



S3Z

Advanced line of miniature Asian style of photoelectric sensors

- 50-250 mm background suppression
- 0.7 m proximity, 150 mm with narrow beam
- 4 m polarized retroreflective
- 15 m through beam
- Standard 3-wire output configuration



APPLICATIONS

Housing material Mechanical protection

- -Processing and Packaging machinery
- -Electronics assembling
- -Transportation lines, material handling
- -Automatic warehouses
- -Cosmetics and Pharmaceutical industry
- -Small part detection with maximum accuracy













PC/PBT

IP67







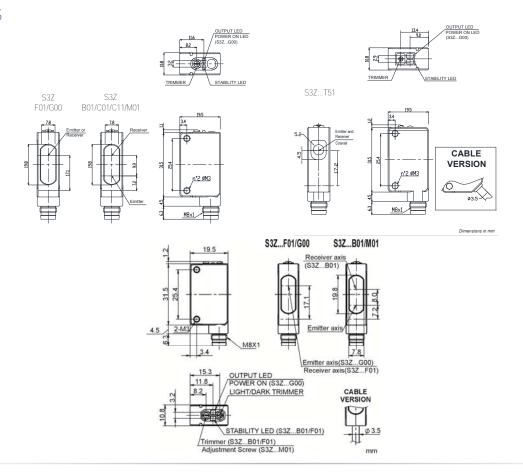


S3Z			
Through beam		015 m 030 m (class 1 LASER)	
Polarized retroreflective		0.054 m 0,310 m (class 1 LASER)	
Retroreflective for transparent (on R2 reflector)		02 m	
Diffuse proximity		0700 mm	
		50150 mm (narrow beam)	
Background suppression		50250 mm 40300 mm (class 1 LASER)	
	Vdc	1030 V	
Power supply	Vac		
	Vac/dc		
	PNP	•	
	NPN	•	
Output	NPN/PNP		
	relay		
	other		
Connection	cable	•	
	connector	•	
	pig-tail		
Approximate dimensions (mm)		11x31x19	



	TECHNICAL DATA		
Consumption (output current excluded)	30 mA max. (LED mod.)		
	35 mA max. (Laser mod.) red LED 650 nm (mod. S3ZT51)		
	red LED 665 nm (mod. S3ZB01/C01)		
Light emission	red LED 670 nm (mod. S3ZM01)		
Light emission	IR LED 850 nm (mod. S3ZC11)		
	IR LED 870 nm (mod. S3ZF01/G00)		
6.00	red Laser 650 nm (mod. S3ZB01/F01/G00/M01)		
Setting	sensitivity trimmer, 6 turns screw (mod. S3ZM01) LIGHT/DARK trimmer (Laser mod.), LIGHT (mod. S3ZPL, -NL),		
Operating mode	DARK (mod. S3ZPD, -ND)		
Indicators	vellow OUTPUT LED, green STABILITY LED (mod. S3ZB01/C01/C11/F01), POWER ON LED (mod. S3ZG00)		
Output	PNP or NPN (short circuit protection)		
Output current	100 mA max.		
Saturation voltage	2 V max. (LED mod.)		
Sacaration voicage	1,5 V max. (Laser mod.) 1 ms max. (LED mod.)		
Response time	250 µs max. (Laser mod.)		
Switching frequency	500 Hz max. (LED mod.)		
Switching frequency	2 kHz max. (Laser mod.)		
Connection	2 m cable Ø 3,5 mm, M8 4-pole connector		
Dielectric strength	500 Vac 1 min., between electronics and housing		
Insulating resistance	>20 MΩ 500 Vdc, between electronics and housing		
Mechanical protection	IP67		
Ambient light rejection	according to EN 60947-5-2		
Vibration	0.5 mm amplitude, 10 55 Hz frequency, for every axis (EN60068-2-6)		
Shock resistance	11 ms (30 G) 6 shock for every axis (EN60068-2-27)		
Housing material	body PBT, indicators cover PC		
Lens material	PMMA, PC (mod. S3ZB01)		
Operating temperature	-25 55 °C (LED mod.), -10 55 °C (Laser mod.)		
Storage temperature	-40 70 °C (LED mod.), -25 70 °C (Laser mod.)		
Weight	50 g max. cable vers. , 10 g max. conn. vers.		

