

# Totalizers electromechanic

Small impulse counters, adding  
Display 5- or 7-digits, with/without reset button

F 503, F 513, F 523



F 503 - Center screw mount at rear



F 513 - Front panel with screw mount



F 523 - Front panel with spring clip

## Features

- Small impulse counter
- Adding
- Display 5- or 7-digits
- With or without reset button

## Technical data - electrical ratings

Voltage supply	24/110 VAC $\pm 10\%$ (50/60 Hz) 230 VAC $+6/-10\%$ (50/60 Hz) 6/12/24 VDC $\pm 10\%$
Ripple residue	<48 %
Nominal frequency	50 / 60 Hz
Power consumption	1.8 W, 2 VA
Pulse ratio	1:1
Service life	10 million impulses
Standard DIN EN 61010-1	Protection class II Overvoltage category II Pollution degree 2
Emitted interference	DIN EN 61000-6-4
Interference immunity	DIN EN 61000-6-2
Approvals	CE conform, UL/cUL

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## Small impulse counters, adding

### Display 5- or 7-digits, with/without reset button

F 503, F 513, F 523

#### Technical data - mechanical design

Display	White numbers on black
Number of digits	5-digits with reset button 7-digits without reset button
Digit height	4 mm
Count mode	1 impulse = 1 count
Step-by-step switching	Adding in 2 half steps
Measuring range	99 999 and 9 999 999
Reset	Manual by reset button
Operating temperature	0...+60 °C
Storing temperature	-20...+70 °C
Relative humidity	80 % non-condensing
Protection DIN EN 60529	IP 41
Housing type	Built-in housing
E-connection	Stranded wires, 300 mm long
Weight approx.	50 g
Material	Housing: Noryl PPO, black

#### F 503

Mounting	Rear center screw mount
Dimensions W x H x L	36 x 22 x 45 mm
Cutout dimensions	36 x 22 mm
Installation depth	55 mm

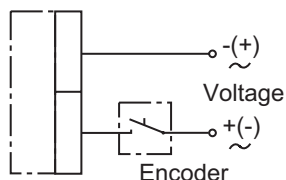
#### F 513

Mounting	Front panel with 2 screws
Dimensions W x H x L	45.7 x 45.7 x 43 mm
Cutout dimensions	37 x 23 mm
Installation depth	43 mm

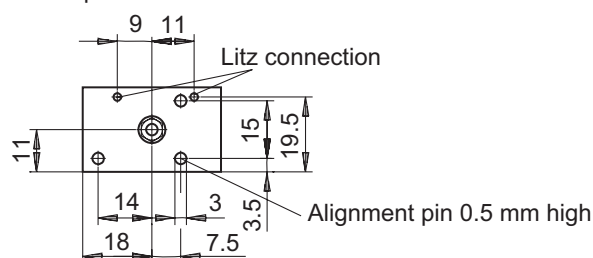
#### F 523

Mounting	Front panel with spring clips
Dimensions W x H x L	42 x 28 x 43 mm
Cutout dimensions	37 x 23 mm
Installation depth	43 mm

#### Connection diagram



Back opinion



#### Trigger level

Features	Voltage DC	Voltage AC
Max. counting speed	10 pulses/s	10 pulses/s
Power	1.8 W	2 VA
Min. pulse duration	50 ms	100 ms
Min. pulse interval	50 ms	100 ms
Switch on time (at 25 °C)	100 %	100 %

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## Small impulse counters, adding

### Display 5- or 7-digits, with/without reset button

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#### Part number

#### Center screw mount

F 503.

	<u>Display</u>
	C 7-digits 9 999 999
	A 5-digits 99 999
	<u>Voltage / connection</u>
A1	6 VDC / Stranded wire 300 mm
A2	12 VDC / Stranded wire 300 mm
A3	24 VDC / Stranded wire 300 mm
A5	24 VAC / Stranded wire 300 mm
A8	110 VAC / Stranded wire 300 mm
A9	230 VAC / Stranded wire 300 mm
	<u>Reset</u>
030B	Without reset button
010A	With reset button

#### Front panel with screw mount

F 513.

