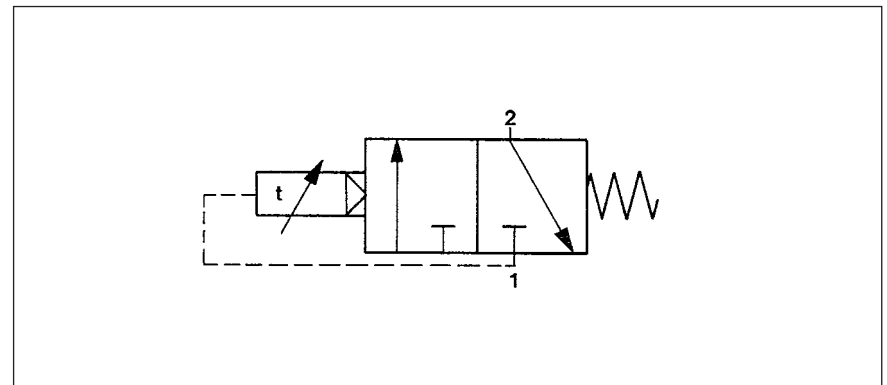# Type 499

Pneumatic Timer

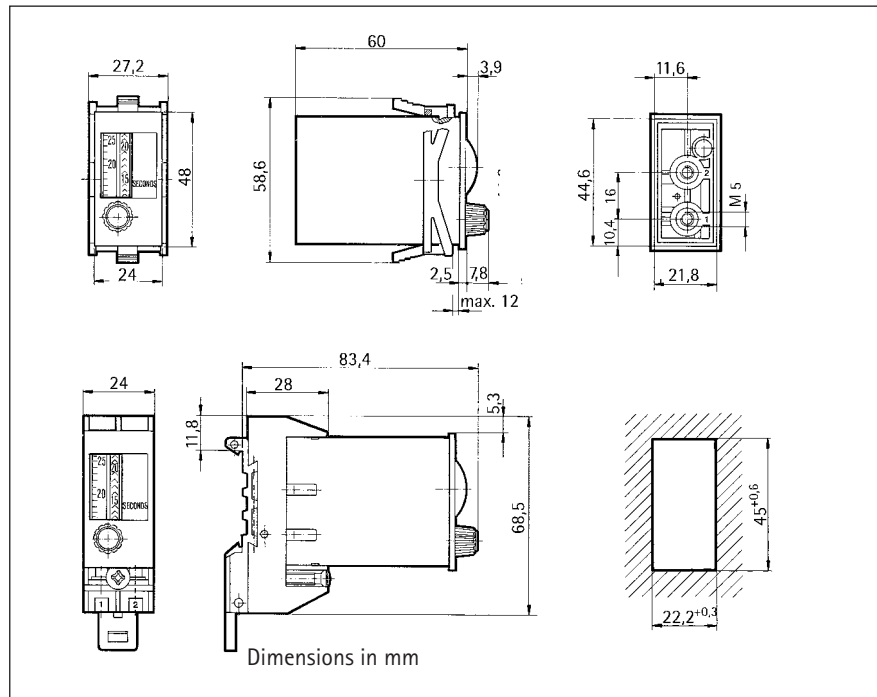■ Low-cost
■ DIN dimensions
■ Requires little space for installation
■ Pressure-independent
■ No continuous air supply equired
■ Stationary preset value

TECHNICAL DATA

Display	digit roll
Time range	0.2 ... 3 s, 2 ... 30 s or 20 ... 300 s, depending on version
Operating pressure	2 ... 6 bar
Air quality	oilfree
Filter pore width	< 40 µs
Operating temperature	0 ... + 60 °C
Connection	hose coupler M5 or rapid-fit connection, depending on version
Mounting	clamping spring or DIN rail attachment
Protection class (IEC 144)	IP 40
Weight	approx. 50 g
Input	timer is started when input 1 is pressurized
Time setting	continuous with rotary knob

Timing range	0.2–3 s	2–30 s	20–300 s
Repeating accuracy	± 0.1 s	± 0.3 s	± 3 s
Setting accuracy	± 0.3 s	± 0.6 s	± 6 s

Reset	by blocking air intake at input 1
Reset time	min. 200 ms
Output	after the set time has elapsed, input 1 is connected to output 2

CONNECTION DIAGRAM

DIMENSIONED DRAWINGS

Dimensions in mm

ORDER INFORMATION

Timer

	Time range	Time range	Time range
Connection	0.2 ... 3 s	2 ... 30 s	20 ... 300 s
Hose coupler M5	0 499 520	0 499 500	0 499 550
Rapid-fit connection	0 499 521	0 499 501	0 499 551

