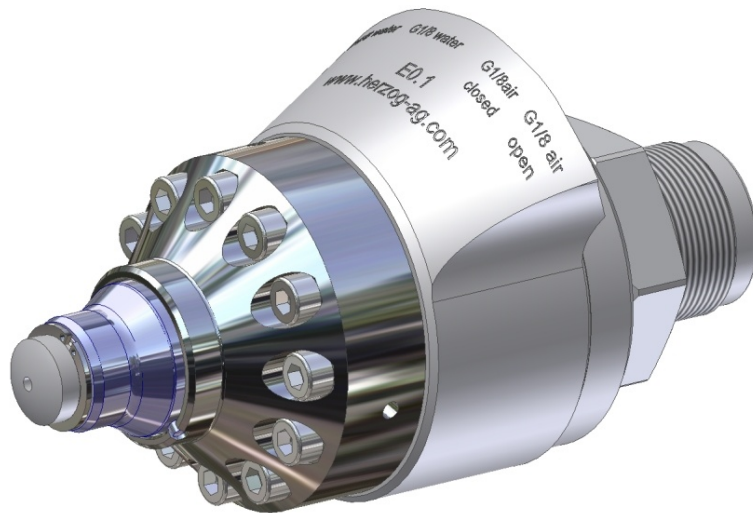


Machine shut-off nozzle for Elastomeric plastics; Type-E

Integrated pneumatic actuator and tempering system

**Application:**

Elastomeric plastics (including **L.S.R.** - **L**iquid **S**ilicone **R**ubber)

Shut-off technique:

Needle shut-off with integrated pneumatic actuator

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Safety instructions



This symbol indicates explanations about important matters.
Failure to read these or false handling could result in injury or damage.

Please pay attention to the following safety instructions and precautions



Handling

- Installation and servicing to be only carried out by suitable personnel according to the installation and service instructions.
- Nozzle can become extremely hot. Full face protection and heat resistant gloves must be worn.



Damage precaution

- Do not drop the nozzle or exert it to unnecessary forces.
- Take care that no foreign bodies enter the working parts of the nozzle.
- No adjustment or manipulation when nozzle is in operation.
- Never heat steel / aluminium parts over **110°C**.
- Nozzle is only to be used for **elastomer** injection molding purposes.



Operational notes

- Maximum injection rate / temperature: **2500 bar at -20°C to 110°C**.
- Torques on screws and threaded parts must be adhered to.
- Noise emissions from the nozzle do not exceed 70 dB(A).



Explosion danger

- Some plastics produce gases if they stay for a longer time in a heated environment. There is a risk that the gas may escape explosively through the nozzle orifice.

Keep this manual in a convenient place for future reference.

Installation instructions



Read safety instructions!

Legend:



With hand



grease with screw lubricant



tool



inspection



temperature equalisation

Note:

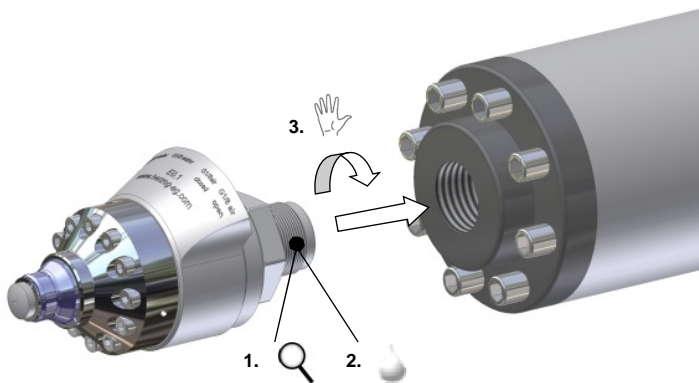
For easier installation grease all threads with screw lubricant.

Tools required:

Hexagonal wrench, Allen key, ring spanner, socket wrench, pliers, punch.
See chapter **Assembly** for tool sizes and torques.

