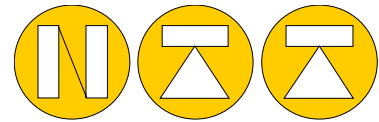


CM78 Program H1S.017
2 Programmable Thresholds and Absolute/
Relative Display, with Load setting.



NORDIC TRANSDUCER

CM78 Configurations is made via the keyboard as described in the following.

SET-UP

To get access to all parameters, then key F, when **ch.set** shows, key password = A 1, A 6 and A 2.
 A 1 (Arrow) = first arrow from left side and A 6 = last on right side
 Under standard set-up each digit do represent following options:



- Stop setting
- Counter type
- Relay function
- Number of decimals 2
- Number of decimals 1

The Set-up is done by means of the arrow keys under each digit, by which the value is sat.

Number of decimals 1 (mm)

- Non ----- 0
- 1 decimal ----- 1
- 2 decimals ----- 2
- 3 decimals ----- 3

Number of decimals 2 (Inch)

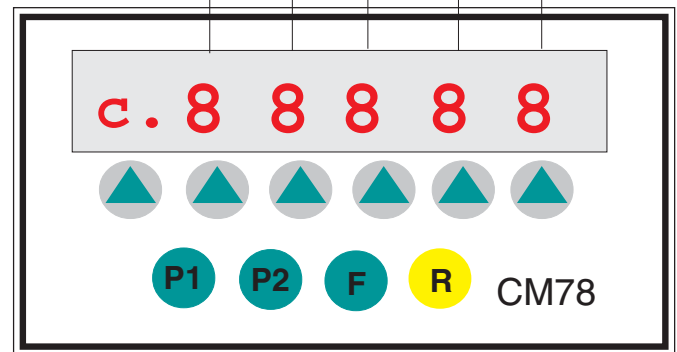
- Non ----- 0
- 1 decimal ----- 1
- 2 decimals ----- 2
- 3 decimals ----- 3

Relay function

- Constant ----- 0
- Pulse output----- 1 (se under LOAD)

Counter type

- Quadrupled ----- 0
- Doubled ----- 1
- Direct ----- 2



STOP Setting/ relay / set-up 1 (under set-up)

Key F and when **ch. Set** is shown key **A1, A6 & A2 (Arrow)**

c XXXXX is shown, key **F** again and it is ready for setup.

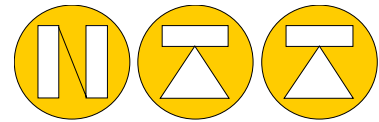
The positive STOP value are now sat by Arrow keys, accept by **F**, then the negative STOP value are sat by Arrow keys, accept with **F** and then out again !.

STOP Setting= The way how to come in and change these parameters, can be done in 3 different manners !

- Free ----- 0 (P1 & P2 get activated se next page)
- Under setup ----- 1 (Can be sat by keying F after the other parameters are sat)
- Under Constant key ----- 2 (Can be sat after setting the correction factor under constant Key)

After set-up key **F** to go out / or further on if End
 Stop are sat to 1, se on right side of this page !

Absolute/relative Display indication please look at page 3



NORDIC TRANSDUCER

Program H1S.017

STOP Setting / relay / setup FREE = 0

Key **P1** & **FC PoS** shows, positive stop value can now be changed.

Key **P2** & **FC nEG** shows, negative stop value can now be changed, decimal point at right side blinking.

R key can zero set display value.

CONSTANT KEY

LOAD

Setting up of LOAD constant = value which is activated via input 9, as start value (typical 000)
Key **F** & **ch. Set** shows, key **P2**, **F**, **P1**, and now LOAD value can be sat in = the value you want at a known point, can be anything but typically **00000**.
Accept with **F** and then on to next step, which is the relay function Pulse (only if this is sat as active)

if not ! Then next step will be

here the first step will be time factor for positive stop value = pulse length, **t.out 1** shows and value can be sat with 0.01 sec. Interval, when OK key **F** and **t.out 2 shows** = negative Stop relay / pulse time, change this and then accept by **F**
Corrections Factor is now next step ←

Fact 1 shows

Correction factor is the value, input pulses from the sensor get multiplied with, before these is shown on the display, so the number of pulses is correct to a given length, this can be sat from 0.1000 to 9.99999, but of course with an realistic factor related to the job ! Accept with **F** when this is OK !.
(1.00000 is the default value)

There is 2 sets (mm / Inch.) the selection for Inch. **is made by closing input 10.**

FACT 2 shows, now key in the multiplication factor to be used for say Inch indication if this is what you want to show, (1.00000 is the default value)

!! IF Under constant key are sat active = 2, under **STOP Setting**, Then this function will come here now, instead of one of the two others, as described before, *look at top of this page STOP setting.*

Relays / outputs.

