

MURENA IP68

Linea luce led flessibile di alta qualità adatta a diverse applicazioni: illuminazione ad immersione di vasche e piscine, luce decorativa per piazze, ristoranti, ville private, giardini, sala conferenze, sale espositive, bar, centri commerciali, parcheggi, sculture ed attrazioni turistiche. Corpo in PVC e resina Eco resistente*.

Disponibile nella versione con luce monocromatica, RGB e RGBW

High quality flexible led light line suitable for different applications: underwater lighting of fountains and pools, decorative light for squares, restaurants, private villas, gardens, conference hall, exhibition halls, bars, shopping centres, parking lots, sculptures and tourist attractions. Body in PVC and resin Eco resistant*.

Available in monochromatic version, RGB or RGBW

*consultare report dei test effettuati in allegato

*see attached test report



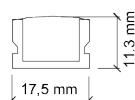
DIMENSIONI / SIZE

Larghezza 11,3 mm, altezza 17,5mm

Lunghezza massima 5m

Width 11,3mm, height 17,5mm.

Max. length 5m



GRADO DI PROTEZIONE / LEVEL OF PROTECTION

IP 68

OTTICHE / OPTICS

General Lighting Down

INSTALLAZIONE / INSTALLATION

Applique, plafone, incasso, idoneo ad installazione in immersione permanente. Fissaggio tramite controcassa o clip

Applique, ceiling, recessed, suitable for permanent underwater Fixing by recessed or clip

MATERIALE / MATERIAL

Guaina in PVC bianco, resina poliuretanic, frost

Sheath in white PVC, polyurethane resin, frost

DILATAZIONE TERMICA / THERMAL EXPANSION

1mm per metro lineare

1mm for linear meter

LUNGHEZZA CAVO / LEVEL OF PROTECTION

Apparecchio fornito di serie con 5 metri di cavo per immersione (2x0.50 o 5x0.50)

Supplied standard with 5m underwater cable (2x0.50 or 5x0.50)

CURVATURA / CURVATURE

Diametro curvatura minima: 12 cm

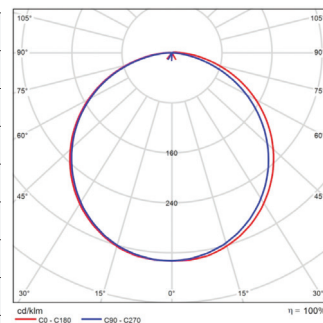
Minimum bending diameter: 12 cm

DATI ILLUMINOTECNICI ED ELETTRICI / LIGHTING AND ELECTRICAL DATA

Parametri illuminotecnici elettrici ed ottici, secondo norma CEI EN 62722-2-1

Electrical and optical lighting parameters, according to the CEI EN 62722-2-1 standard

| | | |
|--|--------------------------------|-----------------------|
| Sorgenti luminose | Light source | Remsa 120T |
| Temperatura di colore CCT | Color temperature CCT | 2700K 3000K 4000K |
| Indice di resa cromatica Ra | Color Rendering coefficient Ra | >90 |
| Deviazione cromatica Step MacAdam | Color deviation Step MacAdam | 3 |
| Flusso luminoso sorgente 65° | Luminous flux tp=65° | 1800 lm/m |
| Flusso effettivo 65° | Actual flux 65° | 910 lm/m |
| Potenza | Power | 15,3 W/m |
| Efficienza luminosa lm/W | Luminous efficiency lm/W | 59 lm/W |
| Voltaggio* | Voltage** | 24V DC |
| Temperatura di colore | Color temperature | RGBW |
| Temperatura del bianco | White color temperature | 2700K |
| Potenza | Power | 28.8W/m |
| Voltaggio* | Voltage** | 24V DC |
| Temp.Tc@Ta 25°C | Temp.Tc@Ta 25°C | 65°C |
| Temperatura standard ambiente esercizio: | Operating temperature | -20° +45° |
| Lifetime | Lifetime | L80 35.000h (Ta 25°C) |



*Alimentatori a tensione costante da ordinare separatamente disponibili sia IP20 che IP67 idonei per installazione in esterni.
Disponibile interfaccia di dimmerazione DALI/DMX/0-10V/ 1-10V, per la versione monocromatica; PWM/DMX/DALI per RGB/RGBW.
Collegamenti tra alimentatore/strip led tramite cavi con connettori IP68 per la versione ad immersione.

