

Totalizers electromechanic

Small impulse counters, adding
Display 4- or 6-digits, with/without reset button

F 102, F 112, F 122



F 102 - Center screw mount at rear



F 112 - Front panel with screw mount



F 122 - Front panel with spring clips

Features

- Small impulse counter
- Adding
- Display 4- or 6-digits
- With or without reset button

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 | 2.3 W, 5.5 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 |

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Technical data - mechanical design

| | |
|-------------------------|---|
| Display | White numbers on black |
| Number of digits | 4-digits with reset button 6-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 | 9999 and 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 | Pin connector D = 1.5 mm |
| Cutout dimensions | 33 x 22 mm |
| Weight approx. | 75 g |
| Material | Housing: Hostaform POM, black |

F 102

| | |
|----------------------|-------------------------|
| Mounting | Rear center screw mount |
| Dimensions W x H x L | 32 x 21.5 x 59 mm |
| Installation depth | 74 mm |

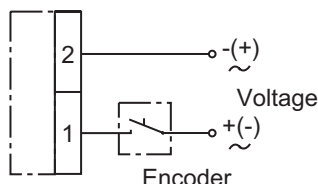
F 112

| | |
|----------------------|---------------------------|
| Mounting | Front panel with 2 screws |
| Dimensions W x H x L | 39 x 37 x 59 mm |
| Installation depth | 72 mm |

F 122

| | |
|----------------------|-------------------------------|
| Mounting | Front panel with spring clips |
| Dimensions W x H x L | 37 x 25 x 59 mm |
| Installation depth | 72 mm |

Connection diagram



Trigger level

Max. counting speed 6 pulses/s

| | |
|---------------------------|------------------|
| Voltage | 230 VAC +6/-10 % |
| Power | 5.5 VA |
| Min. pulse duration | 50 ms |
| Min. pulse interval | 120 ms |
| Switch on time (at 25 °C) | 30 % max. 7 min |

Max. counting speed 10 pulses/s

| | |
|---------------------------|------------------|
| Voltage | 24/110 VAC ±10 % |
| Power | 3 VA |
| Min. pulse duration | 50 ms |
| Min. pulse interval | 50 ms |
| Switch on time (at 25 °C) | 100 % |

Max. counting speed 20 pulses/s

| | |
|---------------------------|--------------|
| Voltage | 24 VDC ±10 % |
| Power | 2.3 W |
| Min. pulse duration | 25 ms |
| Min. pulse interval | 25 ms |
| Switch on time (at 25 °C) | 100 % |

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Part number

Center screw mount

F 102.

| | | | |
|------|--|--|--------------------------------|
| | | | <u>Display</u> |
| | | | B 4-digits 9999 |
| | | | D 6-digits 999 999 |
| | | | <u>Voltage</u> |
| | | | C3 24 VDC |
| | | | C5 24 VAC |
| | | | C8 110 VAC |
| | | | C9 230 VAC |
| | | | <u>Reset</u> |
| 450L | | | With reset button, 4-digits |
| 600N | | | Without reset button, 6-digits |

Front panel with screw mount

F 112.

| | | | |
|------|--|--|--------------------------------|
| | | | <u>Display</u> |
| | | | B 4-digits 9999 |
| | | | D 6-digits 999 999 |
| | | | <u>Voltage</u> |
| | | | C3 24 VDC |
| | | | C5 24 VAC |
| | | | C8 110 VAC |
| | | | C9 230 VAC |
| | | | <u>Reset</u> |
| 450K | | | With reset button, 4-digits |
| 600M | | | Without reset button, 6-digits |

Front panel with spring clips mount

F 122.

| | | | |
|------|--|--|--------------------------------|
| | | | <u>Display</u> |
| | | | B 4-digits 9999 |
| | | | D 6-digits 999 999 |
| | | | <u>Voltage</u> |
| | | | C3 24 VDC |
| | | | C5 24 VAC |
| | | | C8 110 VAC |
| | | | C9 230 VAC |
| | | | <u>Reset</u> |
| 450N | | | With reset button, 4-digits |
| 600Q | | | Without reset button, 6-digits |

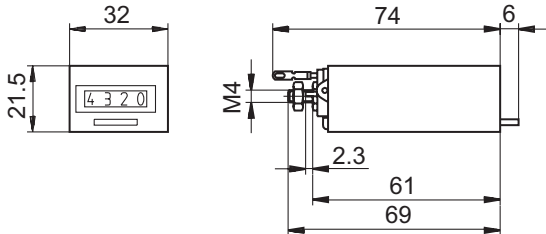
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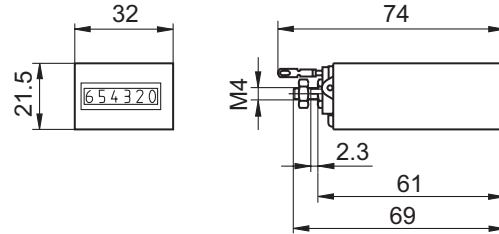
F 102, F 112, F 122

Dimensions

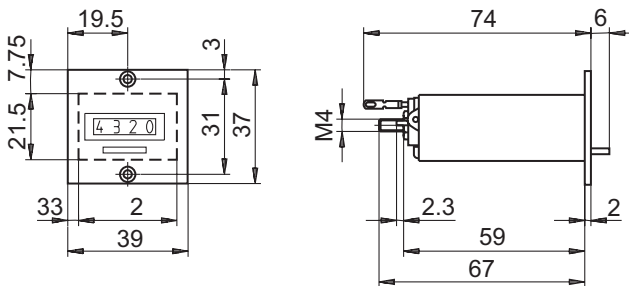
F 102 with reset button, 4-digits



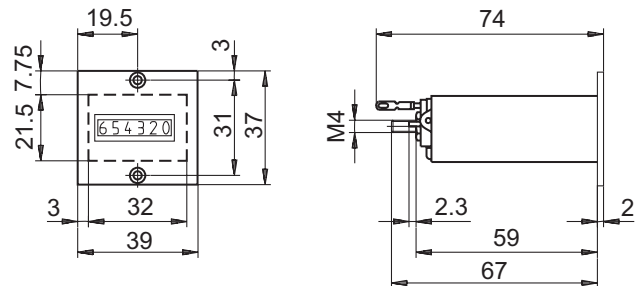
F 102 without reset button, 6-digits



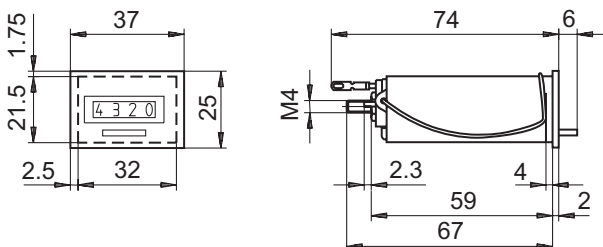
F 112 with reset button, 4-digits



F 112 without reset button, 6-digits



F 122 with reset button, 4-digits



F 122 without reset button, 6-digits

