

SCAIME is a global player in weighing, force, torque, pressure and displacement measurements. Our well fitted and innovative solutions being able to satisfy your needs regardless of your activity field. The quality of our products is renowned, and our technological knowledge and know-how enable us to offer a complete range of solutions for the measurement of physical parameters: indicators, load cells, torquemeters, extensometers, force, position, pressure or level transducers.

Force Measurement



For your all applications...

SCAIME puts at your disposal all the experience we have previously acquired in the field of force measurement :

- Force control on presses
- Peak to peak force measurement
- Press fit measurement
- Force control for safety applications
- Regulation of applied forces

To cover all these different applications, we offer you a wide variety of force sensors working in compression and/or tension as well as load pins.

Moreover, SCAIME can provide you some tailor-made sensors which are fully adapted to your own application or own specifications.



FORCE SENSORS

Model	MS02	MK11	M12 - ML12	K12	K1427	K100	K1107	K1563	K25	K1368	MTRD-MTRS
Nominal load C.N.	0 ... 0.5 kN to 0 ... 5 000 kN	0 ... 0.5 kN to 0 ... 5 000 kN	0 ... 1 kN to 0 ... 2 000 kN	0 ... 0.5 kN to 0 ... 1 000 kN	0 ... 0.5 kN to 0 ... 200 kN	0 ... 1 kN to 0 ... 100 kN	0 ... 10 N to 0 ... 100 N	0 ... 0.1 kN to 0 ... 2 kN	0 ... 0.02 to 0 ... 50 kN	0 ... 10 N to 0 ... 200 N	0 ... 50 kN to 0 ... 500 kN
Combined error % C.N.	0.05 (0.03/0.02)	0.15	M12 $\leq \pm 0.15$ ML12 $\leq \pm 0.3$	0.1	0.1	0.25	0.2	0.15	0.1	0.16	< ± 0.15
Output signal (mV/V)	2.00	2.00	2.00	2.00	≤ 10 kN: 1.00 > 10 kN: 2.00	0.80 ... 1.20	0.50 ± 15 %	2.00 0.1 kN: 1.00	0.02 kN: 1.00 ≥ 0.05 kN: 2.00	0.8 ... 1.20	2 ± 2 % 1 ± 2 %
Construction	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	≤ 20 N: Aluminum Stainless steel	Stainless steel	< 1 kN: Aluminum Stainless steel	≤ 50 N: Aluminum Stainless steel	Stainless steel
Protection	IP65 - IP67	IP65	IP65 - IP67	IP67	IP67	IP65	IP60	IP67	IP65 ≥ 2 kN : IP67	IP60	IP65 - IP68

FORCE SENSORS

Model	K1250	K1882	K13 - K13B	K22	K1613	K450	K18	K180	K2528	K2148	M15-M16
Nominal load C.N.	0 ... 2 kN to 0 ... 100 kN	0 ... 1 kN to 0 ... 150 kN	0 ... 0.01 to 0 ... 100 kN	0 ... 0.05 kN to 0 ... 2 kN	0 ... 0.1 kN to 0 ... 50 kN	0 ... 1 kN to 0 ... 1 000 kN	0 ... 5 kN to 0 ... 5 000 kN	0 ... 15 kN to 0 ... 500 kN	0 ... 0.2 kN to 0 ... 10 kN	0 ... 1 kN to 0 ... 2 kN	0 ... 0.2 kN to 0 ... 1 000 kN
Combined error % C.N.	0.3	0.12	0.25	0.35	0.3	0.2	0.3	± 1	0.5	0.15	< ± 0.5
Output signal (mV/V)	0.80 ... 1.20	1.00	0.80 ... 1.20	0.80 ... 1.20	0.80 ... 1.20	2.00	1.00	0.80 ... 1.20	0.80 ... 1.20	1 kN: 0.5 2 kN: 1	1 ± 0.1 %
Construction	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Aluminum	Stainless steel	Stainless steel
Protection	IP65	IP65	IP65	IP65	IP65	IP67	IP66	IP65	IP63	IP67	IP65

A load cells range from 10 N to 5 000 kN

Our know-how and expertise in the field of force measurements enable us to propose a wide range of sensors.

Force sensors are used to measure tension or compression forces with a precision of up to 0.05 % with a protection level up to IP67.

We provide sensors for many industrial fields such as automotive, aeronautics industries, test and inspection benches, assembly, handling, servocontrol, safety systems, etc.

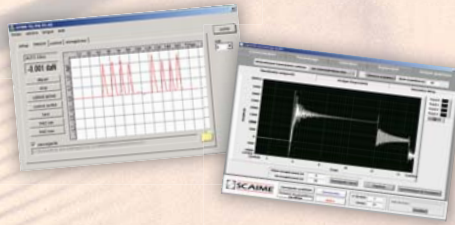
Solutions from sensors... to software

Well-aware of the significance of information technologies development for our business, we have developed softwares associated with some of our products.

These softwares have been designed to bring some new connectivity solutions and meet our customers needs to:

- interface our products with automated systems
- carry out data analysis
- share the measurement results

Acquisition software
for eNod3
and GM80



LOAD CELL ACCESSORIES		
Exemple	Model	Spécifications
	EF & EM	Rod en for load < 700 kN
	LMV & LCV	High level output
	LOAD ADAPTER	For compression utilisation

Specific products...

If you cannot find an optimized solution within our standard range, we will develop a tailor made solution perfectly adapted to your need.



Regardless of whether your problem is with the sensor or the electronics, our engineers can manage the definition, development and production of your specific solution.

Solution for signal processing

We offer solutions for conditioning, display and transmission of the measurement.
Our electronics include functions covering a wide range of applications:

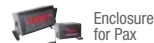
- Process control
- Press fit measurement
- Force control

For integration into industrial environments, we also offer:

- Standard interfaces with the main automated systems (Profibus-DP, Modbus-RTU, CANopen)

	TRANSMITTERS			INDICATORS		
Model	CPJ	eNod3	PAX-S	GM80	GM80 PA-TG	SDI-718B
Accuracy class	0.05 %	0.01 %	0.02 %	0.1 %	0.1 %	0.05 %
Display	-	-	LED 14 mm	LCD 9 mm	LCD 9 mm	-
Max. measuring speed	-	1 200 meas./s.	20 meas./s.	1 000 meas./s.	1 000 meas./s.	1 400 meas./s.
Logic input / output	○ 2 0	● / ● 21 / 2 0	● / ○ 21 / 4 0	● 21 / -	● / ● 21 / 2 0	● 11
Analog output	●	-	○	-	-	-
Serial link RS485 / RS232	-	● / ●	○ / ○	- / ●	- / ●	-
Modbus-RTU / Profibus DP	-	● / CANopen	○ / ○	-	-	Ethernet

ACCESSOIRES



Enclosure for PAX



Cable

Optional
○ Standard
●

Extensometer

SCAIME has launched a range of extensometers using an innovating mechanical process. Very accurate and easy to mount, they simplify force measurement by sensing structural strain directly.

EPSIMETAL extensometers range is particularly dedicated to:

- Industrial process control (stamping machines, molding machines, ...)
- In-board applications (weighing, stability control)
- Structure strain



At your service...

We have many calibration means and masses tied to international standards. We perform adjustments and calibrations of measurement systems made by technicians specialized in respecting applicable standards.



Weighing & Industrial Measurements

