



## High performance ultrasonic fork sensors for transparent label detection

- Dynamic or static teach models
- Slot size 3mm
- High resolution up to 2 mm label gap
- M8 connector with PNP or NPN output
- M12 connector with PNP/NPN output and external teach-in
- Rugged and sturdy aluminium housing



SENSORS

### APPLICATIONS

- Detection of transparent, opaque, or metallic ink labels
- Double sheet detection
- Adhesive surface detection

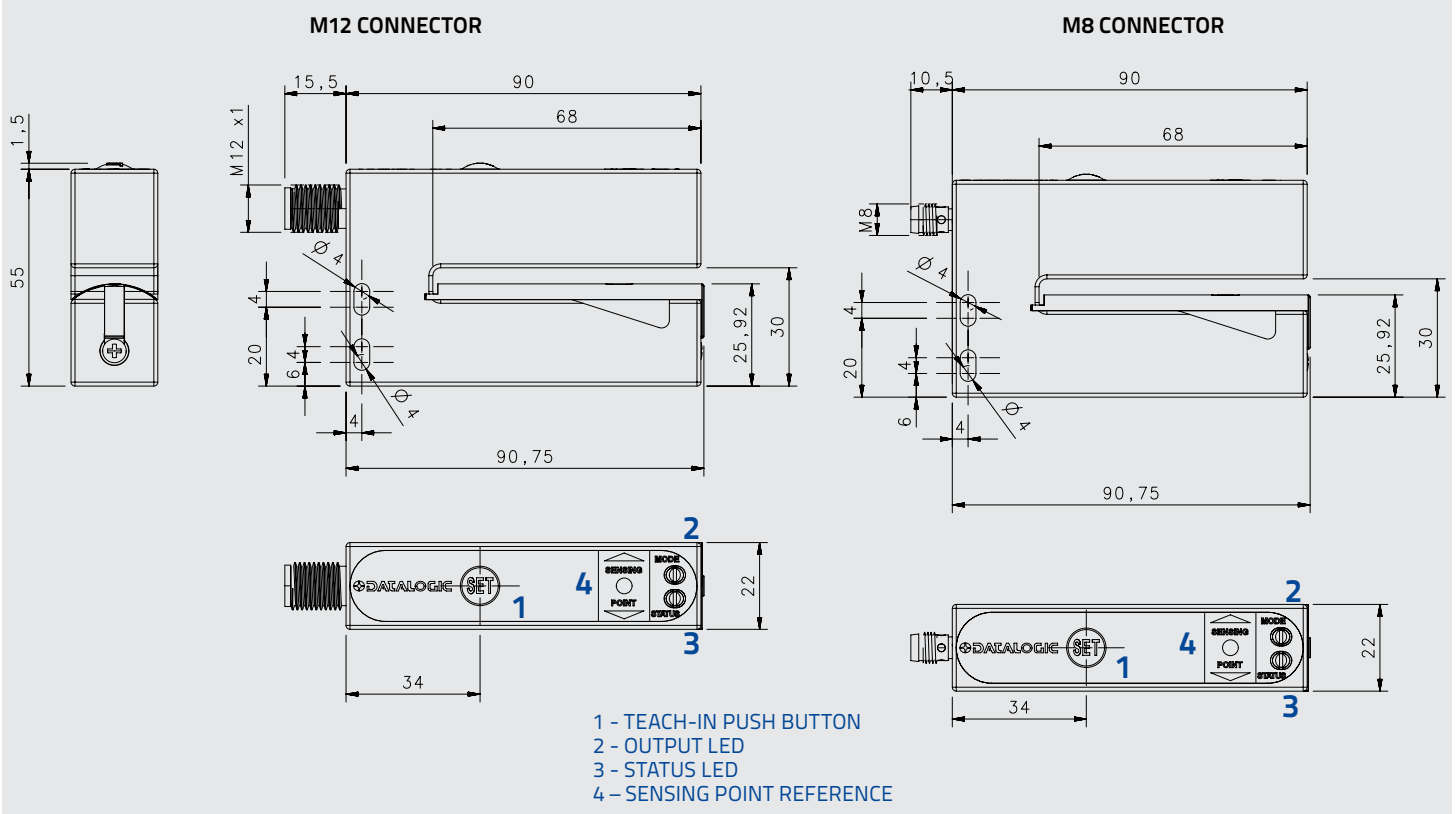


SR23		
Slot width		3 mm
Slot depth		68 mm
Switching frequency		500 hz
Emission type		Ultrasonic 300 KHz
Setting		300 mm
Power supply	Vdc	10...30 Vdc
Output	PNP	•
	NPN	•
Connection	Connector	M12 5-pin
	Connector	M8 4-pin
Approximate dimensions (mm)		90 x 55 x 22
Housing material		Aluminium
Mechanical protection		IP54

