

Digital Dispenser DG 1000T

“for constant, accurate and reproducible dispensing,,



CE

Application Information

1. Introduction

The **digital dispenser DG 1000T** is an efficient and easy-to-use dispensing device for the timed-controlled application of the SurACer[®] 4460 doming resin, as well as adhesives and coatings. The digital dispenser DG 1000T is an inexpensive option for most dispensing tasks within professional and semi-professional applications. The device includes dosage determination and displaying, as also retaining-vacuum function.

The digital dispenser DG 1000T is used for

- time-controlled dispensing applied by means of a syringe
- time-controlled dispensing applied by means of a pneumatic pinch valve

Take advantage of the benefits of the digital dispenser DG 1000T

- Time-controlled dispensing
- Constant, accurate and reproducible results
- Dosage determination and display and thus high flexibility and accuracy while dispensing
- Retaining-vacuum function, preventing unwanted dripping of the material

2. Technical Data

Dimension	approx. 24,5 (w) x 19 (d) x 7 (h) cm
Weight	approx. 3 kg
Input voltage	110 - 240 VAC
Frequency	50/60 Hz
Compressed-air inlet	0.5 - 7 bar
Compressed-air outlet	0.01 - 7 bar
Time-display	LED
Set-time	Time-spectrum 00.01 – 99.99 sec.
Modes	Time-controlled automatic dispensing with time display, manual
Display of determined and selected dispensing time	Yes
Time-adjustment	Simple with up-and-down buttons
Special function	Retaining-vacuum function, preventing unwanted dripping of the material
Standards	CE



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3. Supply Package

Quantity	Article
1	Digital dispenser DG 1000T
1	220 V-power cable
1	Footswitch with cable
1	Fingerswitch with cable
1	Compressed-air hose (2 m) with adapter
1	55 cm ³ - syringe adapter with hose (1 m)
1	55 cm ³ - transparent syringe
1	55 cm ³ - piston (white)
1	Needle-tip, conic with diameter 1.20 mm
1	Needle-tip, conic with diameter 1.37 mm
1	Needle-tip, conic with diameter 0.58 mm
1	Tip-cap
1	Syringe-stand
1	Application Information

4. Operation Preparation



Figure 1: DG 1000T – Frontview



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1. Unpack the unit-device and its accessories
2. Check for evtl. missing items
3. Place the digital dispenser on an appropriate work-site near a compressed-air source or a compressor (optional accessory)
4. Connect the 220 V power cable to the rear of the device (Figure 2, power cable connection) and a suitable 220 V power-socket (50 Hz)
5. Insert the compressed-air hose to the compressed-air inlet "AIR IN" (Figure 2, compressed-air inlet) located on the rear of the device and connect its other end to an oil-free compressed-air source, directly to a compressor or a material pressure tank
6. Plug the compressed-air hose with the bayonet connector of the syringe or that of the pneumatic pinch valve to the compressed-air outlet "AIR OUT" (Figure 1, compressed-air outlet) located on the front of the device and tighten up securely with a clockwise turn.
7. Connect the footswitch- or the fingerswitch-plug to the "FOOT SWITCH" connector on the rear of the device (Figure 2, footswitch connection)



Figure 2: DG 1000T – Rearview

Application Information

5. Operation

The digital dispenser DG 1000T has two operation modes:

- time-controlled dispensing applied by means of a syringe
- time-controlled dispensing applied by means of a pneumatic pinch valve

5.1. Application by means of a syringe

- Perform the operation preparation (see 4. Operation Preparation)
- Select and insert the desired needle tip in the 55 cm³ syringe
- Fill the syringe with the dispensing material
- Insert the piston in the syringe
- Connect the syringe barrel adapter to the syringe
- For an appropriate regulation of the air-supply, make preliminary tests with materials of similar viscosities
- Open the compressed-air source, allowed pressure range 1 - 3 bar
- Adjust the air-supply between 0.5 – 1 bar (depending on the material's viscosity) via the regulating valve "AIR PRESSURE" on the frontview of the device (Figure 1, regulating valve)
- Turn the ON/OFF switch, located on the front of the device, to the "ON" position (Figure 1, ON/OFF switch); the red light will turn on
- The dispensing time can be adjusted with the up-and-down buttons, located on the front of the device (Figure 1, Interval-Timer, as also 6. Operation of the Timer)
- The adjusted dispensing time can be inspected on the display (Figure 1, Display)
- The compressed-air will be released by pressing the footswitch/fingerswitch (Figure 1, footswitch – fingerswitch)
- The dispensing time is on the timer adjusted and, thereby, saved for next procedures
- The undesired dripping of the material from the needle tip can be now prevented using the retaining-vacuum function (Figure 1, Retaining-vacuum). This is important when it comes to low material viscosities or the material is a liquid. Turn the knob slowly accordingly, up to the point no further dripping is observed



