



Position finders DMP3

DMP3-B1211



Model Name > [DMP3-B1211](#)
Part No. > [1042919](#)

At a glance

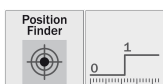
- Distances between 200 mm and 350 mm
- 0.15 mm repeatability
- Four switching outputs
- Operating temperatures as low as -40 °C
- Two different teach-in positions
- Field of view $\pm 10^\circ$ in each direction
- Easy alignment

Your benefits

- Increased productivity due to automated storage and retrieval processes
- Highest reliability in storage and retrieval applications due to relative positioning, which automatically compensates for mechanical rack deviations
- Increased positioning accuracy eliminates temperature-dependent deviations
- Improved process quality and positioning accuracy - sensor compensates for travel inconsistencies in storage and retrieval units
- Fast commissioning and setup due to easy teach-in procedure
- Flexible use – integrated heating version can be used in environments with temperatures as low as -40 °C



The product has been discontinued. Please contact your SICK sales representative for more information about a replacement product.



Performance

Target:	Hole
Repeatability ¹⁾ :	0.15 mm
Working distance:	200 mm ... 350 mm ²⁾
Switching frequency:	20 Hz
Light source:	LED, infrared
Sensing angle ³⁾ :	$\pm 10^\circ$
Operating mode:	Continuous

¹⁾ At 300 mm scanning distance ²⁾ Hole diameter 10 mm ... 20 mm ³⁾ In all axis perpendicular to the hole

Interfaces

Bank select input:	Bank 1: 0 V ... < 2 V or free running, Bank 2: >7 V ... Vs max
Teach-in input:	Active: >7 V ... Vs max, Inactive: 0 V ... < 2 V or free running
Output type:	4 x PNP ¹⁾

¹⁾ PNP: HIGH = $V_S - \leq 2 \text{ V}$ / LOW = $\leq 2 \text{ V}$

Mechanics/electronics

Supply voltage Vs:	DC 18 V ... 30 V ¹⁾
Ripple ²⁾ :	< 5 Vpp
Connection type:	Connector M12, 8-pin
Weight:	450 g ³⁾
Power consumption:	< 1,300 mA ⁴⁾
Output current IA:	$\leq 100 \text{ mA}$

¹⁾ Limit values, reverse-polarity protected ²⁾ May not fall short of or exceed V_S tolerances ³⁾ Incl. cable ⁴⁾ Without load

Ambient data

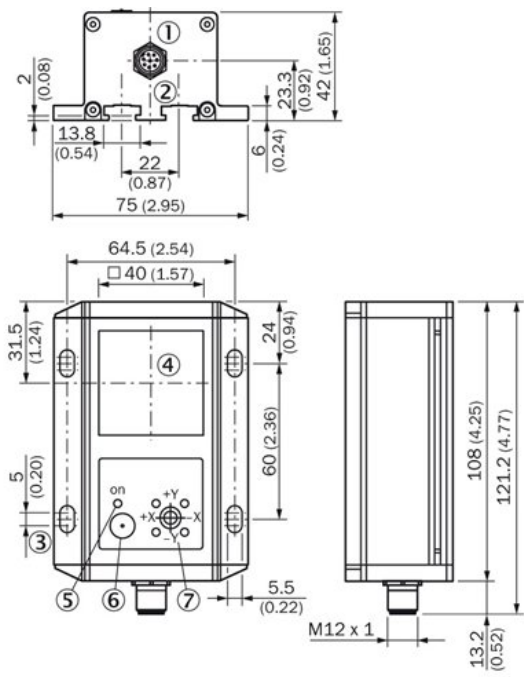
Enclosure rating:	IP 54
Protection class ¹⁾ :	III
Ambient temperature:	Operation: -40 ... 50 °C, Storage: -40 ... 70 °C
Vibration resistance:	According to IEC 68

¹⁾ Reference voltage DC 50 V

General notes

Life cycle phase:	Phased out
-------------------	------------

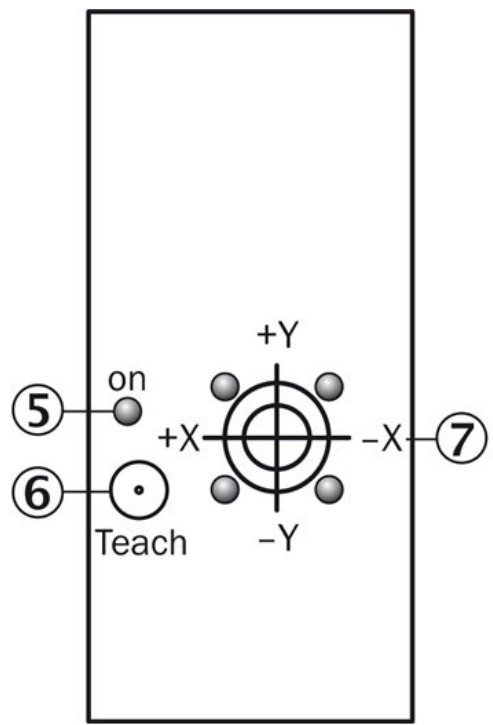
Dimensional drawing



- |1| Connector M12, 8-pin
- |2| T-bar to mount
- |3| Mounting hole
- |4| Optical axis
- |5| LED monitoring area
- |6| Teach-in button
- |7| Four LEDs, position indicator

