Käyttöohje • suomi
Bruksanvisning • svenska
Bruksanvisning • norsk
Brugsanvisning • dansk
Operation instructions • english
Gebrauchsanweisung • deutsch
Gebruiksaanwijzing • nederlands
Manuel d´utilisation • français

1918670

**English** 







#### **Contents**

1.	Preface	3
	1.1. Product introduction	
	1.2. Before welding	3
	1.3. Operation safety	3
2.	Shade number selection for arc welding filter lenses	4
	2.1. Replacement of welding filter lens, protection glass and plastic safety plate	4
	2.2. Use of viewing lens	5
	2.3. Adjustments	5
3.	Inspection and service	7
	3.1. Cleaning	7
4.	Technical data	7
5.	Ordering numbers	8

#### 1.PREFACE

#### 1.1. PRODUCT INTRODUCTION

KEMPPI ALFA (9873010) is welding helmet for arc welding, carbon arc gouging and plasma cutting, used to protect welder's eyes, head, neck and throat against arc radiation, environment radiation and welding spatter. In the upper position of the flip-up welding filter lens, protection during grinding and de-slagging is possible.

#### 1.2. BEFORE WELDING

For your own protection read these operation instructions carefully before using the welding helmet.

Be sure that shade number of your welding filter lens is suitable for your work. The welding helmet is delivered with a welding filter lens shade number EN 10 (DIN 10). Replace the welding filter lens if necessary.

Protection glasses of welding helmets are strong, but not unbreakable. The welding helmet does not protect against hard shocks, particles from grinding wheel, explosions or corrosive substances. Always use approriate safety devices and instruments required for each job.

Adjust the height and girth of the headband for comfort and the welding helmet angle as necessary.

#### 1.3. OPERATION SAFETY

In this document, for danger to life or injury the following symbol is used: 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.)

@ COPYRIGHT KEMPPI OY Alfa/0148 - 3

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.

The Alfa welding helmet is designed to be used in rooms with sufficient ventilation.

When you are working in rooms with insufficient ventilation, we recommend the use of fresh air welding helmet Alfafresh (9873020).

Note the danger caused by special welding jobs!

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

# 2. SHADE NUMBER SELECTION FOR ARC WELD-ING FILTER LENSES

Select appropriate welding filter lens for your welding job using the table below. Be sure that other persons working within the area are using suitable protection by having the approriate shade number.

SHADE NUMBER SELECTION FOR ARC WELDING FILTER (EN 169)														
	Current in amperes													
Welding process	1	5 2	3 0	0 4	60 0	1 80	00 1:	150 25 1	200 75 2	250 25	275	00 4 350	00 5 450	600
MMA			9	1	10		1	1	12		13		14	
MIG, steel						10		11	12			13		14
MIG, aluminiums						10		11	12		13		14	15
TIG, all materials	ç	)	10	)	1	11		12	13		14	14		
MAG (CO2 welding)					10	1	1	12		13		14		15
Garbon arc gouging								10	11	12	1:	3 1	4	15
Plasma cutting						11			12		1:	3		

Higher EN number (=DIN number) means darker welding filter lens. Kemppi welding filter lenses have the shade numbers and approval markings stamped on the face of welding filter lens.

Do not use any welding filter lens without shade number and approval marking.

4 - Alfa/0148 @ COPYRIGHT KEMPPI OY

# 2.1. REPLACEMENT OF WELDING FILTER LENS, PROTECTION GLASS AND PLASTIC SAFETY PLATE

Replacement of welding filter lens and front-mounted protection glass:

- Lift up hatch of welding filter lens.
- Release glass retaining spring (9873014, see spare part picture on page 8) by pressing
  its long sides against each other so much that the spring comes out from behind plastic
  claws of the hatch frame.
- Remove welding filter lens and protection glass (9873149).
- Mount new protection glass and welding filter lens to their places.
- Press glass retaining spring behind plastic claws when it is locked at its place.

Replacement of inner transparent safety plate:

- Release glass retaining spring like in the previous paragraph.
- Replace plastic safety plate (9873155).
- Mount glass retaining spring to its place.

Never use protection glass instead of inner plastic safety plate (9873155) due to risk of damage!

#### 2.2. USE OF VIEWING LENS

Located below the main welding filter lens is a viewing lens designed to make the welding start easier. On delivery the welding helmet is fitted with a non-transparent plastic plate (9873158), but a transparent viewing lens (9873157) is included separately. This lens is lighter than the main filter base and aids the welder in locating the welding start point.

The viewing lens is designed to make the welding start easier.