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- After the termination of the process, shut down the compressed-air of the device with its regulating valve until the manometer indicates zero. After that, shut down the compressed-air source
- Turn the ON/OFF switch, located on the front of the device, to the "OFF" position (Figure 1, ON/OFF switch); the red light will turn off
- Remove the syringe barrel adapter from the syringe and place an end cup to prevent from spilling of evtl. remaining dosing material
- Remove the needle tip from the syringe and place a tip cap to prevent from spilling

5.2. Application by means of a pneumatic pinch valve

- Perform the operation preparation (see 4. Operation Preparation)
- Insert the compressed-air hose of the pneumatic pinch valve with the bayonet connector to the compressed-air outlet "AIR OUT" (Figure 1, compressed-air outlet), located on the front of the device, and tighten up securely with a clockwise turn (before using the pneumatic dispensing pinch valve, as also changing its hose, consult the attached product- and application information).
- Connect the free end of the material-hose (6/4 mm black), expanding from the pressure tank, to the Luer/Lock plug of the pneumatic dispensing pinch valve. **Attention!** Both parts of the Luer/Lock plug should be held by hand while connecting them in order to prevent twisting and, thus damaging of the hose, located in the pneumatic dispensing pinch valve (before using the pneumatic dispensing pinch valve, as also changing its hose, consult the attached product- and application information).
- Select and plug the desired needle tip to the Luer/Lock plug of the corresponding hose, expanding from the pneumatic pinch valve
- Open the compressed-air source, allowed pressure range 6 bar
- Adjust the air-supply between 3.4 – 4.1 bar (depending on the material's viscosity) via the regulating valve "AIR PRESSURE" on the frontview of the device (Figure 1, regulating valve)
- Adjust the material pressure on the pressure tank. A material pressure of approximately 2 bar is recommended
- Turn the ON/OFF switch, located on the front of the device, to the "ON" position (Figure 1, ON/OFF switch); the red light will turn on
- The dispensing time can be adjusted with the up-and-down buttons, located on the front of the device (Figure 1, Interval-Timer, as also 6. Operation of the Timer)
- The adjusted dispensing time can be inspected on the display (Figure 1, Display)
- The compressed-air will be released by pressing the footswitch/fingerswitch (Figure 1, footswitch – fingerswitch)



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- The dispensing time is on the timer adjusted and, thereby, saved for next procedures
- The undesired dripping of the material from the needle tip can be now prevented using the retaining-vacuum function (Figure 1, Retaining-vacuum). This is important when it comes to low material viscosities or the material is a liquid. Turn the knob slowly accordingly, up to the point no further dripping is observed
- After the termination of the process, shut down the compressed-air of the device with its regulating valve until the manometer indicates zero. After that shut down the compressed-air source
- Turn the ON/OFF switch, located on the front of the device, to the "OFF" position (Figure 1, ON/OFF switch); the red light will turn off
- Close entirely the tank's pressure and refill with doming material
- Adjust once more the material pressure to approximately 2 bar and proceed as already described

6. Operation of the Timer

- Turn the ON/OFF switch, located on the front of the device, to the "ON" position (Figure 1, ON/OFF switch); the red light will turn on
- The LED display indicates the current (or the last-set) adjusted time (Figure 1, Interval-Timer)
- The dispensing time can be controlled and adjusted with the up-and-down buttons, located on the front of the device (Figure 1, Interval-Timer)
- The time can be set between 00.01 – 99.99 seconds
- The increasement or decreasement of the dispensing time is performed via the up-and-down buttons
- First and second up-and-down button from the left: adjustment of the seconds
- Second up-and-down button from the right: tenths of a second
- First up-and-down button from the right: hundredth of a second
- To determine a dispensing time, first set the time to 00.00 using the up-and-down buttons (Figure 1, Display)
- Press the footswitch/fingerswitch and dispense up to the desired material volume
- The known volume will now be set on the timer via the up-and-down buttons and is for the rest of the procedure saved



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7. Warranty

The **digital dispenser DG 1000T** has a bring-in warranty of 24 months from the day of sale.

The warranty covers:

- Material damages
- Functional damages
- Damages caused during transportation

The warranty will not apply in case of:

- Defects caused by improper or wrong operation
- Incorrect assembly or installation of parts that do not come from the manufacturer
- Defects caused by misuse of the device
- Claims for replacement of materials, consequential damages or end of production

Damages during transportation and incomplete deliveries must be immediately reported written to the supplier (Fax: +49 3641-352929), as also the shipping company.

A necessary return of the device to the supplier applies only after the damage has been indicated to the seller. A necessary return of the device to the supplier applies only in its original package. In any other case apply the general terms & conditions and warranty terms & conditions of the supplier.

For eventual questions or doubts concerning the product, we encourage you to get in touch with SurA Chemicals GmbH.

The technical consultation given by SurA Chemicals GmbH, verbally or written, is based on the company's best knowledge and shall only be considered as non-binding advice, also in respect of the protected rights of third parties. The company's technical consultation does not release the customer from own examination concerning the suitability and usability of the company's product. The manufacturer's liability extends solely to the value of the products supplied by SurA Chemicals GmbH and applied by the customer.

SurA Chemicals GmbH guarantees its products to be of perfect quality as stated in its general terms and conditions of sale and delivery.



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