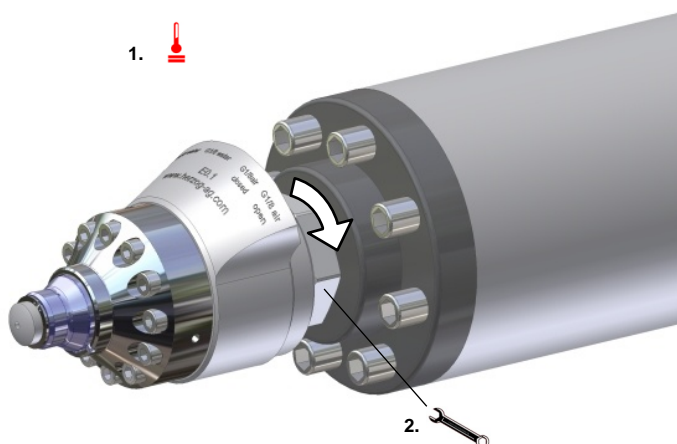
Installation steps A) - C)

A)



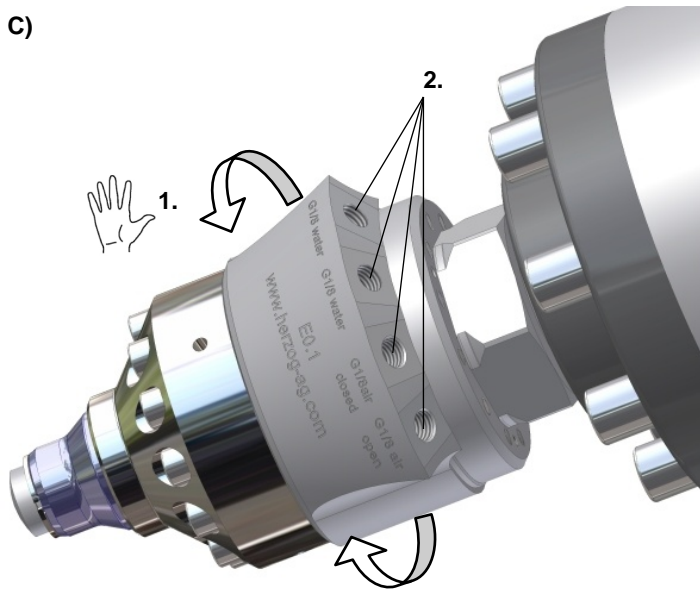
1. Inspect surfaces and threads
2. Grease adapter thread
3. Screw in nozzle and hand tighten

B)



1. If required, await temperature equalisation
2. Tighten acc. to machine handbook

c)



1. Connection ring can be rotated by hand into correct position. No tool required
2. Connect pneumatic and cooling liquid supply acc. to engraving on connection ring

Initial operation



Read safety instructions!

Actuation:

Operating data according to engraving on cylinder

Leakage:

Between needle and guide there is a melt film which prevents the needle from blocking. Melt film will be continuously renewed and eventually leaks out of nozzle.

Retightening the screws:

After approx. 1000 shots, check all screw torques (see **Assembly**) and retighten when necessary.

At machine downtimes do not shut-off the nozzle tempering system. If a longer period of inactivity is forecast, the nozzle should be completely flushed clean.

Service instructions



Read safety instructions!

Cleaning instructions

Dismantle nozzle acc. to instructions and clean individual parts with kerosene. Finally rinse all parts with a grease removal substance. Hardened material can be removed by hand.



Never heat nozzle above 110°C!

