

Capacitive Sensors

ROUND CATALOG



CE

Every product from the company Rechner Sensors bears the CE mark according to EU regulation 765/2008.

RECHNER

SENSORS

Edition

Jun 2022



Devices that are RoHS compliant are devices that comply with the EU Directive 2011/65 / EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment



ATEX is the abbreviation for "ATmosphère EXplosive". ATEX certified devices are certified according to the ATEX product directive 2014/34/EU and the European standards for **explosion protection**.



Devices certified according to IECEx can be used internationally in explosive-endangered areas.

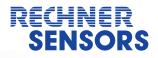


ETL Listed is a **security seal** of approval for the **North American** market. These devices are tested, certified and produced in accordance with UL / CSA safety standards and requirements.



Sensors with this logo are allowed to come into **contact with food** according to the Regulation (EC) No. 1935/2004.

2





The EHEDG certification is based on **hygienic construction and design**, as well as materials to guarantee the hygienic handling and processing of food and thereby supports the EC **food guidelines**.



IO-Link is the first globally standardized **IO technology** for communicating with sensors and actuators. IO-Link is the evolutionary further development of the previous, tried and tested connection technology for sensors and actuators.



Within the **United Kingdom**, the **UKCA marking** is **mandatory** for technical products. The marking must be checked by the **manufacture**r and/ or a **named body** based in the UK for compliance with the relevant regulations. After testing, a **declaration of conformity** is issued.



The **China Compulsory Certificate** (CCC) is a **certification system** for the **standardisation** of product quality for equipment placed on the market in **China**. Certification by Chinese certifiers is mandatory for equipment in potentially **explosive atmospheres**.



The Water Resources Protection Act (WHG) regulates the protection and use of groundwater and surface waters, e.g. rivers, lakes, seas, etc. It is a german national law.



Safety Integrity Level, SIL for short, is defined in the field of functional safety and in international standardization in accordance with IEC 61508, especially for process plants according to IEC6151, the **safety level** or the **safety integrity level**.

In this case, the requirements refer to safety requirement level 2.

TABLE OF CONTENTS

RECHNER

Page 5 Series introduction

Page 6-7 A well-rounded thing

Page 8 Bestseller Food Grade

Page 9 Bestseller ATEX - ALL in ONE

Page 10 Bestseller ATEX - NAMUR

Page 11 Bestseller WHG - SIL -IO-LINK

4

SUPERIOR SERIES

Capacitive sensors - Series 40 - NAMUR

The 40 series includes capacitive sensors in two-wire version according to NAMUR DIN 60947-5-6, also in Ex version for use in zone 20 (dust explosion protection) / zone 0 (gas explosion protection). The sensors can be installed in hazardous areas if approved isolating amplifiers with intrinsically safe control circuits [Exia] or [Exib] of our N-132 series are connected. The 2-wire analog sensors of this series are certified for Zone 20 / Zone 0.

Capacitive sensors - Series 70 (NPN) / Series 80 (PNP)

Series 70 and Series 80 include capacitive sensors in three- and four-wire versions with switching output NPN (70) and PNP (80) in normally open, normally closed or antivalent function. Electronic circuits, PLCs, relays and our 130 series of power supplies can be connected directly. The sensors are reverse polarity protected, overload proof and designed with permanent short circuit protection. Ex versions for use in zone 20 (dust explosion protection) and zone 1 (gas explosion protection) with ATEX and IECEx approval, sensors for continuous temperatures up to +100 °C are available.

Capacitive sensors - Series 801 - LevelMaster PNP XS

The 801 series includes capacitive sensors in three versions with switching output in normally open, normally closed or analog function. Electronic circuits, PLCs, relays, and our series 130 power supplies can be connected directly. The sensors are reverse polarity protected, overload proof and designed with permanent short circuit protection. Sensors for continuous temperatures up to +160 °C as well as for media to be detected with very high conductivity complete the application ranges of the standard versions.



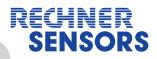
SERIES 26 - A 2 THING! Material **Pressure load Chemical resistance FDA** Abrasion resistance PTFE 3 bar excellent 21 CFR 177.1550 moderate PEEK 21 CFR 177.2415 10 bar excellent excellent 80-26/102-A-G1/2PER o. D6F/529895 SHOSNE RECHNE SENSO # KA1469

Industries

- Semiconductor Technology
- Chemical industry
- Food industry

Applications

- Bulk materials, such as granules, powder, grain
- Liquids, such as water, oil, chemically aggressive media
- Pasty substances, e.g. glues, resins, adhesives
 - 7



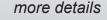
FOOD GRADE



OVERVIEW

- Process connection: G 1/2
- Body material: PEEK (FDA 21 CFR 177.2415)
- SIP / CIP 121° C
- · Ideal for level monitoring in the food industry
- Food Grade
- EHEDG-C2000020 (EL Class I)

KA1244



KAS-80-26/105-A-G1/2-PEEK-FG-Z02-1-HP







OVERVIEW

- Process connection: G 1/2"
- · Body materials:
- PEEK (FDA 21 CFR 177.2415)
- stainless steel no. 1.4305 AISI 303
- SIP / CIP 121° C
- · Ideal for level control in the food or
- · pharmaceutical industry
- Remote adjustment via Easy Teach by Wire
- · EHEDG compliant assembly
- Food Grade

more details

KA1700

KS-801-26/86-S-G1/2-PEEK/VAb-FG-Y3-ETW-HP











CE

Rolls

OVERVIEW

- Process connection: G 1"
- Housing material PTFE (FDA 21 CFR 177.1550)

