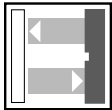




## GLV12 Series 12mm Diameter Cylindrical Style Sensors

- Light on/dark on mode determined by wiring
- Adjustable sensitivity
- Visible light source for easy alignment



### Diffused Mode

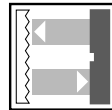
See page 596

**Features:**

- Fast 0.7ms response time
- Quick-disconnect or cabled versions

**Sensing Range:** 200mm

**Outputs:** NPN, PNP



### Retro-Reflective Mode

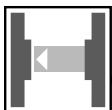
See page 597

**Features:**

- Polarized models reliably detect shiny targets
- Non-polarized models operate at extended sensing range

**Sensing Ranges:** 1m, 2m

**Outputs:** NPN, PNP



### Thru-Beam Mode

See page 598

**Features:**

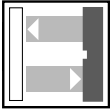
- Large offset allowance for alignment
- Quick-disconnect or cabled versions

**Sensing Range:** 5m



**Outputs:** NPN, PNP

See pages 599-602 for GLV12 Series specifications, wiring and dimensions.

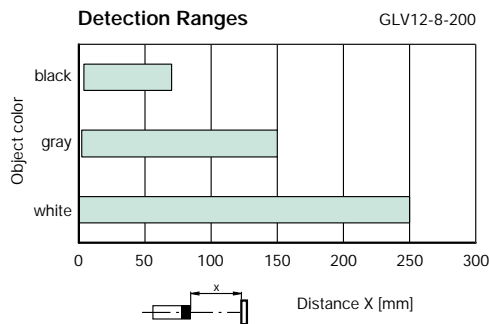
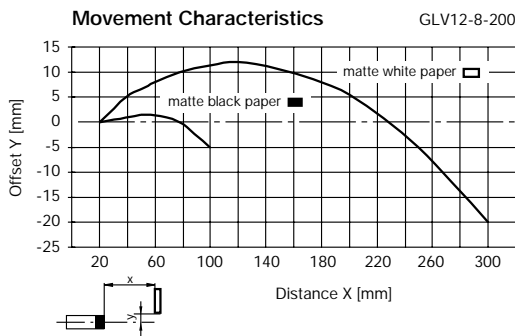
# Photoelectric Sensors

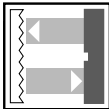


## Diffused Mode

Specifications		0-200mm	0-200mm
SENSING RANGE		0-200mm	0-200mm
SENSITIVITY ADJUSTMENT		Yes	Yes
REFERENCE TARGET		200 x 200mm white test card	200 x 200mm white test card
MODEL NUMBER(S)		GLV12-8-200/36/40b/115	GLV12-8-200/36/40b/92
		GLV12-8-200/37/40b/115	GLV12-8-200/37/40b/92
OUTPUT: Transistor, Normally Open or Normally Closed	/36	NPN	NPN
	/37	PNP	PNP
SUPPLY VOLTAGE		10-30VDC	10-30VDC
HYSTERESIS		10%	10%
RESPONSE TIME		≤0.7ms	≤0.7ms
SWITCHING FREQUENCY		700Hz	700Hz
WEIGHT		1.6oz	0.5oz
ELECTRICAL CONNECTION		 2-meter cable, PVC covered 4-conductor, #26AWG	 Quick disconnect type V1
ADDITIONAL DATA	<i>See pages 599-602</i>		

