

## S3Z

### ADVANCED LINE OF MINIATURE GLOBAL 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
- Light and dark trimmer models
- Standard 3-wire output configuration

#### APPLICATIONS

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

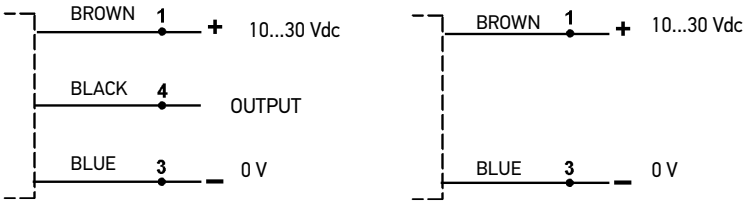


S3Z		
<b>Through beam</b>	0...15 m 0...30 m (class 1 LASER)	
<b>Polarized retroreflective</b>	0.05...4 m 0,3...10 m (class 1 LASER)	
<b>Retroreflective for transparent (on R2 reflector)</b>	0...2 m	
<b>Diffuse proximity</b>	0...700 mm	
<b>Background suppression</b>	50...150 mm (narrow beam) 50...250 mm 40...300 mm (class 1 LASER)	
<b>Power supply</b>	Vdc	10...30 V
	Vac	
	Vac/dc	
<b>Output</b>	PNP	•
	NPN	•
	NPN/PNP	
	relay	
	other	
<b>Connection</b>	cable	•
	connector	•
	pig-tail	
<b>Approximate dimensions (mm)</b>	11x31x19	
<b>Housing material</b>	PC/PBT	
<b>Mechanical protection</b>	IP67	

