



## S50/S51

Extended range of standard “One for All” photoelectric tubular M18 sensors

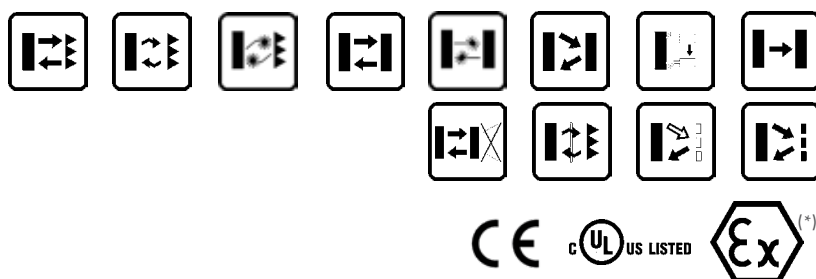
- All optic functions and LASER models
- M18 flat plastic with universal mounting
- Available in M18 metal housing
- Axial or radial optics, cable or connector
- Standard 4-wire NO-NC NPN or PNP output



SENSORS

### APPLICATIONS

- Processing and Packaging machinery
- Conveyor lines, material handling
- Ceramics intralogistics
- Automated warehousing



(\*) Axial models.  
ATEX II 3DG

S50/S51		
Through beam		0...20 m 0...60 m (class 1 LASER) (S50)
Retroreflective (on R2 reflector)		0,1...4 m
Polarized retroreflective		0,1...4 m (S50) 0,1...3 m (S51)
Retroreflective for transparent (on R2 reflector)		0,1...16 m (class 1 LASER) (S50) 0,1...1,3 m (S50)
Diffuse proximity		short distance 0...100 mm medium distance 0...400 mm (S50) 0...450 mm (S51) long distance 0...700 mm long distance LASER 0...350 mm
Fixed focus		100 mm (S50)
Background suppression		50...100 mm (S50)
Through beam with fiber optic		0...100 mm (S50)
Diffuse proximity with fiber optic		0...30 mm (S50)
Contrast sensor		10 ±2 mm
Luminescence sensor		0...20 mm
Power supply	Vdc	10...30 V
	Vac	
	Vac/dc	
	PNP	▪
Output	NPN	▪
	NPN/PNP	
	relay	
	other	
Connection	cable	▪
	connector	▪
	pig-tail	
Approximate dimensions (mm)		M18x 55/68
Housing material		PBT, nickel plated brass
Mechanical protection		IP67

OPTIC FUNCTION	EMISSION	CONNECTION	OUTPUT	MODEL	ORDER No.
Through beam receiver	LED, Axial optic	2m Cable	NPN	S50-MA-2-F01-NN	952021540
		M12 Connector	PNP	S50-MA-2-F01-PP	952021050
	LED, Radial optic	2m Cable	NPN	S50-MA-5-F01-NN	952021700
			PNP	S50-MA-5-F01-PP	952021250
		M12 Connector	NPN	S50-MR-2-F01-NN	952021640
			PNP	S50-MR-2-F01-PP	952021170
	LASER, Axial optic	2m Cable	NPN	S50-MR-5-F01-NN	952021800
			PNP	S50-MR-5-F01-PP	952021370
		M12 Connector	NPN	S50-ML-2-F01-NN	952021840
			PNP	S50-ML-2-F01-PP	952021420
	LASER, Radial optic	2m Cable	NPN	S50-ML-5-F01-NN	952021870
			PNP	S50-ML-5-F01-PP	952021460
M12 Connector		NPN	S50-MH-2-F01-NN	952022030	
		PNP	S50-MH-2-F01-PP	952022020	
M12 Connector		NPN	S50-MH-5-F01-NN	952022050	
		PNP	S50-MH-5-F01-PP	952022040	
Through beam emitter	LED, Axial optic	2m Cable	-	S50-MA-2-G00-XG	952021060
		M12 Connector	-	S50-MA-5-G00-XG	952021260
	LED, Radial optic	2m Cable	-	S50-MR-2-G00-XG	952021180
		M12 Connector	-	S50-MR-5-G00-XG	952021380
	LASER, Axial optic	2m Cable	-	S50-ML-2-G00-XG	952021430
		M12 Connector	-	S50-ML-5-G00-XG	952021470
	LASER, Radial optic	2m Cable	-	S50-MH-2-G00-XG	952022060
		M12 Connector	-	S50-MH-5-G00-XG	952022070
Background suppression	LED, Axial optic	2m Cable	NPN	S50-MA-2-M03-NN	952021550
		M12 Connector	PNP	S50-MA-2-M03-PP	952021070
	LED, Radial optic	M12 Connector	PNP	S50-MA-5-M03-PP	952021270
		2m Cable	PNP	S50-MS-2-M03-PP	952021910
		M12 Connector	PNP	S50-MS-5-M03-PP	952021930
		2m Cable	PNP	S50-MS-2-M03-PP	952021910
Retroreflective for transparent	LED, Axial optic	2m Cable	NPN	S50-MA-2-T01-NN	952021570
			PNP	S50-MA-2-T01-PP	952021090
		M12 Connector	NPN	S50-MA-5-T01-NN	952021730
			PNP	S50-MA-5-T01-PP	952021290
	LED, Radial optic	2m Cable	NPN	S50-MR-2-T01-NN	952021650
			PNP	S50-MR-2-T01-PP	952021190
		M12 Connector	NPN	S50-MR-5-T01-NN	952021810
			PNP	S50-MR-5-T01-PP	952021390
Luminescence	LED, Axial optic	M12 Connector	PNP	S50-MA-5-U03-PP	952021300
Contrast	LED, Axial optic	2m Cable	PNP	S50-MA-2-W03-PP	952021110
		M12 Connector	NPN	S50-MA-5-W03-NN	952021750
			PNP	S50-MA-5-W03-PP	952021310

