

Adding Pneumatic Preset Counter Type 497



VARIABLE PILOT SIGNAL

TECHNICAL DATA

- Continuously visible preset
- Integrated pneumatic reset
- 3 or 5-digit display
- Convenient button setting

Using two pneumatic preset counters it is possible to implement pilot signals with values ranging from 1 to 99.999. These counters are especially suitable as controlling elements for semi-automatic or fully automated processes. This applies both to varying preset/setting values and to values which remain the same for a long period.

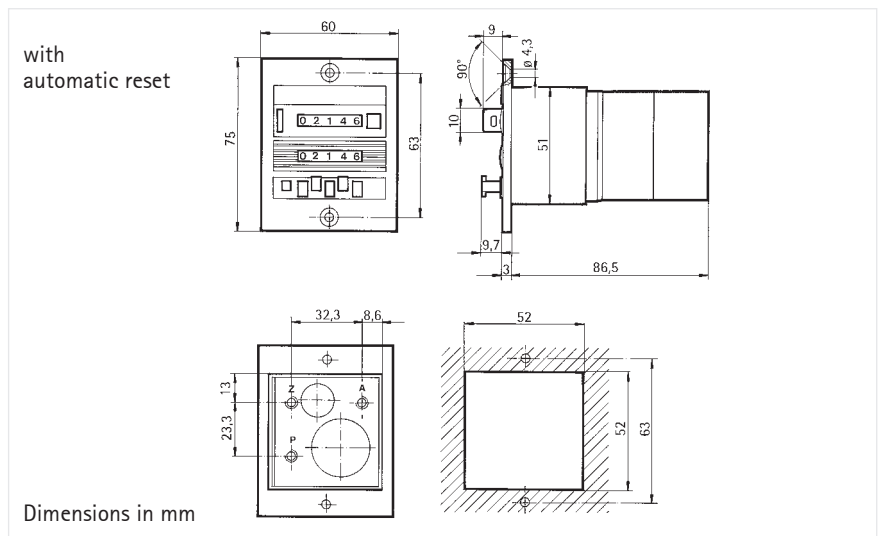
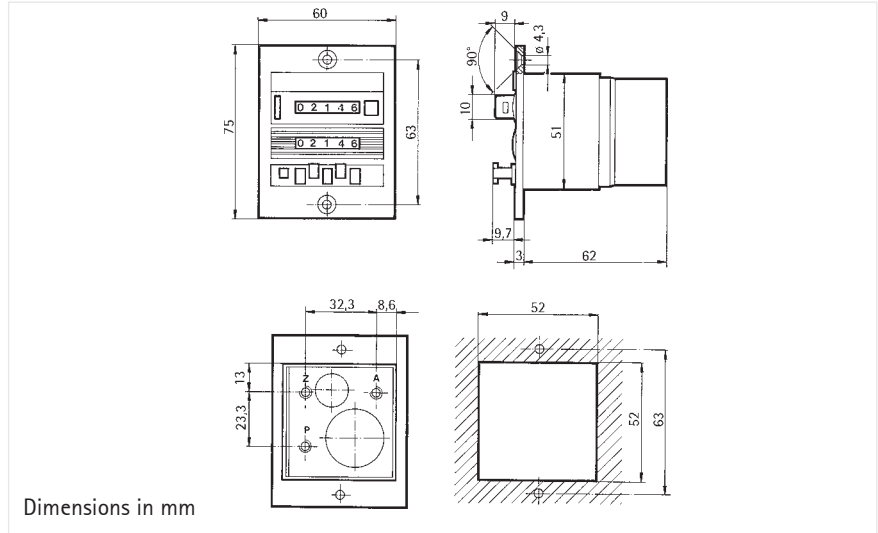
| | |
|----------------------------|--|
| Display | 3 or 5-digit indication of count and preset value, depending on version |
| Digit height | 4 mm |
| Service pressure | 2 ... 8 bar |
| Air quality | oilfree |
| Filter pore width | < 40 µm |
| Operating temperature | 0 ... + 60 °C |
| Connection | hose coupler M5 or rapid-fit connection (depending on version) |
| Mounting | front panel |
| Mounting position | horizontal roller axis |
| Protection class (IEC 144) | IP 40 with hoses connected; for higher degree of protection we recommend clear covers |
| Count input | adding |
| Min. pulse length | 8 ms |
| Max. counting frequency | 20 Hz |
| Pulse duty factor | 1:1 |
| Reset | - manual with button - by external pneumatic signal, Min. pulse length 180 ms - automatic reset after preset has been reached (only in version with automatic reset) |
| Reset frequency | max. 1 per 2 s |
| Signal duration | from when preset has been reached until reset; at 3 bar, counter with automatic reset 300 ... 340 ms |

Attention! Minimum time period between last count pulse and pneumatic reset is 50 ms.

