



Assembly and operating manual

PWG

2-finger angular gripper

Original operating manual

Hand in hand for tomorrow

Imprint

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Technical changes:

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

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Dear Customer,

Thank you for trusting our products and our family-owned company, the leading technology supplier of robots and production machines.

Our team is always available to answer any questions on this product and other solutions. Ask us questions and challenge us. We will find a solution!

Best regards,

Your SCHUNK team

Customer Management

Tel. +49-7133-103-2503

Fax +49-7133-103-2189

cmg@de.schunk.com



Please read the operating manual in full and keep it close to the product.

Table of Contents

1	General	5
1.1	About this manual.....	5
1.1.1	Presentation of Warning Labels	5
1.1.2	Applicable documents	6
1.1.3	Variants	6
1.2	Warranty	6
1.3	Scope of delivery.....	6
1.4	Accessories	6
1.4.1	Sensors	6
1.4.2	Sealing kit	7
1.4.3	Accessories kit	7
1.4.4	Mounting kit for proximity switch	8
2	Basic safety notes	9
2.1	Intended use.....	9
2.2	Not intended use	9
2.3	Constructional changes.....	9
2.4	Spare parts	9
2.5	Gripper fingers	10
2.6	Ambient conditions and operating conditions	10
2.7	Personnel qualification	10
2.8	Personal protective equipment	11
2.9	Notes on safe operation.....	11
2.10	Transport.....	12
2.11	Malfunctions.....	12
2.12	Disposal	12
2.13	Fundamental dangers	13
2.13.1	Protection during handling and assembly	13
2.13.2	Protection during commissioning and operation	13
2.13.3	Protection against dangerous movements	14
2.13.4	Protection against electric shock.....	15
2.14	Notes on particular risks	16
3	Technical data	18
4	Assembly.....	19
4.1	Mounting the gripper.....	19
4.2	Mounting options on the gripper.....	19
4.3	Pneumatic connection.....	19

4.4	Mounting the sensor.....	21
4.4.1	IN inductive proximity switch	21
4.4.2	FPS – S13.....	24
5	Troubleshooting.....	25
5.1	Product does not move.....	25
5.2	The module does not travel through the entire stroke?.....	25
5.3	Gripping force is dropping.....	25
6	Maintenance	26
6.1	Notes.....	26
6.2	Maintenance interval.....	26
6.3	Lubricants/Lubrication points.....	26
6.4	Disassembly of the product	27
6.5	Servicing and assembling the product	27
6.6	Assembly drawing	28
7	Translation of the original declaration of incorporation	30
8	UKCA declaration of incorporation	31
9	Information on the RoHS Directive, REACH Regulation and Substances of Very High Concern (SVHC)	32

1 General

1.1 About this manual

This manual contains important information for a safe and appropriate use of the product.

This manual is an integral part of the product and must be kept accessible for the personnel at all times.

Before starting work, the personnel must have read and understood this operating manual. Prerequisite for safe working is the observance of all safety instructions in this manual.

In addition to these instructions, the documents listed under ▶ 1.1.2 [6] are applicable.

NOTE: The illustrations in this manual are intended to provide a basic understanding and may deviate from the actual version.

1.1.1 Presentation of Warning Labels

To make risks clear, the following signal words and symbols are used for safety notes.



⚠ DANGER

Dangers for persons!

Non-observance will inevitably cause irreversible injury or death.



⚠ WARNING

Dangers for persons!

Non-observance can lead to irreversible injury and even death.



⚠ CAUTION

Dangers for persons!

Non-observance can cause minor injuries.

NOTICE

Material damage!

Information about avoiding material damage.

1.1.2 Applicable documents

- General terms of business *
- Catalog data sheet of the purchased product *
- Assembly and operating manuals of the accessories *

The documents labeled with an asterisk (*) can be downloaded from [schunk.com/downloads](https://www.schunk.com/downloads).

1.1.3 Variants

This operating manual applies to the following variations:

- PWG – F (finger version)
- PWG – F (finger version) High-temperature version (HT)
- PWG – B (jaw version)
- PWG – B (jaw version) High-temperature version (HT)

1.2 Warranty

If the product is used as intended, the warranty is valid for 24 months from the ex-works delivery date under the following conditions:

- Observe the specified maintenance and lubrication intervals
- Observe the ambient conditions and operating conditions

Parts touching the workpiece and wear parts are not included in the warranty.

1.3 Scope of delivery

The scope of delivery includes

- 2-finger angular gripper PWG in the version ordered
- Assembly and Operating Manual
- Accessory pack

1.4 Accessories

A wide range of accessories are available for this product

For information regarding which accessory articles can be used with the corresponding product variants, see catalog data sheet.

1.4.1 Sensors

Designation	Type
Inductive proximity switches	IN
Position monitoring	FPS

- Exact type designation of the compatible sensors see catalog.
- Information on handling sensors is available at [schunk.com](https://www.schunk.com) or from SCHUNK contact persons.
- For mounting the sensors, mounting kits are partly necessary.

1.4.2 Sealing kit

Seal kit for	ID number
PWG 65	0370843
PWG 65 High-temperature version (HT)	0370920
PWG 90	0370844
PWG 90 High-temperature version (HT)	0370921
PWG 130	0370845
PWG 130 High-temperature version (HT)	39370845
PWG 170	0370846
PWG 170 High-temperature version (HT)	39370846
PWG 230	0370847
PWG 230 High-temperature version (HT)	39370847

contents of the sealing kit, ► 6.6 [28].

1.4.3 Accessories kit

Content of the accessory pack:

- Centering sleeves
- O-rings

Accessory pack for	ID number
PWG 65	5510828
PWG 65 High-temperature version (HT)	395510828
PWG 90	5510829
PWG 90 High-temperature version (HT)	395510829
PWG 130	5510830
PWG 130 High-temperature version (HT)	395510830
PWG 170	5510831
PWG 170 High-temperature version (HT)	395510831
PWG 230	5510832
PWG 230 High-temperature version (HT)	395510832

1.4.4 Mounting kit for proximity switch

Tab.: HG-PWG 65, ID number 0300764

Item	Quantity	Designation	ID number
50	2	Holder for proximity switch	5510822
51	2	Screw, M2.5 x 8	9660408
52	2	Nut, M2.5	9936008
53	4	Screw, M2.5 x 12	9660409

Tab.: HG-PWG 130 - 230, ID number 0300763

Item	Quantity	Designation	ID number
50	2	Terminal block, size 12	9936029
51	4	Screw, M4 x 16	9660123

2 Basic safety notes

2.1 Intended use

The product is designed exclusively for gripping and temporarily holding workpieces or objects.