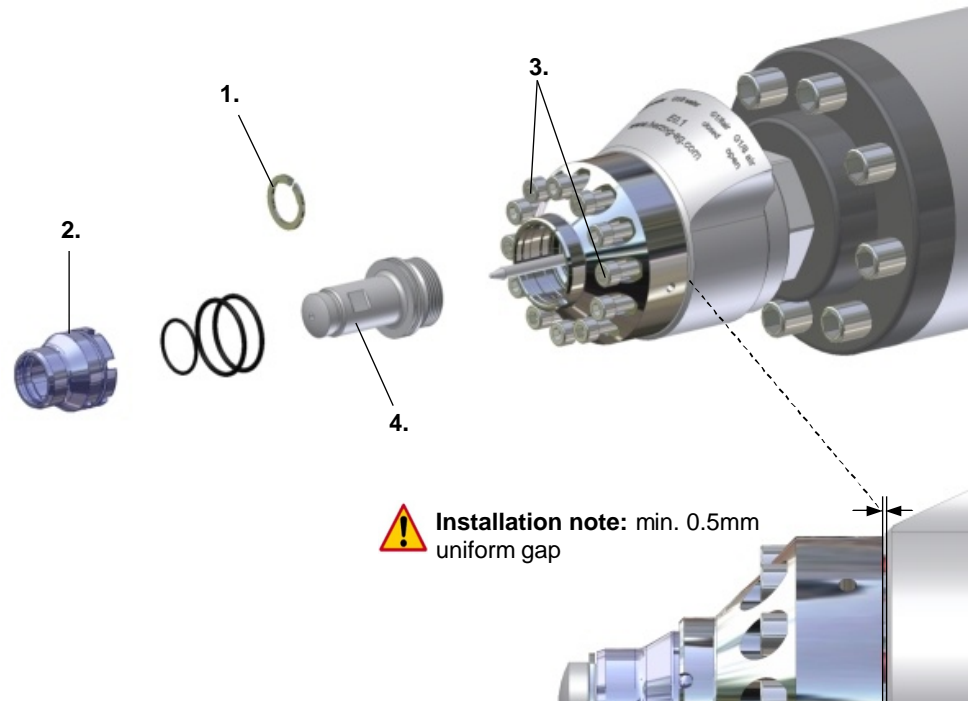
Help tools for cleaning:

- Petrol
- Kerosine

Before reassembly check all parts for damage or wear.

Profit from our cleaning service. The nozzle is disassembled, checked and repaired if necessary after customer approval.

Tip removal



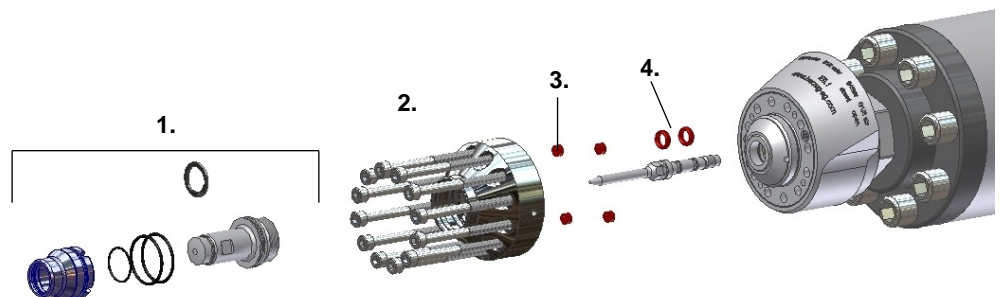
Installation note: min. 0.5mm uniform gap

1. Remove safety ring
2. Take away cooling pipe
3. Loosen screws
4. Screw out tip
5. Check and clean seals and o-rings



Installation note: grease all threads with screw lubricant.

Needle removal



1. Remove tip as described above
2. Remove screws and tip flange
3. Remove seals
4. Screw out needle with ring spanner, take away o-rings
5. Check and clean all parts.