Panel frame

Dimensions	Installation dimensions	Ordering code
48 x 48 mm	45 x 45 mm	2 405 219
52 x 52 mm	45 x 45 mm	2 405 220
54 x 29 mm	50 x 25 mm	2 405 218
⌀ 59 mm	⌀ 50 mm	2 405 224
60 x 75 mm	52 x 52 mm	1 499 512
72 x 72 mm	68 x 68 mm	1 405 672

Accessories

Socket for DIN rail attachment
– Hose screw coupler   1 499 511
– Rapid-fit connector   1 499 513

Please do not forget to add one of the following
Bypass slides to your order:
– Bypass slide for 35 mm H-rail   3 513 306
– Bypass slide for C-rail   3 513 307

Automatic reset see automatic reset module

Automatic Reset Module
for Pneumatic Timers

- Output signal of adjustable length 0.2 to 2 seconds
- DIN dimensions
- Compact design
- Stationary preset value

TECHNICAL DATA
Pneumatic

Service pressure	2 ... 6 bar
Bursting pressure 12	10 bar
Nominal pressure	4 bar
Air quality	filtered (40 µm), non-oiled compressed air, light oil mist permissible

Input	
Response pressure	1.2 $\pm$ 0.4 bar
Drop pressure	0.3 $\pm$ 0.2 bar
Pulse length	min. 30 ms
Pause for reset	min. 200 ms

Time ranges	
Switching delay time	adjustable from 0.2 – 2 sec.
Signal interruption time	min. 300 ms
Repeating accuracy based on switching delay time	$\pm$ 0.3 s

Temperature range	
Application class (DIN 40040)	KUG K = lower temperature limit: –15 °C U = upper temperature limit: + 60 °C G = average relative humidity: 65 % without condensation
Storage temperature	– 25 ... + 70 °C
Protection class (DIN 40050)	IP 40 IP 54 (with protective cover)

Mechanical

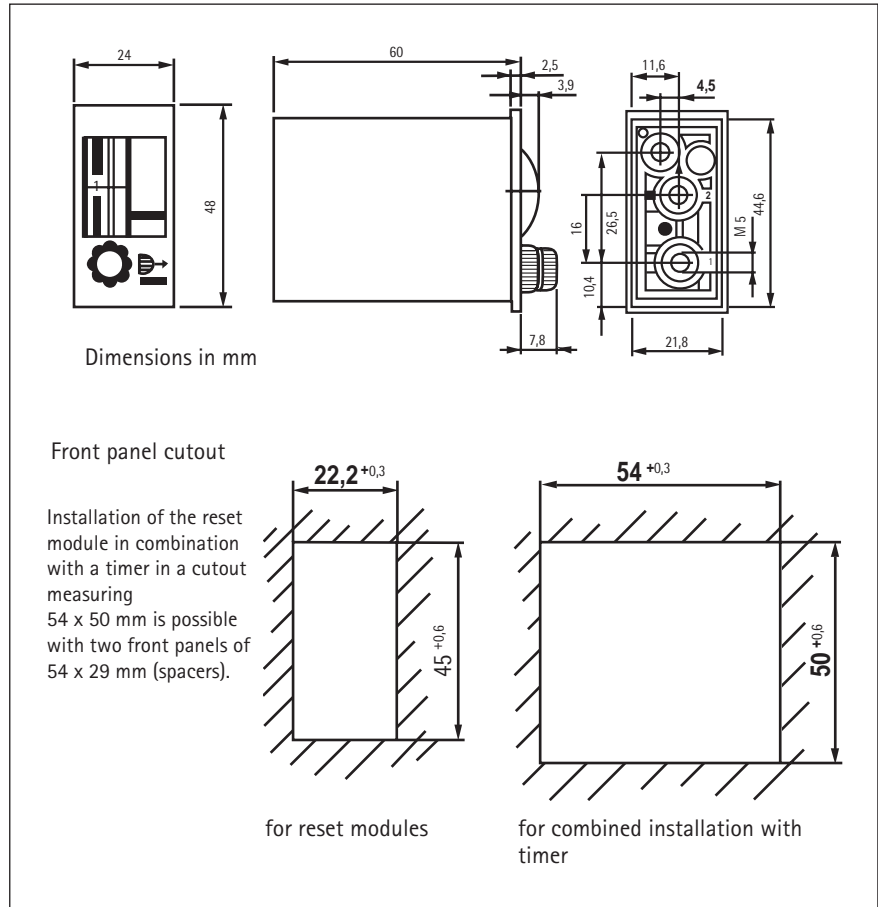|	
Substances which inhibit application of paint according to VW test specification no. 3.10.7	none
Dimensions	24 x 48 x 68 mm (W x H x D)
Insertion depth without connect.	57.5 mm
Front panel cutout	22.2 $^{+0.3}$ x 45 $^{+0.6}$ mm (W x H) (Other front panel cutout dimensions possible with additional panel frame)

