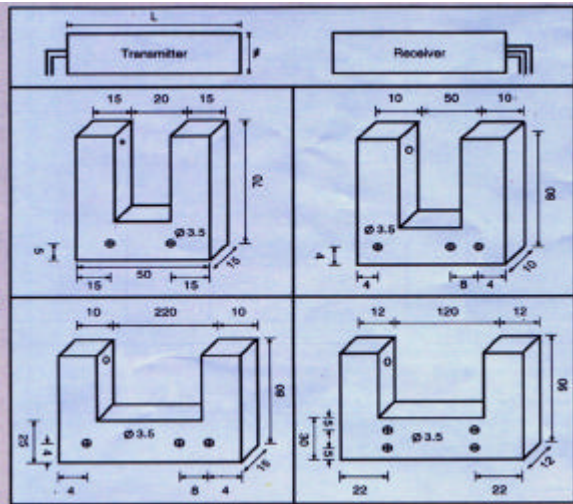


# THROUGH BEAM SENSORS WITH BUILT IN AMPLIFIER



## CYLINDRICAL CONSTRUCTION

Type	Æ (mm)	L (mm)	Sn
SBTA-1K	18	90	1 Mtrs.
SBTA-3K	18	90	3 Mtrs.
SBTA-5K	18	90	5 Mtrs.
SBTA -10K	30	90	10 Mtrs.

## SLOT CONSTRUCTION

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

### WORKING PRINCIPLE :

This consists of two devices, a light emitter and a light receiver. The light receiver device contains amplifier circuit which gives 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, receiver gives a signal, which is amplified and fed to 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, Object counting, silver breakage detection etc.

### TECHNICAL CHARACTERISTICS:

Response Time	:50 ms.
Switching Frequency	:10Hz.
Operating Voltage	:10 – 30 VDC
Maximum Load Current	:100 mA.
Output	:NPN or PNP
Maximum Current consumption	:29mA (OFF)
At 24V DC	:34mA (ON)
Voltage Drop	:1 V Max.
Short Circuit Protection	:Provided
LED indicator	:Provided
Temperature Limit	:0 – 55°C
Cable	:2 Mtrs (std)

### ORDERING CODE

A	B	C
Type	Load Technique	Load logic
SBTA – 1K	P – PNP	O – NO
SBTA - 3K	N – NPN	C – NC
SBTA - 5 K,		
SBTA - 10 K		
SS - 20		
SS - 50		
SS - 120		
SS - 220		

Example :

- 1) SS – 50 - P . O  
Slot sensor, slot gap 50 mm, PNP, Normally Open
- 2) SBTA – 5K – N – O  
Through Beam Sensor with Built in Amplifier,  
Sensing range 5 mtrs, NPN, Normally open