ONLINE DATA SHEET
www.mysick.com

Photoelectric sensors
MH15, Photoelectric proximity sensor, energetic

MHT15-P3249

SICK
Sensor Intelligence.

SICK
Sensor Intelligence.

Photoelectric sensors
MH15, Photoelectric proximity sensor, energetic

Model Name > MHT15-P3249
Part No. > 1026119

Illustration may differ

At a glance

- Energetic variant with a long sensing distance
- Sensitivity control via 270° potentiometer
- Indicator LED with an active switching output and operating reserve
- Straight or right-angle housing designs available
- 100 mm or 350 mm sensing distances for straight housing; 90 mm or 250 mm (each with 90% remission) for right-angle housings
- Mounting accessories (M18 nuts and snap ring) are included
- IP 69K-tested housing offers a long service life that withstands harsh environments

Your benefits

- Reliably detects and positions parts without a reflector, saving installation time and costs
- Shortest M18 body on the market, saving installation space
- Flush mounting via snap ring reduces setup time and prevents obstructions to material flow on conveyor systems
- MHT15 is compatible with competitor sensors for easy replacement that saves installation time and costs
- IP 69K-tested housing offers a long service life that withstands harsh environments, reducing maintenance time and costs

Features

Sensor/detection principle:	Photoelectric proximity sensor, energetic
Housing design (light emission):	Cylindrical, angled
Housing length:	50.3 mm
Thread diameter (housing):	M18 x 1
Optical axis:	Radial
Sensing range max.:	15 mm ... 250 mm [1]
Sensing range:	15 mm ... 180 mm
Type of light:	Infrared light
Light source:	LED [2]
Wave length:	950 nm
Angle of dispersion:	Ca. 4.5 °
Adjustment:	Potentiometer, 270°
Light spot size (distance):	Ø 40 mm (250 mm)

[1] Object with 90 % reflectance (referred to standard white DIN 5033) [2] Average service life of 100,000 h at T_A = +25 °C

© SICK AG. Subject to change without notice.

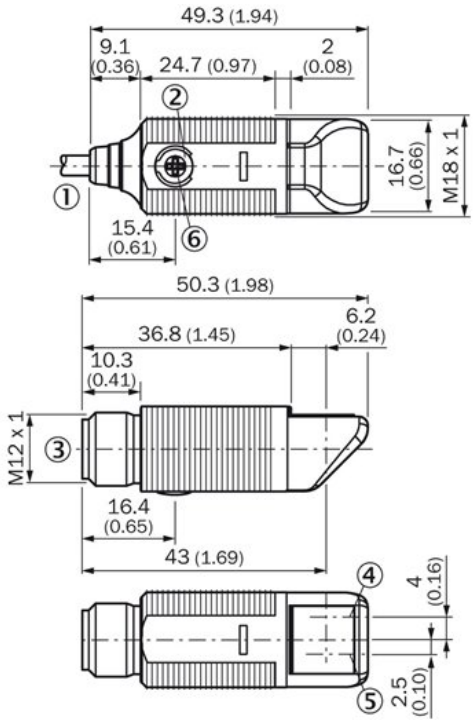
Mechanics/electronics

Supply voltage:	10 V DC ... 30 [1]
Ripple:	≤ 5 Vpp [2]
Power consumption:	30 [3]
Output type:	PNP
Switching mode:	Dark-switching
Signal voltage PNP HIGH/LOW:	Uv - (< 2,9 V)/ca. 0 V
Output current Imax.:	100
Response time:	≤ 1.25 ms [4]
Switching frequency:	400 [5]
Connection type:	Connector M12, 3-pin
Circuit protection:::	A, C, D [6] [7] [8]
Protection class:	III
Weight:	8 g
Polarisation filter:	-
Front screen heating:	-
Special device:	-
Housing material:	ABS, Plastic
Optics material:	PMMA
Enclosure rating:	IP 67 IP 69K
Ambient operating temperature:	-25 ... 55 °C
Ambient storage temperature:	-25 ... 70 °C
UL File No.:	NRKH.E189383 & NRKH7.E189383

[1] Limit values [2] May not exceed or fall short of V_S tolerances [3] Without load [4] Signal transit time with resistive load [5] With light/dark ratio 1:1 [6] A = V_S connections reverse-polarity protected [7] C = interference suppression [8] D = outputs overcurrent and short-circuit protected

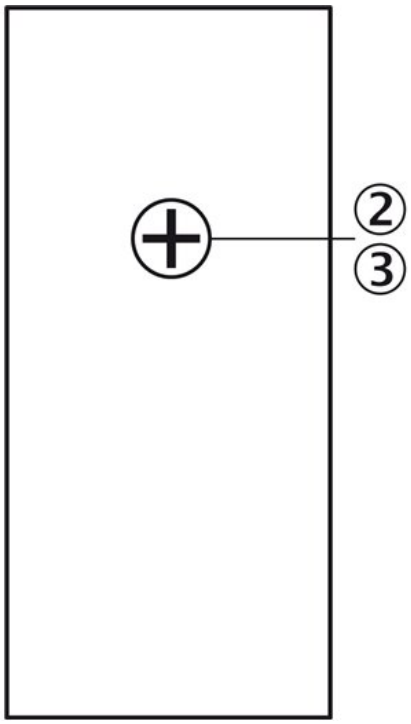
© SICK AG. Subject to change without notice.

