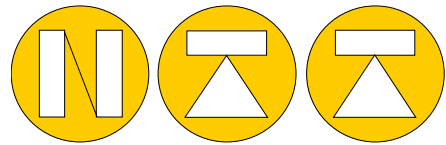


DFI LCD SMART INDICATOR



NORDIC TRANSDUCER



DFI is a new very small battery operated indicator with an accuracy not seen before in this size. A very special technique in power supply makes it possible to keep battery life for very long, it is mounted with 4x1.5V batteries which typically last for ½ to 1 year under normal use. DFI are mend for using together with our tension load cells to form an attractive solution and flexibility as a Dynamometer in even very small or high capacity systems. DFI do also have an analog BARGRAF indicating % of load and also PEAK function.

Load cells which DFI typically can be used together with, so the 2 units form a complete solution.

- ✓ Internal resolution = 1/65.000
- ✓ Auto zero by push button
- ✓ 0.05% accuracy on display
- ✓ Programmable set-up.
- ✓ High & Low PEAK indication
- ✓ Automatic turn off when not used.
- ✓ 16 mm high LCD display
- ✓ RS232 output as option
- ✓ Version 4.1 now for 4 x 1000 Ω cells

LOW COST

TYPE TCS-9310

Tension stainless steel from 100kg to 5ton

Type TCTN-9110

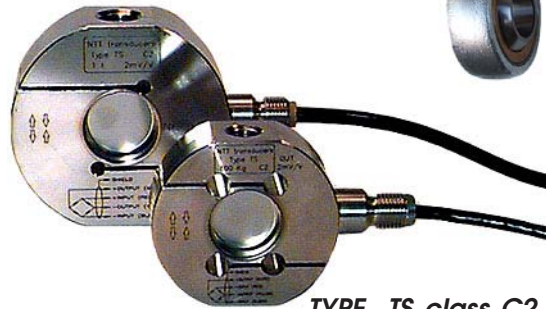
Nickel plated supplied in capacities from 50N - 50kN



Some examples of possibilities !

LOAD CELL	DISPLAY	INCREMENT
50kg	0 - 30kg	x 10g
300kg	0 - 200kg	x 100g
1t	0 - 500kg	x 200g
2t	0 - 1t	x 500g
5t	0 - 2.5t	x 1kg
20t	0 - 20t	x 5kg

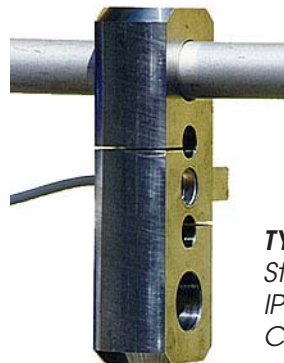
This is only some of the possibilities !
DFI can also be calibrated in lbs !!



TYPE TS class C2
Stainless steel, laser welded, IP68 protection.
Capacities: from 100kg - 5t

Nordic Transducer

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E-mail: ntt@ntt.dk WEB: <http://www.ntt.dk>



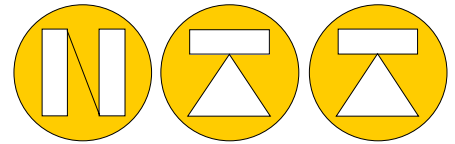
TYPE T20
Stainless steel IP68, laser welded
Capacities: 5, 10.



DFI LCD SMART INDICATOR



Now also with programmable automatic zero setting.



NORDIC TRANSDUCER

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DFI is our latest microprocessor digital indicator gauge. It has inputs both for **dynamometers** (force) and **load cells** (weight) strain gauges.

It is ideal to be used in the most innovative static and dynamic measurement systems such as material testing machines, printing machines, test benches and automation.

Thanks to **accuracy $\leq \pm 0,02\%$** DFI can be used in quality systems as first or second line sampling item if regular calibrated at SIT centres.

The measurement system is made up of an analog section particularly **stable at long term**, of power *carrier frequency* which **lowers the system thermal drifts** and a A/D converter with 16 bits guarantees **65.000 internal divisions**.

