

## ZIRKOR series

# Oxygen analyzers for oxygen measurement made easy

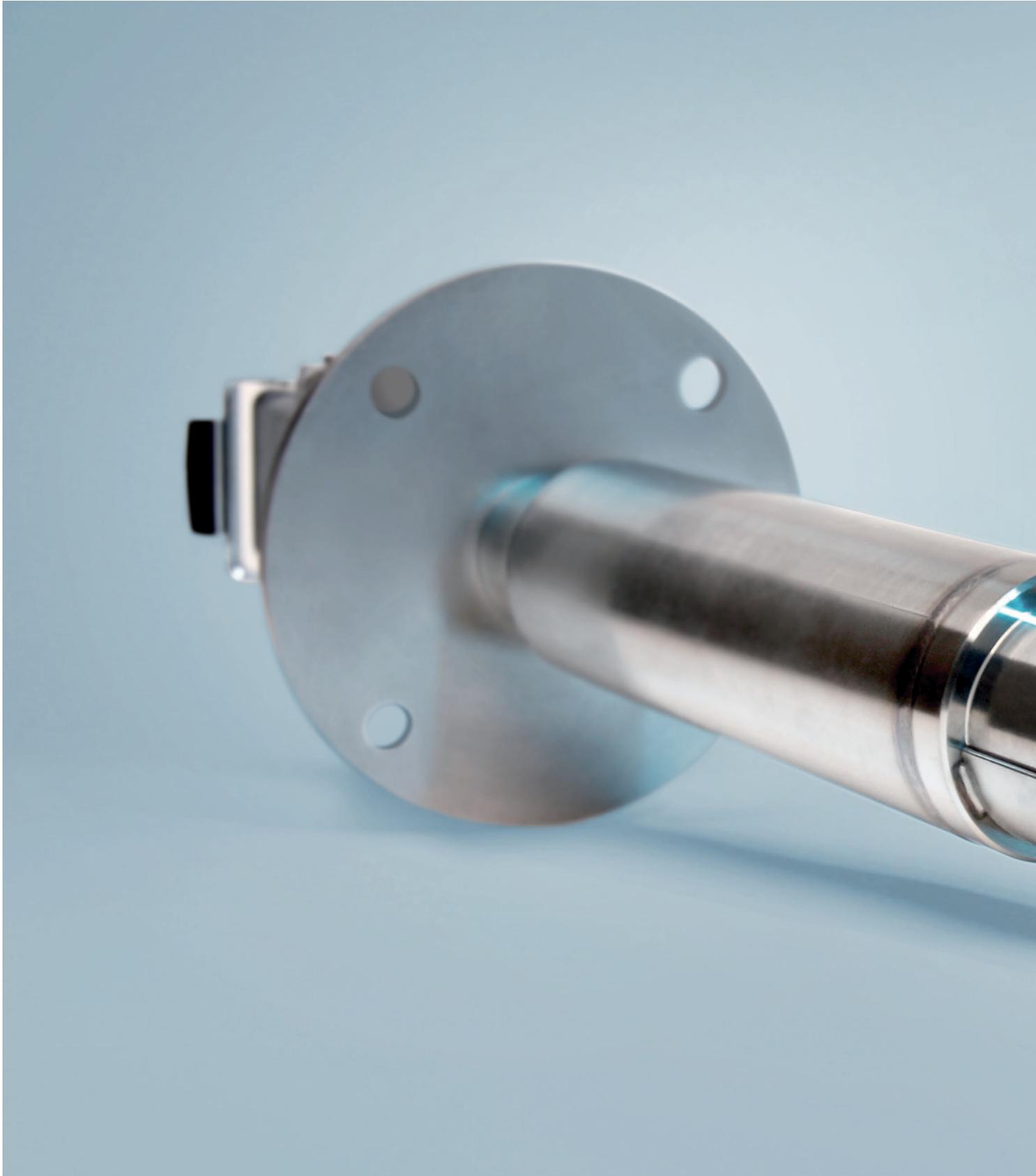
### Tough performance, but easy to operate

- Very high availability due to measuring chamber with extremely long service life
- High reliability due to innovative measuring chamber protection – even in corrosive or reducing conditions
- Reduction of analyzer failures due to internal self-monitoring
- No manual adjustment
- Quick measurement close to the combustion process for timely control
- Approved for emission monitoring
- Easy analyzer operation – even from a distance
- High safety levels due to outstanding Ex safety concept