## Sensing Characteristics



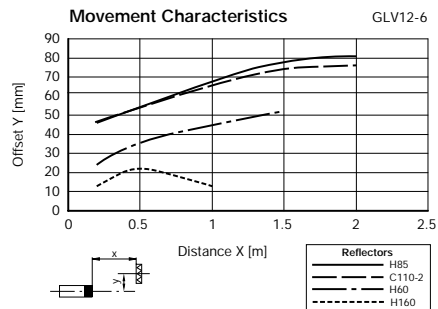
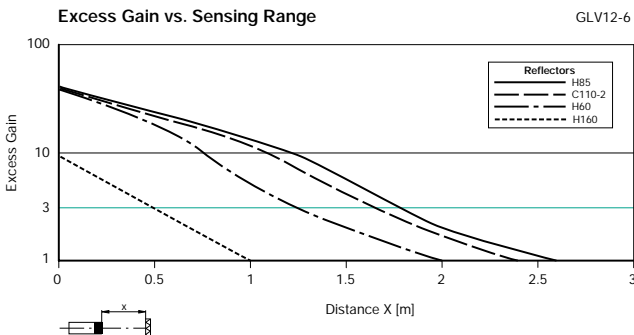
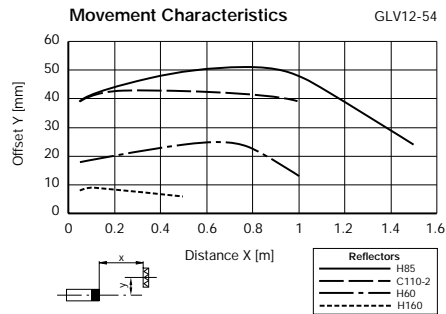
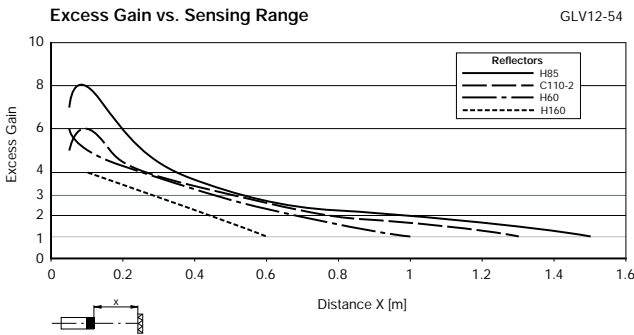


## Retro-Reflective Mode

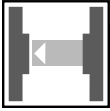
Photoelectric GLV12 Series 12mm Diameter Style

Specifications		0-1m	0-1m	0-2m	0-2m
SENSING RANGE		0-1m	0-1m	0-2m	0-2m
SENSITIVITY ADJUSTMENT		Yes	Yes	Yes	Yes
REFERENCE TARGET		H85 reflector	H85 reflector	H85 reflector	H85 reflector
REFLECTOR DISTANCE		50mm-1m	50mm-1m	0-2m	0-2m
POLARIZED FILTER		Yes	Yes	No	No
MODEL NUMBER(S)		GLV12-54/36/40b/115	GLV12-54/36/40b/92	GLV12-6/36/40b/115	GLV12-6/36/40b/92
		GLV12-54/37/40b/115	GLV12-54/37/40b/92	GLV12-6/37/40b/115	GLV12-6/37/40b/92
OUTPUT: Transistor, Normally Open or Normally Closed		/36	NPN	NPN	NPN
		/37	PNP	PNP	PNP
SUPPLY VOLTAGE		10-30VDC	10-30VDC	10-30VDC	10-30VDC
HYSTERESIS		10%	10%	10%	10%
RESPONSE TIME		≤0.7ms	≤0.7ms	≤0.7ms	≤0.7ms
SWITCHING FREQUENCY		700Hz	700Hz	700Hz	700Hz
WEIGHT		1.6oz	0.5oz	1.6oz	0.5oz
ELECTRICAL CONNECTION		2-meter cable, PVC covered 4-conductor, #26AWG	Quick disconnect type V1	2-meter cable, PVC covered 4-conductor, #26AWG	Quick disconnect type V1
ADDITIONAL DATA		<i>See pages 599-602</i>			



## Sensing Characteristics



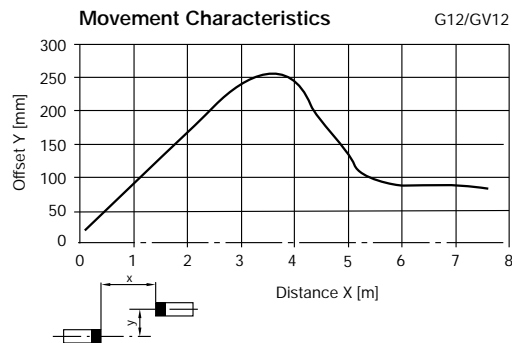
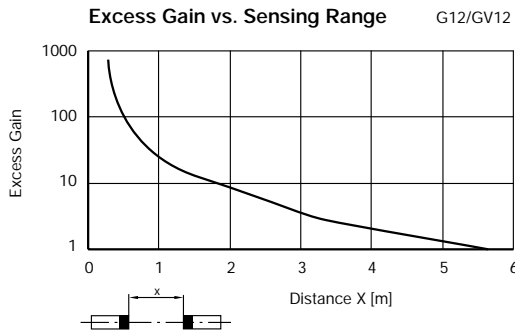
# Photoelectric Sensors

