

NF series

Area sensor

Applications

- Object detection sensor
- Object detection
- Automatic Sensing
- Parking equipment sensing
- Part picking detection
- Assembly Line Direction Control
- Packaging line

NF Introduction

The NF-series area sensing light curtains are versatile in terms of price and variety, and are easy to meet customer needs. They are the most suitable for use in a wide range of sensing light curtains for area detection, protection, inspection and discrimination. Instruction LVD requirements, with CE marking.



NF Property

- Optical Axis Pitch provide available in 10mm (NF1), 20mm (NF2), and 40mm (NF3). Most suitable for various area intrusion detection.
- With protection lengths ranging from 100mm to 1200mm, various models and types are available, and special models can reach 1500mm to meet a variety of customer needs.
- The detection distance can be selected up to 5m, and special models can reach 7m.
- Optical axis optional parallel and Cross detection increasing the detection range of safety light curtains scanning.
- Easy to Install and calibrate for alignment, provide Universal Fixation Plate and Cylindrical component fixation equipment installation.
- Provide NPN or PNP selection.
- Strong anti-interference ability, Aluminum Extrusion Framing, easy wiring mode.
- Custom orders accepted, meet customer needs.

NF General Specifications

Basic information

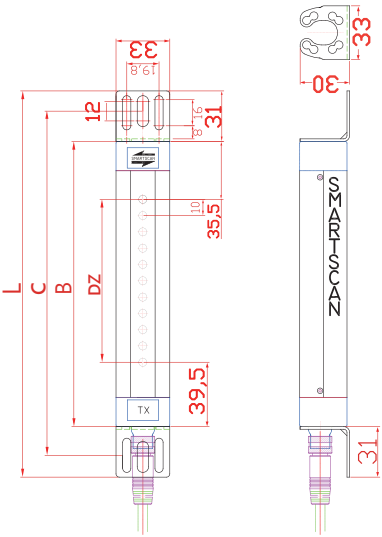
Mode	NF1	NF2	NF3
Optical Axis Pitch	10mm	20mm	40mm
Detection zone	100mm~1200mm	140mm~1100mm	120mm~1080mm
Operating distance	0.5m ~ 3m Low transmit power range : 0.2m ~ 1.5m		
Response time	30msec (Exclude relay switch time)		
Classification	CE LVD ; No safety notified (do not use in dangerous equipment)		
Power supply	22-28VDC ripple <10% Diode Protection		
Power consumption	Basic 40mA ; 8mA more for each axis, up to 400mA		
Output mode	1 output (NPN or PNP selectable)		
Appearance	Aluminum ; Silver coating(standard) ; Yellow powder coating(select)		
Connector	M12 connector (4-Core TX or 5-Core RX)		
Ambient temperature	-10°C to +50°C		
Enclosure rating	IP65(Ingress Protection)Ratings		

NF1 Series

Detection Capability 15mm

Optical Axis Pitch : 10mm Standard Operating distance : 0.5m~3m

Model	Beams	Detection Zone (DZ)(mm)	Overall Length (B)(mm)	Install Length (C)(mm)	Assembly Length (L)(mm)
NF1-11(P)	11	100	175	211	237
NF1-22(P)	22	210	285	321	347
NF1-33(P)	33	320	395	431	457
NF1-44(P)	44	430	505	541	567
NF1-55(P)	55	540	615	651	677
NF1-66(P)	66	650	725	761	787
NF1-77(P)	77	760	835	871	897
NF1-88(P)	88	870	945	981	1007
NF1-99(P)	99	980	1055	1091	1117
NF1-110(P)	110	1090	1165	1201	1227
NF1-121(P)	121	1200	1275	1311	1337



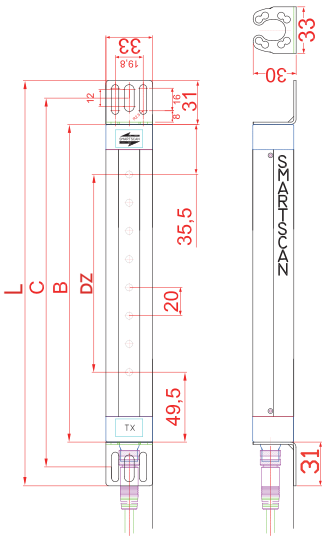
NF1 Dimensions

NF2 Series

Detection Capability 25mm

Optical Axis Pitch : 20mm Standard Operating distance : 0.5m ~ 3m L type Operating distance : 1m ~ 5m