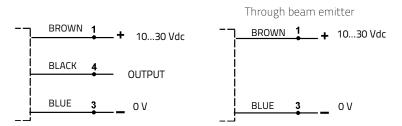
DIMENSIONS



ODATALOGIC

CONNECTIONS

CABLE



M8 CONNECTOR

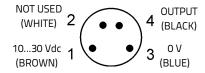
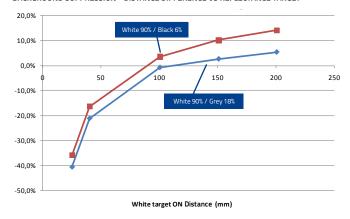
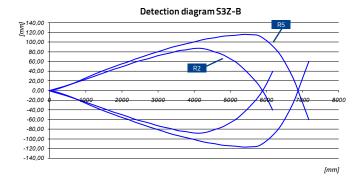


DIAGRAM LED MODELS

BACKGROUND SUPPRESSION - DISTANCE DIFFERENCE VS REFLECTANCE TARGET

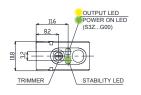


POLARIZED RETROREFLECTIVE - DETECTION AREA

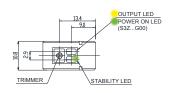


INDICATORS AND SETTINGS

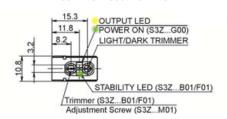
S3Z...F01/G00/B01/C01/M01



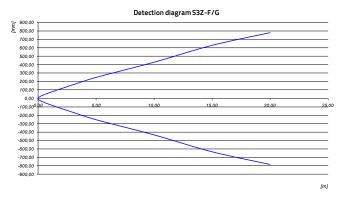
S3Z...T51



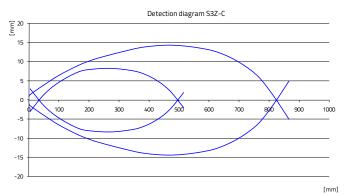
S3Z...F01/G00/B01/M01



THROUGH BEAM - DETECTION AREA

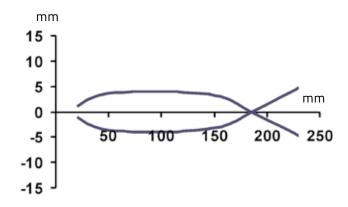


DIFFUSE PROXIMITY - DETECTION AREA

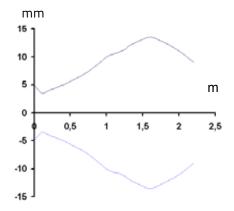


ODATALOGIC

NARROW BEAM PROXIMITY - DETECTION AREA

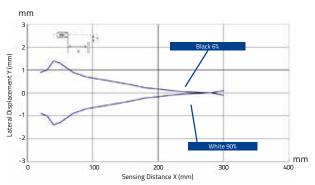


POLARIZED RETROREFLECTIVE FOR TRANSPARENT - DETECTION AREA

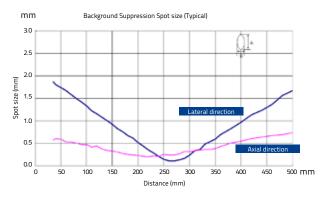


DIAGRAMS LASER MODELS

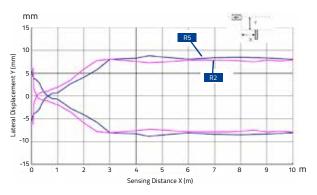
BACKGROUND SUPPRESSION - DETECTION AREA



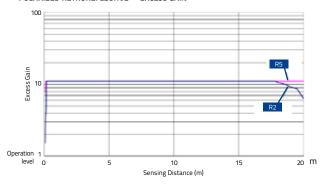
BACKGROUND SUPPRESSION - SPOT DIMENSION



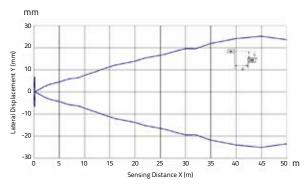
POLARIZED RETROREFLECTIVE - DETECTION AREA