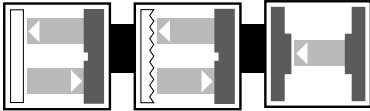


## Thru-Beam Mode

Specifications		
SENSING RANGE	0-5m	0-5m
SENSITIVITY ADJUSTMENT	Yes	Yes
REFERENCE TARGET	Receiver	Receiver
MODEL NUMBER(S)	G12/GV12/36/40b/115	G12/GV12/36/40b/92
	G12/GV12/37/40b/115	G12/GV12/37/40b/92
OUTPUT: Transistor, Normally Open or Normally Closed	/36	NPN
	/37	PNP
SUPPLY VOLTAGE	10-30VDC	10-30VDC
RESPONSE TIME	≤1.0ms	≤1.0ms
SWITCHING FREQUENCY	500Hz	500Hz
WEIGHT	1.6oz (per housing)	0.5oz (per housing)
ELECTRICAL CONNECTION	 2-meter cable, PVC covered 4-conductor, #26AWG	 Quick disconnect type V1
ADDITIONAL DATA	<i>See pages 599-602</i>	

## Sensing Characteristics





## Series Specifications

GLV12 Series Specifications		
LOAD CURRENT	300mA max.	
LEAKAGE CURRENT	≤10μA	
VOLTAGE DROP	≤3VDC	
SHORT CIRCUIT AND OVERLOAD PROTECTION	Yes	
REVERSE POLARITY PROTECTION	Yes	
VOLTAGE RIPPLE	10%	
LED(s)	Yes (1)	
CURRENT CONSUMPTION	≤20mA	
OPERATING MODE	Light on/dark on	
READINESS DELAY	≤25ms	
ELECTROMAGNETIC COMPATIBILITY COMPLIANCE	NEMA ICS5-2000 See page 6	
PROTECTION (IEC)	IP67	
LIGHT SOURCE	Visible red LED 660nm	
AMBIENT LIGHT RESISTANCE	≤20,000 lux	
TEMPERATURE RANGE	<i>WORKING</i>	-13°F to +131°F
	<i>STORAGE</i>	-40°F to +158°F
HOUSING MATERIAL	Nickel-plated brass	
<i>LENS</i>	PMMA	
APPROVALS	CE Yes	

Photoelectric GLV12 Series 12mm Diameter Style

# Photoelectric Sensors

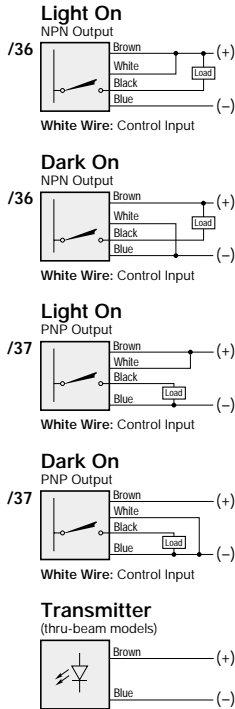
Photoelectric GLV12 Series 12mm Diameter Style

## Wiring Diagrams

DC



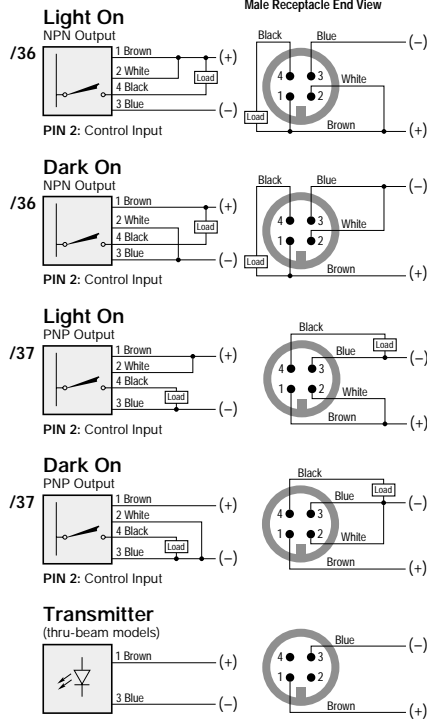
### Cable Connection



### Quick Disconnect

Note: Wiring diagrams show quick disconnect pin numbers.

