

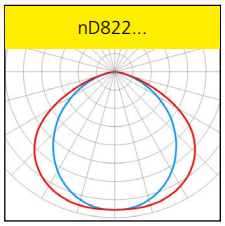
# LED-Steep roof light fitting for Ex-Zone 2/22
# Series nD822...

**Applications:**
Hazardous areas of Zones 2 (gas) and 22 (dust), e.g. cleanrooms, paint shops and spray booths.

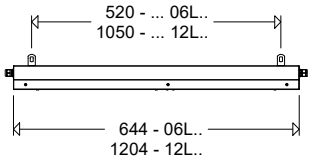
**Design:**
Housing: Sheet steel, powder coated in light grey (RAL 7035), silicone foam gasket.
Glass cover: Impact resistant safety glass pane, frameless / hinged.
Central locking system: Operated by a 5 mm allen key, internal hinges on the opposite side.
Reflector: Hinged; white painted sheet steel; detachable, carrying LED-modules and glare limitation modules.
Connection: 3 poles up to 2.5 mm².
Cable entries: 3 entries M25 x 1.5, (2 glands - one of them is plugged)
Standard: Facing downwards or forwards.
Mechanical installation:
Mounting accessories see spare parts/ accessories.

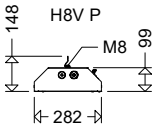
**Technical Data:**
LED: Line modules appr. 5,000 K, CRI > 80, service life $L_{90}$ > 75,000 h at 25 °C ambient temperature, service life $L_{80}$ > 100,000 h at max. ambient temperature
ECG: 220-240 V AC/DC, 0 or 50/60 Hz, overvoltage, overload and short circuit protection

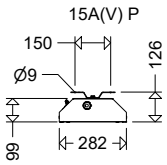
**Note:**
This light fitting is not suitable for application in areas with permanent high humidity in combination with only short periods of operation, such as sewage or stormwater retention tanks or water treatment plants.

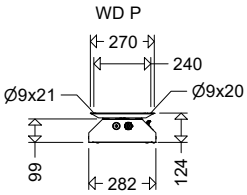



**Options:**
– 3,000 K; light colour (**830**)
– through-wiring (**DV**)
– stainless steel version (**E.**), painted
– for installation in thermally insulated ceilings in accordance with EN 60598
– for connection to central emergency supply systems (**ZB**)
– for connection to central emergency supply systems with integrated monitoring module



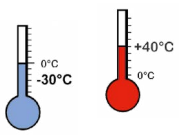




**Product highlights:**

- extremely flat and robust design
- **perfect protection of the LED from mechanical or electrostatic damages with at the same time homogeneous Illumination with glare limitation modules,** no individual light points visible, comfortable perception of light, excellent glare limitation
- **high colour rendering index CRI > 80**, according to the workplace guide lines suitable for nearly all plant locations
- **comfortable central locking system** with internal hinges
- separate, **frame for recessed installation or a swivel arm mounting system** can easily be installed at a later stage, (frame for recessed installation not suitable for stainless steel version!)
- control gear and reflector with LED-modules replaceable by qualified personnel on-site
- suitability for paint booths LABS-tested according to VDMA 24364-C2-L




## nD822...




Ignition protection: ec
Marking:
II 3 G Ex ec IIC T4 Gc (Zone 2)
II 3 D Ex tc IIIC T80°C Dc (Zone 22)
Rated voltage: 220-240 V AC/DC, 0 or 50/60 Hz.

Permissible ambient temperature:
-30 °C up to +40 °C

| Article no. | Type | Connected load [W] | Luminous flux [lm] | Luminous efficacy [lm/W] | Ta max [°C] | Substitute for * | Weight [kg] (without packing material) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| 82200 0001 | **nD822 06L22** | 15 | 2.100 | 140 | 40 | 2 x 18W | 7,6 |
| 82200 0002 | **nD822 06L42** | 28 | 4.110 | 147 | 40 | 2 x 36W | 7,9 |
| 82200 0003 | **nD822 06L60** | 40 | 5.600 | 140 | 40 | 2 x 58W | 7,9 |
| 82200 0050 | **nD822 12L42** | 28 | 4.260 | 152 | 40 | 2 x 36W | 13,5 |
| 82200 0051 | **nD822 12L60** | 40 | 5.900 | 148 | 40 | 2 x 58W | 13,5 |
| 82200 0052 | **nD822 12L85** | 54 | 8.350 | 155 | 40 | > 2 x 58W | 14,1 |
| 82200 0053 | **nD822 12L120** | 79 | 11.470 | 145 | 40 | > 3 x 58W | 14,1 |

II 3 G Ex ec IIC T4 Gc | II 3 D Ex tc IIIC T80°C Dc | IP65

* The given information is for rough orientation only. In each individual case a lighting calculation is necessary.

**Looping the cable on one side:**
All light fittings of series nD822... have got 2 cable entries on one small side of the housing for cable looping instead of the through-wiring system. (3-pole looping standard, 5-pole looping at additionel cost)

**!** Properties, limitations and details for controlling LED-light fittings:
See "Technical Supplement"

All data are correct at the time of printing. Actual technical data can be found under www.schuch.de.