## The ZIRKOR series:

Reliable measurement results under tough conditions



## Tough performance precise analysis



ZIRKOR100



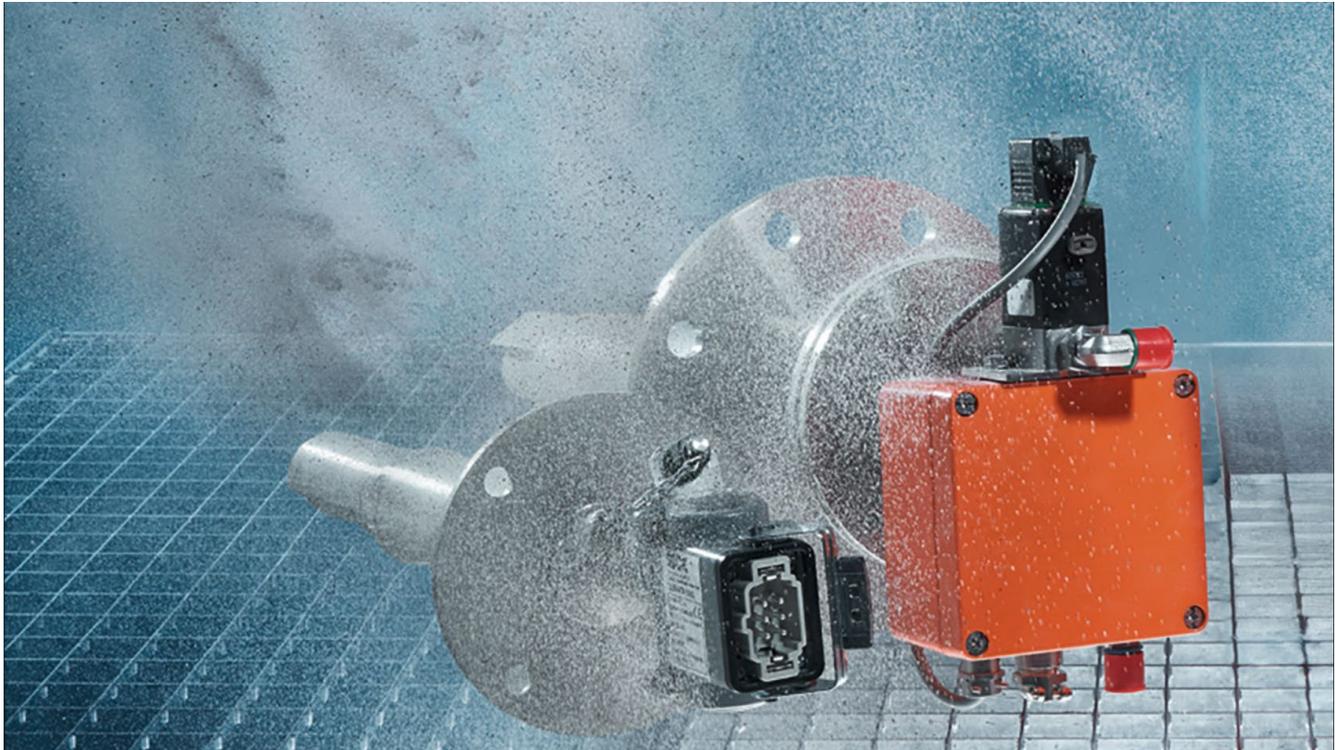
ZIRKOR200

Reliable oxygen measurement is just as important for controlling an optimized combustion process as it is for emissions monitoring. In one of the toughest applications of industrial process automation, the analyzer must be easy to integrate and extremely resistant. The extremely rugged ZIRKOR series, which consists of the ZIRKOR100 and ZIRKOR200, unites very high quality and innovative performance. This makes it the first choice for incineration optimization – even in explosion-hazardous areas. And the ZIRKOR200 has another trick up its sleeve for safety-relevant measurements: It can be qualified in accordance with SIL 2 with 1oo1 (One out of One) as an option

**Precise, but not sensitive:  
our zircon dioxide analyzers**



# Many good ideas for reaching the same goal: The most reliable measurement results



## Oxygen – the driver of all combustion processes

Optimal combustion, however, relies on perfect dosing. Too little oxygen will result in incomplete combustion, leading to increased CO emissions.

Too much oxygen, on the other hand, leads to very high heat loss via the exhaust gas. The reliable oxygen analyzers of the ZIRKOR series measure immediately after combustion to monitor the combustion process. So you can set the optimal oxygen value for your fuel.

## Creating reference values for reliable measured values

Every combustion process creates different pollutants. That's why the ZIRKOR series provides an oxygen reference value for emission measurement in order to ensure reliable measurement results. The measured values are also standardized before and after the various flue gas cleaning processes. This means the values of the individual measurement stations remain comparable and enable exact process control. The type-approved ZIRKOR200 also complies with European regulations.

## Oxygen monitoring to improve processes

Insert gas atmospheres are used in some production processes. In these environments, the zircon dioxide analyzers measure the oxygen values and monitor the inert gas atmospheres which result in high-quality products.

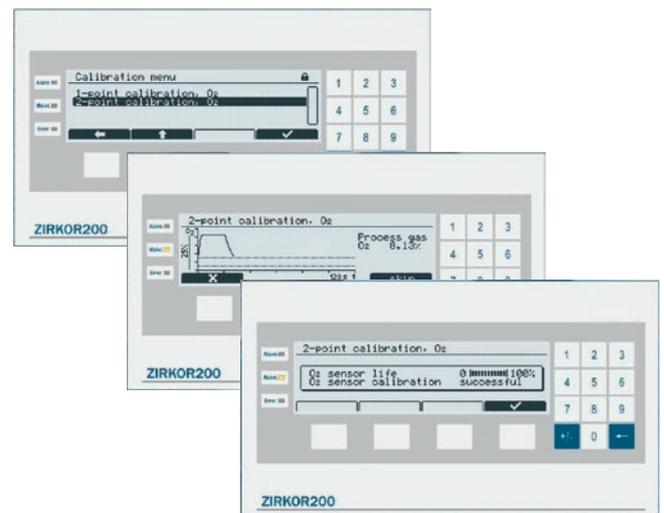
### Firmly soldered and accurate: The chambers are the key

The zircon dioxide analyzers measure very accurately and have an extremely long service life. Only durable materials are installed in the measuring chambers. They are also resistant to leaks: A special soldering process keeps the measuring chambers sealed for a very long time. This results in very high reliability and maximum measurement accuracy for many years.



### Always know where you stand: Sensor diagnostics

The analyzers use the measurement curve progression and the response time of the measuring probe to calculate the remaining service life of the chambers. This is how you prevent unforeseen failures or incorrect measurement results.



### Two levels of durability: the LongLife technology

For the sensors of the ZIRKOR series, there are applications in which rugged is not rugged enough. The innovative LongLife technology of the ZIRKOR series enables reliable oxygen measurement. Even under extremely harsh conditions, such as contact with corrosive gases. The measuring chamber features additional protective layers on the measurement surface. These reduce the negative influence of corrosive gases and enable accurate oxygen measurement at the same time. For long sensor life, even under aggressive conditions. Use in reducing atmospheres is no problem for the measuring chambers. We developed the LongLife<sup>2</sup> for exactly these applications. In addition to the extra protective layer of the LongLife technology, a chamber protective circuit protects the ceramic of the measuring chambers, preventing the platinum coating from gradually peeling off the electrode. This prevents premature wear and decreased measurement performance.

### Convenient and reliable: ZIRKOR Remote

ZIRKOR Remote makes it possible to completely control the devices from a distance. This includes the output of test gases and inspection of the entire system. All process data and information on the analyzer can be saved in real time on mobile end devices and sent as an e-mail report. Thanks to the convenient app, settings can also be made for Ex devices without the Ex zone having to be released for maintenance work.



