Operation Manual

Auto Darkening Welding Helmet

63361, 63394, 63395

Illustration similar, may vary depending on model

Read and follow the operating instructions and safety information before using for the first time.

Technical changes reserved!
Due to further developments, illustrations, functioning steps, and technical data can differ insignificantly.

Updating the documentation
If you have suggestions for improvement or have found any irregularities, please contact us.

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Introduction

Thank you for purchasing this quality product. **To minimise the risk of injury we urge that our clients take some basic safety precautions when using this device. Please read the operation instructions carefully and make sure you have understood its content.**
Keep these operation instructions safe.

- It is your job to protect yourself and others from the hazards associated with welding. To do this, you must familiarize yourself with the safety regulations for arc welding, the handling of high-pressure gas cylinders and the general safety regulations.
- Arc welding produces fumes that are a potential health hazard. Always provide adequate ventilation.
- Never carry out welding work without adequate eye protection.
- Always wear appropriate safety equipment when welding.
- Make sure that the welding helmet is suitable for the work you intend to do and that all parts and components are in good working order.
- Make sure that the solar cells that supply power to the welding helmet are in good working order and ready for use.
- Adjust the headgear according to your head size.
- Set the dark shade state to the correct scale number according to the shade scale. Make sure that the shade scale number you have chosen is correct and appropriate for the work to be done.
- **Warning!** Make sure that the power supply is correct and ready for use. If not, replace immediately with a new filter unit. Never use a welding helmet without power.
- If the welding current is high, set the sensitivity control to “Low.”
- Always check the front cover of the welding protection filter and make sure that it is clean and that no dirt is covering the sensors of the filter cartridge.
- Check all parts of the welding protection filter and replace them if they are worn or damaged. Scratches, cracks, or dents can cause serious injury.
- The welding helmet is equipped with an automatic switch-on function. When you put on the welding helmet, the power turns on automatically.
- The welding helmet is not suitable for laser welding.
- The welding helmet and the filter cartridge must not be placed on hot surfaces.
- Never dismantle the auto-darkening filter.
- The welding helmet does not protect against heavy impacts.
- The welding helmet does not protect against explosive devices or corrosive liquids. Do not make any modifications to the filter or helmet that are not described in this manual. Do not use spare parts that are not specified in this manual. Unauthorized modifications and the use of unsuitable spare parts will void the warranty and increase the risk of property damage and personal injury.
- If the welding helmet does not darken when the arc is ignited, stop welding immediately and have the welding helmet checked by a qualified specialist.
- The welding helmet may only be used at temperatures from -5 °C to 55 °C.

Shade Setting

- Turn the shade pre-set knob to a suitable scale according to the welding procedure and the welding table. The shade scale can be manually adjusted continuously between DIN 9 and DIN 13.
- The sensitivity is adjusted with the sensitivity control. The sensitivity can be adjusted clockwise from low to high. When the welding current is high, the sensitivity must be low, and when the welding current is low or when welding with direct current, the sensitivity must be high. The sensitivity must be set according to the welding process. If the welding ampere and DC current are low, the pulse values are low or non-pulse welding is used, a high sensitivity must be used.
- The recovery time can be adjusted with the delay control. Depending on the welder's needs, the recovery time can be set from 0.1 s to 0.8 s.

- -When the knob is turned to “grind,” the darkening function is switched off, allowing a clear view for grinding a weld. The helmet then serves as a face shield. Make sure that the shade function is turned back on before welding again.

Warning! Do not weld in direct sunlight when using this welding helmet!

Operation

When you are sure that you are familiar with all the above information and everything is ready for using the welding helmet, follow the instructions below:

1. When you put on the welding helmet, the unit switches on automatically.
1. Put the helmet on. At this moment you should be able to see your workpiece and the surrounding area clearly.
2. Try a strike. The viewing window will immediately switch to the darkness shade you have set. Otherwise, readjust the sensitivity. If this fails, stop immediately and check the welding helmet. Do not use the helmet if you are not sure that it is working properly.
3. Always turn the sensitivity control to “Low” when you have finished working. Put the helmet down with the face shield facing downwards so that the unit switches off automatically.

Caution!

- When welding with low ampere, DC welding or low/non-pulse welding, keep away from strong ambient light, especially direct sunlight.
- When the welding helmet is removed or stored, the filter sensors of the helmet should always point downwards and the sensitivity control should be turned to “Low.”

Maintenance and care

- There are no components/parts that need to be repaired by the user.
- The user must not remove the automatic blackout filter. The filter must be removed by a qualified professional.
- The welding helmet can be cleaned with a clean, lint-free fabric or cotton cloth.
- Do not immerse the visor in water or other liquids. Never use abrasive cleaners, solvents, or oil-based cleaners.
- Do not attempt to open the auto-darkening welding filter.
- Do not immerse the filter in water.
- Do not use solvents on the filter or the helmet parts.
- Protect the filter from contact with liquids and dirt.
- Clean the surfaces of the filter regularly. Do not use harsh cleaning solutions. Always keep the sensors and solar cells clean with a clean, lint-free cloth.
- Replace the face shield regularly if it is cracked, scratched, or chipped.

Storage

- The helmet and the welding filter must be stored in a dry, well-ventilated place. Do not expose the helmet to direct sunlight.
- The storage temperature is –20 °C to +70 °C.
- Make sure that the welding filter does not get dirty.

Specifications

Filter size (mm)	110 × 90 × 9
Arc sensors	2
Power supply	Solar cells and Lithium Ion backup batteries
Ultraviolet ray transmittance rate (%)	313–365 nm: < $3.,4\times10^{-6}$
Infrared ray transmittance rate (%)	780–1300 nm: < 0.0027 1300–2000 nm: < 0.0097
Switching time bright/dark (s)	1/30.000
Recovery time dark/bright (s)	0.1–0.8
Temperature (°C)	–5–+55
Dark shade range	DIN 9–13, adjustable on the outside
Light shade number	DIN 4
Sensitivity control	Yes
Delay time control	Yes
Grinding function	Yes
Replaceable lithium battery	Yes

Welding chart

WELDING PROCESS	**ARC CURRENT** (A)																	
	10	20	30	40	60	80	100	125	150	175	200	225	250	275	300	350	400	450
MMA		9		10			11				12					13		
MIG (heavy metal)						10		11			12					13		
MIG (light metal)						10		11			12			13				
MAG					10		11		12				13					
TIG	9		10			11			12				13					
SAW										10		11		12		13		
PAW	9		10		11		12			13								
PAC						11			12					13				

- MMA = Manual metal arc welding
- MIG = Metal inert gas welding
- MAG = Metal active gas welding
- TIG = Tungsten inert gas welding
- SAW = Submerged arc welding
- PAW = Plasma arc welding
- PAC = Plasma arc cutting