

Web Tension Sensor BZR5

Scope of supply

Force sensor in flange design with 5 m cable (PVC) and connection variant S1: Plug connection, right angled, M12, metal

Variant

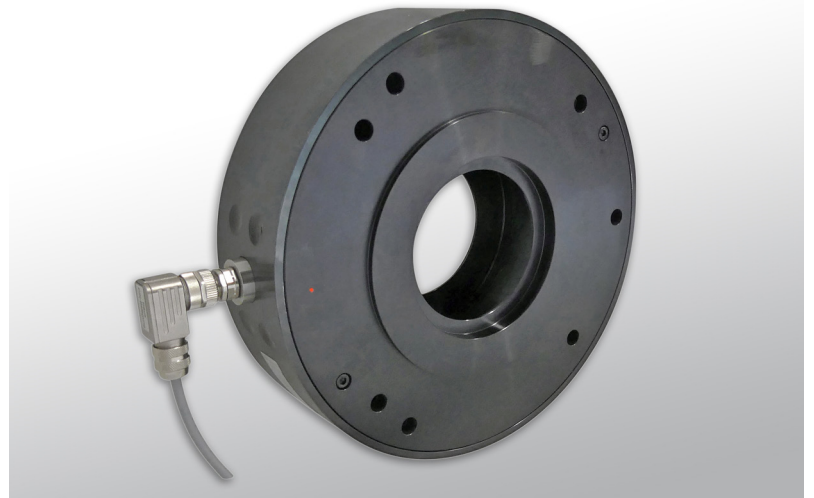
T: Cable gland, straight with flexible spring cable shield

Additional Option

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

Additional Accessories

Sealing ring
Self-aligning ball bearing
2 Snap rings
Bearing support blocks

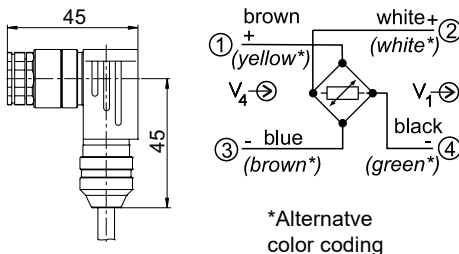


Special Features

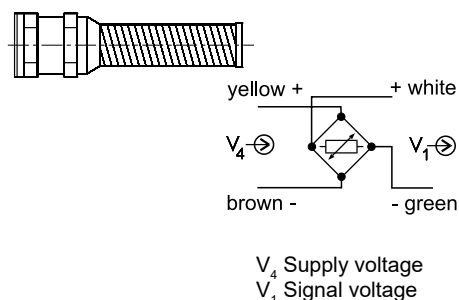
- High overload protection - due to mechanical stops
- Small space requirement
- High Accuracy
- Stainless steel design possible

Connections

Variant S1



Variant T

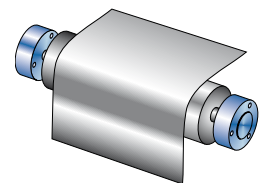


The radial force sensors BZR5 are suitable for the direct measurement of large and very large tension forces which occur in the manufacturing and further processing of web shaped materials.

The devices are used in the conventional device for the measurement of front tension forces. Depending on the flow of the web and the distribution of the load, the measuring rolls can be equipped with single or pairs of sensors.

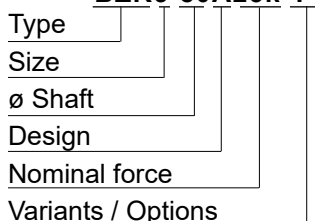
The sensors are of a compact flange design and suitable for a variety of applications. The sensors basically consist of the seat of the bearing, the measuring elements and the housing with cover disks.

The measuring elements function according to the transverse beams principle. The acting forces are captured by strain gauges applied to the measuring elements. The full bridge strain gauge are designed for maximum signal usage and temperature compensation. HAEHNE offers for all its sensors a corresponding range of amplifiers to condition the measuring signal and deliver the bridge voltage supply. Optional multiple metallic coatings of the housing and the potted electrical connections make them suitable for measurement under extreme environmental conditions and aggressive media.



