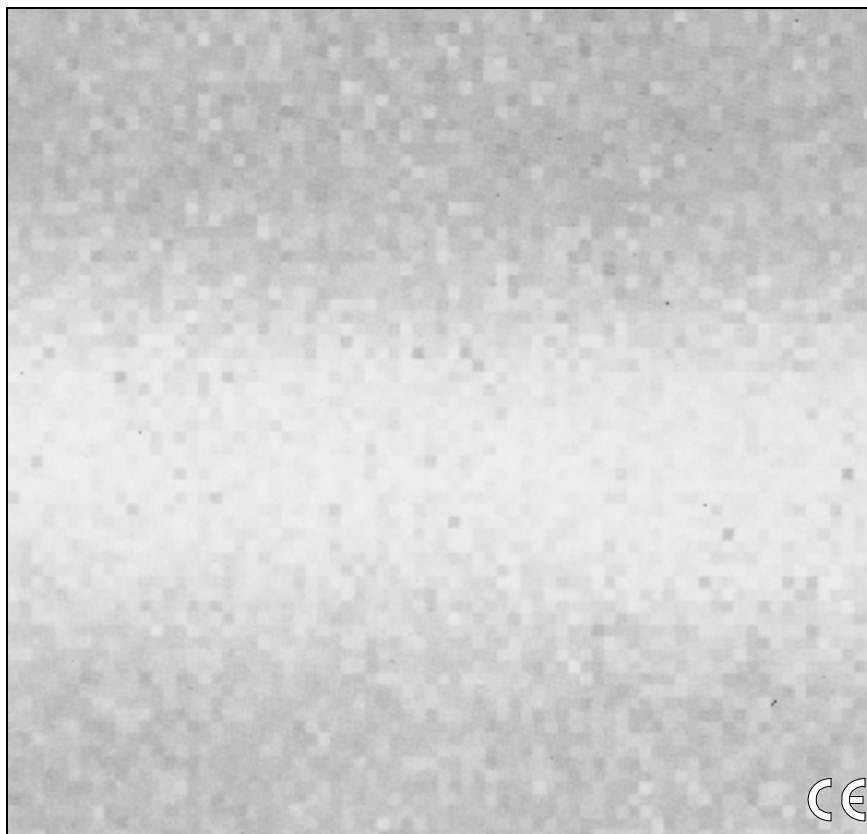




S20 Series

- High performance universal sensors
- Background suppression with μ P teach-in from 10 to 50 cm
- Polarised retroreflex up to 11 m
- 2 m diffused proximity
- 50 m emitter-receiver
- NPN or PNP output
- Cable or M12 connection
- Compact ABS housing with IP66 protection

TECHNICAL DESCRIPTION

The **S20** series offers all the basic optic functions with the best performances.

The series presents models with 50 cm background suppression with μ P based teach-in setting; or trimmer adjustable 11 m polarised retroreflex, 2 m proximity versions, and 50 m emitter - receiver models.

The teach-in key, or the trimmer, are present on the top side of the sensor, together with the yellow LED which indicates the output status and the green LED which indicates the operating status; the latter in the μ P models is a green/red bi-colour LED.

The emission is visible red in the background suppression and polarised retroreflex versions, while it is infrared in the diffused proximity and emitter-receiver versions.

The output can be NPN or PNP, and the connection can be via cable or M12 connector, according to the model. The connection identification is compliant to the EN 60947-5-2 and EN 50044 European regulations.

The compact ABS housing offers good shock resistance and an IP66 protection degree. The connection block can be adjusted either in a straight or right angle position, in order to offer improved adaptability and versatility for mechanical mounting.