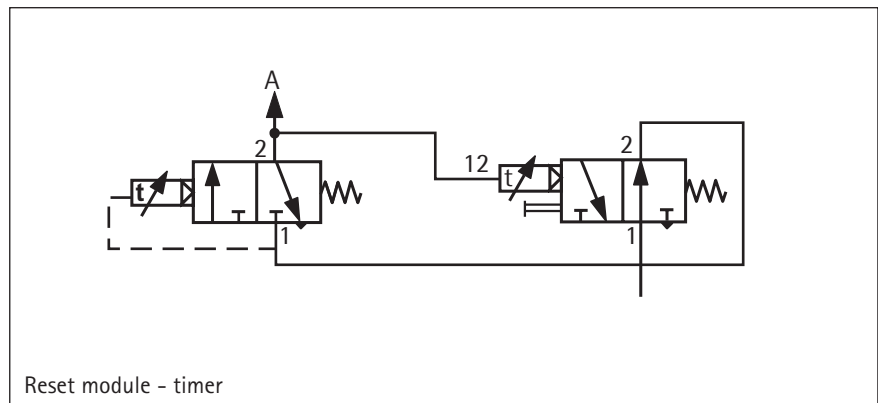| Mounting	
for front panel insertion	by means of clamping frames
Pneum. connections	M5 or rapid-fit coupling for hoses with 4 mm external diameter
Tightening torque for connections	max. 250 Ncm
Mounting position	any
Weight	approx. 50 g

Automatic Reset Module

Dimensions in mm

Front panel cutout

Installation of the reset module in combination with a timer in a cutout measuring 54 x 50 mm is possible with two front panels of 54 x 29 mm (spacers).

for reset modules

for combined installation with timer

CONNECTION DIAGRAM

Reset module - timer

ORDER INFORMATION

	Ordering code
Pneum. reset module M5	0 499 350
Pneum. reset module rapid–fit coupling	0 499 351

Accessories

Front panel 54 x 29 mm	2 405 218

(For further accessories, please refer to the pneumatic timers)
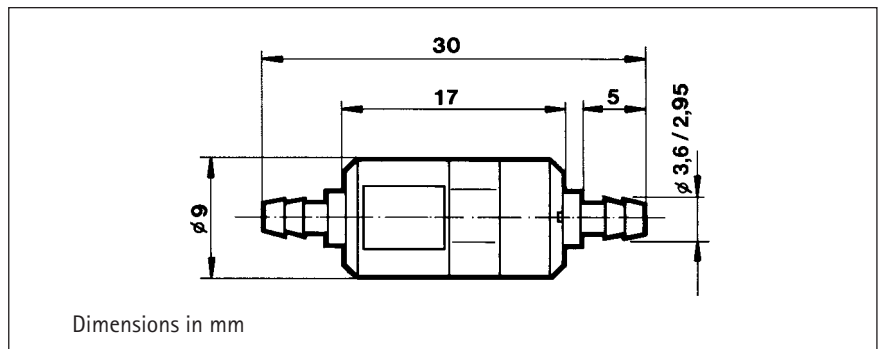
Pneumatic Signal Indicator

■ Signals the operating status of pneumatic hose connections
■ Simple installation
■ Connections for hoses with 2 or 3 mm inside diameter
■ Service pressure 2...8 bar

TECHNICAL DATA

Indication	yellow signal as long as a line is pressurized
Service pressure	2 ... 8 bar
Air quality	filtered, light oil mist permissible
Filter pore width	< 40 µm
Operating temperature	- 15 ... + 60 °C
Storage temperature	- 25 ... + 70 °C
Connection	hose with 2 or 3 mm inside diameter, dep. on version
Mounting	at connection hose
Vibrostability	50 m/s2 (10 ... 500 Hz) acc. to IEC 068-2-6
Shock stability	500 m/s2 (5 ms) acc. to IEC 068-2-27
Maintenance-free operation	> 30 million switching operations
Weight	2 g

DIMENSIONED DRAWING

Dimensions in mm

ORDER INFORMATION

Signal indicator for hoses with 2 mm inside diameter	Ordering code 0 499 210
Signal indicator for hoses with 3 mm inside diameter	Ordering code 0 499 211