# **ODATALOGIC**

# S62 SERIES INSTRUCTION MANUAL

# CONTROLS

## OUTPUT LED (vellow) (S62.,A/B/C/F)

The vellow LED ON indicates the output status. STABILITY LED (green) (S62.,A/B/C/F)

The green LED permantely ON indicates a stable operating condition, where the signal received has a safety margin higher than 30% respect to the output switching value. The sensor is ready to function correctly.

# POWER ON LED (green) (S62..G)

The green LED ON indicates the powering status and the laser emission presence.

#### SENSIBILITY TRIMMER (ADJ.) (S62..A/B/C/F)

A mono-turn trimmer adjusts the sensitivity and the sensor operating distance.

Please refer to "SETTING" paragraph for the correct use procedure.

#### DARK/LIGHT TRIMMER (S62..RX/PN)

The LIGHT/DARK mode is selected using a mono-turn trimmer.

LIGHT MODE: clockwise rotation

DARK MODE: counter-clockwise rotation.

WARNING: the maximum mechanical rotation range of the trimmer is 240°. Do not force over of the maximum and minimum positions.

## CONNECTIONS

#### DC models:

S62-PA-2/5-PN						
	BROWN 1	+	1030 VD	с		
	BLUE 3	_ (	οv			
	WHITE 2 o	UT	WHITE	<b>2</b> +		
	BLACK 4	PN.	BLACK			
S62-F	S62-2/5-G					
BROWN	1 1030 VI	С	BROWN	<b>+</b> 10:	30 VD0	
WHITE	N.C. OUTPL	л	WHITE	2 TEST+		
BLACK		Л	BLACK	4 TEST-		
BLUE	3 – ov		BLUE	3 - 0 V		