Type 497

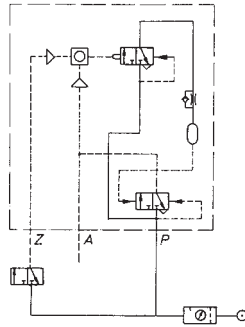
Technical data

DIMENSIONED DRAWINGS

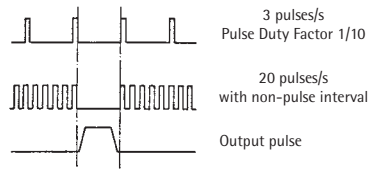


CONNECTION DIAGRAMS

Circuit diagram



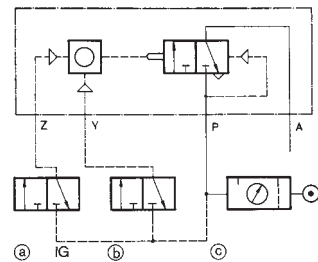
Pulse rate



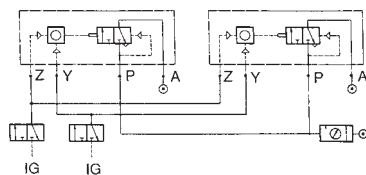
Connection diagram

- Z Pulse input "count"
- Y Pulse input "reset"
- P Air input
- A^E Final output signal
- A^V Output pilot signal

- IG Pulse generator
- a Count
- b Reset
- c Mains



Variable pilot signal
Suggested connection



Connection: Rapid-fit connector



ORDER INFORMATION
Counter

| Connection | Button and pneum. reset | | with automatic reset | |
|---------------------|----------------------------|-----------|-------------------------|-----------|
| | 3-digit | 5-digit | 3-digit | 5-digit |
| Hose coupler M5 | 0 497 619 | 0 497 486 | 0 497 493 | 0 497 472 |
| Rapid-fit connector | 0 497 618 | 0 497 487 | 0 497 479 | 0 497 473 |