## nD822... DIMD

### dimmable via DALI interface

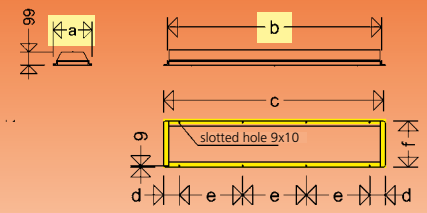
**Design:**
Same as standard version, but with DALI-2-compatible ECG and 2 additional clamping points, marked with DA. Compatible with **LIMAS Line BASIC/PRO** Light Management System.

**Note:**
The conducting wires to the control input must be mains voltage stable and can be integrated in the connection cable.

| Article no. | Type | Connected load [W] | Luminous flux [lm] | Luminous efficacy [lm/W] | Ta max [°C] | Substitute for * | Weight [kg] (without packing material) |
|---|---|---|---|---|---|---|---|
| 82200 0007 | **nD822 06L22 DIMD** | 15 | 2.100 | 140 | 40 | 2 x 18W | 7,6 |
| 82200 0008 | **nD822 06L42 DIMD** | 28 | 4.110 | 147 | 40 | 2 x 36W | 7,9 |
| 82200 0009 | **nD822 06L60 DIMD** | 40 | 5.600 | 140 | 40 | 2 x 58W | 7,9 |
| 82200 0061 | **nD822 12L42 DIMD** | 28 | 4.260 | 152 | 40 | 2 x 36W | 13,5 |
| 82200 0058 | **nD822 12L60 DIMD** | 40 | 5.900 | 148 | 40 | 2 x 58W | 13,5 |
| 82200 0054 | **nD822 12L85 DIMD** | 54 | 8.350 | 155 | 40 | > 2 x 58W | 14,1 |
| 82200 0055 | **nD822 12L120 DIMD** | 79 | 11.470 | 145 | 40 | > 3 x 58W | 14,1 |

* The given information is for rough orientation only. In each individual case a lighting calculation is necessary.

**Installation dimensions**




| Type | a | b | c | d | e | f |
|---|---|---|---|---|---|---|
| **EB 82. 06L** | 302 | 660 | 710 | 55 | 300 | 348 |
| **EB 82. 12L** | 302 | 1224 | 1270 | 125 | 340 | 348 |

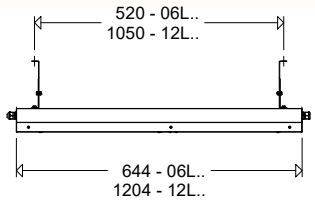
**Attention**: When planning the opening for recess installation please allow additional clearance for the cable glands.

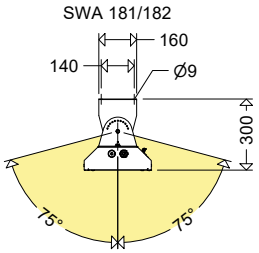
# Frame for Recessed Installation

*retrofit possible!*

Light fittings of series nD822... can be equipped (also retrofitted, except for stainless steel versions) with an all-round angle frame for ceiling and wall installation.
Mounting by means of M5 bolts to the long sides of the housing (see drawing).

| Article No. | Type | |
|---|---|---|
| 18091 0020 | **EB 82. 06L** | frame for narrow housing, e821 06L, nD822 06L |
| 18091 0021 | **EB 82. 12L** | frame for narrow housing, e821 12L, nD822 12L |




**Swivel range 150°**

# Swivel Arm Mounting System

*retrofit possible!*

Light fittings of series nD822... can be equipped with a swivel arm mounting system at any time.
The swivel arms are fixed to the suspension points at the upper side of the housing. Swivel range: ± 75 °
(see dimensions in diagram).

| Article No. | Type | |
|---|---|---|
| 18092 0001 | **SWABF 181/182 P** | for all wattages consisting of: 2 swivel arms with bolts M8 |



**Mounting material**

Suspension brackets **H8V P**



Ceiling brackets **15A P**



Wall/ceiling angles **WD 45 P**



Further accessories as well as carrier rail systems and through-wiring systems are available.

# Accessories / Spare Parts

| Article No. | Type | |
|---|---|---|
| **Spare glasses** | | |
| 82101 9001 | **ABD 821 06** | cover, spare safety glass clear, for 185 06 ..., e821 06 ..., nD822 06 ... |
| 82101 9002 | **ABD 821 12** | cover, spare safety glass clear, for 185 12 ..., e821 12 ..., nD822 12 ... |
| **Cable entries/cable glands** | | |
| 90117 9006 | **2537 G** | ex-protected gland of size M25 x 1,5 with locknut |
| 90119 9001 | **2539 G** | ex-protected gland of size M25 x 1,5 with locknut and plug |
| 90118 9006 | **2538 G** | ex-protected plug of size M25 x 1,5 with locknut |
| **Mounting material** | | |
| 90001 0002 | **H8V P** | 2 suspension eyes, stainless steel |
| 90000 0002 | **DS 15A P** | 2 ceiling brackets, hot galvanized steel |
| 90032 0002 | **DS 15AV P** | 2 ceiling brackets, stainless steel |
| 26000 0011 | **WDW P** | 2 wall/ceiling angle, painted steel |
| 26000 0005 | **WDW 45 P** | 2 wall/ceiling angle 45°, painted steel |