

LIGHTING FIXTURES FOR FLUORESCENT TUBE LAMPS

Explosion Proof Electrical Equipment



Ex Lighting

EVG

Installation: hazardous areas - Zone 1 / 2 (Gases) - Zone 21 / 22 (Dusts)
Classification: Group II - Category 2G 2D



GOST-R
RTR Ex Proof



| | 18W LIGHTING FIXTURE | | 36W LIGHTING FIXTURE |
|---------------------|---|--|---|
| | ATEX 94/9/EC | GOST-R (RTR / RTN) | ATEX 94/9/EC |
| EXECUTION | ⊕ II 2 G Ex edq IIC T4 ⊕ II 2 D Ex tD A21 T 80°C | 2Ex edq IIC T4 (T6) DIP A21 TA 80°C | ⊕ II 2 G Ex edq IIC T4 ⊕ II 2 D Ex tD A21 T 80°C |
| AMBIENT TEMPERATURE | -20°C ÷ +60°C | -20°C ÷ +60°C | -20°C ÷ +55°C |
| PROTECTION DEGREE | IP66 | IP66 | IP66/64 |
| CERTIFICATE REF. | PTB 97 ATEX 2223 | POCC DE. Г505.В01788 | PTB 07 ATEX 2040 |
| RULES OF COMPLIANCE | EN 60079-0; EN 60079-1; EN 61241-0; EN 61242-1 | ГОСТ Р 51330.9-99 (МЭК 60079-0-98); ГОСТ Р 51330.1-99 (МЭК 60079-1-98); ГОСТ Р 51330.8-99; ГОСТ Р МЭК 61241-1-1-99 | EN 60079-0; EN 60079-1; EN 61241-0; EN 61242-1 |

| | 58W LIGHTING FIXTURE | LIGHTING FIXTURES WITH EMERGENCY UNIT ONLY | |
|---------------------|---|--|---|
| | ATEX 94/9/EC | GOST-R (RTR / RTN) | ATEX 94/9/EC |
| EXECUTION | ⊕ II 2 G Ex edq IIC T4 ⊕ II 2 D Ex tD A21 T 90°C | 2Ex edq IIC T4 (T6) DIP A21 TA 90°C | ⊕ II 2 GD Ex edq IIC T4 T80°C |
| AMBIENT TEMPERATURE | -20°C ÷ +60°C | -20°C ÷ +60°C | -20°C ÷ +55°C |
| PROTECTION DEGREE | IP66 | IP66 | IP66/64 |
| CERTIFICATE REF. | PTB 97 ATEX 2225 | POCC DE. Г505.В01788 | PTB 05 ATEX 2066 |
| RULES OF COMPLIANCE | EN 60079-0; EN 60079-1; EN 61241-0; EN 61242-1 | ГОСТ Р 51330.9-99 (МЭК 60079-0-98); ГОСТ Р 51330.1-99 (МЭК 60079-1-98); ГОСТ Р 51330.8-99; ГОСТ Р МЭК 61241-1-1-99 | EN 60079-0; EN 60079-1; EN 61241-0; EN 61242-1 |

Mechanical characteristics

| | |
|--------------------|---|
| Body | glass fibre reinforced polyester resin |
| diffuser | U/V resistant polycarbonate - hinged to body |
| safety closing | operated by triangular key |
| gaskets | EPDM rubber suitable for high temperatures and resistant to environments conditions |
| internal reflector | white polyester highly refractor diffuser |
| cable entry | ISO-Metric thread c/w plastic cable glands and stopping plug |

Electrical characteristics

| | |
|-----------------|--|
| Power supply | electronic ballast 220V/240V - 50/60Hz (p.f.corrected - $\cos \rho \geq 0,98$) |
| Lampholders | bi-pin G13 cap |
| Internal wiring | high-temperature resistant silicon rubber insulation cables |
| Terminals | suitable up to 6mm/sq cables |
| Safety feature | "end of life" switching-off system in according to EN 60079-7 rules |
| Emergency unit | emergency unit composed of inverter charger and Ni-Cd battery pack 7A/h 6V autonomy up to 180 min. |
| Advantages | see table "advantage features" |