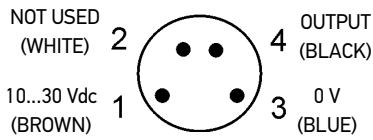


# CONNECTIONS

## CABLE

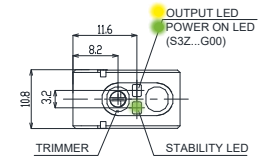


## M8 CONNECTOR

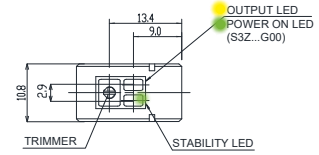


# INDICATORS AND SETTINGS

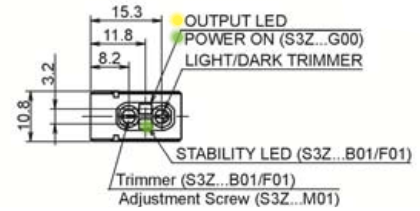
## S3Z...F01/G00/B01/C01/M01



## S3Z...T51

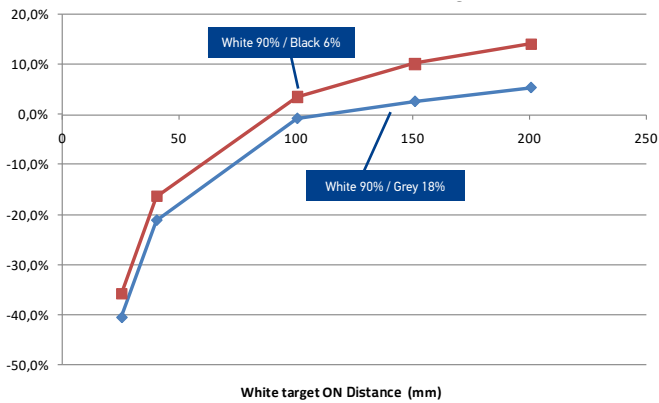


## S3Z...F01/G00/B01/M01/S3Z...-PP, -NN

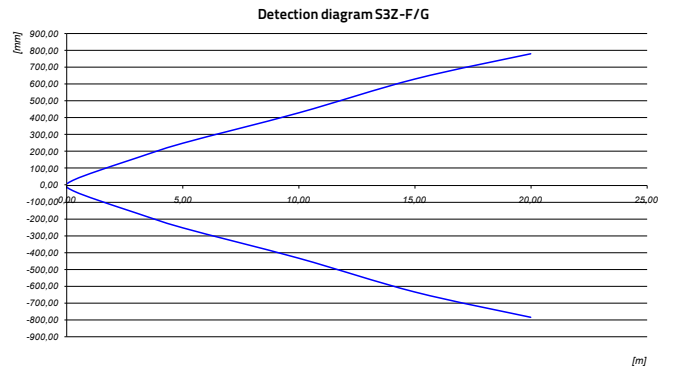


# DIAGRAM LED MODELS

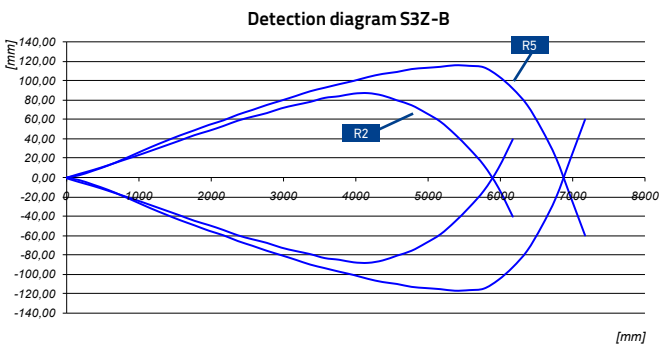
## BACKGROUND SUPPRESSION - DISTANCE DIFFERENCE VS REFLECTANCE TARGET



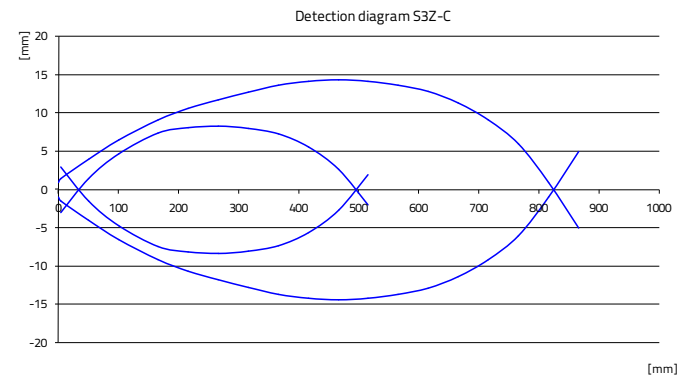
## THROUGH BEAM - DETECTION AREA



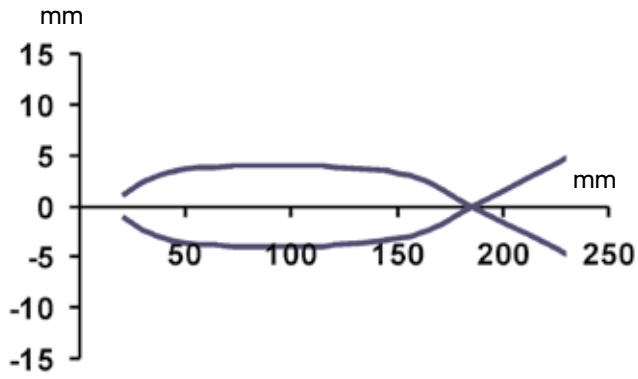
## POLARIZED RETROREFLECTIVE - DETECTION AREA



