

Käyttöohje
Bruksanvisning
Bruksanvisning
Brugsanvisning

Operation instructions
Gebrauchsanweisung
Gebruiksaanwijzing
Manuel d'utilisation

KMG 20
KMG 25

KMG 32
KMG 40



KEMPPI

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Varusteet eri lisäainelangoille, Utrustning för olika tillsatstrådar, Utstyr for ulike sveisetråder, Dele for forskjellige tilsatstråde, Equipment for various filler wires, Ausrüstung für verschiedene Zusatzdrähte, Uitrusting voor verschillende toevoegdraden, Equipement pour différents types de fils d'apport

KMG 20, KMG 25

Tilanusnumero, Beställningsnummer, Ordrenummer, Bestillingsnummer, Order number, Bestellsnummer, Bestellnr., No. de reference (leimaus), (märkning), (benevnelse), (mærkning), (designation), (Kennzeichnung), (benaming), (référéce)

Ø mm	Lisäainelanka	Tunnusväri	Märkningsfärg	Langanjohdin, Trådleddare, Tråtleider, Trådliner, Wire conduit, Drahtleiter, Draadgeleider, Gaine	9580173
Sveisetråd	Tillsatstråd	Fargekode	Farvekode		M6
Filler wire	Tilsatstråd	Sign colour	Sign colour		21
Zusatzdraht	Farvekennzeichen	Farbkennzeichen	Farbkennzeichen		
Toevoegdraad	Kleur code	Kleur code	Kleur code	3,0 m (KMG 25)	
Fil d'apport	Code couleur	Code couleur	Code couleur	4,5 m	0,6 Fe
valk. white	4188571	4188572	9876634	(0,6) ...	
0,8 Fe	valk. white	4188571	4188572	9876635	(0,8) ...
0,9 Fe	pun. red	4188581	4188582	9876633	(0,9) ...
1,0 Fe	pun. red	4188581	4188582	9876636	(1,0) ...
0,6 Ss	valk. white	4188511	4188512	9876634	(0,6) ...
0,8 Ss, Al	valk. white	4188511	4188512	9876635	(0,8) ...
0,9 Ss, Al	pun. red	4188521	4188522	9876633	(0,9) ...
1,0 Ss, Al	pun. red	4188521	4188522	9876636	(1,0) ...

KMG 32, KMG 40

Ø mm	Lisäainelanka	Tunnusväri	Märkningsfärg	Langanjohdin, Trådleddare, Tråtleider, Trådliner, Wire conduit, Drahtleiter, Draadgeleider, Gaine	4290490 (KMG 32)	4255091 (KMG 40)	4259210 (KMG 32)	4255421 (KMG 40)
Sveisetråd	Tillsatstråd	Fargekode	Farvekode		M6	M6	M8	M8
Filler wire	Tilsatstråd	Sign colour	Sign colour		M6	M6	M8	M8
Zusatzdraht	Farvekennzeichen	Farbkennzeichen	Farbkennzeichen		21	21	26	26
Toevoegdraad	Kleur code	Kleur code	Kleur code	3,0 m	4,5 m			
Fil d'apport	Code couleur	Code couleur	Code couleur					
0,6 Fe	valk. white	4188571	4188572	9876634	(0,6) ...			
0,8 Fe	valk. white	4188571	4188572	9876635	(0,8) ...	9580122	(0,8) ...	
0,9 Fe	pun. red	4188581	4188582	9876633	(0,9) ...	9580121	(0,9) ...	
1,0 Fe	pun. red	4188581	4188582	9876636	(1,0) ...	9580123	(1,0) ...	
1,2 Fe	pun. red	4188581	4188582	9876637	(1,2) ...	9580124	(1,2) ...	
1,4 Fe	kelt. yellow	4188591	4188592	9876639	(1,6) ...	9580125	(1,4) ...	
1,6 Fe	kelt. yellow	4188591	4188592	9876639	(1,6) ...	9580126	(1,6) ...	
0,6 Ss	valk. white	4188511	4188512	9876634	(0,6) ...			
0,8 Ss, Al	valk. white	4188511	4188512	9876635	(0,8) ...	9580122	(0,8) ...	
0,9 Ss, Al	pun. red	4188521	4188522	9876633	(0,9) ...	9580121	(0,9) ...	
1,0 Ss, Al	pun. red	4188521	4188522	9876636	(1,0) ...	9580123	(1,0) ...	
1,2 Ss, Al	pun. red	4188521	4188522	9876637	(1,2) ...	9580124	(1,2) ...	
1,6 Ss, Al	kelt. yellow	4188531	4188532	9876639	(1,6) ...	9580126	(1,6) ...	