ON REQUEST ACCESSORIES:

- Pole mounting kit complete with stainless steel hardware
- Ceiling mounting kit complete with stainless steel hardware
- Pendant mounting kit complete with stainless steel hardware
- Wall/Structure mounting kit complete with stainless steel hardware
- Electronic ballast with voltage supply different than standard

EVG Technical data

| CODE | LAMP | TEMPERATURE CLASS (GAS) | TEMPERATURE CLASS (DUSTS) | LAMPHOLDER | CABLE ENTRY | EMERGENCY UNIT | AUTONOMY | DETAIL |
|------|------|-------------------------|---------------------------|------------|-------------|----------------|----------|--------|
|------|------|-------------------------|---------------------------|------------|-------------|----------------|----------|--------|

FLUORESCENT LIGHTING FIXTURES FOR SINGLE AND TWIN LAMPS - POWER SUPPLY 230V-50/60Hz

| | | | | | | | | |
|----------|---------|-------------------------|-----------------------------|-----|-------------|---|---|---|
| SH-21EVG | 1 x 18W | T4 (Ta = -20°C / +60°C) | T 80°C (Ta = -20°C / +60°C) | G13 | 3 x ISO-M25 | - | - | A |
| SH-41EVG | 1 x 36W | T4 (Ta = -20°C / +60°C) | T 80°C (Ta = -20°C / +60°C) | G13 | 3 x ISO-M25 | - | - | A |
| SH-61EVG | 1 x 58W | T4 (Ta = -20°C / +60°C) | T 90°C (Ta = -20°C / +60°C) | G13 | 3 x ISO-M25 | - | - | A |
| SH-22EVG | 2 x 18W | T4 (Ta = -20°C / +60°C) | T 80°C (Ta = -20°C / +60°C) | G13 | 3 x ISO-M25 | - | - | A |
| SH-42EVG | 2 x 36W | T4 (Ta = -20°C / +60°C) | T 80°C (Ta = -20°C / +60°C) | G13 | 3 x ISO-M25 | - | - | A |
| SH-62EVG | 2 x 58W | T4 (Ta = -20°C / +60°C) | T 90°C (Ta = -20°C / +60°C) | G13 | 3 x ISO-M25 | - | - | A |

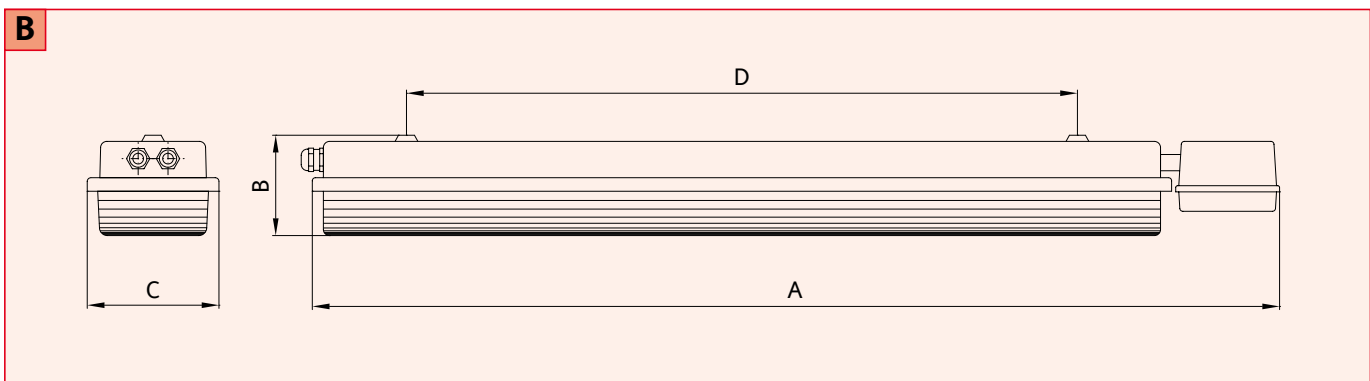
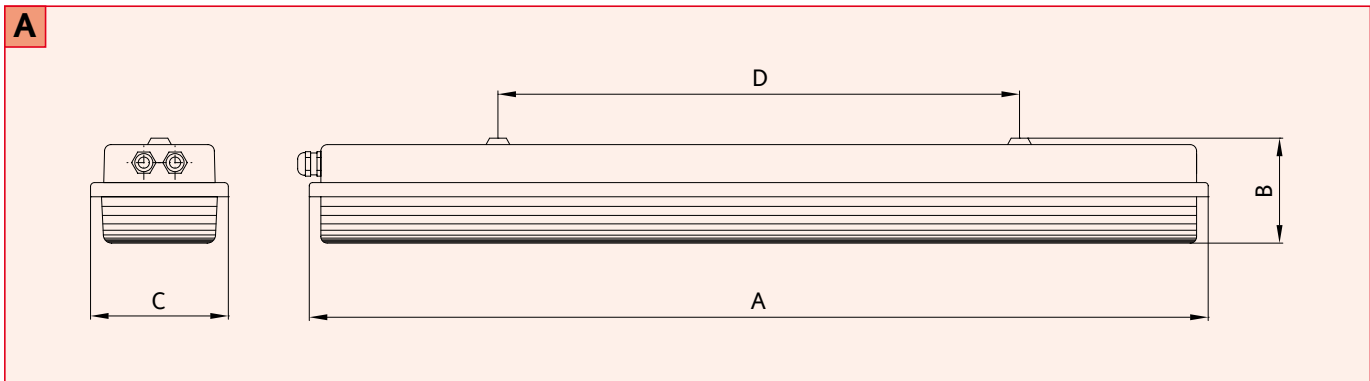
EMERGENCY FLUORESCENT LIGHTING FIXTURES FOR SINGLE AND TWIN LAMPS - POWER SUPPLY 230V-50/60Hz