Standard accessories

Type 497



TECHNICAL DATA

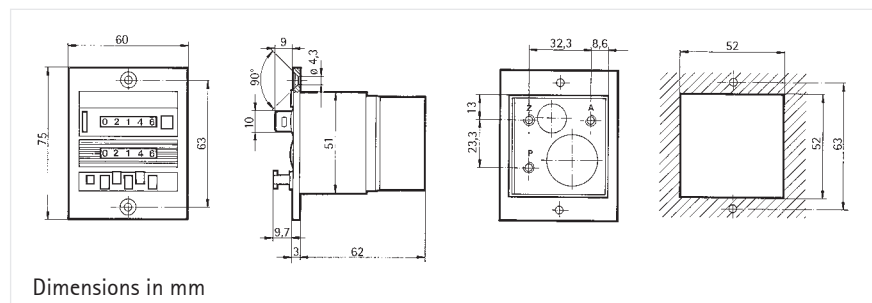
Subtracting Pneumatic Preset Counter

- Integrated pneumatic reset
- 3 or 5-digit display
- Convenient button setting

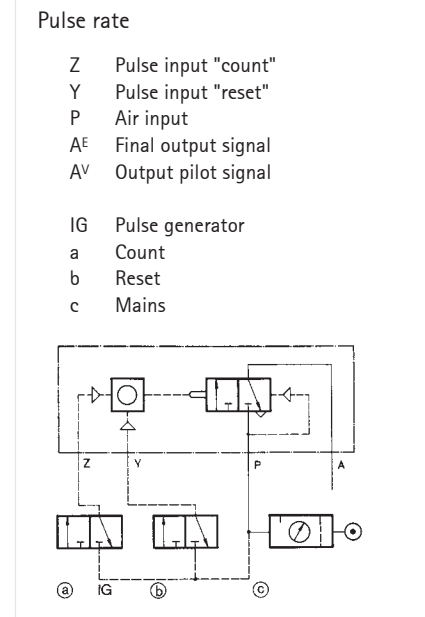
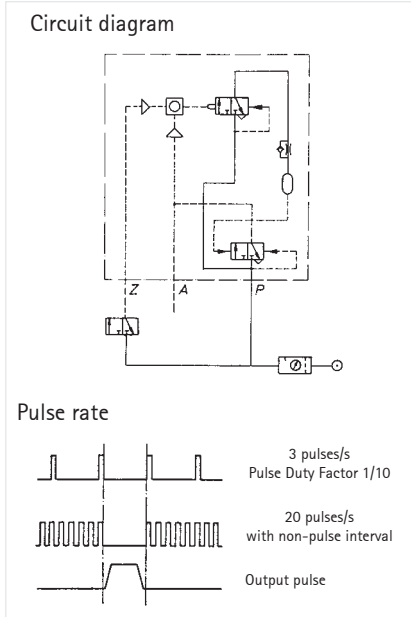
| | |
|----------------------------|---|
| Display | 3 or 5-digit count indication, depending on version |
| Digit height | 4 mm |
| Service pressure | 2 ... 8 bar |
| Air quality | oilfree |
| Filter pore width | < 40 µm |
| Operating temperature | 0 ... +60 °C |
| Connection | hose coupler M5 or rapid-fit connection (depending on version) |
| Mounting | front panel |
| Mounting position | horizontal roller axis |
| Protection class (IEC 144) | IP 40 with hoses connected; for higher degree of protection we recommend clear covers |
| Count input | subtracting |
| Min. pulse length | 8 ms |
| Max. counting frequency | 20 Hz |
| Pulse duty factor | 1:1 |
| Reset | - manual with button - by external pneumatic signal, Min. pulse length 180 ms |
| Reset frequency | max. 1 per 2 s |
| Signal duration | from when preset has been reached until reset; at 6 bar, counter with automatic reset 300 ... 340 ms (depending on connected volume and service pressure) |

Attention! Minimum time period between last count pulse and pneumatic reset is 50 ms.

DIMENSIONED DRAWING



CONNECTION DIAGRAMS



Order information

Counter

Standard accessories

| Connection | Button and pneum. reset | |
|---|-------------------------|-----------|
| | 3-digit | 5-digit |
| Hose coupler M5 | 0 497 530 | 0 497 550 |
| Rapid-fit connector | 0 497 532 | 0 497 552 |
| Transparent cover (description see "Accessories") | | |
| with knob | | 1 405 613 |
| with lock | | 1 405 614 |
| Fittings M5 for hose M 5 x 1 | | 3 641 733 |

Pneumatics

Type 497

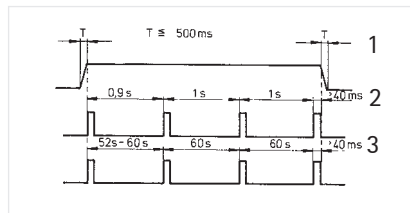


FUNCTION DESCRIPTION

TECHNICAL DATA

Pneumatic Preset Time Counter

- Preset value continuously visible
- Integrated pneumatic reset
- 3 or 5-digit display
- Convenient button setting



- 1 = x-input
- 2 = seconds timer
- 3 = minutes timer

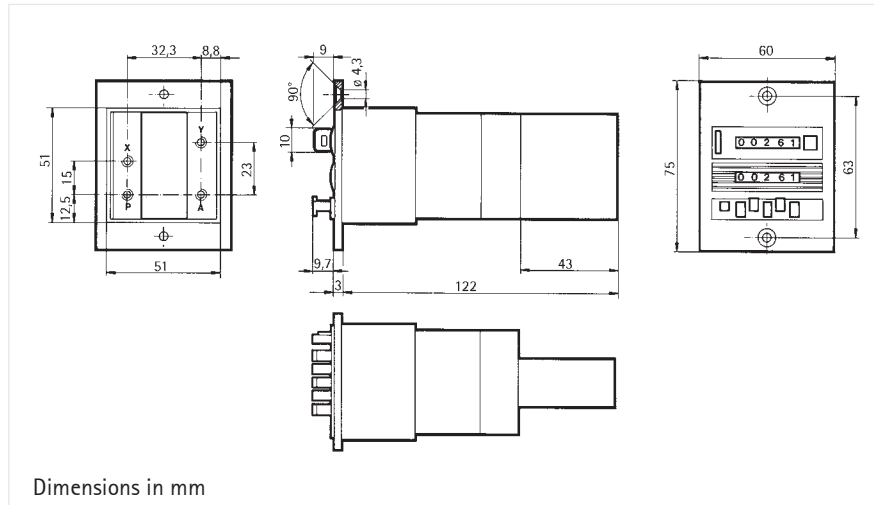
The combination of a pneumatic minutes or seconds pulse generator and a pneumatic preset counter allows setting of times from 1 to 99999 s or 1 to 99999 min. Versions with automatic reset permit fully automatic timing sequences.

