Technical Data Sheet

N5ATA11A

Load Cell, 5-axial

Location: Tibia, Lower

Force direction

F_x, F_y, F_z, M_x, M_y

Application

H3-5%, H3-50%, H3-95%
FAA
BioSID

Equivalent types

Denton: 3644
FTSS: IF-853

Measurement specification

Resistive
Strain gauges

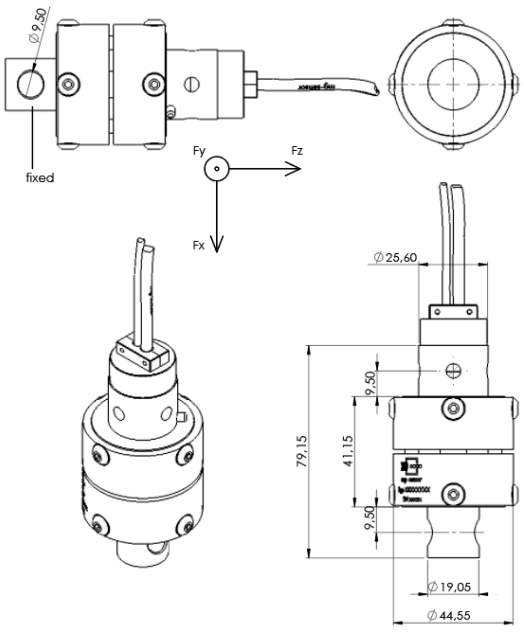
Options

ID-Module integrated in sensor
Polarity according to SAE J211

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



TD N5ATA11A 161013e

Airport Boulevard B 210
77836 Rheinmuenster
Germany

Tel. +49 7229 69969-0
Tel. +49 700 **mg**-*sensor*
Fax +49 7229 69969-19

info@**mg**-*sensor*.de
www.**mg**-*sensor*.de

Technical Data Sheet

N5ATA11A

Technical specification

	Unit	Value					
		F_x	F_y	F_z	M_x	M_y	M_z
Measuring range	kN Nm	11	11	11	 390	 390	 –
Sensitivity[1)]	µV/V/kN µV/V/Nm	180	180	95	 8,0	 8,0	 –
Output signal[1), 2)]	mV/V	2,0	2,0	1,0	3,0	3,0	–
Bridge resistance	Ω	350	350	700	350	350	–
Zero signal[1)]	mV/V	≤ 0,05					
Amplitude non-linearity[3)]	%	≤ 1,0					
Hysteresis[3)]	%	≤ 1,0					
Channel crosstalk[3)]	%	≤ 5,0					
Supply voltage	V	2–15					
Ultimate load	%	150					
Insulation resistance	MΩ	> 100					
Temperature range	°C	–30…+70					
Weight (approximate)	g	500					

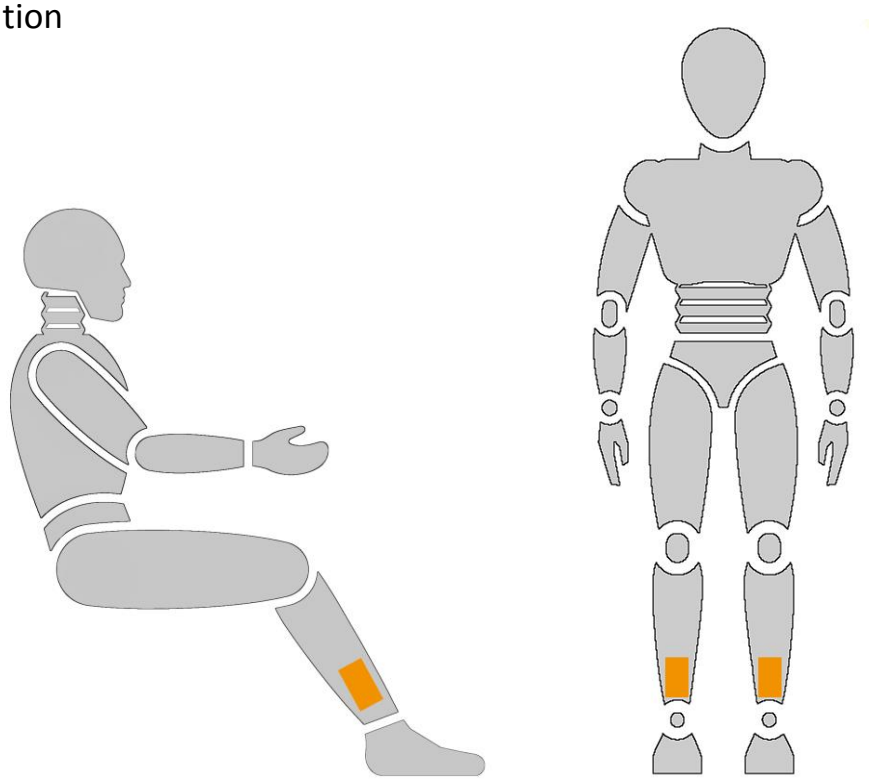
All values measured at 10 V sensor supply voltage and at 23 °C.

[1)] Typical value

[2)] At nominal load

[3)] Relative nominal range

Dummy application



TD N5ATA11A 161013e

Airport Boulevard B 210
77836 Rheinmuenster
Germany

Tel. +49 7229 69969-0
Tel. +49 700 **mg**-*sensor*
Fax +49 7229 69969-19

info@**mg**-*sensor*.de
www.**mg**-*sensor*.de