	<u>Display</u>
	C 7-digits 9 999 999
	A 5-digits 99 999
	<u>Voltage / connection</u>
A1	6 VDC / Stranded wire 300 mm
A2	12 VDC / Stranded wire 300 mm
A3	24 VDC / Stranded wire 300 mm
A5	24 VAC / Stranded wire 300 mm
A8	110 VAC / Stranded wire 300 mm
A9	230 VAC / Stranded wire 300 mm
	<u>Reset</u>
030B	Without reset button
010A	With reset button

#### Front panel with spring clips mount

F 523.

	<u>Display</u>
	C 7-digits 9 999 999
	A 5-digits 99 999
	<u>Voltage / connection</u>
A1	6 VDC / Stranded wire 300 mm
A2	12 VDC / Stranded wire 300 mm
A3	24 VDC / Stranded wire 300 mm
A5	24 VAC / Stranded wire 300 mm
A8	110 VAC / Stranded wire 300 mm
A9	230 VAC / Stranded wire 300 mm
	<u>Reset</u>
030B	Without reset button
010A	With reset button

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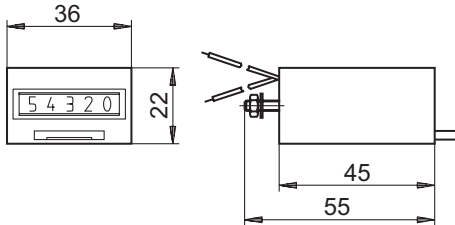
## Small impulse counters, adding

### Display 5- or 7-digits, with/without reset button

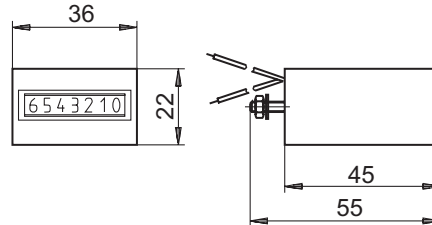
F 503, F 513, F 523

#### Dimensions

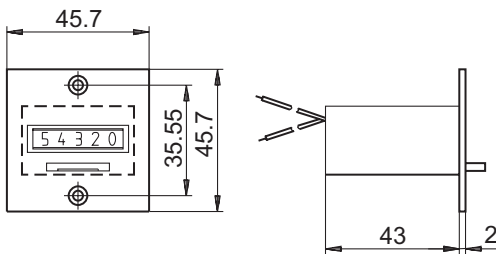
**F 503 with reset button, 5-digits**



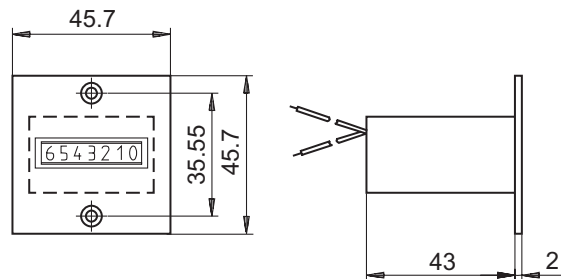
**F 503 without reset button, 7-digits**



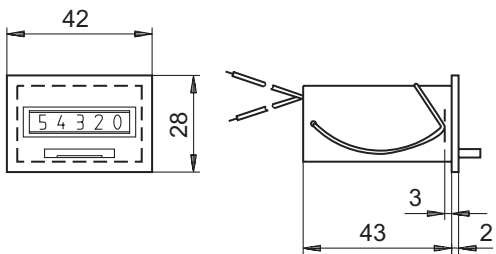
**F 513 with reset button, 5-digits**



**F 513 without reset button, 7-digits**



**F 523 with reset button, 5-digits**



**F 523 without reset button, 7-digits**