# One product family for countless requirements

## ZIRKOR100



### For small systems

Reliable oxygen measurement is also essential in small combustion plants. The ZIRKOR100 is extremely rugged thanks to its innovative chamber technology, yet the price is very affordable. The integrated chamber diagnosis function keeps maintenance work to a minimum and all important information and functions can be accessed via ZIRKOR Remote. With the ZIRKOR100, you don't have to worry about oxygen measurement in your combustion processes.

## ZIRKOR200



### Up to the challenges

The ZIRKOR200 features additional properties and functions. Certified in accordance with EN 15267, it operates smoothly at process temperatures up to 1,600 °C (2,900 °F), makes automated adjustments and can be equipped with the LongLife or LongLife<sup>2</sup> technology for a longer service life. Thanks to its variable probe lengths and a higher number of interfaces, it can be installed in all kinds of plants and applications.

### On the safe side

The Ex types of the ZIRKOR200 are approved for IECEx and ATEX and are perfectly suited for applications in explosion-hazardous areas in Zone 1 and Zone 21. And qualified for SIL 2 with 1oo1 (One out of One), the ZIRKOR200 offers a high level of safety at minimal investment costs.

## The ZIRKOR series at a glance

	ZIRKOR100	ZIRKOR200
		
Sensor technology		
Measuring chamber protection (option)	–	Yes
Chamber diagnostics	Yes	Yes
Chamber exchange	–	Yes
Process gas temperature		
Measuring probe	Up to 400 °C (750 ° F)	Up to 600 °C (1,110 ° F)
Measuring probe with protective pipe	Up to 1,400 °C (2,550 ° F)	Up to 1,600 °C (2,910 ° F)
Measuring probe immersion depth	400 ... 500 mm (15.8 " ... 19.7")	520 ... 3,682 mm (20.5" ... 145")
Wireless remote control	Yes	Yes
Interfaces		
Analog signal	Yes	Yes
WPAN	Yes	Yes
Modbus RTU RS-232	–	Yes
Modbus RTU RS-485	–	Yes
Hart	–	Yes
Fieldbus	–	Yes
Enclosure rating		
Analyzer unit	IP 20	IP 65
Control unit	IP 66	IP 66
Adjustment		
Test gas required	Yes	Yes
SIL type		
Safety integrity level	–	SIL 2 (1oo1)
Ex type		ZIRKOR200 Ex-D, Ex-G
ATEX/IECEX	–	Zone 1, Zone 21

# ZIRKOR100:

## Oxygen measurement made easy



### Product description

The ZIRKOR100 gas analyzer provides robust and reliable oxygen measurement for small combustion plants. It is characterized by a measuring chamber with a long service life and a diagnostic function. This significantly reduces maintenance effort.

The ZIRKOR Remote app allows quick and easy wire-free access to the analyzer. As a result, the simple ZIRKOR100 oxygen measurement relieves plant operators and frees them up to concentrate on other important tasks.

### At a glance

- Measuring chamber with long service life due to high-quality processing
- ZIRKOR Remote app for remote access to the analyzer
- Self-monitoring measuring chamber
- Version for high temperatures available
- Very short response time

### Your benefits

- High availability thanks to measuring chamber with long service life
- Quick measurement close to the combustion process for timely control
- Reduction of analyzer failures due to internal self-monitoring
- Easy analyzer operation – even from a distance

### Fields of application

- Incineration optimization in small to medium-sized combustion plants
- Oxygen monitoring for process control



### More Information online

For more information, enter the link or scan the QR code to get direct access to technical data, operating instructions, software, application examples, and much more.

[www.endress.com/zirkor100](http://www.endress.com/zirkor100)



# Technical data

The exact device specifications and product performance data may vary and are dependent on the respective application and customer specifications.

## ZIRKOR100 analyzer unit

Measured value	O <sub>2</sub>
Measurement principles	Zirconium dioxide sensor
Measuring ranges	
	O <sub>2</sub> 0 ... 25%
Adjustment time (t <sub>90</sub> )	5 s, depending on the measurement gas flow
Accuracy	± 0.5% of the measured value or 0.02% by O <sub>2</sub> volume, with the higher value being valid
Process temperature	
Measuring probe:	≤ +400 °C (750 °F)
Measuring probe with cooling protection pipe:	≤ +1,400 °C (2,550 °F)
Process pressure	-100 hPa ... 100 hPa (-1.45 psi ... 1.45 psi) Maximum pressure fluctuation: ± 50 hPa (0.725 psi)
Process gas speed	≤ 50 m/s (164 ft/s)
Ambient temperature	-40 °C ... +80 °C (-40 °F ... +176 °F)
Electrical safety	CE
Enclosure rating	IP 20
Immersion depth	
Measuring probe:	≤ 500 mm (19.69 ")
Measuring probe with cooling protection pipe:	≤ 1,000 mm (39.37 ")
Material in contact with media	Stainless steel 1.4571
Material	Stainless steel 1.4571
Options	Cooling protection pipe

## ZIRKOR100 control unit

Ambient temperature	-20 °C ... +55 °C (-4 °F ... +131 °F)
Storage temperature	-40 °C ... +80 °C (-40 °F ... +176 °F)
Electrical safety	CE
Enclosure rating	IP 66
Analog outputs	1 output: 4 to 20 mA, 500 Ω
Digital outputs	2 outputs: up to 4 outputs possible as an option
Display	Status LEDs: "Alarm", "Maintenance", and "Fault"
Operation	Via LC display and membrane keyboard Via Android end device with ZIRKOR remote app
Type	Sheet metal housing
Dimensions (W x H x D)	300 mm x 440 mm x 240 mm (11.81 " x 17.32 " x 9.45 ")
Weight	17 kg ... 19 kg (37.5 lbs ... 42 lbs)

