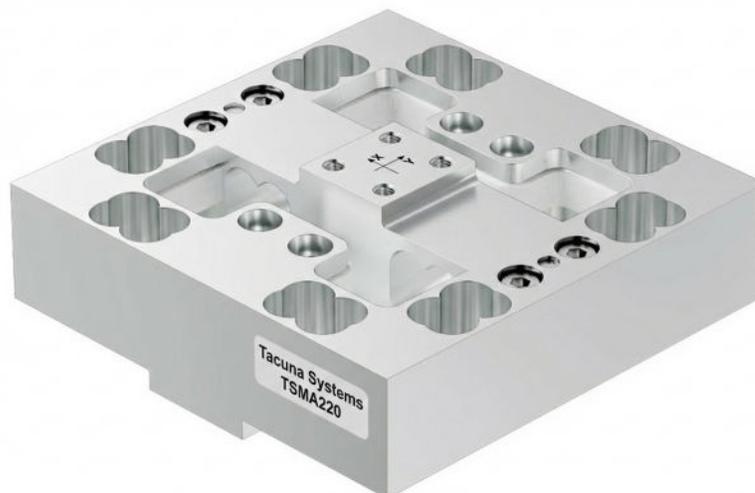# Tacuna Systems

TSMA220

Triaxial Load Cell/Force Sensor

ISO 9001:2015 CE

Features

- Capacity: 2000N, 5000N
- 3-component force sensor F_x, F_y, F_z
- Material: Aluminum
- Protection class: IP65

- Machine tool instrumentation
- Tribology testing
- Test benches
- Materials testing
- Reaction force measurement
- Medical

Technical data

Measuring range				
Maximum Capacity (E_{max})	N	F_x(2000N...5000N)	F_y(2000N...5000N)	F_z(2000N...5000N)

Performance				
Accuracy Class	-	G5	G5	G5
Nonlinear error	%FS	≤±0.5	≤±0.5	≤±0.5
Repeatability error	%FS	≤±0.5	≤±0.5	≤±0.5
Compensated Temperature Range	°C		-10 to 40	
Operating Temperature Range	°C		-30 to 70	
Temp. Coeff - Zero	%FS/10ºC		≤±0.2	
Temp. Coeff - Span	%FS/10ºC		≤±0.2	
Safe Overload	%FS		150	
Ultimate Overload	%FS		200	

Electrical @25°C		
Rated Sensitivity	mV/V	2.0±0.2
Zero Balance	%FS	±1
Excitation Voltage	VDC	5 to 10
Max. Excitation Voltage	VDC	18
Insulation Resistance	MΩ@50VDC	5000
Input Resistance	Ω	750±50
Output Resistance	Ω	700±5
Cable Specification	-	4 conductor PVC shielded cable, Cable Ø3.8 x 2 m

Physical Specifications		
Material	-	Aluminum
Protection	-	IP65
Weight, without cable, approx.	g	700

Dimensions in mm [in]

26
[1.02]

30
[1.18]

35
[1.38]

5
[0.20]

120
[4.72]

A-A

16
[0.63]

4-M5

18
[0.71]

120
[4.72]

A

A

4-Ø5.5
[Ø0.22]

4-Ø10
[Ø0.39]
Deep 5.7[0.22]