

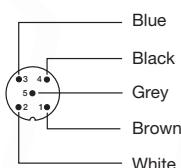
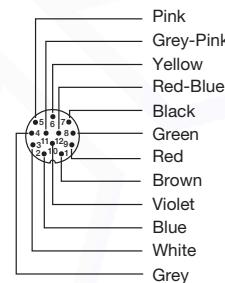
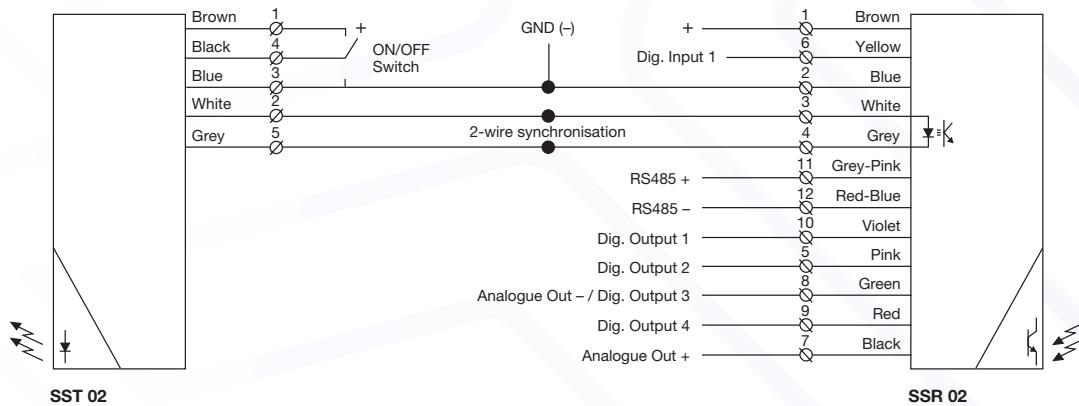


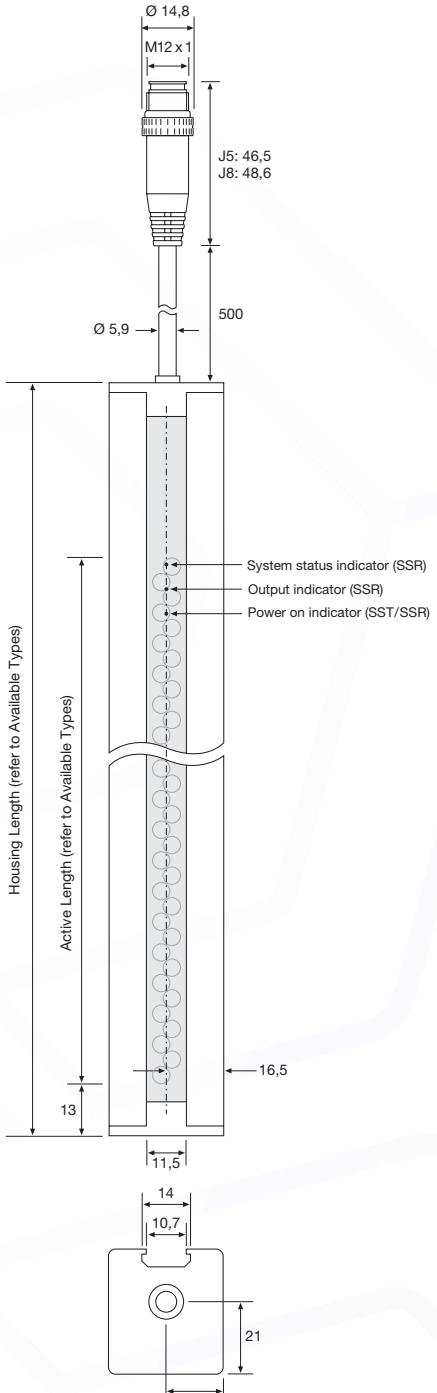
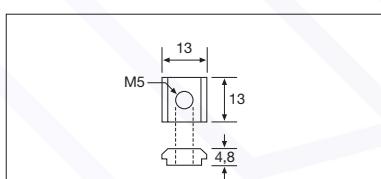


