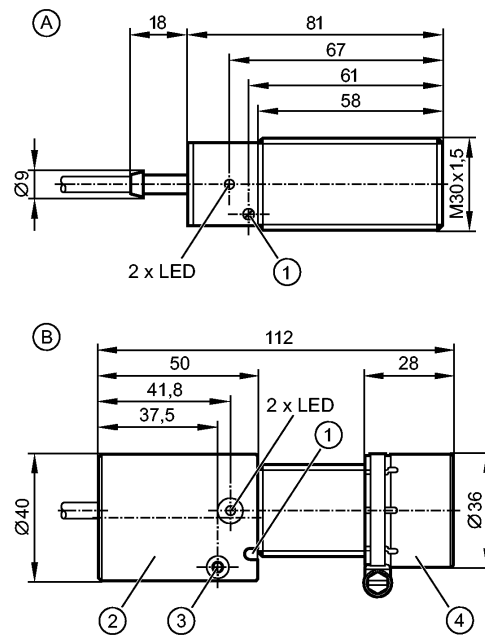


DI003A

DIA2010-ZROA/3D

Evaluation systems, power supplies

New generation available: DI103A
Article discontinued as of 31.March 2017



- A: Sensor
- B: sensor with impact protection housing
- 1: potentiometer
- 2: impact protection housing for the cable
- 3: clamping screw
- 4: impact protection housing for the sensor



Product characteristics

Compact speed monitor M30

DIA

M30 x 1.5

Cable

ATEX approval

Group II, category 3D

Inductive sensor

Sensing range 10 mm [f]

flush mountable

Application

Application	simple evaluation of rotating and linear movement with regard to underspeed; blocking
Switching function	output is switched during the start-up delay and if (f actual) is greater than (f preset)
Electrical design	AC/DC
Switching output	normally open

Electrical data

Nominal voltage	[V]	20...250 AC/DC (45...65 Hz, AC)
Reverse polarity protection		yes
Protection class		II

Outputs

Transistor

DI003A

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Evaluation systems, power supplies

Current rating (continuous)	[mA]	200 AC / 100 DC
Current rating (peak)	[mA]	\hat{I} : 2.2 A (20 ms / 0.5 Hz)
Minimum load current	[mA]	> 6
Leakage current	[mA]	< 1.5
Voltage drop	[V]	< 6.5
Short-circuit proof		no
Overload protection		no

Monitoring range

Sensing range	[mm]	10, without impact protection housing [f], with impact protection housing [nf] 7 mm
Real sensing range (Sr)	[mm]	$10 \pm 10 \%$; without impact protection housing (f)
Operating distance	[mm]	0...5
Correction factors		mild steel = 1 / stainless steel approx. 0.7 / brass approx. 0.5 / aluminium approx. 0.4 / copper approx. 0.3

Measuring / setting range

Setting range	[pulses/min.]	5...300
Adjustment of the switch point		multiturn potentiometer
Hysteresis	[% of Sp]	10
Start-up delay	[s]	12 *)

Reaction times

Damping frequency (max.)	[pulses/min]	1500
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Environment

Ambient temperature	[°C]	-20...50
Protection		IP 67

Tests / approvals

Marking of the unit		II 3D Ex tc IIIC T80°C Dc IP67 U ***)
EMC		EN 60947-5-2

Safety classification

MTTF	[a]	347
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Mechanical data

Mounting		flush mountable
Housing materials		brass special coating; PBT (Pocan); PPE; TPE-U
Weight	[kg]	0.358

Displays / operating elements

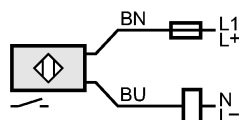
Output status indication	LED	green
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Electrical connection

Connection		PVC cable / 2 m; 2 x 0.5 mm ²
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Wiring

Core colors
 BN brown
 BU blue



Note: miniature fuse to IEC60127-2 sheet 1, ≤ 2 A (fast acting)



DI003A

DIA2010-ZROA/3D

Evaluation systems, power supplies

Place the fuse outside the hazardous area.

Accessories

Accessories (included)	2 lock nuts; impact protection housing; Mounting clamp
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Remarks

Remarks	<p>*) typical Recommendation: check the unit for reliable function after a short circuit. ***) only in conjunction with the impact protective housing</p>
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Pack quantity	[piece]	1
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