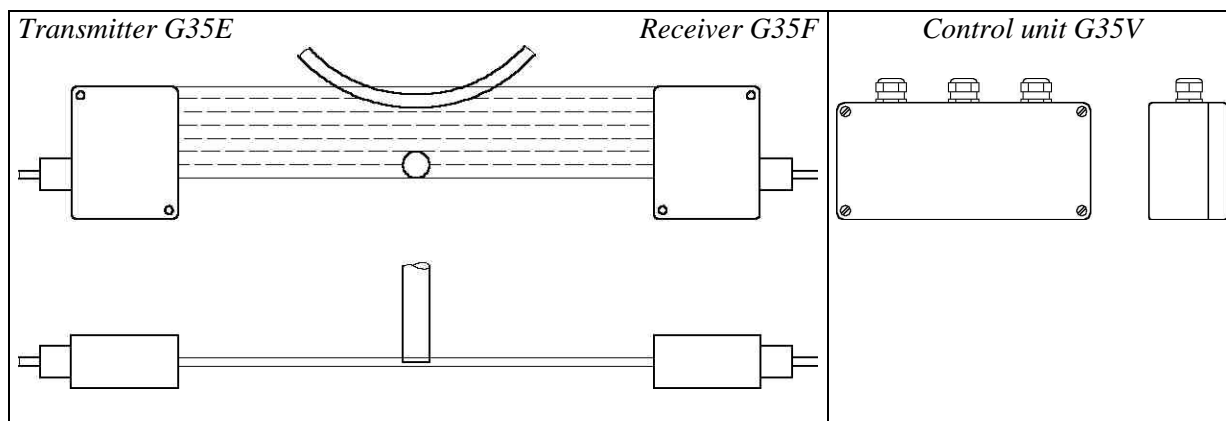


## Light barriers G35



Light barriers in the G35EF range are principally used in length measurement systems, but can also be used as light curtains that detect objects interrupting the beams. The G35EF has a multiple photocell technique enabling an array of beams to be formed.

The output switches when part of the light beam array is interrupted by an object with a size corresponding to the specified *resolution* (please see table below).

The response time when light beams are interrupted or established is 100 µs.

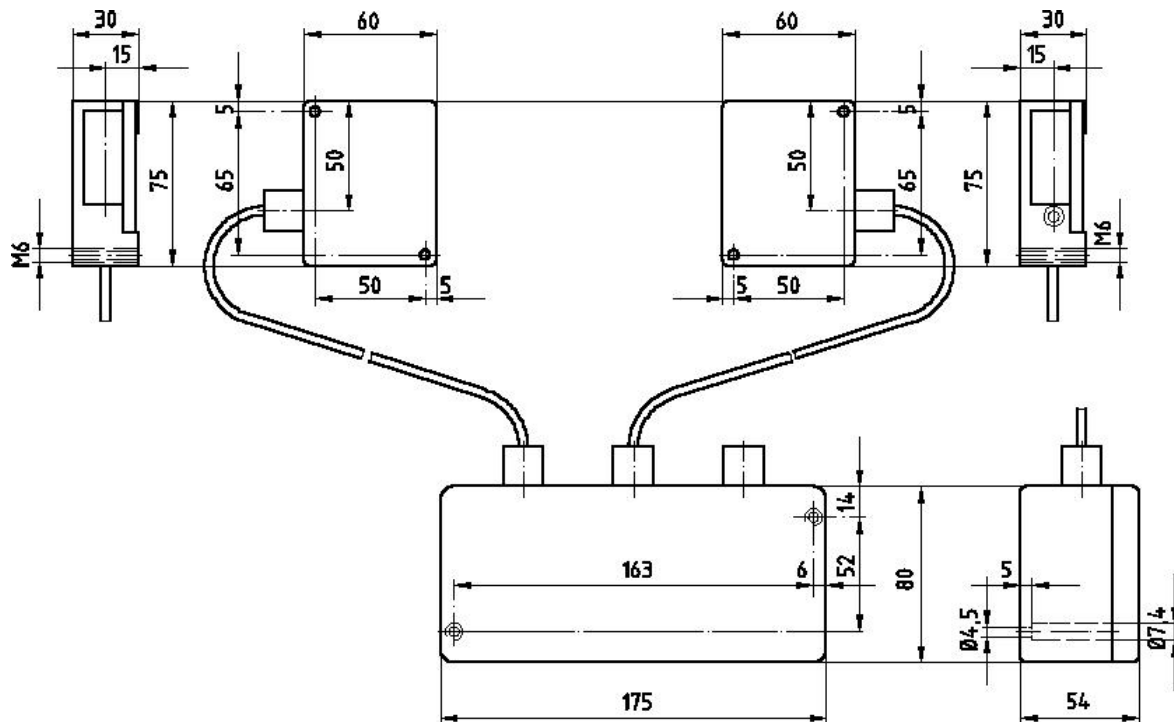
The *accuracy* +/- *S* and *repeatability* *W* are listed below.

