
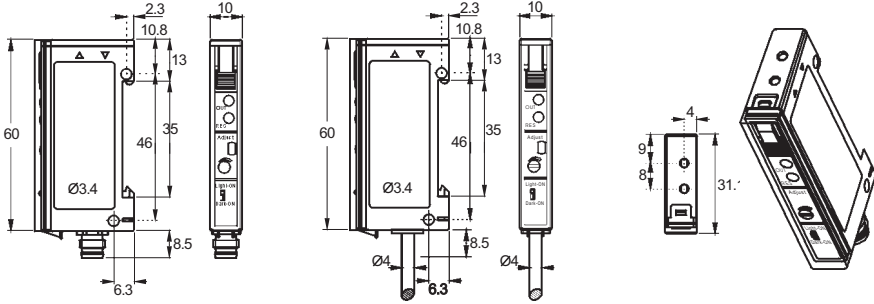
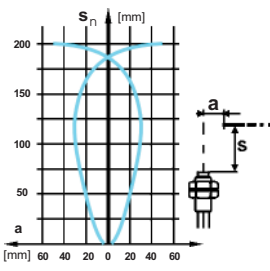
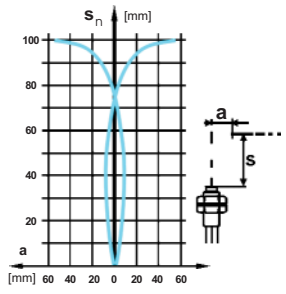


Sensors type	Fiber-optic amplifier with <b>potentiometer</b>	Blue-light fiber-optic amplifier with <b>potentiometer</b>
Sensing distance	200mm	100mm
Photo		
Dimensions(mm)		
Response curve		
NPN potentiometer/cable	FOS3-D0200N-CX6C4U2-P	FOS3-D0100N-CX4C4U2-P
NPN potentiometer/connector	FOS3-D0200N-CX6Q4UP-P	FOS3-D0100N-CX4Q4UP-P
PNP potentiometer/cable	FOS3-D0200P-CX6C4U2-P	FOS3-D0100P-CX4C4U2-P
PNP potentiometer/connector	FOS3-D0200P-CX6Q4UP-P	FOS3-D0100P-CX4Q4UP-P
Operating distance	200mm	100mm
Emitter	LED red 680 nm	LED blue 465 nm
Standard target	100X100 mm white	
Weight	69 g / 18 g	
No-load supply current (at U <sub>b</sub> =24V)	15 mA typ.	
Hysteresis	10% typ.	
Supply voltage range U <sub>b</sub>	10...30 V DC	
Max.ripple content	20%	
Output current	200 mA max.	
Output voltage drop	2.0 V max. at 200mA	
Max.switching frequency	1500 Hz	
Switching time (↑ and ↓)	330 μsec	
Max.ambient light	Halogen 5000 Lux Sun 10000Lux	
Ambient temperature range	-25...+55 °C	
Degree of protection	IP64	
EMC protection	ICE 60255-5 5kV; IEC 61000-4-2 Level 2; IEC 61000-4-3 Level 3; IEC 61000-4-3 Level 2	

