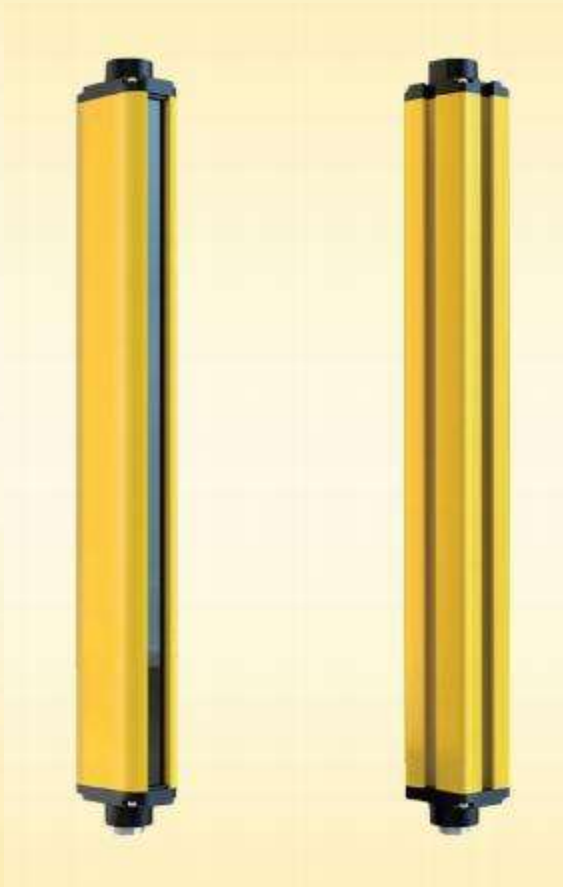


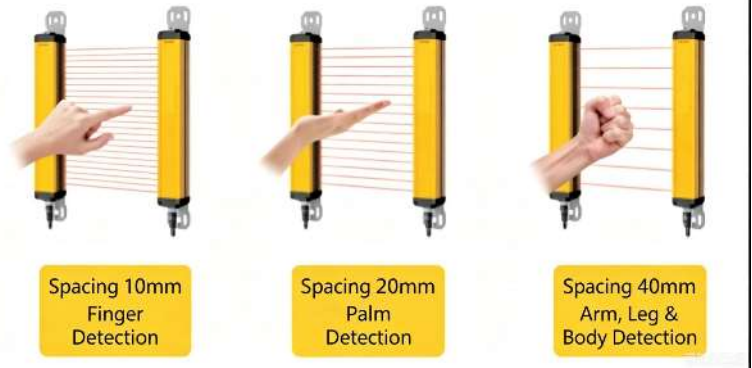
Area Sensor

DS-A series



Product Features

■ Select according to the size of the minimum detectable object



Advanced optical synchronization technology ensures stable and sensitive operation with strong EMI resistance. Simple optical alignment, independent power supply, and straightforward wiring make installation quick and easy.

Equipped with CPU self-diagnostic technology, the light curtain prevents erroneous signal output to connected equipment upon detecting internal faults (undervoltage, cable breakage, poor contact, or insufficient light intensity), ensuring reliable safety performance.

Featuring independent OSSD outputs with real-time self-diagnosis, the light curtain accurately detects external interference and internal faults during operation, ensuring superior fault prevention and enhanced reliability and safety.

Compact size-30×30 mm cross-section.

Full-featured and ruggedly built with long sensing distance, high IP rating, and broad applicability. A precision optical system provides robust immunity to ambient light interference, including welding arcs and strobe lighting.