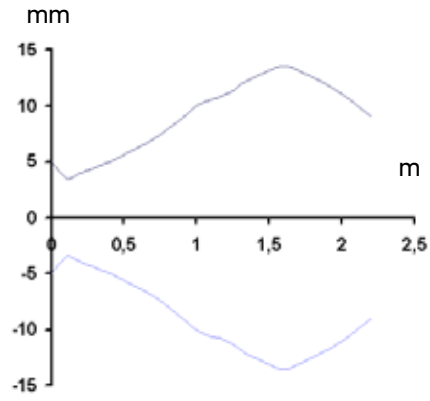
## DIFFUSE PROXIMITY - DETECTION AREA



**NARROW BEAM PROXIMITY - DETECTION AREA**

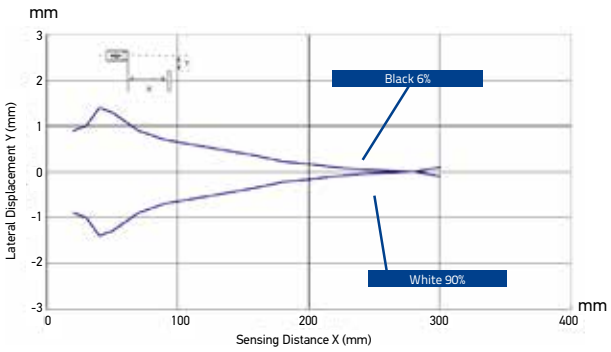


**POLARIZED RETROREFLECTIVE FOR TRANSPARENT - DETECTION AREA**

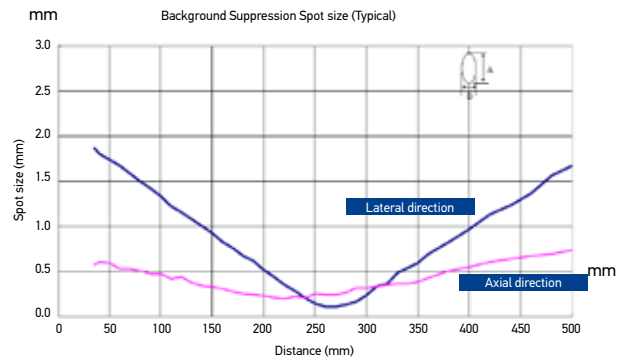


**DIAGRAMS LASER MODELS**

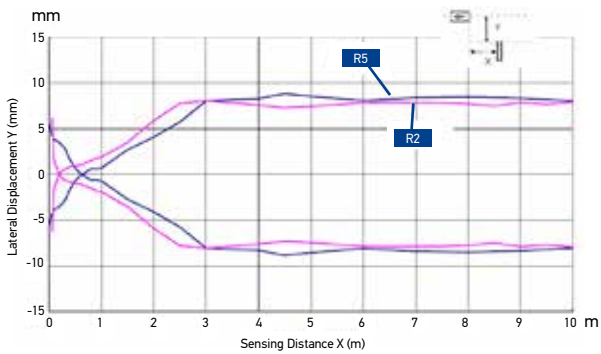
**BACKGROUND SUPPRESSION - DETECTION AREA**



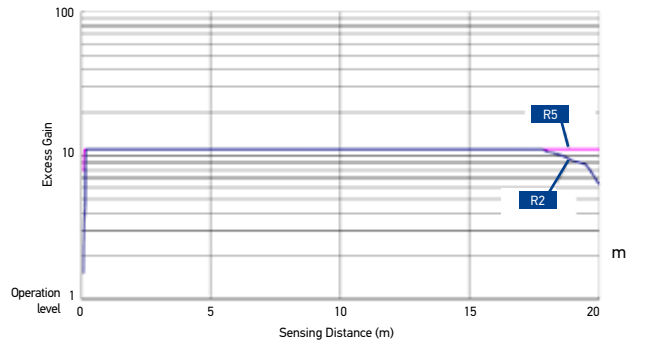
**BACKGROUND SUPPRESSION - SPOT DIMENSION**



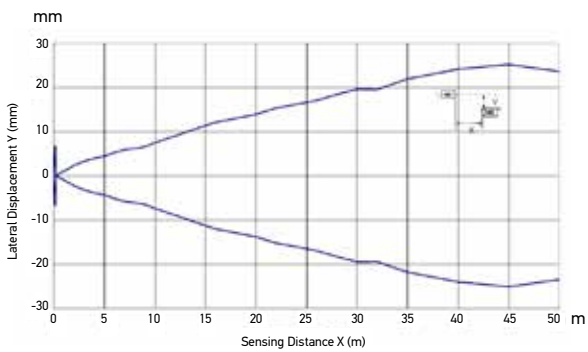
**POLARIZED RETROREFLECTIVE - DETECTION AREA**



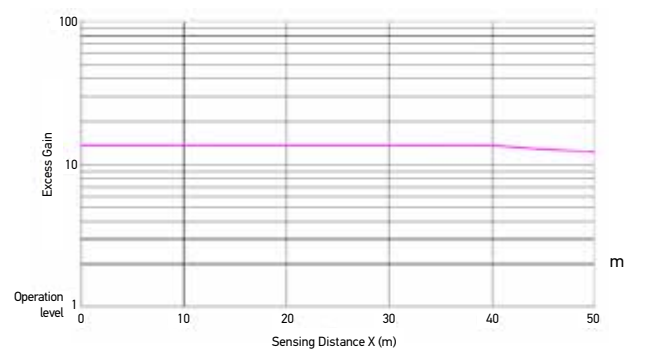
**POLARIZED RETROREFLECTIVE - EXCESS GAIN**



