

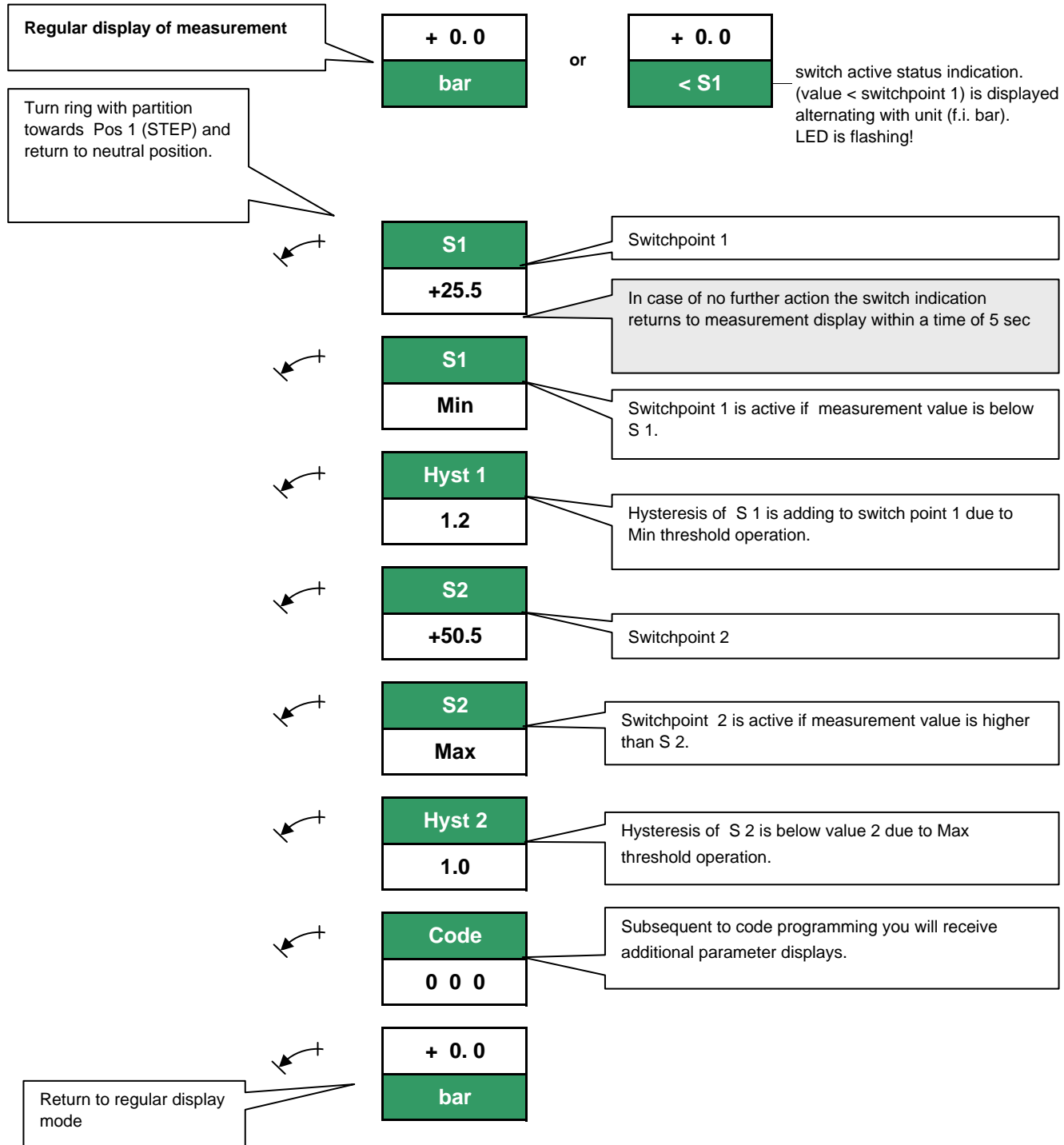


The program ring allows to display the parameters (for example switchpoints) (Pos 1) as well as to modify the parameters (Pos 2).

