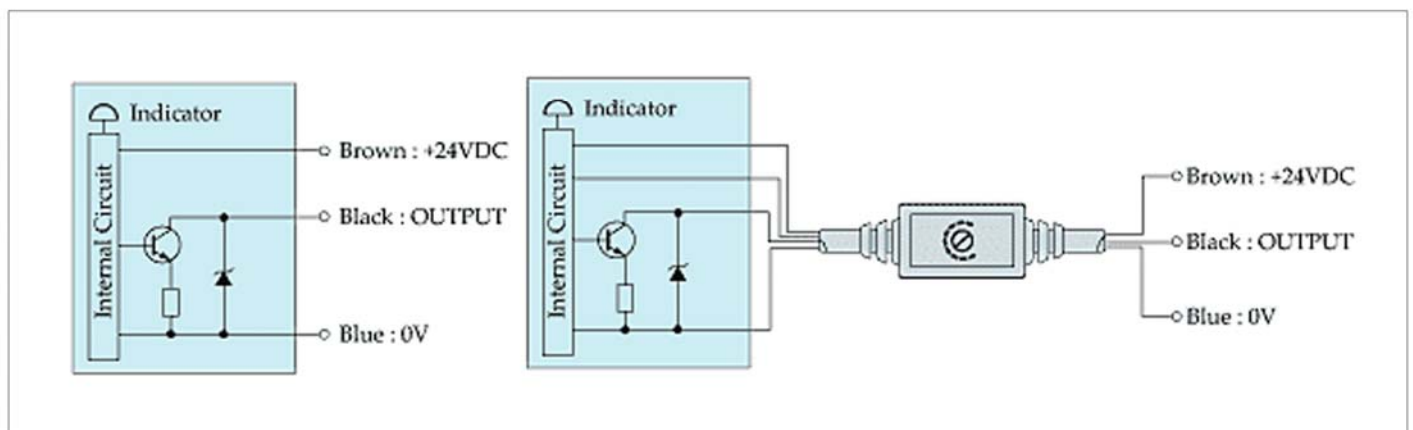


# UM2 series

- Ultra miniature sensor with Amp built-in type
- Adopted excellent visible light indicator



## OUTPUT CIRCUIT



# DC POWER SUPPLY PHOTO SENSORS

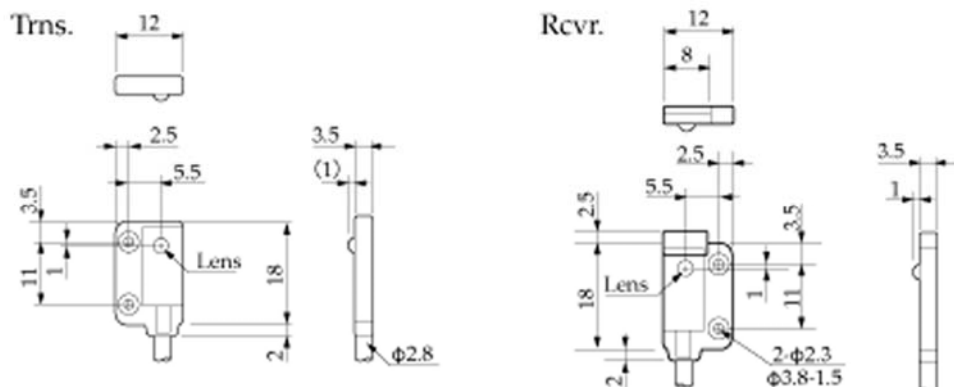
## SPECIFICATIONS

Models	Dark-on	UM2-T50DT1(P)	UM2-T50DT1V(P)	UM2-T50DT(P)	UM2-T50DTV(P)
	Light-on	UM2-T50T1(P)	UM2-T50T1V(P)	UM2-T50T(P)	UM2-T50TV(P)
Detection		Through beam			
Range		500mm			
Minimum detecting object		φ3mm(Opaque)			
Power supply		12VDC		24VDC	
Power consumption	Transmitter	15mA or less			
	Receiver	15mA or less	22mA or less	15mA or less	22mA or less
Output mode	NPN output	NPN open collector, Rating: Sink current 80mA(30VDC) Max.			
	PNP output	PNP open collector, Rating: Source current 80mA(30VDC) Max.			
Response time		0.5ms Max.			
Operating angle		15°(Receiver side)			
Light source		Red LED(660nm)			
Indicators		Operating(Orange LED), Stability (Green LED)			
Sensitivity		-	Sense unit (*)	-	Sense unit (*)
Materials		Case : ABS resin, Lens : Acrylic			
Cable		Flying lead 2m(Outer dia. 2.8mm)			
Weight (Max.)	Transmitter	30g or less			
	Receiver	30g or less	40g or less	30g or less	40g or less
Others		* Cable length between sensor and Sense. Unit is 30cm.			