# FOS3 SERIES

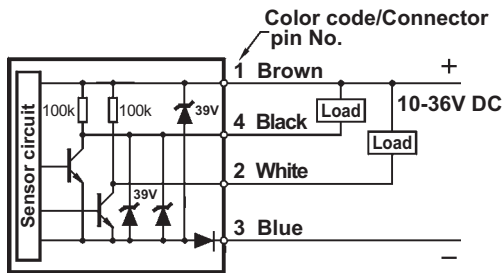
# PHOTOELECTRIC SENSORS TYPE

Sensors type	Fiber-optic amplifier with teach-in	Blue-light fiber-optic amplifier with teach-in	Fiber-optic amplifier with teach-in high switching frequency
Sensing distance	200mm	100mm	140mm
Photo	<p>Dimensions(mm)</p>		
Response curve			
<b>NPN potentiometer/cable</b>	FOS3-D0200N-CX6C4U2	FOS3-D0100N-CX4C4U2	FOS3-D0140N-CX4C4U2
<b>NPN potentiometer/connector</b>	FOS3-D0200N-CX6Q4UP	FOS3-D0100N-CX4Q4UP	FOS3-D0140N-CX4Q4UP
<b>PNP potentiometer/cable</b>	FOS3-D0200P-CX6C4U2	FOS3-D0100P-CX4C4U2	FOS3-D0140P-CX4C4U2
<b>PNP potentiometer/connector</b>	FOS3-D0200P-CX6Q4UP	FOS3-D0100P-CX4Q4UP	FOS3-D0140P-CX4Q4UP
<b>Operating distance</b>	200mm	100mm	140mm
<b>Emitter</b>	LED red 680 nm	LED blue 465 nm	LED red 680 nm
<b>Standard target</b>		100X100 mm white	
<b>Weight</b>		68 g / 17 g	
<b>No-load supply current (at <math>U_b=24V</math>)</b>		25 mA typ.	
<b>Hysteresis</b>		10% typ.	
<b>Supply voltage range <math>U_s</math></b>		10...30 V DC	
<b>Max. ripple content</b>		20%	
<b>Output current</b>		200 mA max.	
<b>Output voltage drop</b>		2.0 V max. at 200mA	
<b>Max. switching frequency</b>		1500 Hz	
<b>Switching time (↑ and ↓)</b>		330 μsec / 100 μsec*	
<b>Max. ambient light</b>		Halogen 5000 Lux Sun 10000Lux	
<b>Ambient temperature range</b>		-25...+55 °C	
<b>Degree of protection</b>		IP64	
<b>EMC protection</b>	ICE 60255-5 5kV; IEC 61000-4-2 Level 2; IEC 61000-4-3 Level 3; IEC 61000-4-3 Level 2		

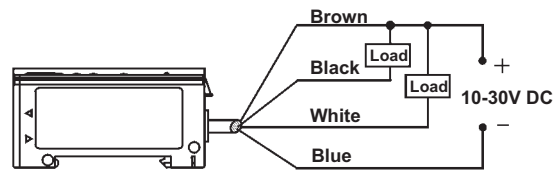
**FOS3-DO100N-CX4C4U2-P    FOS3-DO200N-CX6C4U2-P**  
**FOS3-DO100N-CX4Q4UP-P    FOS3-DO200N-CX6Q4UP-P**



**1. I/O circuit diagram**

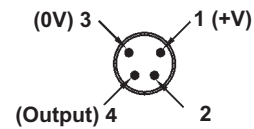


**2. Wiring diagram**



**3. Connector pin position**

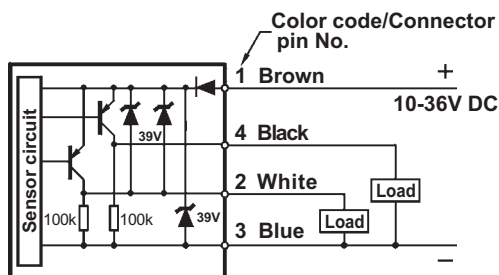
PICO-Style



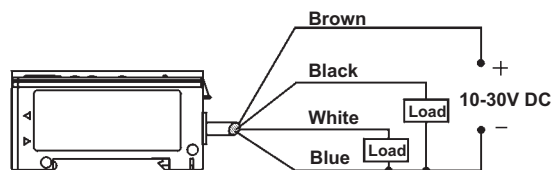
**FOS3-DO100P-CX4C4U2-P    FOS3-DO200P-CX6C4U2-P**  
**FOS3-DO100P-CX4Q4UP-P    FOS3-DO200P-CX6Q4UP-P**



**1. I/O circuit diagram**

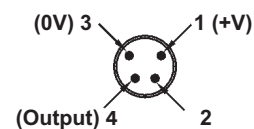


**2. Wiring diagram**



**3. Connector pin position**

PICO-Style



# FOS3 SERIES

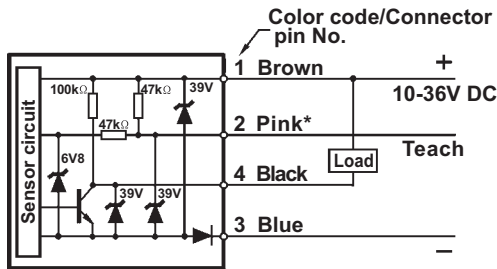
# PHOTOELECTRIC I/O CIRCUIT AND WIRING DIAGRAMS

