

# MAXI-BEAM Sensor Heads

## Sensing Mode

## Models

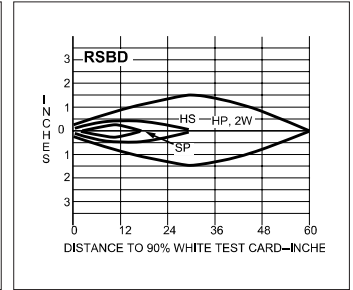
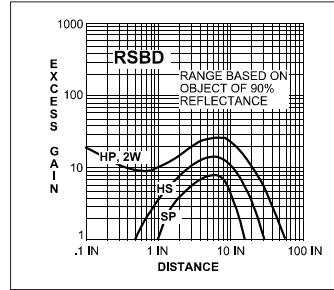
## Excess Gain

## Beam Pattern



### RSBD

**Range:** 5 feet (1,5 m) in HP and 2W modes  
**Beam:** infrared, 880nm  
**Response:**  
 HP, 2W modes: 10ms  
 HS mode: 1ms  
 SP mode: 0.3ms  
**Repeatability:** HP, 2W= 3.3ms; HS = 0.3ms; SP = 0.1ms

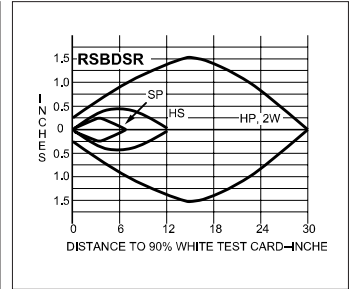
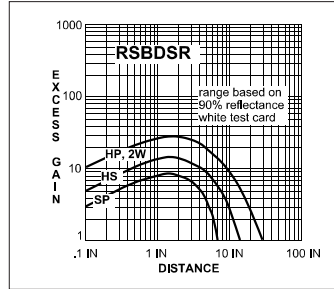


## DIFFUSE Mode



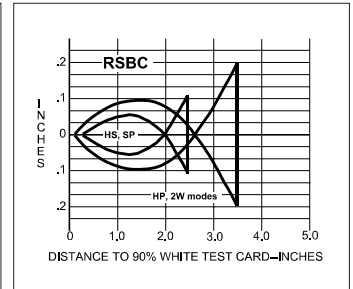
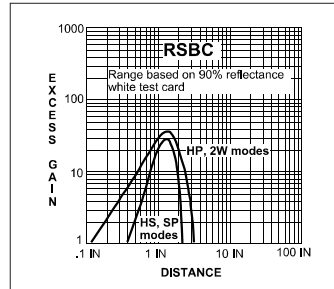
### RSBDSR (short range)

**Range:** 30 inches (76cm) in HP and 2W modes  
**Beam:** infrared, 880nm  
**Response:**  
 HP, 2W modes: 10ms  
 HS mode: 1ms  
 SP mode: 0.3ms  
**Repeatability:** HP, 2W= 3.3ms; HS = 0.3ms; SP = 0.1ms



### RSBC

**Focus at 1.5 in. (38mm)**  
**Beam:** infrared, 940nm  
**Response:**  
 HP, 2W modes: 10ms  
 HS mode: 1ms  
 SP mode: 0.3ms  
**Repeatability:**  
 HP, 2W= 3.3ms;  
 HS = 0.3ms;  
 SP= 0.1ms

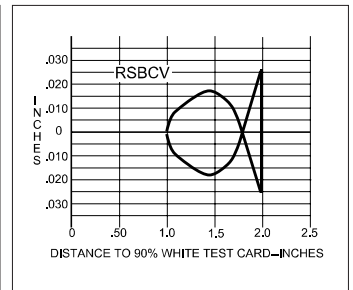
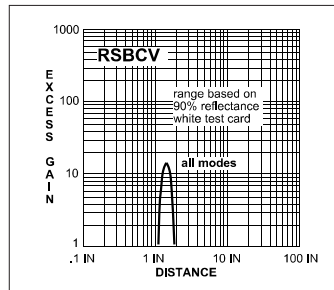


## CONVERGENT Mode



### RSBVC

**Focus at 1.5 in. (38mm);** performance equal in all program modes.  
**Beam:** visible red, 650nm.  
**Response:**  
 HP, 2W, SP modes: 4ms  
 HS mode: 1ms  
**Repeatability:**  
 HP, 2W, SP= 1.3ms;  
 HS = 0.3ms



Powerful infrared beam reliably senses objects of low reflectivity. Ideal for counting the flow of radiused products at a fixed distance from the sensor.

Powerful visible red beam detects small objects only a fraction of an inch away from backgrounds. Useful in many high-contrast color registration applications.

## FIXED-FIELD Mode



### RSBFF models

**Far limit cutoff at:**  
 50mm (model RSBFF50) or  
 100mm (model RSBFF100)  
**Beam:**  
 infrared, 880nm.  
**Response:**  
 HP mode: 10ms  
**Repeatability:**  
 HP mode: 3.3ms

Fixed-field sensor heads have an emitter element and two differently-aimed receiver elements. This creates a high-gain sensing field able to detect objects of low reflectivity, and a sharp far-limit sensing cutoff of 50mm (2 inches) or 100mm (4 inches) which ignores backgrounds beyond cutoff.

These sensors are ideal for detecting a part or surface that is only a fraction of an inch in front of another surface.

RSBFFs may *not* be used with 2-wire power blocks.