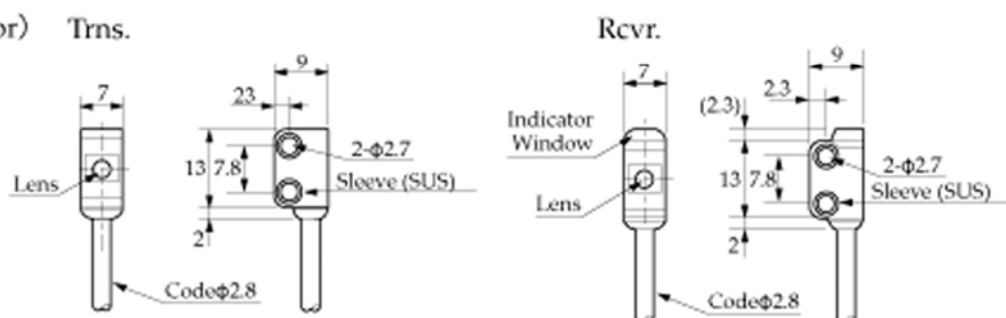
Models	UM2-R3T(P)	UM2-R3TV(P)	UM2-R5T(P)	UM2-R5TV(P)	UM2-Z3SV(P)	UM2- Z3DSV(P)
Detection		Diffuse reflective			Convergent beam	
Range		0.2 to 3cm *		1 0.2 to 5cm *	1 0.5 to 3cm *1	
Power supply		12-24VDC±10%, Ripple 10% Max.				
Current consumption		20mA(Max.)	27mA(Max.)	20mA(Max.)	27mA(Max.)	26mA(Max.) 30mA(Max.)
Output mode	NPN output	NPN open collector, Rating: Sink current 80mA(30VDC) Max.				
	PNP output	PNP open collector, Rating: Source current 80mA(30VDC) Max.				
Operating mode		Light-on				
Response time		0.5ms Max.				
Light source		Red LED(660nm)				
Indicators		Operating(Orange LED), Stability (Green LED)				
Hysteresis		10% Max.				
Sensitivity		-	Sense unit *2	-	Sense unit *2	- Sense unit *2
Circuit protection		Short circuit protection				
Materials		Case : ABS resin, Lens : Acrylic				
Cable		Flying lead 2m(Outer dia. 2.8mm)				
Weight (Max.)		40g				
Others		*1 Detecting object : White paper 50cm x 50cm. / *2 Cable length between sensor and Sense. Unit is 30cm.				

## DIMENSIONS

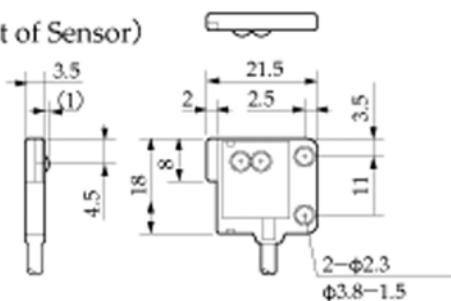
UM2-T15DT  
 UM2-T15DTV (Part of Sensor)  
 UM2-T50DT  
 UM2-T50DTV (Part of Sensor)



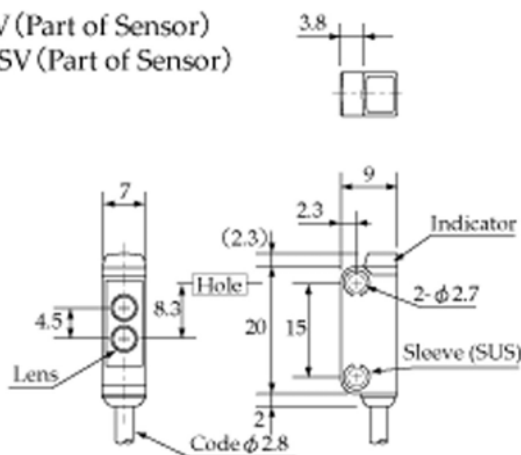
UM2-T50DS  
 UM2-T50DSV (Part of Sensor)



UM2-R3T  
 UM2-R3V (Part of Sensor)  
 UM2-R5T  
 UM2-R5TV (Part of Sensor)

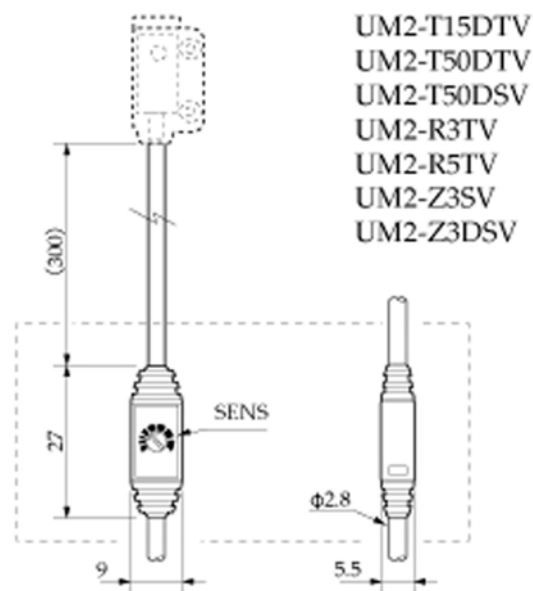


UM2-Z3SV (Part of Sensor)  
 UM2-Z3DSV (Part of Sensor)



### ● SENS

The models with a "V" at the end of the model numbers have a sensitivity adjustment. The through beam type has it on its receiver.



UM2-T15DTV  
 UM2-T50DTV  
 UM2-T50DSV  
 UM2-R3TV  
 UM2-R5TV  
 UM2-Z3SV  
 UM2-Z3DSV

- During installation, fasten directly with a screw. Tightening torque should be less than 0.3N.m(3kgf·cm).