## S51 MODELS

OPTIC FUNCTION	HOUSING/OPTIC	CONNECTION	OUTPUT	MODEL	ORDER No.
Retroreflective	Nickel Plated Brass, Axial	2m Cable	NPN	S51-MA-2-A00-NK	952701601
			PNP	S51-MA-2-A00-PK	952701541
		M12 Connector	NPN	S51-MA-5-A00-NK	952701801
			PNP	S51-MA-5-A00-PK	952701531
	Nickel Plated Brass, Radial	2m Cable	NPN	S51-MR-2-A00-NK	952701711
			PNP	S51-MR-2-A00-PK	952701651
		M12 Connector	NPN	S51-MR-5-A00-NK	952701911
			PNP	S51-MR-5-A00-PK	952701851
	Plastic, Axial	2m Cable	NPN	S51-PA-2-A00-NK	952701071
			PNP	S51-PA-2-A00-PK	952701001
		M12 Connector	NPN	S51-PA-5-A00-NK	952701331
			PNP	S51-PA-5-A00-PK	952701261
	Plastic, Radial	2m Cable	NPN	S51-PR-2-A00-NK	952701201
			PNP	S51-PR-2-A00-PK	952701131
		M12 Connector	NPN	S51-PR-5-A00-NK	952701461
			PNP	S51-PR-5-A00-PK	952701391

