

Safety sensor for Palletisers

# F3S-TGR-SB□C series



## Features

### For Palletiser

F3S-TGR-SB□C series has been developed especially for Palletisers and wrapping machine access protection applications.

### Active - Passive system and Plug and play

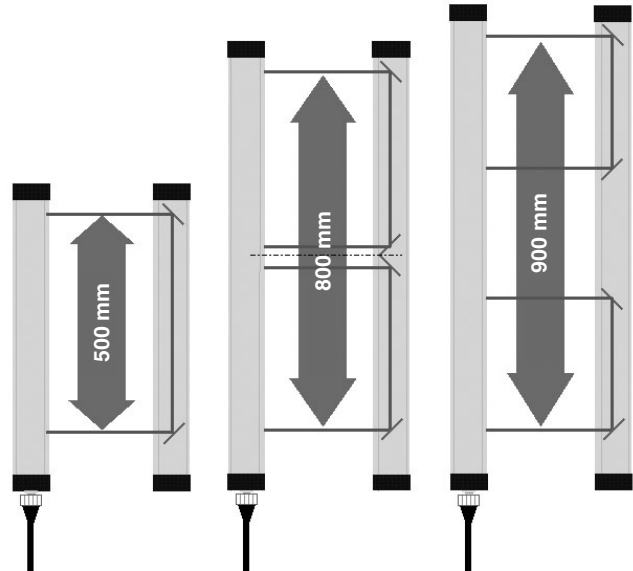
By using a mirror system we can achieve an active - passive multi beam system. This active passive system will improve installation time and reduce costs.



### 3 Different types available

We provide 3 different Types as following:

- 2 beam Type (beam pitch 500 mm)
- 3 beam Type (beam pitch 400 mm)
- 4 beam Type (beam pitch 300 mm)



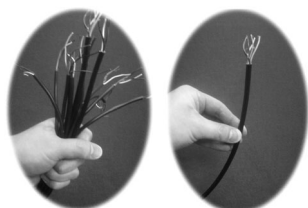
### Muting functions are integrated

Following Muting functions are integrated:

- Muting sensor inputs
- Muting Lamp output
- Override input (120 second max)
- Test / Reset input
- Interlock function and Test Reset input

## Decentralized Muting connection Box

Furthermore, using a F39-TGR-SB-CMB1, it's possible to reduce the wiring time and wiring material for the muting Sensors and Muting Lamp etc.



Ex. 1

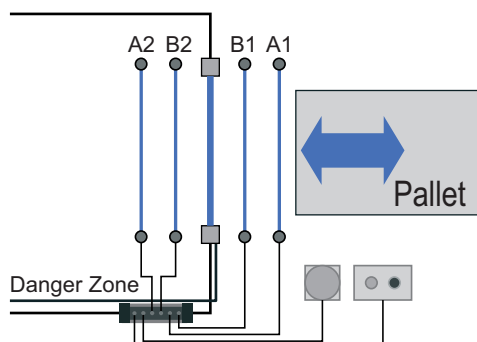
Ex. 2

In the conventional solution all wires from the light curtain, mute sensors, lamp, reset are wired back to the mute controller in the control cabinet (See Ex. 1)  
As you can see this solution need JUST ONE WIRE to the cabinet (See Ex. 2)

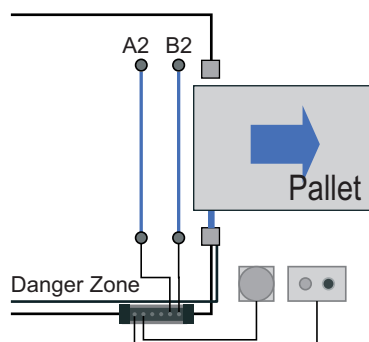


Multiple mute connections are possible

### 1. PARALLEL MUTING and TWO WAY direction

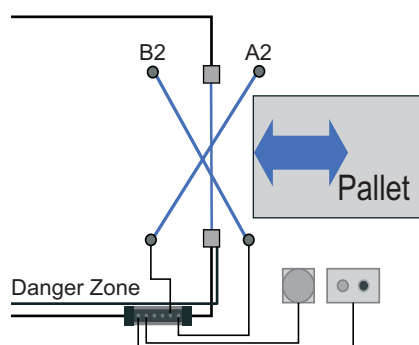


### 2. PARALLEL MUTING and ONE WAY direction

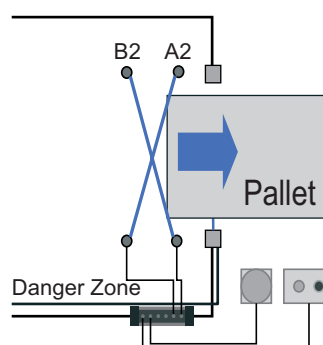


Please add MTL\*. Ex. F3S-TGR-SB4-K1CMTL

### 3. CROSS MUTING and TWO WAY direction



### 4. CROSS MUTING and ONE WAY direction



Please add MTL\*. Ex. F3S-TGR-SB4-K1CMTL

## Reference

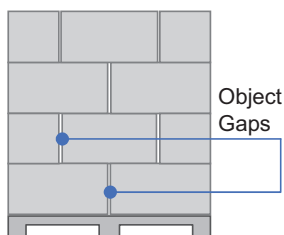
Muting Lamp 
 Override and Test Switch 
 F3S-TGR-SB-K-C 
 Muting sensor 
 F3S-TGR-SB-CMB 
 Mechanical Guard 
 \*MTL has a special software inside of F3S-TGR-SB-K-C which works to finalize a Muting function.

## Muting Sensors Recommendation

It is recommended to use the E3Z or E3G as muting sensor. Please refer to the E3Z datasheet *Cat.No. E701-E2-Cat04-01* and the E3G datasheet *Cat.No. E278-E2-Cat04-03*.

### SOLUTION 1: Object Gaps

In many palletiser applications there is a gap between objects on the pallet. The Muting function may not work correctly because of this gap. To avoid the mutual interruption, we recommend to Use E3G-□□□□T as muting sensor. E3G-□□□□T has ON delay timer internally (0 to 5 seconds)



### SOLUTION 2: Misalignment of pallets

When using a CROSS MUTING system, It may cause that unexpected behavior when the pallets get out of alignment then E3G-□□□□T also solves the problem by OFF delay timer (0 to 5 seconds).