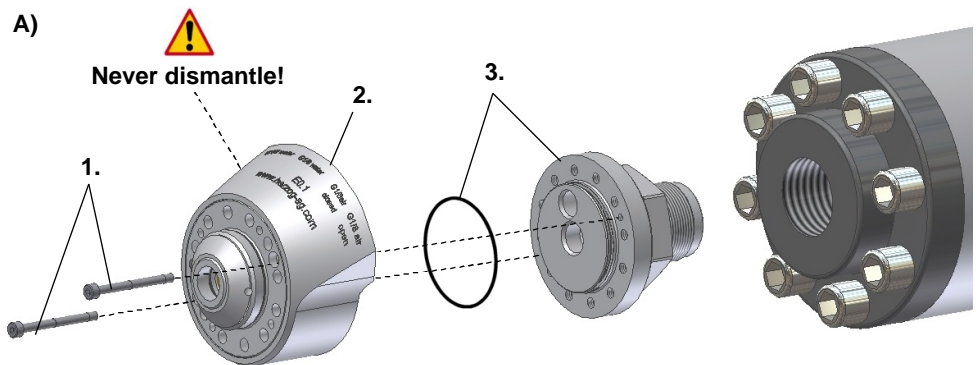


Installation note: grease all threads with screw lubricant.

Disassembly A) - B)



1. For standard cleaning and servicing only the tip and needle should be disassembled (see previous page).
2. If however further nozzle disassembly is required; **we recommend** returning the complete nozzle for servicing as **seals and/or o-rings may become damaged** due to improper assembly /disassembly.