| | | | | | | | | |
|------------|---------|-------------------------|-----------------------------|-----|-------------|-------------|----|---|
| SH-22EVG-E | 2 x 18W | T4 (Ta = -20°C / +60°C) | T 80°C (Ta = -20°C / +60°C) | G13 | 2 x ISO-M25 | 6 V - 7 A/h | 3h | B |
| SH-42EVG-E | 2 x 36W | T4 (Ta = -20°C / +60°C) | T 80°C (Ta = -20°C / +60°C) | G13 | 2 x ISO-M25 | 6 V - 7 A/h | 3h | B |

EVG Technical features

| CODE | A [mm] | B [mm] | C [mm] | D [mm] | WEIGHT [Kg] | CABLE ENTRY | DETAIL |
|------------|--------|--------|--------|--------|-------------|-------------|--------|
| SH-21EVG | 786 | 160 | 214 | 600 | 7,5 | 3 x ISO-M25 | A |
| SH-41EVG | 1355 | 150 | 226 | 716 | 10,2 | 3 x ISO-M25 | A |
| SH-61EVG | 1696 | 160 | 214 | 800 | 13,5 | 3 x ISO-M25 | A |
| SH-22EVG | 786 | 160 | 214 | 600 | 8 | 3 x ISO-M25 | A |
| SH-42EVG | 1355 | 150 | 226 | 716 | 10,7 | 3 x ISO-M25 | A |
| SH-62EVG | 1696 | 160 | 214 | 800 | 14 | 3 x ISO-M25 | A |
| SH-22EVG-E | 913 | 160 | 221 | 600 | 9,40 | 2 x ISO-M25 | B |
| SH-42EVG-E | 1523 | 160 | 221 | 800 | 12,80 | 2 x ISO-M25 | B |

