

Distinguish between the smallest color nuances

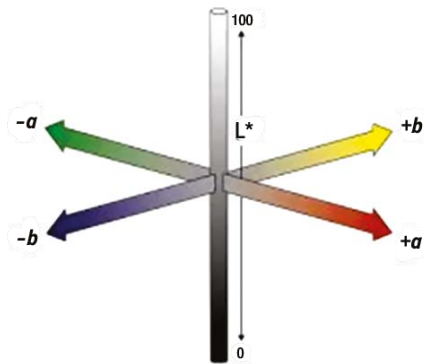
## TRUE COLOR SENSOR BFS 33M

If your application requires reliable detection of colors or the ability to distinguish shades of color, Balluff's True Color sensor is the solution. Balluff's true color sensors use white LEDs to provide a greater color spectrum evaluation. Combine this with the CIELAB color space, which is one of the most versatile color systems, and the result is a color sensor that meets or exceeds the human eye. CIELAB color space includes all possible colors exceeding the RGB color model.

**Advantages of color sensors:** true color distinguishes color nuances, differentiates polished or unpolished metal, white light, color mark sensor mode

**Applications:** color verification, sortation, error proofing, color mark detection

**Industries:** automotive, plastics, packaging, printing, pharmaceutical



CIELAB color space

### BFS00L Features

- Up to 400mm range
- True color
- Software configurable
- Seven channels
- RS-232 communications



### BFS00M Features

- Up to 400mm range
- True color
- Configurable via IO-Link
- Detects up to 256 colors



IO-Link



BFS00L is software configurable



BFS00M detects up to 256 colors



BFS 33M



IO-Link

	BFS000L	BFS000M
Output	3x Push-Pull / RS232C	IO-Link
Connection	2m PUR cable 5x24AWG	M8, 4-pin
Number of colors	7 channels	256 colors
Range	Up to 400mm with additional optics	Up to 400mm with additional optics
Emitter light type	White	White
Color space	CIELAB	CIELAB
IP rating	IP54	IP54

BFS000L  
ACCESSORIES



BFS000M  
ACCESSORIES



	BCC0ARP	BAE009A		BCC0EUH	BCC0C8N
Description	M8 to 9-pin sub D interface cable, 2m	USB to RS232 interface converter	Description	Double-ended M12 straight connectors	Double-ended M12 90° connectors

COMMON  
ACCESSORIES



	BFO00C9	BFO00FP	BFO00C4	BFO00FN	BFO00H8	BAM00NT	BAM020P	BAM01U2
Description	Plastic fiber optic cable, 2m, M4	Plastic fiber optic cable, 1m, M6	Plastic fiber optic cable, 2m, M6	Plastic fiber optic cable, 5m, M6	Glass fiber optic cable, 1m, -20...170°C	Short range optics, 7mm range, M4	Long range optics, 400mm range, M6	Adjustable optic lens, 10...200mm range, M6

KITS



	BAV BP-PH-00090-01	BAV BP-PH-00090-02	BAV BP-PH-00090-03	BAV BP-PH-00091-01
Description	BFS kit with plastic fiber, M6, 1m	BFS kit with plastic fiber, M6, 2m	BFS kit with plastic fiber, M6, 5m	BFS kit with plastic fiber, M4, 2m
Color sensor	BFS000L	BFS000L	BFS000L	BFS000L
Accessories included	BCC0ARP BAE009A BFO00FP	BCC0ARP BAE009A BFO00C4	BCC0ARP BAE009A BFO00FN	BCC0ARP BAE009A BFO00C9