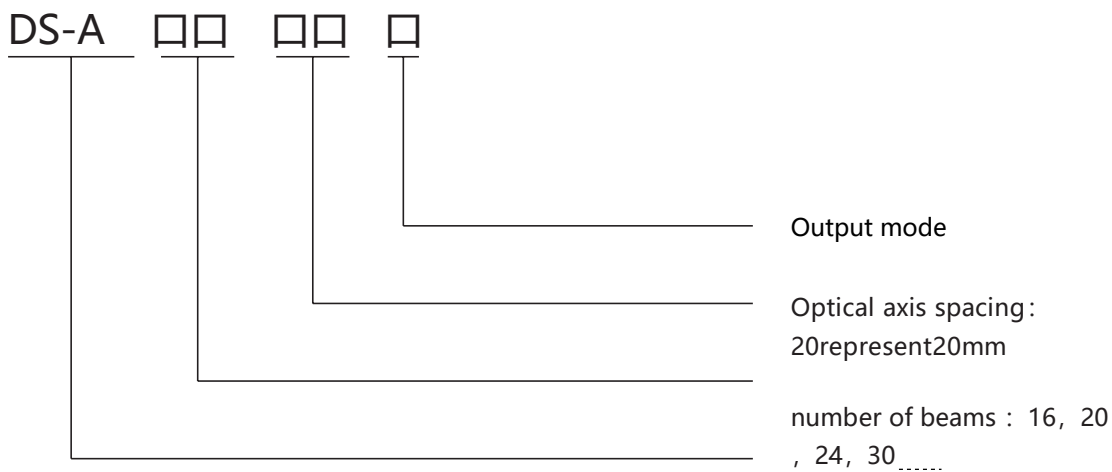
Imported transistors ensure stable performance and long service life. Dual NPN/PNP output with customizable NO/NC configuration supports direct PLC control and external relay interfacing.

Built-in overload and short-circuit protection automatically shuts down the light curtain system upon detecting excessive transient voltage or a short circuit, ensuring safe operation.

Technical Parameters

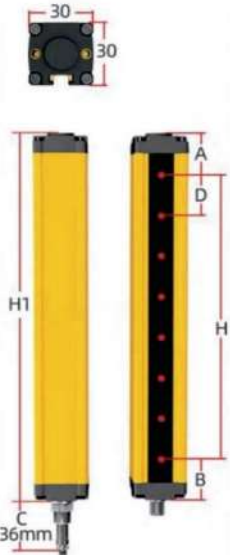
Detection Height	60 × 180mm
Section size	30 × 30mm
Detection distance	0.2-2.5m /0.3-6m (Optional configuration)
Number of optical axes	4-128
Optical Axis Spacing	10(15)/20(25)/40(45)mm
Infrared wavelength	940nm
synchrony	光同步
Maximum power	<15W
Response time	4-18ms
power supply voltage	DC12-24V
Output mode	NPN/PNP
Output current	<100mA
Enclosure Protection Grade	IP54/IP65(Optional configuration)
Operating temperature	-10~55℃
Storage Temperature	-20~70℃
Relative Humidity	15%-85%
impact- resistant	10g/20ms
Scan Time	<18ms

