

ESSENTIAL COMPONENTS

Bulletin 45CLR ColorSight™

Optimize your production processes with advanced, high-performance color sensing

Often the presence or absence of a color will indicate a class of products or a production defect. The ability to detect and classify by color in an assembly or packaging operation is a powerful tool that can speed production and assure quality. That's why Rockwell Automation introduced the Allen-Bradley ColorSight line of affordable, high-performance color sensors that meet the reliability and performance needs of most high-speed production processes. The latest addition is the new 45CLR ColorSight, a compact new solution that offers high-end performance and advanced features to address a broad range of color-based inspection challenges.

Advanced, Affordable Production Control

The ColorSight™ 45CLR is a self-contained color detection sensor with three output channels, allowing for the concurrent sensing of three different colors. RS-485 compatible models are also available that provide matching of up to 5 colors and communicate true RGB values for remote processing of additional colors.

The colors to be sensed are taught quickly and easily with the touch of a button on the sensor, or through the remote teach function. Plus, an on-board color scan function allows the 45CLR to be taught multiple individual colors per channel or scan an area comprised of various colors—a distinct advantage for the inspection of irregular, multi-colored patterns. The 45CLR employs a single white LED light source—as opposed to the RGB multiple LED light source models on the market—which means more precise sensing in a compact housing at a more affordable price point. In addition, the three available spot sizes and wide sensing range tolerance, combined with the IP67 housing and 270° rotatable micro quick-disconnect, help to maximize your application flexibility.



The 45CLR—like its other Allen-Bradley ColorSight counterparts—was designed to perform the sensing operations commonly found in the automotive, food & beverage, packaging, electronic components, paper and printing industries. But this next-generation ColorSight offers enhanced performance in a compact, economical package that adds yet another dimension to the already flexible ColorSight line—and addresses an even wider range of your applications.

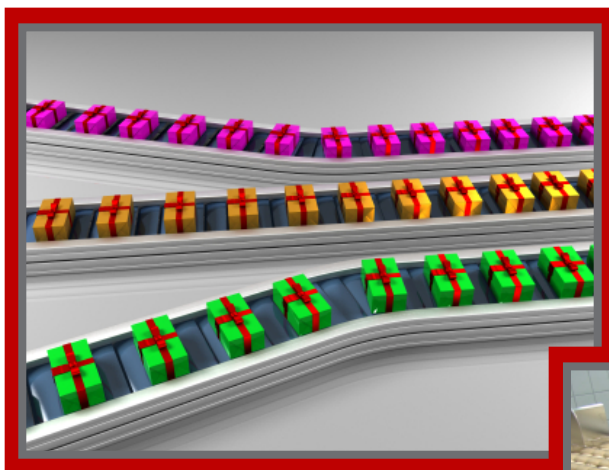
Features:

- Wide sensing range tolerance for reliable sensing when target distance varies from the taught setting
- Easy-to-use teach button (3 channels) and remote teach (single channel) functions
- Gating input (also known as inhibiting input)
- Adjustable tolerance for high precision to general color matching
- Pulse stretching capability (50 ms off delay)
- Teach button lockout
- Compact IP 67 housing with 270° rotatable connector

Benefits:

- Economical and easy-to-apply color sensing solution
- Multiple color detection, color scan function and wide sensing range tolerance allow a single sensor to address a broad range of applications
- Communicate true RGB values via RS-485 for remote processing of additional colors

Typical Color Sensor Applications



Sorting of Packages

Bakery Applications



Other Industries and Applications:

- Automotive
- Food & Beverage
- Packaging
- Electronic Components
- Paper and Printing

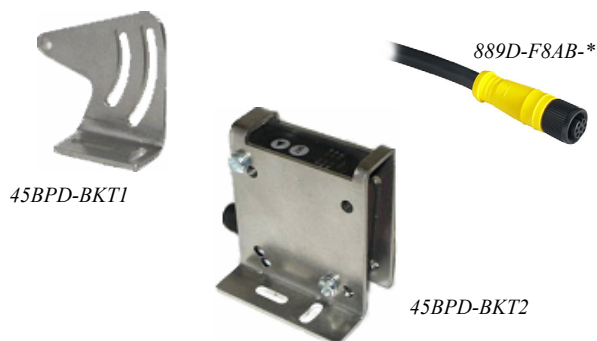
PRODUCT SELECTION for the Most Popular Models



Sensing Range [mm (in.)]	Spot Size [mm (in.)]	Output Type	Cat. No.
12...32 (0.47...1.26)	4 (0.15) round @ 22 (0.86)	3 PNP	45CLR-5JPC1-D8
		RS-485, 1 PNP	45CLR-5LPS1-D8
		RS-485, 1 NPN	45CLR-5LNS1-D8

Note: Additional models are available – refer to catalog pages for more information

Cordsets and Accessories



Description	Cat. No
DC Micro Style QD Cordset, 8-pin	889D-F8AB-*
Communications Cable (RS-485) for MicroLogix	1763-NC01
MicroLogix Advanced Interface Converter Module	1761-NET-AIC
Mounting Bracket	45BPD-BKT1
Protective Mounting Bracket	45BPD-BKT2

** Denotes length in meters. Standard lengths are 2, 5, and 10 meters.*

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