



OIML Member State
Denmark

OIML Certificate No.
R61/2017-A-DK2-2022.01

OIML CERTIFICATE ISSUED UNDER SCHEME A

OIML Issuing Authority

Name: **FORCE Certification A/S**
Address: **Park Allé 345, 2605 Brøndby, Denmark**
Person responsible: **Per Rafn Crety**

Applicant

Name: **Flintec UK Ltd.**
Address: **Caxton House,
Caxton Place,
Pentwyn
Cardiff CF23 8HG,
United Kingdom**

Manufacturer **Flintec UK Ltd.**

Identification of the certified type (*the detailed characteristics will be defined in the additional pages*)

ER500-F

Designation of the module (*if applicable*)

Weighing transmitter for automatic gravimetric filling instruments

This OIML Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML type evaluation report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

OIML R 61-1, Edition (year): 2017

For accuracy class (if applicable): **Ref(0.5)**

This OIML Certificate relates only to metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML Recommendation identified above.

This OIML Certificate does not bestow any form of legal international approval.

The conformity was established by the results of tests and examinations provided in the associated OIML reports:

Type examination report: No. 121-24186.10-2, dated 04 October 2021, that includes 55 pages

Type evaluation report: No. 121-24186.90.70, dated 10 May 2022, that includes 24 pages

The technical documentation relating to the identified type is contained in documentation file:
121-24186

OIML Certificate History

Revision No.	Date	Description of the modification
Initial version	17 June 2022	

Identification, signature and stamp

The OIML Issuing Authority

FORCE Certification A/S

Date: 17 June 2022

Jens Hovgård Jensen

Certification Manager

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate is issued, partial quotation of the Certificate and of the associated OIML type evaluation report(s) is not permitted, although either may be reproduced in full.

Descriptive annex

Characteristics

Type:	ER500-F
Reference class:	Ref(0.5)
Accuracy class:	0.5, 1 or 2
Single-interval, multi-range or multi-interval	
Maximum number of verification scale intervals(n_i):	$\leq 3 \times 10000$
Maximum tare effect:	-Max
Fractional factor:	$p_i = 0.5$
Minimum input-voltage per VSI:	$0.2 \mu\text{V}$
MinFill:	<i>See tables below</i>
Extra warm-up time:	3 minutes
Maximum time between automatic zero-setting:	120 minutes
Excitation voltage:	5 VDC
Load cell interface:	4-wire or 6-wire
Minimum input-impedance:	43 ohm
Maximum input-impedance:	1200 ohm
Mains power supply:	9-32 VDC - not to be supplied from DC mains.
Operational temperature:	$-15 \text{ }^\circ\text{C}$ to $+55 \text{ }^\circ\text{C}$
Maximum cable length between ER500-F and junction box	1533 m/mm^2

MinFill for $0.2 \mu\text{V} \leq d < 0.4 \mu\text{V}$

d	X(0.5)		X(1)		X(2)	
[g]	d	[g]	d	[g]	d	[g]
0,1	281	28,1	70	7	18	1,8
0,2	561	112,2	70	14	18	3,6
0,5	842	421	70	35	18	9
1	1683	1683	140	140	18	18
2	1683	3366	210	420	18	36
5	1683	8415	420	2100	35	175
10	2525	25250	420	4200	105	1050
20	2525	50500	420	8400	105	2100
50	2525	126250	630	31500	105	5250
100	2525	252500	630	63000	158	15800
200	2525	505000	630	126000	158	31600
500	2525	1262500	630	315000	158	79000

MinFill for $0.4 \mu\text{V} \leq d < 0.8 \mu\text{V}$

d	X(0.5)		X(1)		X(2)	
[g]	d	[g]	d	[g]	d	[g]
0,1	141	14,1	35	3,5	9	0,9
0,2	141	28,2	35	7	9	1,8
0,5	281	140,5	35	17,5	9	4,5
1	421	421	35	35	9	9
2	842	1684	70	140	9	18
5	842	4210	210	1050	9	45
10	842	8420	210	2100	18	180
20	1263	25260	210	4200	53	1060
50	1263	63150	315	15750	53	2650
100	1263	126300	315	31500	53	5300
200	1263	252600	315	63000	79	15800
500	1263	631500	315	157500	79	39500

MinFill for $0.8 \mu\text{V} \leq d$

d	X(0.5)		X(1)		X(2)	
[g]	d	[g]	d	[g]	d	[g]
0,1	71	7,1	18	1,8	6	0,6
0,2	71	14,2	18	3,6	6	1,2
0,5	71	35,5	18	9	6	3
1	141	141	18	18	6	6
2	211	422	18	36	6	12
5	421	2105	35	175	6	30
10	421	4210	105	1050	11	110
20	421	8420	105	2100	17	340
50	632	31600	105	5250	33	1650
100	632	63200	158	15800	33	3300
200	632	126400	158	31600	33	6600
500	632	316000	158	79000	50	25000

Software

The software version is displayed during the start-up of the indicator. (Alternating with the TAC number). The version format is xx.yy.zz, where x is the basic software family, while yy is version numbers for minor legally relevant changes and zz is changes and corrections not influencing the legal function of the software.

