

Overview



INPUD-T (Inductive Power and Data Transmission) is a compact system for contactless transmission of Pt100 transducers. INPUD-T is able to transmit two or four channels simultaneously.

The electronics for receiving data from up to four Pt100 sensors is already integrated in the rotating module. There, the signals are amplified and converted serially into a digital data stream. Digital transmission ensures a very high degree of data reliability, even under harsh ambient conditions with the presence of e.g. oil, dust, or moisture. In the stationary module the incoming data stream is decoded and converted into an output signal that is proportional to the measured temperature. Due to the near field communication and its dedicated structure, the INPUD-T is immune against external disturbances.

The integrated LEDs indicate the status of the data communication and power control. This status information can also be fed directly to the control system via the connecting cable; it guarantees correct and reliable operation at all times.

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

Features

- integrated signal converter
0..10 V / 4..20 mA
- no maintenance required, suitable for
24/7 continuous operation
- housing protection class IP54 or IP67
- different form factors/performance
categories
- integrated CRC check, proprietary
digital transmission method
- not affected by electromagnetic radiation

Your benefits

- transmits up to four Pt100 signals
- integrated linearization thus high
accuracy
- for harsh ambient conditions
- rotational speeds up to 5000 1/min
- compact design
- LED status display as well as status
information via the connection cable
- easy and simple installation

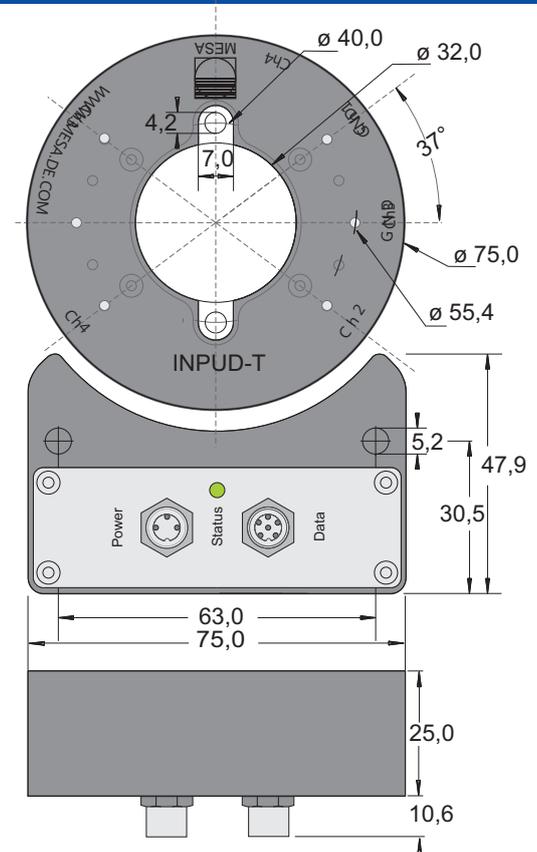
Applications

- Horizontal flow wrapping machines
- Process engineering, planetary mixers
- Centrifuges, decanters
- Calenders (foil production, fleece, etc.)

Technical data

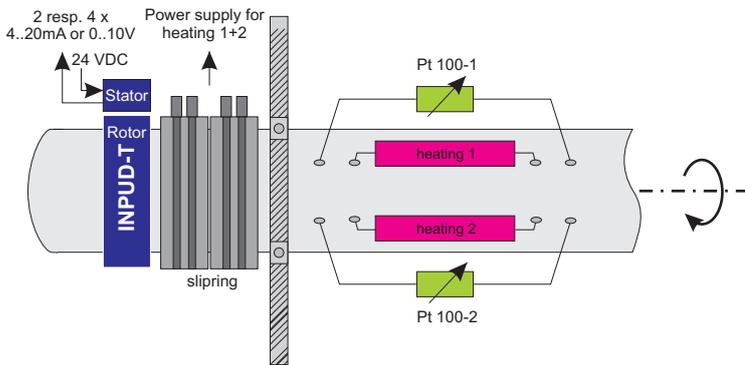
Stator	Power supply	24 VDC±10 %/0,12 A max.
	Channels	2 or 4 channels
	Interface	0..10 V 4..20 mA, living zero
	Resolution	12 bit
	Error	<±0,15 % f.s.r.
Rotor	Connections/sensors	2 or 4x Pt100, 2(4)-wires M3 screw bolts M8 socket (IP67, optional)
	Measuring range (optional)	0...300 °C (-200...850 °C)
	Sampling rate	12,5/25 Hz (4/2 channels)
	RPM	up to 5.000 1/min
Mechanic	Material	PETP/Aluminium
	Protection class	Housing IP54 / IP67
	Stator connections	Plug M8, 3-pin (power) Socket M8, 6-pin (signals)
	Air gap	2 mm (± 1 mm)
	Temperature range	0...60 °C
	Dimensions	as in sketch, 3D-data available on request

Dimensions



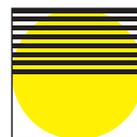
Dimensions of INPUD-T2/T4, IP54 or IP67 housing protection

Installation example *Horizontal Flow Wrapping Machine*



- reduce slip ring tracks from 8 to 4 (for heating1+2 only)
- mount INPUD-T with adapter ring on the shaft
- install connection cable for heater under the INPUD-T rotor and on through to the slip ring
- connect Pt100 sensors to INPUD-T rotor
- connect 2/4x I/U output signals with heating controller
- connect 24 VDC supply voltage – switch on

Your contact



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