

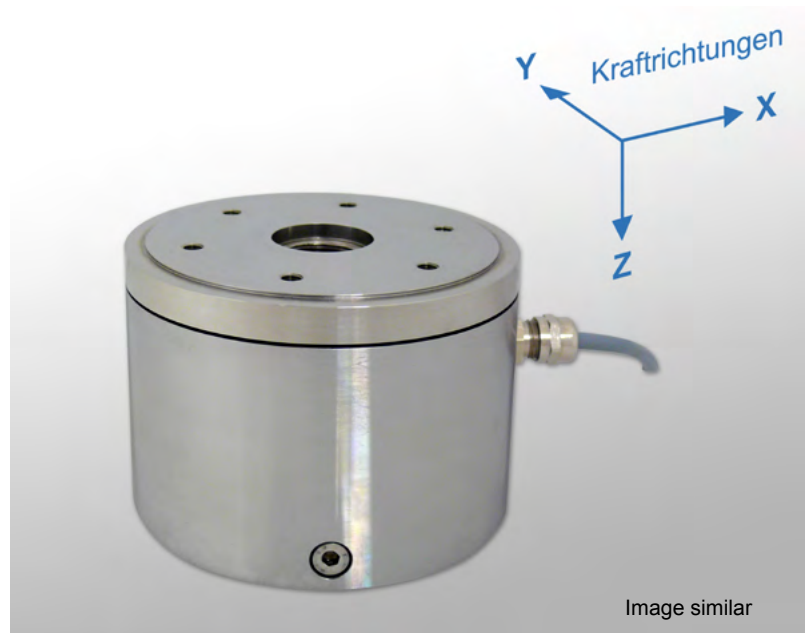
3D Sensor XYZ

Scope of Supply

Force sensor with 5 m cable (PVC)
with radial cable outlet and connection
variant T: cable gland, straight

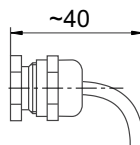
Additional Options

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



Connections

Variant T



Special Features

- Low space requirement due to compact design
- Simultaneous acquisition of forces from three directions
- Stainless steel design

The 3D sensor is characterized by a particularly compact design. It was developed specifically for applications in small spaces where an exact measurement in three directions is necessary.

The sensor consists of a measuring element, whose design has been optimized by the finite element method (FEM).

Strain gauges capture the forces acting on the active range of the measuring element.

The voltage supply to the full bridge and the processing of the measuring signals is effected with a suitable amplifier from the HAEHNE program, for example with the DCX. The signals can be evaluated further or transferred to common fieldbus standards.

Ordering example

XYZ5k5k64k-T

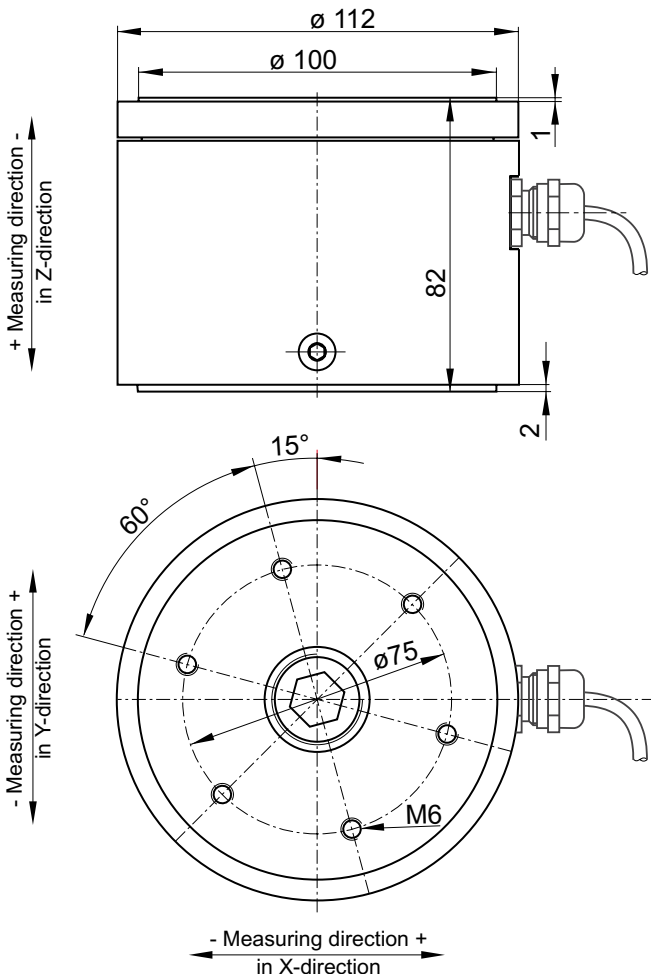
Type
nominal forces XYZ
Variants / Options

Technical Data	Values (%) based on nominal force		
	X-direction	Y-direction	Z-direction
Nominal force*	5 kN	5 kN	64 kN
Max. operating force	160 %		
Absolut max. force	600 %		
Nominal rating	0,25 mV / V	0,25 mV / V	0,75 mV / V
Combined error in measuring direction	0,3 %		
Nominal ambient temperature	+ 10 ... +60° C (+50 ...+140 °F)		
Operational temperature range	- 10 ... +75° C (14 ... 167 °F)		
Nominal resistance of strain gauge	1000 Ω		
Max. bridge supply voltage	10 VDC		
Protection class	IP 50		
Sensor cable (Standard)	PVC, grey, 12 x 0,14 mm ²		

*Other measuring ranges and combinations are possible:

Nominal force	X-direction	Y-direction	Z-direction
min. [kN]	3,25 kN	3,25 kN	22,5 kN
max. [kN]	80 kN	80 kN	400 kN

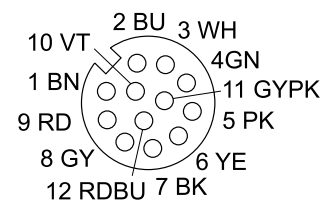
Depending on the nominal force the value of nominal rating is 0,25 to 1 mV/V



Measuring Cable Lead colors

No.	Short-cuts	Lead colors	Assignment	Measuring direction
1	BN	brown	V ₁ +	X
2	BU	blue	V ₁ -	
3	WH	white	V ₄ +	
4	GN	green	V ₄ -	
5	PK	pink	V ₁ +	Y
6	YE	yellow	V ₁ -	
7	BK	black	V ₄ +	
8	GY	grey	V ₄ -	
9	RD	red	V ₁ +	Z
10	VT	violet	V ₁ -	
11	GYPK	greypink	V ₄ +	
12	RDBU	redblue	V ₄ -	

V₁: Signal voltage
V₄: Supply voltage



Dimensions in mm (1 mm = 0.03937 inches)

XYZ PB EN 06_15.indd

Technical modifications reserved.