#### AC models:



Power supply:         1030 VDC-Class 2 (UL508)         24240 VAC / 2460 VDC           Ripple:         2 Vpp max.         10 % max           Current consumption (output current excluded):         3 0 mA         < 3 VA           Outputs:         S62PPNN: PNF or NPN NA./N.C. 30 VDC         Electromechanical SPDT 20 VDC           Outputs:         S62PN:         NPN/PNP; 30 VDC max (short-circuit protection)         Electromechanical SPDT 20 VDC           Output current:         (overload and overvoltage protection)         (resistive load)           Output saturation voltage:         ≤ 2 V         -           Response time:         S62API/C:         500 µs max.         25 ms           Switching frequency:         S62API/C:         1 kHz         20Hz           Emission type:         S62API/C:         1 kHz         20Hz           Se2API/C:         1 kHz         20Hz         S62API (G = 2)           S62API/C:         S62C01 : 90 cm on 90% White target (EG = 2)         S62C01 : 90 cm on 90% White target (EG = 2)           S62API/C/F:         OUTPUT LED (VFELLOW) / STABILITY LED (GREEN)         S62API/C/F:           Adjustment:         Mono-turn sensitivity adjustment timmer Mono-turn sensitivity adjustment timmer         Mono-turn sensitivity adjustment timmer           Abierty Light rejection:		S62-PA-2/5	S62-PA-1			
Ripple:     2 Vpp max.     10 % max       Current consumption (cutput current excluded):     < 3 vA	Power supply:	10 30 VDC- Class 2 (UL508)	24240 VAC / 2460 VDC			
Current consumption (output current excluded):         < 30 mA         < 3 VA           Outputs:         S62PPINN: PNP or NPN N.A./N.C. 30 VDC         Electromechanical SPDT 250 VAC / 30 VDC           Output current:         100 mA max (short-circuit protection)         2 A max.           Output saturation voltage:         ≤ 2 V         -           Response time:         S62P/BIC:         500 µs max.         25 ms           Switching frequency:         S62A/B/C:         500 µs max.         20Hz           Emission type:         S62A/B/C:         1 ms         20Hz           Operating distance (typical values):         S62A/B/C:         1 ms         20Hz           S62A/B/C:         1 ms         20Hz         20Hz           Emission type:         RED (640 nm) (S62A/B/C/G)         20Hz           Operating distance (typical values):         S62A/B/C/F:         0UTPUT LBO (YELLOW) / STABILITY LED (GE = 2)           S62A/B/C/F:         OUTPUT LED (YELLOW) / STABILITY LED (GREEN)           Adjustment:         Mono-turn light/dark trimmer (S62R/PN)           Operating temperature:         -10 55 °C           Storage temperature:         -20 MΩ, 500 VAC, 1 min between electronics and housing           Insulating resistance:         >20 MΩ, 500 VAC, 1 min between electronics and housing     <	Ripple:	2 Vpp max.	10 % max			
S62PVIN:         PNP or NPN N.A./N.C. NPN/PNP; 30 VDC         Electromechanical SPDT 250 VAC / 30 VDC           Output current:         100 mA max (overload and overvoltage protection)         250 VAC / 30 VDC           Output saturation voltage:         ≤ 2 V         -           Response time:         S62RVE         100 mA max (overload and overvoltage protection)         (resistive load)           Switching frequency:         S62RVEC:         1 KHz         20 Hz           Emission type:         RED (640 nm) (S62KP/C(G)         20 Hz           Operating distance (typical values):         S62C01: 90 cm on 90% White target (EG = 2) S62C01: 90 cm on 90% White target (EG = 2) S62C01: 90 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 90 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 5° C           Adjustment:         Mono-turn sensitivi	Current consumption (output current excluded):	< 30 mA	< 3 VA			
Output current:100 mA max (overload and overvoltage protection)2 A max. (resistive load)Output saturation voltage: $\leq 2 V$ -Response time:S62A/B/C:500 µs max. S62F/G:25 msSwitching frequency:S62A/B/C:1 kHz20HzEmission type:RED (640 nm) (S62A/B/C/G)20HzOperating distance (typical values):S62B: 0.18 m on R2 (Ø63 mm reflector) (EG = 2) S62B: 0.18 m on R2 (Ø63 mm reflector) (EG = 2) S62C01: 90 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 90 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 200 cm on 90% White target (EG = 2) S62C1: 90 cm on 90% White target (EG = 2) S62C1: 90 cm on 90% White target (EG = 2) S62C1: 90 cm on 90% White target (EG = 2) S62C1: 90 cm on 90% White target (EG = 2) S62C1: 90 cm on 90% White target (EG = 2) S62C1: 90 cm on 90% White target (EG = 2) S62C2 S62C2 S62C2 Dielectr	Outputs:	S62PP/NN: PNP or NPN N.A./N.C. 30 VDC S62PN: NPN/PNP; 30 VDC max (short-circuit protection)	Electromechanical SPDT 250 VAC / 30 VDC			
Output saturation voltage:         ≤ 2 V         -           Response time:         S62K/B/C:         500 µs max.         25 ms           Switching frequency:         S62K/G:         1 ms         20Hz           Emission type:         RED (640 nm) (S62A/B/C:G)         20Hz           Operating distance (typical values):         S62B: 0.18 m on R2 (Ø63 mm reflector) (EG = 2)         S62A: 13m on R2 (Ø63 mm reflector) (EG = 2)           S62C1:         S62A: 13m on R2 (Ø63 mm reflector) (EG = 2)         S62C1: 200 cm on 90% White target (EG = 2)           S62C1:         S62C1: 200 cm on 90% White target (EG = 2)         S62C1: 200 cm on 90% White target (EG = 2)           S62C1:         S62C1: 200 cm on 90% White target (EG = 2)         S62C1: 200 cm on 90% White target (EG = 2)           S62C1:         S62C1: 200 cm on 90% White target (EG = 2)         S62C1: 200 cm on 90% White target (EG = 2)           S62C1:         S00 cm on 90% White target (EG = 2)         S62C1: 200 cm on 90% White target (EG = 2)           S62G1:         90 Cm on 90% White target (EG = 2)         S62C1: 20 m           S62G1:         90 Cm on 90% White target (EG = 2)         S62C1: 20 m           S62G1:         90 Gm max.         S6225 m           Indicators:         S62G1: 90 VME ON LEO (SREEN)         S62	Output current:	100 mA max (overload and overvoltage protection)	2 A max. (resistive load)			
