

LSM-70F LED Machine Work Light

IP65 Waterproof Folding Arm Lamp for CNC Machines

User Manual

Model LSM-70F (CMO-LSM-70F) - Brand JIAKMJ

16 W to 40 W - DC 24 V / AC 110-220 V - IP65 - 4-row LED

Kemotronics Industrial Lighting

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1. PRODUCT OVERVIEW

The LSM-70F is an IP65 waterproof LED machine work light for machine tools, CNC lathes, milling machines and drilling equipment. The sealed lamp head carries a 4-row LED array behind a waterproof lens, and the head sits on a two-section aluminum folding arm (230 mm + 300 mm) - set the head where the work is and it stays there, so the beam falls on the cutting area instead of into the operator's eyes.

The head and the arm are aluminum alloy, sealed with a built-in waterproof rubber ring and rated IP65, so the lamp keeps working in a shop where coolant, oil mist and metal chips are part of the day. The same lamp body is made in 16 W, 24 W, 32 W and 40 W versions, on DC 24 V or AC 110-220 V.

Typical users: machine tool operators, CNC and lathe shops, tool rooms, maintenance and repair benches, production lines.

2. TECHNICAL SPECIFICATIONS

Model	LSM-70F (CMO-LSM-70F)
Brand	JIAKMJ
Product type	IP65 LED machine work light (bar head, folding arm)
Light source	LED array, 4-row LED
Power	16 W / 24 W / 32 W / 40 W (selected when ordering)
Voltage	DC 24 V or AC 110-220 V (selected; NOT interchangeable)
Protection	IP65 - waterproof and dust-proof, built-in rubber sealing ring
Light colour	White, high brightness
Arm	Two-section aluminum folding arm, 230 mm + 300 mm (about 530 mm reach)
Arm adjustment	150 degrees at two joints, 180 degrees and 360 degrees
Housing	Aluminum alloy
Mounting	Screw-fixed base - fixing screws and washers are INCLUDED
Cable	Power cable pre-attached at the factory
Packing	1 piece per pack unless a larger pack is ordered
Certification	None applied for - no CE / RoHS marking on this product
Note	Dimensions measured by hand, tolerance 1 to 3 mm

3. PACKAGE CONTENTS

- 1 x LSM-70F LED machine work light with pre-attached power cable (selected power and voltage)
- 1 x Screw-fixed mounting base with fixing screws and washers
- 1 x User Manual (this document)

There is no magnetic base for this lamp - it is fixed with screws only. The lamp does not include a plug for DC models or any machine-side socket. Please state the power and the voltage you need when ordering: the AC 110-220 V version and the DC 24 V version are different products inside and are not interchangeable.

4. INSTALLATION INSTRUCTIONS

Step 1 - Check the voltage: read the label on the lamp. The DC 24 V version and the AC 110-220 V version are completely different inside - connecting a DC lamp to mains voltage destroys it instantly, and the reverse does the same.

Step 2 - Mount the base: mark and drill the fixing holes on the machine frame, column or a rigid bracket, then fix the base with the supplied screws and washers. Clean the mounting face first so the lamp sits flat and does not vibrate while cutting.

Step 3 - Position the head: release the joints and swing the folding arm to the position you want - the arm adjusts 150 degrees at two joints, 180 degrees and 360 degrees. Tighten the joints so the head stays put.

Step 4 - Connect the power: connect the DC 24 V version to the machine 24 V supply observing polarity, or plug the AC version into a matching earthed socket. Keep the cable clear of hot chips and moving axes.

Step 5 - Aim and test: switch the lamp on and aim the beam at the work area, not into the operator's eyes. Check that the arm holds position with the machine running before you start cutting.

