# IHAEHNE

# Compression Force Sensor DK2

#### Scope of Supply

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

#### **Additional Options**

Starting from 1 kN nominal force:

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

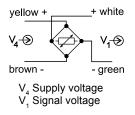
#### Additional Accessories

Self aligning pad

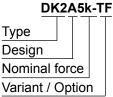
### Connection

Variant T





## Ordering example:





#### **Special Features**

- Minimum space requirement due to compact design
- Simple mounting •
- Nominal force ratings 0,2; 0,5; 1; 2; 5 and 10 kN
- Made of stainless steel with protection class IP67
- With and without overload protection

The compression force sensors of DK2 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.

The sensors consist of a cylindrical membrane,

whose special form was optimized with

Finite Elements Analysis (FEA).

Strain gauge elements on the membrane



surface capture the acting forces.

An amplifier of the HAEHNE product program provide the voltage supply to the full bridge and is also processing the measurement signals. The signals at the output

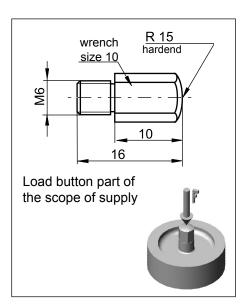
terminals of the amplifier are proportional to the acting compression force. They can be digitally displayed or used as actual values in closed loop controls.

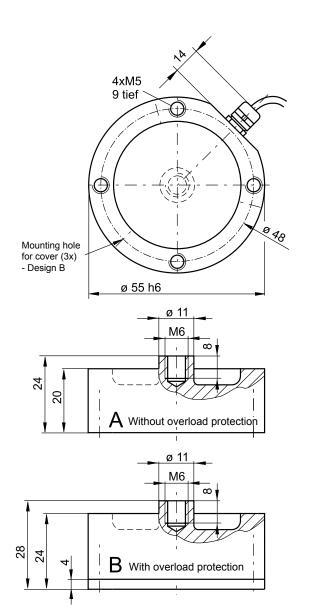
The radial cable entry facilitates simple mounting of the load cell to machine frames. In order to optimize the transmission of force the use of a load button or a pendular pad is recommended.

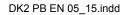
## DK2



Technical Data	Values (%) based on nominal force	
Nominal Force	0,2; 0,5; 1; 2; 5; 10 kN	
Max. operating force	160 %	
Absolute max. force Design A Design B	250 % 1000 %	
Nominal rating	0,2 kN	1,25 mV/V
	0,5 - 10 kN	1,5 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 strain gauge	700 Ω	
Max. bridge supply voltage	10 VDC	
Enclosure protection	IP67	
Sensor cable (standard)	PVC, grey, 4 x 0,14 mm <sup>2</sup>	







Dimensions in mm (1 mm = 0.03937 inches) Technical modification reserved.

HAEHNE Elektronische Messgeräte GmbH · Heinrich-Hertz-Str. 29 · D-40699 Erkrath Germany · Telefon 0211/92591-0 · Fax 0211/92591-20 http://www.haehne.de Email: info@haehne.de

