

Order code	Gas	Symbol	Range	Resolution	Converterbox
CA-S-CO-XX50	Carbon Monoxide	CO	0-50 ppm	1 ppm	CONV-PC193
GCA-S-CO-X100	Carbon Monoxide	CO	0-100 ppm	1 ppm	CONV-PC193
GCA-S-CO-X500	Carbon Monoxide	CO	0-500 ppm	1 ppm	CONV-PC193
GCA-S-CO-1000	Carbon Monoxide	CO	0-1000 ppm	<12 ppm	CONV-PC193
CCA-S-CO2-X2	Carbon Dioxide	CO <sub>2</sub>	0-2 %Vol	0.10 %	CONV-PC190
CCA-S-CO2-X5	Carbon Dioxide	CO <sub>2</sub>	0-5 %Vol	0.10 %	CONV-PC190
CCA-S-CO2-100	Carbon Dioxide	CO <sub>2</sub>	0-100 %Vol	1 %Vol	CONV-PC190
GCA-S-ETO-XX20	Ethylene Oxide	ETO	0-20 ppm	0.1 ppm	CONV-PC193
GCA-S-ETO-X100	Ethylene Oxide	ETO	0-100 ppm	1 ppm	CONV-PC193
GCA-S-H2-1000	Hydrogen	H <sub>2</sub>	0-1000 ppm	2 ppm	CONV-PC193
GCA-S-H2-X100	Hydrogen	H <sub>2</sub>	0-100 %Vol	1 %Vol	CONV-PC193
GCA-S-H2S-XX50	Hydrogen Sulfide	H <sub>2</sub> S	0-50 ppm	1 ppm	CONV-PC193
GCA-S-H2S-X100	Hydrogen Sulfide	H <sub>2</sub> S	0-100 ppm	1 ppm	CONV-PC193
GCA-S-H2S-X100	Hydrogen Sulfide	H <sub>2</sub> S	0-200 ppm	1 ppm	CONV-PC193
GCA-S-HCL-XX30	Hydrogen Chloride	HCL	0-30 ppm	1 ppm	CONV-PC193
GCA-S-HCN-XX30	Hydrogen Cyanide	HCN	0-30 ppm	1 ppm	CONV-PC193
GCA-S-NH3-X100	Ammonia	NH <sub>3</sub>	0-100 ppm	1 ppm	CONV-PC193
GCA-S-NH3-1000	Ammonia	NH <sub>3</sub>	0-1000 ppm	<12 ppm	CONV-PC193
GCA-S-LEL-100	Methane IR	LEL	0-100 %Vol	1 %Vol	CONV-PC190
GCA-S-LEL1-100	Combustible Gas IR	LEL	0-100 %LEL	1 %LEL	CONV-PC190
GCA-S-LEL2-100	Combustible Gas Cat Bead	LEL	0-100 %LEL	1 %LEL	CONV-PC194
GCA-S-NO-X100	Nitric Oxide	NO	0-100 ppm	1 ppm	CONV-PC193
GCA-S-N2O-XXX1000	Nitrous Oxide	N <sub>2</sub> O	0-1000 ppm	20 ppm	CONV-PC190
GCA-S-N2O-XXX1	Nitrous Oxide	N <sub>2</sub> O	0-1 %Vol	0.01 %	CONV-PC190
GCA-S-O2-XX21	Oxygen	O <sub>2</sub>	0-21 %Vol	0.1 %Vol	CONV-PC192
GCA-S-SO2-XX20	Sulphur Dioxide	SO <sub>2</sub>	0-20 ppm	0.1 ppm	CONV-PC193
GCA-S-VOC-XX20	Volatile Organic Compounds	VOC	0-20 ppm	0.1 ppm	CONV-PC193

## 8 DELIVERED

### GCA-S-xxxxx:

- Gas probe
- Calibration certificate

### GCA-S-xxxxx-SET:

- Gas probe
- Calibration certificate
- Converter box
- Power supply

Die Fühler werden vor der Auslieferung ab Werk justiert. Für höchste Genauigkeit empfiehlt ROTRONIC eine jährliche Kalibrierung des Geräts.

