UNIVERSAL MINI SENSORS

MINIATURE SENSOR BASIC LINE



- ***Diffuse or fixed focus proximity for background suppression***
- ***Polarised retroreflex and emitter-receiver with narrow beam***
- ***Models with trimmer setting***
- ***Double NO-NC NPN or PNP output***

S41 SERIES

The **S41** series offers a basic line of photoelectric sensors in a miniature housing, ideal for applications that require reduced dimensions and costs.
The optic functions include a diffuse proximity adjustable from 0 to 35 cm and a 11 cm fixed focus proximity suitable for background suppression; 2.5 m polarised retroreflex, 1 m retroreflex for transparents and 6 m through beam are available for longer operating distances; the latter is also available in a narrow beam emitter version that allows to place sensors side by side without interferences.
The LED emission is red for the fixed focus proximity and infrared for the other models. Two LED indicators are visible on the sensors: a yellow output LED and a green switching stability LED; the diffuse proximity models and a polarised retroreflex version also present a sensitivity adjustment trimmer.
The normally open and normally closed outputs are both present on different poles; cable or M8 connection is offered according to the model chosen.

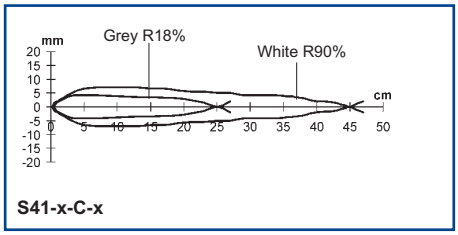
DATASENSOR
value through detection

TECHNICAL DATA

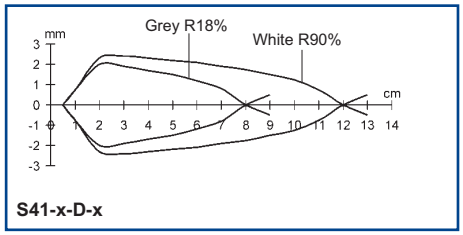
Power supply: ..... 10 **...** 30 Vdc, reverse polarity protection
Consumption: ..... 35 mA max.
Light emission: ..... red LED 660 nm (B, D, P, T vers.)
infrared LED 880 nm (C, G, H vers.)
Diffuse proximity operating distance: ..... 0.2 **...** 35 cm (C vers.)
Fixed focus operating distance: ..... 11 cm ± 10 % (D vers.)
Polarised retroreflex operating distance: .. 0.1 **...** 2.5 m (on R2)
Retroreflex transparents op. distance: ..... 0.1 **...** 0.7 m (on R2)
Through beam operating distance: ..... 0.1 **...** 6 m (G vers.), 0.1 **...** 1.5 m (H vers.)
Setting: ..... sensitivity trimmer (B, C, T vers.)
Indicators: ..... yellow OUTPUT LED
green POWER LED (G, H vers.)
green STABILITY LED (B, C, D, F, P vers.)
Output type: ..... NC-NO NPN or PNP
Saturation voltage: ..... 2 V max.
Output current: ..... 100 mA max., short-circuit protection
Response time: ..... 1 ms max.
Switching frequency: ..... 500 Hz max.
Connection: ..... M8 4-pole connector
2 m Ø 3.5 mm cable
Electrical protection: ..... class 2
Mechanical protection: ..... IP67 (P, D, F, G, H vers.)
IP66 (B, C, T vers.)
Housing material: ..... ABS
Lens material: ..... PMMA plastic
Weight: ..... 10 g max. (connector vers.)
40 g max. (cable vers.)
Operating temperature: ..... -25 **...** +55°C
Storage temperature: ..... -25 **...** +70°C
Reference standard: ..... EN 60947-5-2
Certifications: ..... CE cULus LISTED Ex II3D

The operating distances indicate the detection distance with excess gain 2.

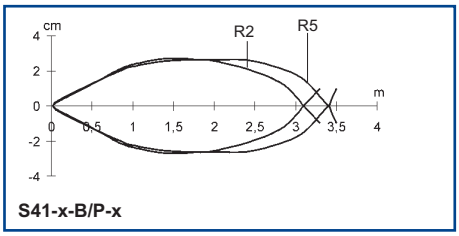
DETECTION DIAGRAMS



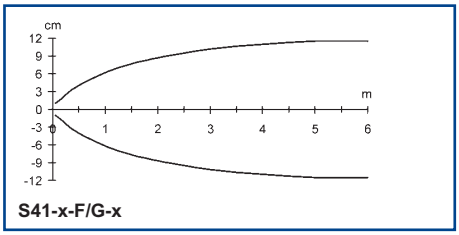
S41-x-C-x



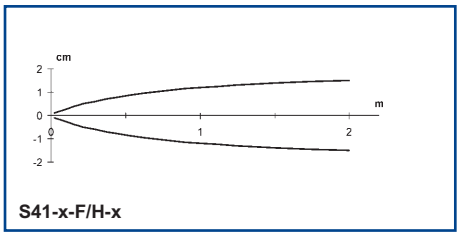
S41-x-D-x



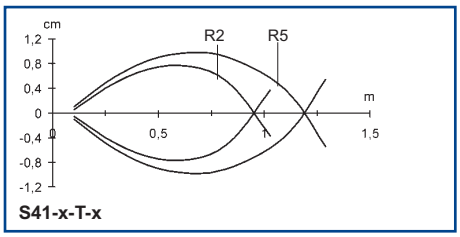
S41-x-B/P-x



S41-x-F/G-x



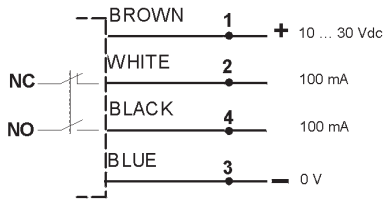
S41-x-F/H-x



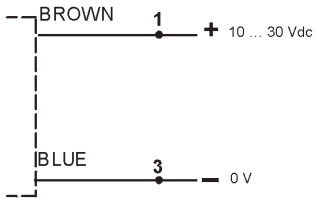
S41-x-T-x

The detection diagrams indicate the typical operating distance with excess gain 1.