## TECHNICAL DATA

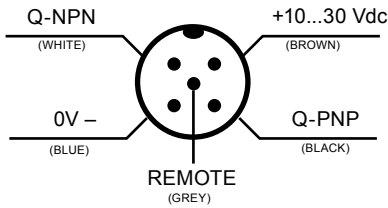
SPECIFICATION	
Minimum pulse time	1ms
Detectable size	> 2mm
Max. tape speed	60m/min
Tape size	> 16mm
Ultrasonic frequency	300 Khz
ELECTRICAL DATA	
Power supply	12...30 Vdc
Current consumption	< 55mA
Ripple	10%
Output current	250 mA max.
Output saturation voltage	< 1,5V @ 100mA
Rising time	0,8 us max
Falling time	1,6 us max
Power On delay	325 ms
Response time	1ms
Switching frequency	500 hz
Output	PNP / NPN
MECHANICAL DATA	
Connection	M12 5 pin
Operating temperature	0 °C ... +50 °C
Storage temperature	-25 °C ... +75 °C
Humidity	35...85% rH non condensing
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	Aluminium
Protection class	IP54
Weight	300g

## DIMENSIONS



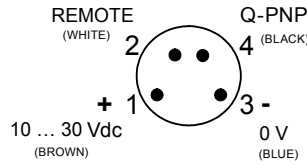
## CONNECTION

### M12 CONNECTOR – 5 PIN

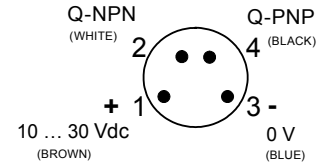


BROWN	1	+10...30 Vdc
WHITE	2	Q-NPN
BLACK	4	Q-PNP
BLUE	3	0 V
GREY	5	TEACH-IN

### M8 CONNECTOR – 8 PIN



BROWN	1	+10...30 Vdc
WHITE	2	REMOTE
BLACK	4	Q-PNP
BLUE	3	0 V



BROWN	1	+10...30 Vdc
WHITE	2	Q-NPN
BLACK	4	Q-PNP
BLUE	3	0 V

## SETTINGS

STEP	USER ACTION DYNAMIC SETTING	LED INTERFACE	USER ACTION STATIC SETTING	LED INTERFACE	SENSOR ACTION
1	Place the label in the fork	It shows the output status	Place the label in the fork	It shows the output status	In working mode
2	press the button for more than 1s	It is turned off and after 1s it is turned on	Press the TEACH Button for more than 1s.	It turns OFF and ON	It measures the time of the button pressure
3	Release the button	It blinks	Release before 4s.	It turns OFF and blinks	It start the calibration
4	Run the tape for some labels	It blinks	Wait the LED blinking	LED is blinking	It searches the bestworking condition
5	To close procedure for D.on, press the button briefly	It blinks	To close and store the calibration, wait the end of the led blinking	LED is blinking then Turns ON	It waits 3s. It stores the new values Then it returns in working mode
	To close procedure for L.on, press the button more than 5 s	After 5 s it blinks slowly	To close WITHOUT store the calibration, press briefly the TEACH-IN within 3s.	It turns OFF and ON	It restore the previous setting
6	Release the button	It shows the output status			

## MODEL SELECTION AND ORDER INFORMATION

ADJUSTMENT	OUTPUT	CONNECTION	MODEL	ORDER No.
Dynamic Teach-in	PNP/NPN+EXT	M12 5 pin	SRX3-5-US-M12-PNH	953171000
Static Teach-in	PNP/NPN+EXT	M12 5 pin	SRX3-5-US-3-M12-PNH	953171010
Dynamic Teach-in	PNP+EXT	M8 4 pin	SRX3-6-US-M8-PH	953171020
Static Teach-in	PNP+EXT	M8 4 pin	SRX3-6-US-3-M8-PH	953171030
Dynamic Teach-in	PNP/NPN	M8 4 pin	SRX3-6-US-M8-PN	953171040
Static Teach-in	PNP/NPN	M8 4 pin	SRX3-6-US-3-M8-PN	953171050

## CABLES

TYPE	No. Of POLES	SHEAT	LENGTH	DESCRIPTION	ORDER No.
Female M12 Connector (Axial)	5-poles	Grey, P.V.C.	3 m	CS-A1-03-G-03	95ACC2110
			5 m	CS-A1-03-G-05	95ACC2120
			10 m	CS-A1-03-G-10	95ACC2140
		Black, P.V.C. UL	3	CS-A1-03-U-03	95ASE1170
			5	CS-A1-03-U-05	95ASE1180
			10	CS-A1-03-U-10	95ASE1190
M8 Connector (Axial)	4-poles	Grey, P.V.C.	3 m	CS-B-1-02-G-03	95A251420
			5 m	CS-B-1-02-G-05	95A251430
			7 m	CS-B-1-02-G-07	95A251440
			10 m	CS-B-1-02-G-10	95A251480
		P.U.R.	2 m	CS-B-1-02-R-02	95A251500
			5 m	CS-B-1-02-R-05	95A251520
M8 Connector (radial 90°)	4-poles	Grey, P.V.C.	3 m	CS-B2-02-G-03	95A251450
			5 m	CS-B2-02-G-05	95A251480
			7 m	CS-B2-02-G-07	95A251470
		P.U.R.	5 m	CS-B2-02-R-05	95ACC2110