

ASSEMBLY TOOLS AND SYSTEMS



Torque Measuring Instruments

Range



Torque Testers

Equipped with a built-in transducer the EZ smart series is ideal to control and set torque delivered by tightening tools (Air and electric screwdrivers, Torque Wrenches, Impulse tools...). Thanks to its embeded software readings are automatically stored and Cm / Cmk statistics calculated against preset tolerances. External transducers may be used as well thanks to its transducers input.



Torque Read-outs

Versatile, compact and easy to use the TA smart series and TA SB smart series can be connected to our Static or Rotary transducers. The MTA torque read-out is ideal to create tool tests for each of your tightening tools, proceed with regular control and organize / store data collection for ISO and SPS documentation.



Torque Transducers

NST series : a complete range of static transducers from 0,1 to 3389 Nm.
B series : a complete range of rotary transducers with dedicated cable for MTA and TA read-out and EZ torque testers.

Torque Testers

EZ Smart Series

- Easy to use scroll Menu • External transducers may be plugged • 500 readings memory
- USB output • Cm/Cmk statistics inside • Pulse tools measuring mode



Equipped with a built-in static transducer the EZ series are used to calibrate quickly and accurately every kind of tightening tool. Reading memory can be transferred to any kind of computer or printer through its RS 232 output. Thanks to its built-in statistics program, Cm and Cmk can be immediately know (according to AFNOR standard) and modified according to the requested tolerances.

Model	Capacity (Nm)	Accuracy (Nm)	Power Supply	Code
EZ2 V3	2	±2%	Secteur/Accus	4-7600510
EZ5 V3	5	±1%		4-7600511
EZ20 V3	20	±1%		4-7600512

With COFRAC control certificate

Model	Capacity (Nm)	Accuracy (Nm)	Power Supply	Code
EZ2 V3	2	±2%	Secteur/Accus	4-7600318
EZ5 V3	5	±1%		4-7600319
EZ20 V3	20	±1%		4-7600320

Example of printed statistics report :

0036 + 4.382 n.m = 1.721s	11:49	12 Mai 11
0037 + 4.246 n.m = 1.834s	11:49	12 Mai 11
0038 + 4.367 n.m = 1.529s	11:50	12 Mai 11
0039 + 4.352 n.m = 1.312s	11:50	12 Mai 11
0040 + 4.653 n.m = 1.544s	11:51	12 Mai 11
NOMINAL TORQUE	4.400 N.m	
TOLERANCE +	4.400 + 0.400	
TOLERANCE -	4.400 - 0.400	
SAMPLE	005	
STANDARD DEVIATION = 0.066	AVERAGE = 4.483	
MIN = 4.246	MAXI = 4.653	
Cm = 2.024	C.M.K. = 1.873	



Torque Read-Outs

MTA Torque & Angle Analyser



- Transducers automatic recognition
- 7 measuring modes
- Suitable with Force, Torque, Angle Transducers
- Real time clock and USB interface
- Graphic functions on PC interface
- 5000 readings memory
- Delivered with 3 softwares without licence
 - ❶ PC interface program
Calibration, tool test, graphic
 - ❷ Torque meter bootloader
 - ❸ Statistics program (via Excel)



4 transducers multiplexer

Suitable with all our transducers the MTA is a powerfull hand-held Force/Torque/Torque & Angle. Analyser. It allows you to set up and create tool tests, save readings for PC transfer. It is the ideal solution to organize and store data collection for ISO and SPC documentation.

It may be connected simultaneously to 4 different transducers via a multiplexer. Use of bar code reader is also possible to select quickly the tool test for each of your tool on the assembly line.

Model	Power Supply	Code
MTA	Main/Battery	4-7600010
Multiplexer 4V		4-7600117



Bar code reader :

Easy to select one tool test thanks to a bar code sticker fixed on each tool (ideal for periodical control).

When a multiplexer is connected the bar code reading will automatically select the necessary transducer.

Model	Code
Bar code reader	4-7600118

Torque Read-Outs

TA Smart Series

- Easy to use scroll Menu • 500 readings memory • RS 232 output
- Mini/Maxi Torque limits with relay • Cm/Cmk statistics inside • Impulse tools measuring mode



TA SMART Torque Read-Out features both user friendly program and very accurate electronics.

