

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.

Technical data

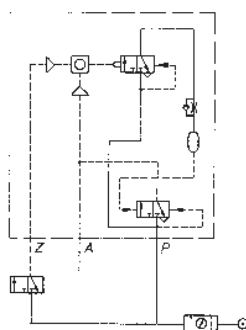
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Technical data

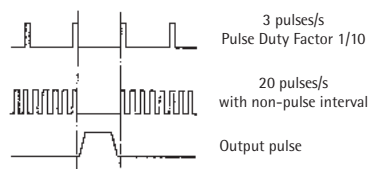
Type 497

CONNECTION DIAGRAMS

Circuit diagram



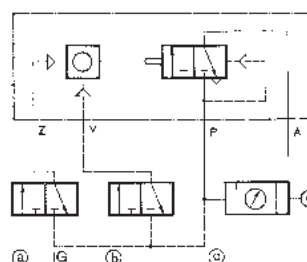
Pulse rate



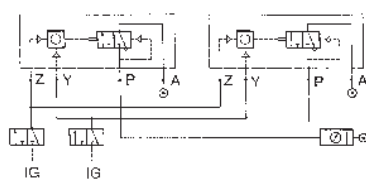
Connection diagram

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

Standard accessories

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

Pneumatics

Type 497



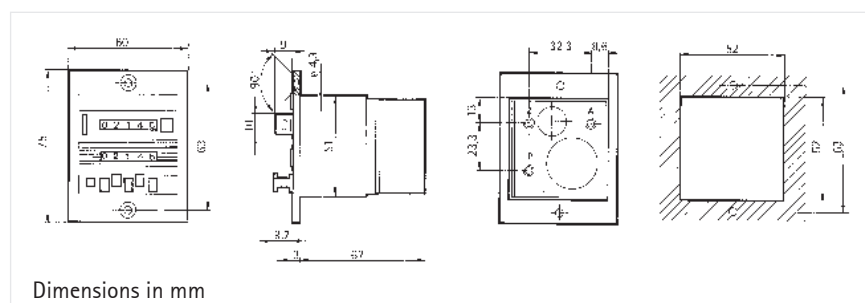
TECHNICAL DATA

- 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

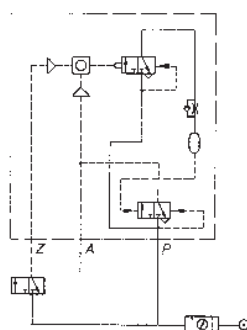


Technical data

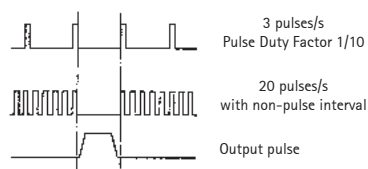
Type 497

CONNECTION DIAGRAMS

Circuit diagram



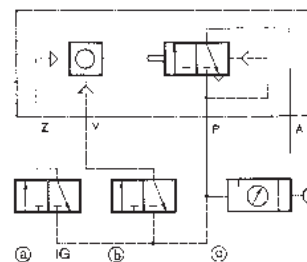
Pulse rate



Pulse rate

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



Connection: Rapid-fit connector



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

Type 497

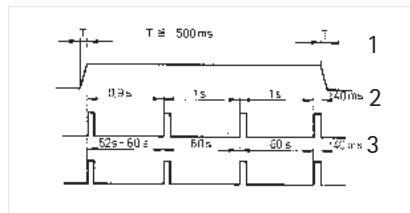


FUNCTION DESCRIPTION

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

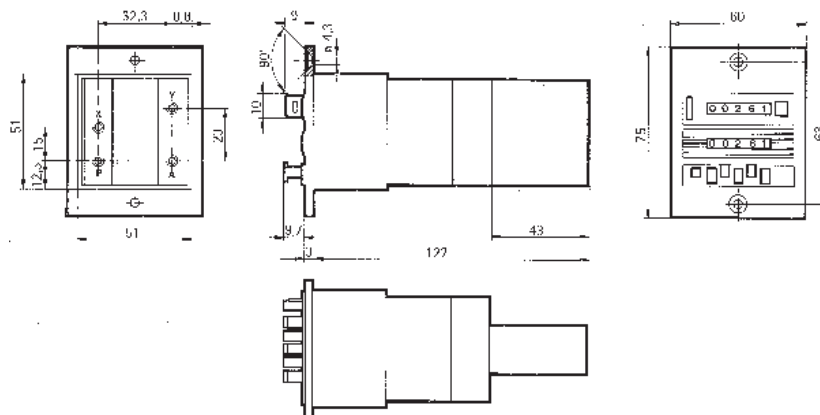
The combination of a pneumatic minutes or seconds pulse generator and a pneumatic preset counter allows setting of times from 1 to 99999 s or 1 to 99999 min. Versions with automatic reset permit fully automatic timing sequences.

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

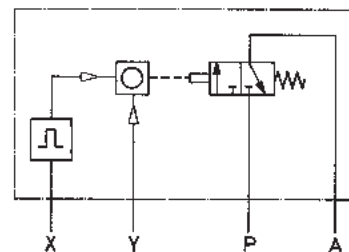
Type 497

DIMENSIONED DRAWING

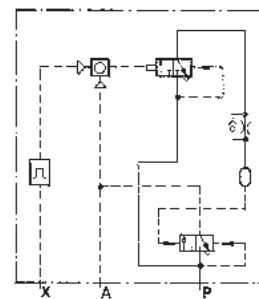


Dimensions in mm

CONNECTION DIAGRAM



pneumatic timer



pneumatic timer
with automatic repeat mode

X = air intake timing element
Y = pneumatic reset

P = air intake
A = output signal

ORDER INFORMATION

Preset time counter

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

Standard accessories

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