

M01 TORQUE WRENCH

The M01 torque wrench is used to measure torque within the small ranges ($\pm 0.2 \dots \pm 10 \text{ Nm}$) by the hand screwing and screwing-off of threaded connections or by the manual calibrating of measuring devices

Special features:

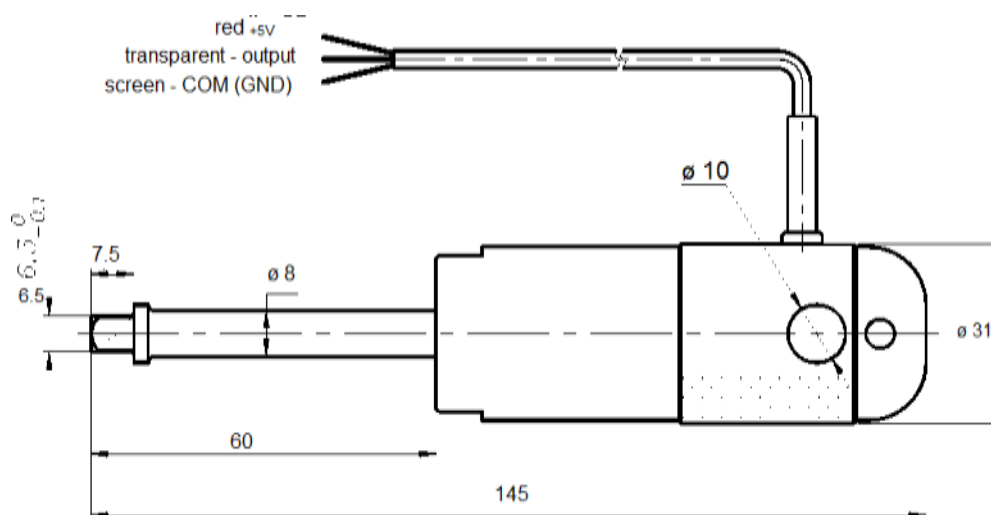
- Operating on the strain gauge principle
- Built-in amplifier
- Low sensitivity to lateral and axial forces and to bending moment
- Torque measurement of positive and negative polarity



Type-Survey

Type	Nominal torque, Nm
M01-02	0.2
M01-05	0.5
M01-1	1
M01-2	2
M01-5	5
M01-10	10

M01 Torque Wrench. Dimensions in mm



Technical data

Deviation of the actual output signal at the nominal torque from the nominal value (including hysteresis and nonlinearity)	%	± 0.5
Temperature effect per 10 °C on the zero signal, related to the nominal output value	%	± 0.2
Accuracy class		0.2
Warming-up period	min.	≥ 2
Supply voltage	V(DC)	5 ± 0.5
Power consumption	mA	100
Analogue output		
Nominal output signal with positive (right-hand) nominal torque	V	+ 2
Nominal output signal with negative (left-hand) nominal torque	V	- 2
Frequency output signal at torque = zero	V	0
Digital output (T42)		
Interface		RS232
Data transfer rate	Kbaud/sec	115.2
High-level output voltage	V	≥ - 10
Low-level output voltage	V	≤ 10
Digital output (T45)		
Interface		USB 2.0
Data transfer rate	Kbit/s	100
Sample rate	kSample	5.0
Input-output galvanic isolation		+

Parameters of resistance to environment and mechanical exposures

Nominal temperature range	°C	0 ... +60
Humidity	%	95 (+ 35 °C)
Atmospheric pressure	kPa	84 ... 106.7 (630 ... 800 mm Hg)
Storage temperature range	°C	- 10 ... + 70
Storage humidity	%	95 (+ 30 °C)
Vibration resistance: Frequency range Duration Acceleration	Hz h m/s ²	10 ... 55 1 40
Impact resistance: Number of impacts Duration Acceleration	n ms m/s ²	1000 10 400
Degree of protection		IP40

