DENCHIMINING



AE16 CORDED CAPLAMP

The power that preserves

Oldham personal safety lighting systems, for applications where failure is not an option.

With quality and reliability at the core of Denchi's business ethos, and the "without compromise" philosophy of Oldham, the AE16 caplamps deliver the perfect light performance needed by the miner for maximum productivity in a safety controlled working environment.

High-performance lamps and leading technology chargers, designed without compromise. Experience has proven worldwide that the rugged construction of all Oldham lamps make them the "lowest cost of ownership" caplamps in the world.



PART NUMBERS:

| AE16 CAPLAMP COMPLETE (STANDARD) | 200014 |
|--------------------------------------|--------|
| AE16 CAPLAMP COMPLETE (SUPER-BRIGHT) | 20001X |
| E16 BATTERY PACK | 203011 |
| A-TYPE LAMPTOP (STANDARD) | 204024 |
| A-TYPE LAMPTOP (SUPER-BRIGHT) | 204025 |
| 1600MM STANDARD CABLE | 201540 |
| 1700MM LONG CABLE | 201543 |
| | |

A complete repair parts list is available in the maintenance manual

FEATURES & BENEFITS

- Maintenance-free battery and headpiece for minimised repair costs.
- Advanced Li-ion technology control for safety and optimised performance.
- Battery BMS protection for inrush current, overcharge, low voltage and temperature control
- Brightest light penetration for safety and visibility
- Reliable lighting performance
- Complete availability of parts for maintenance repairs.
- Lowest total cost of life ownership
- Longest lighting performance in emergency situations

SPECIFICATION

STANDARD CAPLAMP

| Light performance | 6,000 LUX / 180 Lumen across 6.5° arc / 50 Lumen across 130° arc |
|--------------------|--|
| Colour temperature | Natural white ~4500K |
| Auxiliary LED | 35 Lumen across 120° arc |

SUPER-BRIGHT CAPLAMP

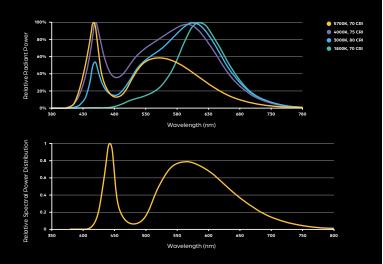
| Light performance | 9000 LUX / 275 Lumen across a 5.7° arc / 50 Lumen across 130° arc |
|--------------------|---|
| Colour temperature | Neutral white ~5300K |
| Auxiliary LED | 35 Lumen across 120° arc |

OPTIMISED LIGHTING

The light distribution of the Oldham main light source has been engineered to provide the optimal working light. Optimised with research undertaken by the Australian University of New South Wales on the behaviour of the human eye.

The standard Oldham caplamp achieves a spot of 6000 lux / 180 Lumen across a 6.5° arc (the normal area of focused sight for the human eye) and more than 50 lumen over 130° for peripheral vision illumination to avoid snag and trip hazards. The LED is specifically selected to match natural (warm) light for optimal visibility and perception underground.

The Super-Bright caplamp version provides a spot of 9000 lux / 275 Lumen across a narrower 5.7° arc with a slightly cooler LED spectrum. These factors combine to produce a beam that penetrates through dust and spray to give a clear contrast on rock surfaces.



MODEL AVAILABILITY AND FEATURES

SPECIFICATION CONTINUED

| Charger connection | Standard keyhole | |
|-------------------------------|----------------------------------|--|
| Main & Auxiliary LED Life | 30,000 hours | |
| Battery Life | >1200 cycles | |
| Weight | 960g | |
| Battery case & cover material | Polycarbonate | |
| Headpiece Dimensions | 67 x 67 x 70 mm | |
| Battery Dimensions | 152 x 125 x 55 mm | |
| Operating Temp | $Ta = 0^{\circ}C - +40^{\circ}C$ | |

CERTIFICATION

The AE16 caplamp is certified with Ex ia approvals for use in gassy coal mine applications:

- IECEx_ITS_22.0019
- ITS-I 22 ATEX 34123X / IECEX EXTC 24.0022X

APPLICATIONS

| Mining | Quarries | |
|-----------------|--------------------|--|
| | Construction | |
| Military | Emergency Services | |
| Confined-Access | Civil Engineering | |

| Product Specification | DL16 (Production ends 2023) | AE16 |
|---|---|--|
| | Good 🖌 | Best 🗸 🇸 🗸 |
| Run time (main LED) | >20 hours | |
| Battery Charge time (after 12hr shift) | 5-8 hours (>8hr recommended) | 8-10 hours (>10hr recommended) |
| Battery Cover | Standard cover fitted | Standard cover fitted (Option for clear hi-top cover to suit tracking TAG with IECEx approval) |
| Life cycle expectancy | > 5 years (@10hr, 5 day week) | |
| Battery / Cover IP Rating | IP67 / IP54 | |
| Emergency Situation - Light duration from 100% full charge | >24 hours main LED / >200 hours auxiliary LED | |
| Approvals | None – hard rock applications only | ITS-1-22 ATEX 34123X IECEx ITS 22.0019X / IECEx ExTC 24.0022X |
| STANDARD VERSION | v | ✓ |
| SUPER-BRIGHT VERSION | × | |



+49 173 9699012 Becker Mining Europe Neumuehler Weg 32 66130 Saarbruecken Germany



enquiries@denchigroup.com +44 (0) 1847 808 000 Denchi House, Thurso Business Park, Thurso, Caithness, KW14 7XW, UK