- The product may only be used within the scope of its technical data, Link Technische Daten.
- The product is intended for installation in a machine/ automated system. The applicable guidelines for the machine/ automated system must be observed and complied with.
- The product is intended for industrial and industry-oriented use. Its use outside enclosed spaces is only permitted if suitable protective measures are taken against outdoor exposure. The product is not suitable for use in salty air.
- The product can be used within the permissible load limits and technical data for holding workpieces during simple machining operations, but is not a clamping device according to EN 1550:1997+A1:2008.
- Appropriate use of the product includes compliance with all instructions in this manual.
- Any utilization that exceeds or differs from the appropriate use is regarded as misuse.

2.2 Not intended use

It is not intended use if the product is used, for example, as a pressing tool, stamping tool, lifting gear, guide for tools, cutting tool, clamping device or a drilling tool.

- Any utilization that exceeds or differs from the appropriate use is regarded as misuse.

2.3 Constructional changes

Implementation of structural changes

Modifications, changes or reworking, e.g. additional threads, holes, or safety devices, can damage the product or impair its functionality or safety.

- Structural changes should only be made with the written approval of SCHUNK.

2.4 Spare parts

Use of unauthorized spare parts

Using unauthorized spare parts can endanger personnel and damage the product or cause it to malfunction.

- Use only original spare parts or spares authorized by SCHUNK.

2.5 Gripper fingers

Requirements for the gripper fingers

Accumulated energy can make the product unsafe and risk the danger of serious injuries and considerable material damage.

- Only change gripper fingers if no residual energy can be released.
- Make sure that the product and the top jaws are a sufficient size for the application.

2.6 Ambient conditions and operating conditions

Required ambient conditions and operating conditions

Incorrect ambient and operating conditions can make the product unsafe, leading to the risk of serious injuries, considerable material damage and/or a significant reduction to the product's life span.

- Make sure that the product is used only in the context of its defined application parameters, Link Technische Daten.
- Make sure that the product is a sufficient size for the application.
- Make sure that the environment is free from splash water and vapors as well as from abrasion or processing dust. Exceptions are products that are designed especially for contaminated environments.

2.7 Personnel qualification

Inadequate qualifications of the personnel

If the personnel working with the product is not sufficiently qualified, the result may be serious injuries and significant property damage.

- All work may only be performed by qualified personnel.
- Before working with the product, the personnel must have read and understood the complete assembly and operating manual.
- Observe the national safety regulations and rules and general safety instructions.

The following personal qualifications are necessary for the various activities related to the product:

Trained electrician

Due to their technical training, knowledge and experience, trained electricians are able to work on electrical systems, recognize and avoid possible dangers and know the relevant standards and regulations.

Qualified personnel	Due to its technical training, knowledge and experience, qualified personnel is able to perform the delegated tasks, recognize and avoid possible dangers and knows the relevant standards and regulations.
Instructed person	Instructed persons were instructed by the operator about the delegated tasks and possible dangers due to improper behaviour.
Service personnel of the manufacturer	Due to its technical training, knowledge and experience, service personnel of the manufacturer is able to perform the delegated tasks and to recognize and avoid possible dangers.

2.8 Personal protective equipment

Use of personal protective equipment

Personal protective equipment serves to protect staff against danger which may interfere with their health or safety at work.

- When working on and with the product, observe the occupational health and safety regulations and wear the required personal protective equipment.
- Observe the valid safety and accident prevention regulations.
- Wear protective gloves to guard against sharp edges and corners or rough surfaces.
- Wear heat-resistant protective gloves when handling hot surfaces.
- Wear protective gloves and safety goggles when handling hazardous substances.
- Wear close-fitting protective clothing and also wear long hair in a hairnet when dealing with moving components.

2.9 Notes on safe operation

Incorrect handling of the personnel

Incorrect handling and assembly may impair the product's safety and cause serious injuries and considerable material damage.

- Avoid any manner of working that may interfere with the function and operational safety of the product.
- Use the product as intended.
- Observe the safety notes and assembly instructions.
- Do not expose the product to any corrosive media. This does not apply to products that are designed for special environments.
- Eliminate any malfunction immediately.
- Observe the care and maintenance instructions.

- Observe the current safety, accident prevention and environmental protection regulations regarding the product's application field.

2.10 Transport

Handling during transport

Incorrect handling during transport may impair the product's safety and cause serious injuries and considerable material damage.

- When handling heavy weights, use lifting equipment to lift the product and transport it by appropriate means.
- Secure the product against falling during transportation and handling.
- Stand clear of suspended loads.

2.11 Malfunctions

Behavior in case of malfunctions

- Immediately remove the product from operation and report the malfunction to the responsible departments/persons.
- Order appropriately trained personnel to rectify the malfunction.
- Do not recommission the product until the malfunction has been rectified.
- Test the product after a malfunction to establish whether it still functions properly and no increased risks have arisen.

2.12 Disposal

Handling of disposal

The incorrect handling of disposal may impair the product's safety and cause serious injuries as well as considerable material and environmental harm.

- Follow local regulations on dispatching product components for recycling or proper disposal.

2.13 Fundamental dangers

General

- Observe safety distances.
- Never deactivate safety devices.
- Before commissioning the product, take appropriate protective measures to secure the danger zone.
- Disconnect power sources before installation, modification, maintenance, or calibration. Ensure that no residual energy remains in the system.
- If the energy supply is connected, do not move any parts by hand.
- Do not reach into the open mechanism or movement area of the product during operation.

2.13.1 Protection during handling and assembly

Incorrect handling and assembly

Incorrect handling and assembly may impair the product's safety and cause serious injuries and considerable material damage.

- Have all work carried out by appropriately qualified personnel.
- For all work, secure the product against accidental operation.
- Observe the relevant accident prevention rules.
- Use suitable assembly and transport equipment and take precautions to prevent jamming and crushing.

Incorrect lifting of loads

Falling loads may cause serious injuries and even death.

- Stand clear of suspended loads and do not step into their swiveling range.
- Never move loads without supervision.
- Do not leave suspended loads unattended.

2.13.2 Protection during commissioning and operation

Falling or violently ejected components

Falling and violently ejected components can cause serious injuries and even death.

- Take appropriate protective measures to secure the danger zone.
- Never step into the danger zone during operation.

2.13.3 Protection against dangerous movements

Unexpected movements

Residual energy in the system may cause serious injuries while working with the product.

- Switch off the energy supply, ensure that no residual energy remains and secure against inadvertent reactivation.
- Never rely solely on the response of the monitoring function to avert danger. Until the installed monitors become effective, it must be assumed that the drive movement is faulty, with its action being dependent on the control unit and the current operating condition of the drive. Perform maintenance work, modifications, and attachments outside the danger zone defined by the movement range.
- To avoid accidents and/or material damage, human access to the movement range of the machine must be restricted. Limit/prevent accidental access for people in this area due through technical safety measures. The protective cover and protective fence must be rigid enough to withstand the maximum possible movement energy. EMERGENCY STOP switches must be easily and quickly accessible. Before starting up the machine or automated system, check that the EMERGENCY STOP system is working. Prevent operation of the machine if this protective equipment does not function correctly.