Model description

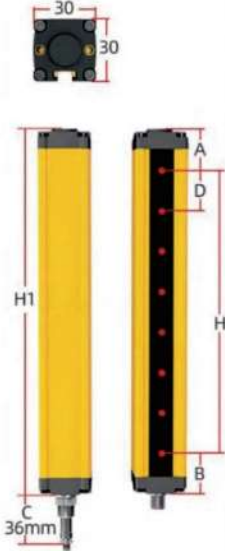


DS-A Series

10mm Beam Pitch Model List

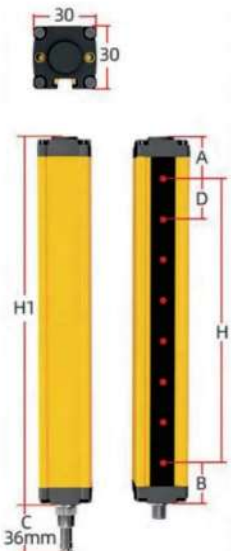
Outline	Model No.	No. of Beams (N)	Beam Pitch (D)	Protective Height (H)	Overall Height (H1)	Sensing Distance (M)	Upper Dead Zone (A)	Lower Dead Zone (B)
	DS-A0810	8	10	70	120	0.2-1.5m	15	35
	DS-A1210	12	10	110	160	0.2-1.5m	15	35
	DS-A1610	16	10	150	200	0.2-1.5m	15	35
	DS-A2010	20	10	190	240	0.2-1.5m	15	35
	DS-A2410	24	10	230	280	0.2-1.5m	15	35
	DS-A2810	28	10	270	320	0.2-1.5m	15	35
	DS-A3210	32	10	310	360	0.2-1.5m	15	35
	DS-A3610	36	10	350	400	0.2-1.5m	15	35
	DS-A4010	40	10	390	440	0.2-1.5m	15	35
	DS-A4410	44	10	430	480	0.2-1.5m	15	35
	DS-A4810	48	10	470	520	0.2-1.5m	15	35
	DS-A5210	52	10	510	560	0.2-1.5m	15	35
	DS-A5610	56	10	550	600	0.2-1.5m	15	35
	DS-A6010	60	10	590	640	0.2-1.5m	15	35
	DS-A6410	64	10	630	680	0.2-1.5m	15	35
	DS-A6810	68	10	670	720	0.2-1.5m	15	35
	DS-A7210	72	10	710	760	0.2-1.5m	15	35
	DS-A7610	76	10	750	800	0.2-1.5m	15	35
	DS-A8010	80	10	790	840	0.2-1.5m	15	35
	DS-A8410	84	10	830	880	0.2-1.5m	15	35
	DS-A8810	88	10	870	920	0.2-1.5m	15	35
	DS-A9210	92	10	910	960	0.2-1.5m	15	35
	DS-A9610	96	10	950	1000	0.2-1.5m	15	35
	DS-A10010	100	10	990	1040	0.2-1.5m	15	35
	DS-A10410	104	10	1030	1080	0.2-1.5m	15	35
	DS-A10810	108	10	1070	1120	0.2-1.5m	15	35
	DS-A11210	112	10	1110	1160	0.2-1.5m	15	35
	DS-A11610	116	10	1150	1200	0.2-1.5m	15	35
	DS-A12010	120	10	1190	1240	0.2-1.5m	15	35
	DS-A12410	124	10	1230	1280	0.2-1.5m	15	35
	DS-A12810	128	10	1270	1320	0.2-1.5m	15	35