Dimensional drawing



|1| Connection cable 2 m
|2| Sensitivity adjustment 270°
|3| Yellow LED indicator:- lights
continuously:light reception> reserve factor 1
.3- blinks: light reception < reserve factor 1.3 but > swit

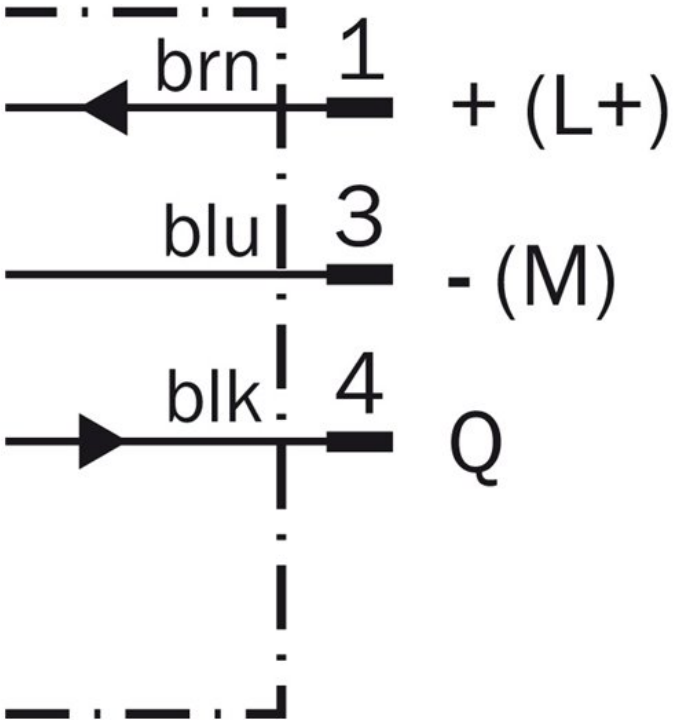
Adjustments possible



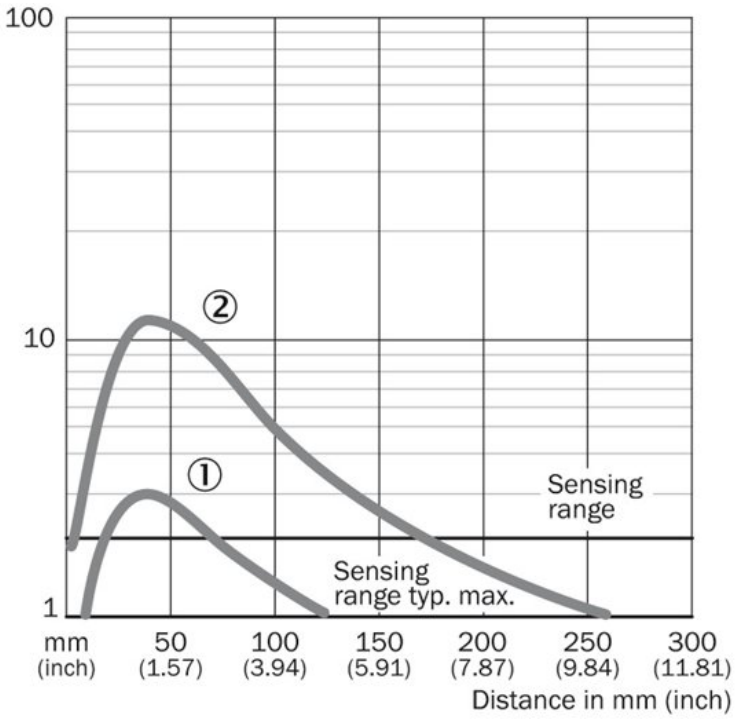
|2| Sensitivity adjustment 270°
|3| Yellow LED indicator,-lights continously: Light
reception> reserve factor 1,3-blinks: Light recepti
on >reserve factor 1,3but light reception>switching thres

© SICK AG. Subject to change without notice.

Connection diagram

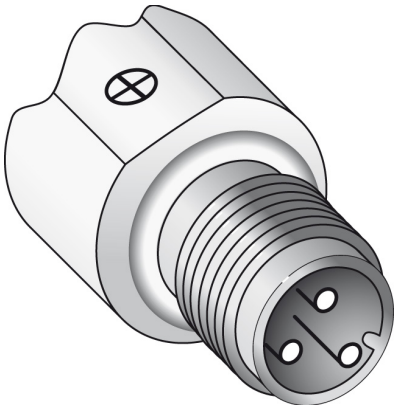


Characteristic curve

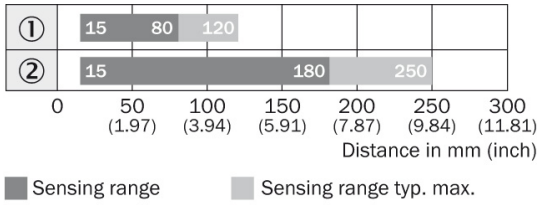


© SICK AG. Subject to change without notice.

Connection type



Sensing range diagram



① Sensing range on gray, 18 % remission
② Sensing range on white, 90 % remission

© SICK AG. Subject to change without notice.

· USmod 4c int40

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**

SICK
Sensor Intelligence.