Data Sheet 02-0157  06/23

# Luminaire Series USL16/36 Stainless Steel

## The world's brightest sight glass luminaire:

LED luminaire is four times brighter than a typical sight glass light, offering an unprecedented view of processes.

## The advantages of LumiStar3000 LED technology:

- Ultra-bright LED provides 3000 lumens at full brightness, four times the light output than a typical 100-Watt halogen light
- Total internal reflection (TIR) lens with 24-degree beam angle, ideal for vessel illumination through sight glass with maximum light output and less than 5% loss of light output
- Cool white, 5500K color temperature, optimized for stainless-steel vessels
- Cool operation with temperature-based current limiting and automatic dimming
- LEDs have long service life and are vibration and impact resistant
- No heat radiation into process vessel (cold light output)

## Application:

Brightly illuminate process vessels for a clear view of processes in the chemical, pharmaceutical, bio-tech and food processing industries. It mounts on sight glass fittings for use in combined sight and light ports (single port version) or arranged separately (two port version). For illuminating bioreactors, mixers, filters and the interior of tanks, hoppers, silos, agitators, separators, pipelines and other – usually closed – containers in **non-hazardous areas.**

## Fits the following nominal sizes:

- Circular Weld-On Sight Glass fitting to DIN 28120: from Size DN 50 (3" view diameter)
- Circular ANSI Bolt-On Sight window: from size 2"
- Visual Flow Indicators: from size 2"
- Circular Weld-Neck Sight Glass fitting series MV: from DN 50
- Sanitary Clamp Connection Series MetaClamp: from 1"

## Protection:

- Dust and waterjet tight to IP 65 to DIN EN 60529/DIN VDE 0470 Part 1

## Operating conditions:

Independent of internal pressure/vacuum in the vessel, standard LumiStar3000 luminaires are approved for use in ambient temperatures from -40°C up to +80°C at the cable entry gland. **Under no circumstances should these luminaires be used for sealing vessel openings - an appropriate sight glass fitting must be used at all times.**

## Electrical data:

This LumiStar3000 luminaire is equipped with a factory mounted 5-pin M12 connector and is supplied with a 3 meter power cable.
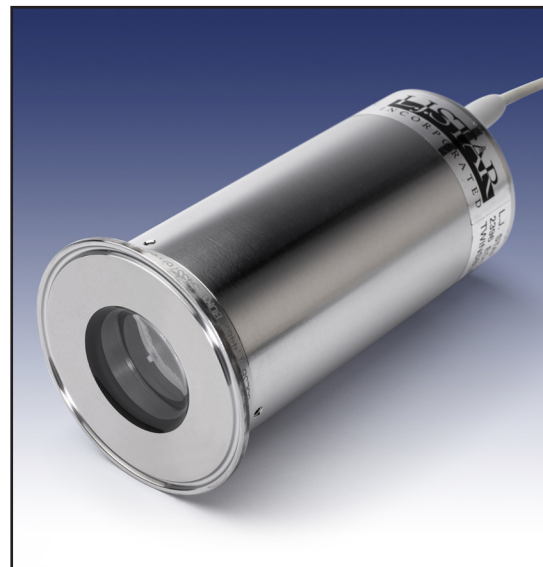
## Operation:

- Smart design with three modes of operation: flashlight mode (momentary), timed mode, and direct mode
- Factory-programmable options include: timer duration, initial brightness, and LED on at power up
- Industry-standard 5-pin M12 connector for power
- Remote switch available

