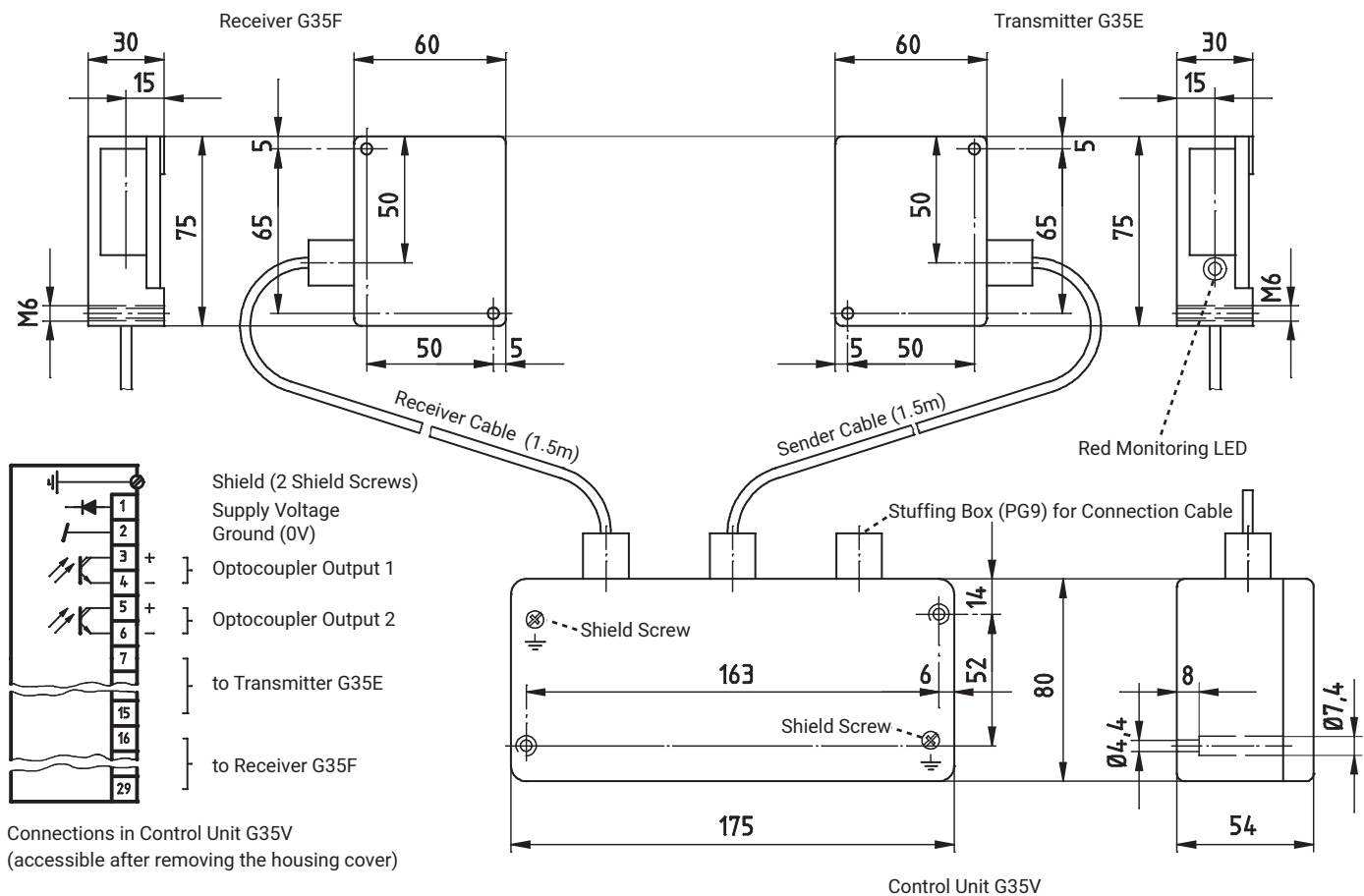


# Measuring Light Barrier G35

Reliable Length Measuring, Precise Object Detection

- As light barrier in length measuring systems or light curtain for object detection
- High operational reliability even under difficult conditions
- Light grid consisting of 6 beam paths
- Light grid height: 40mm to 65mm (type-dependent)
- Response time (object entry and exit): 100us
- Resolution: 8mm to 12mm (type-dependent)
- Accuracy:  $\pm 0.5\text{mm}$  or  $\pm 0.8\text{mm}$  (type-dependent)
- Repeatability: 0.1mm or 0.2mm (type-dependent)
- Distance transmitter-receiver: up to 700mm (type-dependent)
- Two isolated optocoupler switching outputs with high load rating (30V/100mA)
- Insensitive to environmental influences
- Robust metal housing, protection class IP65
- Supply voltage: 12V DC, 24V DC or 24V AC



- Optocoupler Output 1: Transistor conductive when light grid completely uncovered
- Optocoupler Output 2: Transistor conductive when light grid (partially) covered
- Red Monitoring LED: light: device ready for operation and light grid completely uncovered, dark: light grid (partially) covered or device defective
- Shield: the connection to the shielding of the connection cable must be established via one of the shield screws inside the control units
- Connection Cable: to minimize external interference, the shielding of the connection cable must be connected on both sides

Parameter	G35EF1 G35E1/G35F1	G35EF2 G35E2/G35F2	G35EF3 G35E3/G35F3	G35EF4 G35E4/G35F4	G35EF5 G35E5/G35F5
Light Grid Height	51.5mm	51.5mm	40mm	65mm	51.5mm
Maximum Distance Transmitter to Receiver	200mm	350mm	200mm	200mm	700mm
Resolution (Beam Path Distance)	10mm	10mm	8mm	12mm	10mm
Accuracy (Correctness)	±0.5mm	±0.8mm	±0.5mm	±0.5mm	±0.8mm
Repeatability (Precision)	0.1mm	0.2mm	0.1mm	0.1mm	0.2mm
Allowed Ambient Temperature	0° to +50°C				
Protection Class	IP65				

Parameter	Control Unit G35V1	Control Unit G35V2
Supply Voltage	24V DC (18V to 30V) or 24V AC (18V to 30V)	12V DC (11V to 15V)
max. Current Consumption	70mA	60mA
Optocoupler Outputs: Operating Voltage	10V to 30V	
Optocoupler Outputs: max. Load per Output	100mA	
Optocoupler Outputs: min. Isolation Voltage	5000V <sub>rms</sub>	
Allowed Ambient Temperature	0° to +50°C	
Protection Class	IP65	

**Explanation to the device designation:**

G35EFx: Combination consisting of Transmitter G35Ex and receiver G35Fx

G35EFxVy: Combination consisting of Transmitter G35Ex, receiver G35Fx and control unit G35Vy