

INHALTSVERZEICHNIS

1. DESCRIPTION	1
2. GENERAL SAFETY REQUIREMENTS	1
3. TECHNICAL DATA	2
4. INSTALLATION INSTRUCTIONS AND HANDLING	2
5. WARRANTY & MAINTENANCE	3
6. GENERAL CONDITIONS	4
7. MANAGING FAILURES IN GENERAL	4
8. ENVIRONMENTAL ASPECT AT DISPOSAL	4
9. SERVICE LIFE INFORMATION	4

ONLY THOSE PERSONS WHO HAVE READ THESE TECHNICAL INSTRUCTIONS THOROUGHLY AND UNDERSTAND THEM COMPLETELY SHALL BE AUTHORIZED TO FIT AND SERVICE THIS PRODUCT.

IMPORTANT NOTICE

If this product is being purchased or used for incorporation into another product, the SRG Schutz + Rackow Gastechnik GmbH reminds the end product manufacturer that any and all product user warning, instructions or product labels are the responsibility of the end product manufacturer.

CONTENT

1. DESCRIPTION

The LPG FLOAT GAUGE has been developed and approved for exclusive use in LPG storage from small automotive cylinders, toroidal tanks and vessels. This product is not intended for any other installation or purpose. If the product user has any questions regarding this product's proper application or purpose, the product user should call +49-8462-9392-0. Any non-approved use or application and/or any non-approved modification of the product may result in serious accident or personal injury for which SRG Schutz + Rackow Gastechnik GmbH will not be held responsible.

2. GENERAL SAFETY REQUIREMENTS

- All users must comply fully with all national or local laws, rules or regulations in force.
- Anyone using this product must be thoroughly familiar with these instructions and other applicable product instructions and manuals.



This is a component part designed for use with LPG tanks or cylinders. The final manufacturer is responsible for preparing appropriate and adequate instructions and warnings for the ultimate product user.

IMPORTANT NOTE: All SRG type 487 float gauges are level indicators only and should not be used to gauge the level during filling operations.

- The maintenance instructions outlined below should be incorporated into any product manual or instruction label.
- Failure to follow any instruction or warning within this instruction manual or on any product label may result in a serious accident involving either personal injury, property damage or both.

2.1 Before every use, check the condition of the float gauge (cleanliness, condition of threads), inform yourself about standards and safety regulations for float gauges used with gases.

SRG Schutz + Rackow Gastechnik GmbH / D-34475 Gladenbach
reserves the right to change at any time designs, materials or specifications without notice
for more information contact: +49 8462 9392-0 or info@srgrackow.com

For fitting torques see table below, use only calibrated torque wrench.

- Flange version of the float gauge: Make sure that the float gauge is built in parallel to the tank flange. For the position of the dowel pin in the tank flange, please refer to DIN 4680, Part 1.
- Please pay attention on the succession of screwing in the flanged version of the float gauge: The four Allen screws have to be screwed in crosswise.
- After fitting, check the assembly for leaks (e.g. with a leak detecting spray). Any fire is prohibited during this operation.

Fitting torques

Inlet thread	Fitting torque with Teflon tape or thread sealant
3/4" NPT	160Nm + orientation (max. 130Nm after orientation)
1" NPT	160Nm + orientation (max. 200Nm after orientation)
1 1/2" NPT	180Nm + orientation (max. 200Nm after orientation)
Mounting Screws: Flange "Junior"	
M8 x 20	5 - 7 Nm
M8 x 25	5 - 7 Nm
1/2" UNF x 7/8"	5 - 7 Nm
Mounting Screws: Flange "Senior"	
M8 x 25	7 - 9 Nm
5/16" UNF x 7/8"	7 - 9 Nm

This fitting torques have to be respected without exception; if there is still a leakage after assembling of the float gauge on the tank, check the thread of the tank coupling.

In supplement all local rules in law have to be respected (e.g. special rules for the installation of tank equipments; check procedures...).

Note: The use of impact drivers is not recommended on flange screws or when fitting screw type gauges!

Attention: Do not apply a water test with pressures over 20 bar to the SRG float gauge type 487. High water pressure may damage the function!

5. WARRANTY & MAINTENANCE

The limited warranty foreseen in our general conditions of sale does not cover the following:

- Repair or replacement due to normal wear or damage during routine maintenance.
- Damage to components whose fragility is for technical reasons unavoidable and determined by product design.
- Damage from not following recommended maintenance and procedures, as outlined in this instruction manual.
- Damage arising from modifications not included in the procedures in this instruction manual.
- Damage resulting from the use of an unauthorised part, supplied, manufactured or modified by procedures not included in this instruction manual.



Failure to follow the installation instructions and handling instructions may cause an accident or personal injury, for which SRG Schutz + Rackow Gastechnik GmbH declines any responsibility.

Repair or reconditioning the PRODUCT is strictly prohibited!