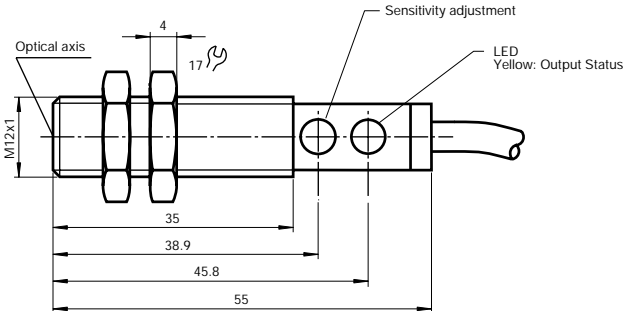
V1 Type



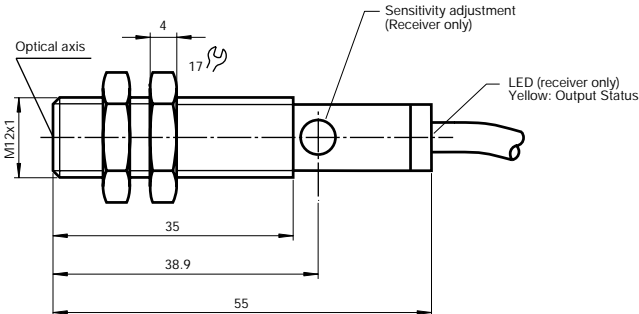
## Dimensions (mm)

Photoelectric GLV12 Series 12mm Diameter Style

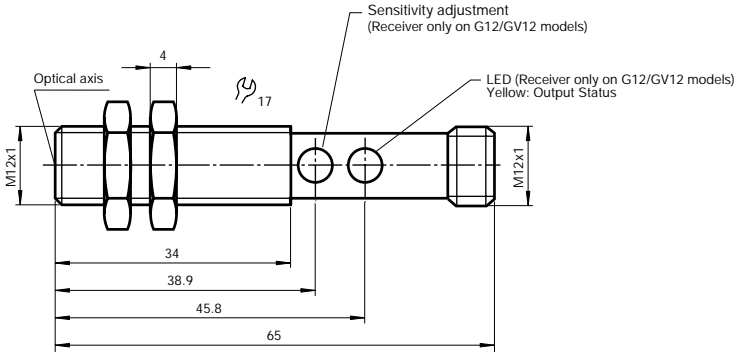
GLV12.../115



G12/GV12.../115



GLV12.../92, G12/GV12.../92



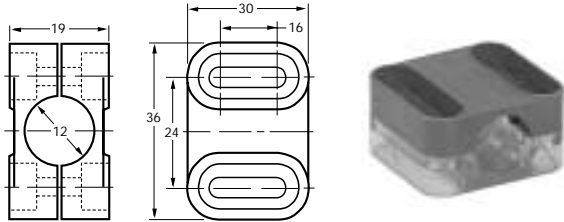
# Photoelectric Sensors

Photoelectric GLV12 Series 12mm Diameter Style

## Accessories

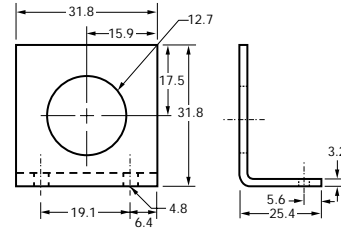
(Dimensions in mm)

### Adjustable Mounting Bracket Model BF12 (for mounting screws #8-32)



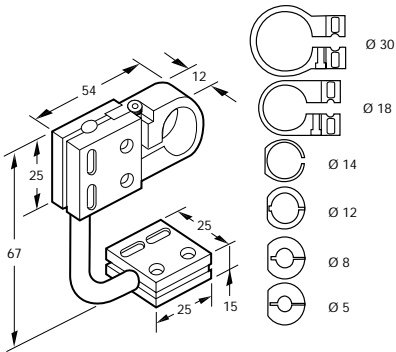
Material: Crastin

### Right Angle Mounting Bracket Model AB12 (sensor can be adjusted by using two lock nuts included with sensor)



Material: stainless steel

### Universal Mounting Bracket Model BF5-30 (provides 360° rotation in two axes)



See pages  
769-828 for  
cordsets



See pages 829-840  
additional accessories  
for photoelectric sensors