



- Distinguishes between different color shades
- Large sensing range of 400 mm
- High degree of flexibility through fiber adaptation
- Simple configuration and visualization using software
- Robust metal housing

Balluff has raised the bar in photoelectronics with the True-color Sensor BFS 33. The sensor succeeds where existing RGB sensors reach their limits by using the lab color space. The sensor can detect minute differences in color on injection molded parts and opens up a wealth of new possibilities in color detection.

The sensor uses three digital outputs and a serial interface to perform evaluations. The lab color space values are transmitted directly via this interface.



# True Color Sensor BFS 33M

For distinguishing between the smallest of color nuances at the highest level



400 mm sensing range possible with additional lens!



Type	True Color Sensor BFS
<b>Ordering code</b>	<b>BFS000L</b>
Part number	BFS 33M-GSS-F01-PU-02
Channels (outputs)	3 (7 colors + background)
Color space	CIELab
Switching frequency	1.5 kHz (on 3 products)
Resolution	8 enhancement settings, 12 bit
Color resolution	< 0.5 dE
Repeat accuracy	< 1 dE
Protection class	IP 54
Ambient temperature T <sub>a</sub>	-10...+55 °C
Housing material	Al coated

Type	Plastic fiber optic BFO
<b>Ordering code</b>	<b>BFO00C4</b>
Part number	BFO D22-XB-LB-EAK-15-SA1-02
Operating principle	Buttons
Sensing distance	5...80 mm, up to 400 mm with additional lens
Dispersion angle	60°
Connection	SMA connector
Length	2000 mm
Ambient temperature T <sub>a</sub>	-55...+70 °C
Fiber optic material	Plastic POF
Sleeve material	Plastic



Type	Lens (Long Range)
<b>Ordering code</b>	<b>BAM01PA</b>
Part number	BAM LS-FO-001-M6-L
Sensing distance	400 mm
Light spot diameter	23 mm at a distance of 400 mm
Ambient temperature T <sub>a</sub>	-10...+140 °C
Lens material	Glass
Housing material	Aluminum-coated

Note: This lens is screwed onto the fiber optic BFO00C4

## Industries

- Automobile industry
- Plastics processing
- Packaging industry
- Handling and assembly
- Printing industry
- Timber processing

