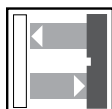




Econo-VueTM

GLV18 Series 18 mm Diameter Cylindrical Sensors

- P+F's most economical 18 mm diameter photoelectric line
- Visible red light source
- Straight and right angle housings
- Cable and quick-disconnect versions

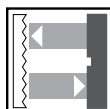


Diffuse Mode

See pages 372-373

Sensing Ranges: 200 mm, 400 mm, 450 mm

Output: NPN, PNP

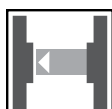


Retro-Reflective Mode

See pages 374-375

Sensing Ranges: 3.5 m, 4 m, 5.5 m, 6.5 m

Output: NPN, PNP



Thru-Beam Mode

See page 376

Sensing Ranges: 12 m, 20 m

Output: NPN, PNP

See pages 377-382 for GLV18 Series specifications, wiring and dimensions.



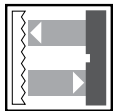
Diffuse Mode

SENSING RANGE			50-200 mm	50-200 mm
SENSING HEAD			Straight	Right Angle
MODEL NUMBER(S)  2-meter cable, PVC covered, 3/4-conductor, #26 AWG  Quick disconnect 3-pin/4-pin M12, integral	NPN Light On		GLV18-8-200/25/102/115 ⚡	GLV18-8-200-S/25/102/115 •
	NPN Dark On		GLV18-8-200/59/102/115	GLV18-8-200-S/59/102/115
	PNP Light On/Dark On		GLV18-8-200/115/120 ⚡	GLV18-8-200-S/115/120 ⚡
	NPN Light On		GLV18-8-200/25/102/159 ⚡	GLV18-8-200-S/25/102/159 •
	NPN Dark On		GLV18-8-200/59/102/159	GLV18-8-200-S/59/102/159
	PNP Light On/Dark On		GLV18-8-200/73/120 ⚡	GLV18-8-200-S/73/120 ⚡
REFERENCE TARGET			100 x 100 mm white test card	
SENSITIVITY ADJUSTMENT			Yes	
LED(s)			Yes (2)*	
LIGHT SPOT DIAMETER			≈ 15 mm at 200 mm range	
LIGHT BEAM ANGLE			≈ 4°	
ADDITIONAL DATA			See pages 377-382	

*See dimensional drawings for LED functions.

SENSING RANGE			50-450 mm	50-400 mm
SENSING HEAD			Straight	Right Angle
MODEL NUMBER(S)  2-meter cable, PVC covered, 3/4-conductor, #26 AWG  Quick disconnect 3-pin/4-pin M12, integral	NPN Light On		GLV18-8-450/25/102/115 ⚡	GLV18-8-400-S/25/102/115 •
	NPN Dark On		GLV18-8-450/59/102/115	GLV18-8-400-S/59/102/115
	PNP Light On/Dark On		GLV18-8-450/115/120 ⚡	GLV18-8-400-S/115/120 ⚡
	NPN Light On		GLV18-8-450/25/102/159 ⚡	GLV18-8-400-S/25/102/159 •
	NPN Dark On		GLV18-8-450/59/102/159	GLV18-8-400-S/59/102/159
	PNP Light On/Dark On		GLV18-8-450/73/120 ⚡	GLV18-8-400-S/73/120 ⚡
REFERENCE TARGET			100 x 100 mm white test card	
SENSITIVITY ADJUSTMENT			Yes	
LED(s)			Yes (2)*	
LIGHT SPOT DIAMETER			≈ 30 mm at 400 mm range	
LIGHT BEAM ANGLE			≈ 4°	
ADDITIONAL DATA			See pages 377-382	

*See dimensional drawings for LED functions.



