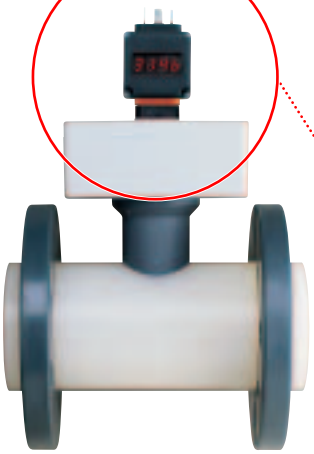
M-Zert
Zertifiziertes QM-System
DIN EN ISO 9001
Zertifikat-Nr. 01017

Plug-On Display for Transmitters Option: Limit contact, Ex-Version

KOBOLD

measuring • monitoring • analysing



Flow

Level

Pressure

Temperature

- Universal mounting on Transducers with 4-20 mA Output; Plug DIN 43 650
- No additional Power Supply required
- Easy to programming using Push Buttons
- Compact Sandwich construction
- Good Readability through LED-Display
- Option: Open-Collector-Output ATEX-version Ex II2G EEx ib IIC T4

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KOBOLD Messring GmbH
Nordring 22-24
D-65719 Hofheim/Ts.
☎ (06192) 299-0
Fax (06192) 23398
E-mail: info.de@kobold.com
Internet: www.kobold.com

Model:
AUF-...

Description

The model AUF-... plug-on display is a universal local display suitable for use with various transmitters. The transmitter must be fitted with an analogue output and a connector in accordance with DIN 43 650. Type AUF-2000 can be delivered for use in hazardous areas. The plug-on display is simply plugged in between connector and socket; it is then ready for operation. The plug-on display is user programmable. Scaling, the position of the decimal point, gate time and switch point (optional) may be set with two keys. The menu steps are output to the LED display field.

The plug-on display is supplied by the current loop of the 4–20 mA signal transmitter. No additional auxiliary power is required. The programmed parameters are stored in an EEPROM; they are therefore not lost after power failure. Over or under range are displayed as a message on the LED display. All device functions are continuously monitored by an integral diagnostic system. The indicating unit can be rotated in 90° steps; it can thus be adapted to different installation positions. The integral open-collector output, available as an option, allows a transmitter to be retrofitted easily with a limit contact.

Order Details

Model	Description
AUF-1000	Standard plug-on display, 4-20 mA, 2-wire
AUF-1001	Plug-on display with Open Collector, 4-20 mA, 2-wire
AUF-2000	Plug-on display Ex II 2G EEx ib IIC T4, 4-20 mA, 2-wire
AUF-3000	Plug-on display, 4-20 mA, 3-wire

Scope of supply

Plug-on display, flat gasket ring, fixing screw, operating instruction, stickers with physical units.

Technical Specifications

Display:	4-digit red LED display, Digit height: 7.62 mm Programmable decimal point setting
Indicating range:	-1999 to +9999
Accuracy:	0.2% of span ± 1 digit
Electrical connection:	To transmitters with 4–20 mA output and plug acc. DIN 43 650, polarized
Sensor supply:	Not required, 4–20 mA loop powered
Voltage drop:	≤ 5 V
Conversion rate:	Three measurements/second
Attenuation:	0,3 - 20 (adjustable)
Data back-up:	Non-volatile EEPROM
Error message:	HI: overrange LO: underflow
Programming:	With two keys, menu-assisted, scaling of indication, decimal point, gate time, error message switch point (AUF-1001)
Protection:	IP 65
Temperature influence on display:	0.1%/ 10 K
Storage temperature:	-30...+80 °C

Technical Data AUF-1.../AUF-3...

Max. current load:	max. 60 mA
Case material:	Plastic PA 6 GF30, orange window: PMMA, red
Ambient temperature:	0...+60 °C
Open collector:	type AUF-1001, PNP, max. current load 90 mA

Technical Data AUF-2000

Conformance:	DMT 99 ATEX E 077
Ex-protection:	Ex II 2G EEx ib IIC T4
Voltage:	U_i 28 V_{DC}
Current:	I_i 100 mA
Power:	P_i 0,9 W
Effective inner capacitance C_i negligible	
Effective inner inductance L_i negligible	
Housing material:	Polyamide compound, black window: PMMA, red
Ambient temperature:	-20...+40°C

No responsibility taken for errors;
subject to change without prior notice.