## 7 TECHNISCHE SPEZIFIKATIONEN

Bestell-Code	Gas	Symbol	Bereich	Auflösung	Konverterbox
CA-S-CO-XX50	Kohlenmonoxid	CO	0-50 ppm	1 ppm	CONV-PC193
GCA-S-CO-X100	Kohlenmonoxid	CO	0-100 ppm	1 ppm	CONV-PC193
GCA-S-CO-X500	Kohlenmonoxid	CO	0-500 ppm	1 ppm	CONV-PC193
GCA-S-CO-1000	Kohlenmonoxid	CO	0-1000 ppm	<12 ppm	CONV-PC193
CCA-S-CO2-X2	Kohlendioxid	CO <sub>2</sub>	0-2 %Vol	0,10 %	CONV-PC190
CCA-S-CO2-X5	Kohlendioxid	CO <sub>2</sub>	0-5 %Vol	0,10 %	CONV-PC190
CCA-S-CO2-100	Kohlendioxid	CO <sub>2</sub>	0-100 %Vol	1 %Vol	CONV-PC190
GCA-S-ETO-XX20	Ethylenoxid	ETO	0-20 ppm	0,1 ppm	CONV-PC193
GCA-S-ETO-X100	Ethylenoxid	ETO	0-100 ppm	1 ppm	CONV-PC193
GCA-S-H2-1000	Wasserstoff	H <sub>2</sub>	0-1000 ppm	2 ppm	CONV-PC193
GCA-S-H2-X100	Wasserstoff	H <sub>2</sub>	0-100 %Vol	1 %Vol	CONV-PC193
GCA-S-H2S-XX50	Schwefelwasserstoff	H <sub>2</sub> S	0-50 ppm	1 ppm	CONV-PC193
GCA-S-H2S-X100	Schwefelwasserstoff	H <sub>2</sub> S	0-100 ppm	1 ppm	CONV-PC193
GCA-S-H2S-X100	Schwefelwasserstoff	H <sub>2</sub> S	0-200 ppm	1 ppm	CONV-PC193
GCA-S-HCL-XX30	Chlorwasserstoff	HCL	0-30 ppm	1 ppm	CONV-PC193
GCA-S-HCN-XX30	Cyanwasserstoff	HCN	0-30 ppm	1 ppm	CONV-PC193
GCA-S-NH3-X100	Ammoniak	NH <sub>3</sub>	0-100 ppm	1 ppm	CONV-PC193
GCA-S-NH3-1000	Ammoniak	NH <sub>3</sub>	0-1000 ppm	<12 ppm	CONV-PC193
GCA-S-LEL-100	Methan IR	UEG	0-100 %Vol	1 %Vol	CONV-PC190
GCA-S-LEL1-100	Brennbares IR-Gas	UEG	0-100 %UEG	1 %UEG	CONV-PC190
GCA-S-LEL2-100	Brennbares Schweißgas	UEG	0-100 %UEG	1 %UEG	CONV-PC194
GCA-S-NO-X100	Stickstoffmonoxid	NO	0-100 ppm	1 ppm	CONV-PC193
GCA-S-O2-XX21	Sauerstoff	O <sub>2</sub>	0-21 %Vol	0,1 %Vol	CONV-PC192
GCA-S-N2O-XXX1000	Distickstoffmonoxid	N <sub>2</sub> O	0-1000 ppm	20 ppm	CONV-PC190
GCA-S-N2O-XXX1	Distickstoffmonoxid	N <sub>2</sub> O	0-1 %Vol	0.01 %	CONV-PC190
GCA-S-SO2-XX20	Schwefeldioxid	SO <sub>2</sub>	0-20 ppm	0,1 ppm	CONV-PC193
GCA-S-VOC-XX20	Flüchtige organische Verbindungen	VOC	0-20 ppm	0,1 ppm	CONV-PC193

## 8 LIEFERUMFANG

### GCA-S-xxxxx:

- Gasfühler
- Kalibrierzertifikat

### GCA-S-xxxxx-SET:

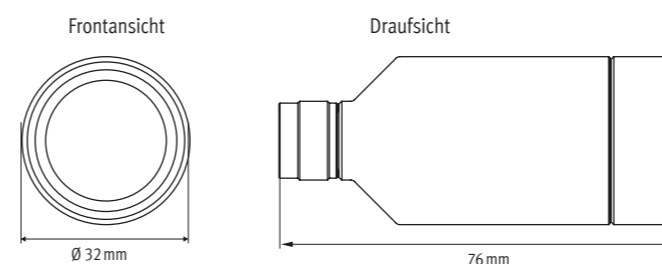
- Gasfühler
- Kalibrierzertifikat
- Konverterbox
- Spannungsversorgung