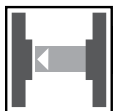
Retro-Reflective Mode

SENSING RANGE		0-4 m	0-3.5 m
SENSING HEAD		Straight	Right Angle
POLARIZED FILTER		Yes	Yes
MODEL NUMBER(S)  2-meter cable, PVC covered, 3/4-conductor, #26 AWG  Quick disconnect 3-pin/4-pin M12, integral	NPN Light On	GLV18-55/25/102/115 •	GLV18-55-S/25/102/115
	NPN Dark On	GLV18-55/59/102/115 ⚡	GLV18-55-S/59/102/115 ⚡
	PNP Light On/Dark On	GLV18-55/115/120 ⚡	GLV18-55-S/115/120 ⚡
	NPN Light On	GLV18-55/25/102/159 •	GLV18-55-S/25/102/159
	NPN Dark On	GLV18-55/59/102/159 ⚡	GLV18-55-S/59/102/159 ⚡
	PNP Light On/Dark On	GLV18-55/73/120 ⚡	GLV18-55-S/73/120 ⚡
REFERENCE TARGET	FE-RR1 reflector		
SENSITIVITY ADJUSTMENT	No		
LED(s)	Yes (2)*		
LIGHT SPOT DIAMETER	≈ 200 mm at 5.5 m range		≈ 160 mm at 4.5 m range
LIGHT BEAM ANGLE	≈ 2°		
ADDITIONAL DATA	See pages 377-382		

*See dimensional drawings for LED functions.

SENSING RANGE		0-6.5 m	0-5.5 m
SENSING HEAD		Straight	Right Angle
POLARIZED FILTER		No	No
MODEL NUMBER(S)  2-meter cable, PVC covered, 3/4-conductor, #26 AWG  Quick disconnect 3-pin/4-pin M12, integral	NPN Light On	GLV18-6/25/102/115 •	GLV18-6-S/25/102/115 •
	NPN Dark On	GLV18-6/59/102/115 ⚡	GLV18-6-S/59/102/115 •
	PNP Light On/Dark On	GLV18-6/115/120 ⚡	GLV18-6-S/115/120 •
	NPN Light On	GLV18-6/25/102/159 •	GLV18-6-S/25/102/159 •
	NPN Dark On	GLV18-6/59/102/159 •	GLV18-6-S/59/102/159 •
	PNP Light On/Dark On	GLV18-6/73/120 ⚡	GLV18-6-S/73/120 •
REFERENCE TARGET	FE-RR1 reflector		
SENSITIVITY ADJUSTMENT	No		
LED(s)	Yes (2)*		
LIGHT SPOT DIAMETER	≈ 300 mm at 8 m range		≈ 250 mm at 6.5 m range
LIGHT BEAM ANGLE	≈ 2°		
ADDITIONAL DATA	See pages 377-382		

*See dimensional drawings for LED functions.

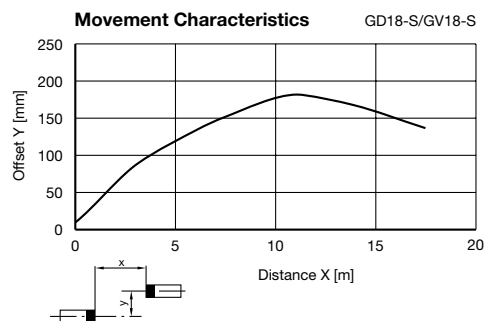
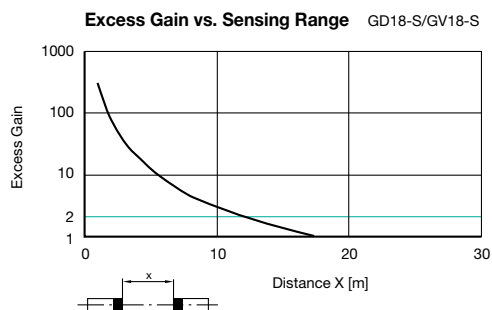
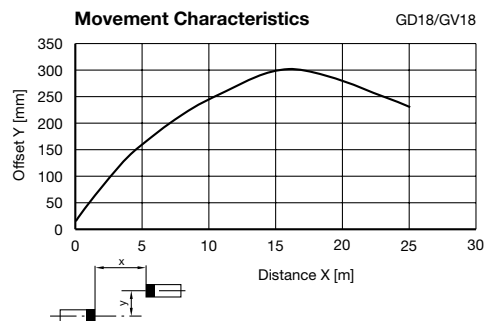
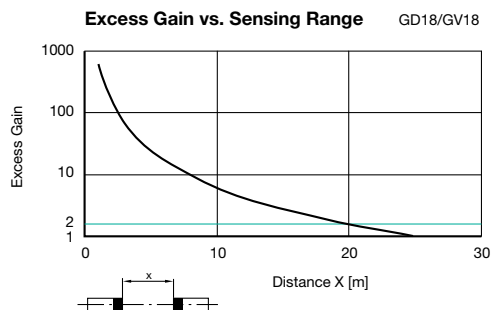