## Power supply

Voltage 104 ... 126 V AC,  $\pm 10\%$  / 207 ... 253 V AC,  $\pm 10\%$ 

Frequency 50 Hz / 60 Hz

Power consumption  $\leq 350$  W

## Options

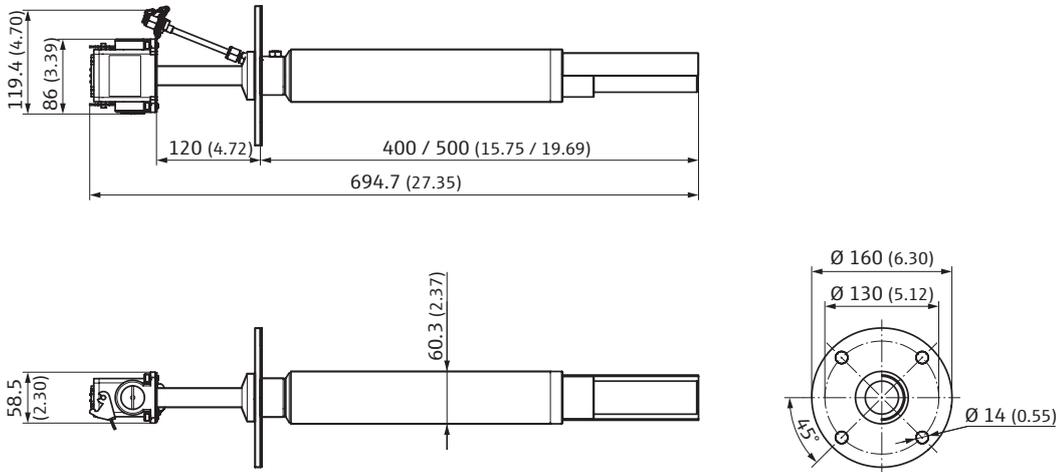
Two oxygen limit value alarms (min/max value)

## Ordering information

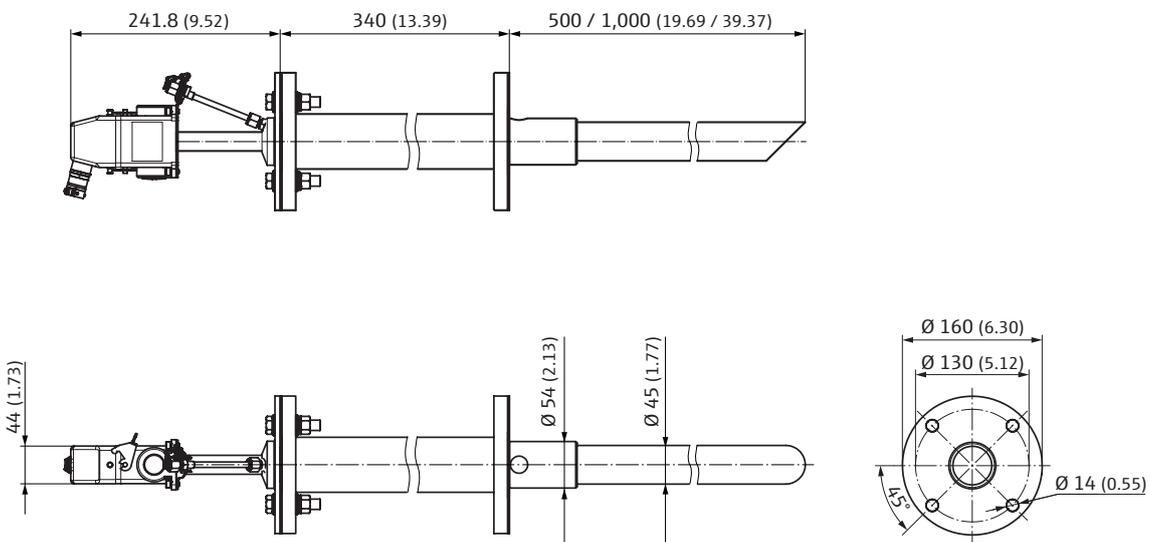
Our regional sales organization will help you to select the optimum device configuration.

## Dimensional drawings

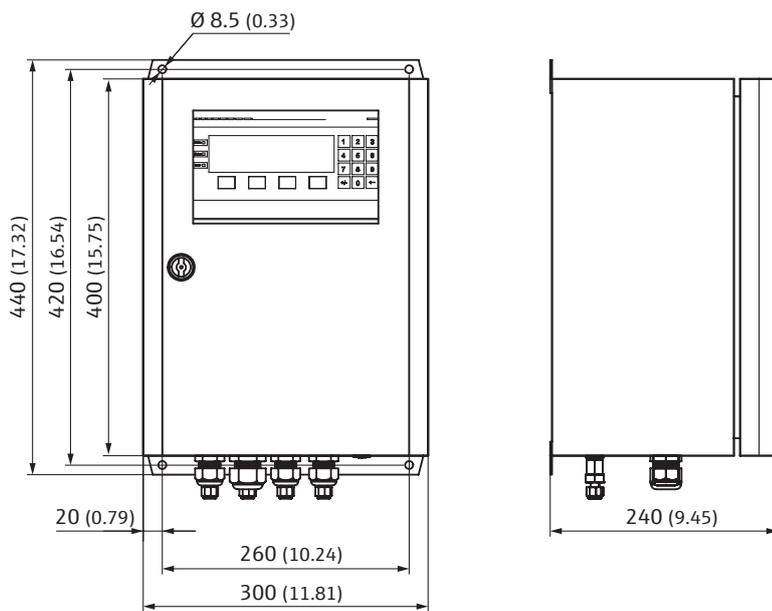
Analyzer unit ZIRKOR100 (dimensions in mm (inch))



ZIRKOR100 analyzer unit with cooling protection pipe (dimensions in mm (inch))



## ZIRKOR100 / ZIRKOR200 control unit (dimensions in mm (inch))



## Accessories

### Flanges

#### Weld-in flange

Brief description	Hole circle diameter	Threaded size	Part no.
Flange with pipe, internal diameter 72.1 mm (2.84"), nominal length 100 mm (3.94"), stainless steel 1.4571	130 mm (5.12")	M12	5335407

### Device protection (mechanical)

#### Protective housing and pipes

Brief description	Part no.
Insulation for cooling protection pipe 310 mm (12.21")	5335411
Weather hood for analyzer unit, 1.4301, unpainted	5335409
Weather hood for control unit, 1.4301, unpainted	5335410

# ZIRKOR200:

## The innovation is in the chambers



### Product description

The ZIRKOR200 gas analyzer provides very robust, reliable, and suitability-tested oxygen measurement for small and large combustion plants. The ZIRKOR200 is characterized by a measuring chamber with a particularly long service life. The LongLife technology employed for this purpose increases the resistance of the measuring chamber in corrosive and reducing conditions in particular. The integrated measuring

chamber monitoring system and fully automated adjustment significantly reduce the maintenance effort. The ZIRKOR Remote app allows quick and easy wire-free access to the analyzer. The ZIRKOR200 provides a low-maintenance, simple oxygen measurement system for incineration optimization. Thanks to its suitability test as per EN 15267, it is also suitable for emission monitoring.

