

TORK GA21-A EX PROOF GAS ALARM DEVICE

GA21-A series gas alarm devices are ATEX-certified devices developed for hazardous environments. They generate an analog output according to the concentration of LPG and Natural Gas detected in the environment.

TECHNICAL FEATURES

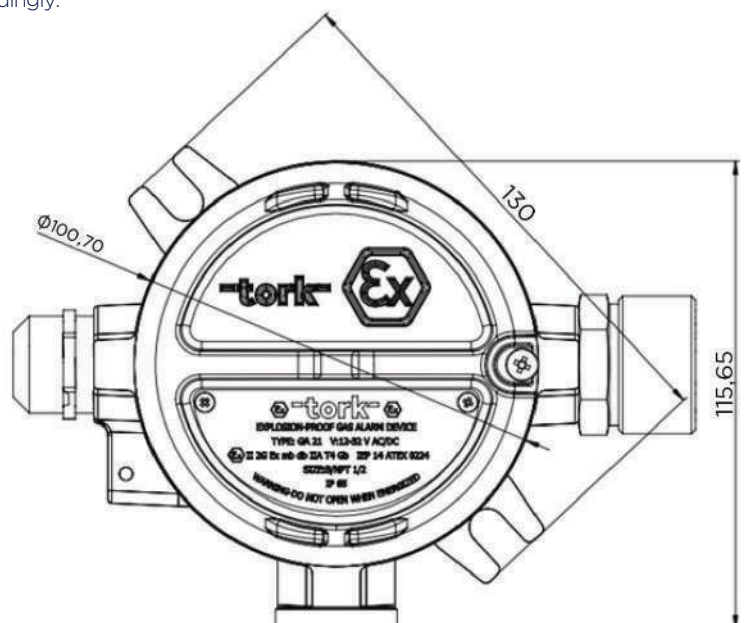
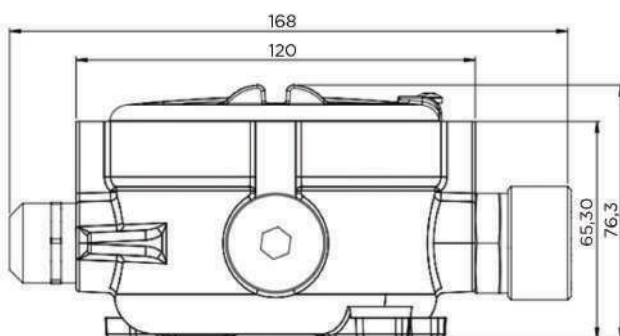
Sensor Type	: Semiconductor (5V) Catalytic
Detected Gases	: LPG, Natural Gas
Relay Output	: 7A 28VDC - 5A 240VAC
Signal Output	: 2-10mA, 4-20mA, 1-5V, 2-10V analog output signal
Response Time	: <15 sec
Precision	: %±2
Working Temperature	: -10°C ~ +50°C
Humidity	: 0 ~ 95%RH
Working Voltage	: 12 ~ 24V DC
Power Consumption	: Max.4 W
Audible Alarm	: Piezoelektrik Buzzer
Volume Level	: 85 dB
Body	: Epoxy die aluminium cast / Etial160
ATEX Classification	: II 2G Ex mb db IIA T4 GB
Cable Input Gland	: 2G Ex db mb IIA T4 Gb
Calibration Time	: 1,5 dakika
IP Protection	: IP65 Gövde/IP55(Sinter)
Dimensions / Weight	: 168x130x76,3mm / 850gr
Danger Zone Boundary	: Zone 1 veya Zone 2
Certificates	: (EN 60079-1:2014), (EN 60079-18:2015), (EN IEC 60079-0:2018)