| | |
|----------------------------|--|
| Display | 3 or 5-digit indication of count and preset value |
| Digit height | 4 mm |
| Service pressure | 2 ... 6 bar |
| Air quality | oilfree |
| Filter pore width | < 40 µm |
| Operating temperature | 0 ... + 60 °C |
| Connection | hose coupler M5 or rapid-fit connection |
| Mounting | with front panel |
| Protection class (IEC 144) | IP 40 with hoses connected; for higher degree of protection we recommend transparent covers |
| Weight | approx. 150 g, with automatic reset module approx. 200 g |
| Count input | adding |
| Resolution | 0.01 h, minute or second, dep. on version |
| Max. counting frequency | 20 Hz |
| Time deviation | max. 15 % in the first second or minute |
| Frequency error | 1/min. 0.5 %; 1/s 2 % |
| Reset | - manual with button - by external pneumatic signal, min. pulse length 180 ms - automatic reset after preset has been reached (only in version with automatic reset) |
| Reset frequency | max. 1 per 2 s |
| Signal output | |
| Signal duration | from when preset has been reached until reset; counter with automatic reset 300 ... 340 ms |
| Switch A | is ventilated with intake air during signal generation |
| Signal generation | transition P to A |

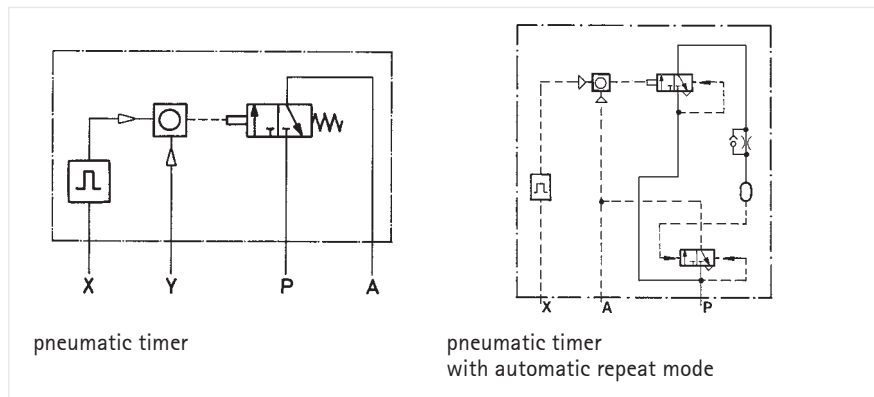
Technical data

Type 497

DIMENSIONED DRAWING



CONNECTION DIAGRAM



X = air intake timing element
Y = pneumatic reset

P = air intake
A = output signal

ORDER INFORMATION

Preset time counter

Standard accessories

| Version | | Hose coupler M5 | Rapid fit connection |
|--|----------------------|-----------------|----------------------|
| 3-digit, | second indication | 0 497 621 | 0 497 620 |
| | minute indication | 0 497 622 | - |
| 5-digit, | second indication | 0 497 652 | 0 497 653 |
| | with automatic reset | 0 497 665 | 0 497 663 |
| 5-digit, | minute indication | 0 497 654 | 0 497 655 |
| | with automatic reset | 0 497 666 | 0 497 664 |
| Transparent cover as described under "Accessories" | | | |
| | with key | | 1 405 614 |
| | with knob | | 1 405 613 |
| Fittings M5 for hose M5 x 1 | | | 3 641 733 |

Pneumatics