20mm Beam Pitch Model List

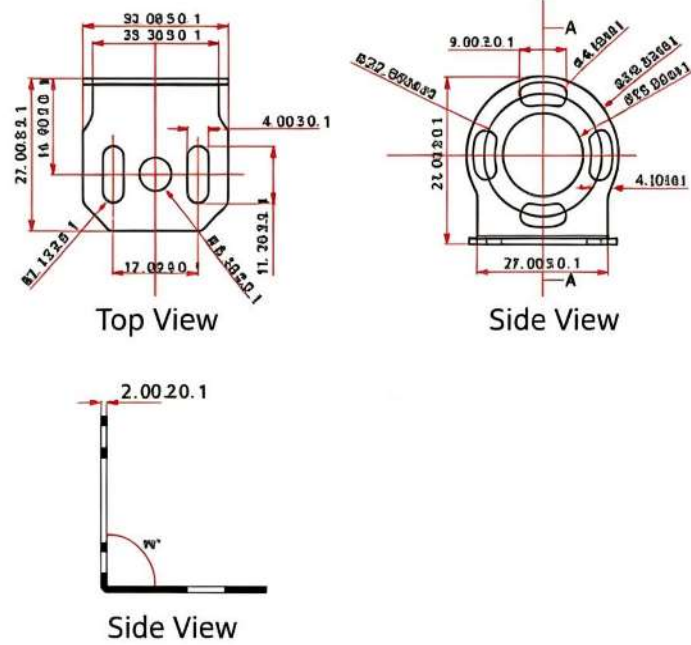
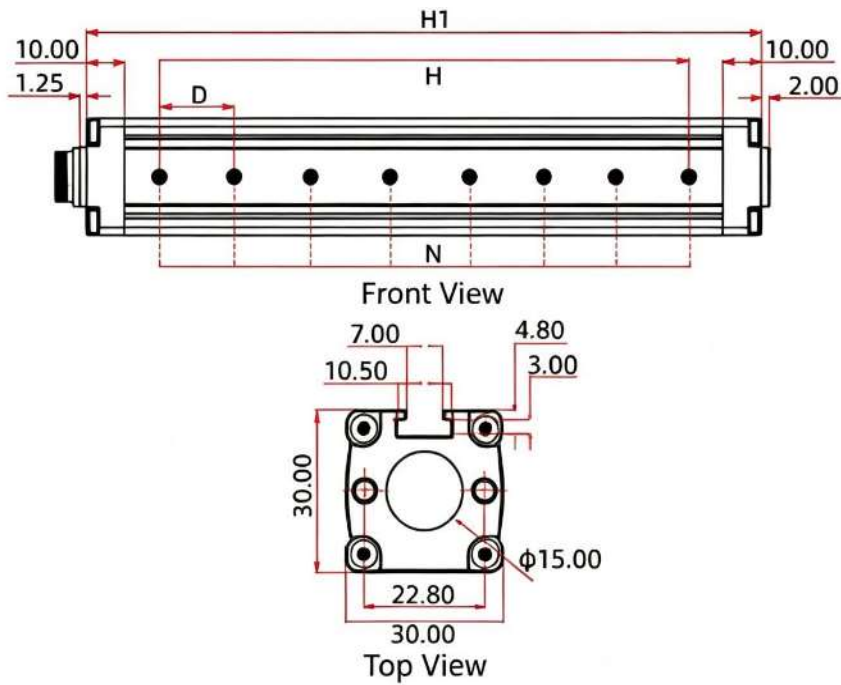
Outline	Model No.	No. of Beams (N)	Beam Pitch (D)	Protective Height (H)	Overall Height (H1)	Sensing Distance (M)	Upper Dead Zone (A)	Lower Dead Zone (B)
	DS-A0420	4	20	60	115	0.2-1.5m	15	35
	DS-A0620	6	20	100	155	0.2-1.5m	15	35
	DS-A0820	8	20	140	195	0.2-1.5m	15	35
	DS-A1020	10	20	180	235	0.2-1.5m	15	35
	DS-A1220	12	20	220	275	0.2-1.5m	15	35
	DS-A1420	14	20	260	315	0.2-1.5m	15	35
	DS-A1620	16	20	300	355	0.2-1.5m	15	35
	DS-A1820	18	20	340	395	0.2-1.5m	15	35
	DS-A2020	20	20	380	435	0.2-1.5m	15	35
	DS-A2220	22	20	420	475	0.2-1.5m	15	35
	DS-A2420	24	20	460	515	0.2-1.5m	15	35
	DS-A2620	26	20	500	555	0.2-1.5m	15	35
	DS-A2820	28	20	540	595	0.2-1.5m	15	35
	DS-A3020	30	20	580	635	0.2-1.5m	15	35
	DS-A3220	32	20	620	675	0.2-1.5m	15	35
	DS-A3420	34	20	660	715	0.2-1.5m	15	35
	DS-A3620	36	20	700	755	0.2-1.5m	15	35
	DS-A3820	38	20	740	795	0.2-1.5m	15	35
	DS-A4020	40	20	780	835	0.2-1.5m	15	35
	DS-A4220	42	20	820	875	0.2-1.5m	15	35
	DS-A4420	44	20	860	915	0.2-1.5m	15	35
	DS-A4620	46	20	900	955	0.2-1.5m	15	35
	DS-A4820	48	20	940	995	0.2-1.5m	15	35
	DS-A5020	50	20	980	1035	0.2-1.5m	15	35
	DS-A5220	52	20	1020	1075	0.2-1.5m	15	35
	DS-A5420	54	20	1060	1115	0.2-1.5m	15	35
	DS-A5620	56	20	1100	1155	0.2-1.5m	15	35
	DS-A5820	58	20	1140	1195	0.2-1.5m	15	35
	DS-A6020	60	20	1180	1235	0.2-1.5m	15	35
	DS-A6220	62	20	1220	1275	0.2-1.5m	15	35
	DS-A6420	64	20	1260	1315	0.2-1.5m	15	35