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Application Examples

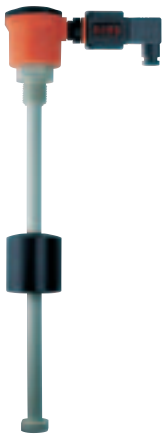
Flow

- Calorimetric flow meter
- Turbine flow meter with analogue output
- Vortex flow meter

Pressure

- Pressure sensors
- Manometer with analogue output

Level



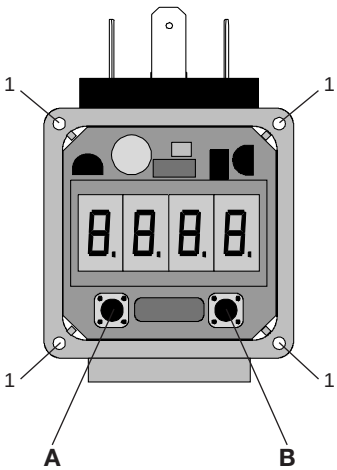
- Level transmitter
- Bypass level indicator with transmitter

Temperature

- Temperature sensors with head mounted transmitter

Adjustment

For adjustment, the 4 screws of the display should be unscrewed and the cover removed.



- Simple programming through keys A and B
- Free scaling of display value
- Software oriented adjustment of the decimal point
- Adjustable gate time of the display
- Recognition of overranging
- freely programmable set-point adjustment (option)

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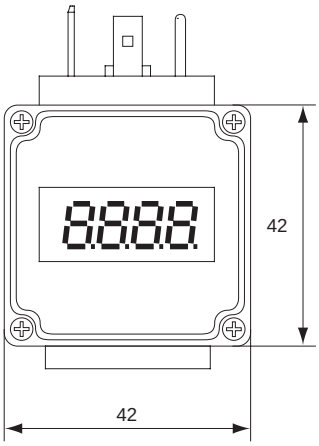
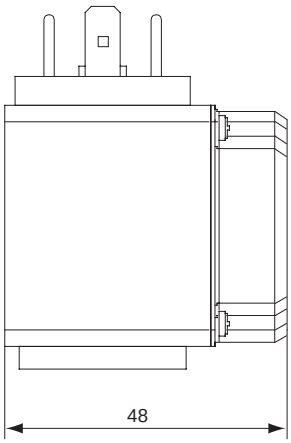
Dimensions

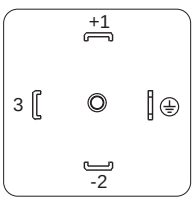
Front view



Side view



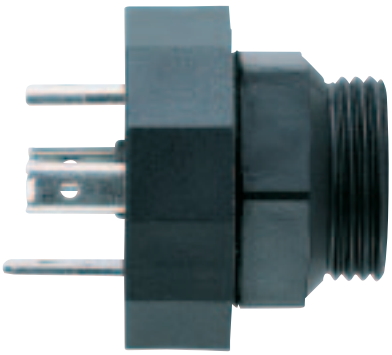
Electrical connection



	AUF-1000 AUF-2000	AUF-1001	AUF-3000
PIN 1	$+V_S$/S+	$+V_S$/S+	$+V_S$
PIN 2	GND/S-	GND/S-	GND
PIN 3	-	Switch out	Signal

Accessory

For mounting of the plug-on display on devices with PG-connection, different adapters are available. The adapter is simply screwed in the existing PG-cable gland and wired to the device. At the opposite side of the adapter, is a plug according to DN 43 650, on which the sandwich display can be simply plugged on.

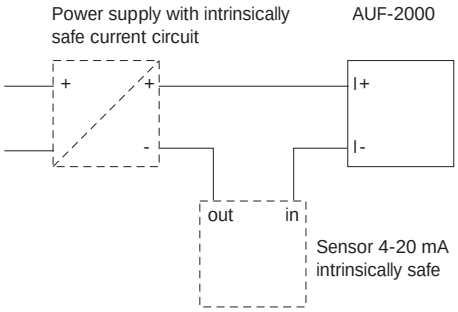


Ordering data

Ordering data	Description
AUF-PG11	for fitting in a PG-11 cable gland
AUF-PG13	for fitting in a PG-13.5 cable gland
AUF-PG16	for fitting in a PG-16 cable gland

Further options for OEM applications

(on request)

- Generic version
- Housing black or blue
- Company logo
- Client-specific adjustment
- Client-specific switching hysteresis

By Usage of model AUF-2000 in hazardous areas, an intrinsicly safe current power supply transmitter should be used and being rectified with the electrical data of the connected sensor.