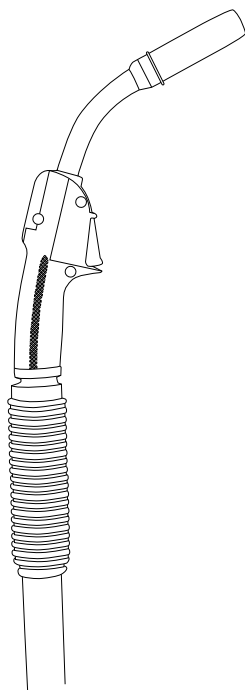


MMT | 25, 27, 32, 35, 42 30W, 42W, 52W



Operating manual • English *EN*

Käyttöohje • Suomi *FI*

Bruksanvisning • Svenska *SV*

Bruksanvisning • Norsk *NO*

Brugsanvisning • Dansk *DA*

Gebrauchsanweisung • Deutsch *DE*

Gebruiksaanwijzing • Nederlands *NL*

Manuel d'utilisation • Français *FR*

Инструкции по эксплуатации • По-русски *RU*

OPERATING MANUAL

English

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1. PREFACE

1.1 GENERAL

Congratulations on having purchased this product. Used correctly, Kemppi products can significantly increase the productivity of your welding, and provide years of economical service.

This operating manual contains important information on the use, maintenance and safety of your Kemppi product. The technical specifications of the equipment can be found at the end of the manual.

Please read the manual carefully before using the equipment for the first time. For your own safety and that of your working environment, pay particular attention to the safety instructions in the manual.

For more information on Kemppi products, contact Kemppi Oy, consult an authorised Kemppi dealer, or visit the Kemppi web site at www.kemppi.com.

The specifications presented in this manual are subject to change without prior notice.

Important notes

Items in the manual that require particular attention in order to minimise damage and personal harm are indicated with the '**NOTE!**' notation. Read these sections carefully and follow their instructions.

Disclaimer

While every effort has been made to ensure that the information contained in this guide is accurate and complete, no liability can be accepted for any errors or omissions. Kemppi reserves the right to change the specification of the product described at any time without prior notice. Do not copy, record, reproduce or transmit the contents of this guide without prior permission from Kemppi.

1.2 PRODUCT INTRODUCTION

Kemppi MMT MIG/MAG guns for manual welding are designed for demanding professional use. They are suitable to be used in all MIG units equipped with Euro adapter.

1.3 OPERATION SAFETY

Please study these Operation safety instructions and respect them when installing, operating and servicing the machine.

Welding arc and spatters

Welding arc hurts unprotected eyes. Be careful also with reflecting arc flash. Welding arc and spatter burn unprotected skin. Use safety gloves and protective clothing.

Danger for fire or explosion

Pay attention to fire safety regulations. Remove flammable or explosive materials from welding place. Always reserve sufficient fire-fighting equipment on welding place. Be prepared for hazards in special welding jobs, eg. for the danger of fire or explosion when welding container type work pieces.

***NOTE!** Fire can break out from sparks even several hours after the welding work has been finished!*

Mains voltage

Never take welding machine inside a work piece (eg. container or truck). Do not place welding machine on a wet surface. Always check cables before operating the machine. Change defect cables without delay. Defect cables may cause an injury or set out a fire. Connection cable must not be compressed, it must not touch sharp edges or hot work pieces.

Welding power circuit

Isolate yourself by using proper protective clothing, do not wear wet clothing. Never work on a wet surface or use defect cables. Do not put MIG gun or welding cables on welding machine or on other electric equipment. Do not press MIG gun switch, if the gun is not directed towards a work piece.

Welding fumes

Take care that there is sufficient ventilation during welding. Take special safety precautions when welding metals which contain lead, cadmium, zinc, mercury or beryllium.

2. CONNECTING THE GUN

The gun is equipped with spiral liner for welding normal steel wire. Before connecting the gun, make sure that its wire liner is according to recommendations for the welding wire in question (see consumable parts sheet delivered with the gun).

Set the snap connector carefully at its place so that the control connectors will not get damaged. Tighten the snap connector carefully in order to avoid voltage losses. Loose connection will heat the gun and the feeder unit. Control tightness of connection daily.

Connect liquid hoses of gun and interconnecting cable according to operation instruction of the wire feeder. Fix liquid hoses in such a way that those having red code always are connected to corresponding red counter connectors and the blue ones respectively to blue counter connectors. When connecting liquid and gas hoses check that there are no dirt, metal powder or other wastes.

- Before driving the wire into gun check that the wire end is straight at a length of approx. 200 mm and the tip blunt (file if necessary). A sharp wire tip may damage wire liner and contact tip of gun.
- Watch out for wire sticking out from welding end of gun. Do not direct the gun towards people or work piece, instead make sure that the wire comes freely out in the air.

