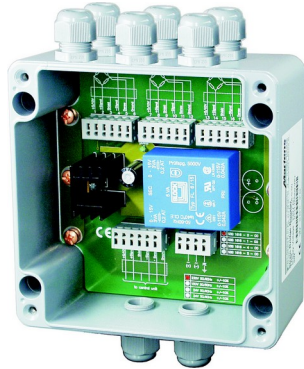


**Product Information**

**DMS-Bridge Amplifier  
 SBB1616**



- Bridge supply 2..10 V
- max. 6 DMS strain bridge sensors  $\geq 300 \Omega$  at 10 V
- Output current 200 mA max.
- Line compensation up to 1 V
- Protection class IP65

**Characteristics**

Strain-Bridge-Amplifier SBB 1616 will be used if more than one strain bridge sensor (DMS sensor) is necessary. The device can supply max. 6 DMS sensors. The total force or weight, results from the sum of single loads or weights. It must be ensured, that all used DMS sensors have the same measuring range and sensitivity (mV/V). Tolerance-conditioned differences in sensitivities are considered, by operating with the arithmetic average value of the used DMS sensors.

**Technical data**

**Power supply**

Supply voltage : 230 V AC  $\pm 10 \%$ ; 115 V AC  $\pm 10 \%$ ,  
 24 V AC  $\pm 10 \%$  or 24 V DC  $\pm 15 \%$

Power consumption : max. 8 VA

Operating temp. : -10..+55 °C

CE- conformity : EN 55022, EN 60555,  
 IEC 61000-3/4/5/11/13

**Input**

Voltage : 2..10 V DC (bridge voltage)

Difference voltage : input/output maximal 2 mV

Input resistance : 10 kOhm

Number of bridges : max. 6 (300  $\Omega$  each) at 10 V

Connection : 3 sensors direct, with 6 sensors 2 parallel  
 under a common terminal  
 (see connection diagram)

**Output**

Bridge voltage : 2..10 V DC amplified bridge voltage from  
 the measuring device

Voltage reserve  
 for line compensation : max. 1 V

Output current : max. 200 mA, with short circuit proof

Case : Aluminum, field mounting

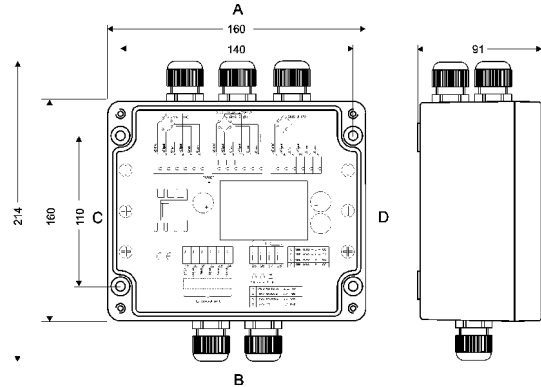
Dimensions : 160 x 160 x 91 mm (WxHxD)

Weight : max. 1900 g

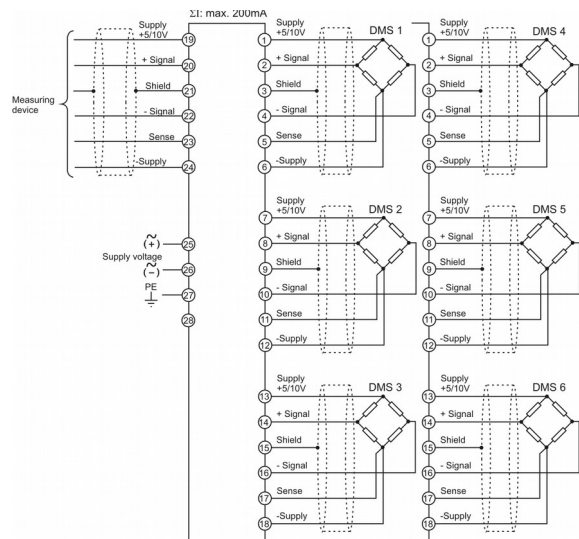
Connection : clamp terminals, 2 mm<sup>2</sup> single wire,  
 1.5 mm<sup>2</sup> flexi wire, AWG14  
 5 or 8 cable glands M16x1.5

Protection class : IP65, terminals IP20,  
 finger safe acc. to BGV A3

**Dimensions**



**Connection diagram**



**Ordering code**

SBB1616 - 1. - 2.

1. Power supply	
0	230 V AC $\pm 10 \%$
1	115 V AC $\pm 10 \%$
4	24 V AC $\pm 10 \%$
5	24 V DC $\pm 15 \%$
2. Options	
00	without option
01	3 additional cable glands M16x1.5 on side A