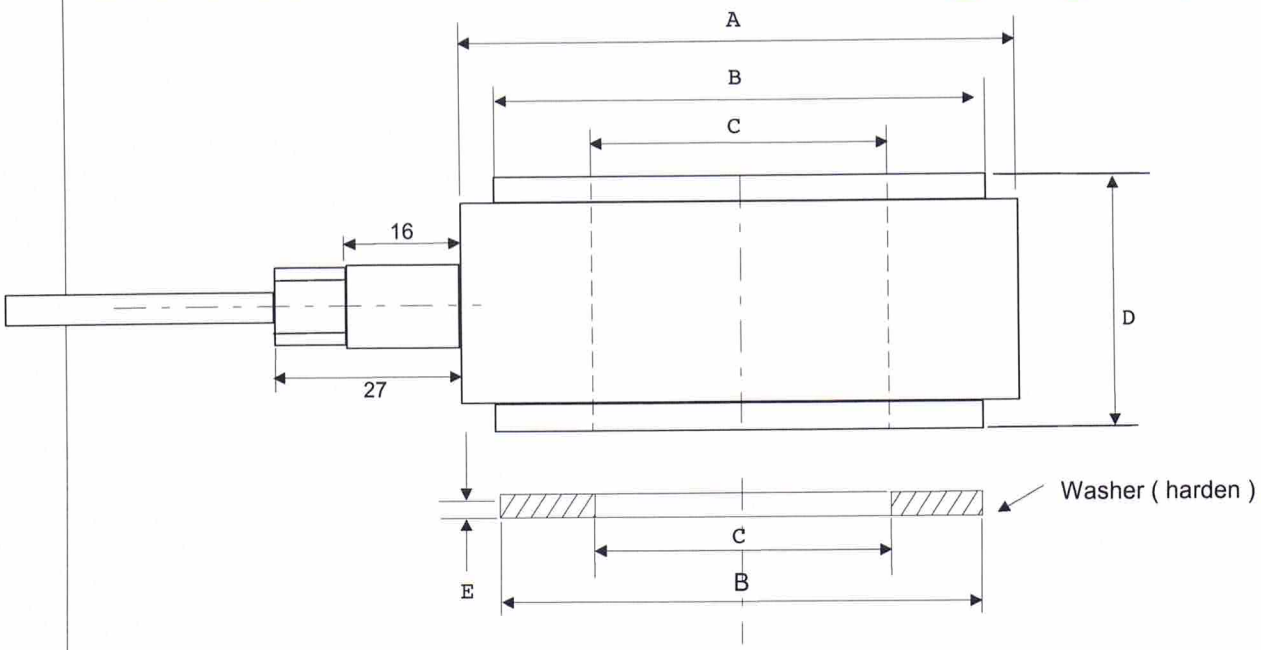
BTN-Mxx
Bolt Tension Transducer



Capacity: 30kN - 750kN Stainless steel

Sensitivity	mV/V	approx. 2.0 +/- 0.01
Non linearity	%FS	< +/- 1.0
For compressing measuring app.:		<+/-1.0%
For measuring fastner clamping app.:		<+/-3.0%
Hysteresis	%FS	< 0.5 %
Repeatability	%FS	< 0.2 %
Zero balance	%FS	+/-1.0
Zero temp. drift	%FS/10°C	+/-0.2
Span temp. drift	%FS/10°C	+/-0.2
Supply voltage	V	max. 12 (AC/DC)
Temp. compensation range		-10 - +50 °C
Input Impedance		M12-700 Ohm/1800 Ohm M30
Output Impedance		M12-700 Ohm/1400 Ohm M30
Safe overload	%FS	150
Max. dynamic load	S%	70

Cable in high quality
Ø3mm x length 3000mm for M8-M20
Ø5mm x length 5000mm for M24-M36

4 wire
Input+ : Red, Input-: Black
Output+: Green, Output-: White
Cable screen is not connected to load cell body
Protection degree: Potted IP65

Dimensions in mm

Bolt size	Force kN	A	B	C	D	E
M8	30	24	15	8.3	12	2
M10	60	24	17.8	10.3	12	2
M12	80	28	22.5	12.3	15	2.5
M16	120	32	28	16.3	15	2.5
M20	160	46	38	20.3	15	3
M24	300	54	48	24.5	22	3
M30	500	65	60	30.8	27	3
M36	750	79	64	37	27	4