Fe = teräs, stål, stål, stål, steel, Stahl, staal, acier

Ss = ruostum. teräs, rostfritt stål, rustfritt stål, rustfritt stål, stainless steel, nichtrorst. Stahl, roestvast staal, acier inoxydable

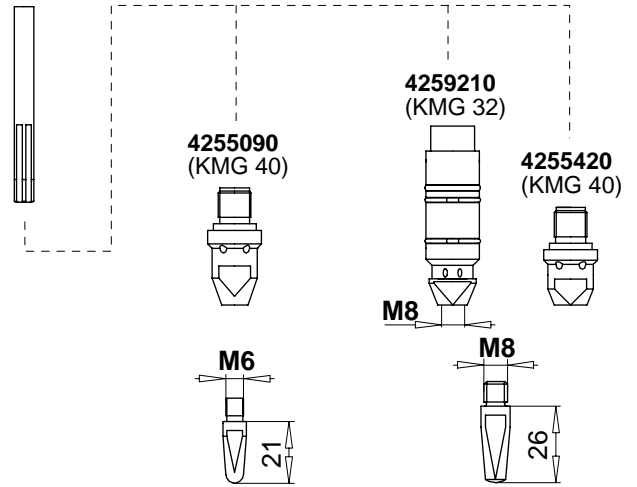
Al = alumiini, aluminium, aluminium, aluminium, aluminium, Aluminium, aluminium, aluminium

Kontaktiputkivarustus, Kontaktörutrustning, Utstyr for kontaktør, Kontaktbagør, Contact tube equipment, Kontaktrohrüstung, Met contactbuis uitgevoerd, Equipement avec tube contact interieur

KMG 32, KMG 40

Ø mm	Tunnusväri	Kontaktiputki
Lisäainelanka	Märkningsfärg	Kontaktör
Tillsatstråd	Färgkode	Kontaktør
Sveisetråd	Farvekode	Kontaktør
Tilsatstråd	Sign colour	Contact tube
Filler wire	Farbkennzeichen	Kontaktrohr
Zusatzdraht	Kleur code	Contactbuis
Toevoegdraad	Code couleur	Tube contact intérieur
Fil d'apport		

0,6	valk.	white	9580262	(0,8)
0,8	valk.	white	9580262	(0,8)
0,9	pun.	red	9580286	(1,0)
1,0	pun.	red	9580286	(1,0)
1,2	orans.	orange	9580235	(1,2)
1,4	kelt.	yellow	9580264	(1,6)
1,6	kelt.	yellow	9580264	(1,6)



General

KMG 20, 25, 32 and 40 are air-cooled MIG guns designed for demanding professional use. The guns are suitable to be used in all MIG units which are equipped with Euro-adaptor.

Technical data

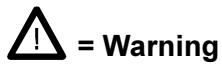
	KMG 20	KMG 25	KMG 32	KMG 40
Order number	6251113	6252123	6253033	6253133
Length 3,0 m	----	6252124	6253034	6253134
Length 4,5 m				
Loading capacity 60 % ED Ar + CO ₂ (75+25 %) CO ₂	160 A 180 A	200 A ¹⁾ 250 A ¹⁾	260 A ¹⁾ 320 A ¹⁾	300 A ¹⁾ 380 A ¹⁾
Filler wires to be welded	∅ mm	∅ mm	∅ mm	∅ mm
steel solid wire	0,6 ... 1,0	0,6 ... 1,0	0,6 ... 1,2	0,6 ... 1,6
steel cored wire	0,8 ... 1,0	0,8 ... 1,0	0,8 ... 1,2	0,8 ... 1,6
stainless steel	0,6 ... 1,0	0,6 ... 1,0	0,6 ... 1,2	0,6 ... 1,6
aluminium	0,8 ... 1,0	0,8 ... 1,0	0,8 ... 1,2	0,8 ... 1,6
Voltage class	L			

The guns meets the construction and safety requirements according to norm EN 50078 for applicable parts.