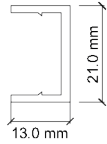
**Constant voltage ballasts to be ordered separately, both IP20 and IP67 are available and suitable for outdoor installation.
DALI/DMX/0-10V/ 1-10V dimming interface available for monochromatic light; PWM/DMX/DALI for RGB/RGBW
The ballast and led strip are connected via cables with IP68 for immersion version

ACCESSORI / ACCESSORIES

INC MURENA

Incasso in pvc estruso lunghezza max. 3m
Recessed extruded pvc max. length 3m

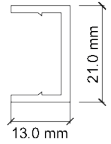
16.0 mm



CLIP MURENA

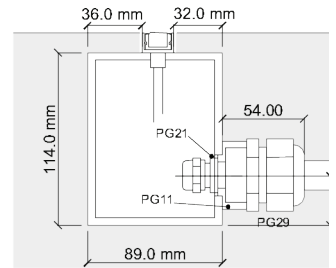
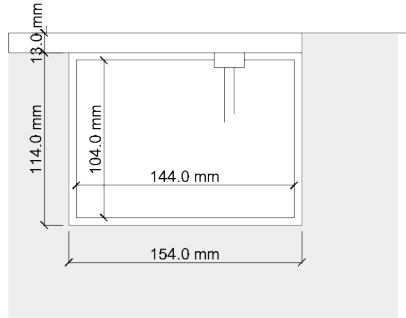
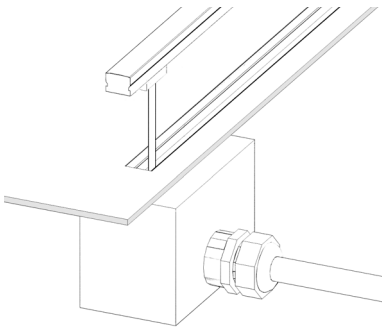
Clip per fissaggio Murena
Clip for Murena fixing

16.0 mm

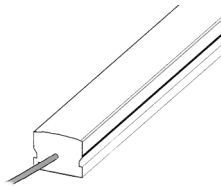


VT INC MURENA

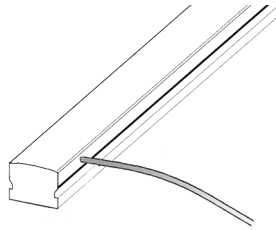
Elemento da incasso per cemento per connessione stagna (uscita cavo, vedi soluzione C)
Recess item for concrete for sealed connection (wirings, see C solution)



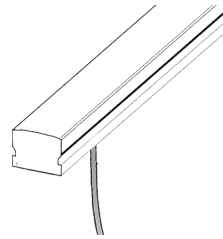
CABLAGGI / WIRINGS



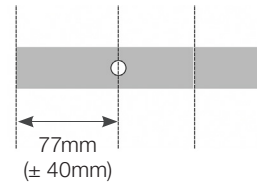
A - uscita cavo testa
A - head wiring



B - uscita cavo laterale
B - lateral wiring



C - uscita cavo retro
C - wiring from behind



Standard 77mm dall'estremità
(Se l'installazione prevede VTINC, possibile variare misura ± 40 mm)
Standard 77mm from the end
(If installation includes VTINC, it is possible to change measurement ± 40 mm)

NOTES

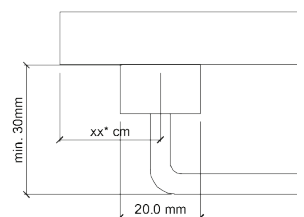
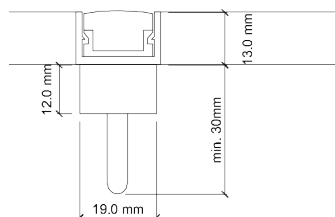
Dimensioni minime per installazione Murena senza VT INC
Minimum dimensions for installation Murena output without VT INC

**uscita tipo C

Se non diversamente specificato, distanza standard tra estremità della lampada e mezziera foro uscita cavo 77mm

**use type C

Unless otherwise specified, standard distance between the end of the lamp and the middle of the cable outlet 77mm