Model	Beams	Detection Zone (DZ)(mm)	Overall Length (B)(mm)	Install Length (C)(mm)	Assembly Length (L)(mm)
NF2-8(PL)	8	140	225	260	287
NF2-12(PL)	12	220	305	340	367
NF2-16(PL)	16	300	385	420	447
NF2-20(PL)	20	380	465	500	527
NF2-24(PL)	24	460	545	580	607
NF2-28(PL)	28	540	625	660	687
NF2-32(PL)	32	620	705	740	767
NF2-36(PL)	36	700	785	820	847
NF2-40(PL)	40	780	865	900	927
NF2-44(PL)	44	860	945	980	1007
NF2-48(PL)	48	940	1025	1060	1087
NF2-52(PL)	52	1020	1105	1140	1167
NF2-56(PL)	56	1100	1185	1220	1247



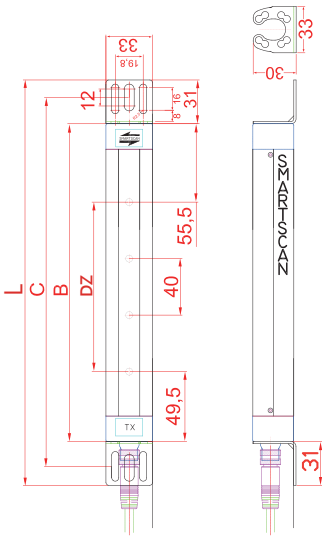
NF2 Dimensions

NF3 Series

Detection Capability 45mm

Optical Axis Pitch : 40mm Standard Operating distance : 0.5m ~ 3m L type Operating distance : 1m ~ 5m

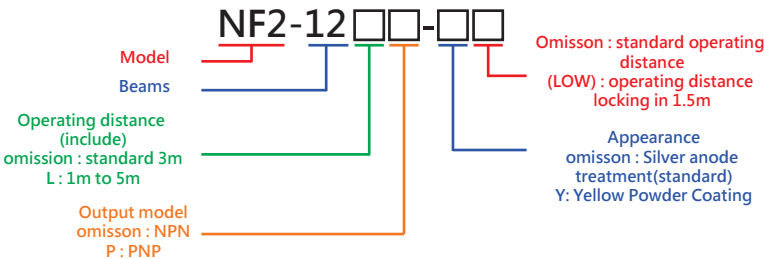
Model	Beams	Detection Zone (DZ)(mm)	Overall Length (B)(mm)	Install Length (C)(mm)	Assembly Length (L)(mm)
NF3-4(PL)	4	120	225	260	287
NF3-6(PL)	6	200	305	340	367
NF3-8(PL)	8	280	385	420	447
NF3-10(PL)	10	360	465	500	527
NF3-12(PL)	12	440	545	580	607
NF3-14(PL)	14	520	625	660	687
NF3-16(PL)	16	600	705	740	767
NF3-18(PL)	18	680	785	820	847
NF3-20(PL)	20	760	865	900	927
NF3-22(PL)	22	840	945	980	1007
NF3-24(PL)	24	920	1025	1060	1087
NF3-26(PL)	26	1000	1105	1140	1167
NF3-28(PL)	28	1080	1185	1220	1247



NF3 Dimensions

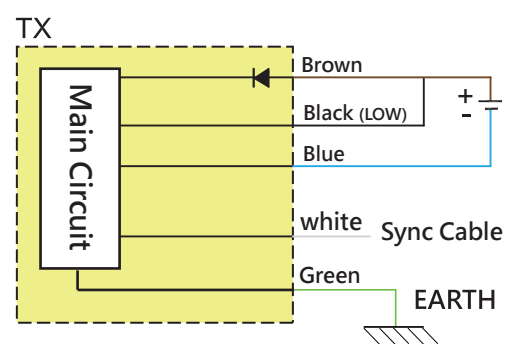
NF Series

※ SMARTSCAN provide customized services.
Please connect with our salesperson.