Nordic Transducer

(Zul. Abw.) (Oberfl.) Maßstab (Gewicht)

(Compression Load Cell)
Cell Material: Stainless Steel
Finish: Welded/ potted

	Datum	Name
Bearb.	17012024	KD
Gepr.	Rev.02	
Norm		

BTN-Mxx-(M8..M36-AZE)
Bolt Tension Transducer

www.ntt.dk

Ref. force: 1 kg = 9.80665N

Nordic Transducer

Blatt
Blätter

Zust. Änderung Date: 02122023

SHEET: 1 OF 1 REVISION: 04

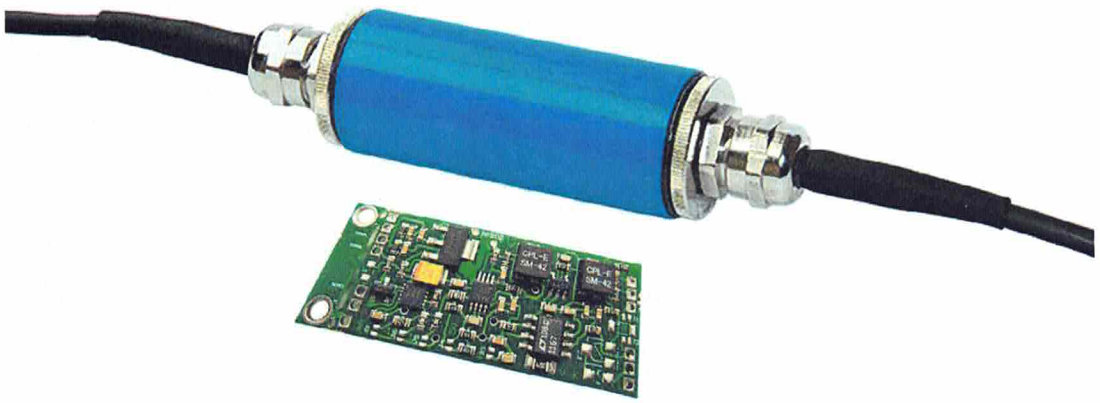
Nordic Transducer

BTN-Mxx
Bolt Tension Transducer
M8 to M36, 30kN to 750kN

Nordic Transducer Denmark -- www.ntt.dk --- ntt@ntt.dk

Nordic Transducer

Strain Gauge Sensor-Interface LCV
Mounted on the cable 4-20mA typical



Performance Features

- High accuracy
- Voltage or current output
- Direct connection to PLC
- Long input lead possibility from LCV to evaluation
- Level of protection IP67

Application

- Research and development
- Process measuring and control technology
- Automotive engineering
- Energy and environmental technology
- Mechanical engineering

Description

The LCV is connected between the supply line of the sensor and signal acquisition (e.g. PLC). The robust tube-housing with a high level of protection also allows operation in rough environments. A screw clamp is sufficient for the fixation.
The supply of 12 ... 28VDC is suitable for automotive and industrial applications. High flexibility is ensured by many analog output versions. For very slow measurements, a 50 Hz -3 dB filter can be pre-configured as an option.

Scope of Delivery

If the LCV is ordered with a NTT-Sensor, it will be mounted and calibrated together exfactory. If the LCV is ordered without a sensor, an uncalibrated assembly set (amplifier module, tube-housing, screw connection) will be delivered. All output versions can be configured by solder jumpers. As an option, the amplifier module can be pre-calibrated to a value, determined by the customer. At initiation only the zero point must be adjusted.

Strain Gauge Sensor-Interface LCV

TYPE	LCV-U10	LCV-U5	LCV-I4	LCV-I12
Output signal	+/- 10V	+/- 5V	4...20mA	12 +/-8mA

Nordic Transducer

Scope: The bolt tension Load cell can be connected to all of our Amplifiers and instruments.

STAR instrument can be used for up to 7 different load cell capacities, also with option for datalogging ++++,

please call us and ask for our solution to solve your job !!

We do have several options of connections to these sensors.
As 2 Wire 4-20mA, 3 wire 4-20mA, Voltage 0-5V, 0-10VDC,
USB3 with software all to be connect on the cable in line from load cell .

LAB 101.1 2 wire analog
LAB 104.1 4 wire 5VDC or 10VDC
LCV-I4 4-20mA or Voltage
LCVUSB3 direct including free software