



# Torque Measurement

Sensors, Accessories, Electronics



# A product range from 0.005 to 20 000 Nm

Our torque meters 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 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 specific 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.



## Focus on the MR12 series...



Special torque meter for torque measurement on pulley/belt. It is mounted on the motor shaft and the pulley directly on it, which means that the mechanical assembly does not need to be modified. It supports the radial forces generated by the belt tension.

## 2 AXIAL SENSORS

### Torque & Force



Model	M2396	M2371	DR1 - DR12	DR2	DR2477	DR2112/-L	DR2212/-L	DR2208	DR2500	DR2554	DR2800
Nominal torque (Cn) Nm	5 ... 50 Nm 0.5 ... 2 kN	2 ... 5 Nm 100 ... 500 N	1 ... 5 000	1 ... 500	0.2 ... 200	0.1 ... 20 000 0.1 ... 1 000	0.5 ... 20 000 0.1 ... 1 000	0.5 ... 20 000	0.005 ... 150	50 ... 1 000	50 ... 10 000
Accuracy class (% Cn)	0.2	0.2	0.1	0.1	0.25	0.1 / 0.2 0.05 in option	0.1 0.05 in option	0.1	0.1	0.1	0.1
Output signal	1 mV/V	±5 V ±10 V in option	1 mV/V	1 mV/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	±5 V ±10 V in option
Rotating	-	•	•	•	•	•	•	•	•	•	•
Contactless	-	•	-	-	•	•	•	•	•	•	•

Consult our complet product range on: [www.scaime.com](http://www.scaime.com)

## CAPTEURS



Model	DR2494	DR2113	DR2493	MR12	DF30/2209	D2452	DH15	D2223	DFW25/35	DV14	D2268
Nominal torque (Cn) Nm	0.1 ... 20	0.1 ... 5 000	0.1 ... 5 000	20 ... 5 000	10 ... 20 000 1 ... 5	0.005 ... 20 000	0.005 ... 20	2 ... 3 000	2 ... 5 000	1 ... 5 000	50 ... 10 000
Accuracy class (% Cn)	0.25	0.1	0.25	0.1	0.1/0.2 0.05 in option	0.1 0.05 in option	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 ±10 V in option	1 mV/V	1 mV/V	1 mV/V	1 mV/V	1 mV/V	1 mV/V	1 mV/V			
Rotating	•	•	•	•	-	-	-	-	-	-	-
Contactless	•	•	•	•	-	-	-	-	-	-	-

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## ACCESSORIES



Model	966	966P	969	950	950P	951
Coupling for torque meter	D2452, DR2112, DR2208, DR2477, DR2500	DR2, DR20, DR2269, DR2513	DR2212, DR2477	D2452, DR2112, DR2208, DR2477, DR2500	DR2, DR20, DR2269, DR2513	DR2212, DR2477

## 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

## 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 most popular automated systems (Profibus-DP, Modbus-RTU, CANopen®, EtherCAT)

## ELECTRONICS



●: Standard - ○: Optional

Model	CPJ	eNod4	IM-S/IM-P	GM80	SI-USB3
Type	Transmitters		Indicators		Acquisition
Input	mV/V, potentiometer	mV/V	mV/V, 4-20 mA, ±10 V	mV/V, 4-20 mA, ±5 V	mV/V, 4-20 mA, ±10 V
Accuracy class	0.05 %	0.01 %	0.02 %	0.1 %	0.05 %
Max. measuring speed (meas./s.)	-	1 200	100	1 000	5 000
Display	-	-	LED 14 mm	LCD 9 mm	PC
Logic Input (I) / Output (O)	○ 2 ○	● 2 I - 2 O	● / ○ 3 I / 4 O	● 1 I / -	-
Analog output	●	○	○	-	-
Serial link RS485 / USB	-	● / ●	○ / -	- / ●	- / ●
Modbus / PROFIBUS® / CANopen®	-	● / ○ / ●	○ / ○ / -	-	-
Modbus-TCP / PROFINET® EtherNet/IP / EtherCAT®	-	○ / ○ ○ / ○	-	-	-

Consult our full product range on: [www.scaime.com](http://www.scaime.com)

## 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.



Headquarter: Technosite Altéa - 294, Rue Georges Charpak - 74100 JUVIGNY - FRANCE  
 SCAIME SAS - 294, RUE GEORGES CHARPAK - CS 50501 - 74105 ANNEMASSE CEDEX - FRANCE  
 Tél. : +33 (0)4 50 87 78 64 - Fax : +33 (0)4 50 87 78 46 - [info@scaime.com](mailto:info@scaime.com) - [www.scaime.com](http://www.scaime.com)  
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