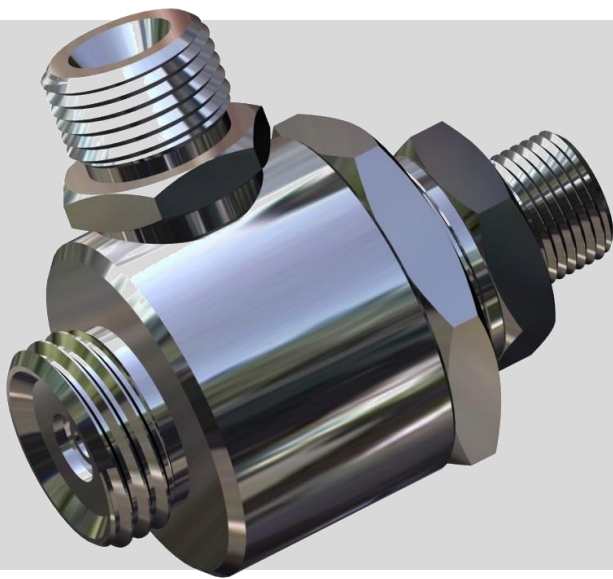




SCHLICK Two-Substance Nozzle Model 827 Form 0 S6
(D4.731 Version 1.0)

Register

3-D-View	Page 1
Safety-Engineering Data Sheet	Page 3
Operating Instructions	Page 4
Recommended Accessories	Page 5
Components-Drawing and Spare Parts List	Page 6
Assembly Instructions	Pages 7 – 8
Error-Checklist	Page 8
Drawing	Page 9
Atomization-Air Consumption Diagram	Pages 10 – 11
Liquid-Consumption Diagram	Page 12
Atomization-Steam Consumption Diagram	Pages 13 – 14

Safety-Technical Data Sheet

Important Information for Operators, Users and Fitters

Introduction: This nozzle has been developed using the latest state of technology and accomplishes the current national and international safety requirements. This nozzle offers a high degree of operational reliability, thanks to experience of many years in the field, research and development and to a permanent quality control provided in our company. **In normal operation the nozzle is safe.** Nevertheless and in particular if certain operational parameters are not met, there are some potential sources of danger to personnel, material and for the optimal sequence of the operation.

So, these operating instructions are comprising basic safety instructions which are to be observed with regard to the configuration, the operation and the assembling and disassembling of the nozzle. They have to be studied by the operator, user and fitter before assembling or disassembling the nozzle and have steadily to be at the disposal of the aforesaid persons.

General safety requirements:

- The nozzles have to be used only as per their usage to the intended purpose. Any changes of the operational conditions are to be clarified with the manufacturer.
- A usage to the intended purpose includes also the observance of the various information and instructions of this safety-technical data sheet and of those given in the operating and assembling instructions, as well as the observance of all the regulations of the Employer's Liability Insurance Association.
- The operators have to be familiarized with the method of function and with the handling of the nozzle.
- Installation, configuration, putting-into-operation and disassembling or assembling are to be carried out only by experienced and skilled personnel.
- Operation of the nozzle only by experienced resp. authorized users.
- Conversions and changes of the nozzle to be made only by authorized skilled personnel and after having consulted the manufacturer. Each and every conversions or changes made by other persons or conversions and changes, which have not been agreed with the manufacturer, will lead to a complete exclusion of liability.
- Prior to every putting-into-operation, the following has to be carried out, resp. to be observed:
 - functional test
 - checking, that all the nozzle connections are fitted firmly and tightly
 - labour safety
- The nozzles are exposed to the following kinds of wear and tear:
 - Chemical
 - Thermal
 - mechanical
- Therefore, the nozzles have to be checked regularly and if necessary, to be replaced. **Operation of the nozzles only in a technical perfect condition.**



Do not ever direct the liquid jet or the spray towards persons or electrical appliances. Risk of injury by chemical additives, high pressures, solid agents, current strike. **ATTENTION: In case of media like gas, air or steam, the spray jet is hardly visible.**



The danger exists, that the spray jet will be inhaled. In particular when chemicals or other noxious substances are atomized, remedial measures are to be taken by appropriate steps and devices (e.g. exhaustion, suitable breathing protection). The working area has to be adequately identified by suitable warning symbols.



