

Overview



INPUD-B (Inductive Power and Data Transmission for Binary Sensors) is a modular system for contactless transmission of electrical energy for supplying up to 8 binary sensors (inductive, capacitive, optical) on rotating shafts, axles or pallets.

The switching states of sensors are transmitted over an gap to the stationary part. Transmission is carried out as a serial data stream; automatic error detection i.e. error correction is integrated in the system. At the same time, the stationary part induces electrical voltage in the opposite rotating module. From there the connected sensors are permanently supplied with sufficient energy. INPUD-B operates independently of rotational speed, transmission is carried out reliably even under the harshest ambient conditions (dust, water, oil, etc.).

Since it has no mechanically contacting parts, INPUD-B requires no servicing and no regular maintenance. The integrated LEDs indicate the status of the data communication and power control. This status information can also be fed directly to the control, guaranteeing correct and reliable operation at all times.

INPUD products are available in different performance categories and form factors. Please contact MESA for more information.

Features

- compatible with most electrical and mechanical sensors
- 8 independent input channels 0/24 V (pnp)
- sensor connection to rotor via 3-pin M8x1 plug connector
- standard-interfaces for commercially available sensors
- inputs/outputs reverse polarity protected
- different form factors/performance categories available

Your benefits

- simple and fast installation
- no maintenance work necessary
- status/power-on indication via LED and plug connector
- high data integrity, digital transmission method
- suitable for harsh industrial environments (e.g. dirt, dust, moisture, etc.)
- suitable for 24/7 continuous operation

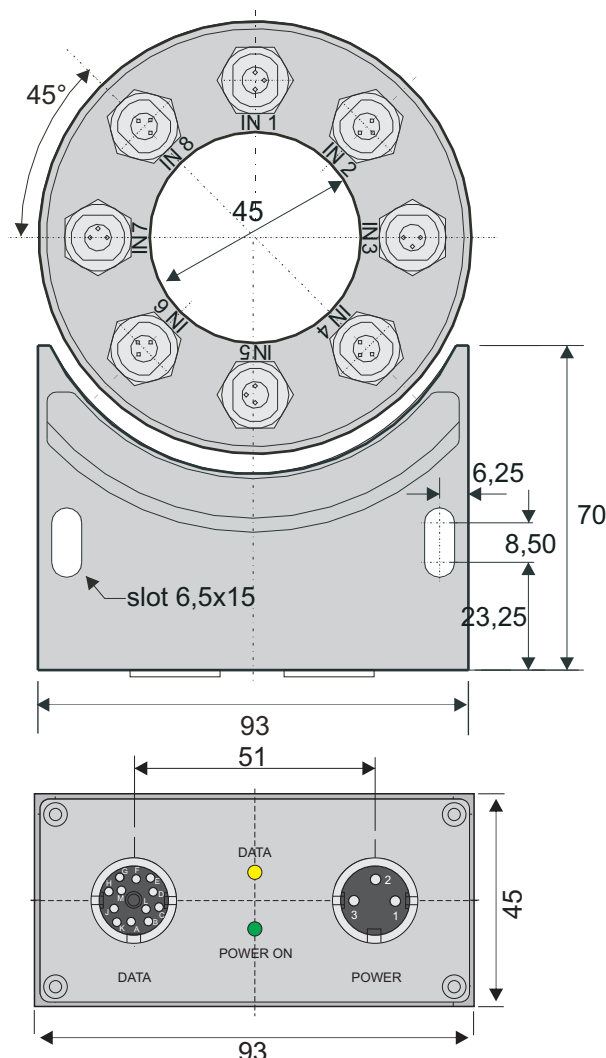
Applications

- Machinery, rotary indexing tables
- End position detection on rotating parts
- Robotics

Technical data

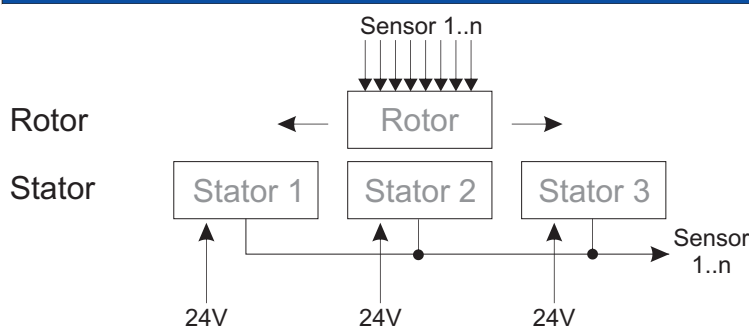
Stator	Power supply	24 VDC/0,7 A max.
	Interface	8 binary channels 0/24 V (pnp), standard sensors
	Response time	4 ms
	Connections	Binder 723, included with delivery, 3-pin (supply) 12-pin (data)
Rotor	Inputs	for 8 standard sensors (inductiv, capacitiv, optical, etc.)
	Sensor supply	24 VDC/0,16 A (rotor out)
	Sampling rate	1 kHz
	Connections	8x M8x1,5 male connector
Mechanics	Housing	PETP, plug side with aluminium cover
	Mounting	see drawing
	Air gap	2 mm (\pm 1 mm)
	Axial offset	\pm 1 mm
	Operating temperature	0..60 °C
	Protection class	IP67
	RPM	< 5.000 1/min

Dimensions



Dimensions INPUD-B, radial, protection class IP67

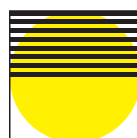
Application



Notes

- The plastic housing of the stationary and rotating modules should not be completely surrounded by a magnetically conductive material.
- The INPUD-B system should have a minimum lateral clearance of approximately 30 mm to metallic surfaces.
- Compatibel to INPUD-B:
Stationary BIC003N (BIC 1I3-P2A16-R01K01-C03)
Rotating BIC003P (BIC 2I3-P2A16-R01K01-SM3A30).

Your contact



MESA

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