### At a glance

- Measuring chamber with extremely long service life due to innovative protection mechanisms
- Self-monitoring measuring chamber
- Fully automated adjustment mechanism integrated into the control unit
- Version for high temperatures available
- ZIRKOR Remote app for remote access to the analyzer
- Very short response time
- Suitability-tested according to EN 15267
- Ex types for ATEX and IECEx, Zone 1 or Zone 2

### Your benefits

- Very high availability due to measuring chamber with extremely long service life
- High reliability due to innovative measuring chamber protection – even in corrosive or reducing conditions
- Reduction of analyzer failures due to internal self-monitoring
- No manual adjustment
- Quick measurement close to the combustion process for timely control
- Approved for emission monitoring
- Easy analyzer operation – even from a distance
- High safety levels due to outstanding Ex safety concept

### Fields of application

- Incineration optimization
- Oxygen monitoring for process control
- Oxygen reference value for emission measurement
- Monitoring of inert gas atmospheres



### More Information online

For more information, enter the link or scan the QR code to get direct access to technical data, operating instructions, software, application examples, and much more.

[www.endress.com/zirkor200](http://www.endress.com/zirkor200)



# Technical data

The exact device specifications and product performance data may vary and are dependent on the respective application and customer specifications.

## ZIRKOR200 analyzer unit: standard version

Measured value	O <sub>2</sub>
Suitability-tested measured value	O <sub>2</sub>
Measurement principles	Zirconium dioxide sensor
Measuring ranges	0 ... 25% by vol.
Certified measuring ranges	
	O <sub>2</sub> 0 ... 25% by vol.
Adjustment time (t <sub>90</sub> )	5 s depending on the measurement gas flow
Accuracy	± 0.5% of the measured value or 0.02% by O <sub>2</sub> volume, with the higher value being valid
Process temperature	
	Measuring probe: ≤ +600 °C (1,112 °F)
	Measuring probe with cooling protection pipe: ≤ +1,600 °C (2,912 °F)
Process pressure	-100 hPa ... 100 hPa (-1.45 psi ... 1.45 psi)
	Maximum pressure fluctuation: ± 50 hPa (0.725 psi)
Process gas speed	≤ 50 m/s (164 ft/s)
Ambient temperature	-40 °C ... +80 °C (-40 °F ... +176 °F)
Conformities	EN 15267 2000/76 / EG (17 <sup>th</sup> German Federal Immission Control Act (BImSchV)) 2001/80 / EC (13 <sup>th</sup> German Federal Immission Control Act (BImSchV)) 27 <sup>th</sup> German Federal Immission Control Act (BImSchV) 30 <sup>th</sup> German Federal Immission Control Act (BImSchV) German Technical Instructions on Air Quality Control (TA-Luft)
SIL	
	Safety integrity level: SIL 2 (IEC 61508)
	Systematic suitability: SIL 2 (IEC 61508)
	Device type: Type B
	Operating mode: Low demand rate
	System architecture: 1oo1 assessment; option
Electrical safety	CE
Enclosure rating	IP 65
Dimensions (W x H x D)	See dimensional drawings
Immersion depth	
	Measuring probe: ≤ 3,682 mm (145")
	Measuring probe with cooling protection pipe: ≤ 1,000 mm (39.4 ")
Material in contact with media	Stainless steel 1.4571
Material	Stainless steel 1.4571
Options	Cooling protection pipe LongLife chamber LongLife <sup>2</sup> chamber

## ZIRKOR200 analyzer unit: Ex types

Measured value	O <sub>2</sub>
Suitability-tested measured value	O <sub>2</sub>
Measurement principles	Zirconium dioxide sensor
Measuring ranges	0 ... 25% by vol.
Certified measuring ranges	
	O <sub>2</sub> 0 ... 25% by vol.
Adjustment time (t <sub>90</sub> )	5 s depending on the measurement gas flow
Accuracy	± 0.5% of the measured value or 0.02% by O <sub>2</sub> volume, with the higher value being valid
Process temperature	
ZIRKOR200 Ex-G measuring probe:	≤ +500 °C (+930 °F)
ZIRKOR200 Ex-G measuring probe with cooling protection pipe:	≤ +1,400 °C (2,550 °F)
ZIRKOR200 Ex-D measuring probe:	≤ +600 °C (1,112 °F)
Process pressure	-100 hPa ... 100 hPa (-1.45 psi ... 1.45 psi)
	Maximum pressure fluctuation: ± 50 hPa (0.725 psi)
Process gas speed	≤ 50 m/s (164 ft/s)
Ambient temperature	
ZIRKOR200 Ex-G:	-20 °C ... +55 °C (-4 °F ... +131 °F)
ZIRKOR200 Ex-D:	-20 °C ... +70 °C (-4 °F ... +158 °F)
Conformities	EN 15267 2000/76 / EG (17 <sup>th</sup> German Federal Immission Control Act (BImSchV)) 2001/80 / EC (13 <sup>th</sup> German Federal Immission Control Act (BImSchV)) 27 <sup>th</sup> German Federal Immission Control Act (BImSchV) 30 <sup>th</sup> German Federal Immission Control Act (BImSchV) German Technical Instructions on Air Quality Control (TA-Luft)
SIL	
Safety integrity level	SIL 2 (IEC 61508)
Systematic suitability	SIL 2 (IEC 61508)
Device type	Type B
Operating mode	Low demand rate
System architecture:	1oo1 assessment; option
Ex approvals	
IECEX	ZIRKOR200 Ex-G: Ex db IIC T3 Gb ZIRKOR200 Ex-D: Ex tb IIIC T133°C/T141°C Db
ATEX	ZIRKOR200 Ex-G: II 2G Ex db IIC T3 Gb ZIRKOR200 Ex-D: II 2D Ex tb IIIC T133°C/T141°C Db
Electrical safety	CE
Enclosure rating	
ZIRKOR200 Ex-G, ZIRKOR200 Ex-D	IP66
Dimensions (W x H x D)	Dimensions may vary, for details see dimensional drawing
Immersion depth	
ZIRKOR200 Ex-G measuring probe:	≤ 924 mm (36.4 ")
ZIRKOR200 Ex-D measuring probe:	≤ 960 mm (37.80 ")
Material in contact with media	Stainless steel 1.4571