Response time:         S62A/B/C: S62F/G: S62F/G: S00Hz         25 ms           Switching frequency:         S62F/G: S00Hz         20Hz           Emission type:         RED (640 nm) (S62A/B/C/G)         20Hz           Operating distance (typical values):         S62B: S62B: 0.18 m on R2 (Ø63 mm reflector) (EG = 2) S62C01: 90 cm on 90% White target (EG = 2) S62C01: 90 cm on 90% White target (EG = 2) S62C11: 200 cm on 90% White target (EG = 2) S62C11: 200 cm on 90% White target (EG = 2) S62C11: 200 cm on 90% White target (EG = 2) S62C11: 200 cm on 90% White target (EG = 2) S62C11: 200 cm on 90% White target (EG = 2) S62C1           Adjustment:         S62A/B/C/F: OUTPUT LED (YELLOW) / STABILITY LED (GREEN) S62G: POWER ON LED (GREEN)           Adjustment:         Mono-turn light/dark trimmer (S62RX/PN)           Operating temperature:         -10 55 °C           Storage temperature:         -20 MΩ, 500 VAC, 1 min between electronics and housing Insulating resistance:           Dielectric strength:         500 VAC, 1 min between electronics and housing           Insulating resistance:         > 20 MΩ, 500 VDC between electronics and housing           Ambient light rejection:         according to EN 60947-5-2           Vibrations:         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 (EN60068-2-6)           Shock resistance:         11 ms (30 G) 6 shock fo	Output saturation voltage:	≤ 2 V	-			
Switching frequency:         S62A/B/C: S00Hz         1 KHz 500Hz         20Hz           Emission type:         RED (640 nm) (S62A/B/C/G)            Operating distance (typical values):         S62E1 0.18 m on R2 (Ø63 mm reflector) (EG = 2) S62C1: 90 cm on 90% White target (EG = 2) S62C1: 90 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm on 90% White target (EG = 2) S62C1: 00 cm rs ensitivity adjustment trimmer Mono-turn light/dark trimmer (S62RX/PN)           Operating temperature:         -10	Response time:	<b>S62A/B/C:</b> 500 μs max. <b>S62F/G:</b> 1 ms	25 ms			
Emission type:         RED (640 nm) (S62A/B/C/G)           Operating distance (typical values):         S62B: 0.18 m on R2 (Ø63 mm reflector) (EG = 2) S62A: 13 m on R2 (Ø63 mm reflector) (EG = 2) S62C01: 90 cm on 90% White target (EG = 2) S62C11: 200 cm on 90% White target (EG = 2) S62F/G: 025 m           Indicators:         S62A/B/C/F: OUTPUT LED (YELLOW) / STABILITY LED (GREEN) S62G: POWER ON LED (GREEN)           Adjustment:         Mono-turn sensitivity adjustment trimmer Mono-turn light/dark trimmer (S62RX/PN)           Operating temperature:         -10 55 °C           Storage temperature:         -20 70 °C           Dielectric strength:         500 VAC, 1 min between electronics and housing           Insulting resistance:         > 20 MQ, 500 VDC between electronics and housing           Ambient light rejection:         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 (EN60068-2-6)           Shock resistance:         11 ms (30 G) 6 shock for every axis (EN60068-2-27)           Housing material:         PMMA window, policarbonate lens           Mechanical protection:         2 m cable Ø 4 mm / M12 4-pole connector         2 m cable Ø 5 mm           UL requirements:         2 m cable Ø 4 mm / M12 4-pole connector         2 m cable Ø 5 mm           UL requirements:         0 Conneclis: they are intended to be connected to a power- supply or syst	Switching frequency:	<b>S62A/B/C:</b> 1 kHz <b>S62F/G:</b> 500Hz	20Hz			
Operating distance (typical values):       S62B: 0.18 m on R2 (Ø63 mm reflector) (EG = 2)         S62A: 13m on R2 (Ø63 mm reflector) (EG = 2)       S62C01: 90 cm on 90% White target (EG = 2)         S62C01: 90 cm on 90% White target (EG = 2)       S62C01: 90 cm on 90% White target (EG = 2)         Indicators:       S62C1: 200 cm on 90% White target (EG = 2)         S62C1: 200 cm on 90% White target (EG = 2)       S62C1: 200 cm on 90% White target (EG = 2)         Adjustment:       S62C1: 90 WER ON LED (GREEN)         Adjustment:       Mono-turn sensitivity adjustment trimmer Mono-turn sensitivity adjustment trimmer Mono-turn sensitivity adjustment trimmer Mono-turn ight/dark trimmer (S62RX/PN)         Operating temperature:       -10 55 °C         Storage temperature:       -20 MΩ, 500 VDC between electronics and housing         Insulating resistance:       > 20 MΩ, 500 VDC between electronics and housing         Ambient light rejection:       according to EN 60947-5-2         Vibrations:       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:       PMMA window, policarbonate lens         Mechanical protection:       IP67         Connections:       2 m cable Ø 4 mm / M12 4-pole connector       2 m cable Ø 5 mm         UL requirements: <td>Emission type:</td> <td colspan="4">RED (640 nm) (S62A/B/C/G)</td>	Emission type:	RED (640 nm) (S62A/B/C/G)				