During the atomizing process, the temperature of the medium/the media to be atomised is to be taken into consideration. The risk of burns or frostbite exists – remedy: suitable protective clothing to be worn.



If media are atomized which are detrimental to health, appropriate protective clothing has to be worn during assembling or disassembling of the nozzle.

- For adjustment, assembling and disassembling of the nozzle, only suitable tools shall be used.
ATTENTION: For adjustment, assembling or disassembling of the nozzle, all the pipes have to be depressurized and emptied.
- Before assembling, the connections have to be cleaned.

In case of a non-professional and/or material appropriate handling of the nozzle, any claim on guarantee is cancelled.

Operating Instructions for SCHLICK Two-Substance Nozzle Model 827 Form 0 S6 (D4.731 Version 1.0)

Design characteristics:

The nozzle exhibited static charge. The design, construction and inspection of the nozzle has been carried out in accordance with Directive 2014/68/EU and the AD-2000 legislative body.

Assembly of the connecting pipes:

- Before connecting the nozzle, the connecting pipes have to be cleaned or to be blown through.
- The propellant (compressed air, steam, gas) has to be connected at the lateral connection (connecting thread G ½" outside thread) and the liquid at the central connection (connecting thread G 3/8" outside thread).
- Make sure, that the pipes are connected completely tightly.

Operating conditions:

Propellant:

The propellant atomizes the liquid at a minimum pressure of 0,5 bar (g). The consumption of propellant is depending on the position of the spindle and on the pressure of the propellant. At a higher pressure of the propellant and during sucking operation, also the throughput of the liquid is increased, or under constant throughput of the liquid (non-sucking), the fineness of atomization is increased, and vice versa (at constant spindle position).

Setting of the throughput of the propellant:

Normal spindle position: The front edge of the spindle flushes with the central bore inside the body (all distance discs are assembled). By removing the discs, the spindle position can be varied. The more discs to be removed, the more the spindle extends into the orifice of the body, thus the spray cone becomes more pointed, the propellant consumption and the fineness of atomization is decreased (at constant propellant pressure and constant liquid throughput). Each to application, the necessary spindle position has to be determined by tests.

Throughputs of compressed air resp. steam in dependence on the bore diameter at various spindle positions and pressures: see performance diagrams (pages 10 + 11 and 13 + 14).

Liquid:

The liquid can be sucked, supplied or be fed under pressure. At the liquid side, the throughput can be set within certain limits, by varying the pressure of the liquid, or the supply- or the sucking height. Throughputs of the liquid for various bore holes and various pressures: see throughput diagram (page 12).

Switching-on and switching-off the nozzle:

- When **switching-on**, first the propellant valve has to be opened, then the liquid valve.
- When **switching-off**, first the liquid valve has to be closed and then about 10 sec. later and in order to avoid any re-dropping of the nozzle the propellant valve.

Maintenance and cleaning of the nozzle:

In appropriate cycles, depending on the spraying medium, the nozzle has to be checked for any damages, to be cleaned and to be greased slightly. As detergents, cleaning solvents, cleaning rags, plastic spatula, ultrasonic cleaner or similar means shall be used. No hard objects!

Wearing parts (e.g. O-rings and/or seals) have to be examined optically and exchanged if necessary, while cleaning the nozzle.

Use only suitable tools!

Before assembly, all threads have to be greased slightly with a suitable lubricant.
Suitable lubricants are available at SCHLICK! Ask for our advice.

