

# Totalizers electromechanic

## Impulse counters, front panel mount

### Display 6- or 8-digits, with/without reset button

F 504, F 514, F 518, F 524



F 504 - Socket box



F 514 - Front panel with screw mount



F 518 - Front panel with screw mount

#### Features

- Impulse counter
- Adding
- Display 6- or 8-digits
- With or without reset button / key reset

#### Technical data - electrical ratings

Voltage supply	24/110 VAC ±10 % (50/60 Hz) 230 VAC +6/-10 % (50/60 Hz) 24 VDC ±10 %
Ripple residue	<48 %
Nominal frequency	50 / 60 Hz
Power consumption	2 W, 3 VA
Pulse ratio	1:1
Service life	VDC - 100 million impulses VAC - 50 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

#### Technical data - mechanical design

Display	White numbers on black
Digit height	4.5 mm
Count mode	1 impulse = 1 count
Step-by-step switching	Adding in 2 half steps
Reset	Manual by reset button or detachable key
Operating temperature	0...+60 °C
Storing temperature	-20...+70 °C
Relative humidity	80 % non-condensing
Protection DIN EN 60529	IP 41
E-connection	Soldering pins (flat)
Weight approx.	100 g
Material	Housing: Noryl PPO, black

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**F 504, F 514, F 518, F 524**

#### Technical data - mechanical design

##### F 504

Number of digits	6-digits with/without reset button 8-digits without reset button
Measuring range	999 999 and 99 999 999
Housing type	Socket box
Mounting	Socket box
Dimensions W x H x L	50 x 25 x 85.8 mm
Cutout dimensions	50 x 25 mm
Installation depth	85.8 mm

##### F 514

Number of digits	6-digits
Measuring range	999 999
Housing type	Built-in housing
Mounting	Front panel with 2 screws
Dimensions W x H x L	60 x 37.5 x 61.3 mm
Cutout dimensions	51 x 26 mm
Installation depth	77.8 mm

##### F 518

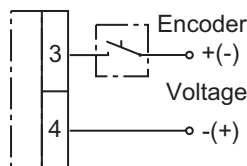
Number of digits	6-digits with/without reset button 8-digits without reset button
Measuring range	999 999
Housing type	Built-in housing
Mounting	Front panel with 2 screws
Dimensions W x H x L	66.5 x 37 x 61.3 mm
Cutout dimensions	51 x 26 mm
Installation depth	77.8 mm

##### F 524

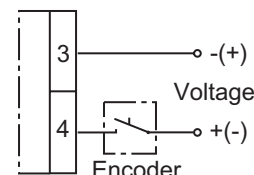
Number of digits	6-digits with/without reset button 8-digits without reset button
Measuring range	999 999 and 99 999 999
Housing type	Built-in housing
Mounting	Front panel with spring clips
Dimensions W x H x L	53.2 x 28.2 x 61.3 mm
Cutout dimensions	51 x 26 mm
Installation depth	77.8 mm

#### Connection diagram

##### Standard connection



##### "H"-connection



"H"-connection - combination F 504 with FE504  
Please indicate when placing your order whether counters F 504 are to be mounted together with preset counters FE504 in a common front panel and/or in counter panels with common mounting rails. The counters F 504 will then be supplied ex works with a suitable, so-called external plug-in housing "H".

#### Trigger level

##### Max. counting speed 10 pulses/s

Voltage	24/110 VAC $\pm 10\%$ 230 VAC $+6/-10\%$
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Power	3 VA
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Min. pulse duration	50 ms
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Min. pulse interval	50 ms
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Switch on time (at 25 °C)	100 %
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##### Max. counting speed 20 pulses/s

Voltage	24 VDC $\pm 10\%$
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Power	2 W
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Min. pulse duration	25 ms
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Min. pulse interval	25 ms
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Switch on time (at 25 °C)	100 %
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#### Accessories

##### Front panels for F 504

Z 100.01A	Front panel with transparent protective cover, for socket box 50 x 25 mm
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##### Front frames for F 504

Z 105.02A	Front frame with cylinder lock provided on transparent cover
Z 107.01A	Front frame, insertion cutout 50 x 25 mm

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#### Part number

##### Socket box

F 504.

	<u>Display</u>
B	6-digits 999 999
C	8-digits 99 999 999
	<u>Voltage</u>
3	24 VDC
5	24 VAC
8	110 VAC
9	230 VAC
	<u>Reset / E-connection</u>
640DA	With reset key / standard connection
650DA	With reset button / standard connection
800FA	Without reset / standard connection
659DB	With reset button / "H"-type connection
809FB	Without reset / "H"-type connection

##### Front panel with screw mount

F 514.    B

	<u>Display</u>
B	6-digits 999 999
	<u>Voltage / connection</u>
A3	24 VDC / Standard connection
A5	24 VAC / Standard connection
A8	110 VAC / Standard connection
A9	230 VAC / Standard connection
B3	24 VDC / "H"-type connection
B5	24 VAC / "H"-type connection
B8	110 VAC / "H"-type connection
B9	230 VAC / "H"-type connection
	<u>Reset</u>
600B	Without reset button
640A	With detachable key
650A	With reset button

##### Front panel with screw mount

F 518.