Indicators:         S62A/B/C/F:         OUTPUT LED (YELLOW) / STABILITY LED (GREEN)           Adjustment:         Mono-turn sensitivity adjustment trimmer Mono-turn light/dark trimmer (S62RX/PN)           Operating temperature:         -10 55 °C           Storage temperature:         -20 70 °C           Dielectric strength:         500 VAC, 1 min between electronics and housing           Insulating resistance:         > 20 MΩ, 500 VDC between electronics and housing           Ambient light rejection:         according to EN 60947-5-2           Vibrations:         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:         ABS           Lens material:         PMMA window, policarbonate lens           Mechanical protection:         IP67           Connections:         2 m cable Ø 4 mm / M12 4-pole connector         2 m cable Ø 5 mm           UL requirements:         VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power-supply or system, including filters or air-gaps, of overvoltage category II ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peek of 1.2KV and with a short-circuit power limit at max 500VA. <td>Operating distance (typical values):</td> <td colspan="4">S62B: 0.18 m on R2 (Ø63 mm reflector) (EG = 2)           S62A: 13m on R2 (Ø63 mm reflector) (EG = 2)           S62C01: 90 cm on 90% White target (EG = 2)           S62C11: 200 cm on 90% White target (EG = 2)           S62F/G: 025 m</td>	Operating distance (typical values):	S62B: 0.18 m on R2 (Ø63 mm reflector) (EG = 2)           S62A: 13m on R2 (Ø63 mm reflector) (EG = 2)           S62C01: 90 cm on 90% White target (EG = 2)           S62C11: 200 cm on 90% White target (EG = 2)           S62F/G: 025 m				
Adjustment:         Mono-turn sensitivity adjustment trimmer Mono-turn light/dark trimmer (S62RX/PN)           Operating temperature:         -10 55 °C           Storage temperature:         -20 70 °C           Dielectric strength:         500 VAC, 1 min between electronics and housing           Insulating resistance:         > 20 MΩ, 500 VDC between electronics and housing           Ambient light rejection:         according to EN 60947-5-2           Vibrations:         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 (EN60068-2-7)           Housing material:         ABS           Lens material:         PMMA window, policarbonate lens           Mechanical protection:         1 P67           Connections:         2 m cable Ø 4 mm / M12 4-pole connector           UL requirements:         VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power- supply or system,including filters or air-gaps, of overvoltage category II ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.           Weight:         90 g. max. cable versions / 40 g. max. connectors versions	Indicators:	S62A/B/C/F: OUTPUT LED (YELLOW) / STABILITY LED (GREEN) S62G: POWER ON LED (GREEN)				
Operating temperature:       -10 55 °C         Storage temperature:       -20 70 °C         Dielectric strength:       500 VAC, 1 min between electronics and housing         Insulating resistance:       > 20 MΩ, 500 VDC between electronics and housing         Ambient light rejection:       according to EN 60947-5-2         Vibrations:       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 (EN60068-2-7)         Housing material:       ABS         Lens material:       PMMA window, policarbonate lens         Mechanical protection:       IP67         Connections:       2 m cable Ø 4 mm / M12 4-pole connector       2 m cable Ø 5 mm         VL requirements:       VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power-supply or system, including filters or air-gaps, of overvoltage category II ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.         Weight:       90 g. max. cable versions / 40 g. max. connectors versions	Adjustment:	Mono-turn sensitivity adjustment trimmer Mono-turn light/dark trimmer (S62RX/PN)				
Storage temperature:       -20 70 °C         Dielectric strength:       500 VAC, 1 min between electronics and housing         Insulating resistance:       > 20 MΩ, 500 VDC between electronics and housing         Ambient light rejection:       according to EN 60947-5-2         Vibrations:       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:       ABS         Lens material:       PMMA window, policarbonate lens         Mechanical protection:       IP67         Connections:       2 m cable Ø 4 mm / M12 4-pole connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power-supply or system, including filters or air-gaps, of overvoltage category II ("load level - secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.         Weight:       90 g. max. cable versions / 40 g. max. connectors versions	Operating temperature:	-10 55 °C				
Dielectric strength:       500 VAC, 1 min between electronics and housing         Insulating resistance:       > 20 MΩ, 500 VDC between electronics and housing         Ambient light rejection:       according to EN 60947-5-2         Vibrations:       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:       ABS         Lens material:       PMMA window, policarbonate lens         Mechanical protection:       IP67         Connections:       2 m cable Ø 4 mm / M12 4-pole connector       2 m cable Ø 5 mm         VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power-supply or system, including filters or air-gaps, of overvoltage category II ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.         Weight:       90 g. max. cable versions / 40 g. max. connectors versions	Storage temperature:	-20 70 °C				
