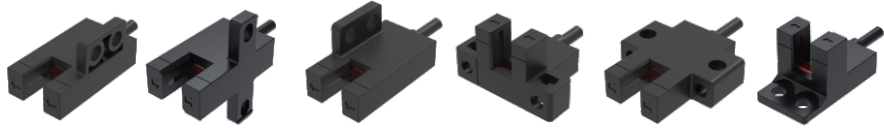


Tank type

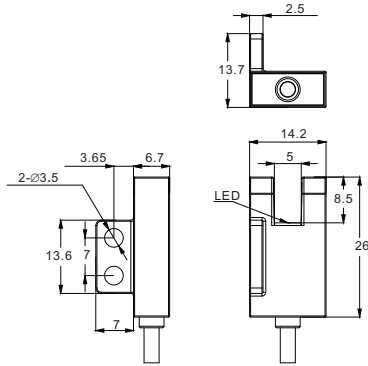


Model						
NPN	DSF-302NA-SE	DST-303NA-SE	DSR-304NA-SE	DSL-305NA-SE	DSK-306NA-SE	DSY-307NA-SE
PNP	DSF-302PA-SE	DST-303PA-SE	DSR-304PA-SE	DSL-305PA-SE	DSK-306PA-SE	DSY-307PA-SE
Basic Features						
Working principle	Photoelectric Sensors					
Enclosure style	Type F	Type T	Type R	Type L	Type K	Type Y
How optics work	Shooting					
Light source	Infrared LED, 940nm					
Slot width	5.0mm					
Groove depth	8.5mm					
Detection	1.2x1.8mm opaque object					
Light	Red LED					
Electrical Data						
Switch mode	Light.on (Light Action) / D.on (shading action) Switchable					
Output mode	NPN or PNP open collector					
Response time	≤0.33ms					
Switching frequency	3KHz					
Repeatability	0.01mm					
Hysteresis (Return/Response)	<0.2mm					
Operating voltage	5~24V DC					
Current consumption	<20mA					
Residual voltage	1.5V or less (load current 100mA, wire length 2m)					
Load current	≤100mA (24VDC)					
Insulation resistance	≥20MΩ (250VDC)					
Resistance	AC, 1000V1 minutes, between all power connection between the terminal and the shell					
Protection circuits	Reverse polarity protection/surge protection					
Environmental Conditions						
Operating ambient temperature	-25~55°C					
Storage temperature	-30~80°C (non-icing)					
Humidity of the working environment	5~85%RH					
Store humidity	5~95%RH (no condensation)					
Ambient illumination	Incandescent lamp ≤ 1000					
Anti-vibration	10~55Hz sweep, 1.5mm amplitude, XYZ 3 directions for 2 hours each					
Ingress protection	IP50					
Mechanical Data						
Connection	2m/4 core cable					
Size	26x14.2x13.7mm	26.5x15.2x27.1mm	26x14.2x13.7mm	26.03x18x14.9mm	26x6.7x25.4mm	25.8x15.4x14.4mm
Material	PC					
Weight	0.025kg	0.026kg	0.025kg	0.026kg	0.026kg	0.025kg
Fittings	/					

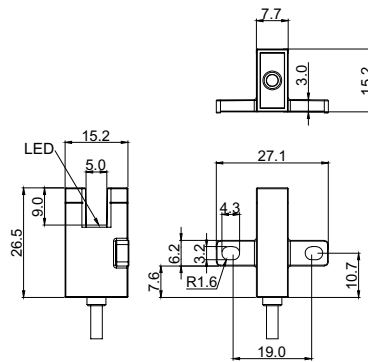
Note: DSL-305NA/PA-SE is recommended to be installed with small-head or non-standard M3 (screw head diameter less than 5.2mm) screws; DSK-306NA/PA-SE is recommended to be installed with general-purpose M3.5 screws; Other models are recommended to be installed with general-purpose M3 screws. The recommended torque value is less than 0.6N.

Dimensions

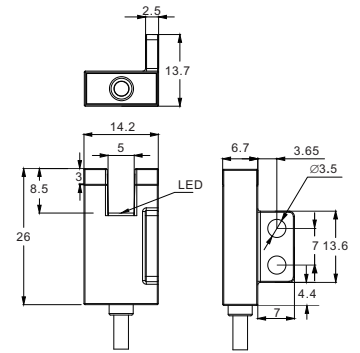
Type F



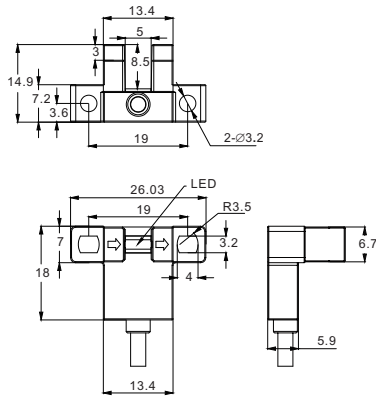
Type T



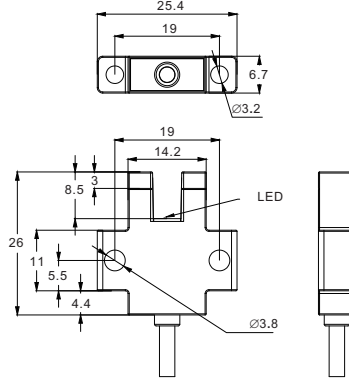
Type R



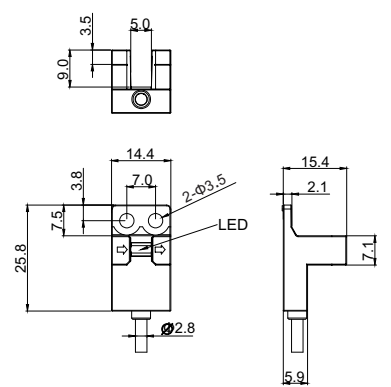
Type L



Type K

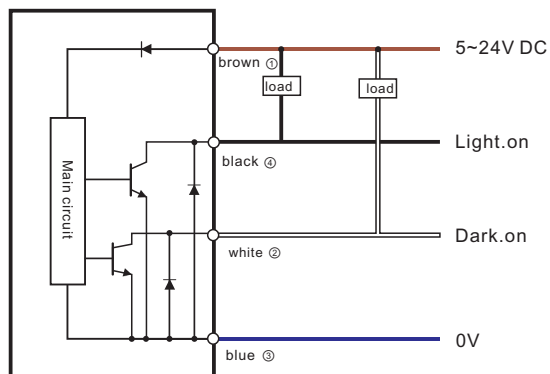


Type Y



Wiring Diagram

NPN



PNP

