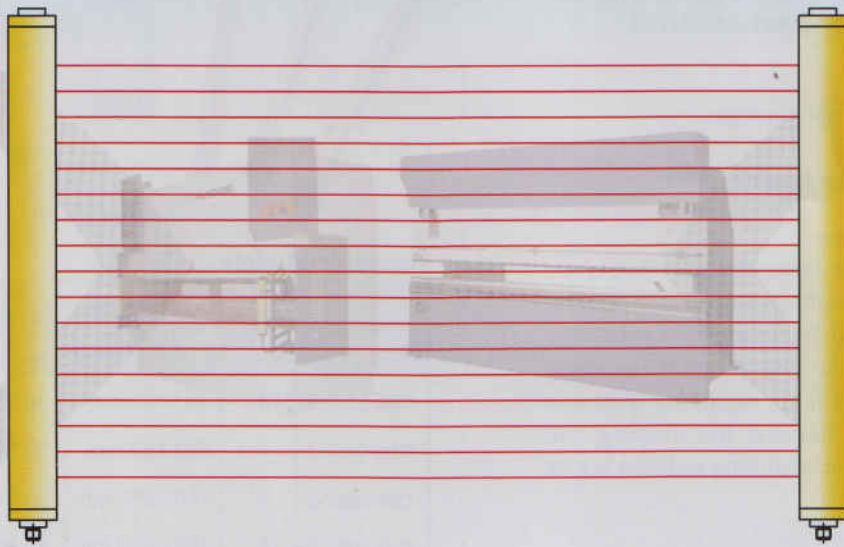


The Ultimate Reliability In Human Safety

SAFE MASTER



JAYASHREE OPTICAL CURTAINS SERIES - OBS

INTRODUCTION

Operation of heavy duty press, cutters and similar machines involves safety hazards for human beings. Optical Safety Barriers, designed by JAYASHREE, is ideal for preventing accidents by sensing presence of any object in the Danger-Zone. This noise immune system has a very fast response to take care of high speed applications.

APPLICATIONS

Human safety while working on heavy machines like press, bending machines Cutters Machining Centres. Sensing on conveyor belts at Airports/ Passenger lifts. An advanced version incorporating movement sensors is also available.



Operating Principle

The optical barrier systems are available in two different basic types

Series OBS 605 : Master control unit + Pair of Transmitter & Receiver. In this type main control unit operates on 240V AC supply. The optical barrier uses high frequently modulated IR beams being transmitted in a specific sequence. The power to the Transmitter/ Receiver is given from the controller unit. A synchronization signal between Transmitter and Receiver is connected via the controller unit.

The presence of transmitted IR beam is continuously monitored by Receiver. Any object entering in the IR curtain zone is immediately detected and the controller operates a out put relay.

Series OBS 606 : In this type the Transmitter & Receiver units directly operate on 24VDC supply with a self synchronized scanning. These units can be directly used with PLC or External power supply. The receiver gives a 24V DC logic, fail safe output signal when any object is detected.

Special Features :

- Immune to Ambient Light Changes.
- No cross talk
- Special models for large Area monitors.

Mounting Instructions :

The Transmitter and Receiver unit should be mounted on a flat surface with exact in line position. The faces of T & R should be parallel to each other. Any angular displacement can affect the results. A special laser alignment indicator unit is available on Request for checking the alignment. The correct mounting position are as show below :

Ordering Information

Please inform following details while ordering

- 1] Supply Voltage
- 2] No. of channels (beam)
- 3] Beam Pitch(object size)
- 4] Sensing gap
- 5] Ambient Conditions

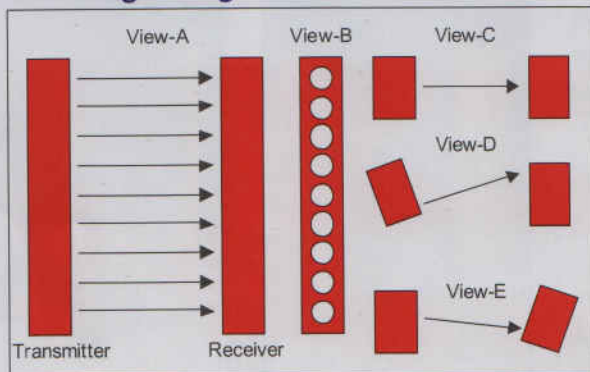
SAFE MASTER I



Available Models

MODEL	No. of BEAMS	SCANNING HEIGHT	PITCH (c/c distance between two beams)	SENSING GAP
OBS 6057-3	3	60 / 100 mm	30 / 50 mm	
OBS 6057-4	4	90 / 150 mm	30 / 50 mm	
OBS 6057-6	6	150 / 250 mm	30 / 50 mm	
OBS 6057-7	7	180 / 300 mm	30 / 50 mm	
OBS 6057-8	8	210 / 350 mm	30 / 50 mm	
OBS 6057-11	11	300 / 500 mm	30 / 50 mm	
OBS 6057-16	16	450 / 750 mm	30 / 50 mm	
OBS 6057-20	20	570 / 950 mm	30 / 50 mm	

Mounting Arrangements



View-A : Normal mounting position with transmitter-receiver modules facing each other.

View-B : Transmitter/ Receiver modules are positioned this way in the column.

View-C : Normal mounting position as seen from the top

View-D : Top view of mounting position with transmitter mis-aligned

View-E : Top view of mounting position with receiver mis-aligned.

Views-D : and E are indicative of wrong mounting.