

# LIQUID LEAK SENSORS

# WL 10

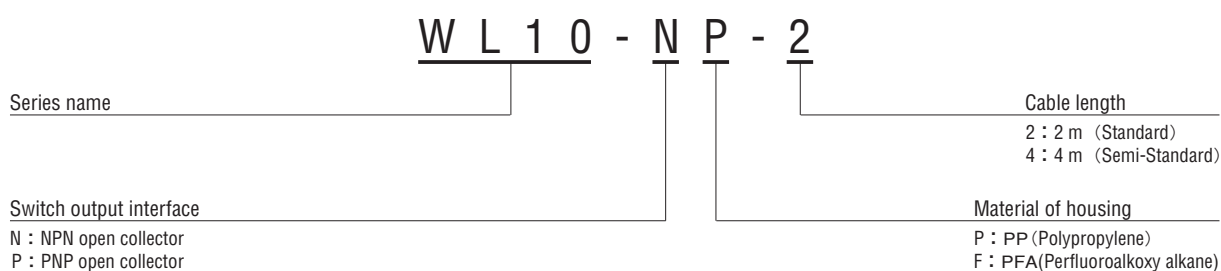


## FEATURES

- Low effects at detection point by introduction of new optical technology
- Needless shade plate, High precision
- Compact and Slim size ( $\phi$  25 mm, t = 10 mm)
- Lead-free Soldering

INTERNAL STRUCTURE [PP type]	
Part name	Material
① Housing	PP
② Cover	
③ Mounting plate	
④ Sealing cap	
⑤ P.C. board	Glass-Epoxy
⑥ Label	Polyester film
⑦ Photo-interrupter	—
⑧ Cable	PVC

## MODEL NUMBER DESIGNATION



## LIST OF MODEL NUMBERS

		Model number			
		NPN		PNP	
Switch output interface					
Material of housing		PP	PFA	PP	PFA
Cable length	2 m	WL10-NP-2	WL10-NF-2	WL10-PP-2	WL10-PF-2
	4 m	↻ WL10-NP-4	↻ WL10-NF-4	↻ WL10-PP-4	↻ WL10-PF-4

※ Verify the above model numbers when placing orders.

The products marked ↻ are manufactured upon receipt of order basis.

### STANDARD SPECIFICATIONS

● Unless otherwise specified, the specs are defined at an ambient temperature of  $25 \pm 5$  °C and excitation voltage of 24 V DC.

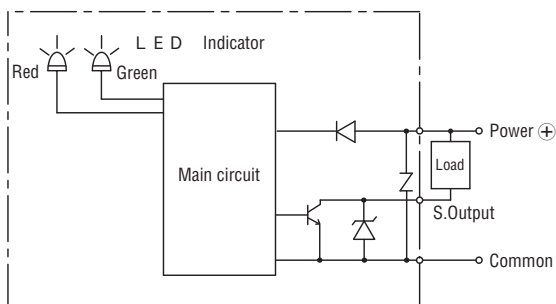
Item		Model number	WL10	
			NPN	PNP
General specifications	Operating temp. range	°C	- 10 ~ 60	
	Operating humidity	%RH	35 ~ 85 (No condensation)	
	Storage temp.	°C	- 20 ~ 70 (Atmospheric pressure, humidity 65 %RH maximum)	
	Pressure medium		Water (PP) / Corrosive fluids compatible with PFA	
	Material of housing		PP/PFA	
	Net weight	g	Approx. 30 (WL10- * P-2)	Approx. 50 (WL10- * P-4, WL10- * F-2)
Power	Supply voltage	V DC	12 ~ 24 $\pm$ 10 %	
	Consumption current	mA maximum	10 (Except open collector output)	
Output	Switching capacity		Voltage endurance : 30 VDC Sink current : 50 mA maximum (Over current protection)	Voltage endurance : 24 VDC Sourced current : 50 mA maximum (Over current protection)
	Residual voltage	V maximum	1.0 V maximum	2.0 V maximum
	Operation grade		Normal condition : Switch output is ON / Green LED is ON Leakage detection : Switch output is OFF / Red LED is ON	