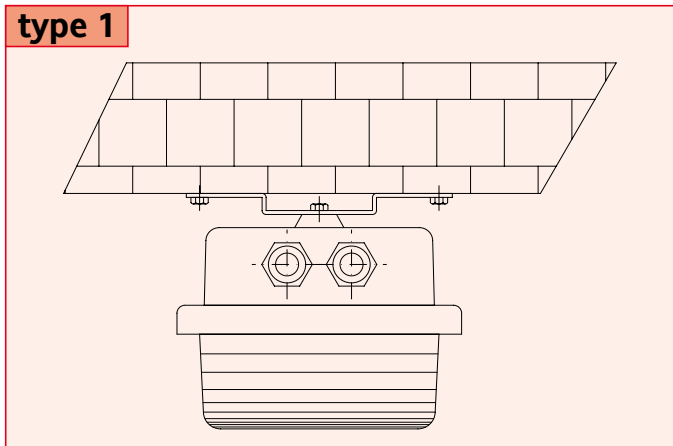
Reference details



EVG Installation and mounting details

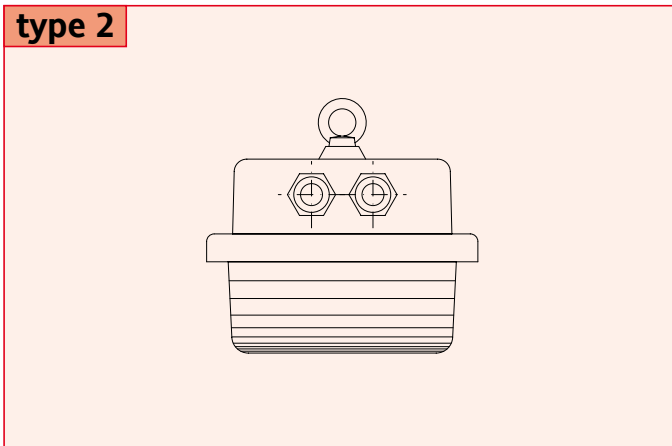
Ceiling mounting

type 1



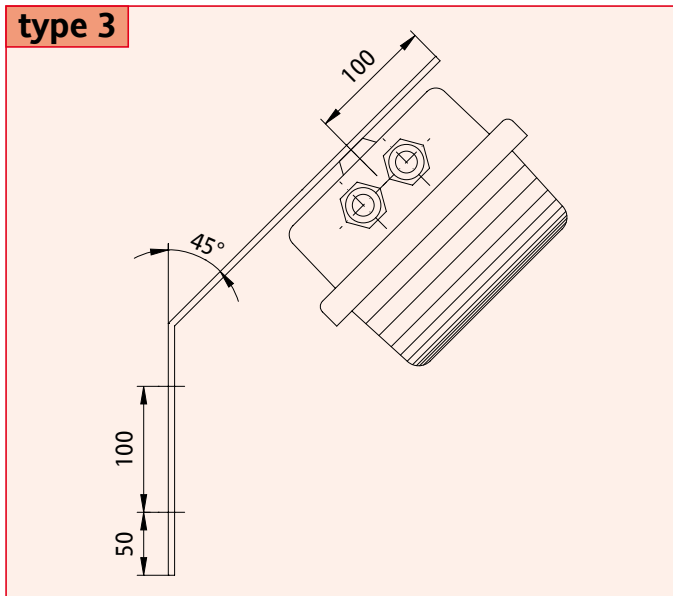
Pendant mounting

type 2



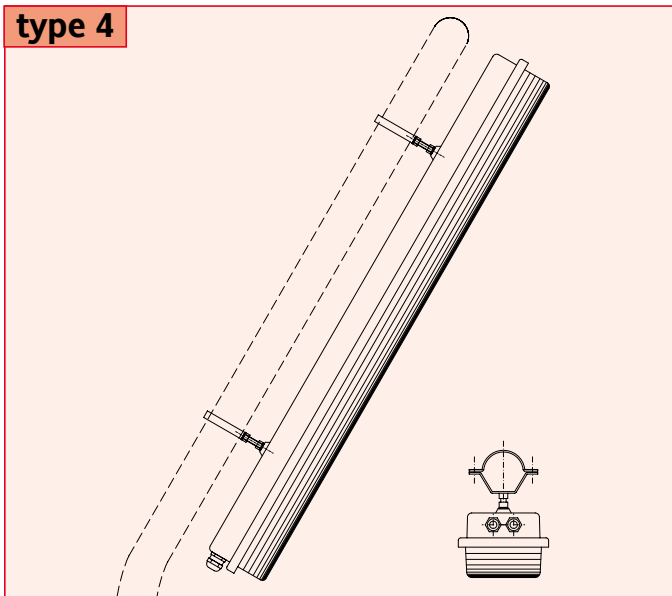
Wall/structure mounting

type 3



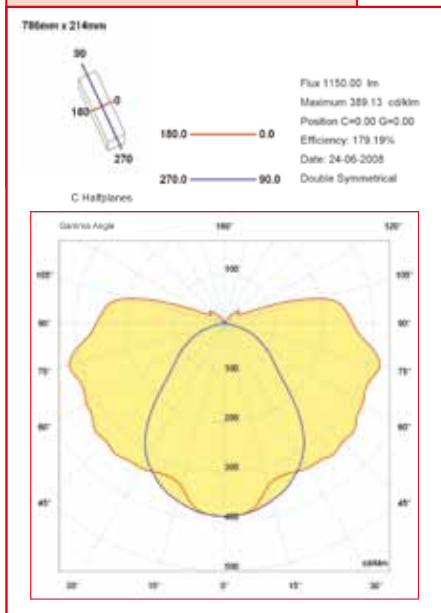
Pole mounting Assemblig detail with pole (typical)