**FOS3-DO100N-CX4C4U2**  
**FOS3-DO100N-CX4Q4UP**

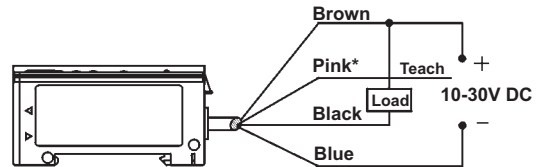
**FOS3-DO200N-CX6C4U2**  
**FOS3-DO200N-CX6Q4UP**



### 1. I/O circuit diagram

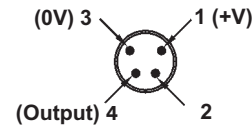


### 2. Wiring diagram



### 3. Connector pin position

PICO-Style

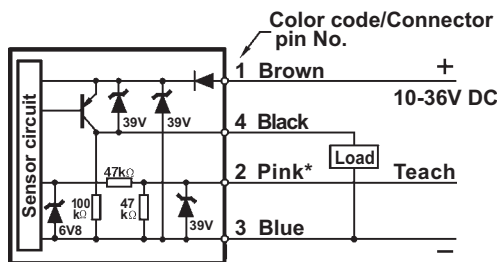


**FOS3-DO100P-CX4C4U2**  
**FOS3-DO100P-CX4Q4UP**

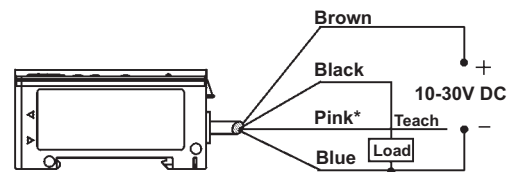
**FOS3-DO200P-CX6C4U2**  
**FOS3-DO200P-CX6Q4UP**



### 1. I/O circuit diagram

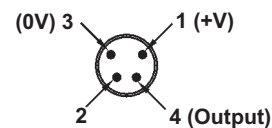


### 2. Wiring diagram



### 3. Connector pin position

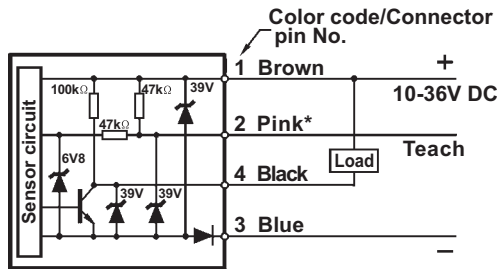
PICO-Style



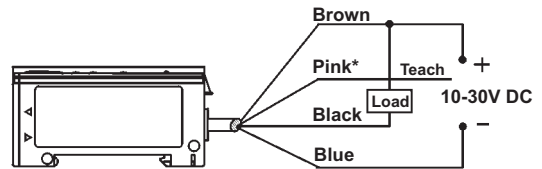
### FOS3-D0140N-CX4C4U2 FOS3-D0140N-CX4Q4UP



#### 1. I/O circuit diagram

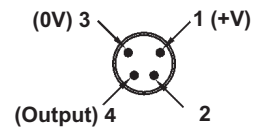


#### 2. Wiring diagram



#### 3. Connector pin position

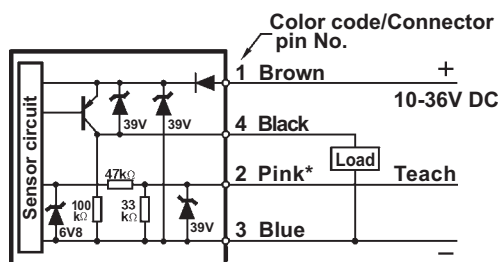
PICO-Style



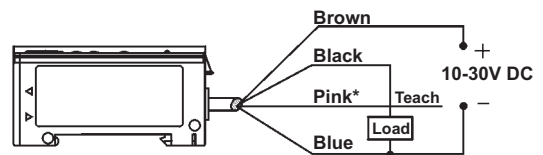
### FOS3-D0140P-CX4C4U2 FOS3-D0140P-CX4Q4UP



#### 1. I/O circuit diagram



#### 2. Wiring diagram



#### 3. Connector pin position

PICO-Style