CERTIFICAZIONI / CERTIFICATIONS

- | | |
|--|---|
| • Soddisfa EN60598-1 e relative note | Satisfies EN60598-1 and related notes |
| • CE - conforme EN 60598-1 | CE - compliance to EN 60598-1 |
| • Apparecchio calpestabile | Walkable spotlights |
| • Può essere installato su superfici infiammabili | It can be installed on surfaces that are normally flammable |
| • Norma CEI 34-156 Classe di isolamento: III | CEI 34-156 Insulation class: III |
| • Conforme alla direttive RAEE - D.lgs 49/2014 | Compliance to the directive RAEE - D.lgs 49/2014 |
| • Norma CEI 64-8 e relativi varianti: prodotto può essere installato su superfici infiammabili | CEI 34-156 Insulation class: ICEI 64-8 and variants: product can be installed on flammable surfaces |
| • Conforme alla direttive RAEE - D.lgs 49/2014 | Compliance to the directive RAEE - D.lgs 49/2014 |
| • IEC/EN 62471:2010 Rischio fotobiologico: RG 0 | IEC/EN 62471:2010 Photobiological risk: RG 0 |

GARANZIA 3 ANNI

Murena è garantita per 3 anni dalla data di produzione. La garanzia copre ogni difetto di fabbricazione.

La garanzia è valida solo quando il prodotto è stato utilizzato secondo le sue specifiche e senza alcun tipo di furto, rottura, alterazione, modifica e utilizzo in base a istruzioni tecniche errate o installazione in parti meccaniche inadeguate.

Murena is guaranteed for 3 years from the date of production. The warranty covers any manufacturing defect.

The warranty is valid only when the product has been used according to its specifications and without any type of theft, breakage, alteration, modification and use based on incorrect technical instructions or installation in inappropriate mechanical parts.

TEST REPORT

| TEST | REF. METHOD | TEST CONDITIONS | RESULTS |
|---------------------------------------|---------------------|--|--|
| OUTDOOR RESISTANCE | | | |
| Florida Test | SAE J 1976 | Direct Inland ,45°South | Good (after 2 years) |
| Arizona Test | SAE J 1976 | Direct Weathering, 45° South | Good (after 2 years) |
| Xenon WOM | SAE J 1960-89 2000h | 65°C - cycle 102minUV + 18 min. UV/waterspray | No color change, minimal gloss change |
| Weatherometer QUV-B | SAE J 2020 | 1000h (8hUV 60°-4hcond.50°C) | No color change, minimal gloss change |
| Weatherometer QUV-A | SAE J 2020 | 2000h (8hUV 70°-4hcond.50°C) | No color change, minimal gloss change |
| WATER AND CHEMICALS RESISTANCE | | | |
| Fuel Resistance | G.M.6073 | Immersion | No gloss change/No degradation |
| Acid Resistance | MS-CG12 | Spot Test 0.5-10% conc. | No gloss change/No degradation |
| Solvent Resistance | GM 6121 M | Various types of used chemicals | No gloss change/No degradation |
| Water Immersion | WSK-M3G178 | 240 h.@ 45°C | No gloss change/No degradation |
| Salt Spray Resistance | ASTM B117-95 | 2000 h @38°C 5% NaCl | No gloss change/No degradation |
| Humidity Resistance | MS-CG12 | 250h @ 40°C 100% R.H. | No gloss change/No degradation |
| Environmental Cycle | G.M.6073 | Three Cycles | No gloss change/No degradation |
| HEAT RESISTANCE | | | |
| Heat Resistance | MS-CG12 | 250 h @ 80°C | No gloss change/No degradation |
| High Temperature Resistance | G.M.6073 | 60 min. @ 93°C | No gloss change/No degradation |
| Thermal Shock | ESK-M99P16-A:3.5.5 | 16h. -40°C+ water@70°C/10cycles | No gloss change/No degradation |
| ABRASION RESISTANCE | | | |
| Stone Chip Resistance | SAE J400:85 | 0.47L of 250-300 graded gravel fired @ sample @480KPa in 5-10s | Chipping rating 10- No chipping to substrate |
| FLAMMABILITY RESISTANCE | | | |
| Flammability resistance | FMVSS 302 | ISO 3795 | Flame self exstinguishing |
| ELECTRICAL PROPERTIES | | | |
| Surface Resistivity | ASTM D257 | 500 V – spec. thickness 2 mm | 2 x 10E15 Ohm |
| Volume Resistivity | ASTM D257 | 500 V – spec. thickness 2 mm | 1 x 10E15 Ohm cm |

CODICI / CODE

| Codice / Code | T°K |
|---------------------------|------------|
| MURENA IP68 | 27K |
| MURENA IP68 | 30K |
| MURENA IP68 | 40K |
| MURENA IP68 | RGBW |
| MURENA IP68 PW | 27K |
| MURENA IP68 PW | 30K |
| MURENA IP68 PW | 40K |
| Clip | |
| CLIP MURENA | |
| Incasso / Recessed | |
| INC MURENA | |
| VT INC MURENA | |