	<u>Display</u>
B	6-digits 999 999
C	8-digits 99 999 999
	<u>Voltage / connection</u>
A3	24 VDC / Standard connection
A5	24 VAC / Standard connection
A8	110 VAC / Standard connection
A9	230 VAC / Standard connection
B3	24 VDC / "H"-type connection
B5	24 VAC / "H"-type connection
B8	110 VAC / "H"-type connection
B9	230 VAC / "H"-type connection
	<u>Reset</u>
600B	Without reset button, 6-digits
640A	With detachable key, 6-digits
650A	With reset button, 6-digits
800C	Without reset button, 8-digits

##### Front panel with spring clips mount

F 524.

	<u>Display</u>
B	6-digits 999 999
C	8-digits 99 999 999
	<u>Voltage / connection</u>
A3	24 VDC / Standard connection
A5	24 VAC / Standard connection
A8	110 VAC / Standard connection
A9	230 VAC / Standard connection
B3	24 VDC / "H"-type connection
B5	24 VAC / "H"-type connection
B8	110 VAC / "H"-type connection
B9	230 VAC / "H"-type connection
	<u>Reset</u>
640D	With detachable key, 6-digits
650D	With reset button, 6-digits
600E	Without reset button, 6-digits
800F	Without reset button, 8-digits

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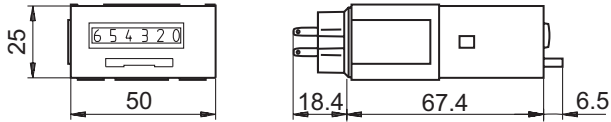
## Impulse counters, front panel mount

### Display 6- or 8-digits, with/without reset button

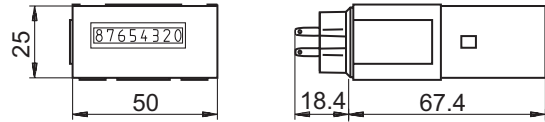
F 504, F 514, F 518, F 524

#### Dimensions

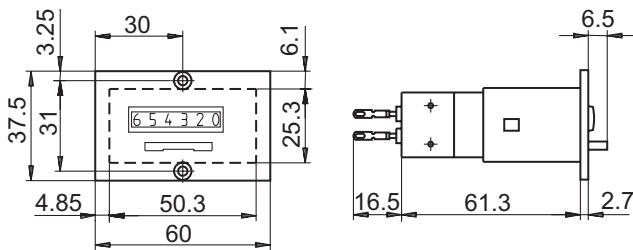
F 504 with reset button, 6-digits



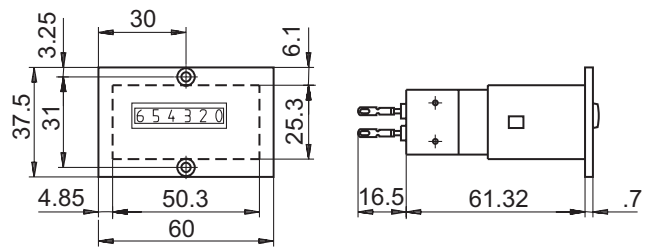
F 504 without reset button, 6- and 8-digits



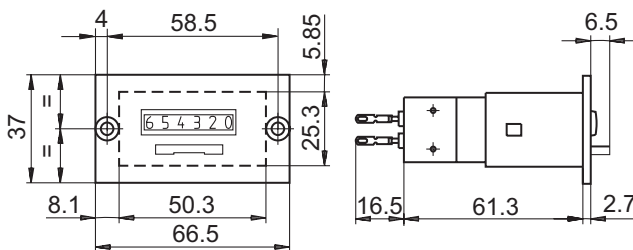
F 514 with reset button, 6-digits



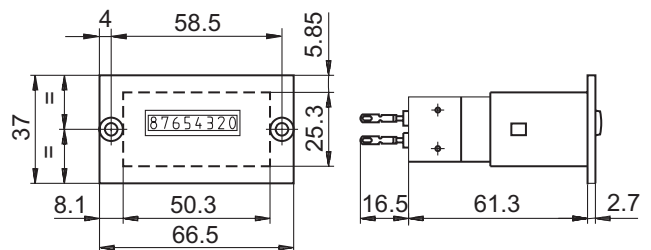
F 514 without reset button, 6-digits



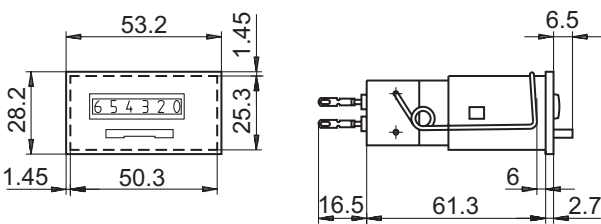
F 518 with reset button, 6-digits



F 518 without reset button, 6- and 8-digits



F 524 with reset button, 6-digits



F 524 without reset button, 6- and 8-digits