WORKING PRINCIPLE

The GA21-A series gas alarm device detects flammable and explosive gases in the environment. The LPG and Natural Gas sensor starts warming up after the power supply is applied. The device reaches its normal detection level approximately 15 minutes after being energized. If the gas concentration in the environment exceeds the set threshold level, the relay is activated. Depending on the application, the relay can be used to activate a ventilation fan, close a gas valve, or operate another warning or safety system. The GA21-A series gas alarm devices are manufactured in compliance with IECEx standards and are certified for use in hazardous environments containing flammable and explosive gases. The industrial-standard 0-10 V and 4-20 mA analog outputs can be connected to PLC systems. By changing the sensor head, different gases can also be detected. If the supply voltage drops below 15 V for more than 1 minute, the buzzer sounds and the yellow LED flashes. If this condition continues for more than 1 minute, the gas leak level remains below the alarm threshold and the alarm condition is automatically reset. If it is desired for the alarm to remain active even after the gas concentration returns to normal, the output relay can be used accordingly.

SIZES



TORK GA21-B EX PROOF GAS ALARM DEVICE

GA21-B series gas alarm devices are ATEX-certified devices developed for hazardous environments. They detect Methane (CH₄) and Natural Gas, provide relay outputs, and generate analog output signals according to the gas concentration.

TECHNICAL FEATURES

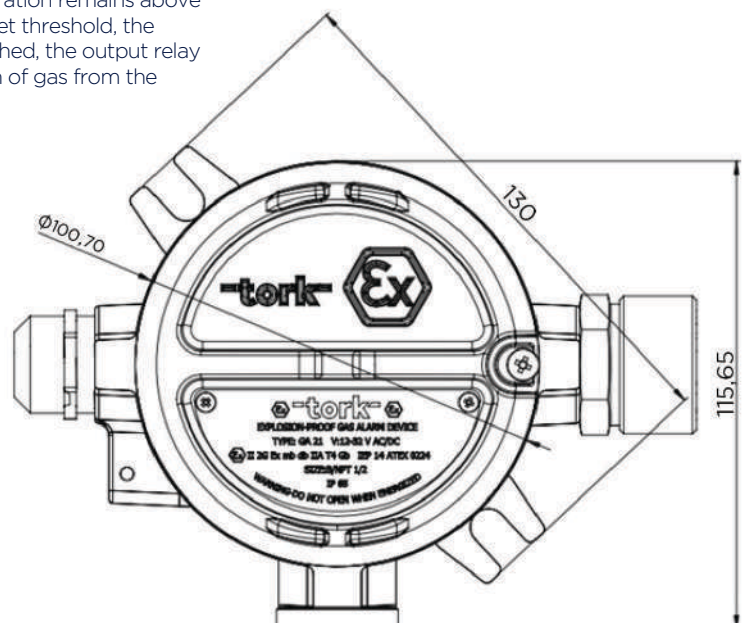
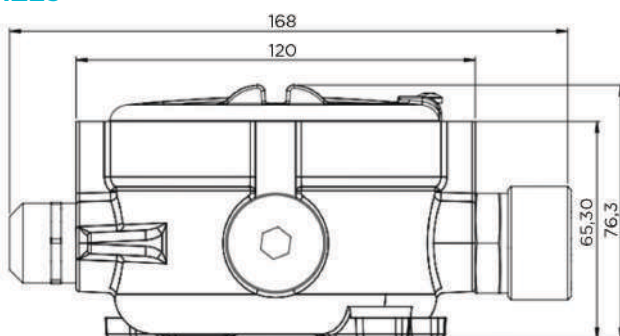
Sensor Type	: Semiconductor (5V) Catalytic
Detected Gases	: Methane (CH ₄), Natural Gas
Relay Output	: 7A 28VDC - 5A 240VAC
Signal Output	: 2-10mA, 4-20mA, 1-5V, 2-10V analog output signal
Response Time	: <15 sec
Precision	: %±2
Working Temperature	: -10°C ~ +50°C
Humidity	: 0 ~ 95%RH
Working Voltage	: 12 ~ 24V DC
Power Consumption	: Max.4 W
Audible Alarm	: Piezoelektrik Buzzer
Volume Level	: 85 dB
Body	: Epoxy die aluminium cast / Etial160
ATEX Classification	: II 2G Ex mb db IIA T4 GB
Cable Input Glandng	: 2G Ex db mb IIA T4 Gb
Calibration Time	: 1,5 dakika
IP Protection	: IP65 Gövde/IP55(Sinter)
Dimensions / Weight	: 168x130x76,3mm / 850gr
Danger Zone Boundary	: Zone 1 veya Zone 2
Certificates	: (EN 60079-1:2014), (EN 60079-18:2015), (EN IEC 60079-0:2018)