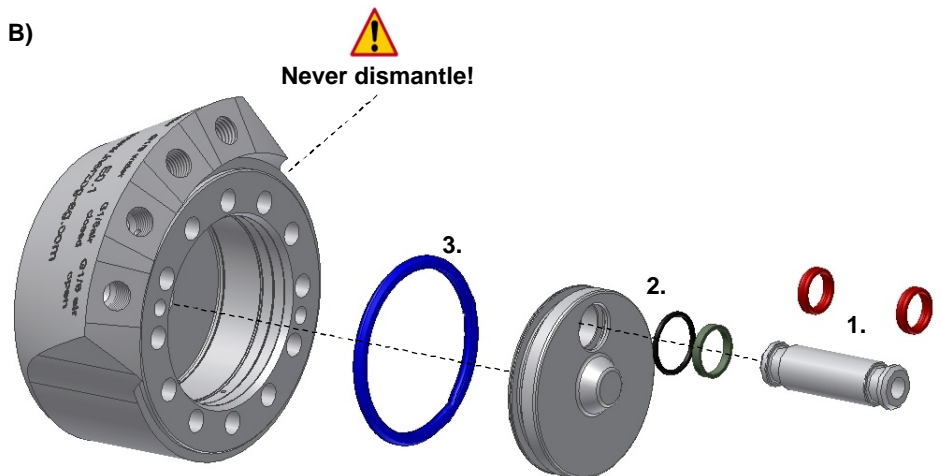


1. Remove two screws
2. Remove complete body/connection ring part
3. Remove o-ring and screw out adapter



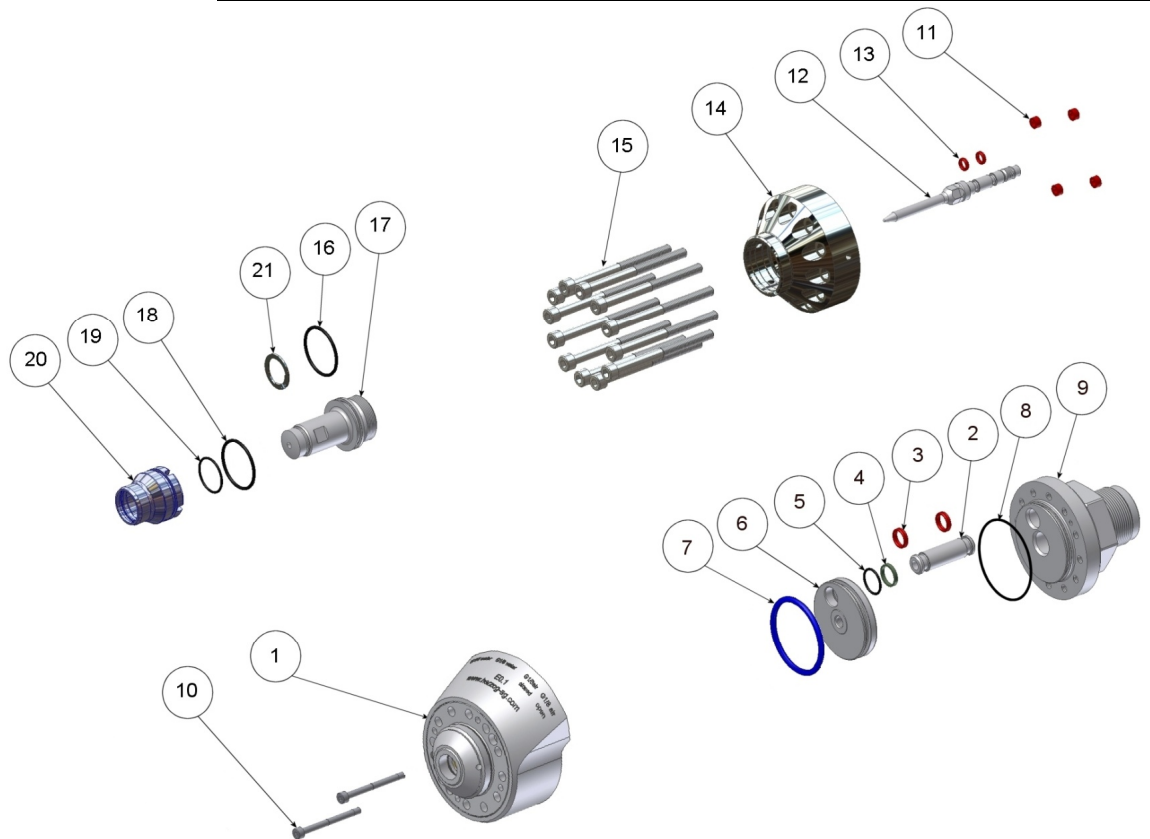
Installation note: grease all threads with screw lubricant.

B)



1. Remove material transfer duct
2. Manoeuvre out piston, seals and o-rings
3. Remove piston seal

Assembly



Assemble according to the numerical order.
Disassembly in opposite order.

Pos.	Description	Tool size (Torque)			
		E0	Qty.	E1	Qty.
1	Body / connection ring	-	1	-	1
2	Material transfer duct	-	1	-	4
3	Seal	-	2	-	8
4	Seal ring	-	1	-	4
5	O-ring	-	1	-	4
6	Piston	-	1	-	1
7	Piston seal	-	1	-	1
8	O-ring	-	1	-	1
9	Adapter	SW50 (acc. to machine handbook)	1	SW50 (acc. to machine handbook)	1
10	Screws	SW3 (4 Nm)	2	SW4 (5 Nm)	2
11	Seal ring	-	4	-	6
12	Needle	SW10 (15 Nm)	1	SW13 (20 Nm)	1
13	Needle seal	-	2	-	2
14	tip flange	-	1	-	1
15	Screws	SW5 (1st installation: no action required. After servicing: tighten crosswise in 4 passes - hand tight, 7Nm, 10Nm, 12Nm)	12	SW6 (1st installation: no action required. After servicing: tighten crosswise in 4 passes - hand tight, 12Nm, 16Nm, 20Nm)	12
16	O-ring	-	1	-	1
17	Tip	SW18 (1st installation: no action required. After servicing: tighten until contact)	1	SW27 (1st installation: no action required. After servicing: tighten until contact)	1
18	O-ring	-	1	-	1
19	O-ring	-	1	-	1
20	Cooling pipe	-	1	-	1
21	Safety ring	-	1	-	1

Spare part order form

Your contact information:

Company	
Street	
City / Zip	
Contact	
Tel. / Fax	
E-Mail	

Engraved nozzle identity no.: please insert here

Quantity	Part (for part name, see Assembly)

Send to:

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