2.13.4 Protection against electric shock

Possible electrostatic energy

Components or assembly groups may become electrostatically charged. When the electrostatic charge is touched, the discharge may trigger a shock reaction leading to injuries.

- The operator must ensure that all components and assembly groups are included in the local potential equalisation in accordance with the applicable regulations.
- While paying attention to the actual conditions of the working environment, the potential equalisation must be implemented by a specialist electrician according to the applicable regulations.
- The effectiveness of the potential equalisation must be verified by executing regular safety measurements.

2.14 Notes on particular risks



⚠ DANGER

Risk of fatal injury from suspended loads!

Falling loads can cause serious injuries and even death.

- Stand clear of suspended loads and do not step within their swiveling range.
- Never move loads without supervision.
- Do not leave suspended loads unattended.
- Wear suitable protective equipment.



⚠ WARNING

Risk of injury from objects falling and being ejected!

Falling and ejected objects during operation can lead to serious injury or death.

- Take appropriate protective measures to secure the danger zone.



⚠ WARNING

Risk of injury due to unexpected movements!

If the power supply is switched on or residual energy remains in the system, components can move unexpectedly and cause serious injuries.

- Before starting any work on the product: Switch off the power supply and secure against restarting.
- Make sure, that no residual energy remains in the system.



⚠ WARNING

Risk of injury from sharp edges and corners!

Sharp edges and corners can cause cuts.

- Use suitable protective equipment.



⚠ WARNING

Risk of burns through contact with hot surfaces!

Surfaces of components can heat up severely during operation. Skin contact with hot surfaces causes severe burns to the skin.

- For all work in the vicinity of hot surfaces, wear safety gloves.
- Before carrying out any work, make sure that all surfaces have cooled down to the ambient temperature.



⚠ WARNING

Risk of injury from parts coming loose!

If the shock absorbers are faulty, the product can become damaged. Parts coming loose in this way can lead to injuries.

- Regularly check the components for wear and damage.



⚠ WARNING

Risk of injury if the condition or behavior of the product is undefined!

Cutting off the compressed air supply in an uncontrolled manner could lead to undefined states and behavior. This may cause personal injury or material damage.

- The operator must define suitable emergency stop and restarting strategies.
 - ⇒ Emergency stop strategies: e.g. by means of controlled shut down
 - ⇒ Restarting strategies: e.g. using pressure build-up valves or suitable valve switching sequences

3 Technical data

Size	PWG 65	PWG 90	PWG 130	PWG 170	PWG 230
Closing torque [Nm]	6.44	35.69	125.4	324.9	934.2
Closing moment produced by spring [Nm]	1.7	9	34.2	80.4	237.6
Recommended workpiece weight [kg]	0.8	3.3	8	15.7	35.8
Air consumption per cylinder volume [cm ³]	8	35	120	320	860
Pressure medium	Compressed air, compressed air quality according to ISO 8573-1:2010 [7:4:4]				
Nominal working pressure [bar]	6				
Min. pressure [bar]	4				
Max. pressure [bar]	8				
Max. permissible finger length [mm]	60	80	125	160	200
Max. permitted weight per finger [kg]	0.15	0.5	1	2.5	4
IP rating	20				
Min. ambient temperature [°C]	-10				
Max. ambient temperature [°C]	90				
Noise emission [dB(A)]	≤ 70				

More technical data is included in the catalog data sheet.
Whichever is the latest version.

4 Assembly

4.1 Mounting the gripper

The gripper can be fastened on the side, on the finger side and on the bottom.

Screws are included in the accessory pack for lateral and finger-side mounting.

Centering is performed by means of centering sleeves, which are also included in the accessory pack.

4.2 Mounting options on the gripper

The plate (6) can be removed to mount a shaft support, workpiece centering device or the like ▶ 6.6 [28].

Connection dimensions for threads and centering devices → catalog.

4.3 Pneumatic connection



⚠ WARNING

Risk of injury due to unexpected movements!

If the power supply is switched on or residual energy remains in the system, components can move unexpectedly and cause serious injuries.

- Before starting any work on the product: Switch off the power supply and secure against restarting.
- Make sure, that no residual energy remains in the system.

NOTICE

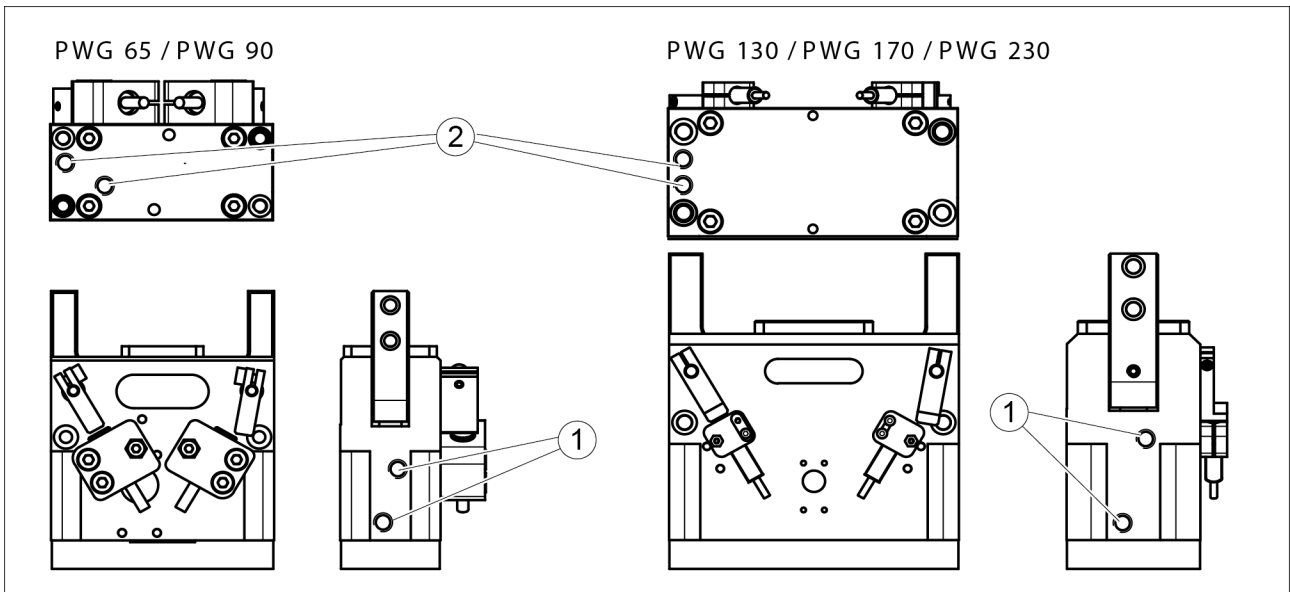
Risk of damage to the gripper!

