## **Shutters and Adapters**

## Shutters for M18 (18mm) Through-beam Sensors (SSE / SSR)

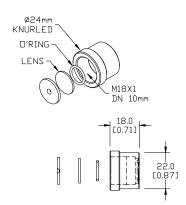
- Reduces the emitted beam, allowing the detection of small targets
- Shutter consists of an aluminum cap and aperture with an O-ring and glass lens, which can screw onto the optical head of either the emitter or receiver

| Sensing Distance (When Used with SSE / SSR Model Photoelectric Switches) |       |       |       |          |          |          |
|--|-------|-------|-------|----------|----------|----------|
| Model  | STOS1 | STOS2 | STOS3 | STOS4    | STOS6    | STOS8    |
| Price  |       |       |       |          |          |          |
| Ø x shutter (mm)   | 1     | 2     | 3     | 4        | 6        | 8        |
| Distance (m)<br>Object (mm)  | N/A   | N/A   | N/A   | 1.5<br>2 | 3.5<br>3 | 6.5<br>4 |

Table shows sensing distance and minimal detectable object.



**Dimensions** mm [inches]



| Shutter Accessory for QM Series Sensors |       |                 |   |                |  |
|---|-------|-----------------|---|----------------|--|
| Part<br>Number                          | Price | Drawing<br>Link | Description   | Weight<br>[lb] |  |
| STQM0                                   |       | PDF             | Micro Detectors shutter, plastic. Package of 2. For use with through beam QM series photoelectric sensors. Vertical and horizontal diaphragms (0.5, 1, 2mm) included. | 0.1            |  |

| Shutter (STQM0) Sensing Distances  |        |        |        |  |  |  |
|------------------------------------|--------|--------|--------|--|--|--|
| Shutter Size                       | 0.5 mm | 1mm    | 2mm    |  |  |  |
| Maximum Sensing Distance           | 1.5 m  | 2 m    | 4.5 m  |  |  |  |
| Minimum Detectable Object Diameter | 0.8 mm | 1.5 mm | 2.5 mm |  |  |  |

 $\label{thm:pote:with shutters on emitter and receiver in same vertical or horizontal orientation. \\$ 

## Right-angle M18 (18 mm) Beam Adapter

For use with M18 retroreflective and through-beam photoelectric switches (not for use with diffuse reflection sensors). Allows 90° light detection using an internal mirror set at 45° to the optical axis. Sensitivity loss is about 20-30%.

| Beam Adapters |                               |  |                |  |  |
|---------------|-------------------------------|--|----------------|--|--|
| Part Number   | Part Number Price Description |  | Weight<br>[lb] |  |  |
| <u>ST03</u>   |                               | Right-angle beam adapter, for use with 18mm sensors (except diffuse reflection models), mirror allows 90 degree light detection. | 0.06           |  |  |