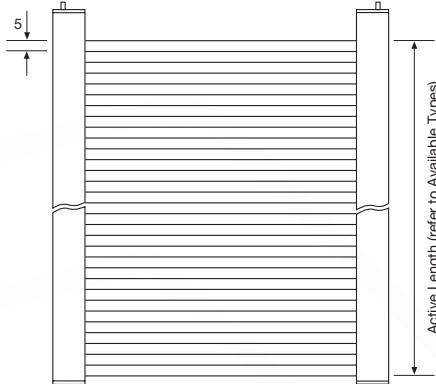


**Connections**

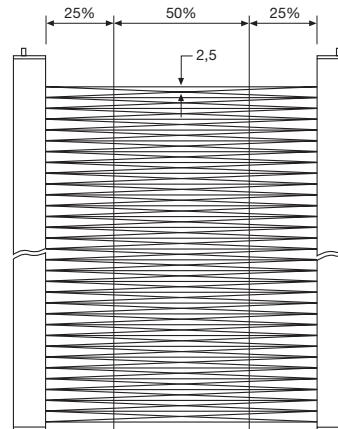
	M12 Plug / Cable	
	SST	SSR
Supply +	Pin 1 / Brown	Pin 1 / Brown
Supply -	Pin 3 / Blue	Pin 2 / Blue
Common sync +	Pin 2 / White	Pin 3 / White
Common sync -	Pin 5 / Grey	Pin 4 / Grey
Test input	Pin 4 / Black	-
Digital input 1	-	Pin 6 / Yellow
RS485 +	-	Pin 11 / Grey-Pink
RS485 -	-	Pin 12 / Red-Blue
Digital output 1	-	Pin 10 / Violet
Digital output 2	-	Pin 5 / Pink
Digital output 3 / Analogue out -	-	Pin 8 / Green
Digital output 4	-	Pin 9 / Red
Analogue out +	-	Pin 7 / Black

**5 pin, M12**Sensor Plug  
(Male)Cable Plug  
(Female)**12 pin, M12**Sensor Plug  
(Male)Cable Plug  
(Female)**Wiring Diagrams**

Dimensions and Descriptions	
 <p>     Ø 14,8      M12 x 1      J5: 46,5      J8: 48,6      Ø 5,9      500      13      16,5      11,5      14      10,7      21      16,5   </p> <p>     Housing Length (refer to Available Types)      Active Length (refer to Available Types)   </p>	 <p>     T-Slot Mounting Fixture      Steel      (2 units included)   </p>
(Units in mm)	

