

## Force Sensor BZH-A01 and 02

### 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

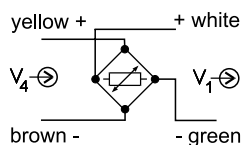
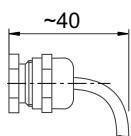
### Additional Options

U: Metal protection hose, fixed connected  
 F: For use in explosive areas incl. J-Box



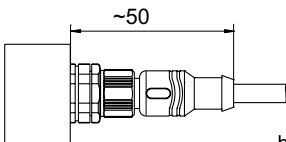
### Connections

#### Variant T

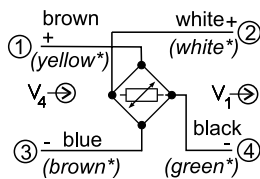


$V_4$  Supply voltage  
 $V_1$  Signal voltage

#### Variant N2



\*Alternative color coding



### Special Features

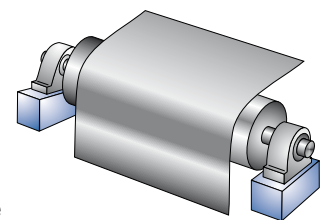
- Nominal force from 15 up to 20 kN
- Compact design for horizontal measuring direction
- Available in standard design or with individual dimensions
- Cost effective pillow block design made of high-strength aluminum

The web tension sensors of the series 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.

All BZH - devices capture the horizontal 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 horizontal force. They can be digitally displayed or used as instantaneous values in a closed control loop.



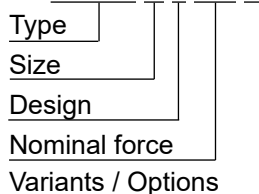
### Additional Options

#### Option U

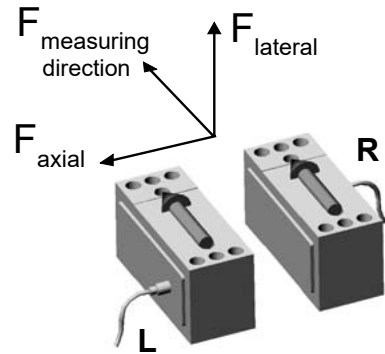


### Ordering Example

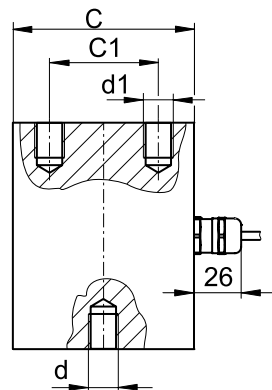
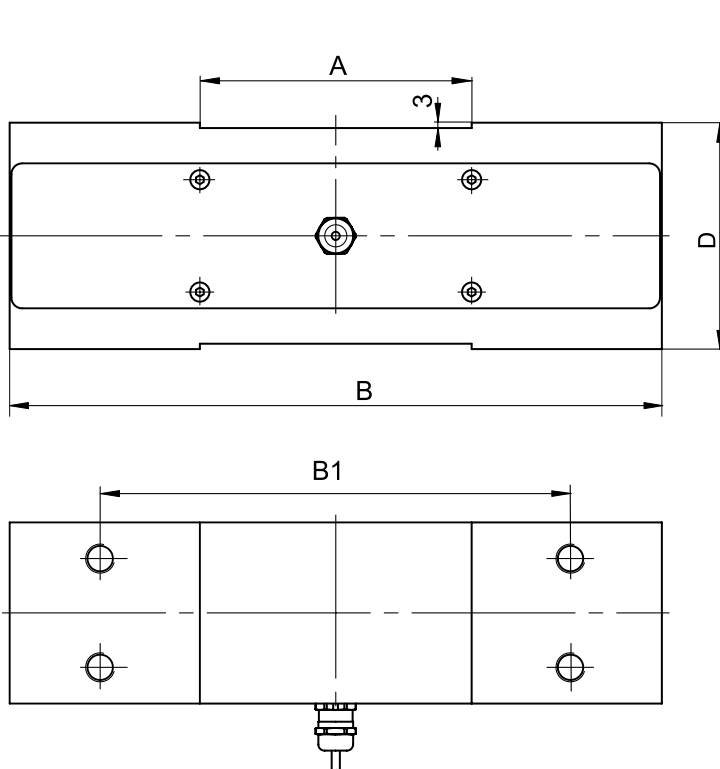
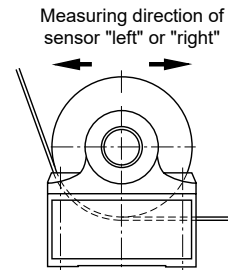
**BZH-A01R20k-TU**



Technical Data	Values (%) based on nominal force
Measuring range	5; 10; 20 kN
Max. operating force	160 %
Absolute max. force <sup>*)</sup>	800 %
Nominal rating	0,5 mV / V
Combined error	0,5 %
Reproducibility	max. ± 0,1 %
Linearity deviation	max. ± 0,3 %
Hysteresis	max. ± 0,3 %
Nominal ambient temperature	+10 ... +60 °C / 32... 140 °F
Operational temperature range	-10 ... +70 °C / 14... 158 °F
Nominal resistance of the strain gauge bridge	2000 Ω
Bridge supply voltage	10 VDC
Enclosure protection	IP 54
Sensor cable (standard)	PUR, grau, 4 x 0,34 mm <sup>2</sup>
Weight Size 01; 02 in kg	7; 11
*) with static load	



When ordering please specify „L“ (left) or „R“ (right) in order to determine unequivocally the measurement direction and the cable connector exit.



Alternatively, an individual adaptation to the following pillow block bearings is possible.  
 For example:  
 Size 01  
 SKF (SNH 509)  
 FAG (SNV 080)  
 Size 02  
 SKF (SNH 515)  
 FAG (SNV 140)  
 et al.



Not for use in corrosive environments

Dimensions in mm (1 mm = 0.03937 inches)

Size	B	B1	A	C	C1	D	d1	d
01	230 +0,5	170 ±0,1	127 +0,2	90 +0,5	50 ±0,1	125 -0,5	4xM12x24	2xM16x32
02	360 +0,5	260 ±0,1	150 +0,2	110 +0,5	70 ±0,1	125 -0,5	4xM16x32	2xM20x40