Material	Stainless steel 1.4571
Options	Cooling protection pipe (not with ZIRKOR200 Ex-D) LongLife chamber (already included with ZIRKOR200 Ex-D) LongLife <sup>2</sup> chamber

### ZIRKOR200 control unit standard version

Ambient temperature	
Instrument air type:	-20 °C ... +55 °C (-4 °F ... +131 °F)
Pump type:	+20 °C ... +50 °C (+68 °F ... +122 °F)
GRP housing with heating:	-40 °C ... +55 °C (-40 °F ... +131 °F)
Storage temperature	-40 °C ... +80 °C (-40 °F ... +176 °F)
Conformities	EN 15267
SIL	
Safety integrity level	SIL 2 (IEC 61508)
Systematic suitability	SC 2 (IEC 61508)
Device type	Type B
Operating mode	Low demand rate
System architecture:	1oo1 assessment
	Option
Electrical safety	CE
Enclosure rating	
Sheet metal housing	IP 66
Stainless-steel housing	IP 66
GRP housing	IP 66
19" rack housing	IP 20
Analog outputs	1 output: 4 to 20 mA, 500; galvanically isolated
Analog inputs	1 input: 4...20 mA, 120 Ω; galvanically isolated
Digital outputs	5 relay contacts
Digital inputs	2 relay contacts: + 24 V AC/DC, 1 A
Modbus	✓
Type of fieldbus integration	RTU RS-232 RTU RS-485
HART	✓
Foundation Fieldbus	✓
Display	Status LEDs: "Alarm", "Maintenance", and "Fault"
Operation	Via LC display and membrane keyboard Via Android end device with ZIRKOR remote app
Type	Sheet metal housing Stainless-steel housing GRP housing 19" rack
Dimensions (W x H x D)	
Sheet metal housing	300 mm x 440 mm x 240 mm (11.81 " × 17.32 " × 9.45 ")
Stainless-steel housing	300 mm x 400 mm x 240 mm (11.81 " × 15.75 " × 9.45 ")
GRP housing	510 mm x 600 mm x 310 mm (20.08 " × 23.62 " × 12.20 ")
19" rack	483 mm x 177 mm x 400 mm (19.02 " × 6.97 " × 15.75 ")

Weight	
Sheet metal housing:	17 kg ... 19 kg (37.5 lbs ... 42 lbs)
Stainless-steel housing:	17 kg ... 19 kg (37.5 lbs ... 42 lbs)
GRP housing:	19 kg ... 27 kg (42 lbs ... 59.5 lbs)
19" rack:	10 kg ... 11 kg (22 lbs ... 24.2 lbs)
Power supply	
Voltage	104 ... 126 V AC, ± 10% / 207 ... 253 V AC, ± 10%
Power consumption	≤ 400 VA
Options	Semi-automated and automated adjustment (1-point or 2-point adjustment) LongLife chamber LongLife <sup>2</sup> chamber Ejector and pump type

### ZIRKOR200 Ex-G type control unit

Ambient temperature	-20 °C ... +55 °C (-4 °F ... +131 °F)
Storage temperature	-40 °C ... +80 °C (-40 °F ... +176 °F)
Conformities	EN 15267
SIL	
Safety integrity level	SIL 2 (IEC 61508)
Systematic suitability	SC 2 (IEC 61508)
Device type	Type B
Operating mode	Low demand rate
Ex approvals	
IECEX	Ex db IIC T6 Gb
ATEX	II 2G Ex db IIC T6 Gb
Electrical safety	CE
Enclosure rating	IP66
Analog outputs	1 output: 4 to 20 mA, 500 Ω; galvanically isolated
Analog inputs	1 input: 4...20 mA, 120 Ω; galvanically isolated
Digital outputs	5 relay contacts
Digital inputs	2 relay contacts: + 24 V AC/DC, 1 A
Modbus	✓
Type of fieldbus integration	RTU RS-232, RTU RS-485
HART	✓
Foundation Fieldbus	✓
Display	Status LEDs: "Alarm", "Maintenance", and "Fault"
Operation	Via LC display and membrane keyboard Via Android end device with ZIRKOR remote app
Type	Pressure-resistant encapsulated housing
Dimensions (W x H x D)	700 mm x 359.5 mm x 220 mm (27.56 " x 14.14 " x 8.66 ")
Weight	32 kg (70.55 lbs)
Power supply	
Voltage	104 ... 126 V AC, ± 10% / 207 ... 253 V AC, ± 10%
Power consumption	≤ 400 VA