APPLICATIONS

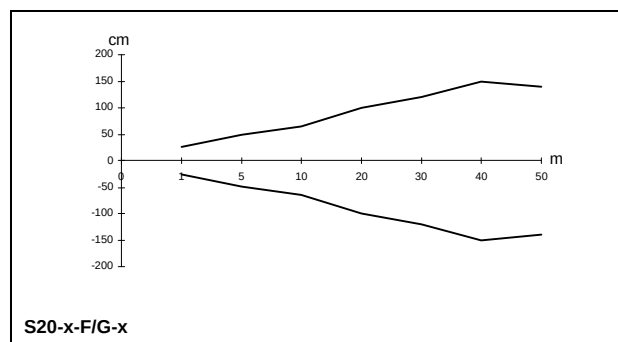
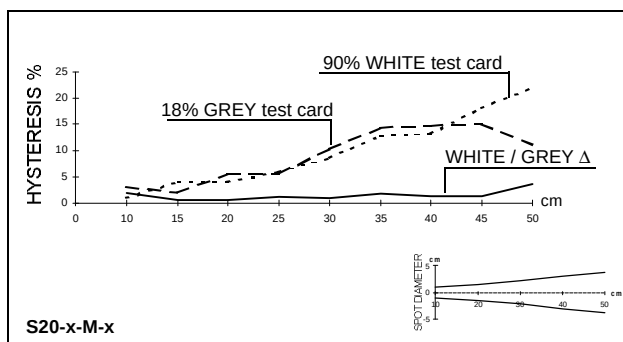
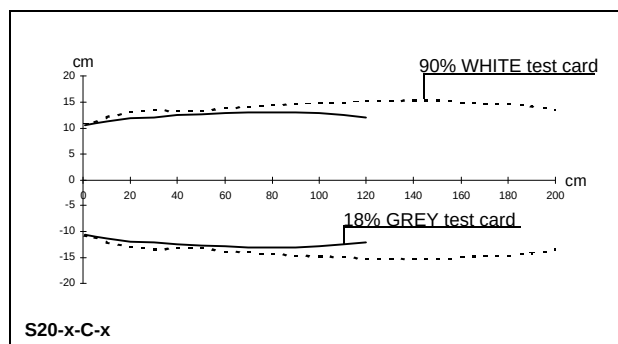
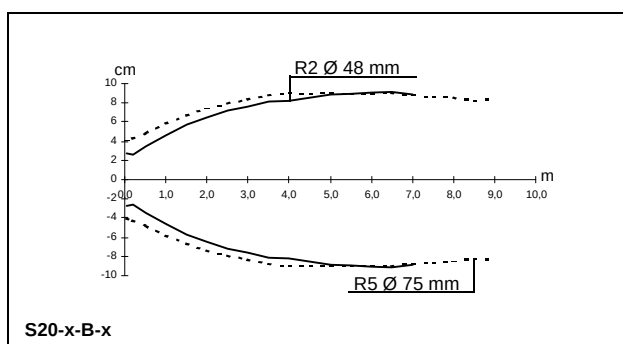
- Automatic material handling
- Automatic warehouse storage and retrieval systems
- Conveyor, sorting and transport
- Automatic guided vehicle systems
- Automatic packaging and packing
- Palletisers and depalletisers



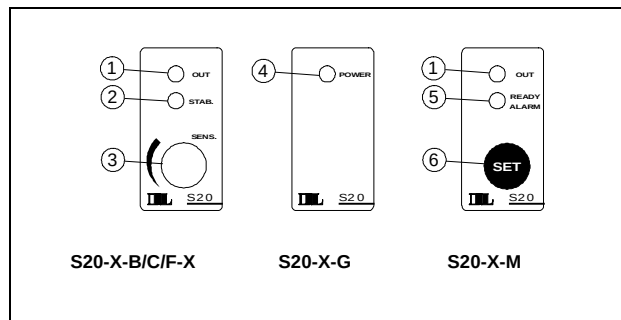
TECHNICAL DATA

	S20-x-B-x	S20-x-C-x	S20-x-F/G-x	S20-x-M-x
Power supply:	10 ÷ 30 Vdc; polarity inversion protection			
Ripple:	2 Vpp max.			
Consumption (output current excluded):	40 mA max.			50 mA max.
Output:	NO and NC NPN or PNP open collector			
Output current:	200 mA with short-circuit protection			
Saturation voltage:	1V max. for NPN versions 2V max. for PNP versions (values at peak output current)			
Response time:	1 ms			
Setting:	sensitivity trimmer			teach-in key
Indicators:	OUT LED (YELLOW) STABILITY LED (GREEN)			OUT LED (yellow) READY LED (green) ALARM LED (red)
Data retention:	-			EEPROM non volatile memory
Operating temperature:	-20°C ÷ 60°C			-10°C ÷ 55°C
Storage temperature:	-20°C ÷ 60°C			
Electrical shock protection:	Class 1 device			
Operating distance:	see table	1 ÷ 200 cm	50 m	10 ÷ 50 cm
Emission type:	RED (660 nm)	INFRARED (880 nm)		RED (660nm)
Ambient light rejection:	EN 60947-5-2			
Housing:	ABS			
Protection degree:	IP66			
Connections:	4 pole M12 connector or 2 m cable with Ø 5 mm			
Dimensions:	55 x 65 x 20 mm			
Weight:	130g. max.			

