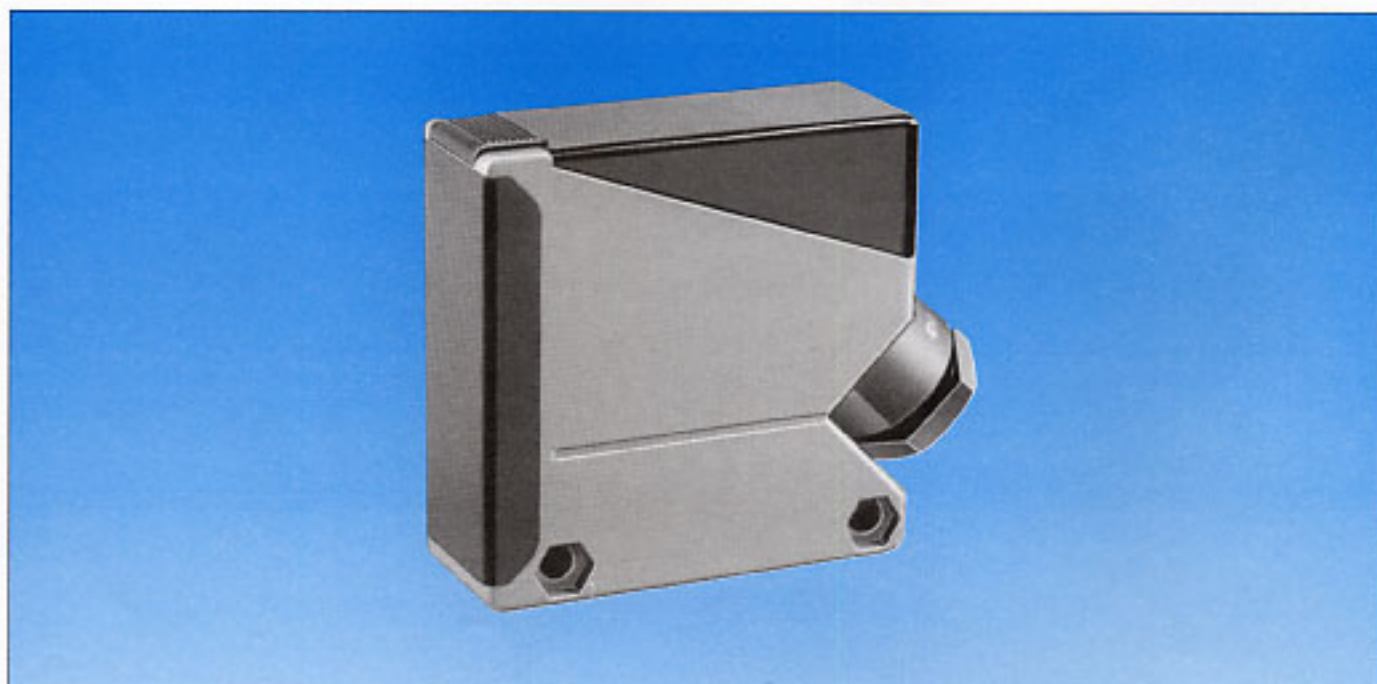


# DL-S100TC/200TC(P) series

BACKGROUND SUPPRESSION  
PHOTO SENSORS

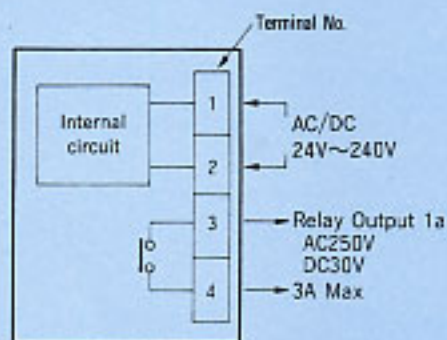
- Long distance type of 1m or 2m
- Terminal board connections, which ensures full open space at wiring.
- This model has the features of a distance sensor, i.e. it is not easily influenced by the background, resistant to dirt on the lens, and is not affected by the colour, shape or material of the detection object.

4

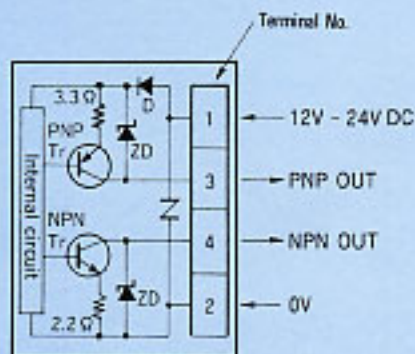


## OUTPUT CIRCUIT

DL-S100P/DL-S200P  
relay output type



DL-S100TC/DL-S200TC  
open collector output type



# DL-S100TC/200TC(P) series

## ■ SPECIFICATIONS

Type	Built-in amp, Open collector output type.		Built-in power supply, Relay output type.	
Model	DL-S100TC	DL-S200TC	DL-S100P	DL-S200P
Detection method	Distance limited reflection			
Operating range	0.2~1m ※1	0.2~2m ※1	0.2~1m ※1	0.2~2m ※1
Voltage	12-24VDC ±10% Ripple 10% or less		AC/DC24~240V ±10% 50/60Hz	
Current consumption	30mA(Max.)		DC : 30mA(Max.), AC : 4W(Max.)	
Output mode	Open collector NPN/PNP 2 output Rating : 100mA(30VDC)MAX ※2		Relay output 1a : 3A AC250V 750VA MAX. 3A 30V DC 90W MAX.	
Operating mode	Light-on/Dark-on selectable			
Response time	10msec.(Max.)		20msec.(Max.)	
Hysteresis	10%(Max.)			
Light source	Infrared LED, wavelength(880nm)			
Sensing cell	Photodiode			
LED indicator	OP.L : Operation indicator (Red LED) UP : Tolerance light indicator (Green LED)			
Sensitivity	NEAR-FAR : Built-in optical distance adjustment VR			
Switch(SW)	Light-on, Dark-on switchable (L. ON side : Light-on, D. ON side : Dark-on)			
Circuit protection	Built-in short circuit protection		-	
Material	Case : Polycarbonate, Frontface & terminal cover, Acryl			
Connection	Terminal connections			
Weight	170g (within 60g of installing matel) MAX.			

※1 20cm×20cm white paper

※2 NPN rating sink current, PNP rating source current

## ■ ENVIRONMENT

Ambient light	Withstands 10,000 lx
Operating temp.	-25~+55℃
Humidity	35~85% RH
Case protection	IP65
Vibration	10~55Hz, 1.5mm Amplitude, 2HR, X.Y.Z. direction
Impact	100g, 2 times, X.Y.Z. direction
Dielectric withstanding	Open collec for output type : AC500V, 1 minute/ Relay output type : AC200V, 1 minute

## ■ Distance adjustment

- Point the detection surface towards the detection direction and fix it temporarily.
- Turn the distance adjustment counter-clockwise gradually from the maximum (FAR) position without a detection object, and find the position where the operation indicator (OP.L Red LED) goes off. If the indicator remains off even if the adjustment is set to maximum, leave it set to maximum (FAR) position.
- Turn the distance adjustment clockwise gradually from the minimum (NEAR) position with a detection object in the detecting place, and find the position where the operation indicator goes on. If the indicator remains on even if the adjustment is set to minimum, leave it set to the minimum (NEAR) position.
- Set the adjustment in the mid point between ② and ③.
- Fix the sensor. Install it securely so that the unit will not slide off due to vibration or shock.