If the maximum permissible finger weight or the permissible mass moment of inertia of the fingers is exceeded, the gripper can be damaged.

- As a rule, a jaw movement must take place without impact and bouncing.
- To do this, carry out sufficient throttling and/or damping if necessary.
- Observe specifications in the catalog data sheet.

NOTE

- Observe the requirements for the compressed air supply, Link Technische Daten.
- In case of compressed air loss (cutting off the energy line), the components lose their dynamic effects and do not remain in a secure position. However, the use of a SDV-P pressure maintenance valve is recommended in this case in order to maintain the dynamic effect for some time. Product variants are also offered with mechanical gripping force via springs, which also ensure a minimum clamping force in the event of a pressure drop.



1 Main connections
(A = open, B = close)

2 Direct connection for air purge
(a = open, b = close)

- Open only the air connections that are needed.
- Close unused main air connections using the screw plugs from the enclosed pack.
- For a hose-free direction connection, use the O-rings from the enclosed pack.

4.4 Mounting the sensor

NOTE

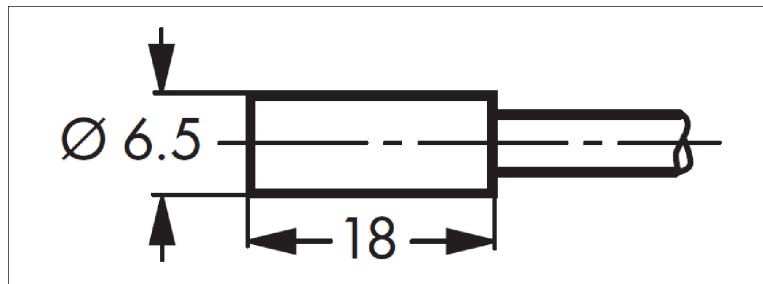
Observe the assembly and operating manual of the sensor for mounting and connecting.

The product is prepared for the use of sensors.

- For the exact type designations of suitable sensors, please see catalog datasheet and Link Übersicht Sensoren.
- For technical data for the suitable sensors, see assembly and operating manual and catalog datasheet.
 - The assembly and operating manual and catalog datasheet are included in the scope of delivery for the sensors and are available at [schunk.com](https://www.schunk.com).
- Information on handling sensors is available at [schunk.com](https://www.schunk.com) or from SCHUNK contact persons.

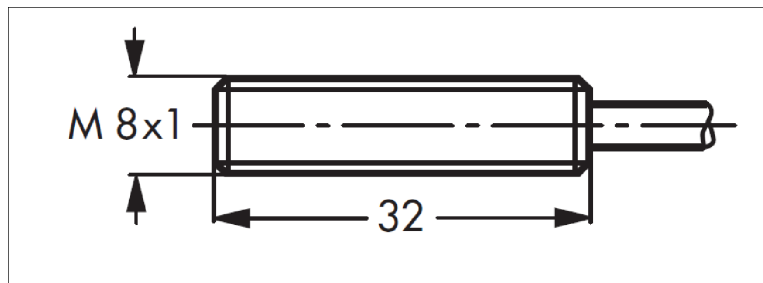
4.4.1 IN inductive proximity switch

PWG 65



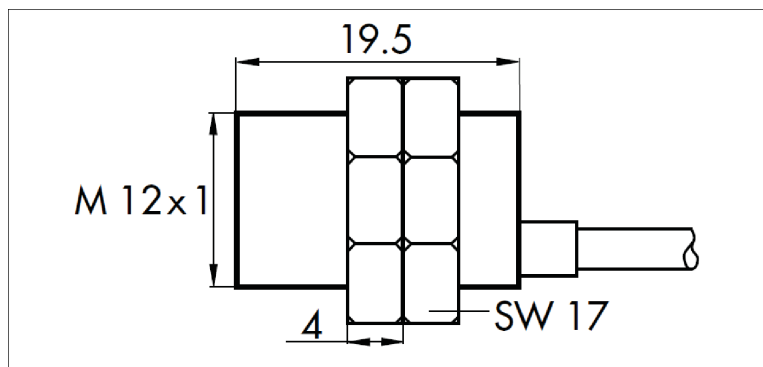
IN 60 inductive proximity switch

PWG 90 - 230



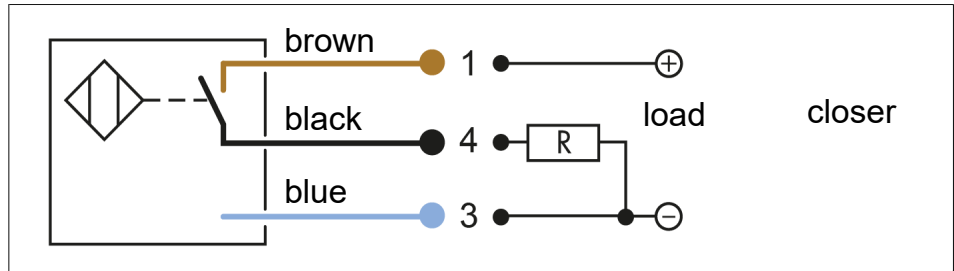
IN 80 inductive proximity switch

Optional for PWG 130 - 230



IN 120 inductive proximity switch

**Switching function:
drawn in
undampened
condition**



The inductive proximity switches used are equipped with reverse polarity protection and are short-circuit-proof.

Make sure that you handle the proximity switches properly:

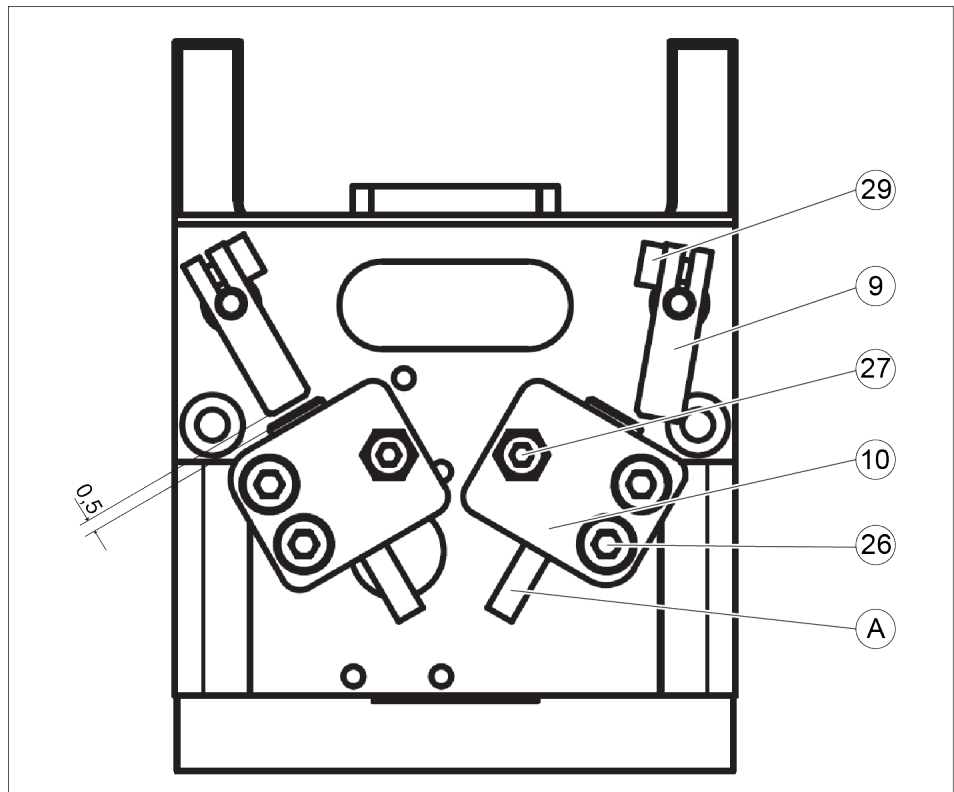
- Do not pull on the cable.
- Do not allow the sensor to dangle from the cable.
- Do not overtighten the mounting screw or mounting clip.
- Please adhere to a permitted bend radius of the cable. (→ catalog)
- Avoid contact of the proximity switches with hard objects and with chemicals, in particular nitric acid, chromic acid and sulphuric acid.

The inductive proximity switches are electronic components, which can react sensitively to high-frequency interference or electromagnetic fields.

- Check to make sure that the cable is fastened and installed correctly. Provide for sufficient clearance to sources of high-frequency interference and their supply cables.
- Parallel switching of several sensor outputs of the same type (nnp, pnp) is permissible, but does not increase the permissible load current.
- Note that the leakage current of the individual sensors (ca. 2 mA) is cumulative.

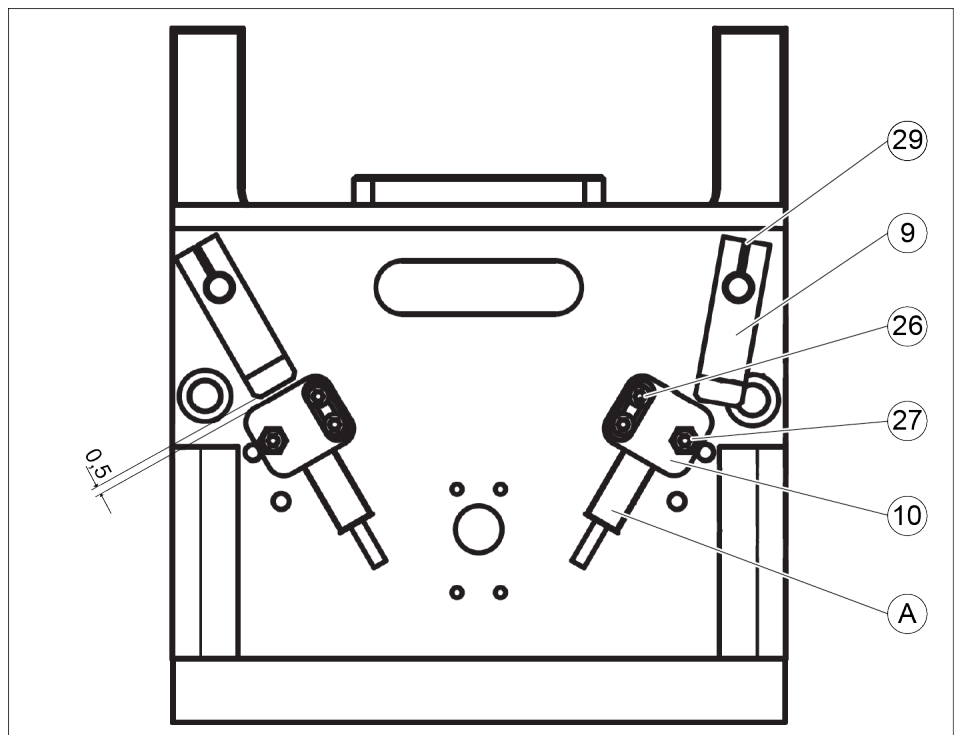
Assembly and adjustment of the proximity switches

PWG 65



A Proximity switch

PWG 90 - 130



A Proximity switch

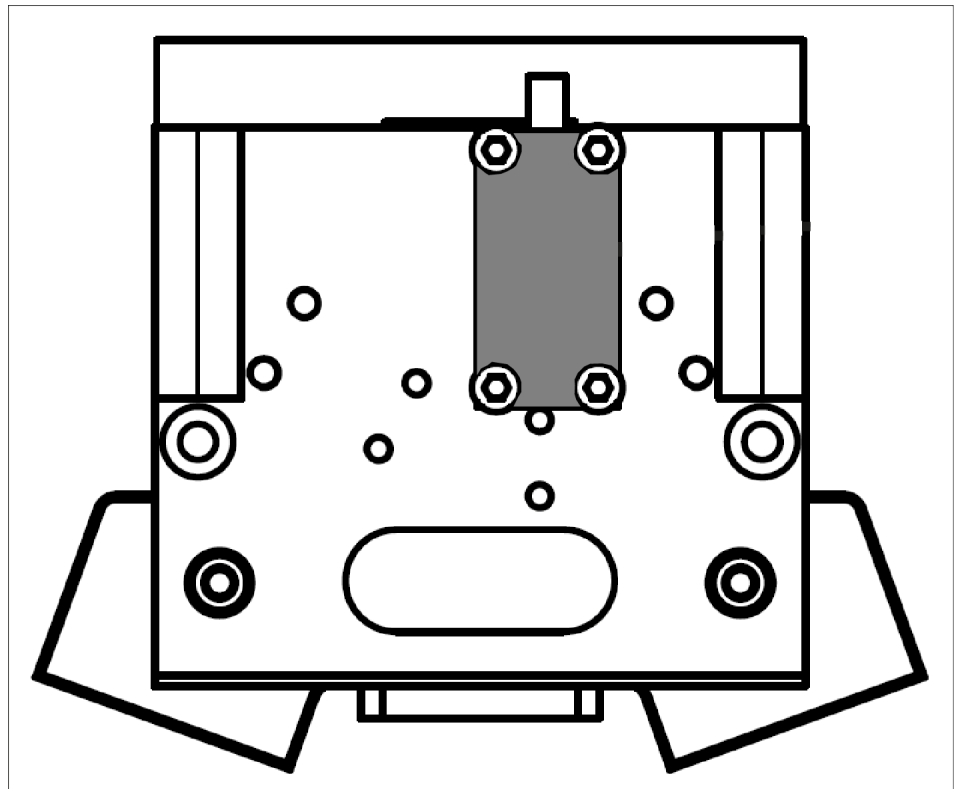
Gripper closed:

1. Set the gripper to »CLOSED« position.
2. Loosen the screw (29) and turn the switching lug (9) so that it faces towards the proximity switch.
3. Re-tighten the screw (29).
4. For PWG 65 (INW 60): Carefully push the proximity switch into the bracket (10) until it touches the switching lug. Then pull back the proximity switch approx. 0.5 mm.
For PWG 90 - 230: Carefully push the proximity switch up to the back stop in the bracket (10). The switching distance can be varied as required by loosening the screws (26).
5. Mount the proximity switch with the attachment screw (27).
Max. tightening torque of 100 Ncm.
6. Connect the proximity switch.
7. Test the function by opening and closing the fingers.

