

# Technical Data Sheet



## F3B3L11A



### Load Cell, 3-axial

Location: Steering Column

Force direction

$F_x, F_y, F_z$

Application

Measurement of forces in the steering column

Equivalent types

Customized versions

Measurement specification

Resistive

Strain gauges

Options

Polarity according to customer specifications

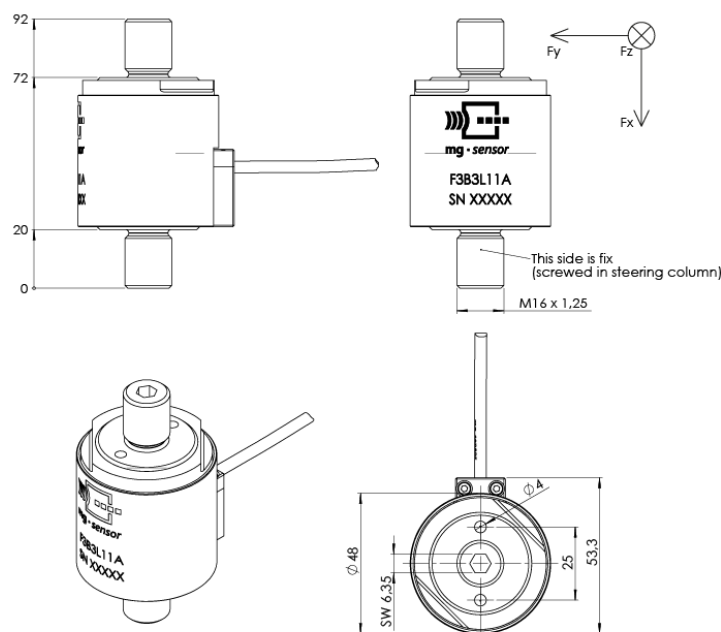


### Technical description

The applied force causes compression or strain of the base body. The deformation is measured using strain gauges. The wiring of multiple strain gauges for a full bridge circuit compensates for the temperature influence on the zero signal and the cross-influence from other force and torque application.



### Dimensions



# Technical Data Sheet



**mg · sensor**  
P U R E P R E C I S I O N

## F3B3L11A



### Technical specification

	Unit	Value		
		F <sub>x</sub>	F <sub>y</sub>	F <sub>z</sub>
Measuring range	kN	25	10	10
Sensitivity <sup>1)</sup>	μV/V/kN	44	140	140
Output signal <sup>1), 2)</sup>	mV/V	1.1	1.4	1.4
Bridge resistance	Ω	700	350	350
Zero signal <sup>1)</sup>	mV/V	≤ 0.05		
Amplitude non-linearity <sup>3)</sup>	%	≤ 1.0		
Hysteresis <sup>3)</sup>	%	≤ 1.0		
Channel crosstalk <sup>3)</sup>	%	≤ 5.0		
Supply voltage	V	2–15		
Ultimate load	%	150		
Insulation resistance	MΩ	> 100		
Temperature range	°C	-30...+70		
Weight (approximate)	g	650 (incl. Adaptors)		

All values measured at 10 V sensor supply voltage and at 23 °C.

<sup>1)</sup> Typical value

<sup>2)</sup> At nominal load

<sup>3)</sup> Relative nominal range