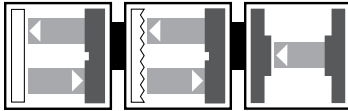
Thru-Beam Mode

SENSING RANGE		0-20 m	0-12 m
SENSING HEAD		Straight	Right Angle
MODEL NUMBER(S)  2-meter cable, PVC covered, 3/4-conductor, #26 AWG  Quick disconnect 3-pin/4-pin M12, integral	NPN Light On	GV18/25/102/115	GV18-S/25/102/115
	NPN Dark On	GV18/59/102/115 •	GV18-S/59/102/115 •
	PNP Light On/Dark On	GV18/115/120 ⚡	GV18-S/115/120 ⚡
	Thru-Beam Transmitter	GD18/115 ⚡	GD18-S/115 ⚡
	NPN Light On	GV18/25/102/159	GV18-S/25/102/159
	NPN Dark On	GV18/59/102/159 •	GV18-S/59/102/159 •
	PNP Light On/Dark On	GV18/73/120 ⚡	GV18-S/73/120 ⚡
	Thru-Beam Transmitter	GD18/159 ⚡	GD18-S/159 ⚡
REFERENCE TARGET		Receiver	
SENSITIVITY ADJUSTMENT		No	
LED(s)		Yes: transmitter (1), receiver (2)*	
LIGHT SPOT DIAMETER		≈ 1300 mm at 25 m range	≈ 650 mm at 17.5 m range
LIGHT BEAM ANGLE		≈ 3°	≈ 2°
ADDITIONAL DATA		See pages 377-382	

*See dimensional drawings for LED functions.

Sensing Characteristics





Series Specifications

GLV18 Series Specifications

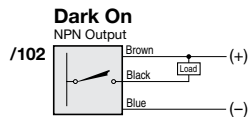
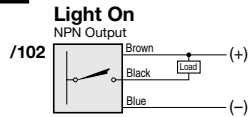
GLV18 Series Specifications		
LOAD CURRENT		100 mA max
VOLTAGE DROP		≤ 1.5 VDC
SHORT CIRCUIT AND OVERLOAD PROTECTION		Yes
REVERSE POLARITY PROTECTION		Yes
SUPPLY VOLTAGE		10-30 VDC
VOLTAGE RIPPLE		10%
CURRENT CONSUMPTION		< 20 mA
RESPONSE TIME		≤ 1 ms
SWITCHING FREQUENCY		500 Hz
LIGHT SOURCE		Visible red LED 640 nm
STANDARDS		EN 60947-5-2
PROTECTION (IEC)		IP67
AMBIENT LIGHT RESISTANCE		≤ 30,000 lux
TEMPERATURE RANGE	WORKING	-13 °F to +140 °F
	STORAGE	-40 °F to +158 °F
HOUSING MATERIAL		Polycarbonate
	LENS	PMMA
APPROVALS		 

Wiring Diagrams

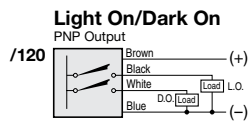
DC



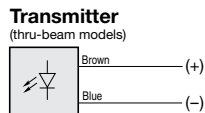
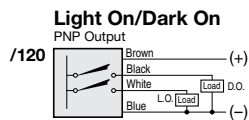
Cable Connection