CE-marking: **CE** EN 50078

Make sure that the gun being in your use is designed for max. welding current needed by you.

¹⁾ Warming up of handle exceeds the requirements of norm.

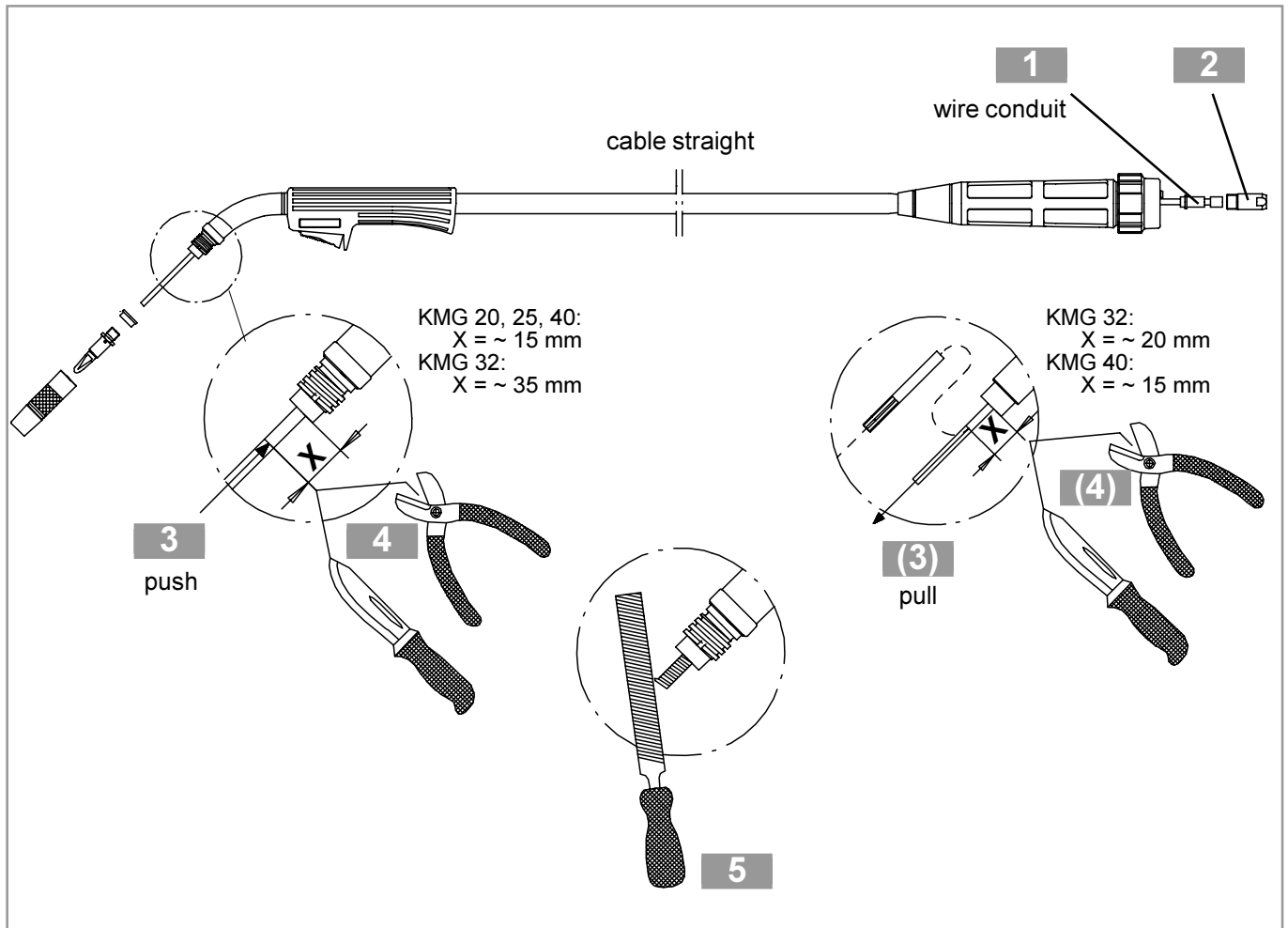


Connecting gun

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

Before starting to weld make sure that the gun has the wire liner according to recommendations (see colour code in accessory list) and that the contact tip corresponds to wire diameter used by you.