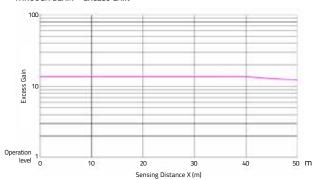
POLARIZED RETROREFLECTIVE - EXCESS GAIN



THROUGH BEAM - DETECTION AREA



THROUGH BEAM - EXCESS GAIN



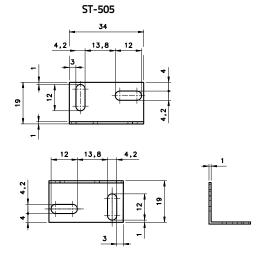


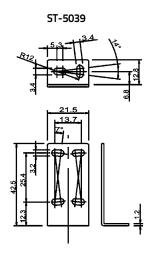
MODEL SELECTION AND ORDER INFORMATION

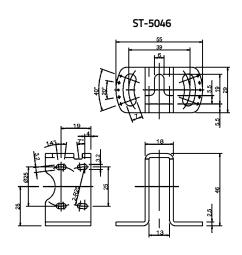
HODEL SELECTION / HILD	OTTELL THE OTTER				
OPTIC FUNCTION	EMISSION	CONNECTION	OUTPUT	MODEL	ORDER No.
		2 m Cable	PNP - LIGHT	S3Z-PR-2-C01-PL	95B010040
		M8 Connector	PNP - LIGHT	S3Z-PR-5-C01-PL	95B010050
Narrow beam diffuse proximity		2 m Cable	PNP - DARK	S3Z-PR-2-C01-PD	95B010060
		M8 Connector	PNP - DARK	S3Z-PR-5-C01-PD	95B010070
	LED	2 m Cable	NPN - LIGHT	S3Z-PR-2-C01-NL	95B010200
		M8 Connector	NPN - LIGHT	S3Z-PR-5-C01-NL	95B010210
		2 m Cable	NPN - DARK	S3Z-PR-2-C01-ND	95B010220
		M8 Connector	NPN - DARK	S3Z-PR-5-C01-ND	95B010230
	LED	2 m Cable	PNP - LIGHT	S3Z-PR-2-C11-PL	95B010001
		M8 Connector	PNP - LIGHT	S3Z-PR-5-C11-PL	95B010011
		2 m Cable	PNP - DARK	S3Z-PR-2-C11-PD	95B010021
I and different annual arity.		M8 Connector	PNP - DARK	S3Z-PR-5-C11-PD	95B010031
Long diffuse proximity		2 m Cable	NPN - LIGHT	S3Z-PR-2-C11-NL	95B010161
		M8 Connector	NPN - LIGHT	S3Z-PR-5-C11-NL	95B010171
		2 m Cable	NPN - DARK	S3Z-PR-2-C11-ND	95B010181
		M8 Connector	NPN - DARK	S3Z-PR-5-C11-ND	95B010191
		2 m Cable	PNP - LIGHT	S3Z-PR-2-B01-PL	95B010081
		M8 Connector	PNP - LIGHT	S3Z-PR-5-B01-PL	95B010091
		2 m Cable	PNP - DARK	S3Z-PR-2-B01-PD	95B010101
	LED	M8 Connector	PNP - DARK	S3Z-PR-5-B01-PD	95B010111
	LED	2 m Cable	NPN - LIGHT	S3Z-PR-2-B01-NL	95B010241
Polarized retroreflective		M8 Connector	NPN - LIGHT	S3Z-PR-5-B01-NL	95B010251
Polarized retroreflective		2 m Cable	NPN - DARK	S3Z-PR-2-B01-ND	95B010261
		M8 Connector	NPN - DARK	S3Z-PR-5-B01-ND	95B010271
		2 m Cable	PNP - DARK/LIGHT	S3Z-PH-2-B01-P	95B010440
	LASED	M8 Connector	PNP - DARK/LIGHT	S3Z-PH-5-B01-P	95B010460
	LASER	2 m Cable	NPN - DARK/LIGHT	S3Z-PH-2-B01-N	95B010450
		M8 Connector	NPN - DARK/LIGHT	S3Z-PH-5-B01-N	95B010470
		2 m Cable	PNP - LIGHT	S3Z-PR-2-FG01-PL	95B010121
		M8 Connector	PNP - LIGHT	S3Z-PR-5-FG01-PL	95B010131
		2 m Cable	PNP - DARK	S3Z-PR-2-FG01-PD	95B010141
	LED	M8 Connector	PNP - DARK	S3Z-PR-5-FG01-PD	95B010151
	LLD	2 m Cable	NPN - LIGHT	S3Z-PR-2-FG01-NL	95B010281
Through beam		M8 Connector	NPN - LIGHT	S3Z-PR-5-FG01-NL	95B010291
modgii bediii		2 m Cable	NPN - DARK	S3Z-PR-2-FG01-ND	95B010301
		M8 Connector	NPN - DARK	S3Z-PR-5-FG01-ND	95B010311
		2 m Cable	PNP - DARK/LIGHT	S3Z-PH-2-FG01-P	95B010520
	LASER	M8 Connector	PNP - DARK/LIGHT	S3Z-PH-5-FG01-P	95B010540
		2 m Cable	NPN - DARK/LIGHT	S3Z-PH-2-FG01-N	95B010530
		M8 Connector	NPN - DARK/LIGHT	S3Z-PH-5-FG01-N	95B010550
		2 m Cable	PNP - LIGHT	S3Z-PR-2-M01-PL	95B010331
	LED	M8 Connector	PNP - LIGHT	S3Z-PR-5-M01-PL	95B010351
	223	2 m Cable	NPN - LIGHT	S3Z-PR-2-M01-NL	95B010321
Background suppression		M8 Connector	NPN - LIGHT	S3Z-PR-5-M01-NL	95B010341
		2 m Cable	PNP - DARK/LIGHT	S3Z-PH-2-M01-P	95B010480
	LASER	M8 Connector	PNP - DARK/LIGHT	S3Z-PH-5-M01-P	95B010500
		2 m Cable	NPN - DARK/LIGHT	S3Z-PH-2-M01-N	95B010490
		M8 Connector	NPN - DARK/LIGHT	S3Z-PH-5-M01-N	95B010510
		2 m Cable	NPN - DARK	S3Z-PR-2-T51-ND	95B010390
Polarized retroreflective	LED	2 m Cable	PNP - DARK	S3Z-PR-2-T51-PD	95B010380
for transparent		M8 Connector	NPN - DARK	S3Z-PR-5-T51-ND	95B010370
		M8 Connector	PNP - DARK	S3Z-PR-5-T51-PD	95B010360