Schick
Atomizing technologies

PARALIQ GTE 703

**Synthetisches
Schmierfett
für Armaturen mit
Elastomer-
dichtungen**

**Synthetic
Lubricating grease
for valves and fittings
with elastomer seals**

10 g

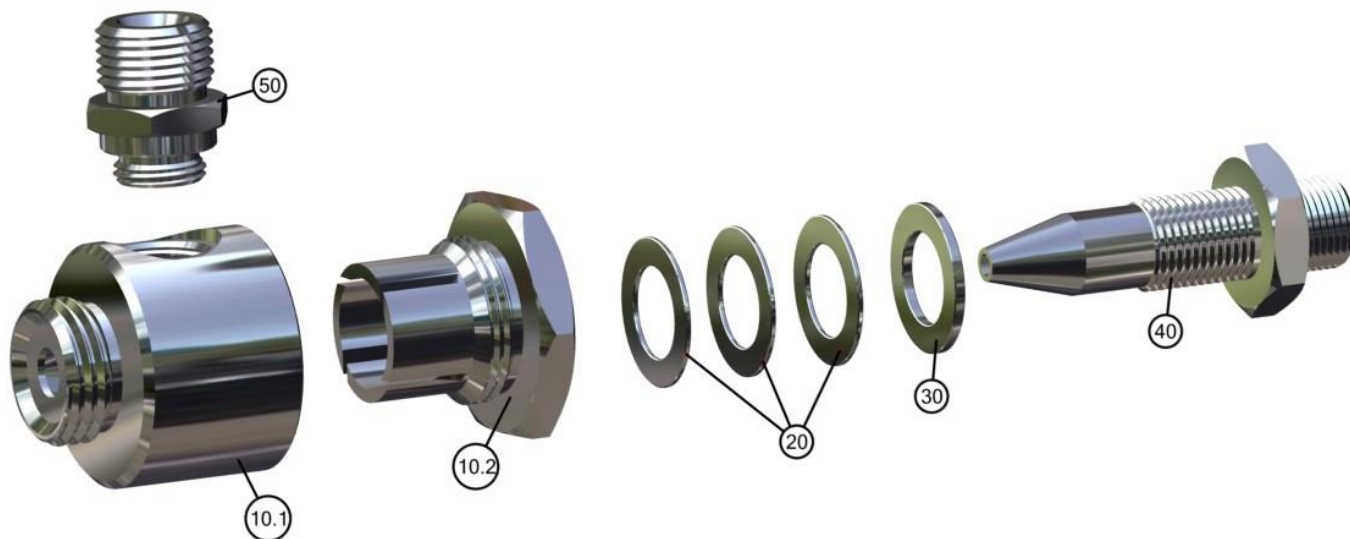
Part number: 76738

best before date

The image shows a red and white OKS 250 spray can. The label features the OKS logo and the number 250. Below this, it specifies 'Welle-Axsumid-paste' and 'White Axsumid paste'. A pictogram shows a person applying the product to a joint. Technical specifications include 'Schmierstofftemperatur 0 bis +100 °C' and 'Anwendungstemperatur -40 °C + 1.400 °C'. The label also contains safety information in German and English, including 'Nicht für Schweißarbeiten und Schweißnahten geeignet' and 'Not for welding and welds'. The bottom of the label has a barcode and the date '11.06.2013 14:03:20.015 01'.

A blue carrying case for a dental ultrasonic scaler system, open to reveal various handpieces and control units. The case is filled with several long, thin handpieces, a control unit with a digital display, and two tubes of ultrasonic gel. The case is labeled "ULTRASONIC" and "DENTAL".

SCHLICK-Nozzle Cleaning Set; **Item-Number 53066-2**



ID	Quantity	Name	Item-Number
10.1+10.2	1	Body with Twist Insert Compressed Air	15173 + 31353
20	3	Distance Ring 1 mm	31354
30	1	Distance Ring 2 mm	31355
40	1	Spindle; Bore 5.0 mm	25478
80	1	Connecting Nipple	15175

Numerical combined parts (10.1 + 10.2) are only available as unit and not as single part!