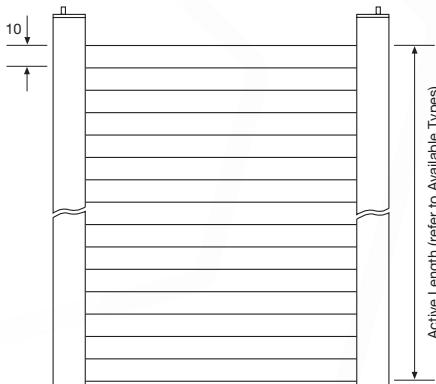
**Beam Patterns**

Parallel Beams

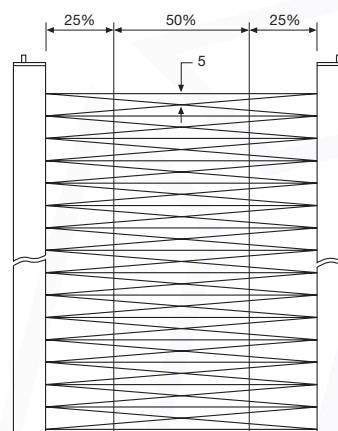


Cross Beams

5 mm channel spacing

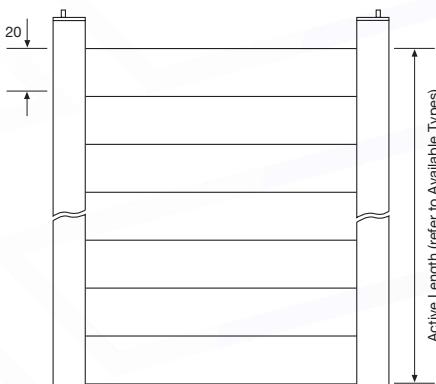


Parallel Beams

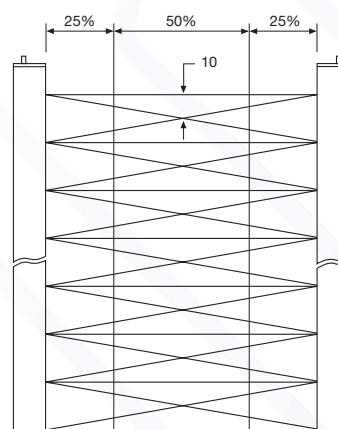


Cross Beams

10 mm channel spacing



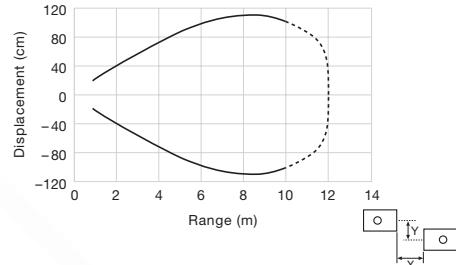
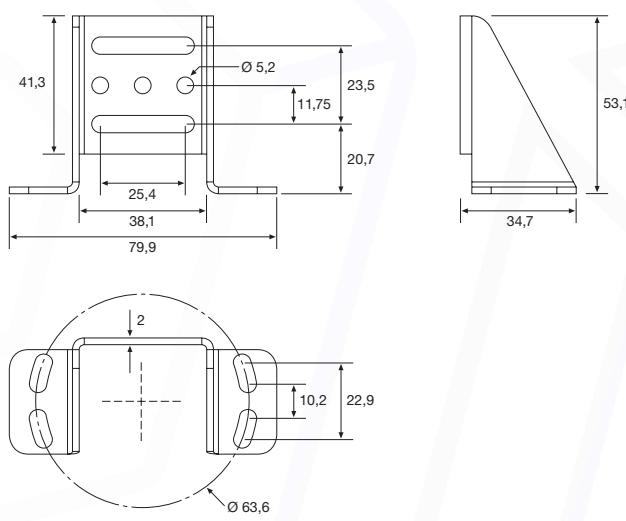
Parallel Beams



Cross Beams

20 mm channel spacing

(Units in mm)

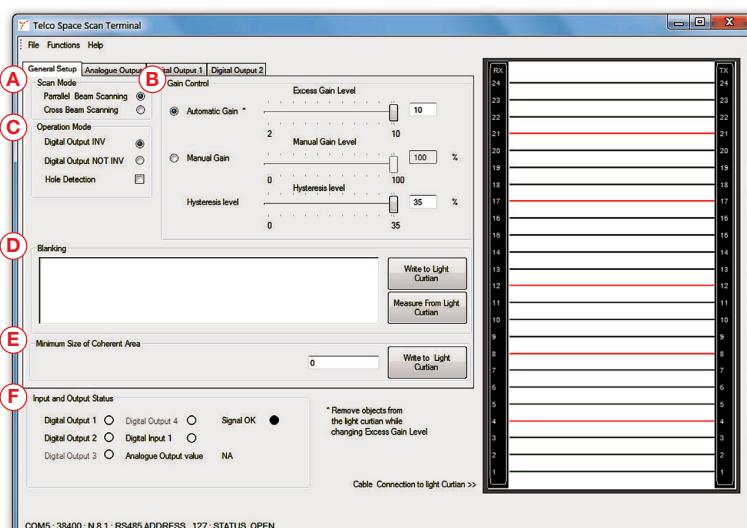
**SPACESCAN™ SERIES**
**SS 02**
**Sensing Characteristics**
**Parallel Displacement**

**Mounting Bracket**


**TR SS53-80 LU**  
 Stainless steel AISI 304  
 (to be ordered separately)

(Units in mm)

Telco reserves the right to change specifications without notice.

**SS 02**
**SPACESCAN™ SERIES**

Spacescan PC Programming and Monitoring			
<b>General Setup</b>			
<b>Scan Mode</b>			
A	Settings	Function	Parameters
1	Parallel Beam Scanning	Scanning with parallel beams	Selected / Not selected
2	Cross Beam Scanning	Scanning with crossed beams	Selected / Not selected
<b>Gain Control</b>			
B	Settings	Function	Parameters
1	Automatic Gain	Select automatic gain adjustment	Selected / Not selected
2	Manual Gain	Select manual gain adjustment	Selected / Not selected
3	Automatic Excess Gain Level	Set the excess gain level of receiver, when used in automatic gain mode	2-10
4	Manual Gain Level	Adjust the gain of the receiver	0-100 %
5	Hysteresis Level	Adjust the hysteresis level	0-35 %
<b>Operation Mode</b>			
C	Settings	Function	Parameters
1	Digital Output INV	Invert the status of all digital outputs	Selected / Not selected
2	Hole Detection	Invert the status of all beams	Selected / Not selected
<b>Blanking</b>			
D	Settings	Function	Parameters
1	Write to Light Curtain	Blanking specified by text is read over to the light curtain	Beam intervals
2	Measure From Light Curtain	Obstructed areas are read from light curtain and written as text in blanking text box	Beam intervals
<b>Minimum Size of Coherent Area</b>			
E	Settings	Function	Parameters
1	Write to Light Curtain	Specifies the maximum size of objects that shall be ignored	Beam number
<b>Input and Output Status</b>			
F	Settings	Description	Indicators
1	Digital Output 1	Indicates status of digital output 1	Yellow
2	Digital Output 2	Indicates status of digital output 2	Yellow
3	Digital Output 3	Indicates status of digital output 3	Yellow
4	Digital Output 4	Indicates status of digital output 4	Yellow
5	Digital Input 1	Indicates status of digital input 1	Green
6	Analogue Output Value	Indication of the analogue output value	Beam Position / Number
7	Signal OK	Indicates a pre-warning of low signal level	Green
<b>PC Software Screenshot</b>			
			