Diffuse Mode Models:



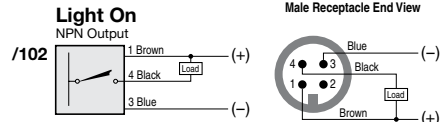
Retro-Reflective and Thru-Beam Mode Models:



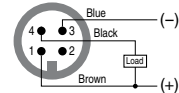
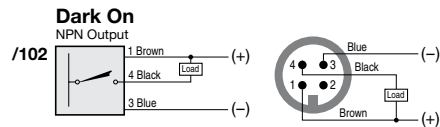
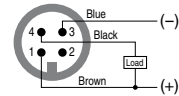
Quick Disconnect

Note: Wiring diagrams show quick disconnect pin numbers.

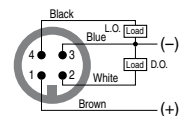
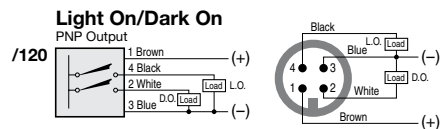
V1 Type



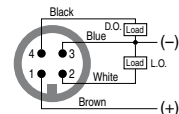
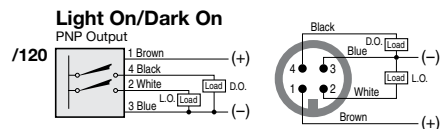
Male Receptacle End View



Diffuse Mode Models:

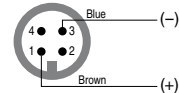
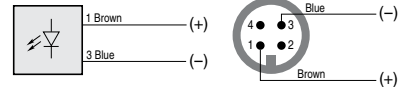


Retro-Reflective and Thru-Beam Mode Models:



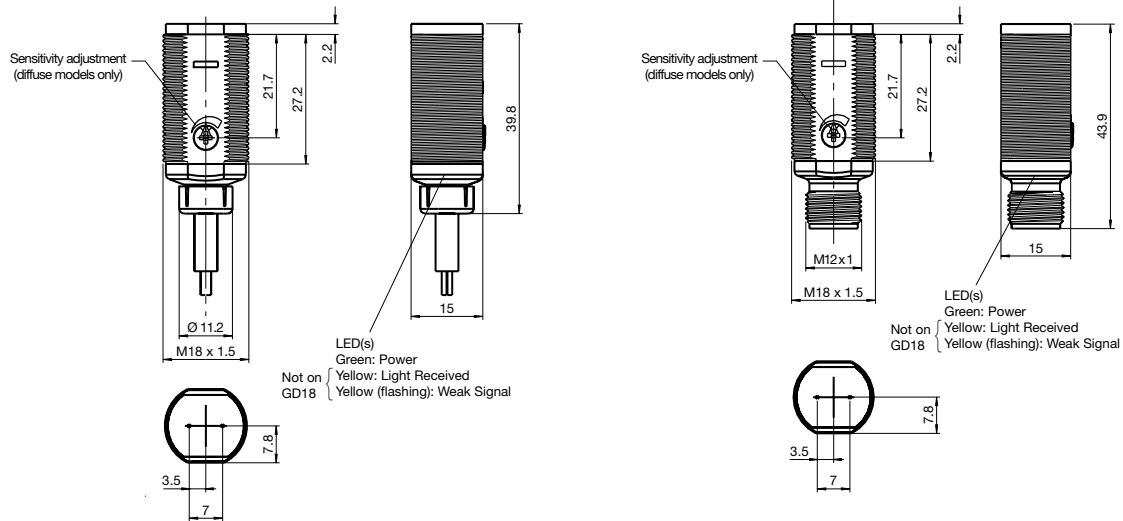
Transmitter

(thru-beam models)



Dimensions (mm)

Straight Sensing Head:



Right Angle Sensing Head:

