



Fibre-optic lightpipe type: fibroLUX

Fibre-optic lightpipe light fittings
for use in hazardous areas



Fibre-optic lightpipe light fitting for use in hazardous areas with built-in timer "V", type fibroLUX® 5035 X1 W2 V, EEx de IIC T4, Ex II 2 G + D, 35 W, 230 V, fixation of the light source by fixation legs "X1", fixation of the lightpipe by universal support "W2" onto sightglass to DIN 28120, DN 40, PN 10



Fibre-optic lightpipe light fitting with built-in timer "U", type fibroLUX® 5035 W W2 U sp, EEx de IIC T3, Ex II 2 G + D, 35 W, 12 V DC, fixation of the light source by bracket "W", fixation of the lightpipe by universal support "W2" onto sightglass to DIN 28120, DN 40, PN 10

The fibroLUX® series of light fittings for use in hazardous areas are technically advanced, innovative top products for the brilliant, powerful and continuous illumination of process equipment, typically in the pharmaceutical and chemical industries. Locating the light source away from the sightglass gives scope for the arrangement "light and sight through small sightglasses".

For the purchasing department:

- Highly competitive price
- Short lead times

For the design or plant engineer:

- The colours of the illuminated products remain "true", due to an absolutely white light output
- Brilliant, targeted illumination, even under difficult conditions, due to focusable light output and movable lightpipe
- The built-in long life halogen bulb is industry standard, available from local suppliers throughout the world
- Available with a built-in electronic timer "V" or "U" or with a device for momentary operation "D" (see options overleaf)
- Easiest mounting due to different mounting possibilities and an absence of orientation prescriptions
- The components of the system do not require expensive servicing due to long maintenance intervals
- There are no complicated pre-installation checks to be carried out with respect to the conformance of the unit to its certification: The unit is delivered ready for use
- The system is designed for continuous operation, thus allowing uninterrupted observation of the process reaction steps
- Maximum length of the lightpipe: 5 m
- Certified to ATEX in the groups G (zones 1 and 2) and D (zones 21 and 22)

For the electrician:

- The light fitting may be supplied for use with a wide range of supply voltages
- Easy connection due to ample junction box with large terminals
- M20 standard tapping for gland permits easy change to a site standard or use with SWA cable
- Quick bulb replacement

Application:

- For use in hazardous areas, mainly in situations where there is insufficient room to fit a "classic" type of sightglass light fitting, where there is only one very small sightglass available for both illumination and observation or in situations where it is desirable to highlight a specific area of a reaction or of the reaction vessel (e.g. for maintenance purposes).

Conditions of service:

- The mounting is independent of the internal pressure or vacuum of the equipment to be fitted with. There are no restrictions for the mounting position.

Technical data:

- Mode of service: Continuous service. If required for economic or environmental reasons, a version is available with a built-in timer or device for momentary use

Enclosure protection degree:

- IP 65, dust and water jet tight to EN 60529 / DIN VDE 0470 part 1

Ignition protection type:

- EEx de to DIN EN 50014 / 50018 / 50019 / 50281-1-1

Explosion group:

- IIC

Temperature class:

- T4

ATEX:

- Ex II 2, G + D, T 130 °C



Light source

A	B	C	D	E
230	76	18	135	110

Electrical data:

- Supply: Alternating current (AC) or direct current (DC), depending on light source
- Supply voltages: With integrated transformer: 24/36/42/115/230/240 V AC
Without integrated transf.: 12V AC/DC (24V DC on demand)
- Power: 35 W effective
- Bulb socket: GU 5.3
- Bulb: Halogen, 35 W / 12 V - Industry standard bulb with an effective operating life of ca. 2500 hours

Construction and materials:

• Compact light source housing and its fixation elements of anti-corrosion cast aluminum alloy (Anticorodal). Marked earth terminal inside the Ex e junction box and another on the outside of the housing. Built-in separation transformer to VDE 0171 for all voltages supplied, except for 12 V DC. Built-in fine fuse, appropriate to the respective supply voltage (for versions with trafo). The light from the halogen bulb is optimally focused on to the lightpipe by an efficient reflector system. Light source mounting either via the "X1" fixation legs or bracket "W" (see dimensioned drawings) or by the customer making an adaptation using the M6 tappings on the housing. Lightpipe designed for optimum light transmission, directly fixed to the light source housing. Standard length of the lightpipe is 1 metre, other lengths on request. Light output as a wide beam, "flood" (standard delivery) or with narrow beam "spot" (see options). Light transmitting fibres protected by a galvanized steel flexible tube, enclosed in a chemical and temperature resistant silicon rubber tube. Lightpipe terminated with a stainless steel ferrule, ground flat and polished for close fit to the sightglass. Minimum bending radius of the lightpipe assembly 100 mm / ± 10%. Fixation of the lightpipe to the sightglass concerned with a stainless steel universal support "W2" or "W3" (for the spotlight adapter), with an M8 screw.

Light source

A	B	C	D	E
193	172	146	186	116

Additional equipment:

Timer:

- Standard set period of ca. 3 minutes, a period of 15 minutes is possible if specified on order
- Type "V" for action on the light source housing or for remote operation
- Type "U" for remote operation only via opening contact, to be built into the supply cable

Momentary push button:

- Type "D", operated on the light source housing

Painting „K“ (Alu parts):

- 2 components acrylic based colour, standard colour RAL 9001, other colours available on demand

Spotlight adapter „SA“:

- To produce a narrow focused output beam. Lens holder in stainless steel to be positively positioned on the emitting end of the lightpipe, adjusted in our works. May be removed / refitted, thus allowing either "flood" or alternatively "spot" operation.

Lightpipe: Version "flood" or "spot"

Fixation of the light source by bracket "W" on sightglasses to or similar to DIN 28120 / 28121

Lightpipe:
Version flood: „W2“ Version "spot", "W3"

Fixation "W2" / "W3" on sightglasses to or similar to DIN 28120 / 28121

Do you wish for more information about our wide range of light fittings for use in hazardous or safe areas, about our range of circular sightglasses to DIN 28120/28121, screwed sightglasses similar to DIN 11851, rectangular or D-ended sightglasses, pipeline flow indicators, sideways or centrally operated wipers, hinged sightglasses, spraying devices or our complete sight and lightglass units VETROLUX? Are you interested in other types, special versions or different protection degrees? If yes, please contact us – it is our business! You will find the necessary indications about our company on the Internet.

1) All dimensions in mm.
2) Subject to changes without preliminary notice.