#### 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

•: Standard - O: Optional

Modbus RTU / Profibus DP

• share the measurement results

#### Signal conditioning

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®)

# SCAIME

## Torque Measurement

Sensors, Accessories, Electronics

#### 













Model	СРЈ	eNod4	PAX	GM80	GM80 PA-TG	SDI-718 B
Туре	Trans	smitters		Acquisition		
Input	mV/V, potentiometer	mV/V, 4-20 mA, 0-10 V	mV/V ±20 V	mV/V, 4-20 mA, ±5 V	mV/V, 4-20 mA, ±5 V	mV/V, 4-20 mA ±60 V, °C, Hz
Accuracy class	0.05 %	0.01 %	0.02 %	0.1 %	0.1 %	0.05 %
Max. measuring speed (meas./s.)	-	1 200	20	1 000	1 000	14 000
Display	-	-	LED 14 mm	LCD 9 mm	LCD 9 mm	PC
Logic Input (I) / Output (O)	O 2 S	•/O 2E-2S/4S	•/O 2E/4S	• 2 E / -	•/• 2E/2S	• 1 E
Analog output	•	-	0	-	-	-
Serial link RS485 / RS232	-	• / •	0/0	-/•	-/•	-

**ACCESSORIES** 



CANopen®



0/0



#### Advice and technical assistance...

Customer support is one of the missions of our engineers.

We are here to help you define your needs, choose the best solution and assist you during the implementation phases.





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Download all our technical documents from our website:

www.scaime.com



MT-Couple-E-1211



## 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.

#### 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 transmision 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 specifie torque applications.



#### At your service...

We have many calibration means and masses connected to international standards. We perform measurement systems adjustments and calibrations, carried out by specialized technicians in full respect of applicable standards.





















Model	DR1 - DR12	DR2	DR20	DR2269	DR2513	DR2477	DR2112/-L	DR2212	DR2208	DR2554	DR2500
Nominal torque (C.N.) Nm	1 5 000	1 500	1 500	10 100	10 100	0.2 200	0.1 20 000 0.1 1 000	0.1 20 000	0.5 5 000	50 1 000	0.005 150
Accuracy class (% C.N.)	0.1	0.1	0.1	0.1	0.25	0.25	0.1 / 0.2 0.05 in option	0.1	0.1	0.15 0.05 in option	0.1
Output signal	2 mV/V	2 mV/V	2 mV/V	2 mV/V	±5 V	±5 V	±5 V ±10 V in option	±5 V ±10 V in option	±5 V ±10 V in option	±5 V ±10 V in option	±5 V ±10 V in option
Rotating	•	•	•	•	•	•	•	•	•	•	•
Contactless electronical	-	-	-	-	•	•	•	•	•	•	•

















Model	DR2153	DR2113	DR2493	MR12	DF30	D2452	DH1 <i>5</i>	D2223	DFW25/35	DV14	D2268
Nominal torque (C.N.) Nm	0.1 20	0.1 5 000	0.1 5 000	20 5 000	10 20 000	0.03 20 000	0.005 20	2 3 000	2 2 000	2 5 000	100 5 000
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 electronical	•	•	•	•	-	-	-	-	-	-	-

### Specific products...

This serie of torque meters has a very low space requirement thanks to its 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.

### **ACCESSORIES**







Model	MST & MWS	966	966P	969	950	950P	951
Coupling for torquemeter	D2452, DR2112, <sup>E</sup> DR2477, DR2500	02452, DR2112, DR2208, DR2477, DR2500	DR2, DR20, DR2269, DR2513	DR2212, DR2477	D2452, DR2112, DR2208, DR2477, DR2500	DR2, DR2O, DR2269, DR2513	DR2212, DR2477