

# VKIA405

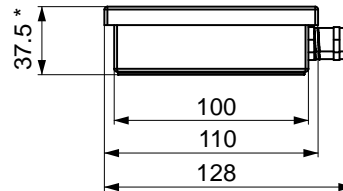
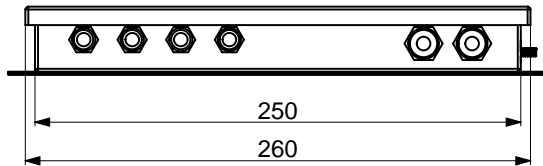
## Digital Amplifier



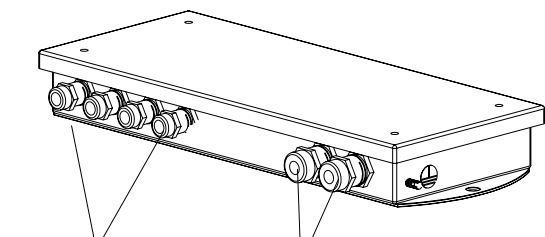
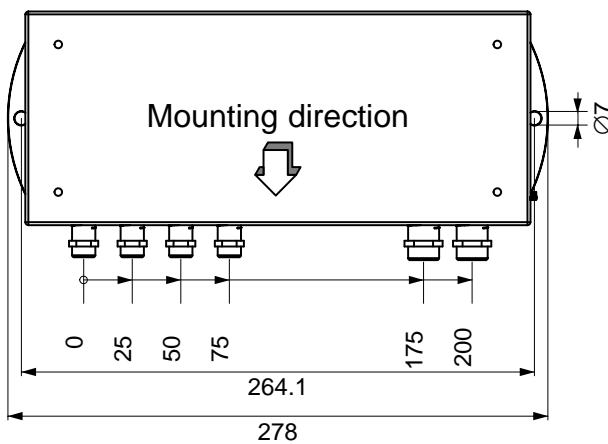
### Special features

- Amplifiers for connection of 4 strain-gage load cells / transducers
- RS-485 2-wire interface
- For simple weighing and control tasks not subject to legal-for-trade regulations
- Supply voltage range 12...30 V
- Degree of protection IP65 per EN 60 529
- EMC protection

Dimensions (in mm; 1 mm= 0.03937 inches)



\* with rubber sealing (mounted)



4x M12, a.f. 14 for cable diameter 5 ... 6.5 mm

2x M16, a.f. 17 for cable diameter 5 ... 9 mm

## Specifications

Type		<b>VKIA405</b>
Accuracy class		<b>0.1</b>
Resistor network for off-center load compensation	$\Omega$	0.39...5.71 (in 15 steps)
Nominal (rated) voltage)	$V_{DC}$	24
Voltage supply	$V_{DC}$	12...30
Nominal temperature range	$^{\circ}C$ [ $^{\circ}F$ ]	-10...+50 [+14...+122]
Operating temperature range		-20...+70 [-4...158]
Storage temperature range		-40...+85 [-40...185]
Humidity, rel., non-condensing	%	5...85
Weight, approx.	kg	1
Degree of protection	according to EN 60529 (IEC 529)	IP65 (dust-tight and protected against water jets)
Material:	Housing Sleeve nut Clamping cone	Sheet steel powder-coated housing: RAL 7035 4 x M12, a.f. 14; 2 Sx M16, a.f.17 nickel-plated brass Neoprene
<b>Integrated electronics</b>		
Bridge resistance of each transducer (max. 4)	$\Omega$	300...1000
Cable length of each transducer	m	6
Bridge excitation voltage <sup>1)</sup>	$V_{AC}$	5
Max. measuring range	mV/V	$\pm 3.0$
Measuring signal resolution	Bit	24 (with 1Hz)
Sampling rate (depending on output format and baud rate)	Hz	200; 100; 50; 25; 12; 6; 3; 2; 1
Cut-off frequency of the digital filter, adjustable; with -3dB	Hz	20...0.05
Cable lengths between electronics and computer with RS-485	m	$\leq 500$
Non-linearity, related to the sensitivity	%	$\pm 0.025$
Effect of temperature per 10K		
on the zero point, related to the full scale value	%	$\pm 0.02$
on the measuring sensitivity, related to the actual value	%	$\pm 0.05$
Serial interfaces		
electrical level (RS-485, differential)	V	Low: B-A < 0.35 High: B-A > 0.35
Baud rate, adjustable	Baud	1 200...115 200
Max. voltage on control output = supply voltage	V	12...30
Max. current load, control output	mA	500
Current consumption (with 350 $\Omega$ transducer)	mA	$\leq 60$

<sup>1)</sup> Depending on the number of connected transducers

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