WORKING PRINCIPLE

GA21-B series gas alarm devices detect flammable and explosive gases in the environment. They are designed to continuously monitor Methane (CH₄) and Natural Gas concentrations below the Lower Explosive Limit (LEL). The devices are classified as II 2G and are designed for safe operation in hazardous areas classified as Zone 1 or Zone 2, with "db" protection. They can also be used in non-hazardous areas. GA21-B series gas alarm devices are manufactured in accordance with ATEX directives and IECEx standards. They use a catalytic sensor capable of detecting flammable and explosive gases. The devices generate industry-standard 4-20 mA, 2-10 mA, 2-10 V, 1-5 V analog output signals proportional to the detected gas concentration. These output signals can be connected to systems such as PLCs. After the supply voltage is applied, the sensor warms up for approximately 1.5 minutes to reach its normal detection level. It is not recommended to test the device with gas before this period has elapsed. If the gas concentration exceeds the preset alarm threshold, the device activates the audible alarm and continues to provide an alarm signal as long as the gas concentration remains above the threshold level. When the gas concentration falls below the preset threshold, the alarm automatically resets. If it is desired for the alarm to remain latched, the output relay can be used to control the closing of the gas valve or the evacuation of gas from the environment.

SIZES



TORK GA21-C EX PROOF GAS ALARM DEVICE

GA21-C series gas alarm devices are ATEX-certified devices developed for hazardous environments. They detect Alcohol vapour and generate analog output signals according to the gas concentration.

TECHNICAL FEATURES

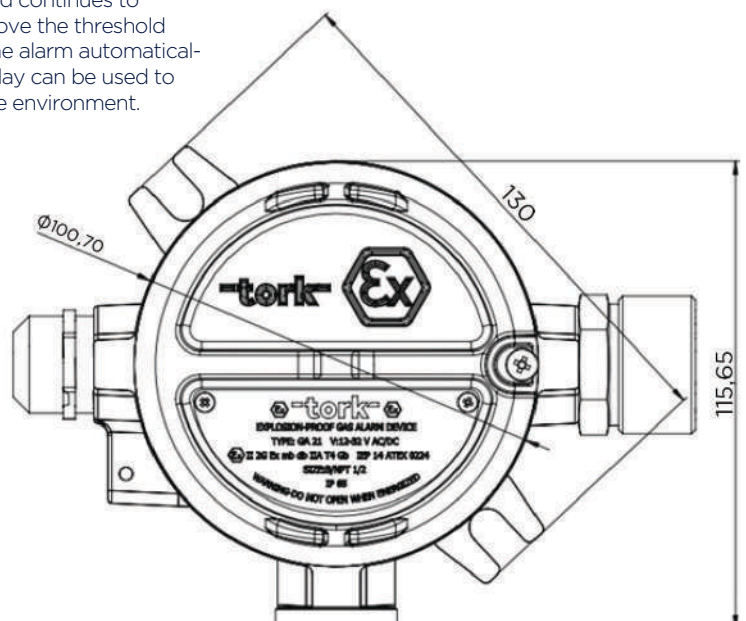
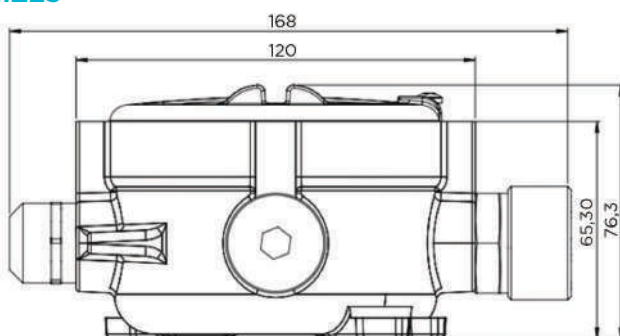
Sensor Type	: Semiconductor (5V) Catalytic
Detected Gases	: Alcohol
Relay Output	: 7A 28VDC - 5A 240VAC
Signal Output	: 2-10mA, 4-20mA, 1-5V, 2-10V analog output signal
Response Time	: <15 sec
Precision	: %±2
Working Temperature	: -10°C ~ +50°C
Humidity	: 0 ~ 95%RH
Working Voltage	: 12 ~ 24V DC
Power Consumption	: Max.4 W
Audible Alarm	: Piezoelektrik Buzzer
Volume Level	: 85 dB
Body	: Epoxy die aluminium cast / Etial160
ATEX Classification	: II 2G Ex mb db IIA T4 GB
Cable Input Glanding	: 2G Ex db mb IIA T4 Gb
Calibration Time	: 1,5 dakika
IP Protection	: IP65 Gövde/IP55(Sinter)
Dimensions / Weight	: 168x130x76,3mm / 850gr
Danger Zone Boundary	: Zone 1 veya Zone 2
Certificates	: (EN 60079-1:2014), (EN 60079-18:2015), (EN IEC 60079-0:2018)