Item-Number of the Complete Nozzle: 25422

SCHLICK-Mod.827, Form 0 S6 Version 1.0, D 4.731

Bore 5.0 mm

1.4404

Assembly Instructions for SCHLICK Two-Substance Nozzle Model 827 Form 0 S6 (D4.731 Version 1.0)

Disassembly:

CAUTION! If the nozzle shows any external pollution, it has to be cleaned unconditional before disassembly.
(Recommendation: Use an Ultrasonic-Cleaner)

Figures in squared brackets represent the parts number of the detail drawing on page 6.

All threads are right-handed threads!

Required Tools:

Vice with protective jaws made of plastic material

Ring Spanner # 24

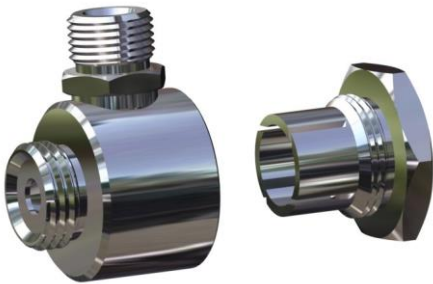
Ring Spanner # 27

Ring Spanner # 41

1. Chuck the nozzle at the body [10.1] into a vice with protective jaws made of plastic material.



2. Unscrew spindle [40] (wrench # 27= width across flats) and remove it incl. distance rings [20 + 30].



3. Unscrew twist insert compressed air [10.2] (wrench # 41= width across flats).



4. Unscrew connecting nipple [50] (wrench # 24= width across flats).

CAUTION: If several nozzles are in use make sure, when re-assembling the nozzle, that the twist insert [10.2] will **not** be assembled to an other body [10.1].

Use only suitable tools!

For **re-assembly** of the nozzle the steps 1. – 4. have to be carried out in reversed order.

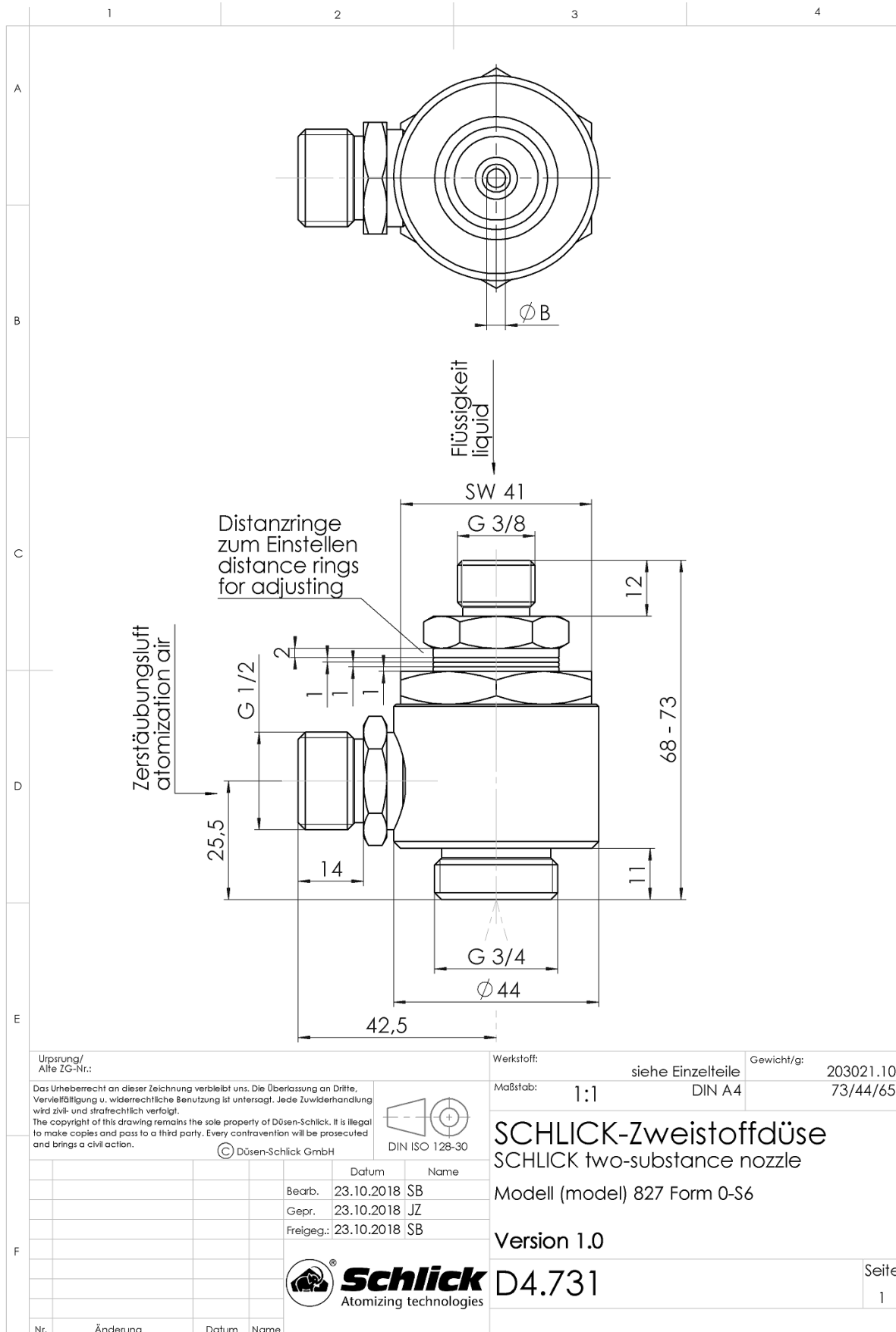
Do not clean the nozzle with any hard objects, use only plastic spatula, cleaning solvents, cleaning rags, ultrasonic cleaner etc.