## 1 ALLGEMEINE BESCHREIBUNG

Herzlichen Glückwunsch zum Kauf Ihres Gasfühlers. Bitte lesen Sie diese Anleitung genau durch, bevor Sie das Gerät installieren. Das vorliegende Dokument beschränkt sich auf die Beschreibung der Hauptfunktionen und die Installation des Geräts. Weiterführende Unterlagen finden Sie im Internet unter: [www.rotronic.com](http://www.rotronic.com)



## 2 ABMESSUNGEN / ANSCHLÜSSE



## 3 INSTALLATION UND EINRICHTUNG

Die Installation des GCA-Fühlers kann auf zwei verschiedene Arten erfolgen:

1. Nur GCA-S-xxxxx-Fühler: Zur Stromversorgung und zur Auslesung der analogen Gerätesignale wird ein Kabel (E2-01XX) benötigt. Achten Sie beim Anschluss des E2-01XX-Kabels auf die korrekte Ausrichtung der Klinken. Ziehen Sie die Rändelmutter von Hand fest.
2. CCA-S-xxxxx-SET-Fühler und Konverterbox: Achten Sie beim Anschluss des GCA-S-xxxxx-Fühlers an das Kabel der Konverterbox auf die korrekte Ausrichtung der Klinken. Ziehen Sie die Rändelmutter von Hand fest. Die Stromversorgung des Fühlers erfolgt über die Spannungsversorgung der im Set enthaltenen Konverterbox. Verbinden Sie die Spannungsversorgung mit dem elektrischen Netzanschluss.

## 4 PLATZIERUNG DES CO<sub>2</sub>-FÜHLERS

Suchen Sie nach einem repräsentativen Ort für die Messung. Vermeiden Sie störende Einflüsse wie Sonneneinstrahlung, Heizelemente, etc. Der Sensor kann einfach an den Datenlogger oder mit Hilfe eines bis zu 5 m langen E2-XXA-Verlängerungskabels angeschlossen werden. Zudem ist für den Fühler die Wandhalterung AC1322 erhältlich.

## 5 EINBINDUNG DES GASFÜHLERS IN RMS

**Achtung!** Das GCA-S-xxxxx-SET kann nur mit den Datenloggern RMS-MADC-868/915-A oder RMS-ADC-L-R in das RMS eingebunden werden. Die Anleitung zur Einbindung des Datenloggers in RMS finden Sie in der entsprechenden Kurzbedienungsanleitung.

Das GCA-S-xxxxx-SET bietet einen 4...20-mA-Ausgang. Verkabelung des 4...20-mA-Ausgangs:

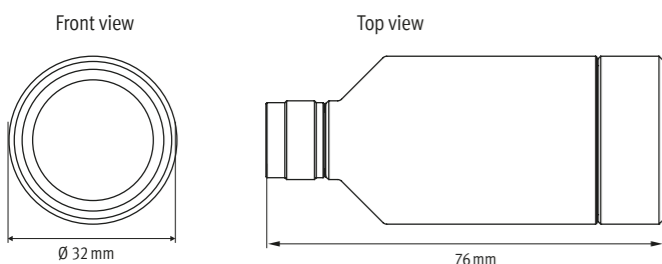
- Blau: Minus (-)
- Braun: Plus (+)

## 1 GENERAL DESCRIPTION

Congratulations on your purchase of your gas probe. Please read these short instructions carefully before installing the device. This document is limited to a description of the main functions and installation of the device. Further documents can be found on the internet at: [www.rotronic.com](http://www.rotronic.com)



## 2 DIMENSIONS / CONNECTIONS



## 3 INSTALLATION AND SETTING

The installation of the GCA can be carried out in two ways:

1. **GCA-S-xxxxx probe only:** a cable is required (E2-01XX) to power and read out the analog signals from the device. When connecting to the E2-01XX cable, make sure that the catches are aligned correctly. Tighten the knurled nut by hand.
2. **GCA-S-xxxxx-SET probe and converter box:** When connecting the GCA-S-xxxxx probe to the cable from the converter box, make sure that the catches are aligned correctly. Tighten the knurled nut by hand. Power the probe via the converter box with the power supply delivered with the set. Plug the power supply into the mains connection.

