi-process welding equipment for high-quality welding on pipes and plates

Wire feeders

WFX 200 P Fe/Ss and WFX 300 P Fe/Ss:

- Special models for steel welding (Fe) and stainless steel welding (Ss).
- Wire spool sizes: 5 kg/200 mm in WFX 200 P Fe/Ss and 20 kg/200 mm in WFX 300 P Fe/Ss.
- Full-metal, two-motor GT04™ wire feed mechanism for 300 mm spool size.
- Reliable DuraTorque™ wire drive mechanism for 200 mm spool size.
- WiseFusion™, WiseRoot+™ and MatchLog™ included.
- Compatible with all Wise™ software products.
- Pulsed and double-pulsed MIG/MAG included in the Ss model.
- ArcVoltage feature included. It measures the actual voltage at the welding arc and displays it on the control panel. This helps you keep your welding values inside the predefined range regardless of the size and length of the cables.



Optional extras

There are several optional extras that you can purchase for your FastMig X. This sample setup is compatible with at least the following hardware and software options.

- SuperSnake sub feeder for extra wide working range
NOTE: WiseRoot+ and WiseThin+ cannot be used with SuperSnake.
- PMT MN multi-neck welding guns with changeable neck options optimized for different welding tasks, e.g. root welding.
- Remote X 37 control panel to replace the fixed control panel on power source.
- Hand remote control units R 10, R 20 and R 30.
- Transport units.
- ARC Mobile Control adapter lets you use a smartphone or a tablet computer for wireless monitoring and controlling of the welding parameters and copying welding settings from one machine to another.

Please visit KEMPPi website for further information.



FastMig X Pipe

High-end multi-process welding equipment for high-quality welding on pipes and plates

Technical data

| FastMig™ | | X 350 | X 450 |
|-----------------------------------|---------------|--|--|
| Connection voltage | | 400 V, -15...+20 % | 400 V, -15...+20 % |
| Rated power | 60 % ED | | 22.1 kVA |
| | 80 % ED | 16.0 kVA | |
| | 100 % ED | 15.3 kVA | 16.0 kVA |
| Output 40 °C | 60 % ED | | 450 A |
| | 80 % ED | 350 A | |
| | 100 % ED | 330 A | 350 A |
| Welding current and voltage range | MMA | 15 A/20 V – 350 A/46 V | 15 A/20 V – 450 A/46 V |
| | MIG | 20 A/12 V – 350 A/46 V | 20 A/12 V – 450 A/46 V |
| Max. welding voltage MMA | | 46 V | 46 V |
| Open circuit voltage | MMA | U ₀ = 70 – 98 V U _{av} = 50 V | U ₀ = 70 – 98 V U _{av} = 50 V |
| | MIG/MAG/Pulse | U ₀ = 80 – 98 V | U ₀ = 80 – 98 V |
| Open circuit power | | 100 W | 100 W |
| Power factor at max. current | | 0.85 | 0.88 |
| Efficiency at 100 % ED | | 87 % | 87 % |
| Operating temperature range | | -20...+40 °C | -20...+40 °C |
| Storage temperature range | | -40...+60 °C | -40...+60 °C |
| EMC class | | A | A |
| Degree of protection | | IP23S | IP23S |
| External dimensions | L x W x H | 590 x 230 x 430 mm | 590 x 230 x 430 mm |
| Weight | | 38 kg | 38 kg |

The minimum recommended generator output is 35 kVA.

FastMig X Pipe

High-end multi-process welding equipment for high-quality welding on pipes and plates

Technical data

| FastMig™ X 350MV | | 230 V range | 400 V range |
|-----------------------------------|---------------|--|--|
| Connection voltage | 3~50/60 Hz | 220 V -10%...230 V +10% | 380 V -10%...440 V +10% |
| Rated power | 80 % ED | 16.0 kVA | 16.0 kVA |
| | 100 % ED | 15.3 kVA | 15.3 kVA |
| Output 40 °C | 80 % ED | 350 A | 350 A |
| | 100 % ED | 330 A | 330 A |
| Welding current and voltage range | MMA | 15 A/20 V – 350 A/46 V | 15 A/20 V – 350 A/46 V |
| | MIG | 20 A/12 V – 350 A/46 V | 20 A/12 V – 350 A/46 V |
| Max. welding voltage MMA | | 46 V | 46 V |
| Open circuit voltage | MMA | $U_0 = 70 - 98 \text{ V}, U_{av} = 50 \text{ V}$ | $U_0 = 70 - 98 \text{ V}, U_{av} = 50 \text{ V}$ |
| | MIG/MAG/Pulse | $U_0 = 80 - 98 \text{ V}$ | $U_0 = 80 - 98 \text{ V}$ |
| Open circuit power | | 100 W | 100 W |
| Power factor at max. current | | 0.90 | 0.88 ... 0.82 |
| Efficiency at 100 % ED | | 83 % | 85 % |
| Operating temperature range | | -20...+40 °C | -20...+40 °C |
| Storage temperature range | | -40...+60 °C | -40...+60 °C |
| EMC class | | A | A |
| Degree of protection | | IP23S | IP23S |
| External dimensions | L x W x H | 590 x 230 x 580 mm | 590 x 230 x 580 mm |
| Weight | | 49 kg | 49 kg |

