

Compression Force Sensor DK4

Scope of Supply

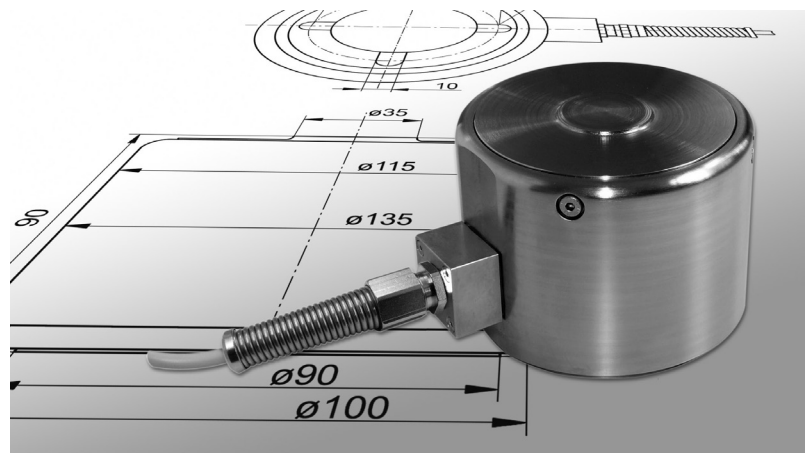
Force sensor with 5 m cable (PVC),
with cable connection T:
cable gland, straight;

Variant

N2: plug connection, straight,
M12, moulded

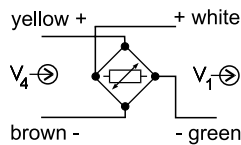
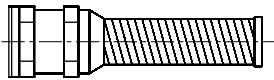
Additional Option

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

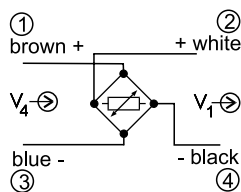
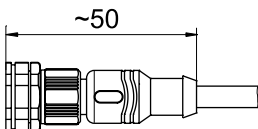


Connection

Variant T



Variant N2



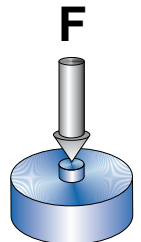
V_4 Supply voltage
 V_1 Signal voltage

Special Features

- Minimum space requirement due to compact design
- Nominal force ratings from 200 to 1000 kN
- Made of stainless steel

The compression force load cells of the DK series are characterized by their very compact design. They have been especially developed for applications where large forces must be measured accurately within confined spaces - diameter and height - .

Typical applications are calenders but also other machines and equipment that require the measurement and control of forces.



The force sensor basically consists of a cylindrical compression body. Its shape has been optimized through calculations made according to the finite element method.

Strain gauge elements on the active circumference of the compression cylinder captures the acting forces.

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

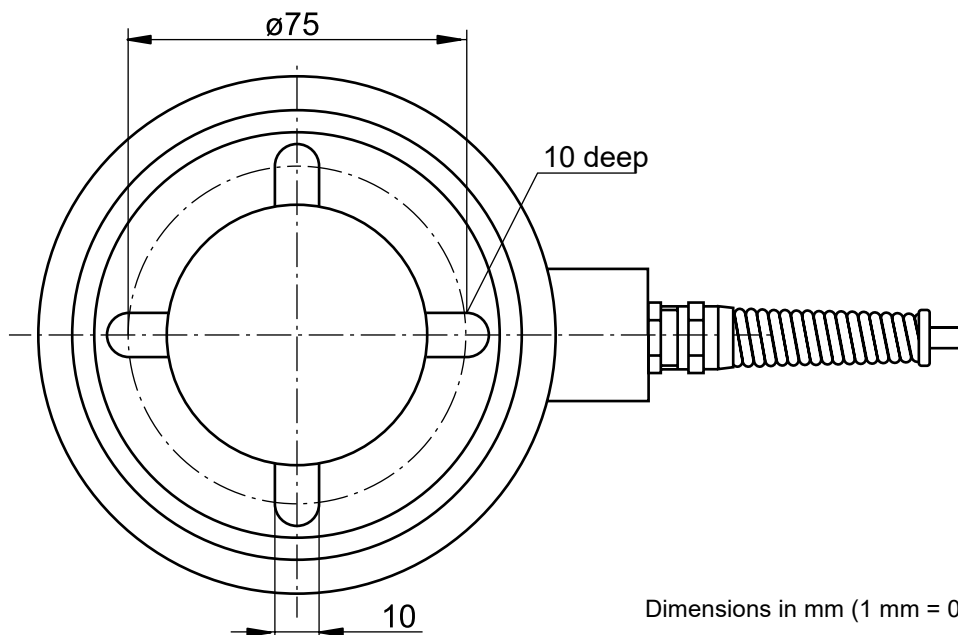
The signals at the output terminals of the amplifier are proportional to the acting compression force. They can be digitally displayed or used as instantaneous values in a control loop.

Ordering example:

DK4-650k-TF

Type	
Nominal force	
Variant / Option	

Technical Data	% Values based on nominal force
Nominal force (measuring range)	200; 500; 650; 1000 kN
Max. operating force	150 %
Absolute max. force	250 %
Nominal rating	1,0 m V / 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	700 Ω
Bridge supply voltage	10 VDC
Enclosure protection	IP 67



Dimensions in mm (1 mm = 0.03937 inches)