## 4 POSITIONING OF THE CO<sub>2</sub>-PROBE

Look for a representative place for the measurement. Avoid interfering influences such as sunlight, heating elements, etc. The sensor can be easily connected to the data logger or can be connected with an extension cable E2-XXA up to 5 m. It is possible to purchase a wall-mounted holder AC1322 for the probe.

## 5 INTEGRATION OF THE GAS-PROBE INTO RMS

**Attention!** The GCA-S-xxxxx-SET can only be integrated into RMS with the RMS-MADC-868/915-A or the RMS-ADC-L-R data loggers. Please see the respective short user manual to add the data logger to RMS.

The GCA-S-xxxxx-SET offers a 4...20 mA output. The cabling for the 4...20 mA output:

- Blue: negative (-)
- Brown: positive (+)

## 6 ADJUSTMENT / CALIBRATION

The probes are adjusted in our factory before delivery. For maximum accuracy, Rotronic recommends an annual calibration of the probes.

# CAPTEUR DE GAZ GCA

Manuel abrégé

## 6 AJUSTAGE ET ÉTALONNAGE

Les capteurs sont ajustés en usine avant leur livraison. Rotronic conseille un étalonnage annuel de l'appareil pour une précision optimale.

## 7 SPÉCIFICATIONS TECHNIQUES

Code de commande	Gaz	Symbole	Gamme	Résolution	Boîtier de conversion
CA-S-CO-XX50	Monoxyde de carbone	CO	0-50 ppm	1 ppm	CONV-PC193
GCA-S-CO-X100	Monoxyde de carbone	CO	0-100 ppm	1 ppm	CONV-PC193
GCA-S-CO-X500	Monoxyde de carbone	CO	0-500 ppm	1 ppm	CONV-PC193
GCA-S-CO-1000	Monoxyde de carbone	CO	0-1000 ppm	<12 ppm	CONV-PC193
CCA-S-CO2-X2	Dioxyde de carbone	CO <sub>2</sub>	0-2 %Vol	0,10 %	CONV-PC190
CCA-S-CO2-X5	Dioxyde de carbone	CO <sub>2</sub>	0-5 %Vol	0,10 %	CONV-PC190
CCA-S-CO2-100	Dioxyde de carbone	CO <sub>2</sub>	0-100 %Vol	1 %Vol	CONV-PC190
GCA-S-ETO-XX20	Oxyde d'éthylène	ETO	0-20 ppm	0,1 ppm	CONV-PC193
GCA-S-ETO-X100	Oxyde d'éthylène	ETO	0-100 ppm	1 ppm	CONV-PC193
GCA-S-H2-1000	Hydrogène	H <sub>2</sub>	0-1000 ppm	2 ppm	CONV-PC193
GCA-S-H2-X100	Hydrogène	H <sub>2</sub>	0-100 %Vol	1 %Vol	CONV-PC193
GCA-S-H2S-XX50	Sulfure d'hydrogène	H <sub>2</sub> S	0-50 ppm	1 ppm	CONV-PC193
GCA-S-H2S-X100	Sulfure d'hydrogène	H <sub>2</sub> S	0-100 ppm	1 ppm	CONV-PC193
GCA-S-H2S-X100	Sulfure d'hydrogène	H <sub>2</sub> S	0-200 ppm	1 ppm	CONV-PC193
GCA-S-HCL-XX30	Chlorure d'hydrogène	HCl	0-30 ppm	1 ppm	CONV-PC193
GCA-S-HCN-XX30	Cyanure d'hydrogène	HCN	0-30 ppm	1 ppm	CONV-PC193
GCA-S-NH3-X100	Ammoniaque	NH <sub>3</sub>	0-100 ppm	1 ppm	CONV-PC193
GCA-S-NH3-1000	Ammoniaque	NH <sub>3</sub>	0-1000 ppm	<12 ppm	CONV-PC193
GCA-S-LEL-100	Méthane IR	LIE	0-100 %Vol	1 %Vol	CONV-PC190
GCA-S-LEL1-100	Gaz inflammables IR	LIE	0-100 %LIE	1 %LIE	CONV-PC190
GCA-S-LEL2-100	Gaz de soudure inflammable	LIE	0-100 %LIE	1 %LIE	CONV-PC194
GCA-S-NO-X100	Monoxyde d'azote	NO	0-100 ppm	1 ppm	CONV-PC193
GCA-S-O2-XX21	Oxygène	O <sub>2</sub>	0-21 %Vol	0,1 %Vol	CONV-PC192
GCA-S-N2O-XXX1000	Protoxyde d'azote	N <sub>2</sub> O	0-1000 ppm	20 ppm	CONV-PC190
GCA-S-N2O-XXX1	Protoxyde d'azote	N <sub>2</sub> O	0-1% Vol	0,01 %	CONV-PC190
GCA-S-SO2-XX20	Dioxyde de soufre	SO <sub>2</sub>	0-20 ppm	0,1 ppm	CONV-PC193
GCA-S-VOC-XX20	Composés organiques volatils	VOC	0-20 ppm	0,1 ppm	CONV-PC193