It is suitable with any 2mV/V static or rotary strain gauges transducer.

Thanks to its built-in statistics program, Cm/Cmk or Cp/Cpk can be immediately known (according to AFNOR standard) and modified according to the requested tolerances.

Model	Power Supply	Code
TA V2 Smart	Main/Cell V9	4-7600284

TA SB Smart Series

- Easy to use scroll Menu • 500 readings memory • RS 232 output
- Mini/Maxi Torque limits with relay • Cm/Cmk statistics inside • Impulse tools measuring mode



TA SB SMART Torque Read-Out features both user friendly program and very accurate electronics.

It is suitable with 5 volts brushless rotary transducer (SB Series see page 10).

Thanks to its built-in statistics program, Cp/Cpk can be immediately known (according to AFNOR standard) and modified according to the requested tolerances.

Model	Power Supply	Code
TA SB V2 Smart	Main/Cell V9	4-7600286



Torque transducers

NST static transducers

NST static transducers are designed to check torque settings of your tools.

Suitable with our EZ SMART, TA SMART and MTA torque read-out, NST transducers are robust, precise and easy to use.

Auto recognition (ARCII) when connected to the MTA.



Model	Torque Range (Nm)	Accuracy	Drive	Code
NST1	0,11 - 1,13	±1%	1/4" Female square	4-7600071
NST3	0,28 - 2,82	±1%	1/4" Female square	4-7600072
NST10	1,13 - 11,3	±1%	1/4" Female square	4-7600073
NST50	5,65 - 56,5	±1%	3/8" Female square	4-7600074
NST100	13,6 - 135,6	±1%	1/2" Female square	4-7600075
NST300	33,9 - 339	±1%	1/2" Female square	4-7600076
NST500	67,8 - 678	±1%	3/4" Female square	4-7600077
NST1000	135,6 - 1355	±1%	1" Female square	4-7600090
NST3000	339 - 3389	±1%	1/2" Female square	4-7600091

B Series : Rotary transducers with brushes

Ideal to measure the torque really achieved on the joints, the B Series transducers are suitable with EZ smart testers, TA Smart read-out, MTA analyser.

Equipped with self-lubricating brushes and accurate ball bearings.

ARCII auto recognition with MTA analyzer.

Aluminium housing and stainless steel shaft.

Overload capacity : 125% of the nominal torque.



For MTA analyser

Model	Capacity (Nm)	Accuracy (Nm)	Drive	Code
B2H IS MTA	2	±1%	1/4" Hexagonal	4-3100151
B5H IS MTA	5	±1%	1/4" Hexagonal	4-3100152
B10H IS MTA	10	±1%	1/4" Hexagonal	4-3100153
B10Q 1/4 IS MTA	10	±1%	1/4" Square	4-3100154
B20H IS MTA	20	±1%	1/4" Hexagonal	4-3100155
B20Q 1/4 IS MTA	20	±1%	1/4" Square	4-3100156
B25Q 3/8 IS MTA	25	±1%	3/8" Square	4-3100157
B75Q 3/8 IS MTA	75	±1%	3/8" Square	4-3100158
B180Q 1/2 IS MTA	180	±1%	1/2" Square	4-3100159
B250Q 3/4 IS MTA	250	±1%	3/4" Square	4-3100160
B500Q 3/4 IS MTA	500	±1%	3/4" Square	4-3100161

Each transducer is equipped with a connection cable for MTA.

