



FI22 Series

Low-Profile Inline Plastic Fibre Optic Sensor

Wave length

Visible red 660 nm

Sensing range

Opposed 260 mm (with PIT46U fibre optic)
Diffuse 65 mm (with PBT46U fibre optic)

Adjustment

- By two push buttons & remote wire
- Expert Teach programming (two point static, dynamic & single point static)
 - Manual adjust (+/-) thresholds (from buttons only)
 - LO/DO and Off Delay configuration options (from buttons or remote wire)
 - Push-button Lockout (from remote wire only)

Supply

Supply voltage 10...30 VDC
Ripple V_{pp} $\leq 10\%$
No load current $\leq 32\text{ mA}$
Delay upon power up 250 ms max.

Protection

Reverse polarity, transient voltages & short-circuit

Outputs

Continuous load current 100 mA
Switching frequency 1 kHz

Led Indicators

- 8 segment red bargraph
- Light-to-dark signal difference relative to taught condition (single point TEACH)
 - Sensing contrast (two point TEACH)
 - Power On
 - Output Conducting

Green LED

Yellow LED

Material

Housing
Protection class (IEC 60529, EN 60529)
Temperature range

ABS/polycarbonate blend
IP67

Cable

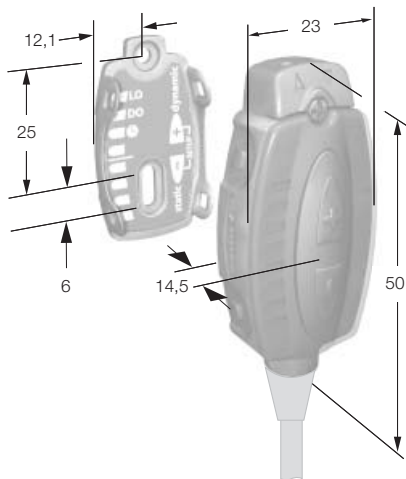
-10 °C...+55 °C, 90% relative humidity @ 50 °C (non condensing)
2 m, PVC 5 x 0,34 mm² (shielded)

Connector

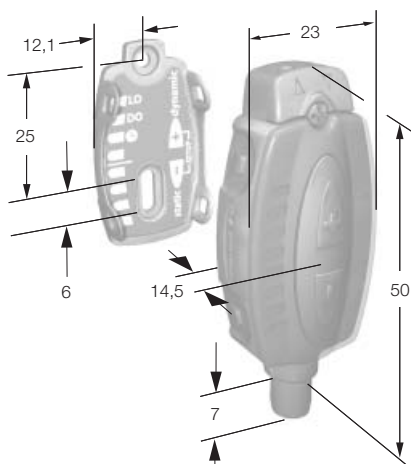
Pico-style, 6 pin

Dimensions [mm]

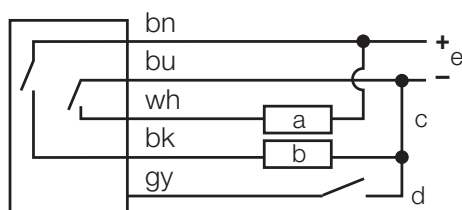
• Cable versions



• Connector versions



Wiring



Index to Wiring

- a) Load 1
- b) Load 2
- c) 100 mA max. load
- d) Remote teach
- e) 10 to 30 VDC

Accessories

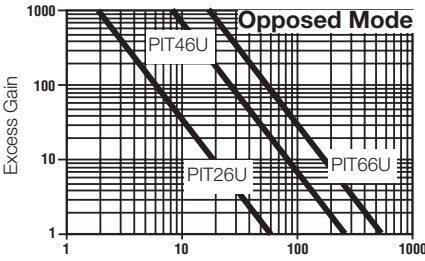
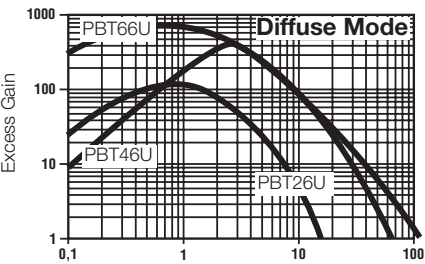
Connectors

PKG6Z-2	30 629 85	Pico-style straight
PKW6Z-2	30 629 98	Pico-style 90°

Photoelectric Sensors

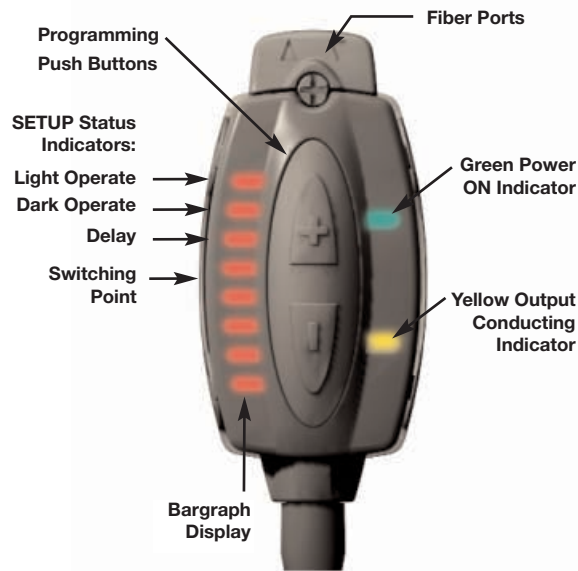
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Excess Gain Curves:
Excess Gain in relation to distance in mm

	Maximum Range (mm) - sensing mode & fibre optic(s) dependant	Light Source	Output function	Connection	Type	Ident number
 <p>Opposed Mode</p>	With Fibre PIT26U 60 PIT46U 260 PIT66U 540	red LED	bipolar PNP/NPN	cable	FI22FP	30 562 87
		red LED	bipolar PNP/NPN	connector	FI22FPQ	30 562 89
 <p>Diffuse Mode</p>	With Fibre PBT26U 15 PBT46U 65 PBT66U 115	red LED	bipolar PNP/NPN	cable	FI22FP	30 562 87
		red LED	bipolar PNP/NPN	connector	FI22FPQ	30 562 89

Indicator LEDs & Programming

Controls: See below



IMPORTANT SAFETY WARNING! These sensors do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can result in either an energised or de-energised output condition. These products should not be used as sensing devices for personnel safety.