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## Short Operating Instructions

# Adapter PPC-06/12-VADC-A

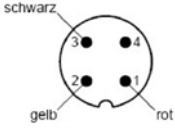


**Please read carefully before use!**

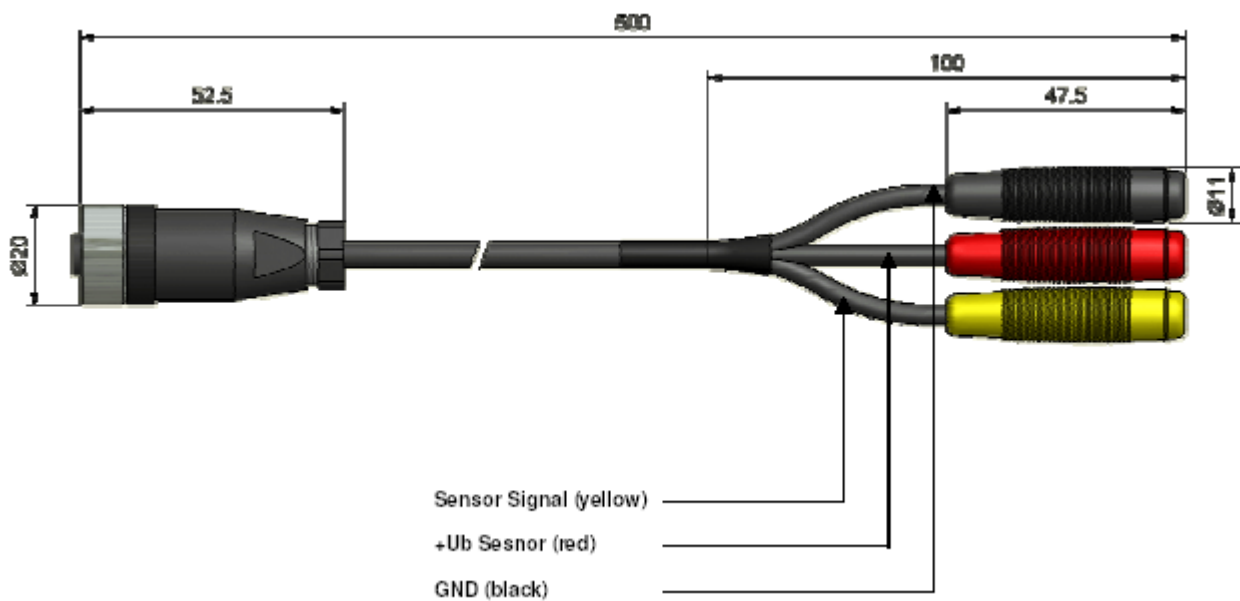
# 1 Description

The adapter PPC-06/12-VADC-A is an ADC / VDC converter for connecting auxiliary sensors to the units PPC-06, PPC-08 and PPC-12.

# 2 Technical Data

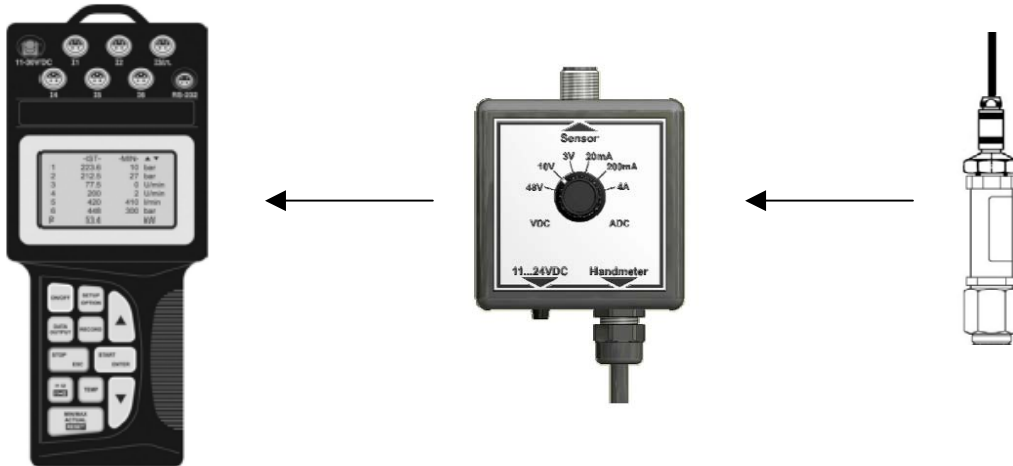
Adapter PPC-06/12-VADC-A		
<b>Housing</b>		
Dimensions	67x68x28mm (2.64x2.68x1,1 inch)	
<b>Auxiliary Sensor Connection</b>		
Plug connection	4-pol., M12x1, socket	
Pin assignment	Pin 1 = +Ub Pin 2 = Signal Pin 3 = GND Pin 4 = n.c.	
Measuring range	3 VDC 10 VDC 48 VDC	20 mA 200 mA 4000 mA
Power requirements sensor	18 VDC ± 0,5 VDC	With external power feed exceeding 18VDC: Power requirement = Power requirement sensor
I <sub>OUT</sub> (max)	50 mA	Without power supply
I <sub>OUT</sub> (max)	100 mA	With power supply at 24 VDC
Fuse	Short-circuit	+Ub to GND
<b>Power requirements</b>		
Plug connection	3-pol., Company Binder	
External power feed)	11V...24V	
Power feed measuring unit	7V...11V	
Charging rate	28 mA 15 mA 9 mA	at 8 VDC at 15 VDC at 24 VDC
<b>Ambient conditions</b>		
Working temperature	0° to 60°C (32° to 140°F)	
Storage temperature	-25° to 70°C (-13° to 158°F)	
Temperature variation	0,02% / °C	
Relative humidity	< 80%	
Safety class	IP40	
<b>Standards</b>		
Transient emissions	EN61000-6-3	
Interference immunity	EN61000-6-2	
HF field	IEC61000-4-3	10V/m, mistake <1%
ESD	IEC61000-4-2	4/8 kV
High frequency, conducted emission	IEC61000-4-6	10V
Burst	IEC61000-4-4	1/2kV
Surge	IEC61000-4-5	0,5kV symmetric on power supply 0,5kV asymmetric on power supply
<b>Accuracy</b>		
	0,5% FS 1,5% FS	In the 4A measuring range