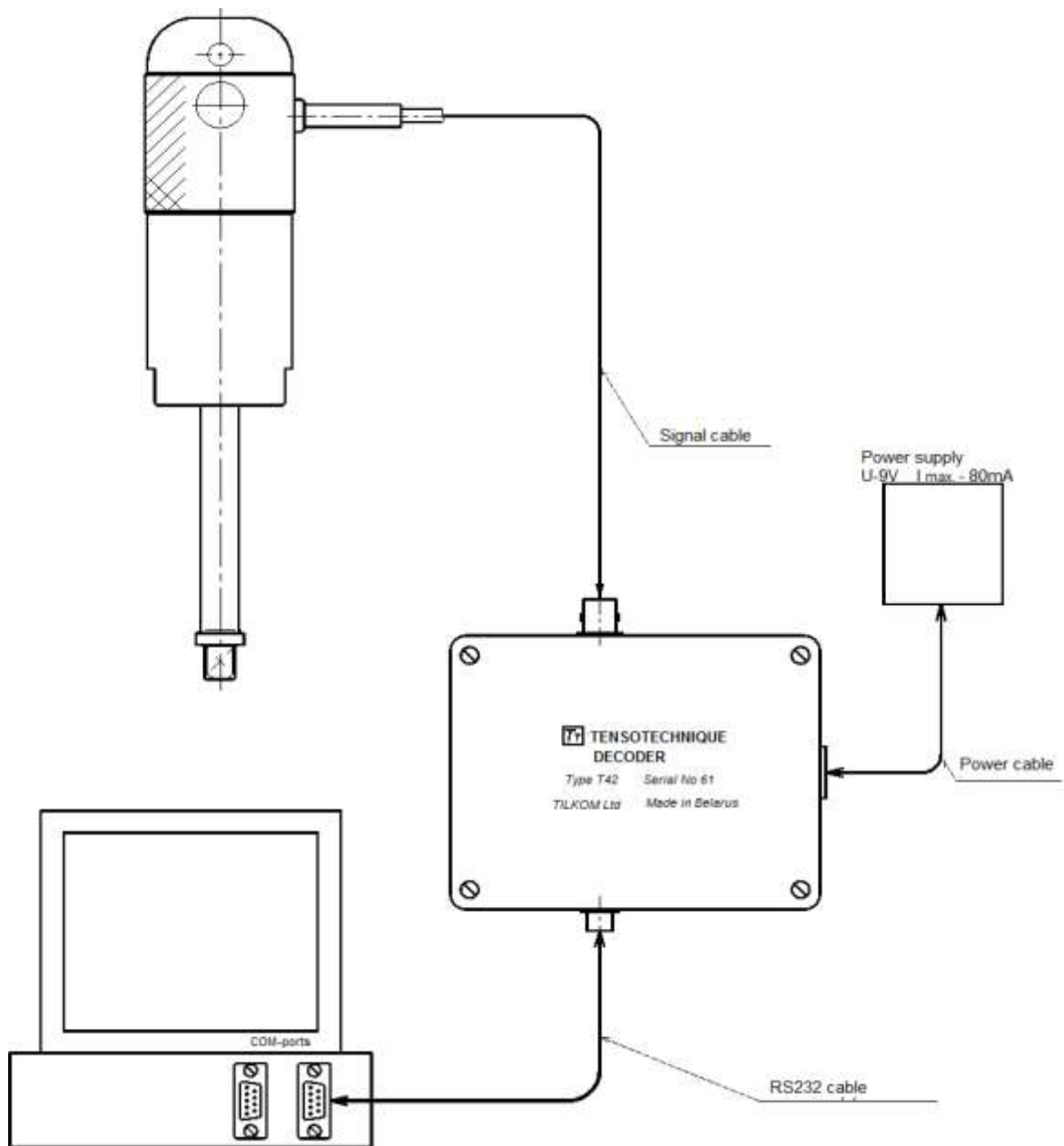
Permissible load limits and mechanical values