The approved software version is 01.01.zz.

TAC number

The non-resettable Traceable Access Code is displayed during the start-up of the indicator in the format: xxxxx. (Alternating with the software version).

Devices

- Initial zero setting device ($\leq 20\%$ of Max)
- Semi-automatic zero setting device ($\leq 4\%$ of Max)
- Zero tracking device ($\leq 4\%$ of Max)
- Semi-automatic subtractive tare balancing device
- Units (Allowed units are g, kg and t.)
- Stable equilibrium, Zero and Net indicators.

Display and buttons

If the ER500-F is equipped with a display and buttons these are for set-up and service purpose only.

Interfaces

- RS232
- RS-485 / RS-422
- USB
- Ethernet
- 3 logical inputs
- 3 logical outputs
- Analogue Output

The interfaces do not have to be secured.

Sealing

Access to the set-up and calibration facility requires that a calibration jumper is removed from the main board. The jumper can be accessed from the outside, top part of the housing.

The indicator also has a Traceable Access Counter, which increment each time the calibration or legal part of the set-up has been changed.

The sealing of the calibration jumper, which also prevents the housing from being dismantled - is accomplished with a brittle plastic sticker. The sticker is placed across the opening designated 30 behind which the calibration jumper is located.

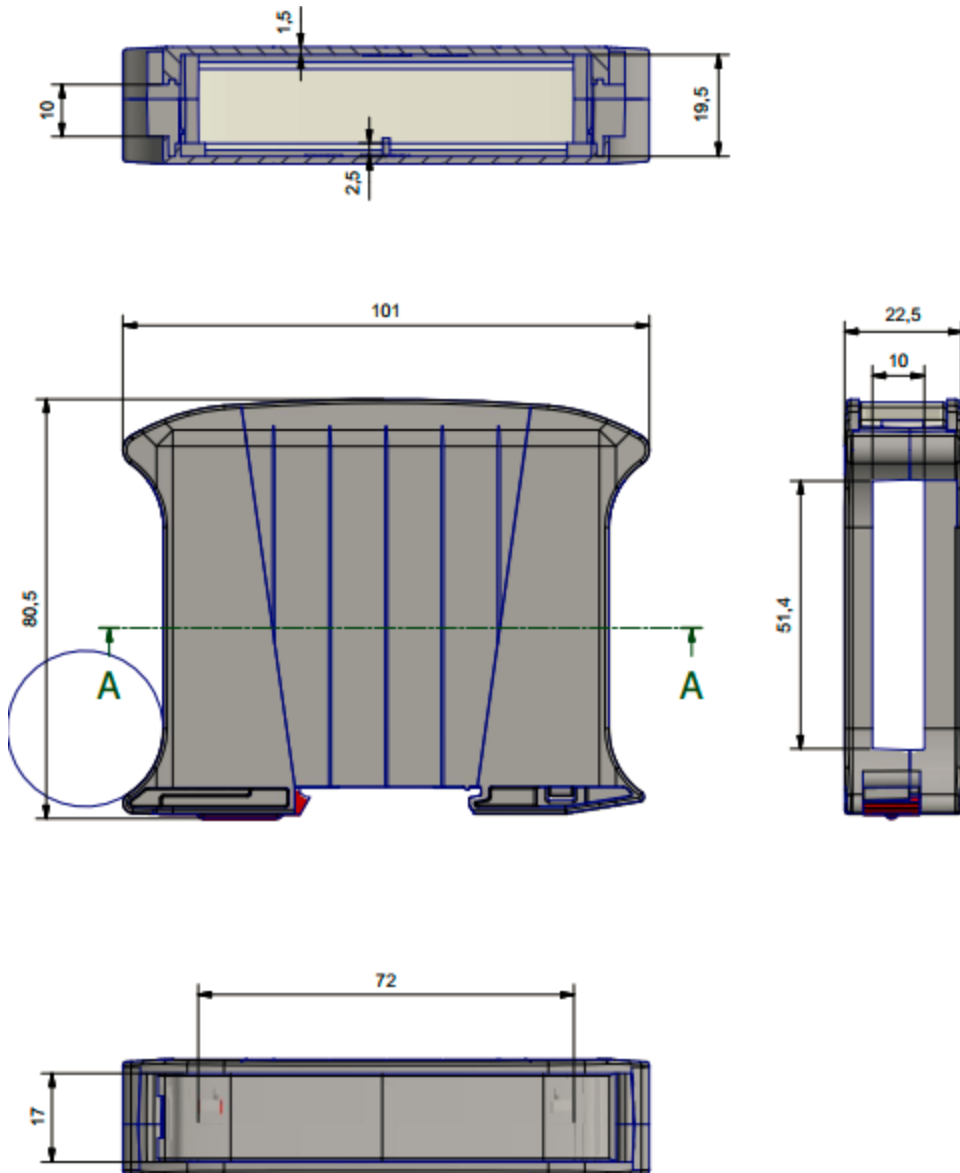


Figure 1 Dimensions of ER500-F.