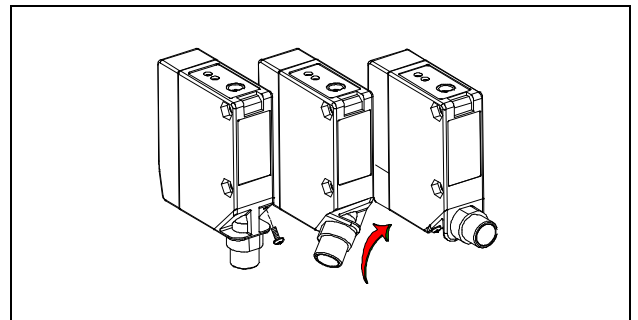
EMISSION DIAGRAMS



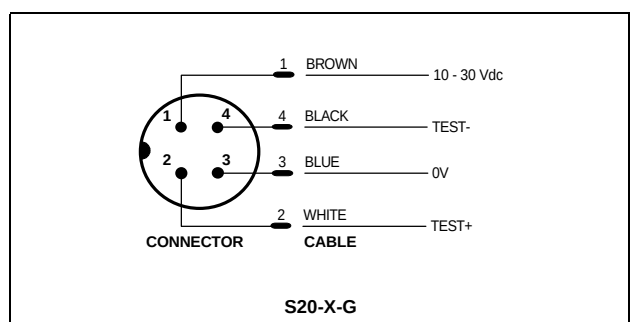
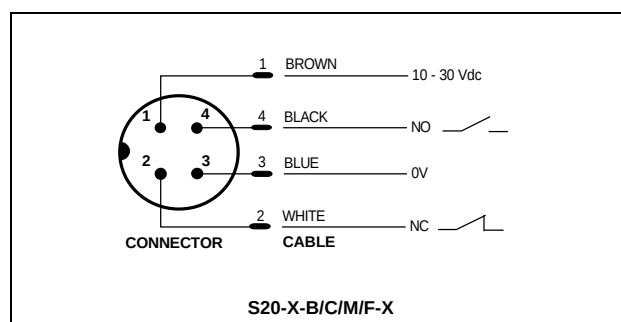
CONTROL PANELS



