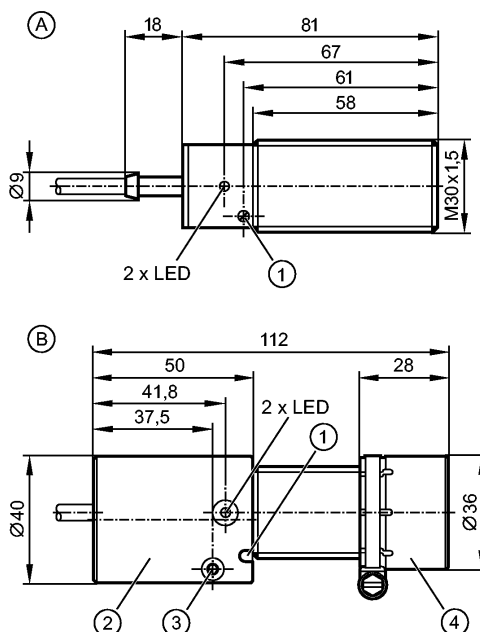


DI003A

DIA2010-ZROA/3D

Evaluation systems, power supplies



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

Made in Germany



Product characteristics

Compact speed monitor M30

DIA

M30 x 1.5

Cable

ATEX approval

Group II, category 3D

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		
Current rating (continuous)	[mA]	200 AC, 100 DC
Current rating (peak)	[mA]	î: 2.2 A (20 ms / 0.5 Hz)
Minimum load current	[mA]	> 6

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DIA2010-ZROA/3D

Evaluation systems, power supplies

Leakage current	[mA]	< 1.5
Voltage drop	[V]	< 6.5
Short-circuit proof		no
Overload protection		no

Range

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

Mechanical data

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

Displays / operating elements

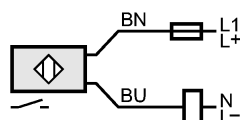
Output status indication	LED	green
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Electrical connection

Connection		PVC cable / 2 m; 2 x 0.5 mm²
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Wiring

Core colours
BN brown
BU blue



Note: miniature fuse to IEC60127-2 sheet 1,
≤ 2 A (fast acting)
Place the fuse outside the hazardous area.

Accessories

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

Remarks		*) typical
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**DI003A**

DIA2010-ZROA/3D

Evaluation systems, power supplies

Recommendation: check the unit for reliable function after a short circuit.

***) only in conjunction with the impact protective housing

Pack quantity [piece]

1