3. USE AND MAINTENANCE

The amount of use and working environment should be taken into consideration when planning the frequency of maintenance of MIG guns. Careful use and preventive maintenance will help to ensure trouble-free operation and long lifetime for the gun.

Due to high temperatures and wear, the welding end of MIG gun requires most maintenance but also condition of other parts should be checked regularly.

Welding end

- Remove welding spatter and check condition of insulations, contact tip and gas nozzle. Replace damaged and worn-out parts. Use only original Kemppi spare parts.
- Check condition of insulations. Replace damaged insulations immediately.
- Check that in the discharge holes for shielding gas there is no spatter or dirt.

Use the gun in a proper way:

- Do not remove welding spatter by hammering the gun against the work piece!
- Do not use sharp tools, because damaging of surfaces will increase stickening of spatter!
- Do not bend neck body of gun or fasten the gun from neck body against bench etc., for it may cause destruction of the neck!
- Do not use the gun as hammer!

Gun cable

- Clean wire liner when replacing wire reel, or more often.
- Check daily that insulations of handle and gun cable are undamaged.
- Check that there are no sharp bends in gun cable.

4. OPERATION DISTURBANCES

Welding wire does not run smoothly or wire is sticking in the wire liner (arc length varies, you can feel shaking in the handle):

- Wire liner is dirty or blocked-up. Clean with compressed air. Replace wire liner if necessary.
- Wrong wire liner or contact tip. Make sure that wire liner and contact tip are according to recommendations for the welding wire in question (see consumable parts sheet delivered with the gun).
- Contact tip has heated up too much. Check cooling liquid circulation.
- Contact face of contact tip is damaged due to spatter or sparking caused by impurities. Replace contact tip.
- Gun cable has too sharp bends, straighten.
- Welding wire has a lot of dirt, rust or bends etc., which increases friction and results in contact disturbances.
- Check operation of the wire feed unit. Check that drive roll size and type are suitable for wire in question. Check that drive roll pressure is not too low or too high.

Gas shielding is bad (weld pool “is boiling”, arc is unstable):

- On inner face of gas nozzle or in contact tip and contact tip holder there is too much welding spatter; clean.
- In discharge hole for shielding gas there is spatter or other dirt; clean.
- There are impurities in shielding gas (moisture, air).
- There are impurities in base material (rust, base coat, grease).
- Pressure gathered in long gas hoses will cause a great flow of shielding gas at welding start, which may cause turbulence or mixing of air into shielding gas. The reason may also be a faulty or a faulty regulated relief valve which lets too much pressure into gas hoses.
- Flow of shielding gas is too small or too big (causes turbulence). Use in short arc range a flow of 8 – 15 l/min, in hot arc range 10 – 20 l/min.
- Distance of gun to work piece is too long. In short arc welding keep the gas nozzle at a distance of 10 – 15 mm and in hot arc welding at a distance of 15 – 30 mm to work piece.
- Angle of tilt of gun is too big.
- There is too much draught at welding place.

5. ORDERING NUMBERS

Gun	Length 3.0 m	Length 4.5 m
MMT 25	6252513MMT	6252514MMT
MMT 27	6252713MMT	6252714MMT
MMT 32	6253213MMT	6253214MMT
MMT 35	6253513MMT	6253514MMT
MMT 42	6254213MMT	6254214MMT
MMT 30W	6253043MMT	6253044MMT
MMT 42W	6254203MMT	6254204MMT
MMT 52W	6255203MMT	6255204MMT

6. TECHNICAL DATA

Gun	MMT 25	MMT 27	MMT 32	MMT 35	MMT 42
Loading capacity Ar + CO ₂ (A)	250	270	320	350	420
Duty cycle (%)	35	35	35	35	35
Wire diameters (mm)	0.6 – 1.2	0.6 – 1.2	0.8 – 1.6	0.8 – 1.6	0.8 – 1.6
Type of cooling	Air	Air	Air	Air	Air

Gun	MMT 30W	MMT 42W	MMT 52W
Loading capacity Ar + CO ₂ (A)	300	400	500
Duty cycle (%)	100	100	100
Wire diameters (mm)	0.8 – 1.6	0.8 – 1.6	0.8 – 1.6
Type of cooling	Liquid	Liquid	Liquid
Cooling data			
Max. temp. in inlet (°C)	50	50	50
Min. flow rate (l/min)	1	1	1
Min. pressure (bar)	1	1	1
Max. pressure (bar)	5	5	5

Connection to MIG unit: Euro adapter

NOTE! Make sure that the gun in your use is designed for the max. welding current needed.

The guns meet construction and safety requirements according to norm IEC / EN 60974-7.

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