Nominal torque, M_N	Nm	0.2	0.5	1	2	5	10
Limit torque, related to M_N	%	150					
Axial limit force	N	20	25	30	50	80	100
Lateral limit force	N	2	4	6	8	10	20
Bending limit moment	Nm	0.2	0.4	0.8	1	2	5
Weight	kg	0.2	0.2	0.2	0.3	0.3	0.3

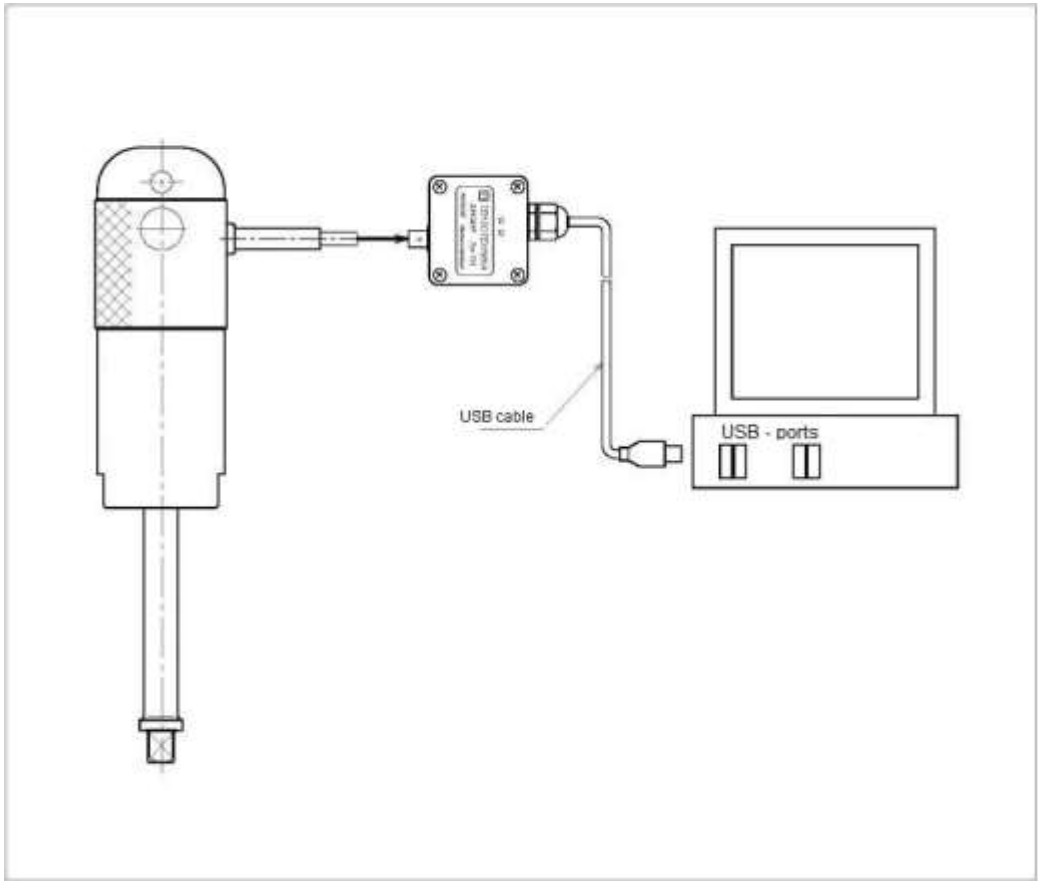
Scope of Supply

M01 torque wrench	1
T45 decoder (USB 2.0 cable)	1
T42 decoder (RS232 cable)	optionally
Power supply (5 V) (AC/DC adapter)	optionally
Software for Windows XP, 7, 8, 10 (on the CD)	1
User Manual	1

Electrical connection



M01 connection with the T42 decoder, a power supply and a PC



M01 connection with the T45 decoder and a PC. The power supply is via an USB port.