Gripper open:

1. Set the gripper to »OPEN« position.
2. Mount the other proximity switch as described in points 2) to 7).

4.4.2 FPS – S13



The FPS sensor is screwed directly onto the housing.
Use DIN 912/A2 M 2.5 x 8 screws to do so.

5 Troubleshooting

5.1 Product does not move

Possible cause	Corrective action
Pressure drops below minimum.	Check air supply. ▶ 4.3 [📄 19]
Compressed air lines switched.	Check compressed air lines. ▶ 4.3 [📄 19]
Proximity switch defective or set incorrect.	Readjust or change sensor.
Unused air connections open.	Close unused air connections.
Flow control valve closed.	Open the flow control valve.
Component part defective.	Replace component or send it to SCHUNK for repair.

5.2 The module does not travel through the entire stroke?

Possible cause	Corrective action
Pressure drops below minimum.	Check air supply., ▶ 4.3 [📄 19]

5.3 Gripping force is dropping

Possible cause	Corrective action
Compressed air can escape.	Check seals, if necessary, disassemble the product and replace seals.
Too much grease in the mechanical movement space.	Clean and lubricate product.
Pressure drops below minimum.	Check air supply. Link Technische Daten
Component part defective.	Replace component or send it to SCHUNK for repair.

6 Maintenance

6.1 Notes



⚠ WARNING

Risk of injury from electric shock due to contact with live parts!

- Before starting any work: Disconnect the power supply from the mains and secure against accidental switch-on.
- Work may only be performed by appropriately qualified personnel.

Original spare parts

Use only original spare parts of SCHUNK when replacing spare and wear parts.

6.2 Maintenance interval

NOTICE

Material damage due to hardening lubricants!

Lubricants harden more quickly at temperatures above 60°C, leading to possible product damage.

- Reduce the lubricant intervals accordingly.

Interval [Mio. cycles]	1
------------------------	---

6.3 Lubricants/Lubrication points

During maintenance, treat all greased areas with lubricant. Thinly apply lubricant with a lint-free cloth.

SCHUNK recommends the lubricants listed.

Lubricant point	Lubricant
Metallic sliding surfaces	SCHUNK grease 3
Seals and sealing surfaces	SCHUNK grease 1
Bore hole at the piston	SCHUNK grease 1

Details regarding SCHUNK lubricant designations are available at [schunk.com/lubricants](https://www.schunk.com/lubricants).

The product contains food-compliant lubricants as standard. **The requirements of standard EN 1672-2:2020 are not fully met.**

NOTE

- Change contaminated food-compliant lubricant.
- Observe information in the safety data sheet from the lubricant manufacturer.

6.4 Disassembly of the product

Position of the item numbers ▶ 6.6 [28]



⚠ WARNING

Risk of injury due to spring forces!

The cover may be ejected due to the high spring forces.

- Dismantle the product carefully.

1. Remove the compressed air line.
2. Unscrew the screws (25) and remove the plate (6).
3. Loosen the set-screws (30) until the bolt (8) can be pushed out. Mark the installation position of the bolts and the fingers / jaws (7 / 11).
4. Remove the fingers / jaws (7 / 11).
5. Unscrew the screw (23) and remove the bar (5). If necessary, secure the bar against twisting with a feeler gage tape.
6. **WARNING! The housing (1), cover (2) and piston (3) are under spring tension. Clamp the housing and cover between »A« and »B«. Unscrew the screws (22). (With PWG 170 and 230, also unscrew the screws (20)). Unclamp slowly.**
7. Remove the piston (3) with piston rod (4) and springs (15). Mark the installation position of the piston and piston rod.
8. Loosen the screw (24) and remove the piston rod.

6.5 Servicing and assembling the product

Maintenance

- Clean all parts thoroughly and check for damage and wear.
- Treat all greased areas with lubricant.
 - ▶ 6.3 [26]
- Oil or grease bare external steel parts.
- Replace all wear parts / seals. ▶ 6.6 [28]
 - Position of the wearing parts ▶ 6.6 [28]
 - Seal kit ▶ 1.4.2 [7]