Torque transducers

For EZ testers or TA read-out

Model	Capacity (Nm)	Accuracy (Nm)	Drive	Code
B2H IS SPEC	2	±1%	1/4" Hexagonal	4-3100140
B5H IS SPEC	5	±1%	1/4" Hexagonal	4-3100141
B10H IS SPEC	10	±1%	1/4" Hexagonal	4-3100142
B10Q 1/4 IS SPEC	10	±1%	1/4" Square	4-3100143
B20H IS SPEC	20	±1%	3/8" Square	4-3100144
B20Q 1/4 IS SPEC	20	±1%	1/4" Square	4-3100145
B25Q 3/8 IS SPEC	25	±1%	3/8" Square	4-3100146
B75Q 3/8 IS SPEC	75	±1%	3/8" Square	4-3100147
B180Q 1/2 IS SPEC	180	±1%	1/2" Square	4-3100148
B250Q 3/4 IS SPEC	250	±1%	3/4" Square	4-3100149
B500Q 3/4 IS SPEC	500	±1%	3/4" Square	4-3100150

Each transducer is delivered with connection cable for EZ or TA.

Sole transducers

Model	Capacity (Nm)	Accuracy (Nm)	Drive	Code
B2H IS	2	±1%	1/4" Hexagonal	4-7670000
B5H IS	5	±1%	1/4" Hexagonal	4-7670001
B10H IS	10	±1%	1/4" Hexagonal	4-7670002
B10Q 1/4 IS	10	±1%	1/4" Square	4-7670003
B20H IS	20	±1%	3/8" Square	4-7670004
B20Q 1/4 IS	20	±1%	1/4" Square	4-7670005
B25Q 3/8 IS	25	±1%	3/8" Square	4-7670006
B75Q 3/8 IS	75	±1%	3/8" Square	4-7670007
B180Q 1/2 IS	180	±1%	1/2" Square	4-7670008
B250Q 3/4 IS	250	±1%	3/4" Square	4-7670009
B500Q 3/4 IS	500	±1%	3/4" Square	4-7670010

Delivered without connection cable.

Accessories

Test joints for EZ testers

The test joints allow to simulate hard, semi elastic or elastic assembly. They take into account the rotation speed of the tool and simulate your assembly conditions for an optimized adjustment.

Standard

Model	Fastening simulator	Drive	Code
SVS13F	Hard	Male Hexagonal 1/4"	4-7602000
SVS13SE	Semi-elastic	Male Hexagonal 1/4"	4-7602001
SVS13E	Elastic	Male Hexagonal 1/4"	4-7602002

For small torque (M2, M3, M4 screws)

Model	Drive	Code
SAV13 M2	M2 Hex. Int screw	4-7600502
SAV13 M3	M3 Hex. Int screw	4-7600503
SAV13 M4	M4 Hex. Int screw	4-7600504



Accessories

Test joints for NST transducers

The test joints allow to simulate hard, semi elastic or elastic assembly. They take into account the rotation speed of the tool and simulate your assembly conditions for an optimized adjustment.

For small torque (M2, M3, M4 screws)

Model	Tool drive	Transducer connection	Code
SPEC-NST M2	M 2 Hex. Int screw	1/4"	4-7600200
SPEC-NST M3	M 3 Hex. Int screw	1/4"	4-7600201
SPEC-NST M4	M 4 Hex. Int screw	1/4"	4-7600202

Standard

Model	Tool drive	Transducer connection	Code
Test joint for NST 1/3/10	Male Hex. 1/4	1/4"	4-7660000
Test joint for NST 50	Hexagonal 19 mm A/F	3/8"	4-7660001
Test joint for NST 100/300	Hexagonal 24 mm A/F	1/2"	4-7660002
Test joint for NST 500	Hexagonal 36 mm A/F	3/4"	4-7660003
Test joint for NST 1000	Hexagonal 46 mm A/F	1"	4-7660004
Test joint for NST 3000	Hexagonal 55 mm A/F	1" 1/2	4-7660005

NST transducers connection cables

Model	Lenght	Plug	Code
EZ and TA	2 m	Male 5 pins Lumberg	4-3125000
MTA	2 m	Male 15 pins SubD	4-7600050

B transducers connection cables

Model	Lenght	Plug	Code
EZ and TA	2 m	Male 5 pins Lumberg	4-3130001
MTA*	2 m	Male 15 pins SubD	4-3130000

* ARCII chips activation - Code 4-7600113 not included

SB transducers connection cables

Model	Lenght	Plug	Code
TA SB	2 m	Male 5 pins Lumberg	4-3125002
MTA	2 m	Male 15 pins SubD	4-7600052



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