

RIKEN KEIKI 04-series

Singelgas detectors for O₂, H₂S or CO

The 04-Series single gas detectors is a group of personal protective measuring devices for O₂, H₂S or CO.

The units are rugged, easy to operate and has replaceable sensors and filters.

Product description

The Riken Keiki 04-series are personal single gas monitors designed for protection from exposure to H₂S, CO or lack of O₂. Users will find the 04-series find the units robust, reliable, long lasting, and cost effective. In addition the instruments has a digital display, can be calibrated, and are dust and water-resistant (IP-67). The 04-series has a replaceable rubber boot in addition to data log from 5 to 300 hours. Each version is equipped with visual, audible, and vibration alarms as standard. Operates up to 9,000 hours (CO and H₂S) on alkaline batteries. Replacement of sensors, filters and batteries is very easy. 3 years sensor warranty.



Features

- ✓ Real-time measurement
- ✓ O₂, H₂S or CO
- ✓ 3 years sensor warranty.
- ✓ Clear display with auto back lighting
- ✓ Loud alarm buzzer, light and vibration.
- ✓ Intrinsically Safe ATEX Exia II CT4 approved
- ✓ IP67 water and dust resistant
- ✓ Changeable alkaline batteries
- ✓ Compact, light weight, ergonomic design
- ✓ Optional waist strap for hands free operation
- ✓ Up to 9,000 hours on operation on alkaline batteries (CO and H₂S)
- ✓ Data logging as standard

Applications

- ✓ Personal monitoring
- ✓ Refineries/Petrochemical
- ✓ Wastewater treatment
- ✓ Occupational health
- ✓ Chemical plants
- ✓ Hazardous material
- ✓ Water
- ✓ Fire service
- ✓ Mining

Common specifications

Sampling method	Diffusion type
Alarm type	Gas alarms: Three-step alarms, STEL alarm, TWA alarm, OVER alarm Fault alarms: Sensor connection/disconnection, low battery level, calibration failure, clock abnormality, system abnormality
Alarm pattern	Self-latching or auto-reset
Alarm indications	Flashing lamp, intermittent audible buzzer, flashing gas concentration readout, vibration
Buzzer volume	80 dB or louder (at 30 cm)
Power Source* 2	AAA alkaline batteries (×2)
Explosion-proof construction	Intrinsically safe explosion-proof construction <alkaline batteries>ATEX: II1G Ex ia IIC T4 Ga/IECEX: Ex ia IIC T4 Ga/Japan Ex: Ex ia IIC T4 Ga <Ni-MH batteries>ATEX: II1G Ex ia IIC T3 Ga/IECEX: Ex ia IIC T3 Ga/Japan Ex: Ex ia IIC T3 Ga
Certifications	ATEX, IECEX, Japan Ex, CE Marking
Protection level	Equivalent to IP66/67
External dimensions/weight	Approx. 54 mm (W) × 67 mm (H) × 24 mm (D) (excluding projections)/approx. 93 g
Functions	Data logger, vibration, STEL alarm, TWA alarm, quick calibration, peak value display, temperature display

Individual specifications

Model	OX-04		HS-04			CO-04	
Detection target gas	Oxygen		Hydrogen sulfide			Carbon monoxide	
Detection principle							
Detection range (Service range)	0.0 to 25.0 % (25.0 to 40.0 %)		0.0 to 30.0 ppm (30.0 to 200.0 ppm)			0 to 500 ppm (500 to 2000 ppm)	
1 digit	0.1 %		0.1 ppm (0.0 to 30.0 ppm) 1.0 ppm (30.0 to 200.0 ppm)			1 ppm (0 to 300 ppm) 10 ppm (300 to 2000 ppm)	
Alarm setpoints	L	18.0 %	1st	5.0 ppm		1st	25 ppm
	LL	18.0 %	2nd	30.0 ppm	3rd 100.0 ppm	2nd	50 ppm
	H	25.0 %	TWA	1 ppm		3rd	1200 ppm
			STEL	5 ppm		TWA	25 ppm
						STEL	200 ppm
Operating temperature range	-40 °C to +60 °C (no sudden changes)						
Operating humidity range	0 to 95 % RH (no condensation)						
Continuous operating time (Alkaline batteries)	Approx. 3,000 hours		Approx. 9,000 hours			Approx. 9,000 hours	
(Ni-MH batteries)	Approx. 2,000 hours		Approx. 6,000 hours			Approx. 6,000 hours	

Accessories:

- AAA alkaline (×2) or Ni-MH (eneloop) batteries (×2)
(specify at time of order)
- Rubber protection cover (×1)
- Alligator clip (×1)

Optional:

- Belt clip
- Heat-resistant case
- Dust filter
- Other filters
- Calibration cap
- Hand strap
- Arm band
- Data logger management program

The Bruusgaard System



TBS is a unique turnkey portable gas detection solution, giving you increased safety and substantial cost savings through standardised instruments, routines, training and procurement.

Logistic Support

At any given time we know the status of all vessels and sites covered by The Bruusgaard System. We consolidate all shipments and make sure you have everything you need on board until next scheduled delivery. This results in fewer shipments and substantial savings!

- Year round follow up of instruments, spares and consumables
- Handling of all shipments & logistics
- Annual reports per vessel including budgeting



Safety

QA – strict routines and logging

- Crew are able to use instruments and follow routines correctly
- Instruments are in proper working condition at all times
- Instruments are calibrated at correct intervals
- Sensors and other items are replaced at correct intervals
- Usage of instruments is logged, including abnormal observations
- Traceability – instrument history and usage
- Routines and procedures can merge into the overall QA-system

Effective and proven training is an integrated part of The Bruusgaard System.

Instruments

All the equipment used for gas detection and calibration is placed in a custom-made wall cabinet. Including Log & Instruction Manual, which are crucial to maintaining the safety integrity.

- Standardised vessel specific gas detector solutions
- Total solutions including all equipment and routines necessary for efficient and safe use, storage and maintenance

Cost Savings

Some of our customers have been able to go from 8 to 10 suppliers down to 1 – translating into cost savings of up to 40-50%. For one vessel, this could be thousands of dollars annually, and for a whole fleet, the cost savings can be dramatic. This is achieved through:

- One contact for worldwide supply of spares & gases
- All service and calibration can be done on site.
- Reductions of instrument types from 10-12 to 2-3

Reduced maintenance costs through:

- On board calibration
- Fewer instruments on board
- No need for spares on board
- One PO per year
- Increased safety
- Less use of administrative time