DS-A Series

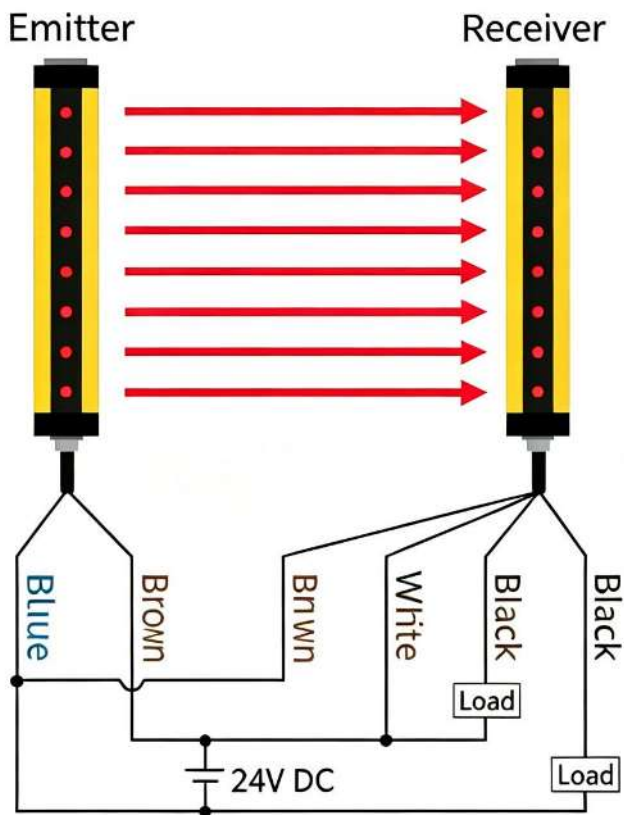
40mm Beam Pitch Model List

Outline	Model No.	No. of Beams (N)	Beam Pitch (D)	Protective Height (H)	Overall Height (H1)	Sensing Distance (M)	Upper Dead Zone (A)	Lower Dead Zone (B)
	DS-A0440	4	40	120	175	0.2-1.5m	15	35
	DS-A0640	6	40	200	265	0.2-1.5m	15	35
	DS-A0840	8	40	280	345	0.2-1.5m	15	35
	DS-A1040	10	40	360	425	0.2-1.5m	15	35
	DS-A1240	12	40	440	505	0.2-1.5m	15	35
	DS-A1440	14	40	520	585	0.2-1.5m	15	35
	DS-A1640	16	40	600	665	0.2-1.5m	15	35
	DS-A1840	18	40	680	745	0.2-1.5m	15	35
	DS-A2040	20	40	760	825	0.2-1.5m	15	35
	DS-A2240	22	40	840	905	0.2-1.5m	15	35
	DS-A2440	24	40	920	985	0.2-1.5m	15	35
	DS-A2640	26	40	1000	1065	0.2-1.5m	15	35
	DS-A2840	28	40	1080	1145	0.2-1.5m	15	35
	DS-A3040	30	40	1160	1225	0.2-1.5m	15	35
	DS-A3240	32	40	1240	1305	0.2-1.5m	15	35
	DS-A3440	34	40	1320	1385	0.2-1.5m	15	35
	DS-A3640	36	40	1400	1465	0.2-1.5m	15	35
	DS-A3840	38	40	1480	1545	0.2-1.5m	15	35
	DS-A4040	40	40	1560	1625	0.2-1.5m	15	35
	DS-A4240	42	40	1640	1705	0.2-1.5m	15	35
	DS-A4440	44	40	1720	1785	0.2-1.5m	15	35
	DS-A4640	46	40	1800	1865	0.2-1.5m	15	35
	DS-A4840	48	40	1880	1945	0.2-1.5m	15	35

Dimension drawing



wiring diagram



Emitter	Emitter	Receiver
	Brown	DC24V+
Receiver	Blue	0V-
	White	0V-
	White	NPN Output
	Black	PNP Output