Web Tension Bearing BZL-A

Scope of Supply

Pillow block with integrated web tension
measuring function with 5 m cable
with connection variant T:
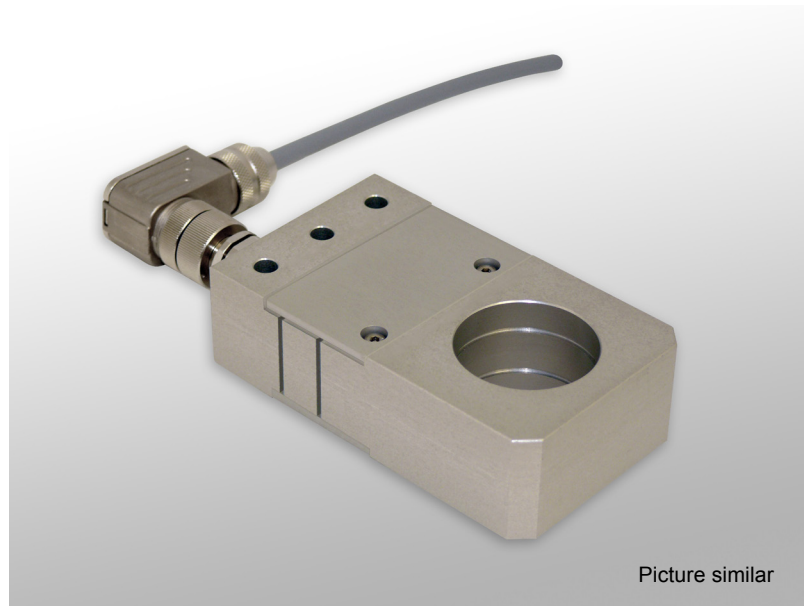cable gland, straight

Variant

S2:   Plug connection, right-angled,
      M12, moulded

Additional Option

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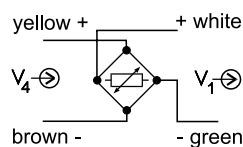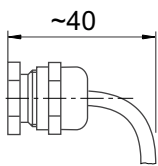   incl. J-Box

Additional Accessories

Self-aligning ball bearing
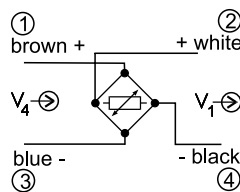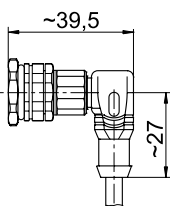Snap rings

Picture similar

Connections

Variant T

~40

yellow +   + white

V_4→   ⟶ V_1→

brown -   - green

Variant S2

~39,5

~27

V_4 Supply voltage
V_1 Signal voltage

① brown +   + white ②

V_4→   ⟶ V_1→

③ blue -   - black ④

Special Features

- Compact and cost-effective design
- Easy to install
- Made of high-strength aluminum

For the web tension measurement in machines with limited installation space the force sensor BZL-A offers great constructive advantages due to its particularly slim, compact design.
The pillow block web tension bearing BZL-A made of high-strength aluminum consist primarily of a pillow block with a measuring inner part with a precision bore for a self-aligning ball bearing. The inner part component contains a double beam technology system with the well-known advantages of a good linearity and a high stiffness. The strain gauges wired as full bridge deliver a signal proportional to the force.

HAEHNE offers for all its sensors a corresponding range of amplifiers to condition the measuring signal and deliver the bridge voltage supply.

Ordering Example

**BZL-A1-15-125-T**

Type
Shaft-ø
Nom. force
Variants / Options

Technical Data	Values (%) based on nominal force
Nominal force	125; 250; 500 N
Max. operating force	160 %
Absolut max. force	800 %
Nominal rating	0,5 mV / V
Combined error	< 0,3%
Nominal ambient temperature	+10 ... +60° C (+50 ...+140 °F)
Operational temperature range	- 10 ... +70° C (14 ... 158 °F)
Nominal resistance of strain gauge	700 Ω
Max. bridge supply voltage	10 VDC
Protection class	IP52
Sensor cable (Standard)	PVC, grey, 4 x 0,34 mm²

Mounting Instruction

The sensor can be fixed with

2 screws to the machine frame.

Notice fixed and floating bearing!

See: "Practical guide of web tensi-

on measurement and control"
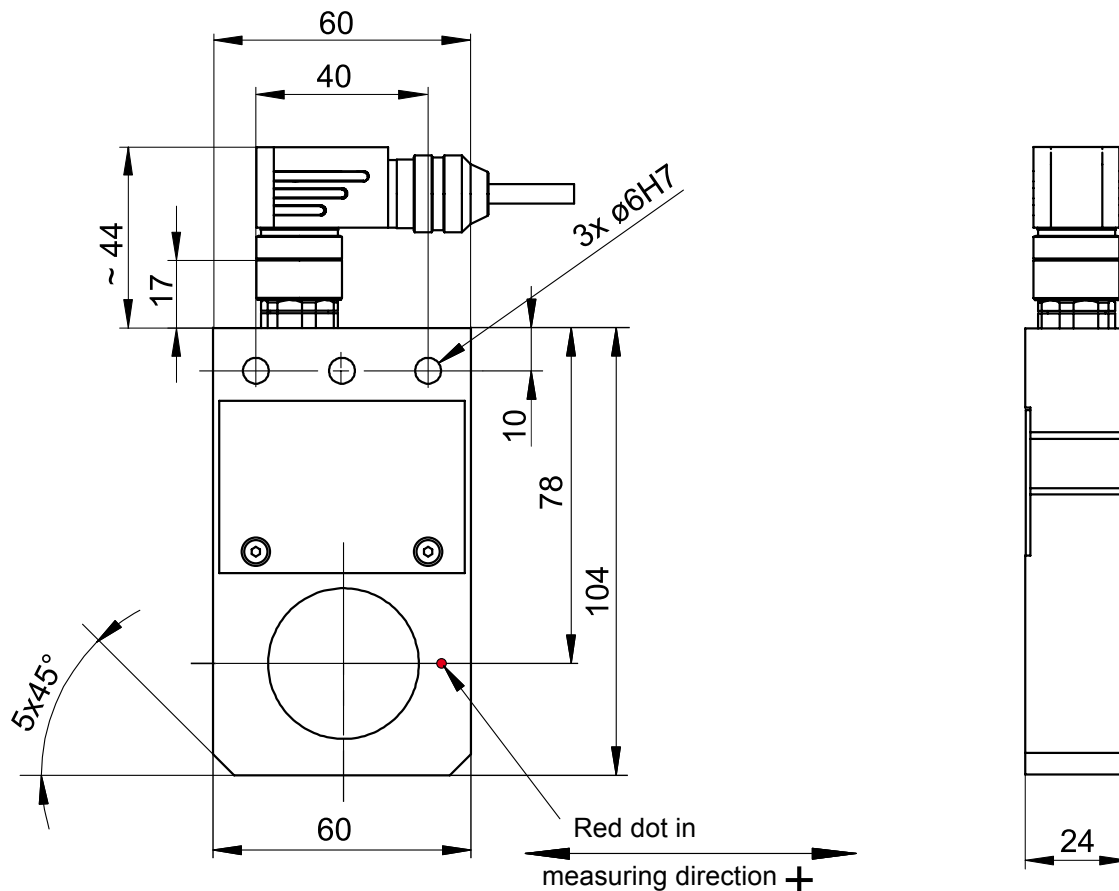
Dimensions in mm (1 mm = 0.03937 inches)
For self-aligning ball bearings 1202TV and 2202TV for measuring roller with 15 mm shaft