## Operating voltage:

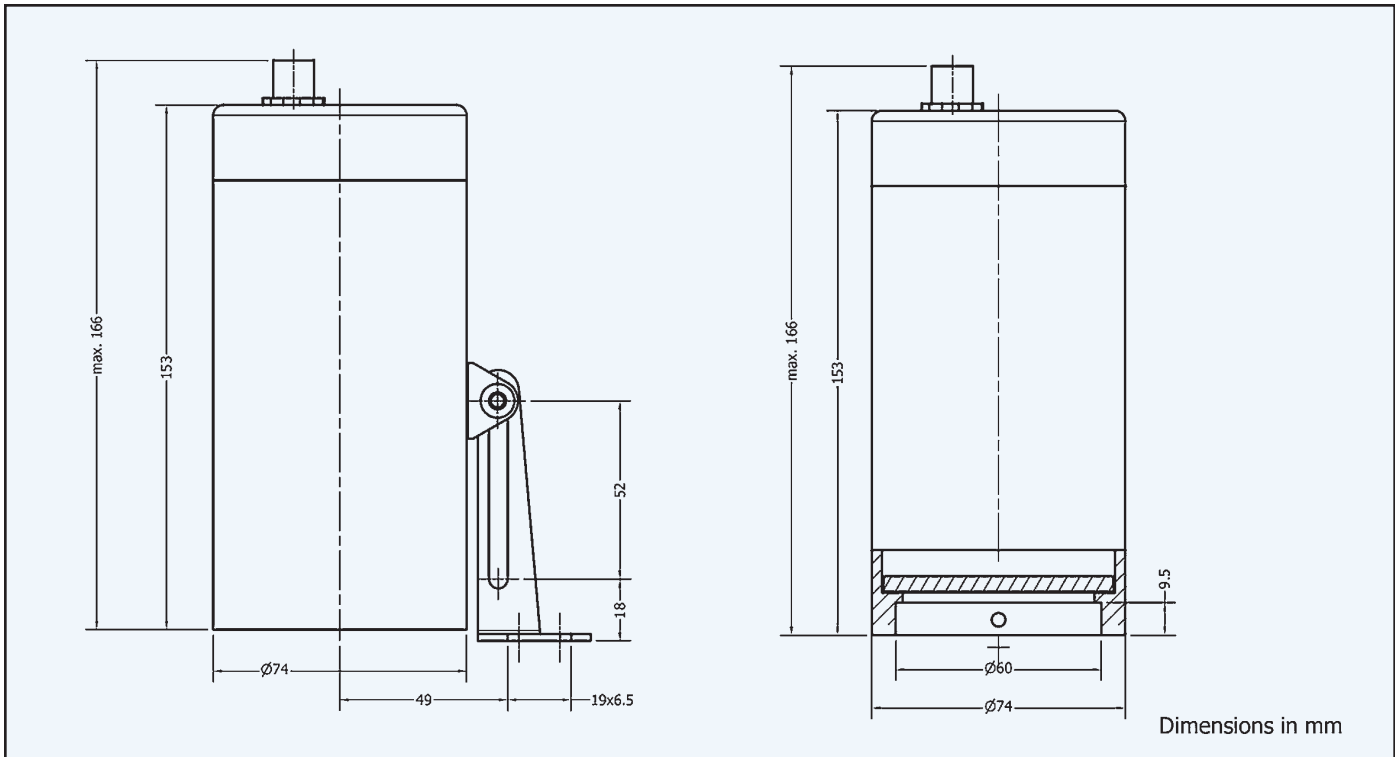- Low Voltage:  24V (AC or DC)
- High Voltage:  110-240V AC



*LumiStar3000 luminaire USL16 with Mounting Bracket*



*LumiStar3000  luminaire USL36 with MetaClamp® Sanitary Clamp Connection*

# Dimensions and electrical data for LumiStar3000™ luminaire USL16/36:



Dimensions in mm

## Components and Materials:

- Body and head of luminaire: 316 Stainless Steel (1.4404)
- Fastener Components: 304 Stainless Steel (1.4301) (hinged bracket or flanged adapter collar for attachment to Weld-neck sight glass fitting MV sizes DN 50 & 65)
- Metaclamp sanitary clamp connection: Duplex Stainless Steel, Hastelloy or Monel with Borosilicate glass to DIN7080

- Optional polymer and metal sanitary clamp connection: 316 stainless steel with a transparent food grade polymer
- Connecting cable: 3 meter cable with M12 Female Connector included
- Weight: 3 lbs. (1.4 kg)

## LumiStar3000 luminaires USL16/36 are suitable for mounting...

- With a fused Metaglas® sight glass for sanitary connections (MetaClamp®) for clamp fittings
- With a fused Metaglas® sight glass for aseptic weld-neck sight glass fittings, Series MV
- With a fused Metaglas® sight glass for TCI ClampConnect® and Bolt-Connect®
- With a fused Metaglas® sight glass for NA-Connect® fittings
- With a fused Metaglas® sight glass for VARIVENT® in-line housings

## Ordering Information

Example: LumiStar3000 Luminaire Stainless Steel USL36, 24V/40W



LumiStar3000 USL 16/36 with programmable on/off switch. State-of-the-art capacitive touch switch, operable with gloves.

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