









Photoelectric Sensors Quick Reference Guide

Family	Overview	Competitive Models	Sensing Modes & Ranges	Operating Voltage	Output Function	Maximum Load Current	Enclosure Ratings	Response Time	Approvals
 <p>Enhanced 50 Series</p>	The Enhanced 50 Series family provides outstanding optical performance and application flexibility in a self-contained, industry-standard package	<ul style="list-style-type: none"> A-B 9000 Series Banner Q45 Omron E3JU Sick W.2000 	<ul style="list-style-type: none"> Thru-Beam: 200 and 500 ft. Reflex: 30 ft. Polarized Reflex: 16 ft. Diffuse Reflective: 5 and 10 ft. Clear Object Detector: 45 in. Infrared Fiber Optic: range varies with fiber Visible Fiber Optic: range varies with fiber 	AC-only: 24 – 240V AC/DC: 12 – 240V AC, 10 – 40V DC	Selectable Light or Dark Operate	DC-only: 250 mA AC/DC: 300 mA to 10A	IP67	DC: 2 mS AC: 15 mS	CSA Approved CE Certified to UL Standard, UL 508
 <p>SM Series</p>	SM Series photoelectric sensors provide high performance and ease of use in an economical, compact package	<ul style="list-style-type: none"> A-B RightSight Banner T18 	<ul style="list-style-type: none"> Thru-Beam: 50 ft. Polarized Reflex: 10 ft. Diffuse Reflective: 8 in. Perfect Prox® Background Rejection: 2 and 4 in. 	DC-only: 10 – 30V AC/DC: 18 – 264V AC, 18 – 50V DC	Light and Dark Operate models available	DC-only: 100 mA (NPN or PNP) AC/DC: 200 mA	NEMA 1, 3, 4, 4X, 6, 6P, 12 and 13, IP68	DC: 1 mS AC: 16 mS	UL Listed C-UL Listed CE
 <p>Comet Series</p>	This high performance, 18 mm tubular sensor family features a wide variety of models in all sensing modes to solve all of your sensing problems.	<ul style="list-style-type: none"> Banner Minibeam 	<ul style="list-style-type: none"> Thru-Beam: 20 and 80 ft. Reflex: 25 ft. Polarized Reflex: 10 and 15 ft. Diffuse Reflective: 8 and 25 in. Focused Diffuse Reflective: 1.6 in. Wide Angle Diffuse Reflective: 6 in. Perfect Prox® Background Rejection: 2 in. (fine spot); 2, 4, 6 and 9 in. Fiber Optic: range varies with fiber 	DC-only: 10 – 30V AC/DC: 20 – 264V AC, 15 – 30V DC AC/DC: 90 – 132V AC, 18 – 50V DC	Selectable Light or Dark Operate	DC-only: 250 mA (NPN), 100 mA (PNP) AC/DC: 300 mA	NEMA 1, 2, 3, 4, 4X, 6, 12 and 13	DC: 1 mS AC: 10 mS, 32 mS (2W)	UL Recognized C-UL Recognized CE
 <p>Prism Series</p>	Prism is a cost-effective line of 18 mm tubular photoelectric sensors with twice the optical gain of other sensors in this product class.	<ul style="list-style-type: none"> Banner Minibeam 	<ul style="list-style-type: none"> Thru-Beam: 20 ft. Reflex: 15 ft. Polarized Reflex: 10 ft. Diffuse Reflective: 8 in. Glass Fiber Optic: range varies with fiber 	DC-only: 10 – 30V AC/DC: 20 – 132V AC, 15 – 30V DC	Light and Dark Operate models available	DC-only: 110 mA AC/DC: 80 mA	NEMA 1, 2, 3, 4, 4X, 6, 12 and 13	3 mS	UL Recognized C-UL Recognized CE
 <p>E58 Harsh Duty Series</p>	E58 Harsh Duty Photoelectric Sensors were designed to withstand your harshest physical, chemical and optical environments, 18 and 30 mm tubular enclosures.	<ul style="list-style-type: none"> Pepperl+Fuchs CP18 Metal Housing 	<ul style="list-style-type: none"> Thru-Beam: 800 ft. Reflex: 59 ft. Polarized Reflex: 34 ft. Perfect Prox® Background Rejection: 2, 4, 6 and 11 in. 	2-Wire Models: AC/DC: 90 – 132V AC, 18 – 50V DC 3/4-Wire Models: AC/DC: 20 – 132V AC, 15 – 30V DC DC-only: 10 – 30V	Light and Dark Operate models available	DC-only: 250 mA (NPN), 100 mA (PNP) AC/DC: 300 mA (100 mA for 18 mm units)	NEMA 1, 2, 3, 3R, 3S, 4, 4X, 6, 6P, 12, 12K and 13	2 to 35 mS	UL Listed C-UL Listed CE
 <p>E51 Series, Modular Limit Switch Style</p>	This versatile sensing family features modular construction, a variety of operating modes and a familiar limit switch style housing.	<ul style="list-style-type: none"> Banner Multibeam (plastic) 	<ul style="list-style-type: none"> Thru-Beam: 300 ft. Reflex: 18 and 35 ft. Polarized Reflex: 15 ft. Diffuse Reflective: 8, 18 and 40 in. Glass Fiber Optic: range varies with fiber 	DC-only: 10 – 30V AC-only: 120V AC/DC: 20 – 264V	N.O. or N.C. (programmable), or N.O./N.C. (complementary)	DC-only: 600 mA AC-only: 1.0 A	NEMA 3, 3S, 4, 4X, 6, 6P and 13; Class I, II, III, Division 2, Groups A, B, C, D, F and G (conduit entry only)	1 to 30 mS	UL Listed CSA Certified CE (where shown in catalog)
 <p>NanoView Series</p>	A family of miniature rectangular photoelectric sensors designed for optimum value and sensing performance for space restricted applications.	<ul style="list-style-type: none"> Banner Q23 Carlo Gavazzi PD32 Keyence PZ-G Omron E3Z Sick Optik W150 	<ul style="list-style-type: none"> Thru-Beam: 4.9 ft. (narrow beam), 19 ft. Polarized Reflex: 8.2 ft. Diffuse Reflective: 13.8 in. Fixed-Focus Diffuse Reflective: 3.9 in. focal point Clear Object Detector: 31.5 in. 	DC-only: 10 – 30V	Selectable Light or Dark Operate	DC-only: 100 mA	IP66 or IP67 by Model	1 mS	UL Listed C-UL Listed CE
 <p>IntelliView Series</p>	A family of compact, high performance specialty photoelectric sensors encompassing a variety of new technologies: color, contrast and UV sensing; field-adjustable foreground/background suppression; analog distance measurement; and laser sensing.	<ul style="list-style-type: none"> Varies by sensing technology 	<ul style="list-style-type: none"> Adjustable Foreground/Background Suppression: 1.2 to 47.2 in. (by model) Analog Distance Measurement: 1.0 to 13.1 ft. (laser), 1.9 to 3.9 in. Color Sensing: 0.19 to 1.77 in. Contrast Sensing: 0.39 in. (ideal) UV Sensing: 0.31 to 0.79 in. 	DC-only: 10 – 30V (suppression, color, contrast, UV sensors) DC-only: 18 – 30V (distance sensors)	Varies by sensor type	DC-only: 100 mA	IP67 (IP66 for suppression models)	Varies by sensor type	UL Listed C-UL Listed CE