type 4

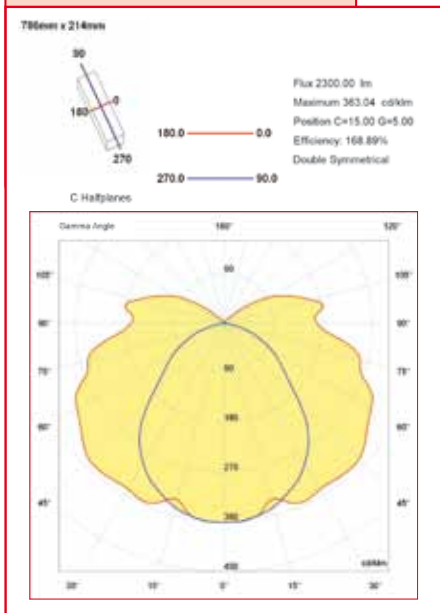


EVG Polar diagrams – photometric data

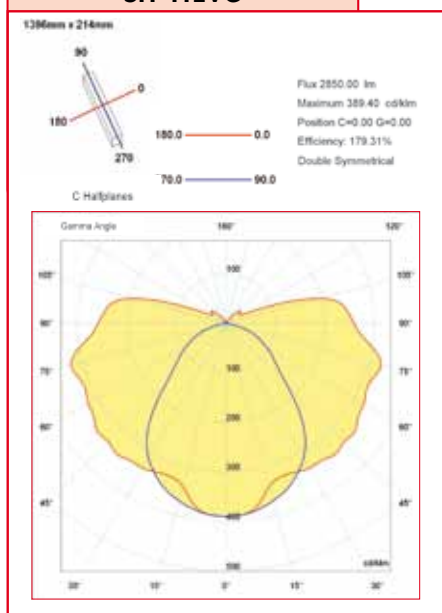
SH-21EVG



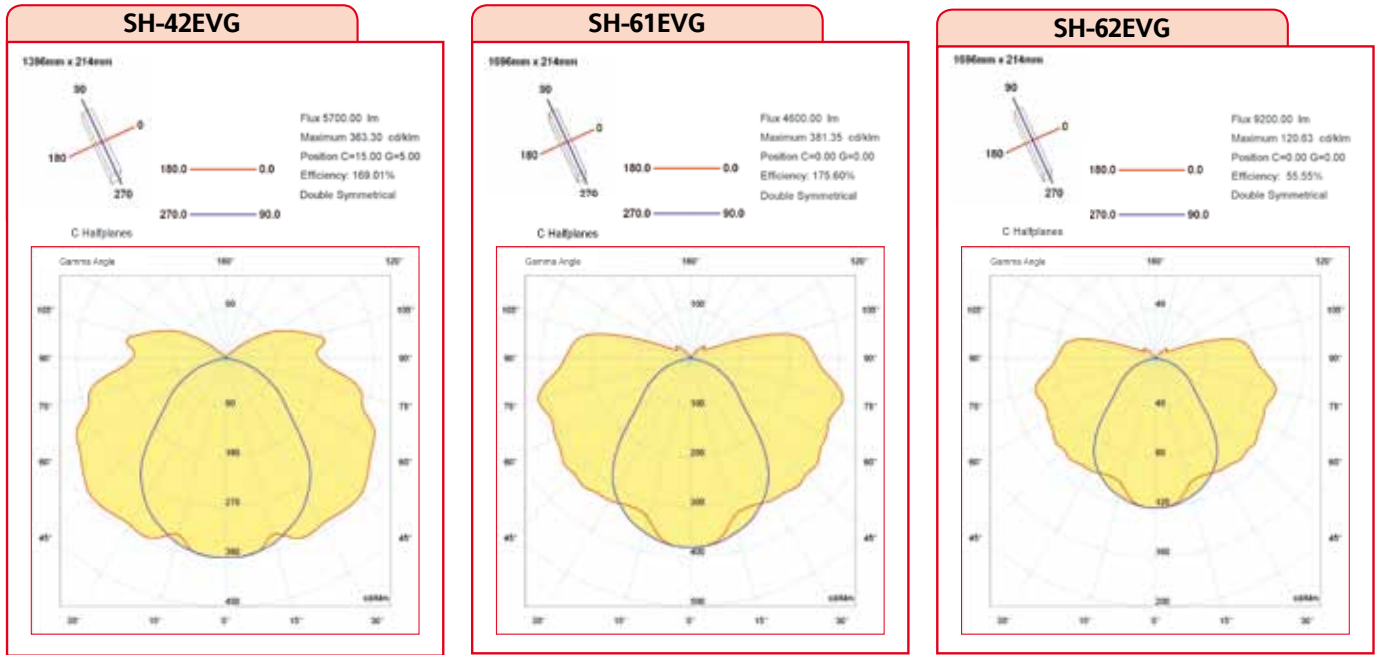
SH-22EVG



SH-41EVG



EVG Polar diagrams – photometric data



EVG with emergency unit

LIGHTING FIXTURES AND EMERGENCY UNIT ELECTRICAL DESIGN AND SPECIAL FEATURES

| | |
|----------------------|--|
| Microprocessor (PLC) | “END-OF LIFE” switching-off system at the end of life a fluorescent tube lamp is safely switched off (according to iec eN-60079-7 stds) |
| Multi-function led | Multi-function led indicator with coded indication of the functions, status and potential failures of the electronic device and of the batteries |
| Monitoring | Special signal whenever there is a e.o.l. situation (led red flashing) Automatic weekly functions test Automatic annual 2/3 times operating period test Function and operating period test can be done manually also |
| Maintenance | Quick replacement of battery set even in explosive atmosphere presence Electrical disconnection whenever the batteries box is opened 24h max recharging time (in according to EN-60598-2-22) |
| Safety | Highest degree of safety in case of lamp failure during the emergency light operation In case of lamp failure during emergency operation the second tube lamp will automatically take over the emergency operation (two lamps version only) |

EVG On request accessories

| CODE | DESCRIPTION | INSTALLATION | MATERIAL |
|------------|---|--------------|------------------|
| 20301.0162 | POLE MOUNTING KIT (SIZE 2” DIA.) C/W HARDWARE | TYPE 4 | GALVANIZED STEEL |
| 20301.0163 | POLE MOUNTING KIT (SIZE 1 1/2” DIA.) C/W HARDWARE | TYPE 4 | GALVANIZED STEEL |
| 20301.0165 | PENDANT MOUNTING KIT C/W HARDWARE AND EYE-BOLTS | TYPE 2 | STAINLESS STEEL |
| 20302.0121 | CEILING MOUNTING KIT C/W HARDWARE | TYPE 1 | GALVANIZED STEEL |
| 20302.0128 | WALL/STRUCTURE MOUNTING KIT C/W HARDWARE | TYPE 3 | GALVANIZED STEEL |

REMARK:

Due to the development of the national and international specifications and of the technology, the above technical characteristics showed on this bulletin can be considered as binding on our confirmation only.