The minimum recommended generator output is 35 kVA.

| WFX | | 200 P Fe, 200 P Ss | 300 P Fe, 300 P Ss |
|-----------------------------|--------------|--------------------|--------------------|
| Output 40 °C | 60 % ED | 520 A | 520 A |
| | 100 % ED | 440 A | 440 A |
| Wire feed speed | | 1 – 25 m/min | 0.5 – 25 m/min |
| Wire feed mechanism | | 4-roll | 4-roll, two motors |
| Diameter of feed rolls | | 32 mm | 32 mm |
| Filler wires | ∅ Fe, Ss | 0.6 – 1.6 mm | 0.6 – 2.0 mm |
| | ∅ Cored wire | 0.8 – 2.0 mm | 0.8 – 2.4 mm |
| | ∅ Al | 0.8 – 2.4 mm | 0.8 – 2.4 mm |
| Wire spool | max. weight | 5 kg | 20 kg |
| | max. ∅ | 200 mm | 300 mm |
| Operation temperature range | | -20 ... +40 °C | -20 ... +40 °C |
| Storage temperature range | | -40 ... +60 °C | -40 ... +60 °C |
| EMC class | | A | A |
| Degree of protection | | IP23S | IP23S |
| External dimensions | L x W x H | 510 x 200 x 310 mm | 590 x 240 x 445 mm |
| Weight | | 9.4 kg | 13.1 kg |

FastMig X Pipe

High-end multi-process welding equipment for high-quality welding on pipes and plates

Ordering information

| | | |
|------------------------------|---------------------------------------|-----------|
| FastMig X 450 power source | X 37 control panel included | 6103450 |
| FastMig X 450 power source | No control panel | 610345001 |
| FastMig X 350 power source | X 37 control panel included | 6103350 |
| FastMig X 350 power source | No control panel | 610335001 |
| FastMig X 350MV power source | X 37 control panel included | 6103353 |
| FastMig X 350MV power source | No control panel | 610335301 |
| WFX 200 wire feeder | 200 mm, regular pulse welding | 6103520 |
| WFX 300 wire feeder | 300 mm, regular pulse welding | 6103530 |
| WFX 200 P Fe wire feeder | 200 mm, pipe welding, steel | 6103521 |
| WFX 300 P Fe wire feeder | 300 mm, pipe welding, steel | 6103531 |
| WFX 200 P Ss wire feeder | 200 mm, pipe welding, stainless steel | 6103522 |
| WFX 300 P Ss wire feeder | 300 mm, pipe welding, stainless steel | 6103532 |
| WFX 200 AMC wire feeder | 200 mm, intelligent pulse welding | 6103523 |
| WFX 300 AMC wire feeder | 300 mm, intelligent pulse welding | 6103533 |
| WFX 200-T | 200 mm, empty | 6103524 |
| WFX 300 P-T | 300 mm, empty | 6103535 |
| WFX 300-T | 300 mm, empty | 6103536 |

Control devices

| | | |
|----------------------------|---|---------|
| Remote X 37 control panel | | 6103800 |
| Arc Mobile Control adapter | Bluetooth adapter for Arc Mobile Control (included with WFX 200 AMC and WFX 300 AMC) | 6103100 |

Cables

| | | |
|--------------------|-------------------------|---------|
| Earth return cable | 5 m, 50 mm ² | 6184511 |
| Earth return cable | 5 m, 70 mm ² | 6184711 |
| MMA welding cable | 5 m, 50 mm ² | 6184501 |
| MMA welding cable | 5 m, 70 mm ² | 6184701 |

Interconnection cables, air-cooled

| | | |
|---------------------|-------|---------|
| FASTMIG X 70-1.8-GH | 1.8 m | 6260468 |
| FASTMIG X 70-5-GH | 5 m | 6260469 |
| FASTMIG X 70-10-GH | 10 m | 6260470 |
| FASTMIG X 70-20-GH | 20 m | 6260471 |
| FASTMIG X 70-30-GH | 30 m | 6260472 |

– For other lengths, please contact Kemppi.

FastMig X Pipe

High-end multi-process welding equipment for high-quality welding on pipes and plates

