



Fork sensors UF, UFnext

UFN3-70P415



Model Name > UFN3-70P415
Part No. > 6049679



At a glance

- Detection of transparent, opaque or printed labels
- Unaffected by metallic foils and labels
- Fast response time of 250 µs
- Simple and accurate adjustment via "+"/"-"-buttons or teach-in
- Rugged, IP 65 aluminum housing

Your benefits

- Reliable label detection, regardless if labels are transparent, opaque or have a printed design, ensuring greater flexibility with one sensor
- Fast response times enable precise detection - even at high web speeds
- The aluminum housing meets all requirements for use in harsh industrial conditions
- Setting the switching threshold using the +/- push buttons or teach-in
- Ultrasonic technology prevents false detection, which may be caused by ambient light or shiny surfaces



Features

Functional principle:	Ultrasonic detection principle
Fork width:	3 mm
Fork depth:	69 mm
MDO ¹⁾ ; ²⁾ :	Size of labels: 2 mm Gap between labels: 2 mm
Label detection:	✓
Adjustment:	Dynamic teach-in Static teach-in
Output function:	Light/darkswitching, selectable via button

¹⁾ Minimum detectable object ²⁾ Depends on the label thickness

Mechanics/electronics

Supply voltage V_s ¹⁾ :	DC 10 V ... 30 V
Ripple ²⁾ :	< 10 %
Power consumption ³⁾ :	40 mA
Switching frequency ⁴⁾ :	1,500 Hz
Response time ⁵⁾ :	250 µs
Output type:	PNP: HIGH = V_s - ≤ 2 V / LOW approx. 0 V
Switching mode:	PNP

Output current I _{max.} ⁶⁾ :	100 mA
Input, teach-in (ET):	Run: U < 2 V Teach: U > 7 V ... < U _V
Initialization time:	100 ms
Connection type:	Connector M8, 4-pin
Protection class ⁷⁾ :	III
Circuit protection:	Output Q short-circuit protected Interference suppression
Enclosure rating:	IP 65
Weight:	Ca. 95 g
Housing material:	Aluminum

¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network, max. 8 A ²⁾ May not exceed or fall short of V_S tolerances ³⁾ Without load ⁴⁾ Without load
 With light/dark ratio 1:1, typical, dependent on material and speed ⁵⁾ Signal transit time with resistive load ⁶⁾ Output current minimal 0.03 mA ⁷⁾ Reference voltage DC
 50 V

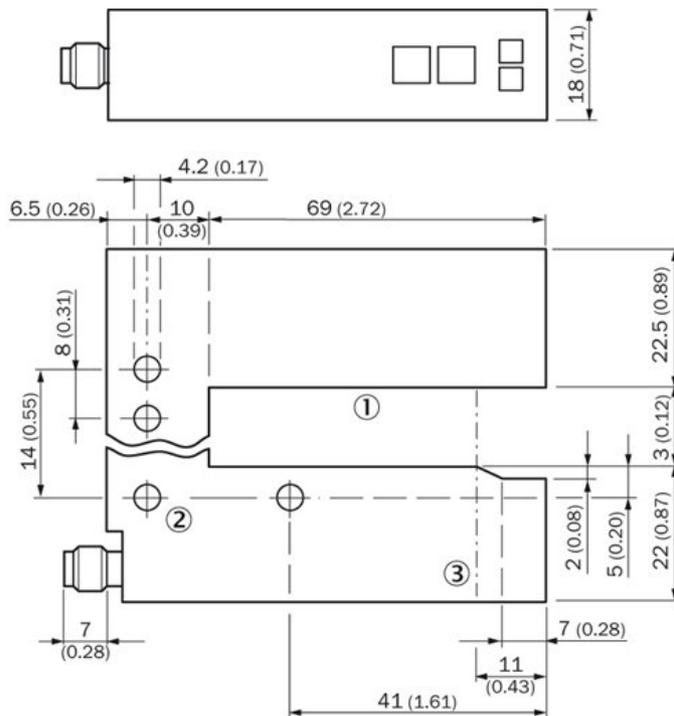
Ambient data

Ambient temperature ¹⁾ :	Operation: 5 ... 55 °C Storage: -20 ... 70 °C
Shock load:	According to EN 60068-2-27
EMC:	EN 60947-5-2 ²⁾

¹⁾ Do not bend below 0 °C ²⁾ The UFN complies with the Radio Safety Requirements (EMC) for the industrial sector (Radio Safety Class A).