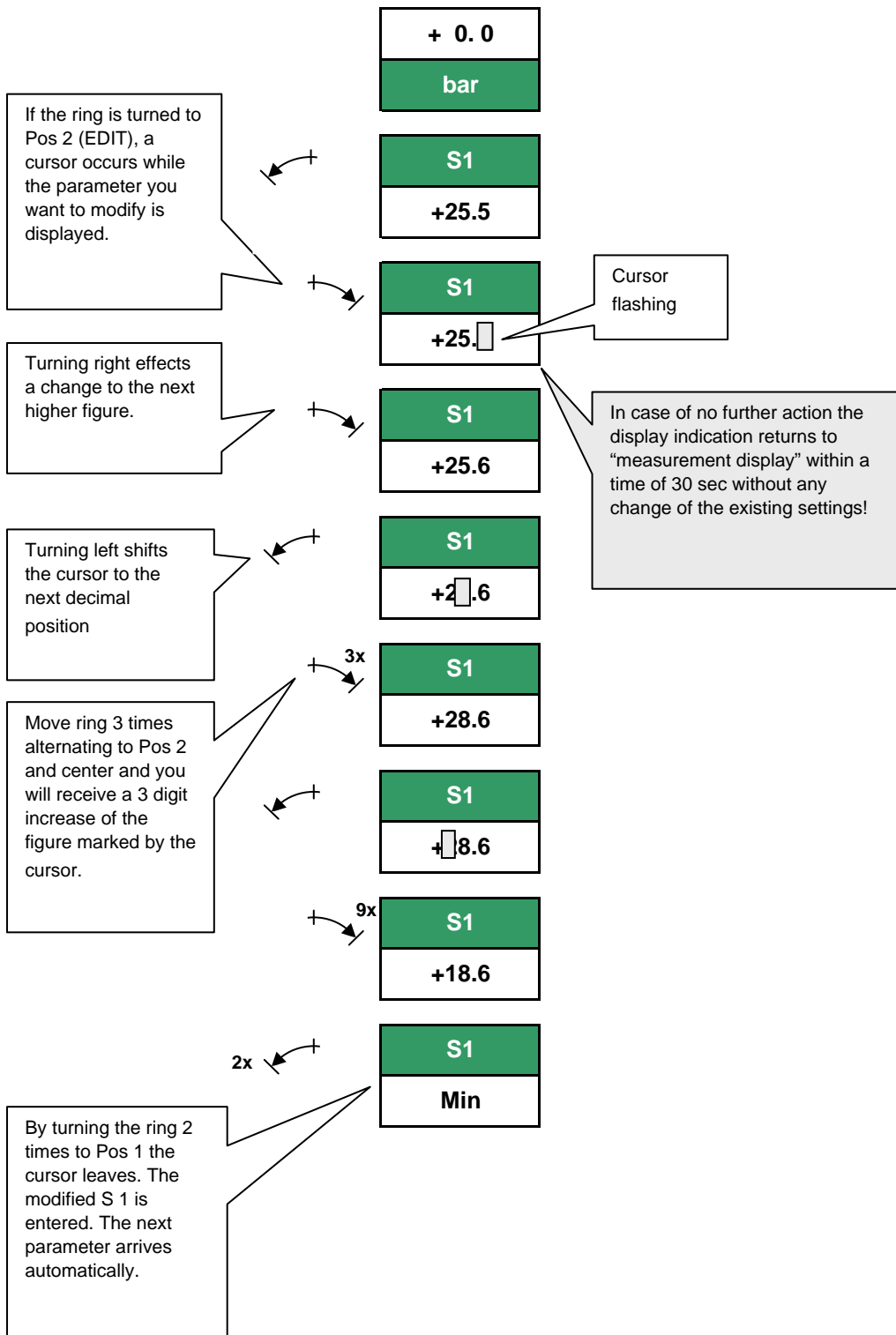
The neutral position of the program ring is achieved by central location of the ring partition between 1 and 2.
The various functions are triggered by turning the partition versus position 1 or 2

principle: Pos 1 = display or next position (STEP)
Pos.2 = modification (EDIT)

How do I display the parameters (like switch points) ?