### ENVIRONMENTAL CHARACTERISTICS

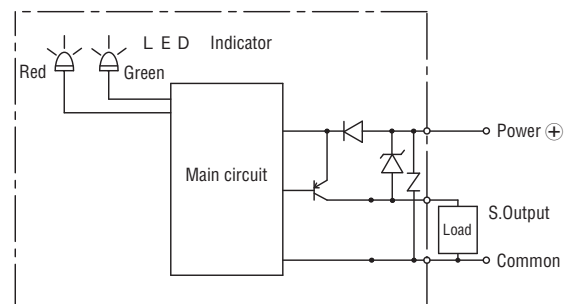
Test item	Test conditions	Specification
Vibration	10 ~ 500 Hz, 1.5 mm maximum / 98.1 m / S <sup>2</sup> , 3 directions for 2 hours each	Meets standard specifications
Shock	490 m/s <sup>2</sup> , 3 directions for 3 times each	
Protection grade	IP67	
EMC	EMI : EN55011: 2007, A2 : 2007 Group 1, class B EMS : EN61326-1: 2006 Table 2	

### INTERNAL ELECTRICAL SCHEMATICS

#### ● NPN



#### ● PNP



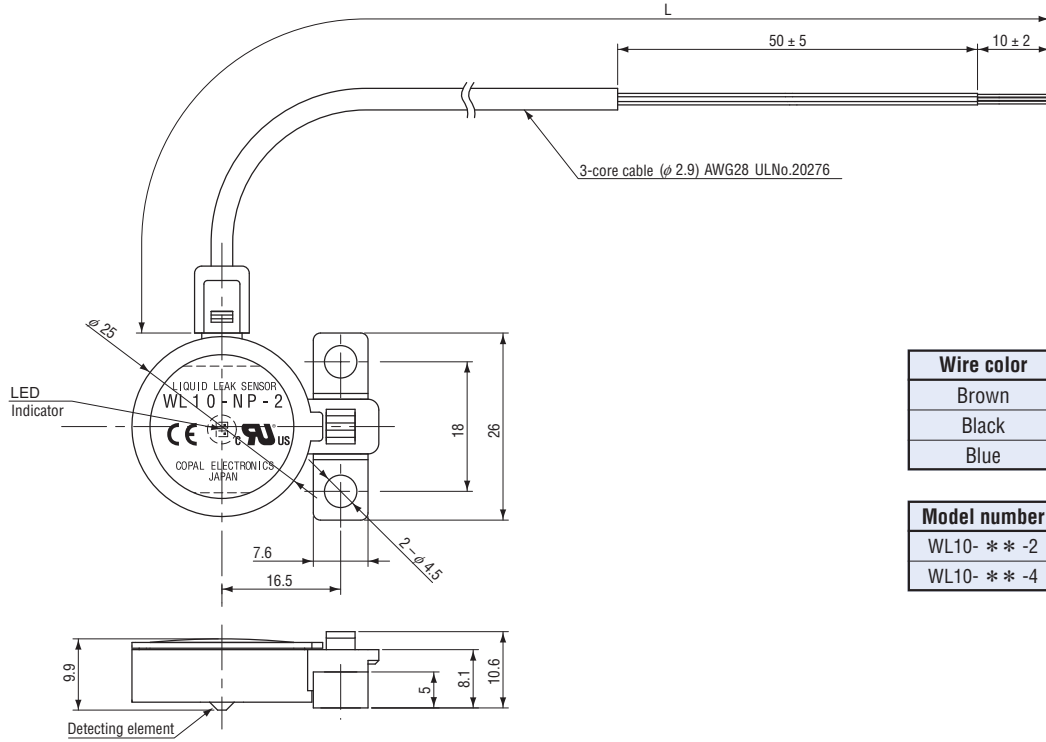
# WL10

## LIQUID LEAK SENSORS

### OUTLINE DIMENSION

Unless otherwise specified, tolerance:  $\pm 0.5$  (Unit: mm)

#### Material of housing - PP



Wire color	Connection
Brown	Power $\oplus$
Black	Output
Blue	Common

Model number	Cable length
WL10-**-2	2000 $\pm$ 100 mm
WL10-**-4	4000 $\pm$ 200 mm

#### Material of housing - PFA