PTFF

FDA 21 CFR 177.1550

SIP / CIP 121° C

8

- · For chemically aggressive products
- · Remote adjustment via Easy Teach by Wire
- Food Grade
- Ex II 2G Ex mb IIC T4 Gb
- Ex II 1/2 D Ex ta/tb IIIC T101°C DA/Db

PTFE

EC 1935/2004

KA1686 KAS-80-26/113-A-G1-PTFE-FG-Z03-ETW-HP-2G-1/2D

IFC





ATEX - ALL IN ONE



OVERVIEW

- Process connection: G 1/2"
- Body material: PEEK (FDA 21 CFR 177.2415)
- SIP / CIP 121° C
- · Remote adjustment via Easy Teach by Wire
- No isolation amplifier necessary
- Ex II 2G Ex mb IIC T4 Gb
- Ex II 1/2 D Ex ta/tb IIIC T101°C DA/Db

KA1685 KAS-80-26/105-A-G1/2-PEEK-FG-Z03-ETW-HP-2G-1/2D

more details

RECHNER SENSORS





OVERVIEW

- Process connection: G 1/2"
- Body material: PEEK (FDA 21 CFR 177.2415)
- SIP / CIP 121° C
- No isolation amplifier necessary

PEEK

FDA 21 CFR 177.2415

- Ex II 2G Ex mb IIC T4 Gb
- Ex II 1/2 D Ex ta/tb IIIC T101°C DA/Db

KA1409 KAS-80-26/160-A-G1/2-PEEK-Z03-1-HP-2G-1/2D





KA0264 KAS-80-26/113-A-G1-PTFE-Z03-1-HP-2G-1/2D

OVERVIEW

- Process connection: G 1"
- Housing material: PTFE (FDA 21 CFR 177.1550)
- SIP / CIP 121° C

9

- No isolation amplifier necessary
- Ex II 2G Ex mb IIC T4 Gb
- Ex II 1/2 D Ex ta/tb IIIC T101°C DA/Db

more details







ATEX - NAMUR



OVERVIEW

- Process connection: G 1"
- Housing material: PTFE (FDA 21 CFR 177.1550)
- SIP / CIP 121 °C
- Ex II 1G Ex ia IIC T1-T6 Ga
- Ex II 1D Ex ia IIIC T101°C Da



more details







OVERVIEW

- Process connection: G 1"
- Housing material: PTFE (FDA 21 CFR 177.1550)
- SIP / CIP 121 °C
- Ex II 1G Ex ia IIC T1-T6 Ga
- Ex II 1D Ex ia IIIC T101°C Da

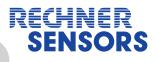




more details



WHG - SIL - IO-LINK





813100 KAS-80-26/113-A-G1-PTFE-Z02-1-HP

OVERVIEW

- Process connection: G 1"
- Housing material: PTFE (FDA 21 CFR 177.1550)
- SIP / CIP 121 °C
- WHG:

Overfill protection (Z-65.13-572) Leakage control (Z-65.13-573)

more details





OVERVIEW

- Process connection: G 1/2"
- Body material: PEEK (FDA 21 CFR 177.2415)
- SIP / CIP 121 °C
- SIL 2
- Ex II 1G Ex ia IIC T1-T6 Ga
- Ex II 1D Ex ia IIIC T101°C Da





OVERVIEW

- Process connection: G 1"
- Housing material: PTFE (FDA 21 CFR 177.1550)
- SIP / CIP 121 °C

11

- Remote adjustment via Easy Teach by Wire
- IO-Link

more details



Customer support guaranteed!

RECHNER SENSORS

GERMANY

Rechner Industrie Elektronik GmbH 6-10 Gaußstraße 68623 Lampertheim

Tel. +49 6206 500 70 info@rechner-sensors.de

CANADA

Rechner Automation Inc 348 Bronte St. South - Unit 11 Milton, ON L9T 5B6

Tel. +1 905 636 0866 contact@rechner.com www.rechner.com

GREAT BRITAIN

Rechner (UK) Limited 5 Theale Lakes Business Park Moulden Way Sulhamstead, Reading Berkshire, RG7 4GB

Tel. +44 118 976 6450 info@rechner-sensors.co.uk

ITALY

Rechner Italia SRL Via Isarco 3 39100 Bolzano (BZ) Office: Via Dell'Arcoveggio 49/5 40129 Bologna

Tel. +39 051 0015498 vendite@rechneritalia.it

USA

Rechner Electronics Ind. Inc. 6311 Inducon Corporate Drive, Suite 5 Sanborn, NY. 14132

Tel. +1 800 544 4106 contact@rechner.com www.rechner.com

KOREA (SOUTH)

Rechner-Korea Co. Ltd. A-1408 Ho, Keumgang Penterium IT Tower, Hakeuiro 282, Dongan-gu Anyang City, Gyunggi-do, Seoul

Tel. +82 31 422 8331 sensor@rechner.co.kr www.rechner.co.kr

CHINA

Suzhou Rechner Sensors Co. Ltd. Building Controlway, No.585, Maxia Road Wuzhong District Suzhou 215124

Tel. +8651267242858







For all transactions, the newest version of the "General Conditions of Sale and Delivery for Products and Services of the Electrical Industry ZVEI" shall apply, along with the supplementary conditions "extended reservation of proprietary rights", together with the supplements listed on our order confirmations and/or invoices.All specifications are subject to change without notice. Reproduction of this document, even in part, is only permissible by the consent of Rechner Industrie Elektronik GmbH.

© RECHNER Germany 06/2022 EN - Printed in EU, all rights reserved.