

## Product Description

### Preamplifier PAM2

#### Special Features

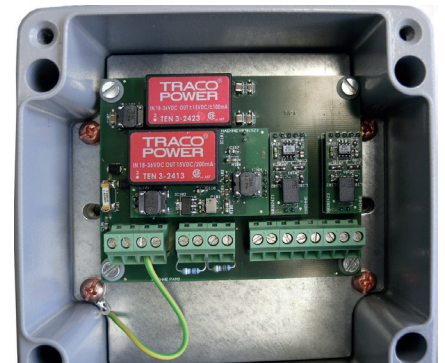
- Combinable with AME, DCM, DCX and DMA
- 100-fold increase of strain gauge signal

## Scope of Supply

- Preamplifier  
in aluminum enclosure

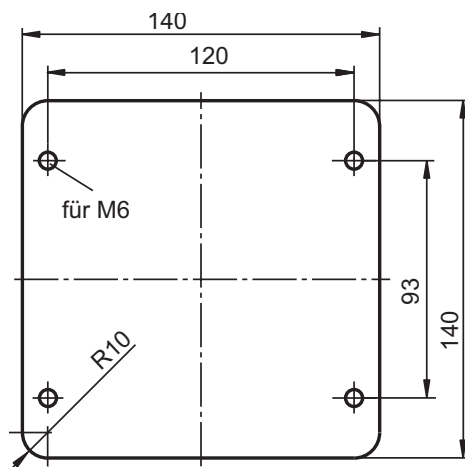
## Version

- **Option 1:** 1 channel
- **Option 2:** 2 channel
- **Option J:**  
Strain gauge supply  
voltage 5 V



## Ordering Example:

PAM2-1  
└─┬─┬ Option  
└─┬─┬ Type



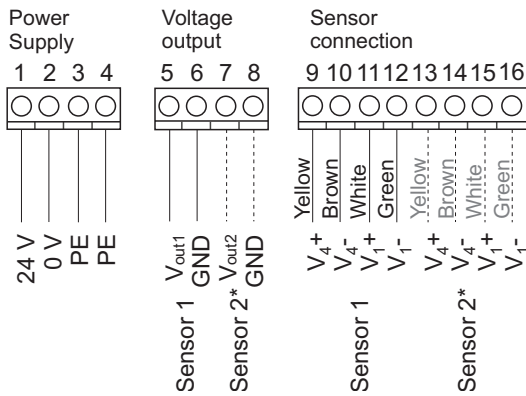
#### Construction:

Aluminium enclosure 140 x 140 x 90 mm (L x B x H)  
Fixing: 4 screws M6

In production plants the distance between force sensor and control cabinet is often higher than the permissible length of cable. For these applications is the preamplifier PAM especially suitable. The low level of the strain gauge sensor signals will be raised to a 100-fold value and with its low output impedance the noise susceptibility is significantly reduced. The settings for the zero point are made on the downstream amplifier.

Technical Data	
<b>Strain gauge excitation supply</b>	
Voltage $V_4$ :	10 V DC
Option J:	5 V DC
Current max.:	160 mA
<b>Difference inputs</b>	
Nominal voltage	$\pm 20$ mV max. $\pm 40$ mV
<b>Amplification factor</b>	100
<b>Terminal cross section</b>	AWG 26 - 14
<b>Signal outputs</b>	
use in combination with AME, DCM, DCX and DMA	
min. load resistance:	10 k $\Omega$
<b>Supply voltage</b>	24 V DC $\pm 10$ %
Current consumption (at 24 V)	approx. 50 mA
<b>Standard protection:</b>	IP65
<b>Temperature range:</b>	0 ...60° C (32...140 °F)

**Wiring diagram for amplifier DCM and DCX**



**Terminal assignment (DCM and DCX)**

Terminal	Signal	Description	Channel
1	24 V		
2	0V		
3	PE		
4	PE		
5	$V_{out1}$	100-fold amplified signal voltage	Sensor 1
6	GND		
7	$V_{out2}$	100-fold amplified signal voltage	Sensor 2*
8	GND		
9	$+V_{4.1}$	Bridge power supply	Sensor 1
10	$-V_{4.1}$		
11	$+V_{1.1}$	Signal voltage	Sensor 1
12	$-V_{1.1}$		
13	$+V_{4.2}$	Bridge power supply	Sensor 2*
14	$-V_{4.2}$		
15	$+V_{1.2}$	Signal voltage	Sensor 2*
16	$-V_{1.2}$		

\*2 channel version only

**Terminal assignment (AME and DCM)**

Terminal	Signal	Description	Channel
1	24 V		
2	0V		
3	PE		
4	PE		
5	$V_{out1}$	100-fold amplified signal voltage	Sensor 1
6	GND		
7	$V_{out2}$	100-fold amplified signal voltage	Sensor 2*
8	GND		
9	$+V_{4.1}$	Bridge power supply	Sensor 1
10	$-V_{4.1}$		
11	$-V_{1.1}$	Signal voltage	Sensor 1
12	$+V_{1.1}$		
13	$+V_{4.2}$	Bridge power supply	Sensor 2*
14	$-V_{4.2}$		
15	$-V_{1.2}$	Signal voltage	Sensor 2*
16	$+V_{1.2}$		

\*2 channel version only

**Wiring diagram for amplifier AME and DMA**

