

BTR Torque test

BTR is a desktop torque for torque measurements consisting of a digital indicator model DTR and a strain gauge torque extremely rugged and compact which has a precision better than 0.20%. Ideal for the calibration and the control of torque keys and torque screwdrivers. Microprocessor indicator is fed by 4 internal batteries with an autonomy of 200 hours, with the AUTO POWER OFF function which activates if any change in the measurement is detected in an interval of 30 minutes. The new generation electronic section consists of a particularly long-term stable analogue circuit and of a 16 bits A/D converter which ensures 65.000 internal divisions with an acquisition speed of 200 conversions per second.

On the display there is an analogue bar for torque, that is still active, even in the programming menu.

The BTR can work in two different ways:

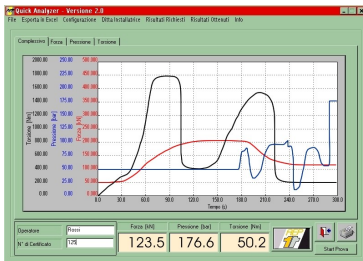
- Direct reading which allows to display the torque in real time
- Storing of max. measured force (PEAK function) ideal to make measurements of trip torque in both clockwise and anti-clockwise direction

Main features:

- 200 HOURS AUTONOMY WITHOUT RECHARGE
- MEASUREMENT UNIT IN Nm
- PROGRAMMABLE RESOLUTION
- PROGRAMMABLE DIGITAL FILTER
- ZERO FUNCTION
- PEAK FUNCTION (clockwise and anticlockwise)
- COMPLETE WITH SIT CERTIFICATE (clockwise)
- RS232 OUTPUT (option)

ACCESSORIES:

- Utility software for the handling of torque keys calibration, with data acquisition, errors processing and printing of a certificate traceable to SIT ones.



RoHS COMPLIANCE

CE



≤ ± 0.20%

Linearity - Hysteresis

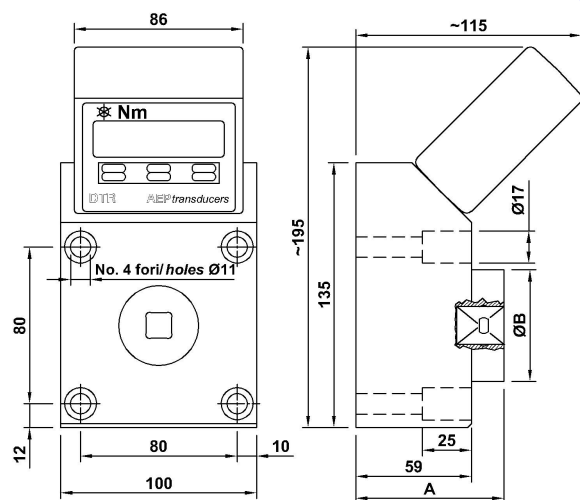


Provided with SIT certificate.

Standard indications

Torque	Display	Resol.
0.5 Nm	0,500	0,001
2.5 Nm	2,500	0,001
5 Nm	5,000	0,001
10 Nm	10,000	0,005
25 Nm	25,000	0,05
50 Nm	50,00	0,01
100 Nm	100,00	0,02
250 Nm	250,00	0,05
500 Nm	500,0	0,1
1000 Nm	1000,0	0,2
2000 Nm	2000,0	0,5

Dimensions [mm]



	5 Nm 10 Nm	25 Nm 50 Nm	100 Nm 250 Nm	500 Nm 1000 Nm	2000 Nm
A	59	63	68	76	86
B	35	35	38	57	57

Technical Data

	NOMINAL TORQUE	0.5 – 2.5 – 5 – 10 Nm 25 – 50 Nm 100 - 250 Nm 500 - 1000 - 2000 Nm
	LINEARITY and HYSTERESIS	≤ ± 0.20 % F.S.
	INTERNAL RESOLUTION	65.000 div.
	READINGS PER SEC. (0 filter)	200 (5ms)
	REFERENCE TEMPERATURE	+23°C
	SERVICE TEMPERATURE RANGE	0/+50°C
	STORAGE TEMPERATURE RANGE	-10/+60°C
	TEMPERATURE EFFECT (10°C)	
	a) on zero	≤ ± 0.015%
	b) on sensitivity	≤ ± 0.005%
	UNIT OF MEASUREMENT	*Nm
	ZERO FUNCTION	~ 50%
	PROGRAMMABLE DIGITAL FILTER	0 ÷ 99
	PROGRAMMABLE RESOLUTION	1, 2, 5, 10
	PROGRAMMABLE BAUD RATE	76800, 38400, 19200
	PEAK FUNCTION	Clockwise (+) , Anticlockwise (-)
	DISPLAY	custom LCD
	DISPLAY HEIGHT	16mm
	POWER SUPPLY	BATTERIE / BATTERIES
	AUTONOMY	200 ore / 200 hours
	ALKALINE BATTERIES	no.4 1,5V size AA
	MECHANICAL LIMIT VALUES REFERRED TO NOMINAL TORQUE:	
	a) service pressure	100%
	b) max. permissible pressure	150%
	c) breaking pressure	>300%
	PROTECTION CLASS (EN60529)	IP40
	SENSOR EXECUTION MATERIAL	Stainless Steel
	CASE EXECUTION MATERIAL	Aluminium
	ELECTRICAL CONNECTION (RS232C)	tank SUB D 9 pole FEMALE
	PROCESS COUPLING (UNI ISO 1174-1):	
	0.5 - 2.5 – 5 - 10 Nm	■ 1/4"
	25 - 50 Nm	■ 3/8"
	100 – 250 Nm	■ 1/2"
	500 – 1000 Nm	■ 3/4"
	2000 Nm	■ 1"
	FIXING SCREWS	No.4 M10

* Other engineering units on request.

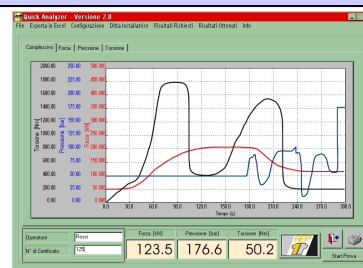
Options

SERIAL OUTPUT	RS232C
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Accessories

QUICK ANALYZER: this software has been developed to analyze, monitor and record the evolution in a certain time of tests that can involve up to 3 different sensors, whose signals are acquired, at the same time, through the serial interfaces.

DEMO: demo software for the connection of the instrument to a PC complete with **DATA LOGGER** and transfer of the measured values to an **EXCEL** file



CODE:

MBTR	Nominal Torque			Serial output
	0N5	25N	500N	X = NO
2N5	50N	1kN	S=RS232	
5N	100N	2kN		
10N	250N			

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In order to improve the technical performances of the product, the company reserves the right to make any dynamometer without notice.