## 8 FOURNITURES

### GCA-S-xxxx:

- Capteur de gaz
- Certificat d'étalonnage

### GCA-S-xxxx-SET:

- Capteur de gaz
- Certificat d'étalonnage
- Boîtier de conversion
- Tension d'alimentation

# SONDA PER GAS GCA

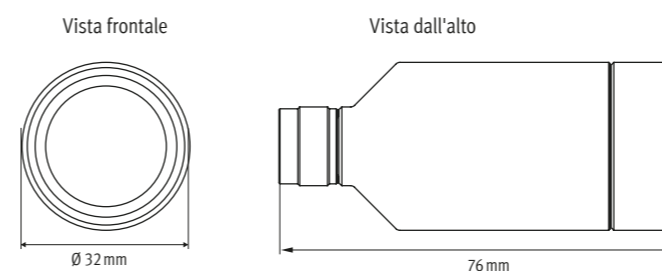
Manuale di istruzioni breve

## 1 DESCRIZIONE GENERALE

Congratulazioni per l'acquisto della sonda per gas. Prima di installare il dispositivo, vi preghiamo di leggere attentamente queste brevi istruzioni. Il presente documento si limita a descrivere le principali funzioni e le modalità di installazione del dispositivo. Per ulteriori documenti consultate il sito Internet: [www.rotronic.com](http://www.rotronic.com)



## 2 DIMENSIONI / CONNESSIONI



## 3 INSTALLAZIONE ED IMPOSTAZIONE

L'installazione della sonda GCA può essere effettuata in due modi:

1. Solo sonda GCA-S-xxxx: è necessario un cavo (E2-01XX) per alimentare e leggere i segnali analogici provenienti dal dispositivo. Effettuando il collegamento al cavo E2-01XX, assicurarsi che gli arresti siano allineati correttamente. Serrare a mano il dado zigrinato.
2. GCA-S-xxxx-SET sonda e box convertitore: collegando la sonda GCA-S-xxxx al cavo dal box convertitore, assicurarsi che gli arresti siano allineati correttamente. Serrare a mano il dado zigrinato. Alimentare la sonda attraverso il box convertitore con l'alimentatore fornito insieme al set. Inserire l'alimentatore nel connettore di rete.

## 4 POSIZIONAMENTO DELLA SONDA PER CO2

Cercare un punto rappresentativo per la misurazione. Evitare sorgenti di disturbo come luce solare, radiatori, ecc. Il sensore può essere semplicemente collegato al data logger oppure può essere collegato con un cavo di prolunga E2-XXA fino a 5 m. È possibile acquistare un supporto AC1322 per il montaggio a parete della sonda.

## 5 INTEGRAZIONE DELLA SONDA PER GAS NEL SISTEMA RMS

**Attenzione!** Il GCA-S-xxxx-SET può essere integrato nel sistema RMS solo con i data logger RMS-MADC-868/915-A o RMS-ADC-L-R. Fare riferimento al rispettivo manuale dell'utente breve per aggiungere il data logger al sistema RMS.