Mounting of wire liner and welding wire



Check in the accessory list that you are using the wire liner which is recommended for welding wire in question (note! colour code).

Perform work according to numbers in picture.

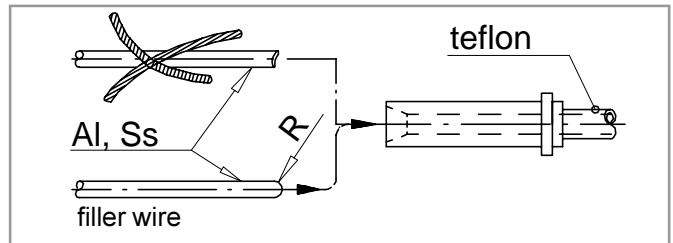
Use in the wire feed unit wire guide tubes which are recommended for welding wire in question.



Before driving the wire into gun check that the wire end is straight in 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.



Be wary of wire sticking out from welding end of gun. Don't direct the gun towards people or work piece, but be careful that the wire comes freely out in the air.

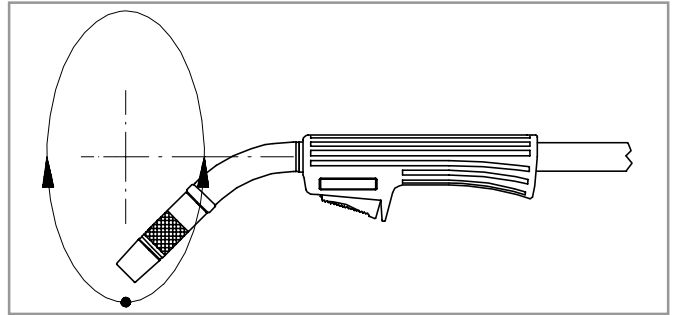


Twisting the neck

When necessary you can twist the gun neck into direction of the handle $\pm 360^\circ$ from the middle position, see picture. Take with one hand a steady hold on the handle and twist with the other hand the neck into position you want to.



Always by adjustment see that the fastening thread of the neck has been twisted almost until bottom. If you twist the neck too much outwards, so by loosening of connection between neck and cable its voltage drop is increasing of which follows that the parts may be overheated and damaged.



Operation disturbances

The most usual operation disturbances are as follows:

Welding wire doesn't run smoothly or wire is sticking in the wire liner:

- Wire liner is dirty or blocked-up. Clean with compressed air according to instructions. Replace by a new wire liner if necessary.
- Wrong wire liner.
- Wire liner is cut off as too long or as too short.
- Wrong contact tip or contact tube.
- Contact face of contact tip is damaged due to spatter or sparking caused by impurities. Replace the contact tip by a new one.
- Gun cable has too sharp bends, straighten.
- Welding wire has bends etc.
- Welding wire has a lot of dirt or rust which results in contact disturbances.
- Check operation of the wire feed unit.

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

- There are impurities in shielding gas (moisture, air).
- There are impurities in base material (rust, base coat, grease).
- On inner face of gas nozzle or on neck body is too much welding spatter; clean.
- In discharge holes for shielding gas is spatter or other dirt; clean.
- Pressure which is gathered in long gas hoses will cause at welding start a great flow of shielding gas, 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 the flow of 8...15 l/min, in hot arc range 10...20 l/min.
- Distance of gun to work piece is too long. Keep in short arc welding the gas nozzle in distance of 10...15 mm and in hot arc welding in distance of 15...30 mm to work piece.
- Angle of tilt of gun is too big.
- There is too much draught at welding place.

Operation safety

Never watch the arc without a face shield designed for arc welding!

The arc damages unprotected eyes!

The arc burns unprotected skin!

Be careful for reflecting radiation of arc!

Protect yourself and the surroundings against the arc and hot spray!

Remember general fire safety!

Pay attention to the fire safety regulations. Welding is always classified as a fire risk operation. Welding where there is flammable or explosive material is strictly forbidden. If it is essential to weld in such an area remove inflammable material from the immediate vicinity of the welding site. Fire extinguishers must always be on site where welding is taking place. Note! Sparks may cause fire many hours after completion of welding.

Watch out for the mains voltage!