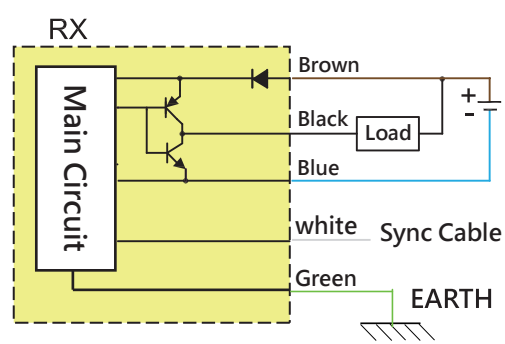


NF1 Power Connector

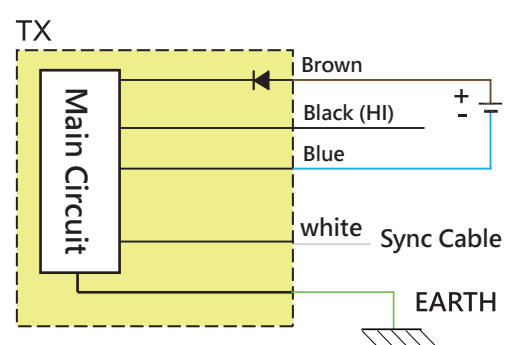
Ouput



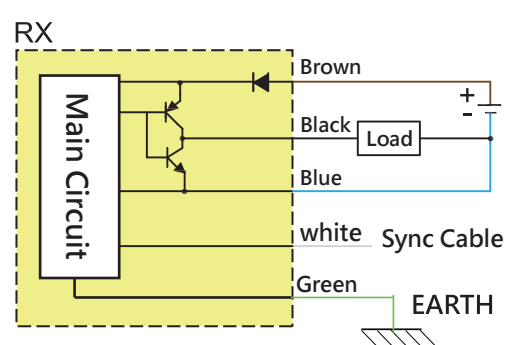
NPN Output Mode



Long range

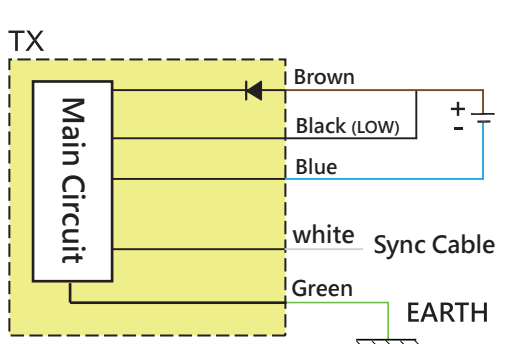


PNP Output Mode

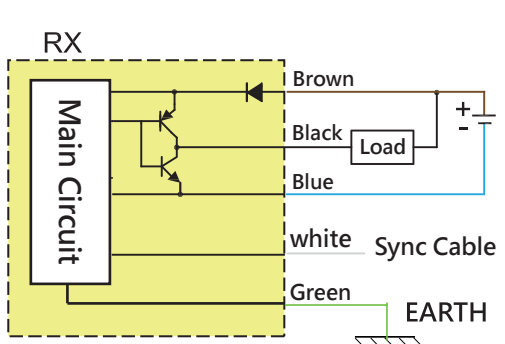


NF2 Power Connector

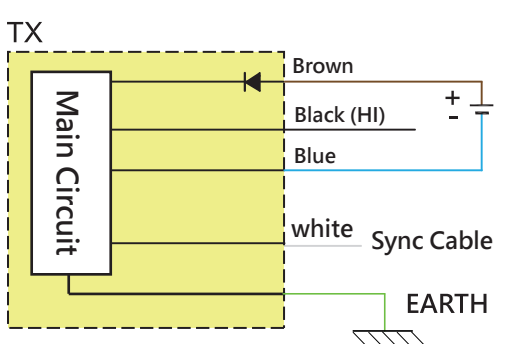
Short range



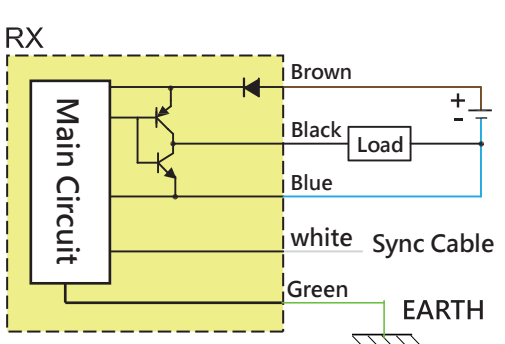
NPN Output Mode



Long range

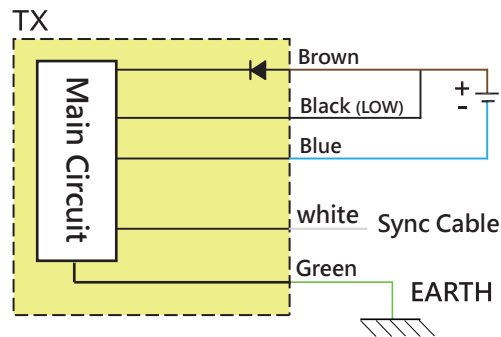


PNP Output Mode

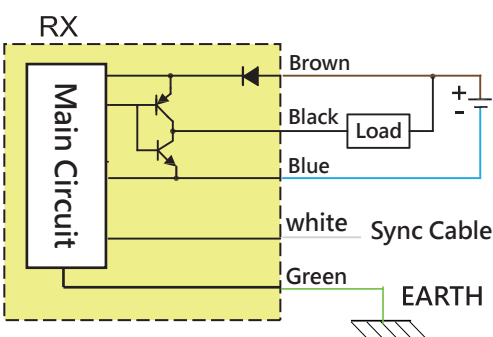


NF3 Power Connector

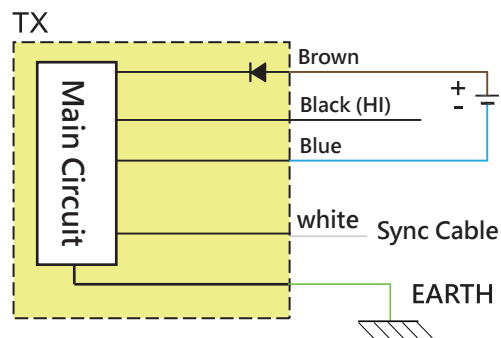
Short range