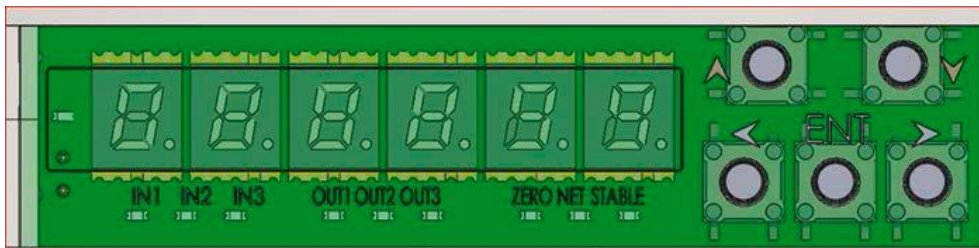


Figure 2 Front panel display with LED indicators and buttons.

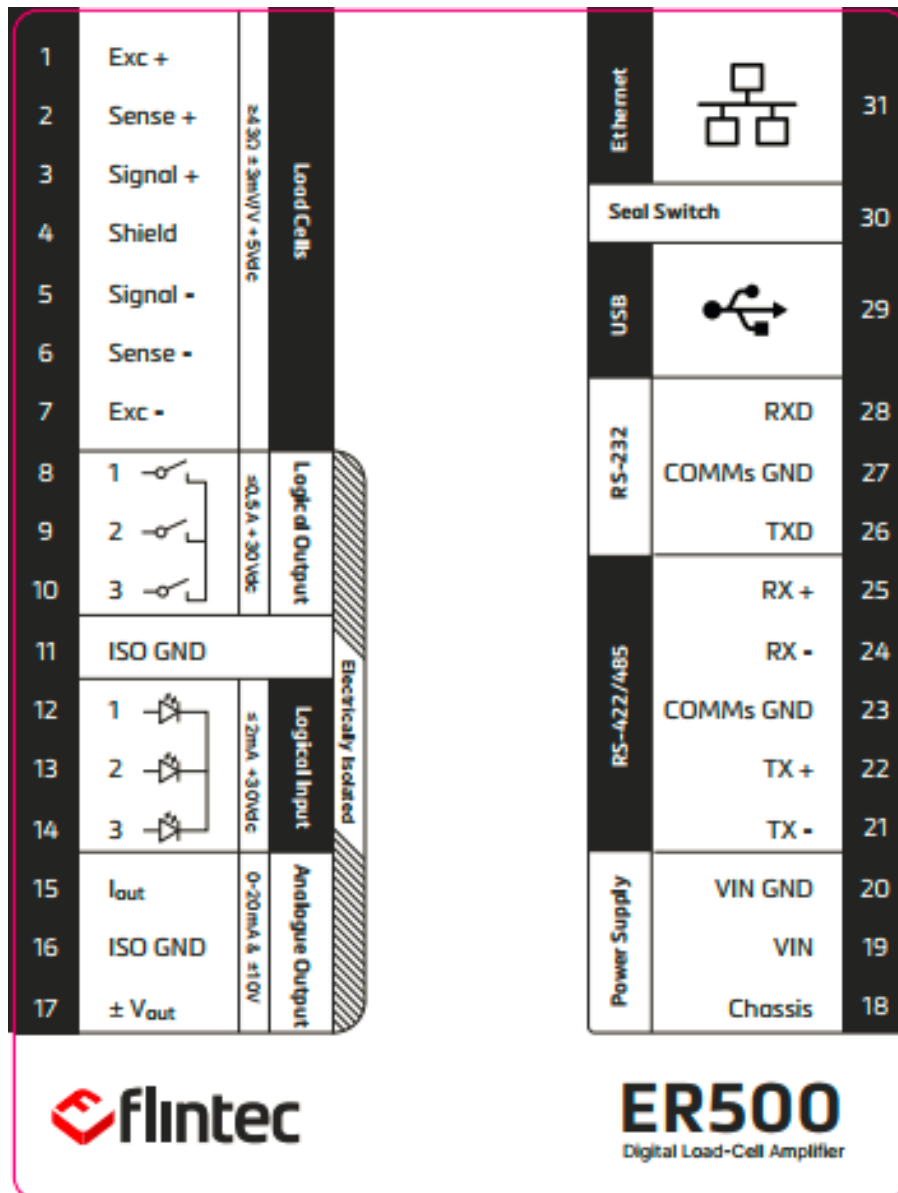


Figure 3 Top side label of ER500-F.