In order to increase the integration level of the components a traditional mixed technology and SMT has been adopted so making the indicator resistant to any kind of vibration and mechanical stresses besides granting the highest reliability of the system. The internal batteries allow the indicator to work 1 year before replacement thanks even to the AUTO POWER OFF feature which puts the indicator off when no measurement variation is detected within 30 minutes time.

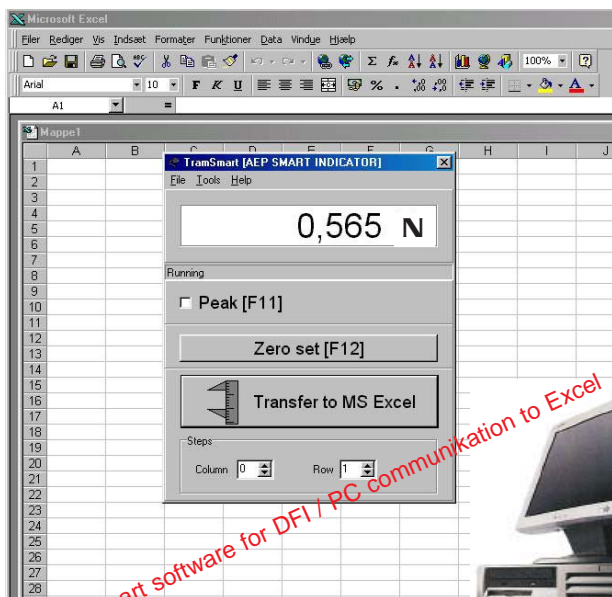
The indicator is equipped with a setting menu which allows to choose the most suitable type of engineering measure (kN, daN, N, t, kg), the resolution and the digital filter according to the measurement to be calculated.

The display also shows a bar analog indication (to show weight) which is operating inside the setting menu.

When the instrument is working in positive mode, SP1 icon is alight; when it is working in negative mode, SP2 icon is alight.

TECHNICAL DATA

INPUT SIGNAL COMPATIBILE	2 mV/V (max.2.4mVV)
LOAD CELL	1x350 Ω or 2x700 Ω , or 4x1000 Ω 4wires)
LOAD CELL EXCITATION	5 Vac ($\pm 3\%$)
CARRIER FREQUENCY	100 Hz
ACCURACY CLASS	$\leq \pm 0.020$ % F.S.
LINEARITY ERRORS	$\leq \pm 0.015$ % F.S.
REFERENCE TEMPERATURE	+23°C
SERVICE TEMPERATURE	0/+50°C
STORAGE TEMPERATURE	10/+60°C
10°C TEMPERATURE EFFECT	
a) on zero	$\leq \pm 0.015\%$ F.S.
b) on sensitivity	$\leq \pm 0.005\%$ F.S.
READING PER SEC.(FILTER 0)	10 (100 msec)
DISPLAY	16mm (custom LCD)
INTERNAL RESOLUTION	65.000 divs
PROGRAMM. MEASURE UNITS	kN, daN, N, t, kg
PROGRAMMABLE RESOLUTION	1, 2, 5, 10
PROGRAMMABLE BAUD RATE	9600, 4800,2400
ZERO FUNCTION	90% F.S.
PEAK FUNCTION	Positive and negative
POWER SUPPLY	ALKALINE BATTERIES
AUTONOMY	½ -1 YEAR
ALKALINE BATTERIES	4 x 1,5V size AA
PROTECTION CLASS - DIN40050	IP60
CASE	Aluminum/ABS
DIMENSIONS (HxWxD)	140x80x48mm
RS232C CONNECTION (OPTION)	9 pole Canon
Standard connector load cell	9 pole Canon



*POSITIVE OVERLOAD:

the dynamometer measures a force higher than its nominal value.

UUUUU

*NEGATIVE OVERLOAD:

the dynamometer measures a force lower than its nominal value.

-LLLLL

OUTSIDE SCALE:

changing measurement unit, an overtaking of display limit happens (99999).

HHHHH

EXHAUST BATTERIES:

measurement calculated when batteries are exhausted could be altered, therefore batteries replacement is necessary.

Low Bat

*WARNING:

if an overload occurs, check if calibration has been altered.