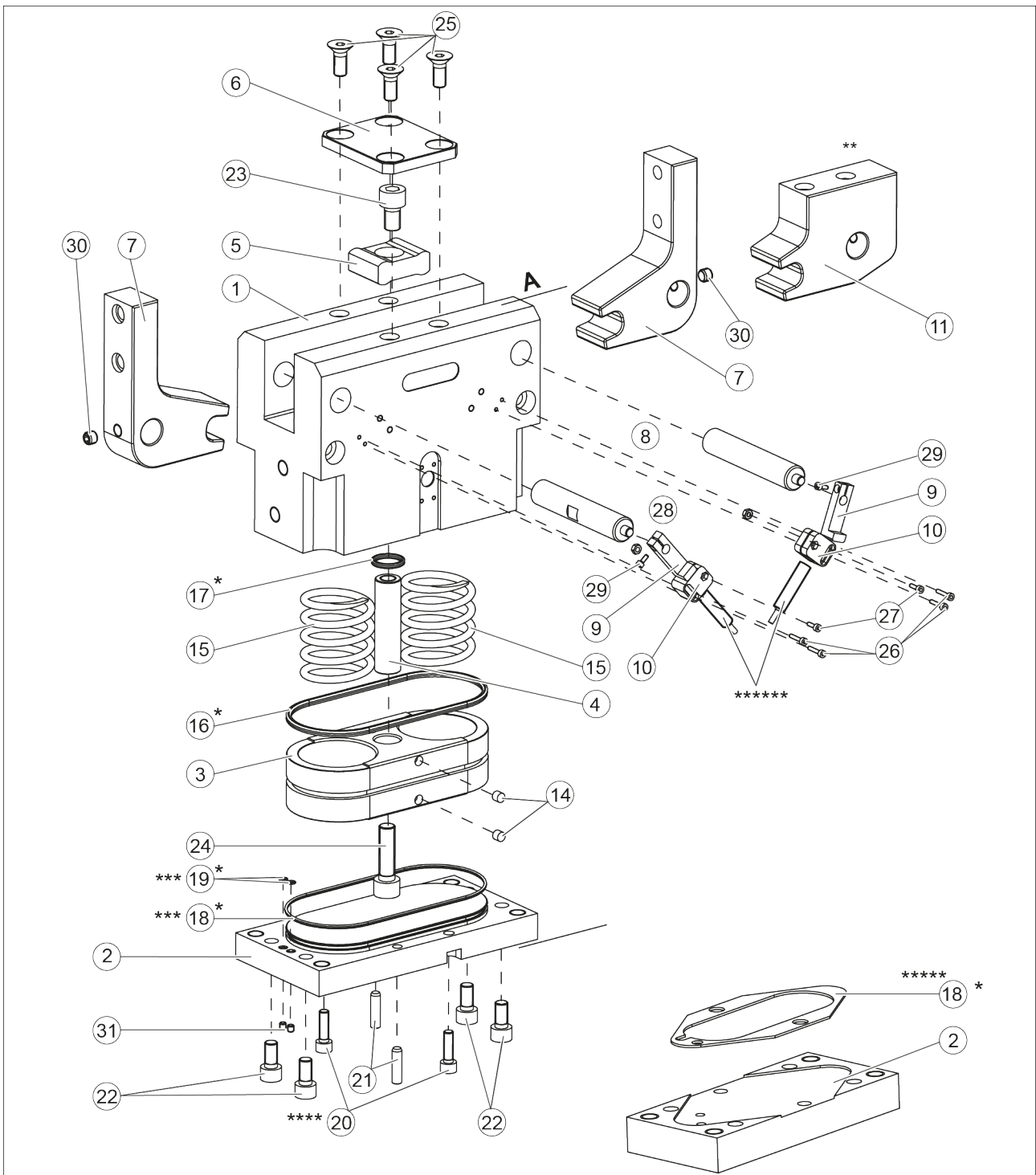
Assembly

Assembly takes place in the opposite order to disassembly. Observe the following:

- Unless otherwise specified, secure all screws and nuts with Loctite no. 243 and tighten with the appropriate tightening torque.
- Make sure the seals are not damaged during the assembly.

6.6 Assembly drawing

The following figure is an example image.
It serves for illustration and assignment of the spare parts.
Variations are possible depending on size and variant.



- * Wearing part, replace during maintenance.
Included in the seal kit. Seal kit can only be ordered completely.
- ** Only for version B (type of jaw)
- *** Only for PWG 90 - PWG 230
- **** Only for PWG 170 - PWG 230
- ***** Only for PWG 65
- ****** Proximity switch (on special order)

7 Translation of the original declaration of incorporation

in terms of the Directive 2006/42/EG, Annex II, Part 1 Section B.

Manufacturer/
Distributor SCHUNK SE & Co. KG
Spanntechnik | Greiftechnik | Automatisierungstechnik
Bahnhofstr. 106 – 134
D-74348 Lauffen/Neckar

We hereby declare that the partly completed machine described below

Product designation: 2-finger angular gripper / PWG /pneumatic
ID number 0302630 ... 0302639

meets the following basic occupational health and safety of the Machinery Directive 2006/42/EC:
No. 1.1.1, No. 1.1.2, No. 1.1.3, No. 1.1.5, No. 1.3.2, No. 1.5.3, No. 1.5.4, No. 1.5.6, No. 1.5.8, No.
1.5.10, No. 1.5.11, No. 1.5.13

The partly completed machinery may not be put into operation until it has been confirmed that the machine into which the partly completed machinery is to be installed complies with the provisions of the Machinery Directive (2006/42/EC). The declaration shall be rendered invalid if modifications are made to the product.

Applied harmonized standards, especially:

EN ISO 12100:2010 Safety of machinery – General principles for design –
Risk assessment and risk reduction

The special technical documentation according to Annex VII, Part B, belonging to the partly completed machine, has been created.

Person authorized to compile the technical documentation:
Stefanie Walter, Address: see manufacturer's address

Signature: see original declaration

Lauffen/Neckar, July 2023

Dr.-Ing. Manuel Baumeister,
Head of Systems Engineering,
Technology & Innovation

9 Information on the RoHS Directive, REACH Regulation and Substances of Very High Concern (SVHC)

RoHS Directive

SCHUNK products are classified as "large-scale stationary installations" or as "large-scale stationary industrial tools" within the meaning of Directive 2011/65/EU and its extension 2015/863/EU "on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)", or fulfill their intended function only as part of one. Therefore products from SCHUNK do not fall within the scope of the directive at this time.

