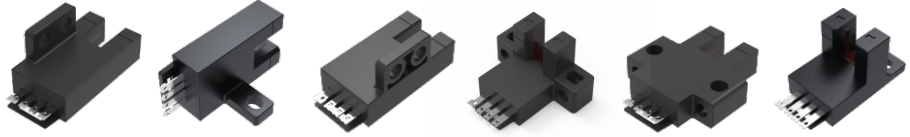


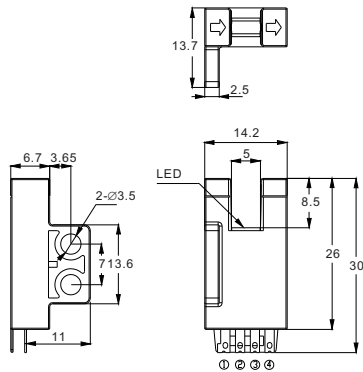
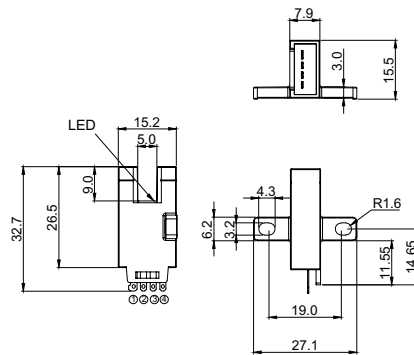
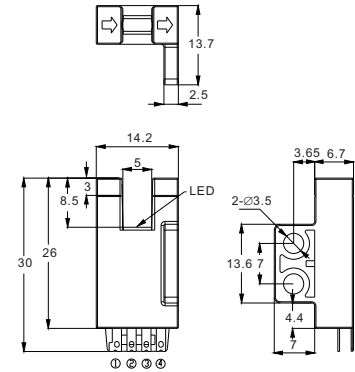
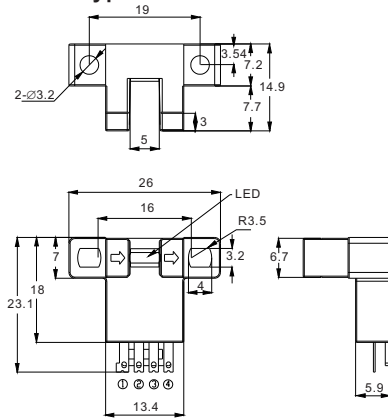
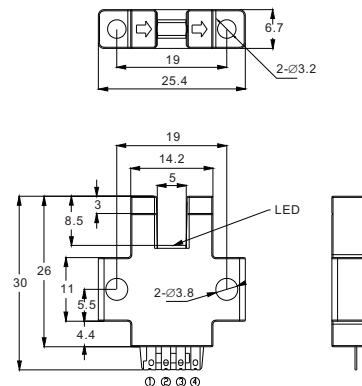
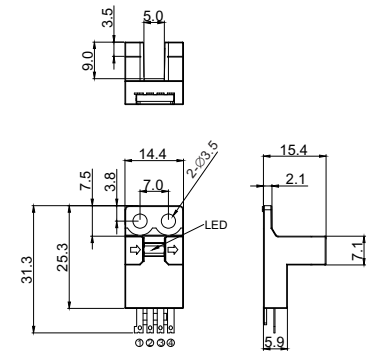
Tank type



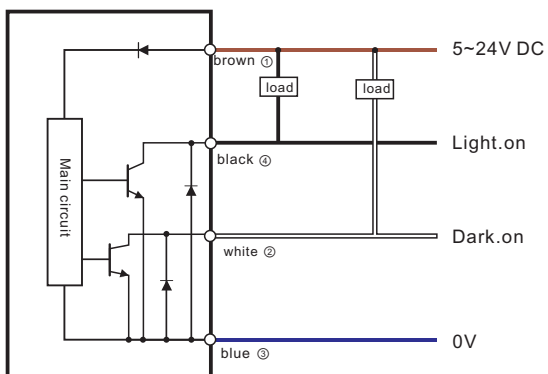
Model						
NPN	DSF-302NA-SC	DST-303NA-SC	DSR-304NA-SC	DSL-305NA-SC	DSK-306NA-SC	DSY-307NA-SC
PNP	DSF-302PA-SC	DST-303PA-SC	DSR-304PA-SC	DSL-305PA-SC	DSK-306PA-SC	DSY-307PA-SC
Basic Features						
Working principle	Photoelectric Sensors					
Enclosure style	Type F	Type T	Type R	Type L	Type K	Type Y
How optics work	Shooting					
Light source	Infrared LED, 940nm					
Slot width	5.0mm					
Groove depth	8.5mm		7.7mm		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	0.3ms					
Switching frequency	3KHz					
Repeatability	0.01mm					
Hysteresis (Return/Response)	<0.2mm					
Operating voltage	5~24V DC					
Current consumption	<20mA					
Residual voltage	0.2V or less (load current 10mA), 1.5V or less (load current 100mA)					
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	4-pin connector					
Size	30x14.2x13.7mm	32.7x15.2x27.1mm	30x14.2x13.7mm	26x23.1x14.9mm	30x25.4x6.7mm	31.3x14.4x15.4mm
Material	PC					
Weight	0.003kg	0.002kg	0.003kg	0.002kg	0.003kg	0.002kg
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
