

DWG 44-100

Piston rod spare parts package

Repair Instructions

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Superior Clamping and Gripping



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Technical changes

We reserve the right to make alterations for the purpose of technical improvement.

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1 Intended use

If the product can no longer be fully opened or closed, a component part may be damaged. The cause for this defect is often a collision. After a collision, the gripper fingers and base jaw may also be damaged.

2 Scope of Delivery

Designation	DWG				
	44	54	64	80	100
Joint [pcs.]	2	2	2	2	2
Piston rod [pcs.]	1	1	1	1	1
Bolts [pcs.]	1	1	1	1	1
Set-screw [pcs.]	3	3	3	3	3
Cylindrical pin [pcs.]	6	6	6	6	6
Safety washer [pcs.]	2	2	2	2	2

Designation	DWG				
	44	54	64	80	100
ETP finger [pcs.]	1	1	1	1	1
Complete sealing kit [pcs.]	1	1	1	1	1

3 Applicable documents

- Catalog data sheet of the product *
- Assembly and operating manual of the product *

The documents marked with an asterisk (*) can be downloaded on our homepage www.schunk.com.

4 Notes on particular risks



WARNING

Risk of injury due to sudden movements!

If the energy supply is switched on or if residual energy is still present in the system, this can cause components to move unexpectedly, which may result in serious injuries.

- Switch off energy supply and secure against re-connection.
- Ensure that no residual energy remains in the system.



WARNING

Risk of injury due to spring forces!

Products that use spring force or have gripping force maintenance contain parts that are under spring tension. This can cause components to move unexpectedly when being dismantled, which may result in serious injuries.

- Carefully dismantle the product.

5 Tools/auxiliary tools

- Hexagon socket wrench
- Clamping device
- Drift punch, Hammer

6 Recommended lubricants

Lubricant point	Lubricant
Metallic sliding surfaces	LINOMAX
All seals	Renolit HLT 2
Bores on the piston	Renolit HLT 2

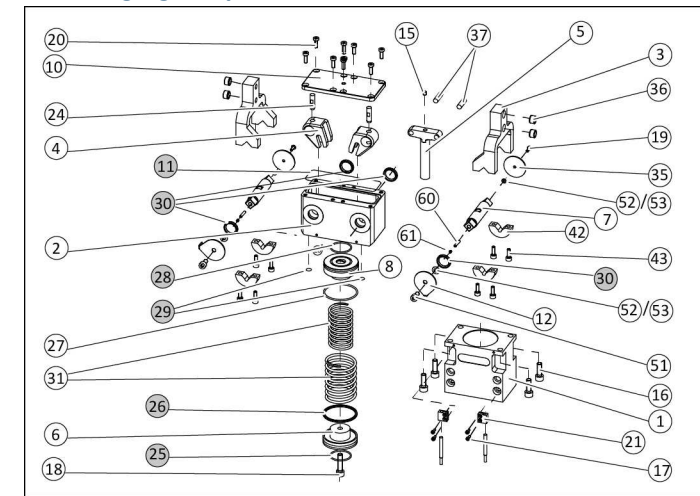
7 Tightening torque

Item	Designation	DWG				
		44	54	64	80	100
16	Screw [Nm]	3.1	3.1	6.1	10	-
18	Screw [Nm]	5.3	5.3	11	18	49
20	Screw [Nm]	1.2	1.2	3.1	3.1	10
43	Screw [Nm]	1.2	1.2	1.2	3.1	3.1
51	Screw [Nm]	1.2	1.2	3.1	6.1	6.1

8 Threadlocker

If not stated otherwise, screws can be secured using Loctite 243 or a similar adhesive.

9 Changing the piston rod



Dismantling

- Remove all compressed air lines.
- Disassemble gripper from the machine/automated system.
- Loosen screws (17) and remove holder (21). Pull proximity switch out of the holder.
- Loosen screw (51) and remove switching lug (12).
- **From size 64 only:** Remove safety washer (52).
- Loosen screw (19), remove washer (35) and safety washer (53).
- Loosen screws (43), lift off clamping components (42) and remove gripper fingers (3). Loosen the set-screw (61).
- **WARNING! The parts are under spring tension!** Loosen the screws (16) and remove the housing (1). Carefully loosen the screw (22).
- Remove piston (6), springs (31) and guide bushing (8).
- Undo the screws (20) and remove the cover (20).
- Mark the assembly position for the bolts (7) and joints (4). Punch cylinder pins (24) through from the bottom. Slide the bolts (7) out of the cover housing (2).
- Remove joints (4) and piston rod (5).

Assembly

- When assembling, use the parts from the spare part package.
- Clean all parts thoroughly, check for damage and wear and grease with a lint-free cloth or brush.
 - If necessary replace seals shown in gray in the picture.
 - Insert cylinder pins (37) into the upper part of the piston rod and secure the upper part with the set-screw (15) to the piston rod (5).
 - Slide the guide bushing (8) in the correct installation position onto the piston rod (5) and insert it onto the housing (1).
 - Fasten the spring (31) and piston (6) onto the piston rod (5) with screw (18).
 - Slide bolt (7) into the cover housing (2) and the joints (4) in the correct installation position onto the bolts.
 - Secure the cover housing (2) onto the housing (1) with screws (16).
 - Align joints (4) and secure with cylinder pins (24) onto bolts (7) and observe the marked installation position when doing so. Tighten set-screw (61).
 - Fasten cover (10) with the screws (20).
 - Fasten gripper finger (3), switching lugs (12) and proximity switches.
 - Open and then close gripper and test its function.
 - Assemble gripper on the machine/automated system. Secure all compressed air lines.