

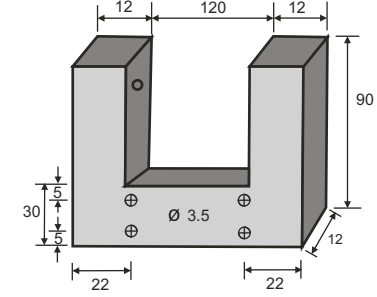
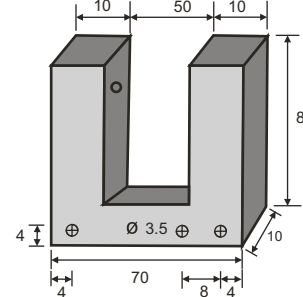
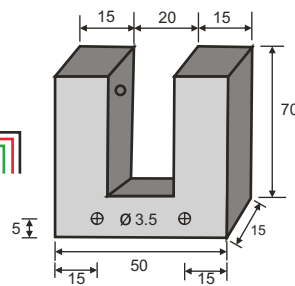
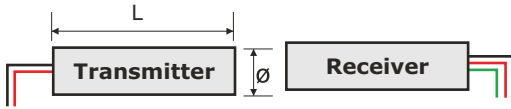
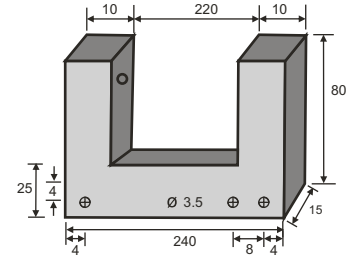
# THROUGH BEAM SENSORS WITH BUILT IN AMPLIFIER

## CYLINDRICAL CONSTRUCTION :

Type	Ø (mm)	L (mm)	Sn
SBTA - 1K	18	90	1 Mtr.
SBTA - 3K	18	90	3 Mtrs.
SBTA - 5K	18	90	5 Mtrs.
SBTA - 10K	30	100	10 Mtrs.
SBTA - 15K	30	100	15 Mtrs.

## SLOT CONSTRUCTION :

Type	H (mm)	W (mm)	D (mm)	Sn
GP - 20	70	50	15	20 mm
GP - 50	80	70	10	50 mm
GP - 120	90	144	12	120 mm
GP - 220	80	240	15	220 mm



## WORKING PRINCIPLE :

This consists of two devices, a light emitter and a light receiver. The light receiver device contains an amplifier circuit which gives a transistorised output. These two devices are kept apart facing each other. The transmitter sends pulses of light in the infrared range which are invisible to the human eye. The receiver device opposite to the transmitter receives these rays. On interruption of these rays by the target object, the receiver gives a signal which is amplified and fed to the output transistor.

## ADVANTAGES :

- Large sensing distance is possible as emitter and receiver are kept opposite to each other.
- Suitable for precise detection of large as well as small objects. Repeatability and Indexing precision are not impaired even if the Object surface or background is reflecting.
- Can be coupled directly to PLC.

## FIELD OF APPLICATION :

These sensors are used for Label sensing, Bottle sensing, Door opening/closing, Film sensing, Counting objects on moving conveyor, sliver breakage detection etc.

## TECHNICAL CHARACTERISTICS :

Response Time	: 5 msec
Switching Frequency	: 100 Hz
Operating Voltage	: 10 - 30 VDC
Maximum Load Current	: 100 mA
Output	: NPN or PNP
Maximum Current consumption	: 29 mA in (OFF) state
@ 24V DC (No Load)	34 mA in (ON) state
Voltage Drop	: 1 V Max
Short Circuit Protection	: Provided
LED Indicator	: Provided
Temperature Limit	: 0-55°C
Cable	: 2 Mtrs (std.)

## ORDERING CODE

A Type	B Load Technique	C Load Logic
SBTA - 1 K	P - PNP	O - NO
SBTA - 3K	N - NPN	C - NC
SBTA - 5K		
SBTA - 10K		
SBTA - 15K		
GP - 20		
GP - 50		
GP - 120		
GP - 220		

## Example :

### 1) SBTA - 5K - N - 0

Through Beam Sensor with Built in Amplifier, Sensing range 5 mtrs, NPN, Normally open

### 2) GP - 50 - P - 0

Slot sensor, slot gap 50 mm, PNP, Normally open



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