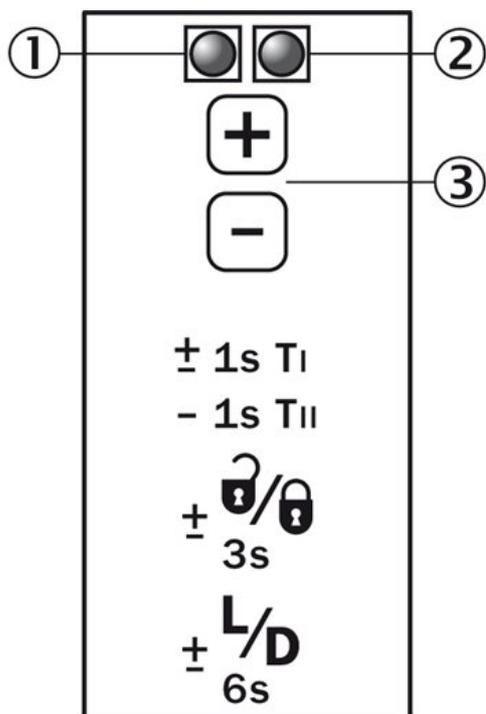
It may cause radio interference if used in residential areas.

Dimensional drawing



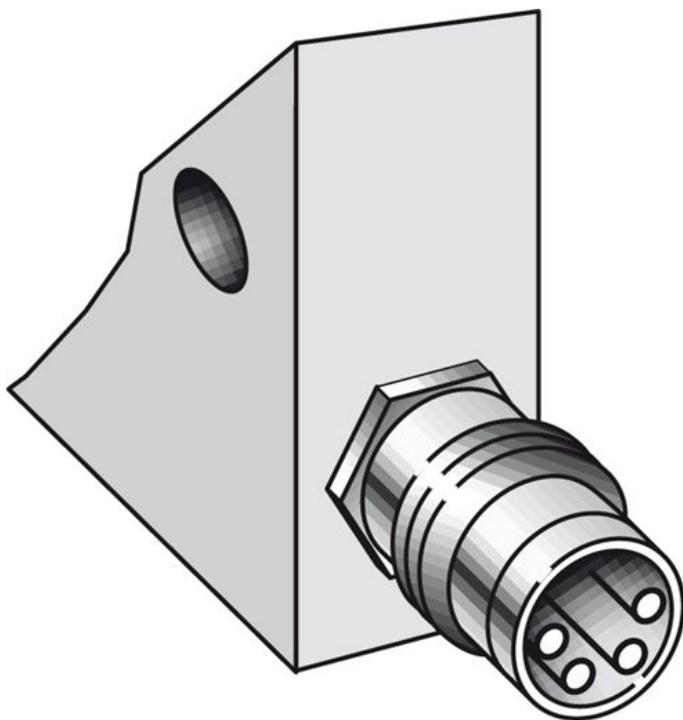
- [1] Fork opening: fork width 3 mm, forks depth 69 mm
- [2] Mounting hole, Ø 4.2 mm
- [3] Detection axis

Adjustments

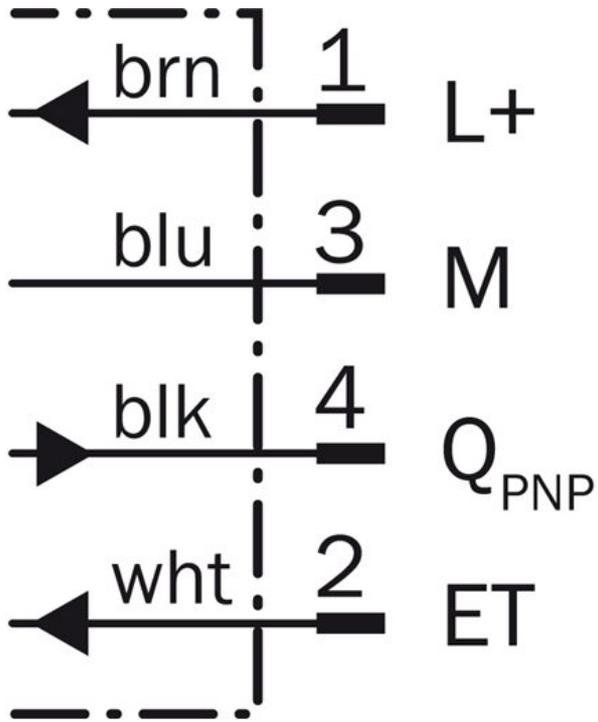


- |1| Function signal indicator (yellow), switching output
- |2| Function indicator (red)
- |3| "+" "-" buttons and function button

Connection type



Connection diagram



Australia

Phone +61 3 9457 0600
1800 334 802 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900
E-Mail sac@sick.com.br

Canada

Phone +1 905 771 14 44
E-Mail information@sick.com

Ceská Republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301
E-Mail kundenservice@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333
E-Mail info@sick-india.com

Israel

Phone +972-4-6801000
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 3358 1341
E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680
E-Mail office@sick.hu

Nederlands

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail austefjord@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

România

Phone +40 356 171 120
E-Mail office@sick.ro

Russia

Phone +7-495-775-05-30
E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail admin@sicksgp.com.sg

Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

South Africa

Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

South Korea

Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan

Phone +886-2-2375-6288
E-Mail sales@sick.com.tw

Türkiye

Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates

Phone +971 (0) 4 8865 878
E-Mail info@sick.ae

USA/México

Phone +1(952) 941-6780
1 800-325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at www.sick.com