Page: 2

2 Relays standard with Normally open contacts
Max 3A, max. 220V

Pulse output:

Output 1 are kept high at the time sat under **t.out 1**, when indication is higher or = the value sat under **Fc PoS**

Output 2 are kept high at the time sat under **t.out 2**, when the indication is lower or = the value sat under **Fc nEG**.

Choice of the measuring unit

Closing input (10) the display will then switch over from mm to Inch indication 1 - 2, and visa versa.

INPUTS

The Instrument accept inputs from bidirectional encoders with NPN open collector output or push-pull.

Standard is 12VDC 60 mA supply to encoder, other voltage can be at order time.

Control inputs:

Terminal 9 activates as shown LOAD

Terminal 10 activates switch from mm to Inch.

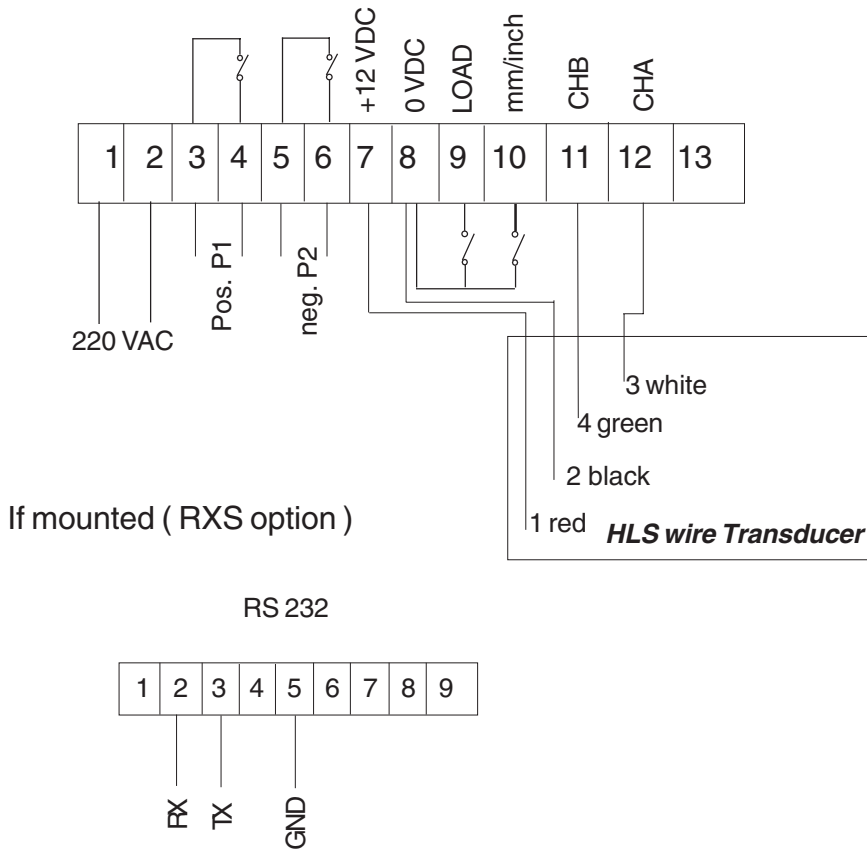
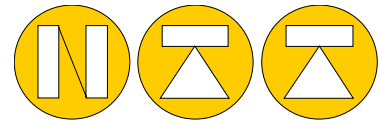
25.4mm become 1.00 Inch. Depending on number of decimals sat !.

Power supply: 220VAC as standard , 24VAC or 115VAC as option.

Counter input frequency:

(are sat under Counter type)

| | |
|--------------------|-------|
| 0 Quadrupled ----- | 10kHz |
| 1 Doubled ----- | 20kHz |
| 2 Direct ----- | 40kHz |



P2

Absolute/relative Display indication

Absolute 00 will normally be when the transducer mechanically is at the 00 point
Then activate input 9-8 for zero setting via connection of external contact, this before P2 function.

Activate P2 to make relative indication active, now a decimal dot on left of the instrument will light up
Now zero setting is possible via **R** key as often you want to do during the movement of the transducer, if you then want to see the total length (absolute) then active **P2** and the decimal dot stop lightning up, P2 activates again and you will go back to the indication from before = last zero setting (only if the transducers not have been moving since)
has the transducer been moved then it will of course show how much this is.

P2

Shift between Absolute and Relative when relative shows a decimal DOT on the left is blinking

R

R is used for zero setting under relative measuring, do not mix this zero setting with system zero setting on input 9.

If there has been made a relative zero setting and you return to former mechanical zero, then the last relative zero will now be shown as a negative value, which has to be sat on 00 via **R** key, before a new start.

R

Do only function as zero key when decimal DOT on the left is blinking = Active in relative function