CONNECTIONS



S41-5-B/C/D/F/P/T



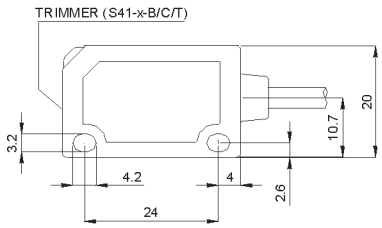
S41-5-G/H

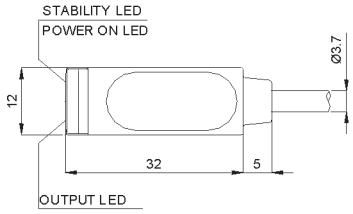


M8 CONNECTOR

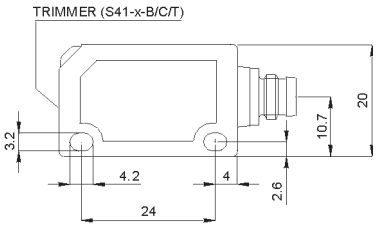
DIMENSIONS

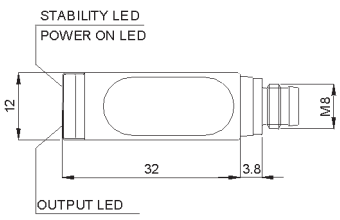
CABLE VERSIONS





M8 CONNECTOR VERSIONS





mm

DATASENSOR

MODEL SELECTION AND ORDER INFORMATION

MODEL	OPTIC FUNCTION	TRIMMER	CONNECTION	OUTPUT	CODE N°
S41-2-B-P	polarised retroreflex	present	2 m cable	PNP	950701000
S41-2-C-P	diffuse proximity	present	2 m cable	PNP	950701010
S41-2-D-P	fixed focus proximity	absent	2 m cable	PNP	950701020
S41-2-F-P	receiver	absent	2 m cable	PNP	950701030
S41-2-G	emitter	absent	2 m cable	-	950701040
S41-2-H	emitter with narrow beam	absent	2 m cable	-	950701045
S41-2-P-P	polarised retroreflex	absent	2 m cable	PNP	950701100
S41-2-T-P	retroreflex for transparents	present	2 m cable	PNP	950701130
S41-5-B-P	polarised retroreflex	present	M8 connector	PNP	950701050
S41-5-C-P	diffuse proximity	present	M8 connector	PNP	950701060
S41-5-D-P	fixed focus proximity	absent	M8 connector	PNP	950701070
S41-5-F-P	receiver	absent	M8 connector	PNP	950701080
S41-5-G	emitter	absent	M8 connector	-	950701090
S41-5-H	emitter with narrow beam	absent	M8 connector	-	950701095
S41-5-P-P	polarised retroreflex	absent	M8 connector	PNP	950701110
S41-5-T-P	retroreflex for transparents	present	M8 connector	PNP	950701140
S41-2-B-N	polarised retroreflex	present	2 m cable	NPN	950701150
S41-2-C-N	diffuse proximity	present	2 m cable	NPN	950701160
S41-2-D-N	fixed focus proximity	absent	2 m cable	NPN	950701170
S41-2-F-N	receiver	absent	2 m cable	NPN	950701180
S41-2-P-N	polarised retroreflex	absent	2 m cable	NPN	950701190
S41-2-T-N	retroreflex for transparents	present	2 m cable	NPN	950701200
S41-5-B-N	polarised retroreflex	present	M8 connector	NPN	950701210
S41-5-C-N	diffuse proximity	present	M8 connector	NPN	950701120
S41-5-D-N	fixed focus proximity	absent	M8 connector	NPN	950701230
S41-5-F-N	receiver	absent	M8 connector	NPN	950701240
S41-5-P-N	polarised retroreflex	absent	M8 connector	NPN	950701250
S41-5-T-N	retroreflex for transparents	present	M8 connector	NPN	950701260

ACCESSORY SELECTION AND ORDER INFORMATION

MODEL	DESCRIPTION	CODE N°
R1	Ø 23 mm reflector with Ø 31 mm support	S940700023
R2	Ø 48 mm reflector with Ø 63 mm support	S940700048
R3	18 x 54 mm reflector with 22.5 x 82 mm support	S940700972
R4	47 x 47 mm reflector with 51.5 x 61 mm support	95A151010
R5	Ø 75 mm reflector with Ø 82 mm support	S940700075
R6	36 x 55 mm reflector with 40.5 x 60 mm support	95A151020
ST-505	1 pc fixing bracket	95ACC1300

*Please refer to **Sensor Accessories***

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Distributed by:

HEADQUARTERS

DATASENSOR SpA
via Lavino, 265 - 40050 Monte San Pietro, BO - Italy
Tel. +39 051/6765611 • Fax +39 051/6759324
www.datasensor.com • e-mail info@datasensor.com

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Printed in Italy in July 2005
Rev. 03