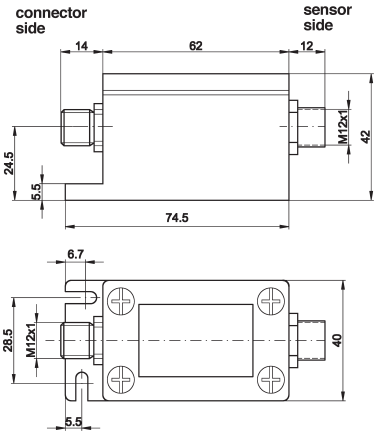
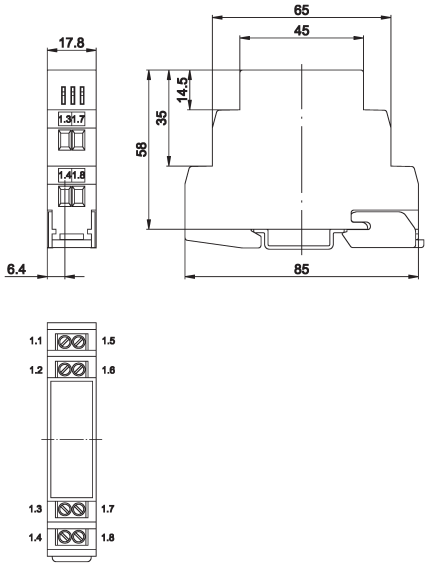
manual

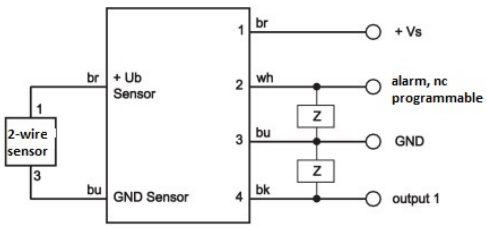
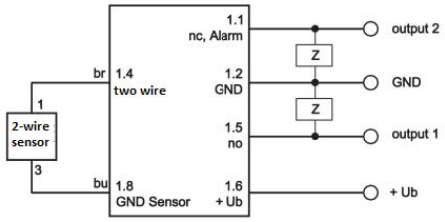
amplifiers for high-temperature sensors

article-no.	IV400720	IV850700
connection	sensor: M12-cable socket supply / output: M12-connector	sensor: terminals supply / output: terminals
version	integrated line monitoring*	integrated line monitoring*





TECHNICAL DATA

output signal	pnp, no/nc, alarm	pnp, no/nc, alarm
operating voltage	10 ... 30V DC	10 ... 30V DC
current consumption (w/o load)	≤ 25mA	≤ 25mA
output current (max. load)	200mA	200mA
voltage drop (max. load)	2.0V DC	2.0V DC
sampling frequency	2kHz	1kHz
status display	+	+
short-circuit protection	+	+
reverse polarity protection	+	+
dimensions	see above	see above
housing material	aluminum	plastic
length (thread/total)	- / -	- / -
operating temperature	-25 ... +75°C	-25 ... +75°C
system of protection (EN 60529)	IP65	IP20
connection	see above	see above
pin configuration		

* in case of short-circuit or line interruption between sensor and amplifier, the outputs switch to "high"

colors: br=brown, wh=white, bu=blue, bk=black

Only one sensor can be connected!

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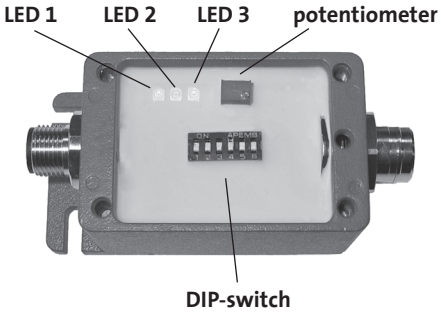
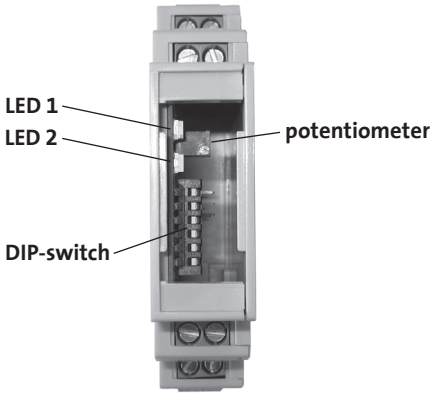
Subject to alteration!
Version: March 2017

setting options IV400720 / IV850700

DIP-switch	on	off
1	output 2 = antivalent	output 2 = alarm
2	adjustment aid on	adjustment aid off
3	time delay on	time delay off
4	on-delay 0 ... 1sec (potentiometer)	off-delay 0 ... 1sec (potentiometer)
5	high hysteresis / high setting control *	small hysteresis / small setting control *
6 *2	3-wire sensors	2-wire sensors

* only for inductive high temperature sensors with 2-wire system
*2 the DIP-switch 6 has to be always in the "off" position!

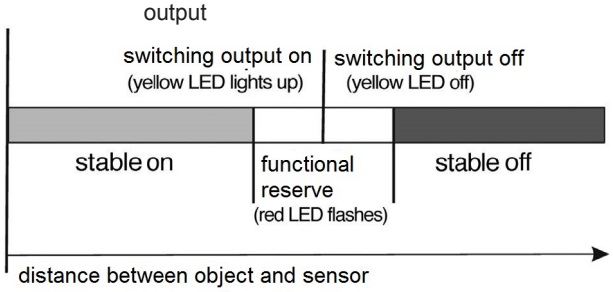




LED 1 green: operating voltage
LED 2 yellow: object identified
LED 3 red: lights up: sensor is not connected
flashes: standby function range
lights up + yellow LED flashes: short-circuit at the output

LED 1 green/yellow: operating voltage/object
LED 2 red: lights up: sensor is not connected flashes: functional reserve range flashes + yellow LED flashes: short-circuit at the output

adjustment aid:
If the adjustment aid is activated (DIP switch 2 'on'), the red LED flashes in order to identify the range of the functional reserve. As such, an object that is to be detected must be located as close to the sensor that the yellow LED lights up and the red LED does not flash. Objects that don't have to be detect have to be located as far away from the sensor that both LEDs do not light up. If the red LED flashes while the sensor is operating, the sensor has to be re-adjusted.



alarm output:
The alarm output is activated by switching DIP switch 1 to the 'on' setting. If no sensor is connected, or if the line to the sensor is disconnected, the alarm output will switch on. In addition, the red LED will light up. The alarm output also switches on if there is a short circuit at the amplifier's switching output. In this case, the red LED lights up and the yellow LED flashes.

hysteresis setting:
The hysteresis can be set in two stages in order to adjust it according to the size of the connected sensors. In the case of large sensors (design 30, 40 and 50), it is recommended to select the setting 'small' . In the case of small sensors (design 18), the 'large' setting should be used.
The sensors featured in this catalog (INDU2350) (which are designed for the use with an external amplifier) are two-wire sensors. The electrical connection between the sensor and amplifier is made by two wires: brown (PIN 1 of the M12-connector) and blue (PIN 3 of the M12-connector).