Il GCA-S-xxxx-SET offre un'uscita 4...20 mA. Cablaggio per l'uscita 4...20 mA:

- Blu: negativo (-)
- Marrone: positivo (+)

## 6 REGOLAZIONE / CALIBRAZIONE

Le sonde vengono regolate presso la nostra fabbrica prima della consegna. Per ottenere la massima accuratezza, Rotronic raccomanda di effettuare la calibrazione delle sonde a cadenza annuale.

## 7 SPECIFICHE TECNICHE

Codice d'ordine	Gas	Simbolo	Range	Risoluzione	Box convertitore
CA-S-CO-XX50	Monossido di carbonio	CO	0-50 ppm	1 ppm	CONV-PC193
GCA-S-CO-X100	Monossido di carbonio	CO	0-100 ppm	1 ppm	CONV-PC193
GCA-S-CO-X500	Monossido di carbonio	CO	0-500 ppm	1 ppm	CONV-PC193
GCA-S-CO-1000	Monossido di carbonio	CO	0-1000 ppm	<12 ppm	CONV-PC193
CCA-S-CO2-X2	Anidride carbonica	CO <sub>2</sub>	0-2 %Vol	0,10%	CONV-PC190
CCA-S-CO2-X5	Anidride carbonica	CO <sub>2</sub>	0-5 %Vol	0,10%	CONV-PC190
CCA-S-CO2-100	Anidride carbonica	CO <sub>2</sub>	0-100 %Vol	1 %Vol	CONV-PC190
GCA-S-ETO-XX20	Ossido di etilene	ETO	0-20 ppm	0,1 ppm	CONV-PC193
GCA-S-ETO-X100	Ossido di etilene	ETO	0-100 ppm	1 ppm	CONV-PC193
GCA-S-H2-1000	Idrogeno	H <sub>2</sub>	0-1000 ppm	2 ppm	CONV-PC193
GCA-S-H2-X100	Idrogeno	H <sub>2</sub>	0-100 %Vol	1 %Vol	CONV-PC193
GCA-S-H2S-XX50	Acido solfidrico	H <sub>2</sub> S	0-50 ppm	1 ppm	CONV-PC193
GCA-S-H2S-X100	Acido solfidrico	H <sub>2</sub> S	0-100 ppm	1 ppm	CONV-PC193
GCA-S-H2S-X100	Acido solfidrico	H <sub>2</sub> S	0-200 ppm	1 ppm	CONV-PC193
GCA-S-HCL-XX30	Acido cloridrico	HCl	0-30 ppm	1 ppm	CONV-PC193
GCA-S-HCN-XX30	Acido cianidrico	HCN	0-30 ppm	1 ppm	CONV-PC193
GCA-S-NH3-X100	Ammoniacca	NH <sub>3</sub>	0-100 ppm	1 ppm	CONV-PC193
GCA-S-NH3-1000	Ammoniacca	NH <sub>3</sub>	0-1000 ppm	<12 ppm	CONV-PC193
GCA-S-LEL-100	Metano con sensore ad infrarossi	LEL	0-100 %Vol	1 %Vol	CONV-PC190
GCA-S-LEL1-100	Gas combustibile con sensore ad infrarossi	LEL	0-100% LEL	1% LEL	CONV-PC190
GCA-S-LEL2-100	Gas combustibile con sensore catalitico	LEL	0-100% LEL	1% LEL	CONV-PC194
GCA-S-NO-X100	Monossido di azoto	NO	0-100 ppm	1 ppm	CONV-PC193
GCA-S-N2O-XXX1000	Ossido di azoto	N <sub>2</sub> O	0-1000 ppm	20 ppm	CONV-PC190
GCA-S-N2O-XXX1	Ossido d'azoto	N <sub>2</sub> O	0-1% Vol	0,01 %	CONV-PC190
GCA-S-O2-XX21	Ossigeno	O <sub>2</sub>	0-21 %Vol	0,1 %Vol	CONV-PC192
GCA-S-SO2-XX20	Anidride solforosa	SO <sub>2</sub>	0-20 ppm	0,1 ppm	CONV-PC193
GCA-S-VOC-XX20	Composti organici volatili	COV	0-20 ppm	0,1 ppm	CONV-PC193

## 8 DOTAZIONE

### GCA-S-xxxx:

- Sonda per gas
- Certificato di taratura

### GCA-S-xxxx-SET:

- Sonda per gas
- Certificato di taratura
- Box convertitore
- Alimentatore