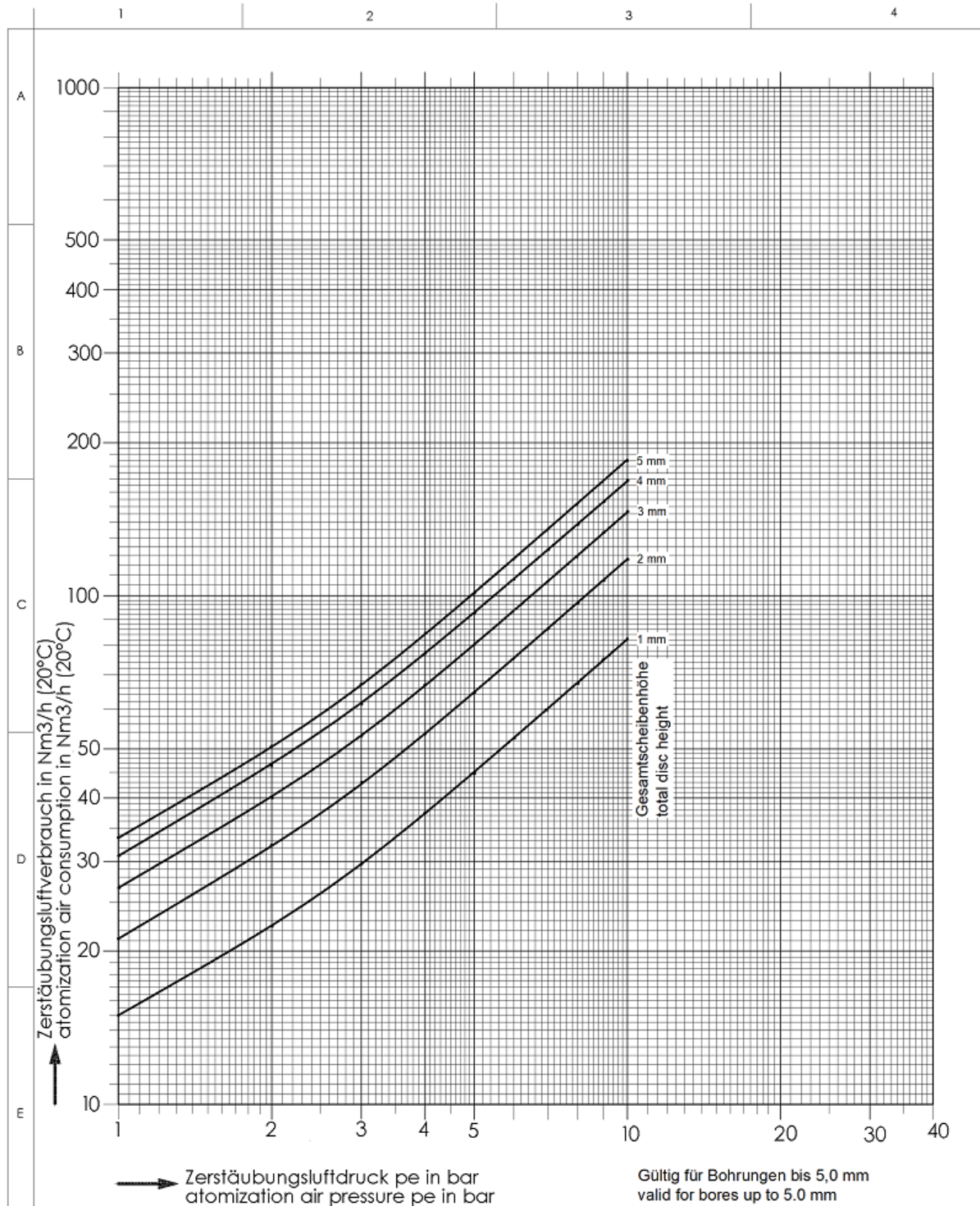
Before assembly, all threads have to be greased slightly with a suitable lubricant.