Take care of the cables - the connection cable must not be compressed, touch sharp edges or hot work pieces. Faulty cables are always a fire risk and highly dangerous. Do not locate the welding machine on wet surfaces. Do not take the welding machine inside the work piece (i.e. in containers, cars etc.)

Ensure that neither you nor gas bottles or electrical equipment are in contact with live wires or connections!

Do not use faulty welding cables. Isolate yourself by using dry and not worn out protective clothes. Do not weld on wet ground. Do not place MIG gun or the welding cables on the power source or other electrical equipment. Don't press on MIG gun switch, if the gun is not directed towards work piece.

Watch out for the welding fumes!

Ensure that there is sufficient ventilation. Follow special safety precautions when you weld metals which contain lead, cadmium, zinc, mercury or beryllium.

Note the danger caused by special welding jobs!

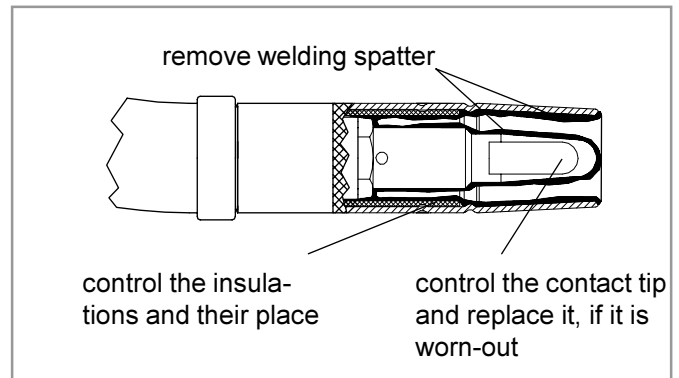
Watch out for the fire and explosion danger when welding container type work pieces.

Maintenance

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, contact tube and gas nozzle regularly. Don't remove welding spatter by hammering the gun against the work piece! Don't use sharp tools, because damaging of surfaces will increase stickening of spatter!

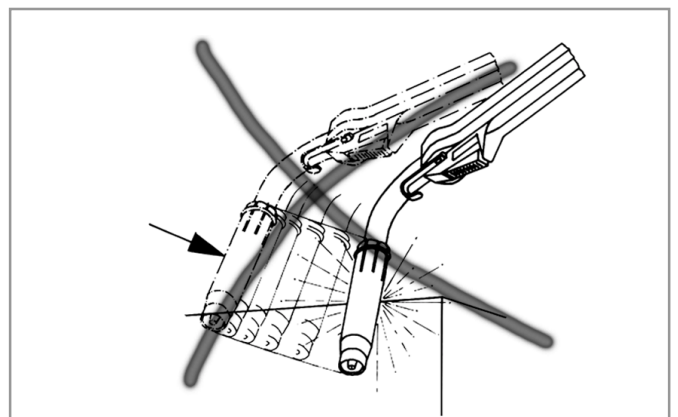
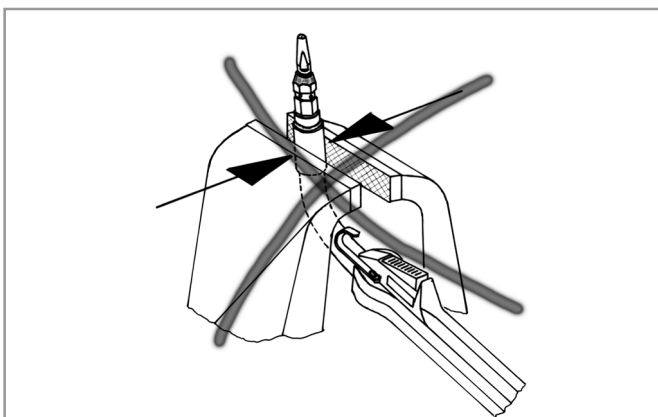


Check that:

- insulation bushing inside the gas nozzle is undamaged and in its place.
- tip insulation of neck is undamaged and in its place.
- flow of shielding gas is free and even. Check that in the discharge holes for shielding gas isn't any spatter or other dirt.

Don't use the gun as hammer!

Don't fasten the gun from neck body against bench etc. This may result in damage for insulations or for neck body!



Gun cable:

Clean the wire liner by replacement of wire reel or more often.

Check that:

- insulations of handle and gun cable are undamaged.
- there are no sharp bends in gun cable.

