# Luminaire Series USL13/33 Stainless Steel

### The world's brightest compact sight glass luminaire:

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

### The advantages of LumiStar1000 LED technology:

- Ultra-bright LED provides 1000 lumens at full brightness, two times the light output than a typical 100-Watt halogen light
- Total internal reflection (TIR) lenses with 26-degree beam angle, ideal for vessel illumination through sight glass with maximum light output and less than 5% loss of light output.
- Cool white, 5000K color temperature, optimized for stainless-steel vessels
- 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 brewery, 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 brew kettles, 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 1"
- Circular Weld-Neck Sight Glass fitting series MV: from DN 50
- Sanitary Clamp Connection Series MetaClamp: from 1"

### Approvals

- ETL listed for all 12-24V and 110-240V with standard cable connection
- CE compliant for all 12-24V configurations

### Protection:

- Conforms to UL STD 2108 and certified to CSA STD 22.2 #250.0
- Dust and waterjet tight to NEMA 4 & 4X
- 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 LumiStar1000 luminaires are approved for use in ambient temperatures from -40ºC up to +80ºC 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 LumiStar1000 luminaire is equipped with a factory light-mounted cable gland. Supplied with a 3 meter power cable.

### M12 Connector Option

- Lights can be supplied with 5-pin M12 connector and cable (3-meter-length) for enabling remote pushbutton switch
- M12 connector and cable not covered by ETL listing



*LumiStar1000 Luminaire Series USL33 with MetaClamp® Sanitary Clamp Connection*



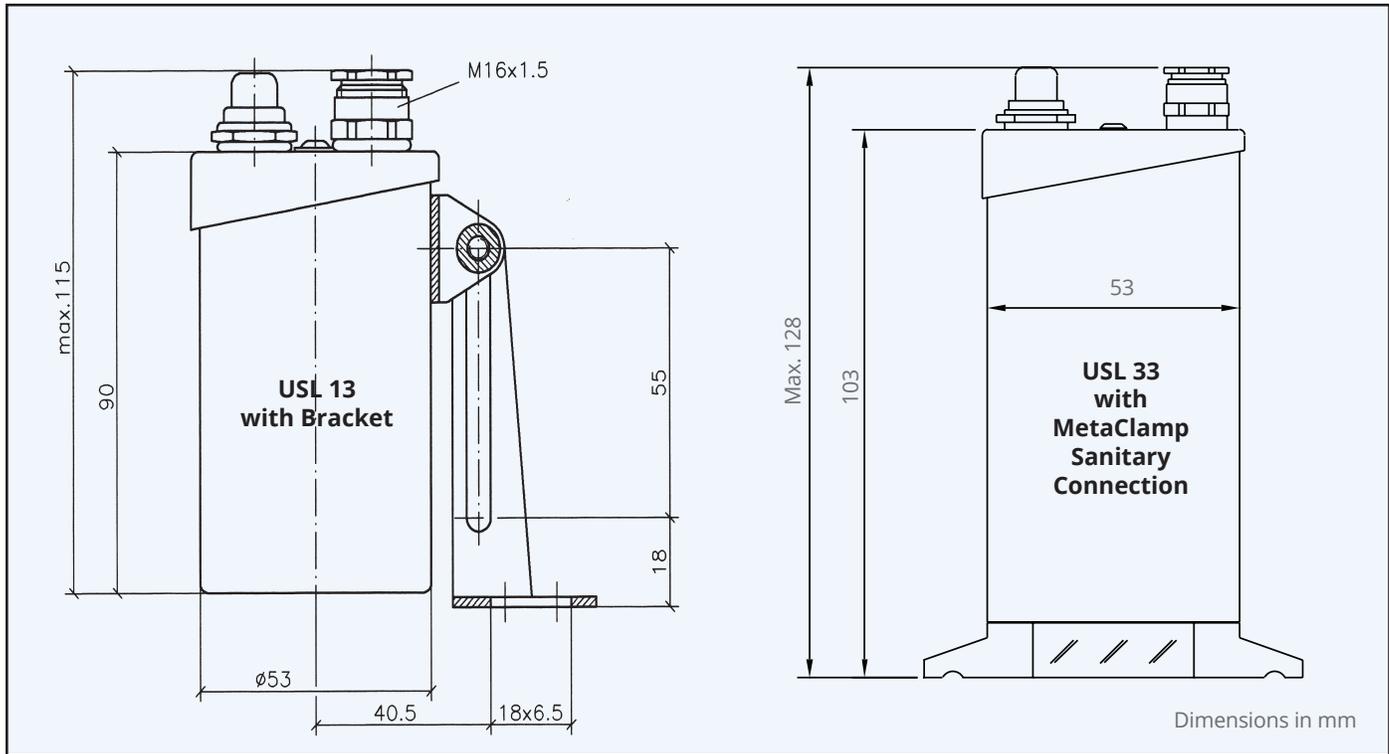*LumiStar1000 Luminaire Series USL13 with Mounting Bracket*

### Operation:

- Smart design with three modes of operation: flashlight mode (momentary), timed mode, direct mode
- Factory-programmable options include: timer duration, initial brightness, and LED on at power up

### Operating voltage:

- Low Voltage: 12-24V (AC or DC)
- High Voltage: 110-240V AC

# Dimensions and electrical data for LumiStar1000™ luminaire USL13/33:



Dimensions in mm

## Components and Materials:

- Body and cap 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: 304 stainless steel with a transparent food grade polymer
- Connecting cable: 3 meter cable with cable gland
- Weight: 1.3 lbs. (0.58 kg)

## LumiStar1000 luminaires USL13/33 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: LumiStar1000 Luminaire Stainless Steel USL33, 24V/12W