REACH Regulation

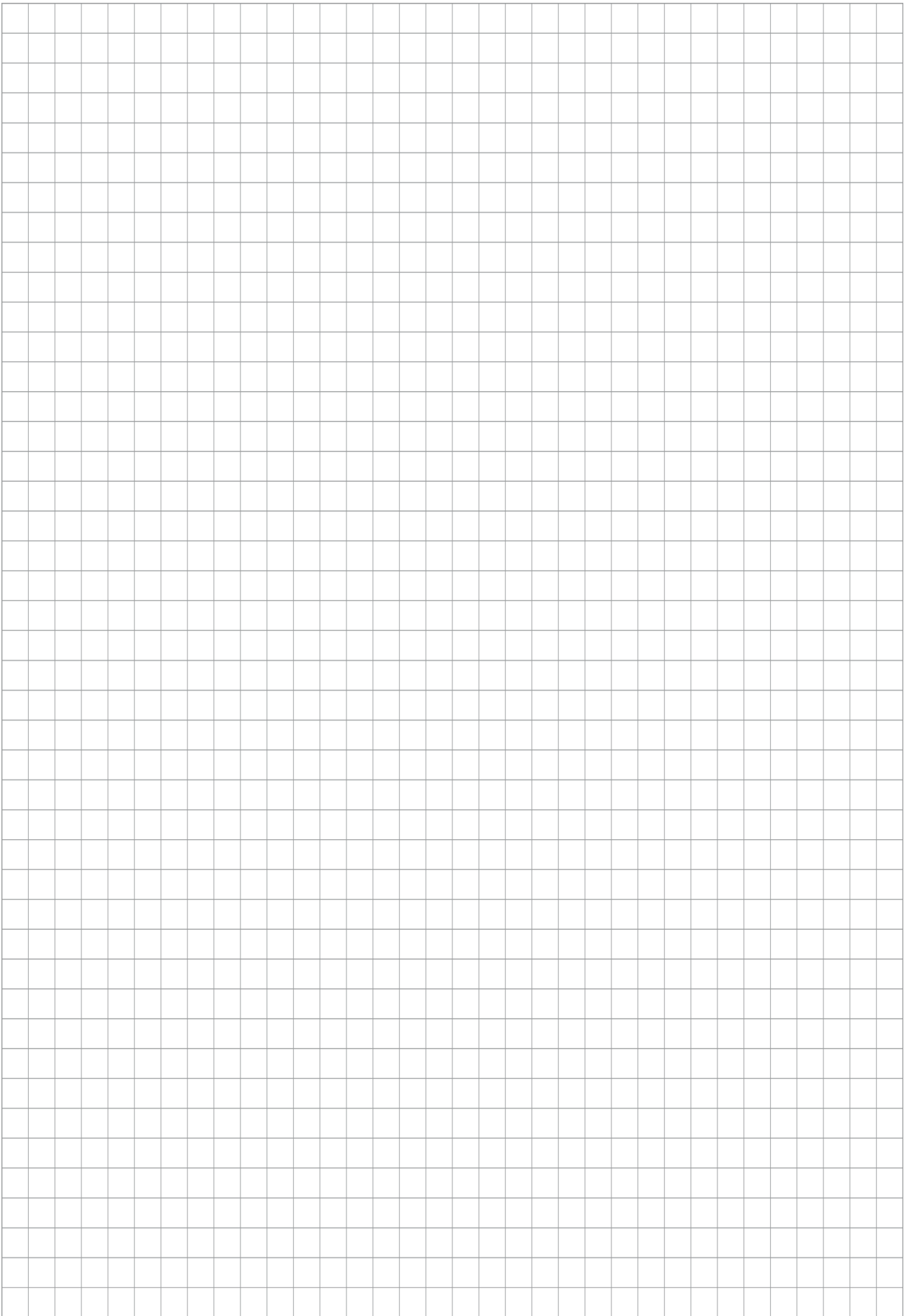
Products from SCHUNK fully comply with the regulations of Regulation (EC) No. 1907/2006 "concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)" and its amendment 2022/477. SCHUNK attaches great importance to completely avoiding chemicals of concern to humans and the environment wherever possible.

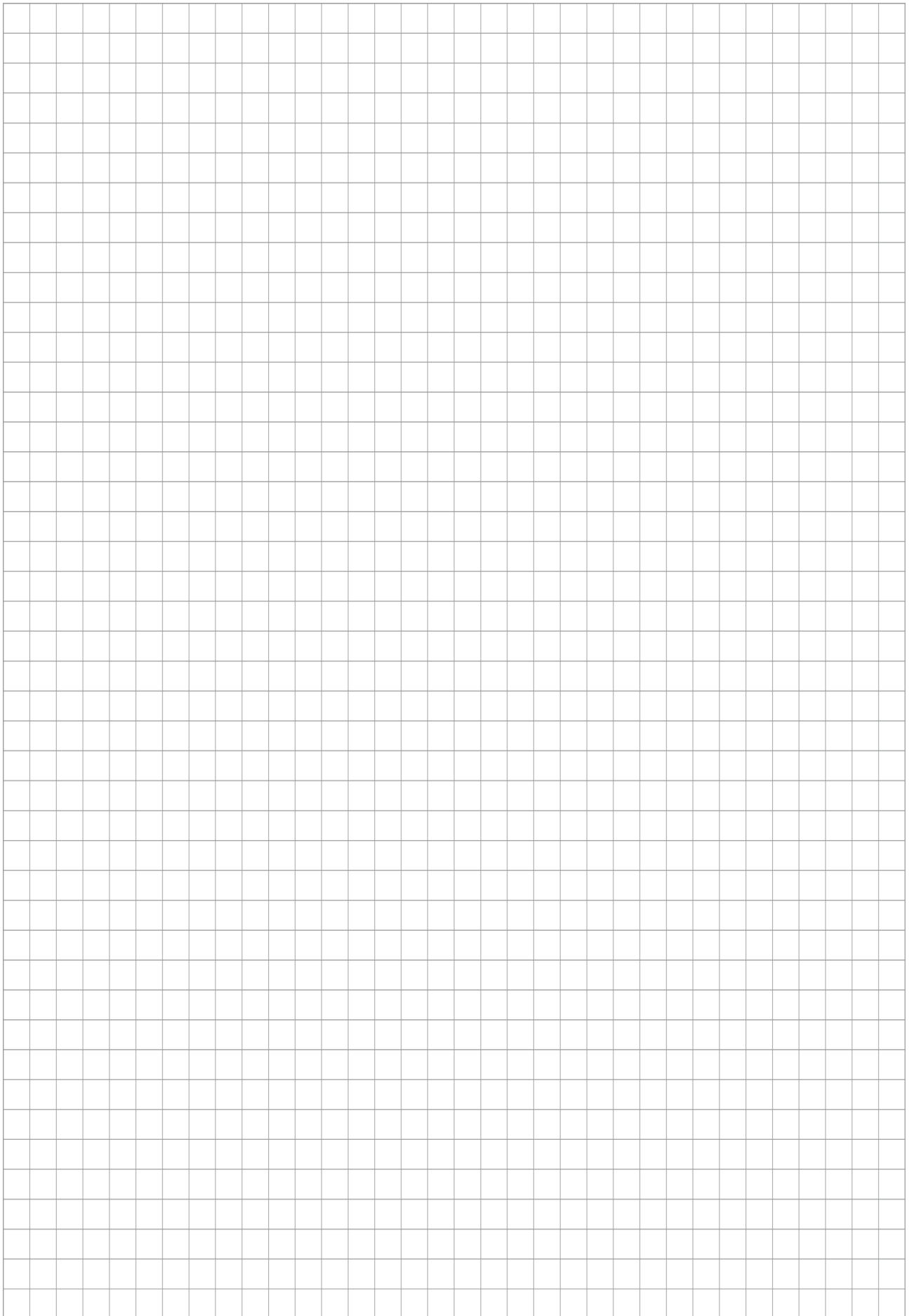
Only in rare exceptional cases do SCHUNK products contain SVHC substances on the candidate list with a mass content above 0.1%. In accordance with Article. 33 (1) of Regulation (EC) No. 1907/2006, SCHUNK complies with its duty to "communicate information on substances in articles" and lists the components concerned and the substances used in an overview that can be viewed at schunk.com/SVHC.

Signature: see original declaration

Lauffen/Neckar, July 2023

Dr.-Ing. Manuel Baumeister,
Head of Systems Engineering,
Technology & Innovation









SCHUNK SE & Co. KG
Spanntechnik | Greiftechnik | Automatisierungstechnik

Bahnhofstr. 106 - 134
D-74348 Lauffen/Neckar
Tel. +49-7133-103-0
info@de.schunk.com
schunk.com

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