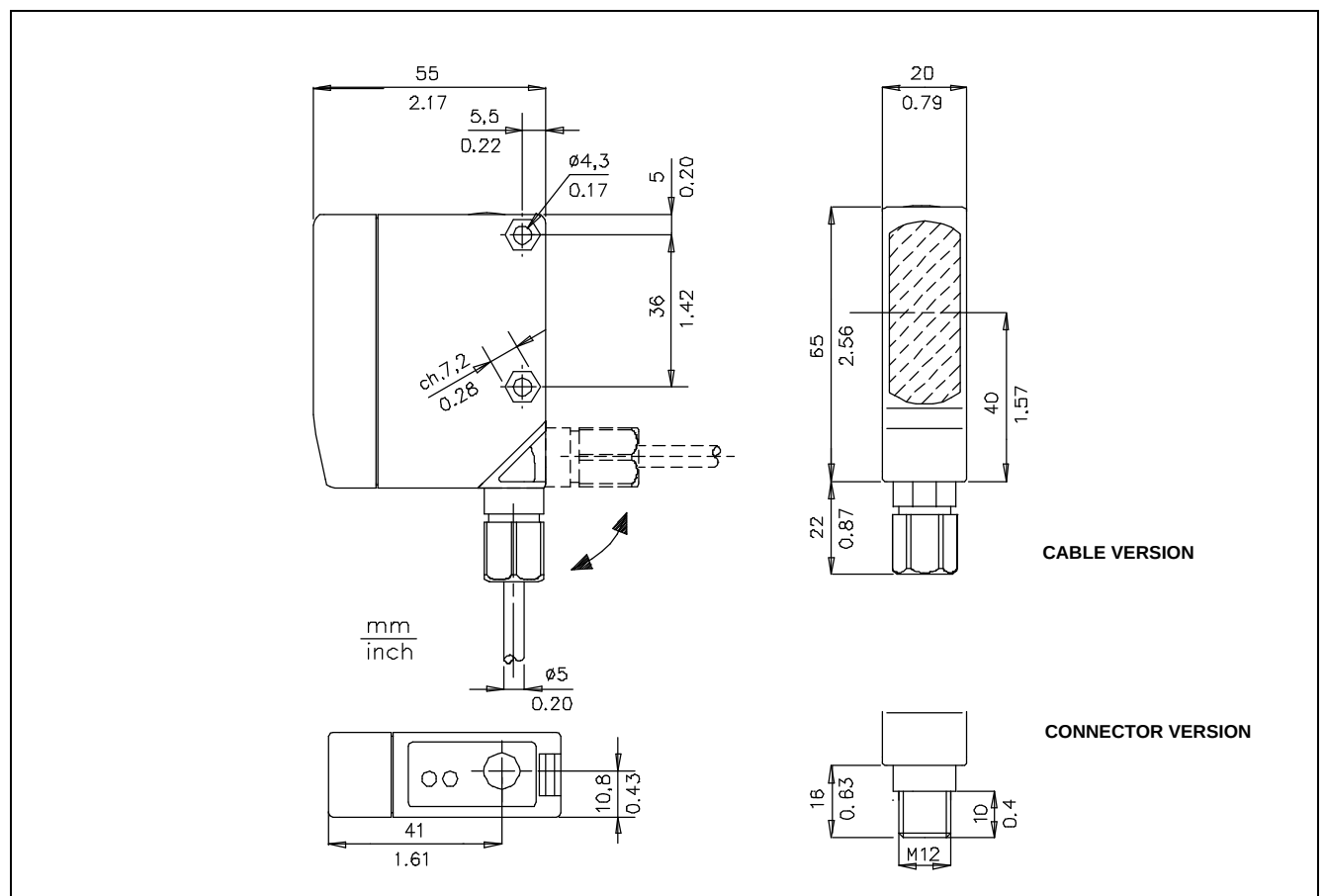
CONNECTION BLOCK



CONNECTIONS



DIMENSIONS



MODELS

MODEL	CONNECTION	OPTIC FUNCTION	OUTPUT	CODE N°
S20-2-B-P	cable	polarised retroreflex	PNP	951351000
S20-2-C-P	cable	diffused proximity	PNP	951351010
S20-2-M-P	cable	background suppression	PNP	951351020
S20-2-F-P	cable	receiver	PNP	951351030
S20-2-G	cable	emitter	-	951351040
S20-2-B-N	cable	polarised retroreflex	NPN	951351050
S20-2-C-N	cable	diffused proximity	NPN	951351060
S20-2-M-N	cable	background suppression	NPN	951351070
S20-2-F-N	cable	receiver	NPN	951351080
S20-5-B-P	M12 conn.	polarised retroreflex	PNP	951351100
S20-5-C-P	M12 conn.	diffused proximity	PNP	951351110
S20-5-M-P	M12 conn.	background suppression	PNP	951351120
S20-5-F-P	M12 conn.	receiver	PNP	951351130
S20-5-G	M12 conn.	emitter	-	951351140
S20-5-B-N	M12 conn.	polarised retroreflex	NPN	951351150
S20-5-C-N	M12 conn.	diffused proximity	NPN	951351160
S20-5-M-N	M12 conn.	background suppression	NPN	951351170
S20-5-F-N	M12 conn.	receiver	NPN	951351180

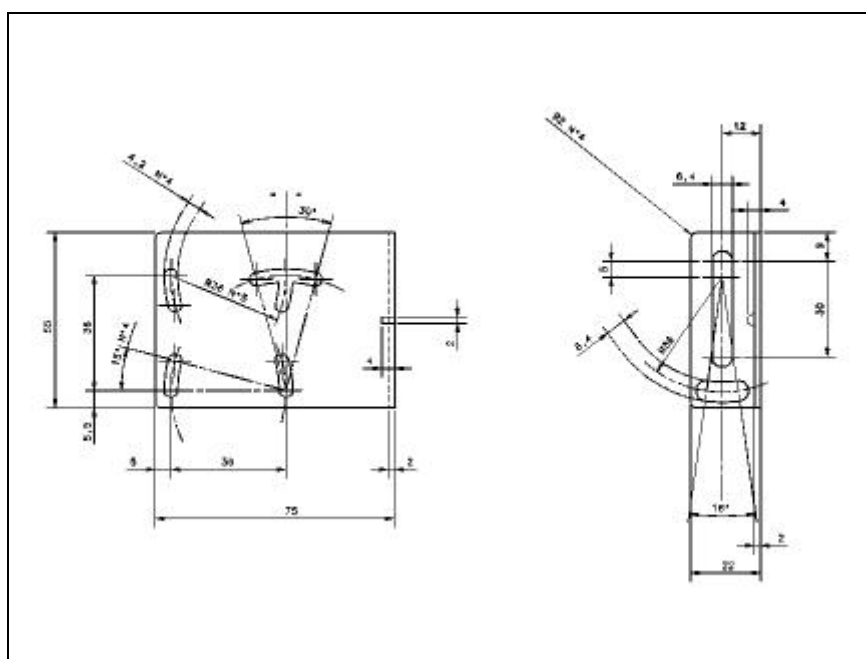
ACCESSORIES

MODEL	DESCRIPTION	CODE N°
R1	Ø 23 mm plastic reflector	S940700023
R2	Ø 48 mm plastic reflector	S940700048
R3	18 x 54 mm plastic reflector	S940700972
R4	51 x 51 mm plastic reflector	95A151010
R5	Ø 75 mm plastic reflector	S940700075
R6	60 x 40,5 mm plastic reflector	95A151020
CRD-263	fixing bracket set (10 pcs)	95ACC1040

TABLE: REFLECTOR /
OPERATING DISTANCE

Reflector	S20-x-B-x
R1	4,2 ± 0,2 m
R2	7 ± 0,2 m
R3	6 ± 0,2 m
R4	9 ± 0,2 m
R5	9 ± 0,2 m
R6	11 ± 0,2 m

FIXING BRACKET



We reserve the right to make modifications and improvements