# MEGOFLEX GL <br> Glass End Light Fiber 



- Black Megolon S530 halogen-free self-extinguishing jacket
- Indoor/outdoor use; water submersible
- $60^{\circ}$ acceptance angle and beam spread
- Lux Calculator can be used when RCP harnessed
- Jacket will not outgas in sealed environment
- Nine sizes available


## FIBER OPTIC LIGHTING

## Megoflex GL - Glass End Light Fiber

## Specifications



Active Diameter: 1.0 mm
Active Areas: 0.75 mm
\# of Fibers: 400
Size of Fibers: $50 \mu \mathrm{~m}$
Outer Diameter: 2.2mm (0.087")
Bend Radius: 5.0mm (0.197")
Jacket Type: Megolon S530
Weight Per Foot: 0.6g (0.02 oz.)
Operating Temp.: $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$

## Description:

1mm MegoFlex GL (Roblon) glass end light fiber with 1.0 mm active diameter and a black megolon S530 jacket; includes 400-50 4 m fibers; for indoor and outdoor use.
Max Tails 9mm: 79
Max Tails 28mm: 494

## Specifications

CAT. NO. F-MF-EL-GL-1.5

| Active Diameter: | 1.4 mm |
| ---: | :--- |
| Active Areas: | 1.5 mm |
| \# of Fibers: | 800 |
| Size of Fibers: | $50 \mu \mathrm{~m}$ |
| Outer Diameter: | $2.7 \mathrm{~mm}(0.106 \mathrm{C})$ |
| Bend Radius: | $8.0 \mathrm{~mm}\left(0.315^{\prime \prime}\right)$ |
| Jacket Type: | Megolon S 530 |
| Weight Per Foot: | $1.2 \mathrm{~g}(0.04 \mathrm{oz})$. |
| Operating Temp.: | $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |

## Description:

1.5 mm MegoFlex GL (Roblon) glass end light fiber with 1.4 mm active diameter and a black megolon S530 jacket; includes 800-50 $\mu \mathrm{m}$ fibers; for indoor and outdoor use.

Max Tails 9mm: 39
Max Tails 28mm: 247

## Specifications

Active Diameter: 2.0 mm

Active Areas: 3.0 mm
\# of Fibers: 1,400
Size of Fibers: $50 \mu \mathrm{~m}$
Outer Diameter: 3.85mm (0.152")
Bend Radius: 15 mm ( 0.591 ")
Jacket Type: Megolon S530
Weight Per Foot: 2.74 g ( 0.096 oz .)
Operating Temp.: $20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$

## Description:

1.5mm MegoFlex EL (Roblon) PMMA end light fiber with 1.5 mm active diameter and a black megolon S530 jacket; includes 3-0.75mm fibers; for indoor, outdoor and submersible use.

Max Tails 9mm: 46
Max Tails 28mm: 267

## Specifications

CAT. NO. F-MF-EL-GL-3

| Active Diameter: | 3.0 mm |
| ---: | :--- |
| Active Areas: | 8.0 mm |
| \# of Fibers: | 3,000 |
| Size of Fibers: | $50 \mu \mathrm{~m}$ |
| Outer Diameter: | $4.85 \mathrm{~mm}(0.191)$ |
| Bend Radius: | $20 \mathrm{~mm}(0.787 \mathrm{C})$ |
| Jacket Type: | Megolon $\mathrm{S530}$ |
| Weight Per Foot: | $10.67 \mathrm{~g}(0.376 \mathrm{oz})$. |
| Operating Temp.: | $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |

## Description:

3mm MegoFlex GL (Roblon) glass end light fiber with 3.0 mm active diameter and a black megolon S530 jacket; includes 3,000-50 mm fibers; for indoor and outdoor use.

Max Tails 9mm: 10
Max Tails 28mm: 66

## FIBER OPTIC LIGHTING

## Megoflex GL - Glass End Light Fiber

## Specifications



Active Diameter: 4.0 mm
Active Areas: 14.0 mm
\# of Fibers: 4,500
Size of Fibers: $50 \mu \mathrm{~m}$
Outer Diameter: 6.35mm (0.250")
Bend Radius: 25mm (0.984")
Jacket Type: Megolon S530
Weight Per Foot: 18g (0.63 oz.)
Operating Temp.: $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$

## Description:

4mm MegoFlex GL (Roblon) glass end light fiber with 4.0 mm active diameter and a black megolon S530 jacket; includes 4,500-50 $\mu \mathrm{m}$ fibers; for indoor and outdoor use.
Max Tails 9mm: 5
Max Tails 28mm: 36