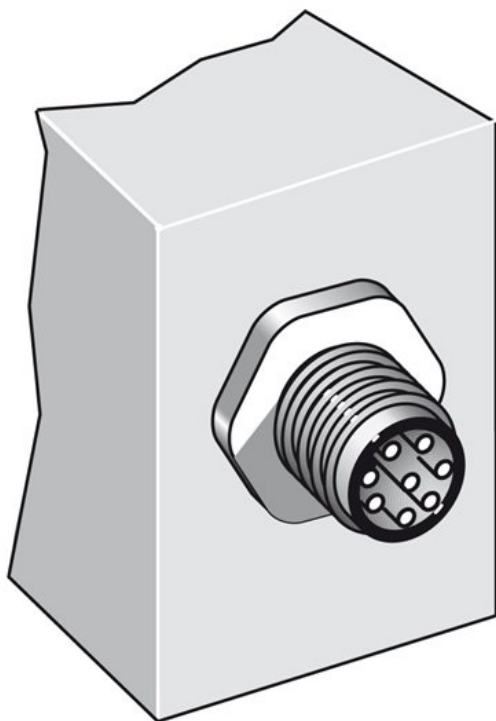
All dimensions in mm (inch)

Adjustments

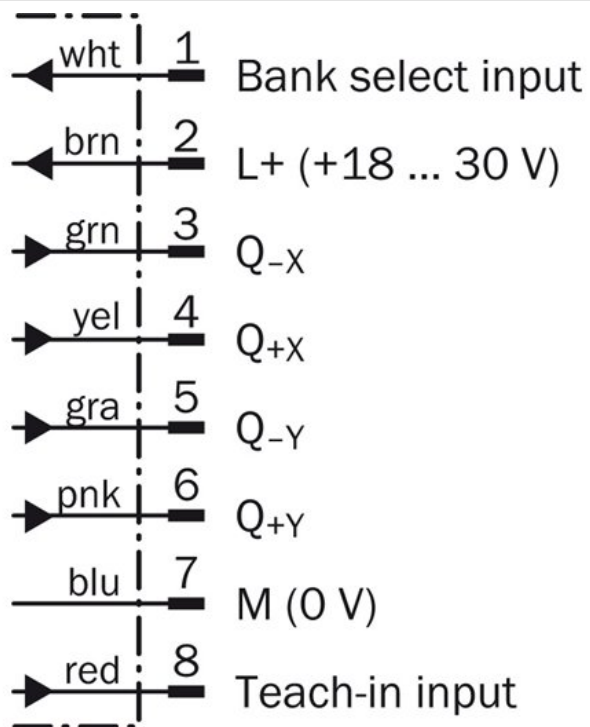


- |5| LED monitoring area
- |6| Teach-in button
- |7| Four LEDs, position indicator

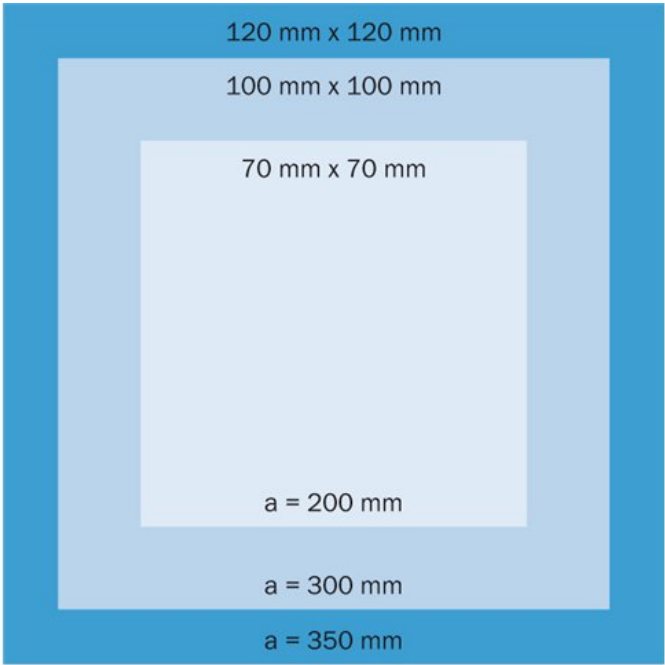
Connection type



Connection diagram

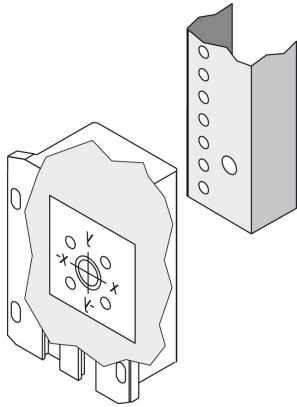


Characteristic curve: viewing area



a = sensing distance

Functional principle: switching status



Functional principle: switching status

Tolerance	$Q_{-x} = 1$ $Q_{+x} = 0$ $Q_{-y} = 0$ $Q_{+y} = 1$	$Q_{-x} = 1$ $Q_{+x} = 1$ $Q_{-y} = 0$ $Q_{+y} = 1$	$Q_{-x} = 0$ $Q_{+x} = 1$ $Q_{-y} = 0$ $Q_{+y} = 1$
	$Q_{-x} = 1$ $Q_{+x} = 0$ $Q_{-y} = 1$ $Q_{+y} = 1$	$Q_{-x} = 1$ $Q_{+x} = 1$ $Q_{-y} = 1$ $Q_{+y} = 1$	$Q_{-x} = 0$ $Q_{+x} = 1$ $Q_{-y} = 1$ $Q_{+y} = 1$
	$Q_{-x} = 1$ $Q_{+x} = 0$ $Q_{-y} = 1$ $Q_{+y} = 0$	$Q_{-x} = 1$ $Q_{+x} = 1$ $Q_{-y} = 1$ $Q_{+y} = 0$	$Q_{-x} = 0$ $Q_{+x} = 1$ $Q_{-y} = 1$ $Q_{+y} = 0$
	Tolerance		

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