Suitable lubricants are available at SCHLICK! Ask for our advice.

Error-Checklist:

Problem	Reason	Elimination
Spray pattern shows strings and/or is uneven	Spindle and/or body polluted	Cleaning of the appropriate part
	Spindle and/or body damaged (scratches, deformation on the outlet-bores etc.)	Replace appropriate part
Propellant medium leaks from distance discs	Spindle and/or twist insert not tightened enough	Check spindle and twist insert for a tight fit
	Sealing surface(s) of the body, twist insert or spindle damaged	Replace appropriate part





875

Das Urheberrecht an dieser Zeichnung verbleibt uns. Die Überlassung an Dritte, Vervielfältigung u. widerrechtliche Benutzung ist untersagt. Jede Zuwiderhandlung wird zivil- und strafrechtlich verfolgt.

The copyright of this drawing remains the sole property of Düsen-Schlick. It is illegal to make copies and pass to a third party. Every contravention will be prosecuted and brings a civil action.

© Düsen-Schlick GmbH



Mod. 827/0 S6

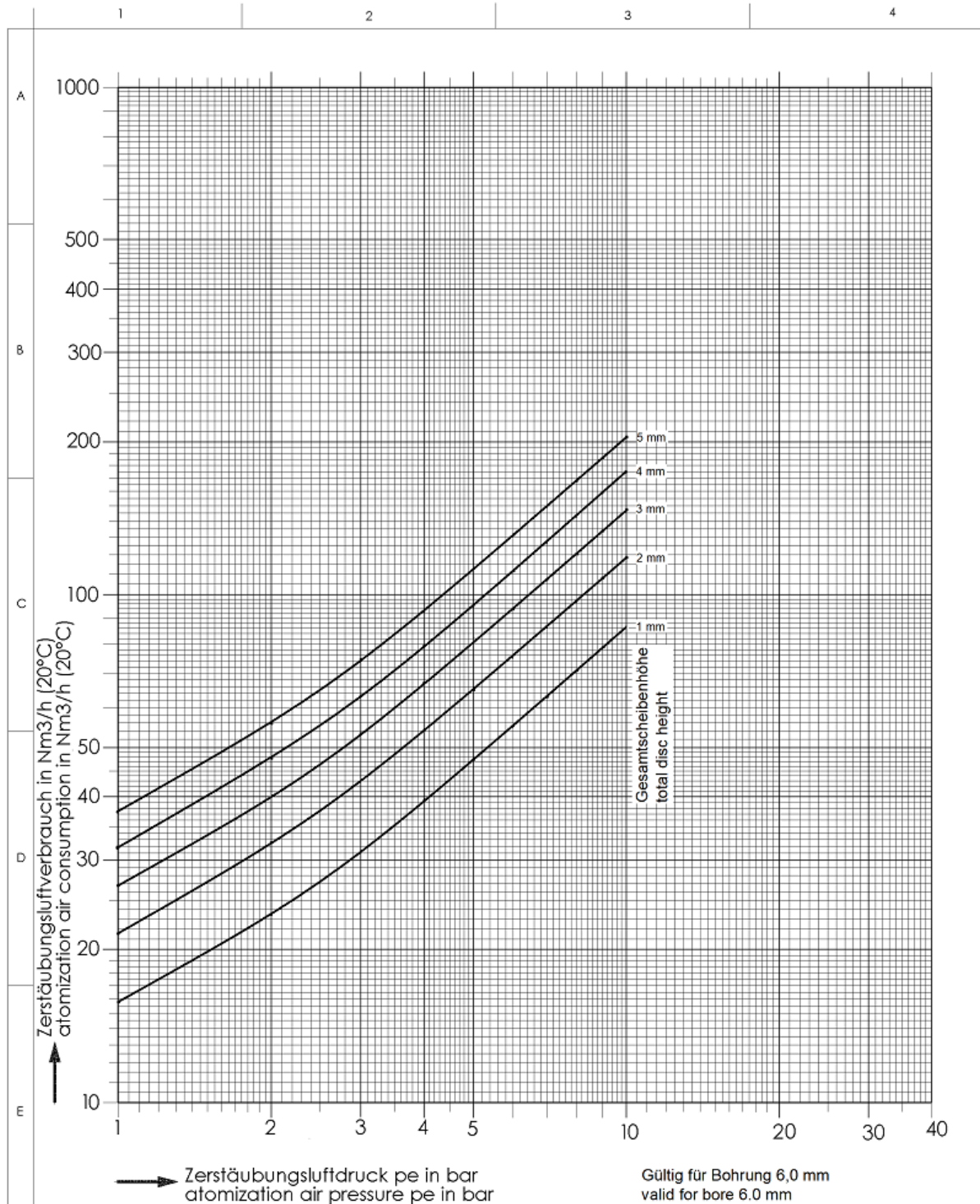
Blatt

von

Ursprung:

Ers. für

Ers. durch



876

Das Urheberrecht an dieser Zeichnung verbleibt uns. Die Überlassung an Dritte, Vervielfältigung u. widerrechtliche Benutzung ist untersagt. Jede Zuwiderhandlung wird zivil- und strafrechtlich verfolgt.

The copyright of this drawing remains the sole property of Düsen-Schlick. It is illegal to make copies and pass to a third party. Every contravention will be prosecuted and brings a civil action.