Insulating resistance:       > 20 MΩ, 500 VDC between electronics and housing         Ambient light rejection:       according to EN 60947-5-2         Vibrations:       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:       ABS         Lens material:       PMMA window, policarbonate lens         Mechanical protection:       IP67         Connections:       2 m cable Ø 4 mm / M12 4-pole connector       2 m cable Ø 5 mm         VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power-supply or system, including filters or air-gaps, of overvoltage category II ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.         Weight:       90 g. max. cable versions / 40 g. max. connectors versions	Dielectric strength:	500 VAC, 1 min between electronics and housing				
Ambient light rejection:       according to EN 60947-5-2         Vibrations:       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:       ABS         Lens material:       PMMA window, policarbonate lens         Mechanical protection:       IP67         Connections:       2 m cable Ø 4 mm / M12 4-pole connector       2 m cable Ø 5 mm         VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power-supply or system, including filters or air-gaps, of overvoltage category II ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.         Weight:       90 g. max. cable versions / 40 g. max. connectors versions	Insulating resistance:	> 20 M $\Omega$ , 500 VDC between electronics and housing				
Vibrations:       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:       ABS         Lens material:       PMMA window, policarbonate lens         Mechanical protection:       IP67         Connections:       2 m cable Ø 4 mm / M12 4-pole connector       2 m cable Ø 5 mm         VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power-supply or system, including filters or air-gaps, of overvoltage category II ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.         Weight:       90 g. max. cable versions / 40 g. max. connectors versions	Ambient light rejection:	according to EN 60947-5-2				
Shock resistance:       11 ms (30 G) 6 shock for every axis (EN60068-2-27)         Housing material:       ABS         Lens material:       PMMA window, policarbonate lens         Mechanical protection:       IP67         Connections:       2 m cable Ø 4 mm / M12 4-pole connector       2 m cable Ø 5 mm         VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power-supply or system, including filters or air-gaps, of overvoltage category II         UL requirements:       ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.         Weight:       90 g. max. cable versions / 40 g. max. connectors versions	Vibrations:	0.5 mm amplitude, 10 55 Hz frequency, for every axis (EN60068-2-6)				
Housing material:       ABS         Lens material:       PMMA window, policarbonate lens         Mechanical protection:       IP67         Connections:       2 m cable Ø 4 mm / M12 4-pole connector       2 m cable Ø 5 mm         VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power-supply or system, including filters or air-gaps, of overvoltage category II ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.         Weight:       90 g. max. cable versions / 40 g. max. connectors versions	Shock resistance:	11 ms (30 G) 6 shock for every axis (EN60068-2-27)				
Lens material:       PMMA window, policarbonate lens         Mechanical protection:       IP67         Connections:       2 m cable Ø 4 mm / M12 4-pole connector       2 m cable Ø 5 mm         VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power-supply or system, including filters or air-gaps, of overvoltage category II ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.         Weight:       90 g. max. cable versions / 40 g. max. connectors versions	Housing material:	ABS				
Mechanical protection:         IP67           Connections:         2 m cable Ø 4 mm / M12 4-pole connector         2 m cable Ø 5 mm           UL requirements:         VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power-supply or system, including filters or air-gaps, of overvoltage category II ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.           Weight:         90 g. max. cable versions / 40 g. max. connectors versions	Lens material:	PMMA window, policarbonate lens				
Connections:       2 m cable Ø 4 mm / M12 4-pole connector       2 m cable Ø 5 mm         VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power-supply or system, including filters or air-gaps, of overvoltage category II ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.         Weight:       90 g. max. cable versions / 40 g. max. connectors versions	Mechanical protection:	IP6	7			
UL requirements:         VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power-supply or system, including filters or air-gaps, of overvoltage category II ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.           Weight:         90 g. max. cable versions / 40 g. max. connectors versions	Connections:	2 m cable Ø 4 mm / M12 4-pole connecto	r 2 m cable Ø 5 mm			
Weight: 90 g. max. cable versions / 40 g. max. connectors versions	UL requirements:	VDC models: they are intended to be connected to a Class 2 transformer or class 2 power supply. VAC models: these devices shall be connected to a power- supply or system, including filters or air-gaps, of overvoltage category II ("load level – secondary circuit of a protected utility transformer"), suitable to control over-voltages at the maximum "rated impulse withstand voltage peak of 1.2KV and with a short-circuit power limit at max 500VA.				
	Weight:	90 g. max. cable versions / 40	g. max. connectors versions			