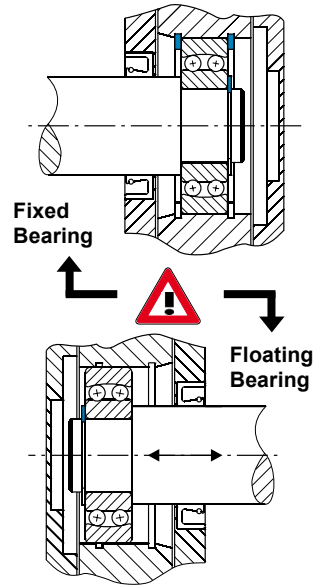
Ordering Data

BZR5-80A25k-T

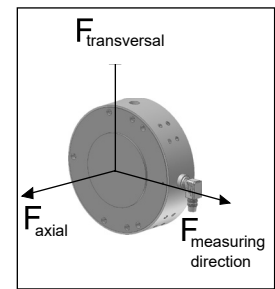
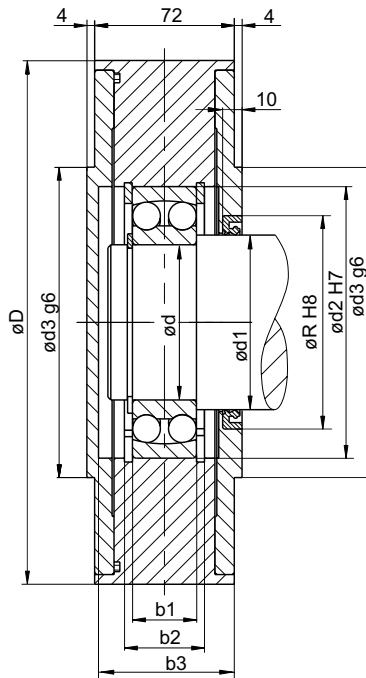
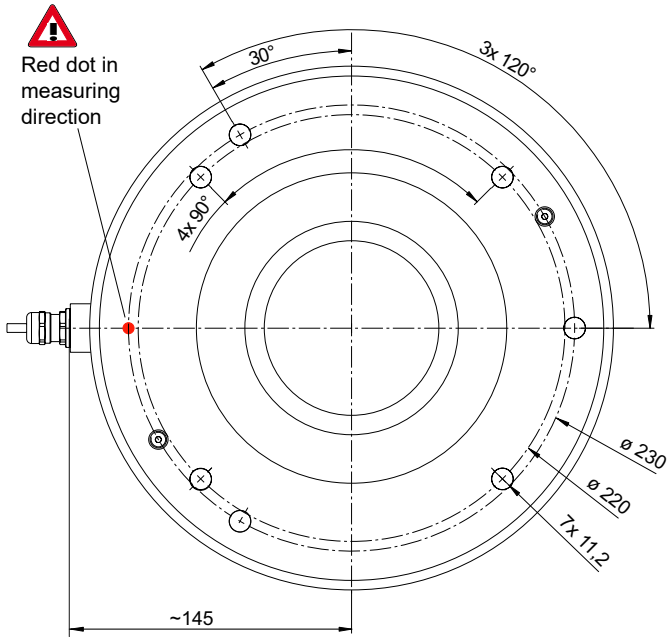


Technical Data	Values (%) based on nominal force
Size	5
Nominal force (Measuring range)	5; 10; 25 kN
Max. operating force	160 %
Absolute max. force	1000 %
max. axial force	50 %
max. transversal force	50 %
Nominal rating	1 mV/V
Combined error	0,5 %
Reproducibility	0,1 %
Nominal ambient temperature	+ 10 ... + 60° C (+50...+140° F)
Operational temperature range	- 10 ... + 70° C (+14... +158° F)
Nominal resistance of strain gauge bridge	700 Ω
Bridge supply voltage	10 V DC
Enclosure protection	Variante S1: IP 67

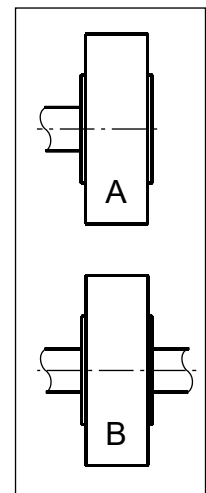
Installation Notice



Bearings and shaft sealing ring are not contained in the scope of supply



Design



Size	Nominal Force [kN]	d	d1	d2	d3	D	b1	b2	b3	R	recom. bearing
5	5; 10; 25	65	75	120	160	270	31	39,3	69	90	2213
		70	80	125			31	39,3		100	2214
		75	85	130			31	39,3		130	2215
		80	90	140			33	41,3		110	(2)2216

Self-aligning ball bearing