**THROUGH BEAM - DETECTION AREA**



**THROUGH BEAM - EXCESS GAIN**



# MODEL SELECTION AND ORDER INFORMATION

OPTIC FUNCTION	EMISSION	CONNECTION	OUTPUT	MODEL	ORDER No.
Narrow beam diffuse proximity	LED	2 m Cable	PNP - LIGHT	S3Z-PR-2-C01-PL	95B010040
		M8 Connector	PNP - LIGHT	S3Z-PR-5-C01-PL	95B010050
		2 m Cable	PNP - DARK	S3Z-PR-2-C01-PD	95B010060
		M8 Connector	PNP - DARK	S3Z-PR-5-C01-PD	95B010070
		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
		2 m Cable	PNP - LIGHT/DARK	S3Z-PR-2-C01-PP	95B010670
		M8 Connector	PNP - LIGHT/DARK	S3Z-PR-5-C01-PP	95B010690
		2 m Cable	NPN - LIGHT/DARK	S3Z-PR-2-C01-NN	95B010660
		M8 Connector	NPN - LIGHT/DARK	S3Z-PR-5-C01-NN	95B010680
Long diffuse proximity	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
		M8 Connector	PNP - DARK	S3Z-PR-5-C11-PD	95B010031
		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/DARK	S3Z-PR-2-C11-PP	95B010630
		M8 Connector	PNP - LIGHT/DARK	S3Z-PR-5-C11-PP	95B010650
		2 m Cable	NPN - LIGHT/DARK	S3Z-PR-2-C11-NN	95B010620
		M8 Connector	NPN - LIGHT/DARK	S3Z-PR-5-C11-NN	95B010640
Polarized retroreflective	LED	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
		M8 Connector	PNP - DARK	S3Z-PR-5-B01-PD	95B010111
		2 m Cable	NPN - LIGHT	S3Z-PR-2-B01-NL	95B010241
		M8 Connector	NPN - LIGHT	S3Z-PR-5-B01-NL	95B010251
		2 m Cable	NPN - DARK	S3Z-PR-2-B01-ND	95B010261
		M8 Connector	NPN - DARK	S3Z-PR-5-B01-ND	95B010271
	LASER	2 m Cable	PNP - LIGHT/DARK	S3Z-PR-2-B01-PP	95B010590
		M8 Connector	PNP - LIGHT/DARK	S3Z-PR-5-B01-PP	95B010610
		2 m Cable	NPN - LIGHT/DARK	S3Z-PR-2-B01-NN	95B010580
		M8 Connector	NPN - LIGHT/DARK	S3Z-PR-5-B01-NN	95B010600
		2 m Cable	PNP - LIGHT/DARK	S3Z-PH-2-B01-P	95B010440
		M8 Connector	PNP - LIGHT/DARK	S3Z-PH-5-B01-P	95B010460
		2 m Cable	NPN - LIGHT/DARK	S3Z-PH-2-B01-N	95B010450
		M8 Connector	NPN - LIGHT/DARK	S3Z-PH-5-B01-N	95B010470
Through beam	LED	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
		M8 Connector	PNP - DARK	S3Z-PR-5-FG01-PD	95B010151
		2 m Cable	NPN - LIGHT	S3Z-PR-2-FG01-NL	95B010281
		M8 Connector	NPN - LIGHT	S3Z-PR-5-FG01-NL	95B010291
		2 m Cable	NPN - DARK	S3Z-PR-2-FG01-ND	95B010301
		M8 Connector	NPN - DARK	S3Z-PR-5-FG01-ND	95B010311
	LASER	2 m Cable	PNP - LIGHT/DARK	S3Z-PR-2-FG01-PP	95B010710
		M8 Connector	PNP - LIGHT/DARK	S3Z-PR-5-FG01-PP	95B010730
		2 m Cable	NPN - LIGHT/DARK	S3Z-PR-2-FG01-NN	95B010700
		M8 Connector	NPN - LIGHT/DARK	S3Z-PR-5-FG01-NN	95B010720
		2 m Cable	PNP - LIGHT/DARK	S3Z-PH-2-FG01-P	95B010520
		M8 Connector	PNP - LIGHT/DARK	S3Z-PH-5-FG01-P	95B010540
		2 m Cable	NPN - LIGHT/DARK	S3Z-PH-2-FG01-N	95B010530
		M8 Connector	NPN - LIGHT/DARK	S3Z-PH-5-FG01-N	95B010550
Background suPpression	LED	2 m Cable	PNP - LIGHT	S3Z-PR-2-M01-PL	95B010331
		M8 Connector	PNP - LIGHT	S3Z-PR-5-M01-PL	95B010351
		2 m Cable	NPN - LIGHT	S3Z-PR-2-M01-NL	95B010321
		M8 Connector	NPN - LIGHT	S3Z-PR-5-M01-NL	95B010341
		2 m Cable	PNP - LIGHT/DARK	S3Z-PR-2-M01-PP	95B010750
	LASER	M8 Connector	PNP - LIGHT/DARK	S3Z-PR-5-M01-PP	95B010770
		2 m Cable	NPN - LIGHT/DARK	S3Z-PR-2-M01-NN	95B010740
		M8 Connector	NPN - LIGHT/DARK	S3Z-PR-5-M01-NN	95B010760
		2 m Cable	PNP - LIGHT/DARK	S3Z-PH-2-M01-P	95B010480
		M8 Connector	PNP - LIGHT/DARK	S3Z-PH-5-M01-P	95B010500
Polarized retroreflective for transparent	LED	2 m Cable	NPN - DARK	S3Z-PR-2-T51-ND	95B010390
		2 m Cable	PNP - DARK	S3Z-PR-2-T51-PD	95B010380
		M8 Connector	NPN - DARK	S3Z-PR-5-T51-ND	95B010370
		M8 Connector	PNP - DARK	S3Z-PR-5-T51-PD	95B010360

