## PENKO Engineering B.V.

Your Partner for Fully Engineered Factory Solutions



How to...

# FLEX 2100, FLEX or FLEX 2ch. – 4ch. parameters explanation



#### PENKO How to... FLEX 2100, FLEX or FLEX 2ch. – 4ch. parameters explanation

Go to **Menu**  $\rightarrow$  **System Setup**  $\rightarrow$  **Indicator Setup**  $\rightarrow$  **Indicator.** You need to fill in the **TAC** code (the TAC code is the number of times a parameter has been edited). The code can be found in the top right corner of the FLEX (red arrow). Fill in the code and press **OK**.



Here you can edit the Name and Unit label.

Indicator	parameters TAC: CAL:	00000065 00000100
Name	Weigher	₽
Unit label	kg	EDIT
	Formatting	
	MultiRange/Inte:	rval
🗙 Cancel	» Next	
RENNAM	INDIC.	ATOR / CONTROLLER

Name: give the Indicator a name.

Unit: fill in the weighing unit, for example: g, kg, ton, lbs. or liter.



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### Press Formatting.

	Formatting	TAC:00000066 CAL:00000100
Step	-	1 +
Decimal point	t <mark>-</mark> 0	, 0 +
X Cancel		V ok
BENKOM		INDICATOR / CONTROLLER

Step: select the step size the Indicator makes while weighing.

For example: if you set step size to 1 the weigher weighs 10.1 - 10.2 - 10.3 etcetera. If you set the step size to 5 the weigher weighs 10.0 - 10.5 - 11.0 etcetera.

**Decimal point:** select the place for the decimal point.



Press OK and press on MultiRange/Interval

Mul	tiRange	/Interval	TAC:0000006 CAL:0000010	9
Range	—	500 Parts	+ ≓ EDIT	
Max Step		50	+	
Mode	—	Multi Rang	ge 🕇	
X Cancel		V ox		
REAL AND			INDICATOR / CO	NTROLLER

Here you can edit the **Range**, **Max Step** and **Mode**.

**Range:** If the Decimal point is set to 0000.0 and the Range is 500 parts. The step size will increase as can be seen in the table below (Range \* Step size).

Weighing range	Step size	Weighing step
0,0 – 50,0	1	0,1-0,2
50,0 - 100,0	2	50,2 - 50,4
100,0 – 250,0	5	100,5 - 101,0
250,0 - 500,0	10	251,0 - 252,0
500,0 - 1000,0	20	502,0 - 504,0
1000,0 - 2500,0	50	1005,0 - 1010,0

**Max Step:** set the maximum step size the indicator can increase, if the maximum step size you want is 1 kg. Set Max Step to Step 10 and the indicator weight will increase as can be seen in the table below.

Weighing range	Step size	Weighing step
0,0 – 50,0	1	0,1-0,2
50,0 - 100,0	2	50,2 - 50,4
100,0 – 250,0	5	100,5 - 101,0
250,0 – above	10	251,0 - 252,0

Mode: there are two settings, you can choose between Multi-Range and Multi-Interval.

Multi-Range: the Indicator will decrease in weight using the last used step size.



For example, If the Indicator is filling up to 250kg and the weight is increasing with 0,5kg (seen in the table below), the Indicator will use this step size (5) to decrease back to zero.

Weighing range	Step size	Weighing step
0,0 - 50,0	1	0,1-0,2
50,0 - 100,0	2	50,2 - 50,4
100,0 – 250,0	5	100,5 - 101,0
250 ,0- 0,0	5	250,0 - 249,5

Multi-Interval: the Indicator will decrease weight using the same step sizes as it used increasing weight.

For example, If the Indicator is filling up to 250kg and the weight is increasing with 0,5kg (seen in the table below), the Indicator will use the same steps to decrease to zero.

Weighing range	Step size	Weighing step
0,0, - 50,0	1	0,1-0,2
50,0 - 100,0	2	50,2 - 50,4
100,0 – 250,0	5	100,5 - 101,0
250,0 - 100,0	5	250,0 - 249,5
100,0 - 50,0	2	99,8 – 99,6
50,0 - 0,0	1	49,9 – 49,8

Press OK and press Next.

	Indicator	parameters	TAC:0 CAL:0	0000065
Operation	Mode 🗕	Industr	ial	+
Max Load		100,00	kg	EDIT
		Stable condition		
		Zero tracking		
🗙 Cancel	« Prev	» Next	🖌 Ok	
			INDICA	TOR / CONTROLLER

Here you can edit the **Operation Mode** and the **Max load**. And click **OK** to save the parameters.

**Operation Mode:** choose between Certified and Industrial mode.



Maxload: fill in the weight the Indicator shows as the maximum load.

For example: if you are weighing 1000kg and the maximum amount you want to be show is 1005. Fill in 1005, above this amount the Indicator will show ======.

#### Press Stable condition.



**Stable range / Stable time:** in this case the Stable range is set to 0,03 kg. This means that if the actual weight is within 0,03 kg of the targeted amount for more than 0,50 second (Stable time), the indicator will readout stable.



#### Press OK and press Zero tracking.



**Tracking range / Tracking step / Tracking time:** these 3 parameters work together and are best explained via an example. The settings above means that if the actual weight is between 0 and 5 kg, every second 0,5 kg is deducted from the weight until the weight reaches zero.

For example you can use these parameters for a manual weighing platform to rule out small bits of dirt.



Press **OK** and press **Next**.

Sample Rate: choose the number of samples per second the FLEX will take.

Certified Text: you can enter the minimal load and maximum load etc.

**Class:** you can enter the class of the load cell.





#### About PENKO

Our design expertise include systems for manufacturing plants, bulk weighing, check weighing, force measuring and process control. For over 35 years, PENKO Engineering B.V. has been at the forefront of development and production of high-accuracy, high-speed weighing systems and our solutions continue to help cut costs, increase ROI and drive profits for some of the largest global brands, such as Cargill, Sara Lee, Heinz, Kraft Foods and Unilever to name but a few.

Whether you are looking for a simple stand-alone weighing system or a high-speed weighing and dosing controller for a complex automated production line, PENKO has a comprehensive range of standard solutions you can rely on.

#### Certifications

PENKO sets high standards for its products and product performance which are tested, certified and approved by independent expert and government organizations to ensure they meet – and even – exceed metrology industry guidelines. A library of testing certificates is available for reference on:

http://penko.com/nl/publications\_certificates.html

#### **PENKO Professional Services**

PENKO is committed to ensuring every system is installed, tested, programmed, commissioned and operational to client specifications. Our engineers, at our weighing center in Ede, Netherlands, as well as our distributors around the world, strive to solve most weighing-system issues within the same day. On a monthly basis PENKO offers free training classes to anyone interested in exploring modern, high-speed weighing instruments and solutions. A schedule of training sessions is found on: www.penko.com/training

#### **PENKO Alliances**

PENKO's worldwide network: Australia, Belgium, Brazil, China, Denmark, Germany, Egypt, Finland, France, India, Italy, Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Syria, Turkey, United Kingdom, South Africa, Slovakia Sweden, Switzerland and Singapore. A complete overview you will find on: www.penko.com/dealers

