

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.

# Torque Measurement



## For all your applications...

We put all our expertise and technical experience in torque measurement at your service. Our static or rotating torque meters will enable you:

- To control torque wrenches very precisely
- To control the torque on screws
- Torque regulation
- Torque measurement on engines

Our various torque meters use a contactless technology for the transmission of the electrical signal between the stator and the rotor. This allows a very high rotation speed as well as reduced maintenance times due to low tear and wear.

Besides our standard range of torque meters, we can also offer you some custom-made solutions for your very special torque applications.



### TORQUE SENSORS

Model	DR1-DR2	DR2	DR20	DR2269	DR2513	DR2477	DR2112/-L	DR2212	DR2208	DR2554	DR2500
Nominal Torque C.N.	1 ... 5 000 Nm	1 ... 500 Nm	1 ... 500 Nm	10 ... 100 Nm	10 ... 100 Nm	0.2 ... 200 Nm	0.1 ... 20 000 Nm 0.1 ... 1 000 Nm	0.1 ... 20 000 Nm	0.5 ... 5 000 Nm	50 ... 1 000 Nm	0.005 ... 150 Nm
Accuracy class (% C.N.)	0.1	0.1	0.1	0.1	0.25	0.25	0.1 / 0.2	0.1	0.1	0.15 0.05 optional	0.1
Output signal	2 mV/V	2 mV/V	2 mV/V	2 mV/V	±5 V	±5 V	±5 V ±10 V optional	±5 V ±10 V optional	±5 V ±10 V optional	±5 V ±10 V optional	±5 V ±10 V optional
Rotating	•	•	•	•	•	•	•	•	•	•	•
Contactless electrical	-	-	-	-	•	•	•	•	•	•	•

### TORQUE SENSORS

Model	DR2153	DR2113	DR2493	MR12	DF30	D2452	DH15	D2223	DFW25/35	DV14	D2268
Nominal Torque C.N.	0.1 ... 20 Nm	0.1 ... 5 000 Nm	0.1 ... 5 000 Nm	20 ... 5 000 Nm	10 ... 20 000 Nm	0.03 ... 20 000 Nm	0.005 ... 20 Nm	2 ... 3 000 Nm	2 ... 2 000 Nm	2 ... 5 000 Nm	100 ... 5 000 Nm
Accuracy class (% C.N.)	0.1	0.1	0.25	0.1	0.2 0.1 in option	0.1	0.2	0.2 0.1 in option	0.2 0.1 in option	0.2 0.1 in option	0.1 0.05 in option
Output signal	±5 V	±5 V	±5 V ±10 V in option	±5 V ±10 V in option	1 mV/V	1 mV/V	1 mV/V	1 mV/V	1 mV/V	1 mV/V	1.5 mV/V
Rotating	•	•	•	•	-	-	-	-	-	-	-
Contactless electrical	•	•	•	•	-	-	-	-	-	-	-

## A product range from 0.005 to 20 000 Nm

Our torquemeters are able to measure torque on rotating parts (e.g. to measure a motor torque) or fixed parts (e.g. to check a torque wrench).

We provide sensors for fields such as industry, automobile, test and inspection benches, assembly or screwing systems.



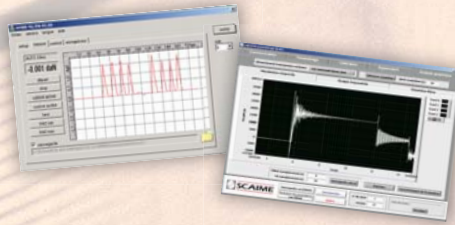
## Solutions from sensors... to software

Well-aware of the significance of information technologies development for our business, we have developed software 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 measurement the results

Acquisition software  
for eNod3  
and GM80



## Solutions for signal processing

We offer solutions for conditioning, displaying and transmitting weight measurement. Our electronics include functions covering a wide range of applications:

- Process control
- Max. value measurement
- Safety threshold

We also offer the following for integration into industrial environments:

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

COUPLINGS		
Exemple	Model	For torquemeter
	MST & MWS	D2452, DR2112, DR2477, DR2500
	966	D2452, DR2112, DR2208, DR2477, DR2500
	966P	DR2, DR20, DR2269, DR2513
	969	DR2212, DR2477
	950	D2452, DR2112, DR2208, DR2477, DR2500
	950P	DR2, DR20, DR2269, DR2513
	951	DR2212, DR2477

	TRANSMITTERS		INDICATORS		ACQUISITION	
Model	CPJ	eNod3-C	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 mes./s.
Logic input / output	○ 2.0	● / ● 21 / 20	● / ○ 21 / 40	● 21 / -	● / ● 21 / 20	● 1 E
Analog output	●	-	○	-	-	-
Serial link RS485 / RS232	-	● / ●	○ / ○	- / ●	- / ●	-
Modbus-RTU / Profibus DP	-	● / CANopen	○ / ○	-	-	Ethernet

### ACCESSORIES



Enclosure for Pax S



Coupling



Cable

Optional  
○ Standard  
●



## DR2554

This series of torque meters has a very low space requirement thanks to their integrated couplings and can therefore be implemented in very reduced space.

The DR2554 offers a maximum rotation speed of 13 000 rpm with an accuracy ranging from 0.05 to 0.15 % of its nominal capacity.

The DR2554 is a contactless sensor and therefore requires no special maintenance operations.

## 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.



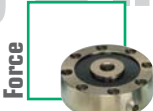
### Technical advices and assistance

Assisting our customers is one of the duties of our engineers. They listen to you so they can define your need, work with you to choose the best solution and help you with its implementation.

# Weighing & Industrial Measurements



Weighing



Force



Pressure



Displacement



Extensometer