## Specifications

CAT. NO. F-MF - EL-GL-4.5

| Active Diameter: | 4.5 mm |
| ---: | :--- |
| Active Areas: | 18.0 mm |
| \# of Fibers: | 6,600 |
| Size of Fibers: | $50 \mu \mathrm{~m}$ |
| Outer Diameter: | $6.35 \mathrm{~mm}(0.250 \mathrm{C})$ |
| Bend Radius: | $30 \mathrm{~mm}(1.18 \mathrm{C})$ |
| Jacket Type: | Megolon S 530 |
| Weight Per Foot: | $19 \mathrm{~g}(0.67 \mathrm{oz})$. |
| Operating Temp.: | $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |

## Description:

4.5mm MegoFlex GL (Roblon) glass end light fiber with 4.5 mm active diameter and a black megolon S530 jacket; includes 6,600-50 $\mu \mathrm{m}$ fibers; for indoor and outdoor use

Max Tails 9mm: 4
Max Tails 28mm: 30

## Specifications

CAT. NO. F - MF - EL - GL - 6
Active Diameter: 5.8 mm

Active Areas: 24.0 mm
\# of Fibers: 1,100
Size of Fibers: $50 \mu \mathrm{~m}$
Outer Diameter: 8.7 mm (0.343")
Bend Radius: 50mm (1.969")
Jacket Type: Megolon S530
Weight Per Foot: 36.28 g (1.279 oz.)
Operating Temp.: $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$

## Description:

6mm MegoFlex GL (Roblon) glass end light fiber with 5.8 mm active diameter and a black megolon S530 jacket; includes 11,000-50 mm fibers; for indoor and outdoor use.

Max Tails 9mm: 2
Max Tails 28mm: 18

## Specifications

CAT. NO. F-MF-EL-GL-8

| Active Diameter: | 7.3 mm |
| ---: | :--- |
| Active Areas: | 36.0 mm |
| \# of Fibers: | 16,500 |
| Size of Fibers: | $50 \mu \mathrm{~m}$ |
| Outer Diameter: | $10.1 \mathrm{~mm}\left(0.398^{\prime \prime}\right)$ |
| Bend Radius: | $60 \mathrm{~mm}\left(2.362^{\prime \prime}\right)$ |
| Jacket Type: | Megolon S 530 |
| Weight Per Foot: | $47.5 \mathrm{~g}(1.6 \mathrm{oz})$. |
| Operating Temp.: | $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |

## Description:

7.3mm MegoFlex GL (Roblon) glass end light fiber with 7.3 mm active diameter and a black megolon S530 jacket; includes 16,500-50 $\mu \mathrm{m}$ fibers; for indoor and outdoor use.

Max Tails 9mm: 1
Max Tails 28mm: 11

## FIBER OPTIC LIGHTING

Megoflex GL - Glass End Light Fiber

## MegoFlex GL Application Notes

1. Glass fiber must be factory terminated using RCP harnessing, which includes randomizing of the fibers in the harness adapter to produce uniform light output from all fibers. See harnessing information in the catalog for further details.
2. The recommended maximum length for an end-lit application is 50 '. Longer fiber runs are possible, but shorter fiber runs are desirable. (Refer to Figure 1.) Contact VLT or use the VLT Lux Calculator to determine photometric output for most end-lit systems.
3. To ensure that all fixtures will have identical light output, use all same length fiber runs. Alternatively, a 3:2 ratio (longest run is no more than $50 \%$ longer than the shortest run) produces generally acceptable light variance. (Refer to Figure 2.)
4. When calculating fiber lengths, allow for an extra two foot serv-ice loop of cable per fiber run. This service loop will allow for slight changes in illuminator location or orientation, and also allows the cable to be re-harnessed in the future, if required.
5. Fiber exiting the illuminator must remain straight for a minimum of 12 " to avoid significantly reduced light transmission.(Refer to Figure 3.)
6. Straight, uninterrupted fiber runs are best for optimum light output. The minimum bending radius for each fiber is shown in the individual product details, but larger bends are recommended if the application permits.
7. Fiber optic cable is not plenum rated. Please consult local codes to determine installation requirements, which may include routing of all fibers through metal conduit.
8. When using conduit to route fiber runs between the illuminator and fixtures, conduit must be large enough to allow the fiber (and ferrule, where applicable) to move freely. Electrical sweeps or bends of 8 " - 12" minimum radius must be used at all turns. No hard $90^{\circ}$ angles may be used.
9. When planning your application, include enough illuminators to accommodate all desired fiber tails. Refer to the "Max Tails" listing in the individual product details.
10.Glass fiber must end in a termination ferrule. When using glass fiber with a fixture, refer to each fixture's individual product details to determine the appropriate ferrule. When using glass fiber without a fixture, refer to the Accessories section to choose a ferrule.

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## FIBER OPTIC LIGHTING

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FIGURE 1. Maximum Fiber Lengths


FIGURE 2. Balancing Light Output


FIGURE 3. Fiber Exiting the Illuminator