5. WIRING

The power cable is attached to the lamp at the factory - there is no terminal block to open. Core colours can differ between production batches, so identify them with a meter before connecting:

Core	AC 110-220 V	DC 24 V	Note
Brown	Live (L)	Positive (+)	Identify with a meter - colours vary by batch
Blue	Neutral (N)	Negative (-)	Identify with a meter - colours vary by batch
Yellow-green	Earth (PE)	Not used on a 2-core DC cable	Earth must be connected where a 3-core cable is supplied

NEVER connect the DC 24 V version to 110-220 V mains, and never connect the AC 110-220 V version to a 24 V supply. Wrong voltage is not covered by warranty. ALWAYS isolate the machine before wiring.

If the cable has to be extended, use a cable of at least 0.5 mm² copper, keep the joint dry and outside the coolant spray zone, and route it away from hot chips and moving axes.

6. COLOUR STATUS

NOT APPLICABLE.

This is a work light, not a signal light. It has no colour-status function - the light colour is the white working beam only.

7. MAINTENANCE AND CARE

- Wipe the lens and the housing with a soft dry cloth. In an oily shop a slightly damp cloth is fine - dry the lamp afterwards.
- Do not use solvents, petrol, thinners or abrasive pads - they cloud the lens and mark the aluminum.
- Check the base screws, the arm joints and the cable entry every 6 months and re-tighten if the head has shifted.

- Keep the sealing ring and the lens seat clean so the IP65 seal stays intact. Replace the ring if it is cut or hardened.
- Do not swing the arm past its stops or use it to pull the machine - the joints are not designed as a handle.
- Store in a dry place at room temperature, with the arm folded, away from direct sunlight.

8. SAFETY WARNINGS

- ALWAYS disconnect the machine from the mains before installing, wiring, cleaning or adjusting the lamp.
- Check the label first. Wrong voltage (DC lamp on mains, or AC lamp on 24 V) destroys the driver and is not covered by warranty.
- Do not look directly into the LED beam when the lamp is on, and do not aim it at other people. Direct the beam onto the work only.
- The lamp head is IP65 - protected against dust and water jets - but it is not a diving light. Do not immerse it in coolant, water or cleaning liquid.
- Do not cover the lamp or block the housing - the aluminum body is the heat sink and needs air around it.
- Keep the cable away from hot chips, sharp edges, moving axes and rotating workpieces.
- Keep fingers clear of the arm joints when folding the lamp - the joints can pinch.
- Keep the lamp and its small parts (screws, washers) away from children.
- Where local regulations require it, installation must be carried out by a qualified electrician.

9. TROUBLESHOOTING

Problem	Possible cause	Solution
Light does not turn on	No supply, wrong voltage version, damaged cable	Check the supply and the label rating; test the cable; replace if the driver has failed
Only part of the lamp lights	Damaged LED row in the array	Replace the light head or the lamp
Light flickers	Loose cable entry, unstable supply, failing driver	Re-seat the cable, check the supply voltage, replace if the driver has failed
Light is dim	Voltage below rating, dirty or clouded lens	Use the rated voltage and clean the lens
Water or coolant inside the head	Sealing ring damaged or lens seat dirty	Switch off, dry the head, clean the seat and replace the sealing ring
Arm will not stay in position	Joint screws loose, or arm overloaded	Tighten the joint screws; do not hang tools or cables on the arm
Lamp becomes hot	Power option too high for the enclosure, housing covered	Do not cover the housing; clear chips from around the body

10. WARRANTY POLICY

1 year warranty from the date of delivery, covering manufacturing defects: LED and driver failure under the correct voltage, switch failure, sealing failure under normal use, and arm joints that fail in normal service.

Not covered: damage from wrong voltage, immersion in coolant or water, a damaged sealing ring from misuse, over-loading the arm, mechanical impact, or dismantling of the sealed head.

11. AFTER-SALES SERVICE

Contact	Jude
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Website	www.cnclight.com

Please quote model LSM-70F together with the power and voltage of your lamp (for example 40 W / AC 110-220 V) and your order number when you contact us.