**TECHNICAL DATA** 

# SETTINGS

S62..A/B setting: Position the sensor and reflector on opposite sides. Turn the sensitivity trimmer to maximum. Find the points where the yellow LED (OUT) in both vertical and horizontal positions and fix the sensor in the centre between these points. Optimum operation is obtained when both LEDs switch ON. If necessary, reduce sensitivity using the trimmer, in order to detect very small targets. In order to improve alignment, repeat the procedure detailed above whilst progressively reducing the sensitivity.

S62..C setting: Position the sensor and turn the sensitivity trimmer at minimum: the yellow LED is OFF (litch mode). Place the target opposite the sensor. Turn the sensitivity trimmer clockwise until the yellow LED turns ON (Target detected state, pos.A). Remove the target, the yellow LED turns OFF. Turn the trimmer clockwise until the vellow LED turns ON (Background detected state, pos.B).

The trimmer reaches maximum if the background is not detected. Turn the trimmer in intermediate position C. between the two positions A and B. The green LED must be ON.

S62...F/G setting: Position the sensors on opposite sides. Turn the sensitivity trimmer to maximum. Find the points where the yellow LED (OUT) is switched ON and OFF in both vertical and horizontal positions, and fix the sensor in the centre between these points. Optimum operation is obtained when both LEDs switch ON.

If necessary, reduce sensitivity using the trimmer, in order to detect very small targets.

In order to improve alignment, repeat the procedure detailed above whilst progressively reducing the sensitivity.

# DIMENSIONS



# INSTALLATION

The sensor can be positioned by means of the two housing holes using two screws (M4x35 or longer, 1.2Nm maximum tightening torque).



Various orientable fixing brackets to ease the sensor positioning

are available (please refer to the accessories listed in the general catalogue). The operating distance is measured from the front surface of the sensor optics. The M12 connector can be oriented at two different positions using the specific fastening spring and rotating the block of 180°.

# **TEST FUNCTION (S62...G)**

The TEST+ and TEST- inputs can be used to switch off the emitter light and verify that the system is correctly operating: the receiver output should switch when the test is activated while the beam is uninterrupted: the inputs activating voltage range is 12...30 VDC, respecting the polarity.

The emission is switched OFF connecting TEST+ to VDC and TEST- to 0V.

The sensors are NOT safety devices, and so MUST NOT be used in the safety control of the machines where installed.

#### DECLARATION OF CONFORMITY

We Datalogic Automation declare under our sole responsibility that these products are conform to the 2004/108/CE and successive amendments.

# WARRANTY

(X)

ζmax

Datalogic Automation warrants its products to be free from defects. Datalogic Automation will repair or replace, free of charge, any product found to be defective during the warranty period of 36 months from the manufacturing date. This warranty does not cover damage or liability deriving from the improper application of Datalogic Automation products.

#### DATALOGIC AUTOMATION

Via Lavino 265 - 40050 Monte S.Pietro - Bologna - Italy Tel: +39 051 6765611 - Fax: +39 051 6759324 www.automation.datalogic.com e-mail:info.automation.it@datalogic.com

Datalogic Automation cares for the environment: 100% recycled paper. Datalogic Automation reserves the right to make modifications and improvements without prior politication without prior notification.

© 2012 - 2013 Datalogic Automation - ALL RIGHTS RESERVED - Protected to the fullest extent under U.S. and international laws. . Copying, or altering of this document is prohibited without express written consent from Datalogic Automation. Datalogic and the Datalogic logo are registered trademarks of Datalogic S.p.A. in many countries, including the U.S.A. and the E.U.