

## Force Sensor BZV-K03

### Scope of Supply

Web tension sensor in pillow block design with 5 m cable (PUR) and connection variant T:  
cable gland, straight

### Variant

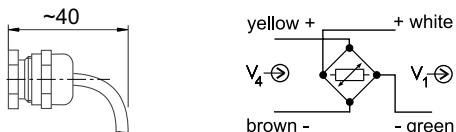
N2: Plug connection, straight,  
M12, moulded

### Additional Options

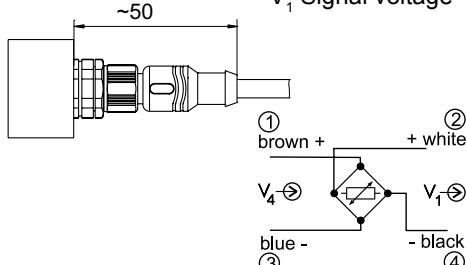
- E: Design for flatness  
measuring roll, grinded pairwise
- U: Metal protection hose,  
fixed connected
- F: For use in explosive areas  
incl. J-Box

### Connections

#### Variant T



#### Variant N2



Plug shows towards the center



### Additional Option

Option U:



### Ordering Example:

**BZV-K03-200k-T**

Type	
Size	
Nominal force	
Variants/ Options	



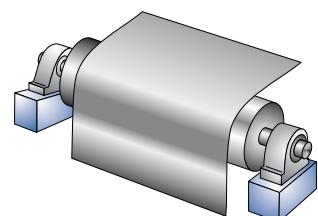
### Special Features

- Nominal force from 200 kN
- Compact design
- Easy modification to different bearing designs and sizes
- High overload protection utilizing mechanical stops
- Torsion resistant measuring block made of stainless steel

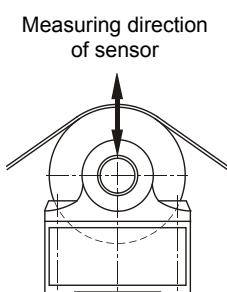
The web tension sensors of the series BZV-K are of a compact pillow block design and suitable for a variety of applications. The sensor is mounted in between the pillow block bearing and the machine frame.

All BZV - devices capture the vertical forces of web tension.

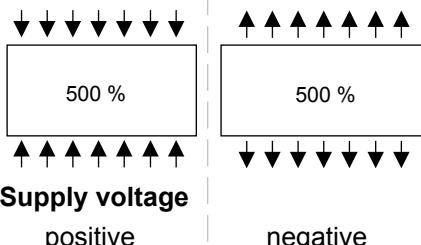
The voltage supply to the full bridge and the processing of the measuring signals is effected by way of a suitable amplifier of the standard



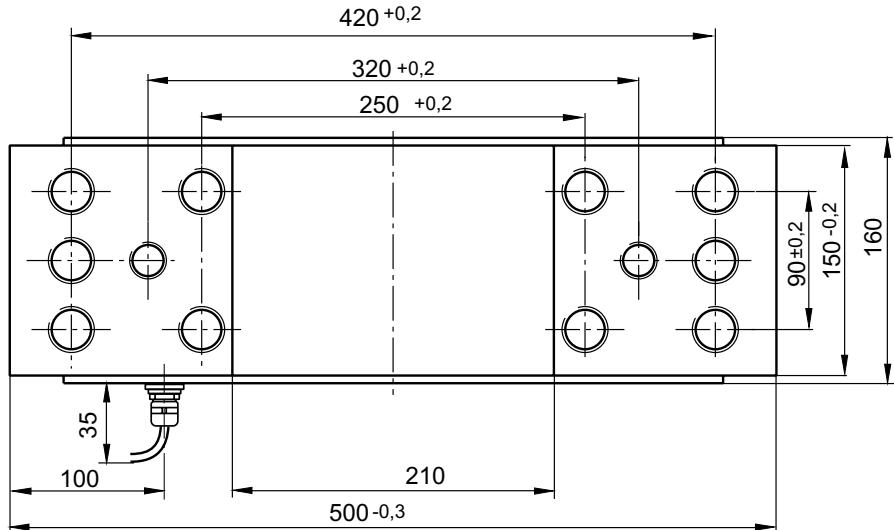
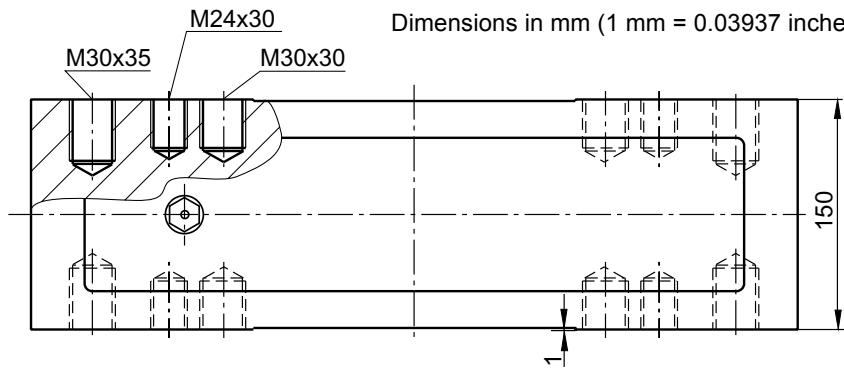
HAEHNE product program. The signals at the output terminals of the amplifier are proportional to the acting vertical force. They can be digitally displayed or used as instantaneous values in a closed control loop.



Technical Data	% Values based on nominal force
Measuring Range	200 kN
Max. operating force	160 %
Absolute max. force	500 %
Nominal ratings:	1 mV / V
Combined error	0,5 %
Reproducibility	max. $\pm$ 0,1 %
Non-linearity	max. $\pm$ 0,3 %
Hysteresis	max. $\pm$ 0,3 %
Zero drift	max. 50 ppm/C°
Nominal ambient temperature	+ 10 ... + 60° C (+50...+140° F)
Operational temperature range	- 10 ... + 70° C (+14... +158° F)
Nominal resistance of the strain gauge bridge	700 $\Omega$
Max. brigde supply voltage	10 VDC
Enclosure protection	IP 67
Sensor cable (standard)	PUR, grey, 4 x 0,34 mm <sup>2</sup>
Weight in kg	80

**Absolute max. force**

Dimensions in mm (1 mm = 0.03937 inches)



The measurable force  
mustn't deviate  $\pm$  20°  
from the center line