**Spacescan PC Programming and Monitoring****Analogue Output**

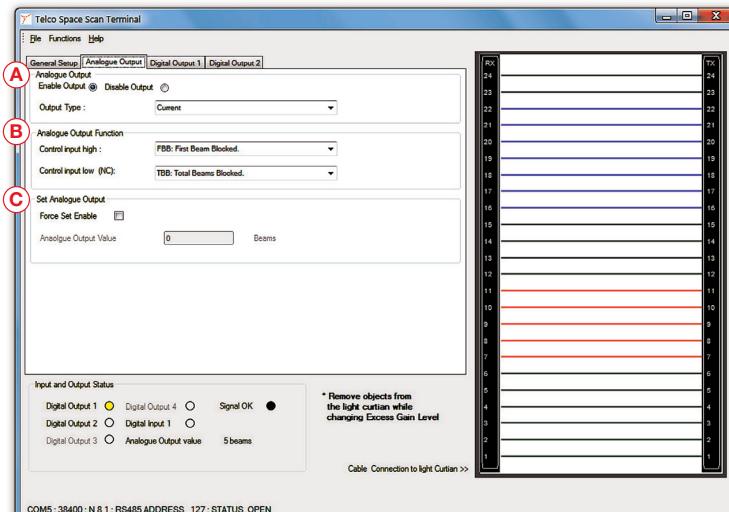
A	Settings	Function	Parameters
1	Enable Output	Output is enabled	Selected / Not selected
2	Disable Output	Output is disabled, i.e. constantly de-energised	Selected / Not selected
3	Output Type	Select between 4-10 mA current or 0-10 V voltage output	Current / Voltage

**Analogue Output Function**

B	Settings	Function	Parameters
1	Control Input High	Select the function that becomes active when control input is high	Function: FBB...
2	Control Input Low	Select the function that becomes active when control input is low	Function: FBB...
3	DIS: Disabled Output	Output is disabled, i.e. constantly de-energised	None
4	FBB: First Beam Blocked	Position of the first beam blocked	Beam position
5	FBM: First Beam Made	Position of the first beam made	Beam position
6	LBB: Last Beam Blocked	Position of the last beam blocked	Beam position
7	LBM: Last Beam Made	Position of the last beam made	Beam position
8	MBB: Middle Beam Blocked	Position of the (FBB+LBB) / 2 rounded to nearest integer	Beam position
9	TBB: Total Beams Blocked	Total number of beams blocked	Beam number
10	TBM: Total Beams Made	Total number of beams made	Beam number
11	CBB: Contiguous Beams Blocked	Reads out the number of beams in the largest group of adjacent beams blocked	Beam number
12	CBM: Contiguous Beams Made	Reads out the number of beams in the largest group of adjacent beams made	Beam number
13	TRN: Number of Transitions	The number of transitions in the beam pattern between made beams and blocked beams	Beam number
14	OD: Outside Dimensions	Reads out LBB - FBB+1, corresponding to the size of a single object contained in the beam pattern, counted in beam breaks	Beam number
15	ID: Inside Dimensions	Reads out the count of beams made between first beam broken and last beam broken. This corresponds to the size of a hole in a single solid object in the light curtain	Beam number
16	CFBB: Contiguous First Beam Blocked	Reads out the number of the first beam in the largest group of adjacent beams blocked	Beam position
17	CLBB: Contiguous Last Beam Blocked	Reads out the number of the last beam in the largest group of adjacent beams blocked	Beam position