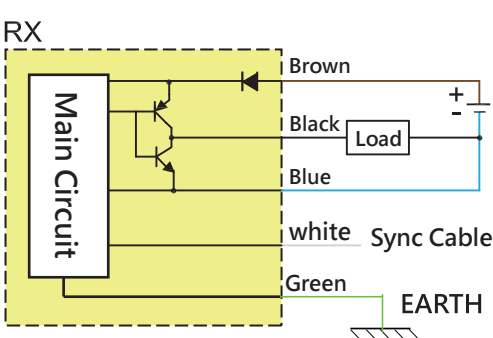
NPN Output Mode



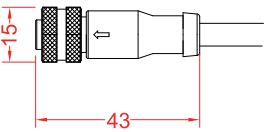
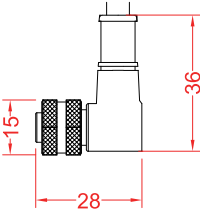
Long range



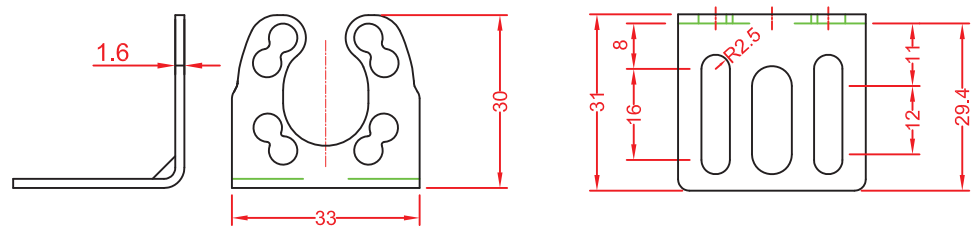
PNP Output Mode



NF Series Accessories & Part dimensions

Part	Connector (1): 180° (standard Configuration)	Connector (2): 90° (Optional Accessory)	Part number	
 Bracket N-001			P/ N	Description
			NF-3m-180	3M Wiring (180°)
			NF-3m-90	3M Wiring (90°)
			NF-5m-180	5M Wiring (180°)
			NF-5m-90	5M Wiring (90°)
			NF-10m-180	10M Wiring (180°)
			NF-10m-90	10M Wiring (90°)

Bracket



Adjustable Fixing Bracket