© Düsen-Schlick GmbH



Schlick
Atomizing technologies

Mod. 827/0 S6

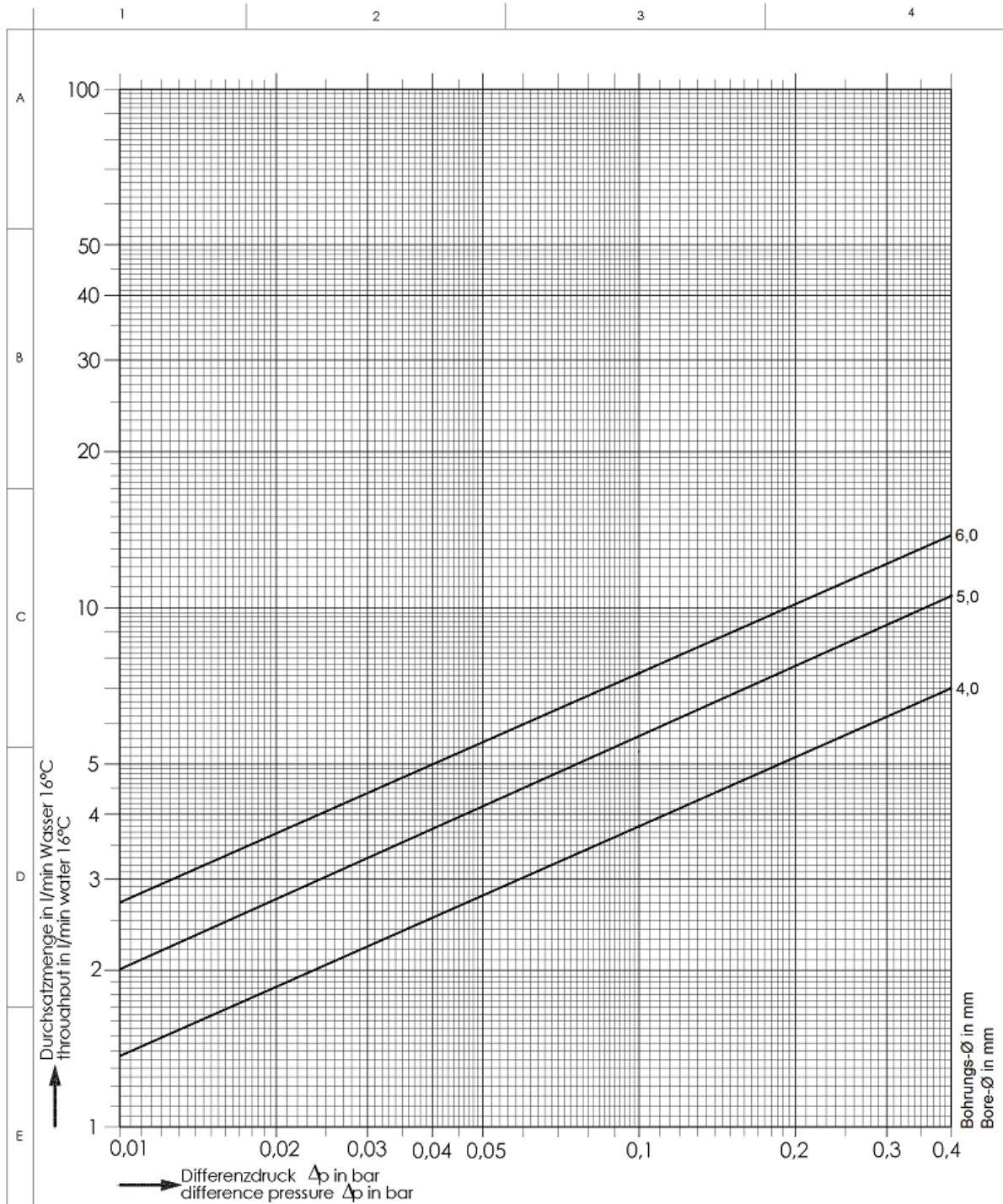
Blatt

von

Ursprung:

Ers. für

Ers. durch



879

Das Urheberrecht an dieser Zeichnung verbleibt uns. Die Überlassung an Dritte, Vervielfältigung u. widerrechtliche Benutzung ist untersagt. Jede Zuwiderhandlung wird zivil- und strafrechtlich verfolgt.

The copyright of this drawing remains the sole property of Düsen-Schlick. It is illegal to make copies and pass to a third party. Every contravention will be prosecuted and brings a civil action.

© Düsen-Schlick GmbH



Mod. 827/0 S6
ohne Drallkörper / without Twist Body

Blatt

von

Ers. für

Ers. durch