The control unit G35V1 or G35V2 provides the necessary supplies for the photoelectric system, and also the switched output circuit.

### Available versions

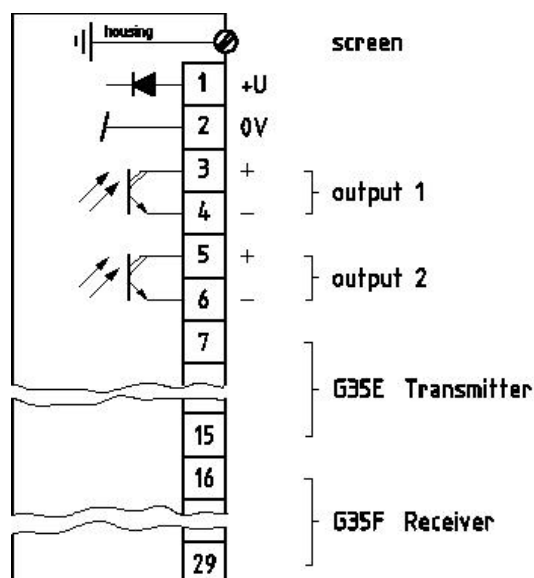
|                                      | G35EF1                  | G35EF2  | G35EF3 | G35EF4 | G35EF5  |
|--------------------------------------|-------------------------|---------|--------|--------|---------|
| <i>Light beam array height</i>       | 51.5 mm                 | 51.5 mm | 40 mm  | 65 mm  | 51.5 mm |
| <i>Max. separation G35E...G35F</i>   | 200 mm                  | 350 mm  | 200 mm | 200 mm | 700 mm  |
| <i>Resolution</i>                    | 10 mm                   | 10 mm   | 8 mm   | 12 mm  | 10 mm   |
| <i>Accuracy S</i>                    | 0.5 mm                  | 0.8 mm  | 0.5 mm | 0.5 mm | 0.8 mm  |
| <i>Repeatability W</i>               | 0.1 mm                  | 0.2 mm  | 0.1 mm | 0.1 mm | 0.2 mm  |
| <i>Size</i>                          | G35E, G35F: 60*75*30 mm |         |        |        |         |
| <i>Permitted ambient temperature</i> | 0°C bis 50°C            |         |        |        |         |
| <i>Protection</i>                    | IP65                    |         |        |        |         |

|                                      | G35V1                                   | G35V2                          |
|--------------------------------------|---|--------------------------------|
| <i>Rating</i>                        | 24VDC/60mA or<br>24VAC/70mA             | 12VDC/50mA up to<br>15VDC/60mA |
| <i>Outputs</i>                       | Transistors, max. capacity: 30VDC/100mA |                                |
| <i>Size</i>                          | 175*80*54 mm                            |                                |
| <i>Permitted ambient temperature</i> | 0°C bis 50°C                            |                                |
| <i>Protection</i>                    | IP65                                    |                                |



## Connections on control unit G35V1(2)

Screw connections can be accessed when the housing is removed.  
Max. cross-sectional area: 1.5 mm<sup>2</sup>; stripping length of wire: 6 mm.



## Screen

Each end of screen has to be connected with device housing!

### Supply voltage U

G35V1:  
24VDC/60mA or 24VAC/70mA  
G35V2:  
12VDC/50mA up to 15VDC/60mA

## Signal Outputs

Max. capacity: 30 V = / 100 mA  
Output 1:  
transistor conducting when sensing area is free  
Output 2:  
transistor conducting when sensing area is not free

The product specifications are based on theoretical and experimental data, and we also have a policy of continuous improvement in performance. Thus although we attempt to provide equipment which in all respects meets specifications, this cannot be ensured in all cases without written confirmation from OPTRONIC AG.