

Type			**Diffuse sensor with background suppression**	
Detection range			**200...2000 mm**	
PNP	Complementary	Part number	BOS 50K-PA-RH12-S4	④
NPN		Part number	BOS 50K-NA-RH12-S4	⑩
PNP	NO/NC	Part number		
NPN	Switchable	Part number		
PNP	NO/NC	Part number		
	Switchable IO-Link	Part number		
PNP	NO	Part number	BOS 50K-PS-RH12-S4	①
NPN	NO	Part number		
PNP	NC	Part number		
NPN	NC	Part number		
PNP	NO with	Part number	BOS 50K-PSV-RH12-S4	②
NPN	Error output	Part number	BOS 50K-NSV-RH12-S4	⑧
PNP	NC with	Part number	BOS 50K-POV-RH12-S4	⑥
NPN	Error output	Part number	BOS 50K-NOV-RH12-S4	⑪
Supply voltage U_B			10...30 V DC	
Output current			100 mA	
No-load supply current I_0 max.			≤ 50 mA	
Switching type			Light/dark switching	
Polarity reversal/short-circuit protected			Yes/Yes	
Settings			Potentiometer, 10-turn	
Emitter, light type			LED, red light	
Wavelength			630 nm	
Light spot diameter			75×75 mm at 1.5 m	
Gray value shift (90%/18%)			8%	
Power indicator			Green LED	
Received light indicator			Yellow LED	
Stability indicator				
Error indicator			Yellow LED (flashes)	
Response time			1 ms	
Switching frequency f			500 Hz	
Degree of protection as per IEC 60529			IP 67	
Ambient temperature T_a			–10...+60°C	
Permissible ambient light			10 klx	
Material		Housing	ABS/PC	
		Optical surface	Glass	
Connection			M12 connector, 4-pin	

Diffuse sensor values referenced to 90% reflective Kodak gray card.

Wiring diagrams on page 233.

Ordering codes on page 227.