WORKING PRINCIPLE

GA21-C series gas alarm devices detect flammable and explosive gases in the environment. They are designed to continuously monitor Alcohol concentration below the Lower Explosive Limit (LEL). The devices are classified as II 2G and are designed for safe operation in hazardous areas classified as Zone 1 or Zone 2, with "db" protection. They can also be used in non-hazardous areas. GA21-C series gas alarm devices are manufactured in accordance with ATEX directives and IECEx standards. They use a catalytic sensor capable of detecting flammable and explosive gases. The devices generate industry-standard 4-20 mA, 2-10 V and 1-5 V analog output signals proportional to the detected gas concentration. These output signals can be connected to systems such as PLCs. After the supply voltage is applied, the sensor warms up for approximately 15 minutes to reach its normal detection level. It is not recommended to test the device with gas before this period has elapsed. If the gas concentration exceeds the preset alarm threshold, the device activates the audible alarm and continues to provide an alarm signal as long as the gas concentration remains above the threshold level. When the gas concentration falls below the preset threshold, the alarm automatically resets. If it is desired for the alarm to remain latched, the output relay can be used to control the closing of the gas valve or the evacuation of gas from the environment.

SIZES



TORK GA21-D EX PROOF GAS ALARM DEVICE

GA21-D series gas alarm devices are ATEX-certified devices developed for hazardous environments. They detect flammable gases such as LPG, Butane (C4H10), Propane (C3H8), Methane (CH4), Alcohol and generate analog output signals according to the gas concentration.