OPTIC FUNCTION	HOUSING/OPTIC	CONNECTION	OUTPUT	MODEL	ORDER No.
Polarized retroreflective	Nickel Plated Brass, Axial	2m Cable	NPN	S51-MA-2-B01-NK	952701611
			PNP	S51-MA-2-B01-PK	952701551
		M12 Connector	NPN	S51-MA-5-B01-NK	952701811
			PNP	S51-MA-5-B01-PK	952701761
	Nickel Plated Brass, Radial	2m Cable	NPN	S51-MR-2-B01-NK	952701721
			PNP	S51-MR-2-B01-PK	952701661
		M12 Connector	NPN	S51-MR-5-B01-NK	952701921
			PNP	S51-MR-5-B01-PK	952701861
	Plastic, Axial	2m Cable	NPN	S51-PA-2-B01-NK	952701081
			PNP	S51-PA-2-B01-PK	952701011
		M12 Connector	NPN	S51-PA-5-B01-NK	952701341
			PNP	S51-PA-5-B01-PK	952701271
Plastic, Radial	2m Cable	NPN	S51-PR-2-B01-NK	952701211	
		PNP	S51-PR-2-B01-PK	952701141	
	M12 Connector	NPN	S51-PR-5-B01-NK	952701471	
		PNP	S51-PR-5-B01-PK	952701401	
Medium diffuse proximity	Nickel Plated Brass, Axial	2m Cable	NPN	S51-MA-2-C01-NK	952701621
			PNP	S51-MA-2-C01-PK	952701561
		M12 Connector	NPN	S51-MA-5-C01-NK	952701821
			PNP	S51-MA-5-C01-PK	952701771
	Nickel Plated Brass, Radial	2m Cable	NPN	S51-MR-2-C01-NK	952701731
			PNP	S51-MR-2-C01-PK	952701671
		M12 Connector	NPN	S51-MR-5-C01-NK	952701931
			PNP	S51-MR-5-C01-PK	952701871
	Plastic, Axial	2m Cable	NPN	S51-PA-2-C01-NK	952701091
			PNP	S51-PA-2-C01-PK	952701021
		M12 Connector	NPN	S51-PA-5-C01-NK	952701351
			PNP	S51-PA-5-C01-PK	952701281
Plastic, Radial	2m Cable	NPN	S51-PR-2-C01-NK	952701221	
		PNP	S51-PR-2-C01-PK	952701151	
	M12 Connector	NPN	S51-PR-5-C01-NK	952701481	
		PNP	S51-PR-5-C01-PK	952701411	
Short diffuse proximity	Nickel Plated Brass, Axial	2m Cable	NPN	S51-MA-2-C10-NK	952701631
			PNP	S51-MA-2-C10-PK	952701571
		M12 Connector	NPN	S51-MA-5-C10-NK	952701831
			PNP	S51-MA-5-C10-PK	952701521
	Nickel Plated Brass, Radial	2m Cable	NPN	S51-MR-2-C10-NK	952701741
			PNP	S51-MR-2-C10-PK	952701681
		M12 Connector	NPN	S51-MR-5-C10-NK	952701941
			PNP	S51-MR-5-C10-PK	952701881
	Plastic, Axial	2m Cable	NPN	S51-PA-2-C10-NK	952701101
			PNP	S51-PA-2-C10-PK	952701031
		M12 Connector	NPN	S51-PA-5-C10-NK	952701361
			PNP	S51-PA-5-C10-PK	952701291
Plastic, Radial	2m Cable	NPN	S51-PR-2-C10-NK	952701231	
		PNP	S51-PR-2-C10-PK	952701161	
	M12 Connector	NPN	S51-PR-5-C10-NK	952701491	
		PNP	S51-PR-5-C10-PK	952701421	
Through beam receiver	Nickel Plated Brass, Axial	2m Cable	NPN	S51-MA-2-F00-NK	952701641
			PNP	S51-MA-2-F00-PK	952701581
		M12 Connector	NPN	S51-MA-5-F00-NK	952701841
			PNP	S51-MA-5-F00-PK	952701781
	Nickel Plated Brass, Radial	2m Cable	NPN	S51-MR-2-F00-NK	952701751
			PNP	S51-MR-2-F00-PK	952701691
		M12 Connector	NPN	S51-MR-5-F00-NK	952701951
			PNP	S51-MR-5-F00-PK	952701891
	Plastic, Axial	2m Cable	NPN	S51-PA-2-F00-NK	952701121
			PNP	S51-PA-2-F00-PK	952701051
		M12 Connector	NPN	S51-PA-5-F00-NK	952701381
			PNP	S51-PA-5-F00-PK	952701311
Plastic, Radial	2m Cable	NPN	S51-PR-2-F00-NK	952701251	
		PNP	S51-PR-2-F00-PK	952701181	
	M12 Connector	NPN	S51-PR-5-F00-NK	952701511	
		PNP	S51-PR-5-F00-PK	952701441	
Through beam emitter	Nickel Plated Brass, Axial	2m Cable	-	S51-MA-2-G00-XG	952701591
		M12 Connector	-	S51-MA-5-G00-XG	952701791
	Nickel Plated Brass, Radial	2m Cable	-	S51-MR-2-G00-XG	952701701
		M12 Connector	-	S51-MR-5-G00-XG	952701901
	Plastic, Axial	2m Cable	-	S51-PA-2-G00-XG	952701061
		M12 Connector	-	S51-PA-5-G00-XG	952701321
Plastic, Radial	2m Cable	-	S51-PR-2-G00-XG	952701191	
	M12 Connector	-	S51-PR-5-G00-XG	952701451	