SRG Schutz + Rackow Gastechnik GmbH / D-34475 Gladenbach
reserves the right to change at any time designs, materials or specifications without notice
for more information contact: +49 8462 9392-0 or info@srgrackow.com

- Respect given torques on side 3 for assembling the float gauge on the tank or cylinder.
- This product is designed and approved for the use with LPG tanks or cylinder. Every other use or application is not permitted without a written authorisation by our technical Department.
- Never disassemble a float gauge.
- Never grease a float gauge (especially the gear mechanism or the thread).
- Never disassemble a float gauge from a tank under pressure.
- Use only materials with clean surfaces and compatible with the specified gas, the specified pressures and the desired flow.
- The manufacturer of the end product has to look after the cleanliness of the tank, which has to be free of grease and metallic, plastic or other particles.
- The float gauges have to be stored in a dry and well tempered environment in its original packaging without any influence of sun or ultraviolet radiation.
- The devices should not be subjected to any clash or impact or deformation:
It is not permitted to use a deformed or damaged float gauge.
- Never use a direct flame near the installation.
- Never modify or remove the markings on the float gauge.
- All users must strictly respect all national or local laws, rules or regulations in force.
- The manufacturer of the end product is responsible for any personal injury, material or immaterial accident or damaging caused by a non-approved fitting or failure of maintenance.
- The customer has to assure an appropriate transportation and handling of this product.
SRG Schutz + Rackow Gastechnik GmbH is not responsible if the product has been transported or handled in an inappropriate way and especially when its specific original packaging looks damaged. In this case the customer has to inform the manufacturer SRG Schutz + Rackow Gastechnik GmbH immediately.

3. TECHNICAL DATA

Working pressure	25 bar
Working temperature	- 20° C + 65° C (optional -40° C)
Body material	Brass, according to EN 12185, or Zamak
Rubber, material	NBR, according to EN 549 or R67-01
Container connection	In reference to customers order (Jr. Sr. or thread version)
Markings	3 Stars, SRG, Type, Date of production, PS25, Material no., customer specifications (e.g. tank dia./ tank height, shaft length, float arm length), (optional -40° C)
Application	Butane, Propane or mixture of both (LPG)

4. INSTALLATION INSTRUCTIONS AND HANDLING

The fitting of the float gauge has to be done in the following order:

- If the float gauge is equipped with a thread, please check if the thread corresponds to the thread of the tank or cylinder.
- Is the float gauge a flange version, check if the seal is assembled (flat seal or o-ring)
- Check the property and the surface condition of the tank.
- Use an appropriate sealing product for the threads (if the threaded version is not delivered with thread sealant), which does not interfere with the correct function of the float gauge. (Use Teflon tape or similar). Apply sealing on threads only. Avoid any sealing product with lubrication effect (e.g. products containing oil or lead).
- Check if the connection is free of any products (grease, oil, painting color...).
- Use a special tool corresponding to the float gauge's wrench (thread version) to fit the float gauge to the tank or cylinder to avoid any deformation.

SRG Schutz + Rackow Gastechnik GmbH / D-34475 Gladenbach
reserves the right to change at any time designs, materials or specifications without notice
for more information contact: +49 8462 9392-0 or info@srgrackow.com

Maintenance (cleaning, replacement of dust caps, etc.) of the PRODUCT is under the responsibility of the installer or the operator. Anyone attempting to maintain the PRODUCT must be thoroughly familiar with EN 13175, EN 13799 and Directive 2014/68/EU and all other standards and regulations referenced therein.

According to this norm maintenance, repair and/or reconditioning shall be performed by properly trained personnel only.

In case of incident or complaint, the user has to send back the supposed defective product to the manufacturer SRG Schutz + Rackow Gastechnik GmbH securely packed, in order to preserve the warranty, the user will not execute any intervention on the product (disassembling, repair, modification...) without our written agreement.

6. GENERAL CONDITIONS

- Because of a policy of continuous product improvement, SRG Schutz + Rackow Gastechnik GmbH reserves the right to change designs and materials as well as specifications and product informations without prior notice.
- SRG Schutz + Rackow Gastechnik GmbH preserves completely the intellectual property of their projects, studies and in general on all documents forwarded to their customers: It is not permitted to communicate, to execute or to use these documents in any way without their written authorisation.
- This instruction manual is a part of the sales contract and is subject to the general terms of sale.

7. MANAGING FAILURES IN GENERAL

In case of faults or leaks (for example, the smell of gas) immediately close the shut-off device and the main shut-off immediately before or after entering the pipe into the housing. In case of malfunction call the Companies. Notify in case of emergency fire, police or gas suppliers.

8. ENVIRONMENTAL ASPECT AT DISPOSAL

Minimizing the impact on the environment by disposing of the products and their packaging at the end of life should be considered. The materials and materials should be disposed of in terms of reuse and material and energy recovery.

9. SERVICE LIFE INFORMATION

Within its responsibility to ensure a safe & sound service life, SRG Schutz + Rackow Gastechnik GmbH declares a maximum service life for this item of 30 years.

According to the maintenance procedures of SRG Schutz + Rackow Gastechnik GmbH, re-testing controls have to be carried out after 10 years of use by an accredited person / body. After another 10 years of use, the maintenance procedure has to be re-newed.

After 20 years of use, the testing cycle is reduced to 5 years. After a total service life of 30 years all items have to be replaced. Old valves need to be scrapped and **cannot be refurbished**.

SRG Schutz + Rackow Gastechnik GmbH / D-34475 Gladenbach
reserves the right to change at any time designs, materials or specifications without notice
for more information contact: +49 8462 9392-0 or info@srgrackow.com