TECHNICAL FEATURES

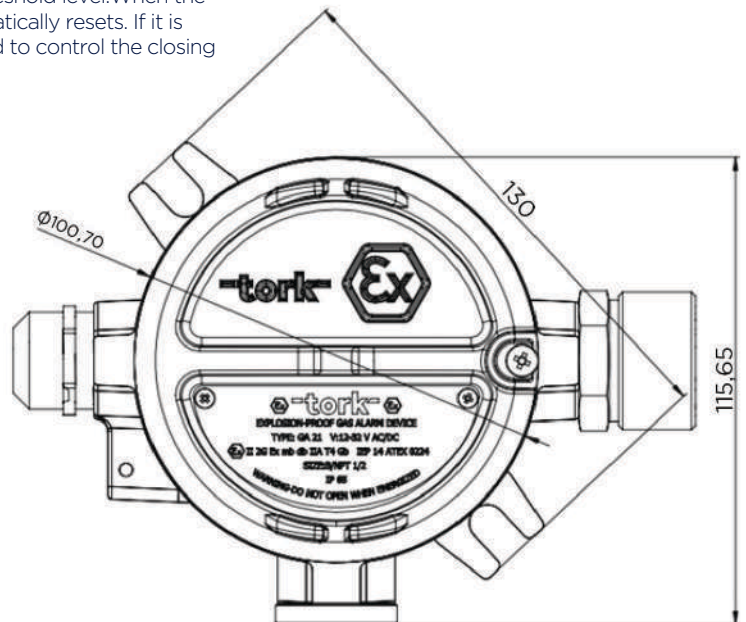
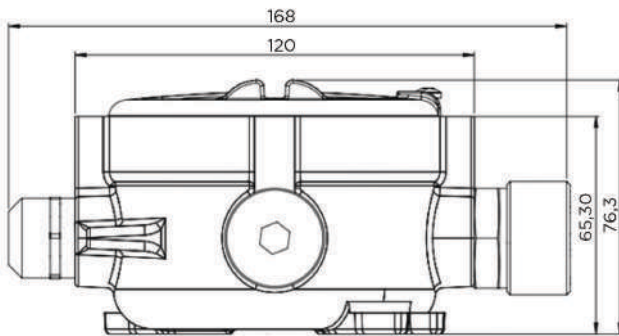
Sensor Type	: Semiconductor (5V) Catalytic
Detected Gases	: LPG, Butane (C4H10), Propane (C3H8), Methane (CH4), Alcohol,
Relay Output	: 7A 28VDC - 5A 240VAC
Signal Output	: 2-10mA, 4-20mA, 1-5V, 2-10V analog output signal
Response Time	: <15 sec
Precision	: %±2
Working Temperature	: -10°C ~ +50°C
Humidity	: 0 ~ 95%RH
Working Voltage	: 12 ~ 24V DC
Power Consumption	: Max.4 W
Audible Alarm	: Piezoelektrik Buzzer
Volume Level	: 85 dB
Body	: Epoxy die aluminium cast / Etial160
ATEX Classification	: II 2G Ex mb db IIA T4 GB
Cable Input Glanding	: 2G Ex db mb IIA T4 Gb
Calibration Time	: 1,5 dakika
IP Protection	: IP65 Gövde/IP55(Sinter)
Dimensions / Weight	: 168x130x76,3mm / 850gr
Danger Zone Boundary	: Zone 1 veya Zone 2
Certificates	: (EN 60079-1:2014), (EN 60079-18:2015), (EN IEC 60079-0:2018)



WORKING PRINCIPLE

GA21-D series gas alarm devices detect flammable and explosive gases in the environment. They are designed to continuously monitor LPG, Butane (C4H10), Propane (C3H8), Methane (CH4), Alcohol concentrations below the Lower Explosive Limit (LEL). The devices are classified as II 2G and are designed for safe operation in hazardous areas classified as Zone 1 or Zone 2, with "db" protection. They can also be used in non-hazardous areas. GA21-D series gas alarm devices are manufactured in accordance with ATEX directives and IECEx standards. They use a catalytic sensor capable of detecting flammable and explosive gases. The devices generate industry-standard 4-20 mA, 2-10 mA, 2-10 V and 1-5 V analog output signals proportional to the detected gas concentration. These output signals can be connected to systems such as PLCs. After the supply voltage is applied, the sensor warms up for approximately 1.5 minutes to reach its normal detection level. It is not recommended to test the device with gas before this period has elapsed. If the gas concentration exceeds the preset alarm threshold, the device activates the audible alarm and continues to provide an alarm signal as long as the gas concentration remains above the threshold level. When the gas concentration falls below the preset threshold, the alarm automatically resets. If it is desired for the alarm to remain latched, the output relay can be used to control the closing of the gas valve or the evacuation of gas from the environment.

