

Force Sensor BZH-A / BZV-A

Scope of Supply

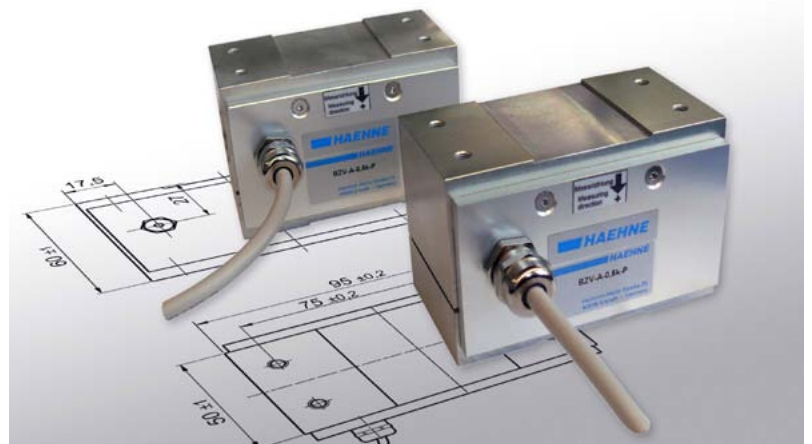
Force sensor in pillow block design with 5 m cable (PVC), with connection variant T: cable gland, straight

Variant

S2: Plug connection, right angled, M12 moulded

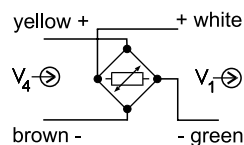
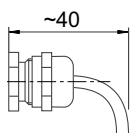
Additional Options

F: For use in explosive areas, incl. J-Box



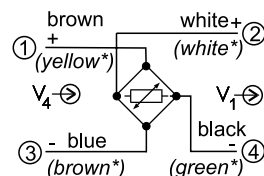
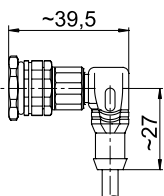
Connections

Variant T



V_4 Supply voltage
 V_1 Signal voltage

Variant S2



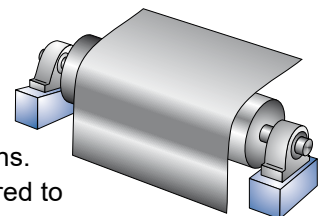
*Alternative color coding

Special Features

- Nominal forces from 0,1 up to 1 kN
- Horizontal or vertical measuring direction
- Cost effective compact design
- Manufactured from high-strength aluminium

The web tension sensors of the series BZV-A and BZH-A 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.

The sensors function according to the strain gauge principle. This means that they are very stiff and not prone to oscillations and vibrations. This is a deciding advantage compared to sensors based on displacement measurement as e.g. exemplified by the LVDT principle (Linear Variable Differential Transformer).



The BZV - devices capture the vertical forces of web tension, the devices of the series BZH the horizontal component.

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.

Ordering Data

BZV-A0,5k-TF
Type
Nominal force
Variants/ Options

BZH-A-R0,5k-TF
Type
Design
Nominal Force
Variants/ Options



Technical Data	% Values based on nominal force
Measuring Range	0,1; 0,2; 0,5; 1 kN
Max. operating force	160 %
Absolute max. force ^{*)}	1000 %
Nominal rating	0,5 mV / V
Combined error	0,5 %
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	2000 Ω
Max. bridge supply voltage	10 VDC
Protection class	IP 52
Sensor cable (standard)	PVC, grey, 4 x 0,34 mm ²
Weight	circa 1 kg
*) with static load	

Individual coloring on request