How do I modify parameters (sample: S1= +18.6 bar)



How do I enter additional parameter or information ?

If the ring is turned to Pos 2 (EDIT), a cursor occurs at the parameter you want to modify.

Turning right effects an increase of the figure.

Turning left shifts the cursor to the next decimal position

By turning the ring to Pos 1 the cursor leaves the display and enters the code. The next parameter arrives automatically.

In regular display mode again.

Code
0 0

Cursor flashes

Code
0 0 1

In case of no further action the display indication returns to "measurement display" within a time of 30 sec without any change of the existing settings!

Code
0 1

Code
0 1 1

Code
 1 1

Code
1 1 1

Filter
1

Filter for display and analog output. (It is a FIFO filter and the time to accomplish the actual measurement value, is corresponding to the seconds shown in the display.)

Units
bar

Selection of various units (bar, psi). Display and switch points are recalculated automatically .

Output
4...20mA

Set analog output 4-20mA or 0-20mA.

4 mA
0

Start of analog output range (in the selected unit).

20 mA
80

End of analog output range (in the selected unit).

+ 0.0
bar

If you want to go back to the complete factory set (default setting), set the code to 989! All your individual parameters are now overwritten by the factory set !

How do I protect my programmed parameters ?



1. Pull off the ring. Keep it as a personal key!
2. Use ring in reverse position on the sensor (PROG.LOCK position).

Sample: How to set a new range to the flow sensor "omni-F"

- The factory set for the velocity range of the flow sensor omni-F is: 0...150 cm / sec and depends to a display of 0...100 %.
- The display shows always 0...100 %, even if you set a different, individual range! The 0 and the 100% can set to individual velocities.
- The individual velocity range is set with a percentage to the 150cm/sec but in a decimal form (1% = 0,01, 100% = 1)

An example and a flow diagram fast the correct attitude will help you to find.

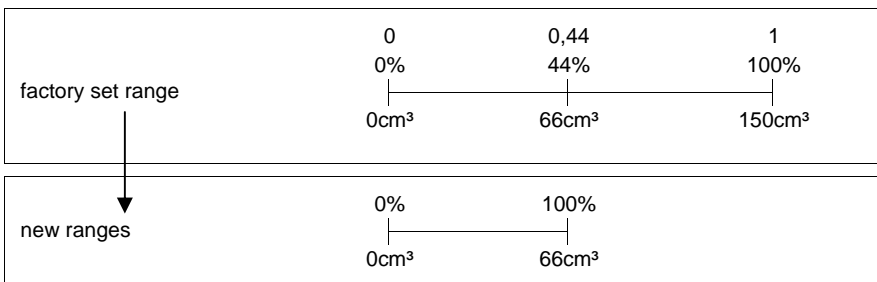
- Sample:**
- tube diameter 40mm
 - range 0...50 l/min
 - switchpoint 1 should be active, if flow is less than 10 l/min
 - Switchpoint 1 should be back again, if the flow is more than 11 l/min (hysteresis =1)

1. Go to the flow diagram "velocity / flow rate / tube diameter" and see that you have approximately 75 cm/sec if you have a tube diameter of 40mm and a flow rate of 50 l/min. This is your individual end of range!

2.

