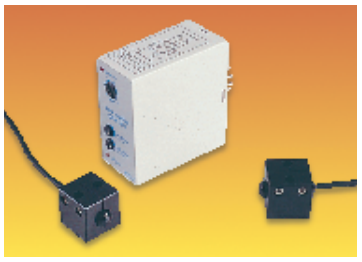
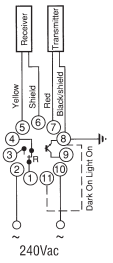
Long Range – High Power Through Beam





Sensors: L = 30, Dia = 10, Cable L = 5m
Amplifier: H = 76.5, W = 38, D = 85 (overall)

- Infra-red transmitter/receiver combination with remote amplifier
- Operates up to 20 metres range when set to maximum sensitivity
- Alternatively can be used over a shorter range on high power
- Suitable for very dirty conditions such as car washes, lift doors, etc.
- Transmitter and reciever are sealed to **IP67**
- Amplifier features either relay or solid state output with optional on-delay and off-delay timer
- The sensors are supplied complete with mounting blocks

The transmitter and reciever are mounted remote from the amplifier unit which is normally installed with other electrical equipment. The ampilifer is simply plugged into a standard 11 pin relay base.

Sensors

Sensing distance	0 to 20 metres
Light source	Modulated infra-red LED
Housings	Noryl sealed to **IP67** with 5 metres of cable on each device
Temperature range	-20°C to +60°C

Amplifier

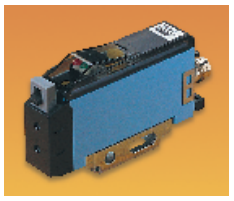
Operating voltage	240V ac ±10%
Power consumption	2.8VA
Outputs	Relay – SPDT, 8A/250V ac NPN open collector 50mA/30Vdc
Functions	Delay on make 0 to 10s, delay on break 0 to 10s
Indication	LED indication of beam on and separate indication of relay on Sensitivity adjustment by potentiometer
Temperature range	-20°C to +60°C

SEN111X

	Order Code	Price Each 1+	5+	10+
Transmitter	**279-973**			
Receiver	**279-985**			
Amplifier	**279-997**			

Fibre Optic Photoswitches

Miniature – WLL160



H = 38.5 (incl. mounting bracket),
W = 12, L = 59 (excl. connector)

- Adjustable sensitivity
- Alarm output (forewarning of failure)
- Light/dark operation (switch selectable)
- **UL** and **CSA** approvals
- Sealing to **IP66**
- OFF time delay (100ms switch selectable)
- Controls protected by hinged plastic cover
- Connection by either 2m integral cable or M8 screw-lock connector

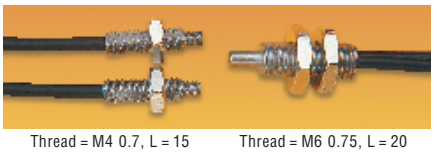
Supply voltage	10-30V dc	OFF time delay	100ms
Output	PNP or NPN transistor	Operating temperature	-25°C to +55°C
Response time	350µs		

FOR SUITABLE SENSOR CONNECTOR SEE HIRSCHMANN 4-WAY M8 RANGE **PAGE 1394**

SEN223X

Output	Mftrs. List No.	Order Code	Price Each 1+	5+	10+
Prewired Type					
PNP	WLL160-F122	**722-9677**			
NPN	WLL160-E122	**722-9689**			
Plug-in Type					
PNP	WLL160-F420	**730-397**			
NPN	WLL160-E420	**722-9690**			

Fibre Leads for WLL160 Amplifiers



Thread = M4 0.7, L = 15 Thread = M6 0.75, L = 20

Diffuse and through-beam fibre leads for use with Sick WLL160 amplifiers and similar. The leads have threaded sensing heads fitted and can be cut to length with the guillotine supplied.

