Q31 Rectangular Photoelectric Sensor — TOF

BFDP-R31-LTI100-LTI200-LTI400-LTR100-LTR200-LTR400-PC2 series · Operating Voltage: 10...30V DC · Switching Freq.: 30Hz

IP66
Ingress Protection



①②③ ④⑤⑥

KEY SPECIFICATIONS

OPERATING VOLTAGE **10...30V DC**	SWITCHING FREQ. **30Hz**
AMBIENT TEMP. **-20...60°C**	HOUSING **31*20*11mm**
BLIND ZONE **50mm**	INGRESS PROTECTION **IP66**

FEATURES

- TOF (time-of-flight) measuring principle

MODEL CODES

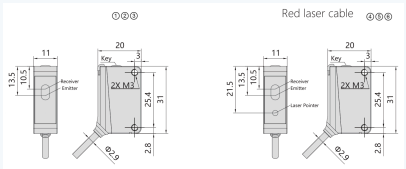
Output Type	①	②	③	④	⑤	⑥
NPN N.O	BFDP-R31-N11LTI100-PC2 SKU 10105142	BFDP-R31-N11LTI200-PC2 SKU 10105146	BFDP-R31-N11LTI400-PC2 SKU 10105150	BFDP-R31-N11LTR100-PC2 SKU 10105154	BFDP-R31-N11LTR200-PC2 SKU 10105158	BFDP-R31-N11LTR400-PC2 SKU 10105162
NPN N.C	BFDP-R31-N21LTI100-PC2 SKU 10105143	BFDP-R31-N21LTI200-PC2 SKU 10105147	BFDP-R31-N21LTI400-PC2 SKU 10105151	BFDP-R31-N21LTR100-PC2 SKU 10105155	BFDP-R31-N21LTR200-PC2 SKU 10105159	BFDP-R31-N21LTR400-PC2 SKU 10105163
PNP N.O	BFDP-R31-P11LTI100-PC2 SKU 10105144	BFDP-R31-P11LTI200-PC2 SKU 10105148	BFDP-R31-P11LTI400-PC2 SKU 10105152	BFDP-R31-P11LTR100-PC2 SKU 10105156	BFDP-R31-P11LTR200-PC2 SKU 10105160	BFDP-R31-P11LTR400-PC2 SKU 10105164
PNP N.C	BFDP-R31-P21LTI100-PC2 SKU 10105145	BFDP-R31-P21LTI200-PC2 SKU 10105149	BFDP-R31-P21LTI400-PC2 SKU 10105153	BFDP-R31-P21LTR100-PC2 SKU 10105157	BFDP-R31-P21LTR200-PC2 SKU 10105161	BFDP-R31-P21LTR400-PC2 SKU 10105165

TECHNICAL DATA

Size	31*20*11mm
Sensing distance	①: 50...1000mm ②: 50...2000mm ③: 50...4000mm ④: 50...1000mm ⑤: 50...2000mm ⑥: 50...4000mm
Blind zone	50mm
Range setting	Button
Measurement accuracy	5mm
Resolution	1mm
Switching frequency	30Hz
Operating voltage	10...30V DC
No-load power consumption	≤0.5VA
Power-on delay	3s
Load current	100mA
Light source	①: Infrared light 940nm ②: Infrared light 940nm ③: Infrared light 940nm ④: Red laser 650nm ⑤: Red laser 650nm ⑥: Red laser 650nm

Light spot size	About 30mm(1000mm), about 60mm(2000mm), about 140mm(4000mm)
Voltage drop	≤2V
Light immunity	<100 kLux
Overload protection	Yes
Short-circuit protection	Yes
Reverse polarity protection	Yes
Ambient temperature	-20...60°C
Storage temperature	-40...70°C
Housing material	ABS
Lens material	PMMA
Ingress protection	IP66
Aiming light	①: Infrared ②: Infrared ③: Infrared ④: Red Laser ⑤: Red Laser ⑥: Red Laser
Operation indicator	Output: Yellow; Power/Instruction: Green
Connection	2m PVC Cable, 3*0.18mm²
Accessories	None

DIMENSIONAL DRAWINGS



All dimensions in mm.