




Selection criteria - Controllers

Series	Special features	Applications
CFO100 	<ul style="list-style-type: none"> ▪ Universal True Color sensor controller ▪ Repeatability in color $\Delta E \leq 0.5$ ▪ Measuring rate max. 10 kHz (up to 2,500 parts per second with asynchronous measurement) ▪ Color memory for 256 colors in 6 color groups ▪ Operation via keys or web interface ▪ Ethernet and RS232 interface ▪ High light output > 130 lm ▪ Color control of self-luminous objects also possible ▪ 3 switching outputs (digital I/O); 8 switching outputs (binary) 	<ul style="list-style-type: none"> ▪ Detection of color rings on metal and plastic sleeves ▪ Color values can be read and statistically evaluated ▪ Color mark recognition in printing industry ▪ Color and gray-scale detection ▪ Packaging control ▪ Color sorting tasks (e.g., O-ring control, closures, crown caps, labels) ▪ Color recognition on interior parts (e.g., head supports)
CFO200 	<ul style="list-style-type: none"> ▪ High precision True Color sensor controller ▪ Repeatability in color $\Delta E \leq 0.3$ ▪ Measuring rate max. 30 kHz (up to 7,500 parts per second with asynchronous measurement) ▪ Color memory for 320 colors in 254 color groups ▪ Operation via keys or web interface ▪ Ethernet, RS232 and USB interface, Option with Modbus (PROFINET, EtherNet/IP, EtherCAT possible via Gateway) ▪ High light output > 220 lm ▪ Color control of self-luminous objects also possible ▪ 8 switching outputs (digital I/O); 256 switching outputs (binary) 	<ul style="list-style-type: none"> ▪ Detection of color rings on metal and plastic sleeves ▪ Color mark recognition in printing industry ▪ Color and gray-scale detection ▪ Packaging control ▪ Color sorting tasks (e.g., O-ring control, closures, crown caps, labels) ▪ Color recognition on interior parts (e.g., head supports) ▪ Color recognition of exterior parts (e.g., parking sensors, exterior mirrors, etc.) ▪ Coloring of liquids (e.g., oil, apple juice, etc.) ▪ Gray shades of concrete blocks and paving stones ▪ Internal coating of cans ▪ Distinction of materials and coatings (stainless steel/tin or brass/gold) ▪ Color values can be read and statistically evaluated

Selection criteria of sensors with integrated controller

Series	Characteristics	Applications
OT-3-LD 	<ul style="list-style-type: none"> ▪ Color sensor for large working distances ▪ Repeatability in color $\Delta E \leq 0.9$ (≤ 1.5 for LD-500) ▪ Working distance of up to 900 mm ▪ Max. switching frequency: 35 kHz ▪ Color memory for max. 31 colors per teach-in ▪ RS232 interface and optional USB ▪ Color control of self-luminous objects also possible 	<ul style="list-style-type: none"> ▪ Color recognition from a large distance up to 900 mm ▪ Correct product positioning in production machines ▪ Packaging control ▪ Color sorting tasks ▪ Color assignment with cars ▪ Detection of bottle crates ▪ Paper recycling recognition ▪ Illumination recognition as per color and intensity