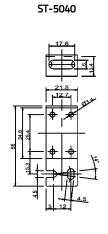
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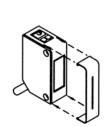
ACCESSORIES

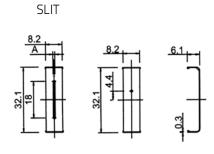
















MODEL	DESCRIPTION	ORDER NO.
ST-505	lateral mounting	95ACC2800
ST-5039	L-shaped fixing bracket	95ACC2270
ST-5040	protection bracket with vertical fixing (only for cable versions)	95ACC2280
ST-5046	protection bracket with horizontal fixing	95ACC2370
S3Z-SLIT1	Ø 0,5 mm slit for through beam	95ACC2470
S3Z-SLIT2	Ø 1 mm slit for through beam	95ACC2480
S3Z-SLIT3	Ø 2 mm slit for through beam	95ACC2490
S3Z-SLIT4	0,5x18 mm slit for through beam	95ACC2500
S3Z-SLIT5	1x18 mm slit for through beam	95ACC2510
S3Z-SLIT6	2x18 mm slit for through beam	95ACC2520
ST-S3Z-M18	S3Z FIX BRK M18 THREADED NOSE	95ACC7850

CABLES

TYPE	DESCRIPTION	LENGTH	MODEL	ORDER No.
Axial M8 Connector	4-pole, grey, P.V.C.	3 m	CS-B1-02-G-03	95A251420
		5 m	CS-B1-02-G-05	95A251430
		7 m	CS-B1-02-G-07	95A251440
		10 m	CS-B1-02-G-10	95A251480
	4-pole, P.U.R.	2 m	CS-B1-02-R-02	95A251620
		5 m	CS-B1-02-R-05	95A251640
Radial M8 Connector	4-pole, grey, P.V.C.	3 m	CS-B2-02-G-03	95A251450
		5 m	CS-B2-02-G-05	95A251460
		7 m	CS-B2-02-G-07	95A251470
		10 m	CS-B2-02-G-10	95A251530
	4-pole, P.U.R.	2 m	CS-B2-02-R-02	95A251630
		5 m	CS-B2-02-R-05	95A251650