Sensing distance with WLL160-F420	Diffuse 70mm, Through-beam 400mm
Fibre length	2m (may be shortened)
Bending radius	25mm
Operating temperature	-40°C to +70°C

SEN225X

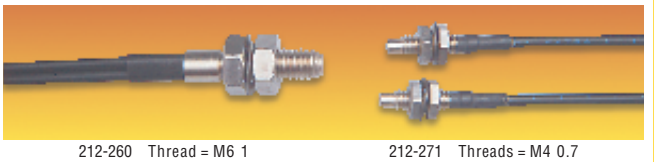
	Mftrs. List No.	Order Code	Price Each 1+	5+	10+
Diffused	LLK1-M6FA02	**730-403**			
Separate	LLK2-M4GA02	**730-415**			

M18

DATALOGIC

Best value

L = 80, Thread = M18
Cable L = 2m



212-260 Thread = M6 1 212-271 Threads = M4 0.7

Fibre Optic Amplifier Unit

- Sensor for small object detection or when access is difficult using conventional sensor
- Plastic housing protected to **IP67** ● Output indication by LED
- DC type has wire selectable output either NPN or PNP, and either normally open or normally closed
- AC type has normally open output

Supply voltage	DC: 10 to 30V dc, AC: 15 to 264V ac, 48 to 62Hz
Current consumption	DC: 30mA max, AC: 10mA max
Output load	DC: 150mA NPN/PNP, AC: 100mA triac
Response time	DC: 1ms max, AC: 20ms max
Temperature range	-15°C to +55°C
Light source	Visible red LED

Fibre Optic Leads

Fibre optic leads to plug into fibre optic amplifier above. The diffused type is for direct detection of an object, and the separate (through-beam) type is for light barrier operation. The leads can be cut to the required length with the tool supplied.

Sensing distance 13mm (diffused), 50mm (separate) Fibre length 1m

Mftrs. List No. S5-5-E1-30 = 179-361, S5-1-E1-20 = 179-362, OF18 = 212-260, OF19 = 212-271

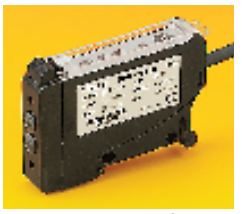
SEN95X

Supply Amplifier Units	Output	Order Code	Price Each 1+	5+	10+
10 to 30V dc	NPN or PNP	**179-361**			
15 to 264V ac	Triac	**179-362**			
Fibre Optic Leads					
Diffused		**212-260**			
Separate		**212-271**			

Touch-to-Teach – TEN Series

DATALOGIC

High Speed



H = 44.5, W = 12, D = 64, Cable L = 2m

- Microprocessor based optic fibre sensing
- Automatic touch-to-touch setting
- High speed response, 100µs or 330µs
- Reverse polarity, overload and short-circuit protection
- High speed type features both red and green LED emission, also delay function and alarm output
- Sensor guided optic fibre alignment
- **IP65** housing, screw or DIN rail fixing

Power supply	10 to 30V
Output	PNP open collector, 100mA max.
Response time	330µs (1.5KHz) (standard), 100µs (5KHz) (high speed)
Setting	Automatic via SET button, REMOTE function
Emission	Red LED (standard), red/green LEDs (high speed)
Indicators	Red/Green/Orange tri-colour LED for operative status, Yellow output LED, red alarm LED, green timer LED
Operating distance	Standard type: 100mm (diffuse), 300mm (through-beam) High speed type: 60mm (diffuse), 180mm (through-beam)
Delay function	Timer for minimum output ON time 40ms (high speed type)
Operating temperature	-10°C to +55°C
Data retention	EEPROM non-volatile memory

FOR SUITABLE FIBRE OPTIC LEADS SEE **ORDER CODES 212-260/212-271** (ABOVE) OR SIMILAR

SEN346

	Mftrs. List No.	Order Code	Price Each 1+	5+	10+
Standard speed (330µs)	TEN-3-P	**724-8544**			
High speed (100µs)	TEN-2-P	**724-8556**			