$\frac{150\text{cm/s}}{100\%} = \frac{66\text{cm/s}}{x\%}$	$x = 44$	$44\% = 0,44$
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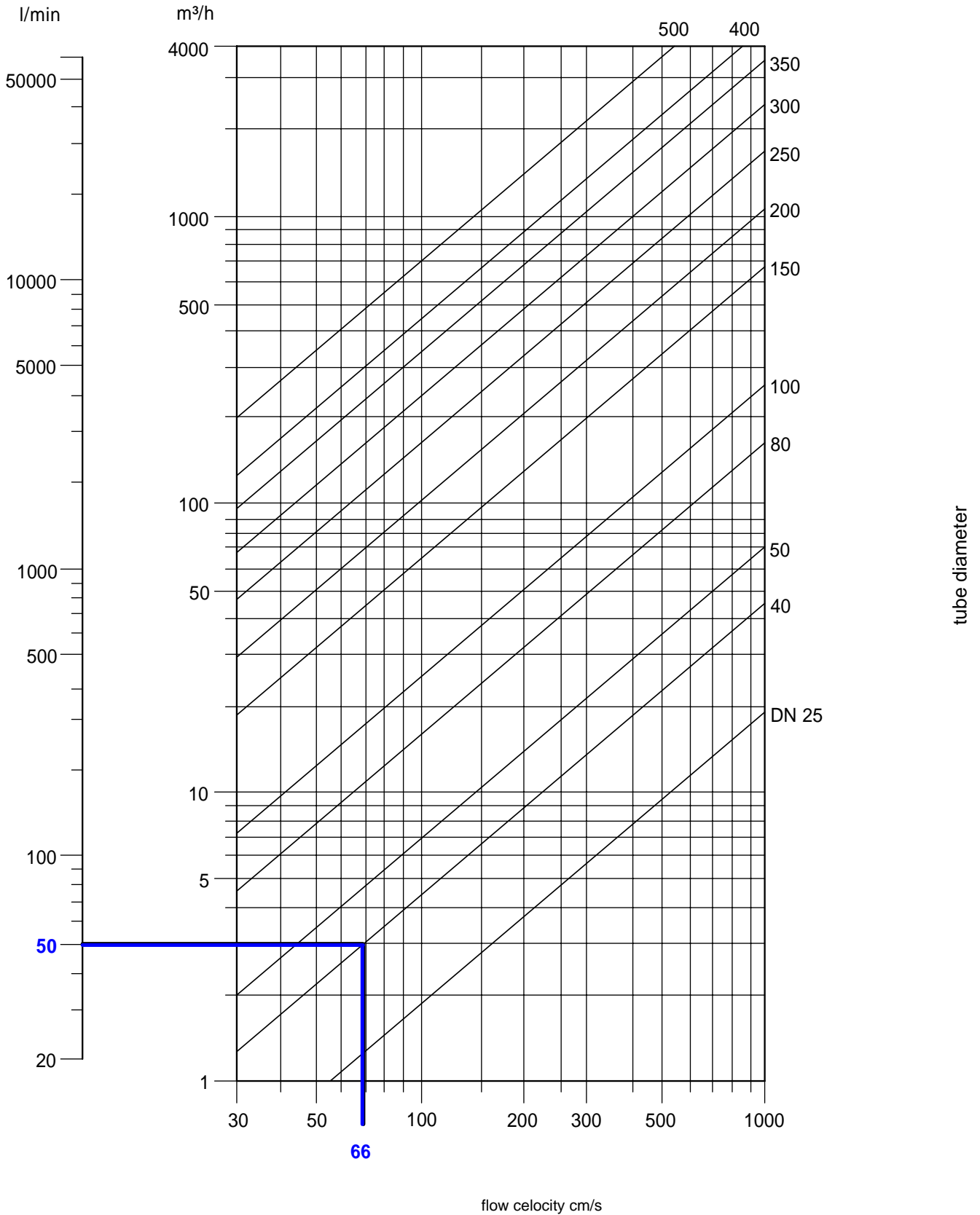
3. Please program 0,44 as your 20mA (you have to pass the code with 111)! Your display now, will show 100% if you have a velocity of 66 cm/sec (44% of the factory set!)



Pass the code as you see it in chapter "How do I enter additional parameter or information ? " Enter the parameter 20mA =1 and change the 1 to 0,44. Please see also the chapter "How do I modify parameters"

4. To program the switch point to 10 l/min, please look at the chapter "how do I modify parameters". The switch point in case of the sample is a Min switch (change if necessary the S1 to a Min switch. Do not forget, to leave the display field with stepping the cursor to the left hand side, until the next parameter field will arrive (to enter the modification in a proper way!)

Flow diagram



Sample: A flow of 50 l/min gives in a tube of DN40 Rohr a flow velocity of 66 cm/s.