We recommend the viewing lens is used only with welding currents of less than 200 A as higher currents cause reflections which can enter the viewing lens.

NOTE! Through the viewing lens you can check the start point before starting, but you should turn the welding helmet before arc ignition in such a way that the arc to be ignited can be seen through the welding filter lens.

Never watch the arc through the viewing lens!

#### Mounting of viewing lens:

- Remove inner transparent plastic safety plate (9873155) and its retaining spring.
- Lift from inside the helmet the plastic plate of viewing lens opening upwards and remove it through the opening of the plastic safety plate.
- Mount the viewing lens to the place of the plastic plate. Make sure that it will cover the whole viewing opening.
- Mount the plastic safety plate and its retaining spring to its place.

@ COPYRIGHT KEMPPI OY Alfa/0148 - 5

#### 2.3. ADJUSTMENTS

#### Height adjustment for band:

Adjust the headband height so that the band part circulating the head is positioned relatively low, then the welding helmet stays rigidly positioned on the head. The sweatband should be a little above the eyebrows and the ears.

Bend the tip of the inner strip (A) of band inwards so much that the plastic pins there come our from holes of the counterpart (B). Adjust the upper part of band to the desired length by moving plastic strips in regard to each other. Press the plastic strips against each other so that the plastic pins are placed into holes of counterpart.

#### Tightening adjustment of band:

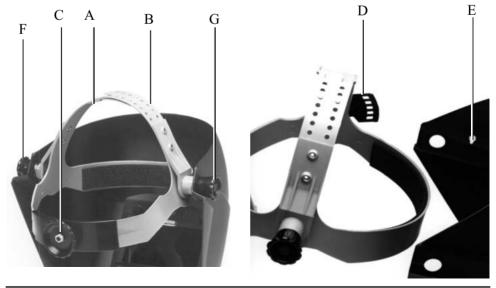
Adjust the band tightness as suitable for your head by rotating the adjusting wheel (C).

#### Adjustment of welding helmet angle:

Adjust the welding helmet angle in regard to your face so that the lower edge of welding helmet is positioned in the welding situation near your chest, when the welding helmet gives the best protection. Bend the adjustment plate (D) inwards so much that the plastic screw (E) of the welding helmet comes out of the hole of the adjustment plate. Turn the adjustment plate and release the plate so that the screw is placed to the desired hole of the adjustment plate.

### Tightening adjustment of welding helmet:

Adjust the tightness of welding helmet in regard to band by rotating the screws (F) and (G). Adjust the tightness of helmet so that the high raised helmet stays up, but goes down when you nod your head. If the helmet strikes against your chest when falling, the adjustment is too loose or the helmet angle has been adjusted too near your face from the adjustment plate (D).



6 - Alfa/0148 @ COPYRIGHT KEMPPI OY

#### 3. INSPECTION AND SERVICE

Always inspect the welding helmet carefully before starting to weld. The cracked, pitted or scratched parts should be replaced immediately.

Never use a damaged welding helmet or a welding helmet with defective or insufficient equipment!

Always before use inspect the condition of welding filter lens, protection glass and plastic safety plate and that these have been mounted in the right way:

- Inspect that the front-mounted protection glass and inner transparent plastic safety plate are undamaged, clean enough and correctly mounted. Replace protection glass or plastic safety plate immediately, if these are damaged, or if spatter or scracthes reduce vision.
- Inspect that the welding filter lens is undamaged and clean. The damaged welding filter lens impairs protection so that it should be replaced immediately. Make sure that the shade number of welding filter lens is appropriate for your work.

Inspect that the plastic plate of the viewing opening or the viewing lens is undamaged and correctly mounted and surely covers the whole opening.

Inspect that the welding helmet and headband are undamaged.

Inspect that the hatch of the welding helmet is completely closed when being in down position.

Careful use and safe keeping of welding helmet make its operating life longer and improve your safety!

Don't put the welding helmet on hot surface, e.g. on hot welding seam!

#### 3.1. CLEANING

Blow dirt and dust with compressed air off from welding helmet.

Clean the welding helmet with damp cleaning cloth which is watered with mild soap water.

Don't use any dissolvents for cleaning the welding helmet.

Don't wipe the inner plastic safety plate e.g. with gloves since it gets easily scratched.