ÖLÇÜLER



TORK GA21-E EX PROOF GAZ ALARM CİHAZI

GA21-E serisi gaz alarm cihazları, LPG, Bütan(C4H10), Propan(C3H8) gibi yanıcı gazları tespit eden ve gaz yoğunluğuna göre analog çıkış üreten ATEX ortamlar için geliştirilmiş cihazlardır.

TEKNİK ÖZELLİKLER

Sensör Tipi	: Yanı İletken (5V) Katalitik
Algılanan Gazlar	: LPG, Bütan(C4H10), Propan(C3H8)
Röle Çıkışları	: 7A 28VDC - 5A 240VAC
Sinyal Çıkışları	: 2-10mA, 4-20mA, 1-5V, 2-10V analog çıkış sinyali
Tepki süresi	: <15sn
Hassasiyet	: %±2
Çalışma Sıcaklığı	: -10°C ~ +50°C
Nem	: 0 ~ 95%RH
Çalışma Gerilimi	: 12 ~ 24V DC
Güç Tüketimi	: Max.4 W
Sesli Alarm	: Piezoelektrik Buzzer
Ses Seviyesi	: 85 dB
Gövde	: Epoksi Boyalı Alüminyum Döküm /Etial160
ATEX sınıflandırması	: II 2G Ex mb db IIA T4 GB
Kablo Giriş Rakoru	: 2G Ex db mb IIA T4 Gb
Kalibrasyon Süresi	: 1,5 dakika
IP Koruması	: IP65 Gövde/IP55(Sinter)
Boyutlar / Ağırlık	: 168x130x76,3mm / 850gr
Tehlikeli Alan Sınıfı	: Zone 1 veya Zone 2
Sertifikalar	: (EN 60079-1:2014), (EN 60079-18:2015), (EN IEC 60079-0:2018)



TEMEL BİLGİLER

GA21-E serisi gaz alarm cihazları, çevredeki yanıcı ve patlayıcı gazları tespit eden bir cihazdır. LPG, Bütan(C4H10), Propan(C3H8) karışımlarını Alt Patlama Limiti(LEL) altındaki yoğunluklarda sürekli izlemek için tasarlanmıştır. II 2G kategorisinde yer alır. "db" ile güvenliği artırılmış, Zone 1 veya Zone 2 tehlikeli alanlarda çalışacak şekilde yapısı ve bileşenleri kullanıma uygun olarak tasarlanmıştır. Tehlikeli olmayan alanlarda da kullanılabilir. ATEX direktifine ve IECx standartlarına göre üretilmiştir. GA21-E serisi gaz alarm cihazları Yanıcı ve patlayıcı gazları algılayabilen katalitik sensör kullanır. Endüstri standardında üç telli bağlantı aracılığıyla beslenir ve 4- 20 mA, 2-10 mA, 2-10 volt, 1-5 volt seviyelerinde analog çıkış sinyalleri üretir. Bu çıkış sinyalleri PLC gibi sistemlere bağlanabilir. Besleme voltajı verildikten 1.5 dakika sonra sensör ısınarak normal algılama düzeyine gelir. Bu süre bitmeden herhangi bir gaz ile test edilmesi önerilmez. Gaz kaçağı seviyesi ayarlanan sınır seviyesinin üzerinde ise cihaz alarm verir ve sınır seviyenin üzerinde olduğu sürece alarm vermeye devam eder. Ayarlanan sınır seviyenin altına düştüğünde ise otomatik olarak alarmı kapatır. Alarm şartlarında gaz vanasının kapanması veya gazın ortamdan tahliye olması isteniyorsa çıkış rölesi kullanılır.

ÖLÇÜLER