Ordering information

| Interconnection cables, liquid-cooled | | |
|---|-------|---------|
| FASTMIG X 70-1.8-WH | 1.8 m | 6260473 |
| FASTMIG X 70-5-WH | 5 m | 6260474 |
| FASTMIG X 70-10-WH | 10 m | 6260475 |
| FASTMIG X 70-20-WH | 20 m | 6260476 |
| FASTMIG X 70-30-WH | 30 m | 6260477 |
| – For other lengths, please contact Kemppi. | | |

| Software products | | |
|--|---|----------|
| MatchLog™ | Included with WFX 200 AMC and 300 AMC | 9991017 |
| MatchChannel™ | Included with MatchLog™ licence | |
| WisePulseMig™ licence for pulse welding | Included with all WFX wire feeders except P Fe models | 9990417 |
| WiseRoot+™ | Included with WFX 200 P Fe/Ss and 300 P Fe/Ss | 9990418 |
| WiseThin+™ | Included with WFX 200 AMC and 300 AMC | 9990419 |
| WiseFusion™ | Included with all WFX wire feeders | 9991014 |
| WisePenetration™ function | Included with WFX 200 AMC and 300 AMC | 9991000 |
| Pipe Steel welding program package | Included with WFX 200 P Fe and 300 P Fe | 99904274 |
| Pipe Stainless welding program package | Included with WFX 200 P Ss and 300 P Ss | 99904275 |
| Steel Pack for WiseThin+ welding program package | Included with WFX 200 AMC and 300 AMC | 99904301 |
| Steel Pack | Included with WFX 200 AMC and 300 AMC | 99904232 |
| Stainless Steel Pack | Included with WFX 200 AMC and 300 AMC | 99904233 |
| Aluminium Pack | Included with WFX 200 AMC and 300 AMC | 99904231 |
| Work Pack | Included with WFX 200 and 300 | 99904230 |
| – Other welding software available. | | |

| Accessories | | |
|---|------|---------|
| Cooling unit Cool X | | 6068200 |
| SuperSnake GT02S sub feeder | 10 m | 6153100 |
| SuperSnake GT02S sub feeder | 15 m | 6153150 |
| SuperSnake GT02S sub feeder | 20 m | 6153200 |
| SuperSnake GT02S sub feeder | 25 m | 6153250 |
| SuperSnake GT02S W sub feeder | 10 m | 6154100 |
| SuperSnake GT02S W sub feeder | 15 m | 6154150 |
| SuperSnake GT02S W sub feeder | 20 m | 6154200 |
| SuperSnake GT02S W sub feeder | 25 m | 6154250 |
| SuperSnake GT02S sub feeder synchronization unit for WFX wire feeders | | W004030 |
| KV 200 mounting plate for two wire feeders and TIG unit | | 6185249 |
| Gun holder GH 30 | | 6256030 |

For more product information, videos and news, please visit our website at www.kemppi.com

FastMig X Pipe

High-end multi-process welding equipment for high-quality welding on pipes and plates

Ordering information

| | | |
|--------------------------------------|------|-----------|
| Transport unit PM 500 | | 6185291 |
| Remote control unit R10 | 5 m | 6185409 |
| Remote control unit R10 | 10 m | 618540901 |
| Remote control unit R20 | 5 m | 6185419 |
| Remote control unit R30 DataRemote | 5 m | 6185420 |
| Remote control unit R30 DataRemote | 10 m | 618542001 |
| Remote control extension cable | 10 m | 6185481 |
| Software installation device DataGun | | 6265023 |

NOTE! WiseRoot+™ and WiseThin+™ welding processes are not available with SuperSnake sub feeder.

| MIG guns | | | |
|----------|---------------------------------|-------|---------------|
| PMT MN | 1.2 mm / 60° / L198 / ROOT | 3.5 m | 62503230N04 |
| PMT MN | 1.2 mm / 60° / L168 / ROOT | 3.5 m | 62503230N06 |
| PMT MN | 1.2 mm / 60° / L198 / ROOT | 5 m | 62503250N04 |
| PMT MN | 1.2 mm / 60° / L198 | 3.5 m | 62503230N08 |
| PMT MN | 1.2 mm / 60° / L198 | 5 m | 62503250N08 |
| PMT MN | 1.2 mm / 45° / L222 | 3.5 m | 62503230N02 |
| PMT MN | 1.2 mm / 45° / L222 | 5 m | 62503250N02 |
| PMT MN | 1.0 mm / Ss / 60° / L198 / ROOT | 5 m | 62503250N03SS |
| PMT MN | 1.0 mm / Ss / 60° / L198 | 5 m | 62503250N07SS |
| PMT MN | 1.0 mm / Ss / 45° / L222 | 5 m | 62503250N01SS |
| Neck | 45° / L222 | | SP007229 |
| Neck | 60° / L198 / ROOT | | SP007811 |
| Neck | 60° / L168 / ROOT | | SP007810 |
| Neck | 60° / L198 | | SP008006 |
| Neck | 60° / L168 | | SP008007 |
| PMT 35 | | 3 m | 6253513 |
| PMT 35 | | 4.5 m | 6253514 |
| PMT 42 | | 3 m | 6254213 |
| PMT 42 | | 4.5 m | 6254214 |
| PMT 50 | | 3 m | 6255013 |
| PMT 50 | | 4.5 m | 6255014 |
| PMT 30W | | 3 m | 6253043 |
| PMT 30W | | 4.5 m | 6253044 |
| PMT 42W | | 3 m | 6254203 |
| PMT 42W | | 4.5 m | 6254204 |
| PMT 52W | | 3 m | 6255203 |
| PMT 52W | | 4.5 m | 6255204 |

– More Kemppi welding guns available.