#### 4. TECHNICAL DATA

Size of welding filter lens:  $60 \times 110 \text{ mm}$ Shade numbers of welding filter lenses: EN 8 - EN 14 Operation temperature range: -20...+60 °CStorage temperature range: -40...+70 °C

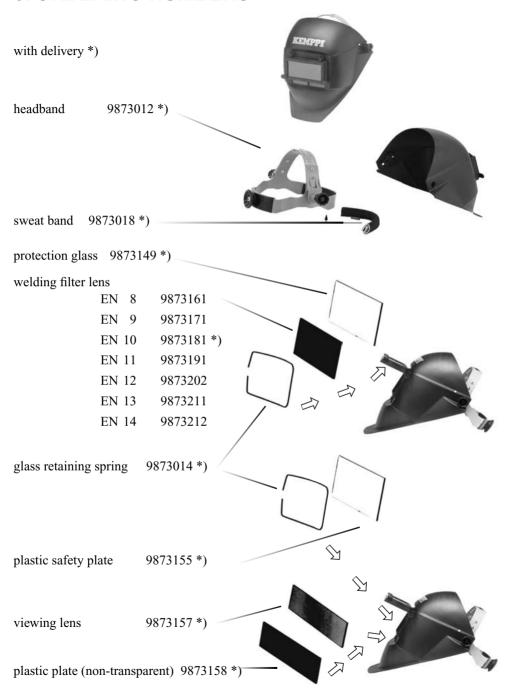
Welding helmet material: impact resistant plastic Welding helmet meets conformity requirements for the norm EN175.

CE-marking: EN175 S W S where S: Increased robustness, mechanical strength.

W: Dimensional stability, water immersion.

@ COPYRIGHT KEMPPI OY Alfal0148 - 7

## **5. ORDERING NUMBERS**



8 - Alfa|0148 @ COPYRIGHT KEMPPI OY



KEMPPI OY

PI 13

FIN - 15801 LAHTI

**FINLAND** 

Tel (03) 899 11

Telefax (03) 899 428

www.kemppi.com

KEMPPIKONEET OY

PI 13

FIN - 15801 LAHTI

**FINLAND** 

Tel (03) 899 11

Telefax (03) 7348 398

e-mail: myynti.fi@kemppi.com

KEMPPI SVERIGE AB

Box 717

S - 194 27 UPPLANDS VÄSBY

**SVERIGE** 

Tel (08) 59 078 300

Telefax (08) 59 082 394

e-mail: sales.se@kemppi.com

KEMPPI NORGE A/S

PB 2151 Postterminalen

N - 3103 TØNSBERG

NORGE

Tel 33 35 80 80

Telefax 33 35 80 90

e-mail: sales.no@kemppi.com

KEMPPI A/S

Literbuen 11

DK - 2740 SKOVLUNDE

DANMARK

Tel 44 941 677

Telefax 44 941 536

e-mail:sales.dk@kemppi.com

KEMPPI BENELUX B.V.

Postbus 5603

NL - 4801 EA BREDA

**NEDERLAND** 

Tel (076) 5717 750

Telefax (076) 5716 345

e-mail: sales.nl@kemppi.com

KEMPPI (U.K) Ltd.

4-6 Sergeants Way

Elms Industrial Estate

BEDFORD, MK 41 OEH

**ENGLAND** 

Tel (01234) 213 581

Telefax (01234) 215 128

e-mail: sales.uk@kemppi.com

#### KEMPPI FRANCE S.A.

S.A. au capital de 5 000 000 F.

65 Avenue de la Couronne des Prés

78681 EPONE CEDEX

**FRANCE** 

Tel (01) 30 90 04 40

Telefax (01) 30 90 04 45

e-mail: sales.fr@kemppi.com

KEMPPI GmbH

Otto - Hahn - Straße 14

D - 35510 BUTZBACH

DEUTSCHLAND

Tel (06033) 88 020

Telefax (06033) 72 528

e-mail:sales.de@kemppi.com

KEMPPI OY

Oddzial w Polsce

UI. Piłsudskiego 2

05091 ZABKI

Poland

Tel +48 22 781 5301

Telefax +48 22 781 6505

e-mail: jacek.rutkowski@kemppi.com

KEMPPI SWITZERLAND SA

Chemin de la Colice 4

CH-1023 Crisser/ Lausanne

SUISSE

Tel. +41 21 6373020

Telefax +41 21 6373025

e-mail: sales.ch@kemppi.com

Manager Felix Baumgartner

KEMPPI WELDING

MACHINES AUSTRALIA PTY LTD

P.O. Box 404 (2/58 Lancaster Street)

Ingleburn NSW 2565, Australia

Tel. +61-2-9605 9500

Telefax +61-2-9605 5999

e-mail: info.au@kemppi.com

Manager Kent Eimbrodt

www.kemppi.com