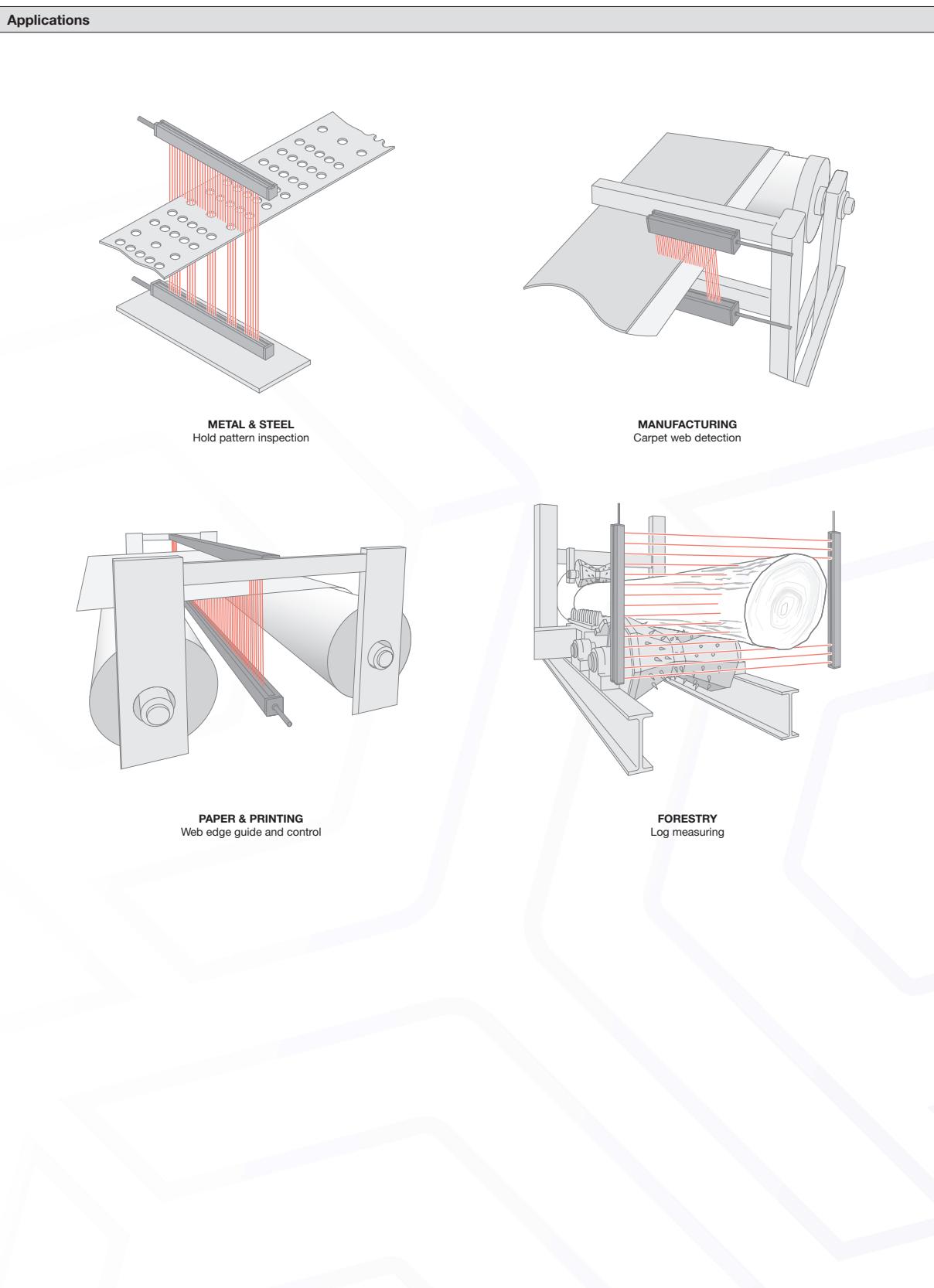
**Analogue Output Function**

C	Settings	Function	Parameters
1	Force Set Enable	Allows the user to write values direct to the analogue output	Selected / Not selected
2	Analogue Output Value	Defines the value of the analogue output	Beam Position / Number

**PC Software Screenshot**



**Applications**



The page contains four detailed technical illustrations showing how SPACESCAN™ Series sensors are used in various industries:

- METAL & STEEL**  
Hold pattern inspection: A sensor unit is shown above two metal plates with circular holes, with red lines indicating the scanning path across the surfaces.
- MANUFACTURING**  
Carpet web detection: A sensor unit is positioned under a conveyor belt carrying a large sheet of material, with red lines showing the detection range.
- PAPER & PRINTING**  
Web edge guide and control: A sensor unit is mounted on a frame above a paper web, with red lines indicating its role in guiding and controlling the edge.
- FORESTRY**  
Log measuring: A sensor unit is shown measuring a large log, with red lines indicating the measurement range along its length.