**ZIRKOR200 Ex-G pneumatic unit**

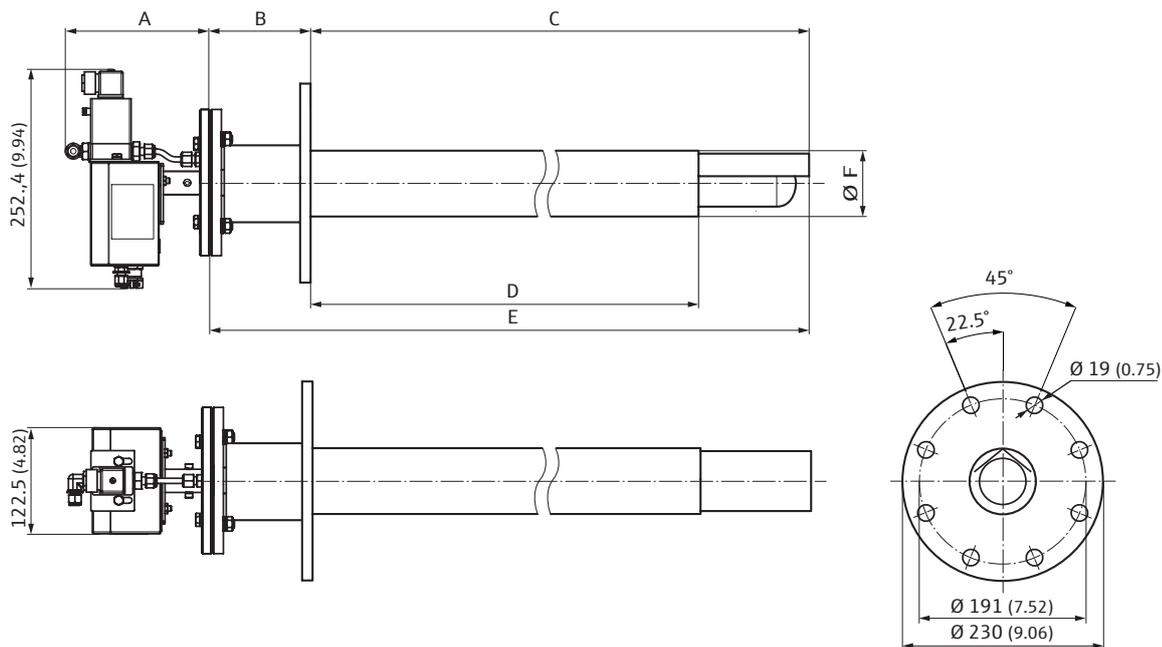
Ambient temperature	-20 °C ... +55 °C (-4 °F ... +131 °F)
Electrical safety	CE
Enclosure rating	IP65
Dimensions (W x H x D)	Dimensions may vary, for details see dimensional drawing
Auxiliaries	
Test gas:	150 l/h ... 180 l/h (5.29 ft <sup>3</sup> /h ... 6.36 ft <sup>3</sup> /h)
Instrument air:	30 l/h ... 40 l/h (1.06 ft <sup>3</sup> /h ... 1.41 ft <sup>3</sup> /h); 2...10 bar (29 psi ... 145 psi); particle size max. 1 µm; particle content max. 1 mg/m <sup>3</sup> ; oil content max. 0.1 mg/m <sup>3</sup> ; pressure condensation point max. -40 °C (-40°F)

## Ordering information

Our regional sales organization will help you to select the optimum device configuration.

## Dimensional drawings

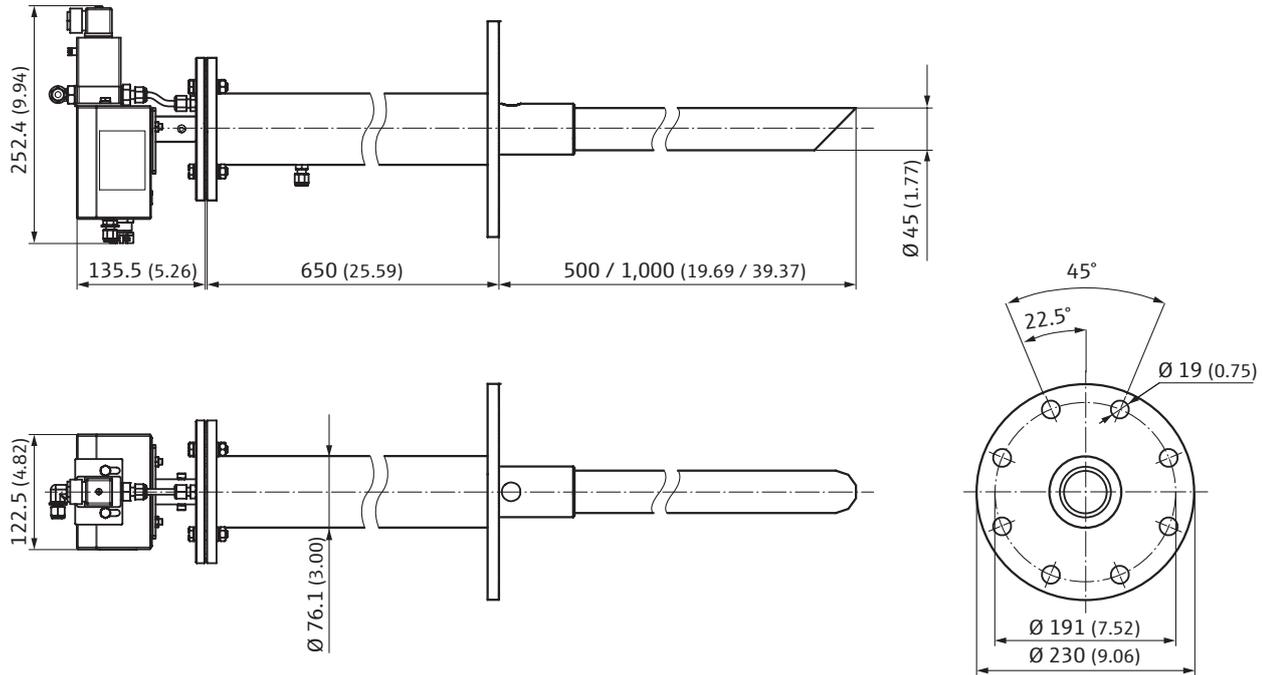
Analyzer unit ZIRKOR200 (dimensions in mm (inch))