Connection cable		
<b>Plug M12x1 series 713</b>	<b>Fa. Binder</b>	
<b>Material</b>	PA66 (UL 94 HB)	
<b>Rated current</b>	4A	
<b>Protection class (plugged)</b>	IP67	
Cable		
<b>Outer cover</b>	PUR	
<b>Color</b>	Black	
<b>Allowed temperature</b>	-20° to 70°C ( -4° to 158°F) -5° to 70°C ( 23° to 158°F)	Stationary condition Moving condition
<b>Banana jack 4mm</b>	<b>Company Hirschmann</b>	
<b>Size</b>	4mm (0,16 inch)	
	Black	Masse
	Red	+Ub
	Yellow	Signal



The connection cable is part of the scope of delivery of the adapter PPC-06/12-VADC-A in standard. With its three banana jacks (4mm/0,16 inch) it connects signals and can be used optionally. The connection to the adapter PPC-06/12-VADC-A is done by the M12x1 plug connection.

### 3 Connection



The adapter PPC-06/12-VADC-A is connected via the standard interconnection cable to the units PPC-06, PPC-08 and PPC-12. The measuring units also do the power supply for the adapter. After connecting choose the measurement range by turning the rotary switch of the adapter PPC-06/12-VADC-A. At last connect the auxiliary sensor via the connection cable or another connection with plug M12x1 to the adapter PPC-06/12-VADC-A. The adapter PPC-06/12-VADC-A supplies the auxiliary sensors. Additionally an external power supply can be connected to the adapter alone or as a support for sensors with a higher capacity need (see technical data sheet).

### 4 Configuration at the PPC-06/08 (new version available April 2009)

After the hardware configuration you have to configure the measurement units PPC-06/08 also.

Choose "AUX. SENSOR" in the PPC-06/08 menu and afterwards connect the adapter PPC-06/12-VADC-A.

Choose "Unit" to select the values you want to read in the display according to your relating signals, with "Signal" you choose the type of signal.

#### Example:

The signal you want to measure has a range from 4mA to 20mA.

```
>>> Configuration at the adapter PPC-06/12-VADC-A:    Measuring range 20mA
>>> Configuration at the PPC-06/08:                  Unit: From:      0      [%]
                                                       To:             100   [%]

                                                       Signal From:    4      [mA]
                                                       To:             20   [mA]
```

With this a signal of 4mA is displayed 0%; at 20mA 100% is shown in the display.

#### Attention !!

The signal value entry should be the same range as the entry range that has been configured at the adapter PPC-06/12-VADC-A before.

## 5 Configuration at the PPC-06/08/12 (old version)

After the hardware configuration you have to configure the measurement units PPC-06/08/12 also. Choose " AUX. SENSOR " in the menu and afterwards the canal the adapter PPC-06/12-VADC-A is connected.

Choose "Unit" to select the values you want to read in the display according to your relating signals, with "Signal" you choose the type of signal.

### Attention !!

Keep sure that the current signal value equals the final value of 20mA for each of the 3 current measuring ranges. For each of the 3 voltage measuring ranges has to equal the final a value of 10V.

### Example:

The signal you want to measure has a range from 0A to 20A

>>>	Configuration at the adapter PPC-06/12-VADC-A:	Measuring range	4A	
>>>	Configuration at the PPC-06/08/12:	Unit: From:	0	[A]
		To:	2	[A]
		Signal From:	0	[mA]
		To:	20	[mA]

With this 0A is displayed for signal of 0A; at 20A also 20A is shown in the display.

## 6 Safety advice

Pollyswitch fuses protect the measuring ranges and the feeding voltage. With a current overload they become high-impedance and protect the internal electronics. Please take care of the following points.

- Select the measuring range of the adapters PPC-06/12-VADC-A before starting the recording.
- Don't switch to another measuring range during a measurement. If this should occur the fuses will react and it will take some time before the fuses back off and the measurement can continue.
- When connecting auxiliary sensors with the connection cable be sure to connect the correct cable colors according to the data sheet.

Stand: November 2008