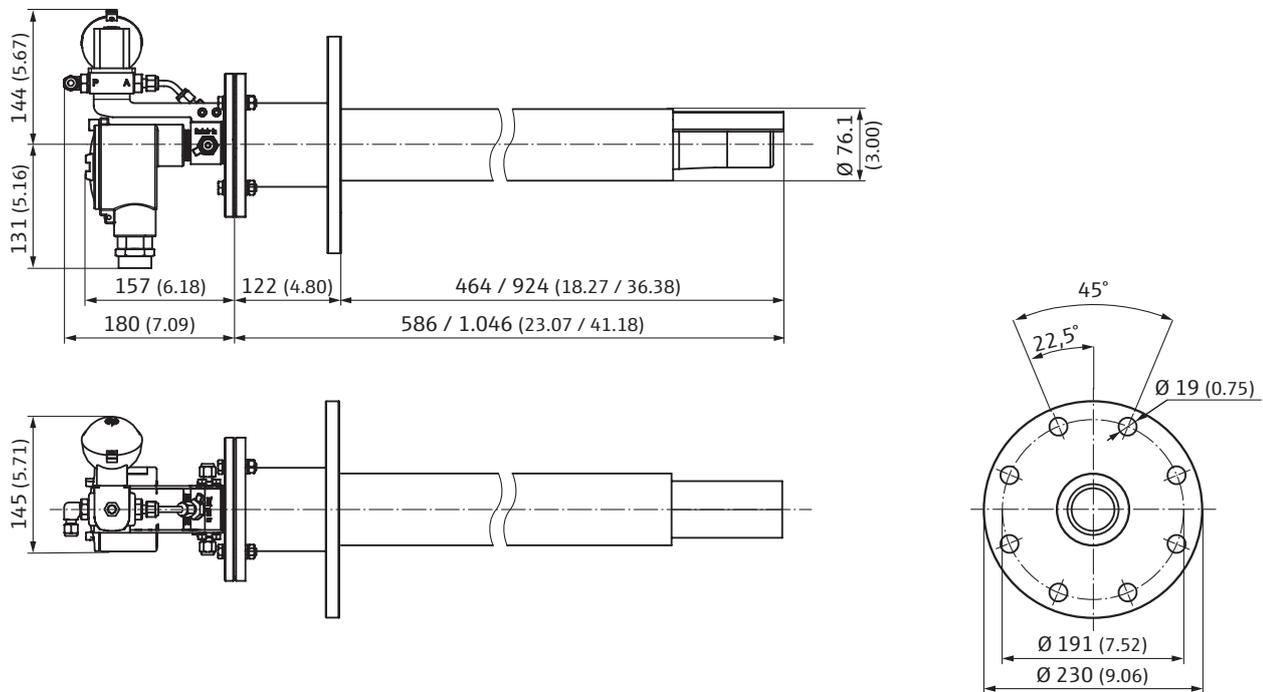
Type	A	B	Immersion depth C	D	E	F	Weight
Z200-X1...	135 (5.3)	97 (3.8)	520 (20.4)	380 (14.9)	615 (24.2)	57.0 (2.2)	11.0 (24.2)
Z200-Z2...	150 (5.9)	97 (3.8)	950 (37.4)	800 (31.5)	1,045 (41.1)	57.0 (2.2)	13.0 (28.6)
Z200-Z3...	150 (5.9)	120 (4.7)	1,835 (72.2)	1,720 (67.7)	1,955 (76.9)	76.1 (3)	17.5 (38.5)
Z200-Z4...	150 (5.9)	120 (4.7)	2,768 (109)	2,648 (104)	2,888 (113)	76.1 (3)	21.1 (46.5)
Z200-Z5...	150 (5.9)	120 (4.7)	3,682 (145)	3,562 (140)	3,802 (149)	76.1 (3)	25.0 (55.1)

All dimensions in mm (inch), all weights in kg (lbs)

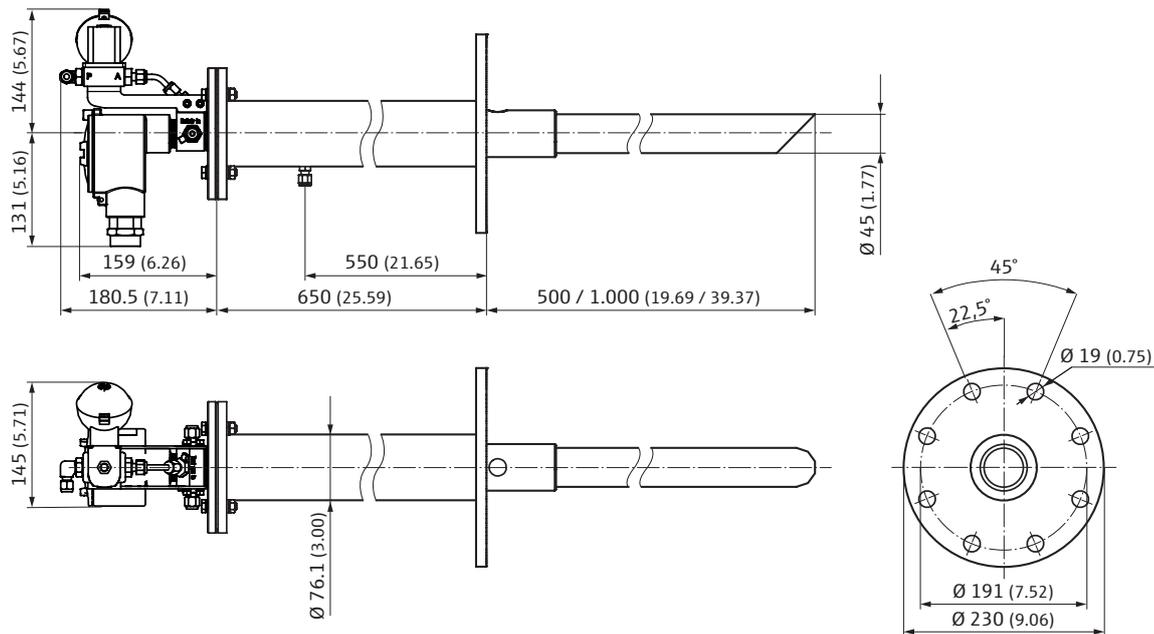
### ZIRKOR200 analyzer unit with cooling protection pipe (dimensions in mm (inch))



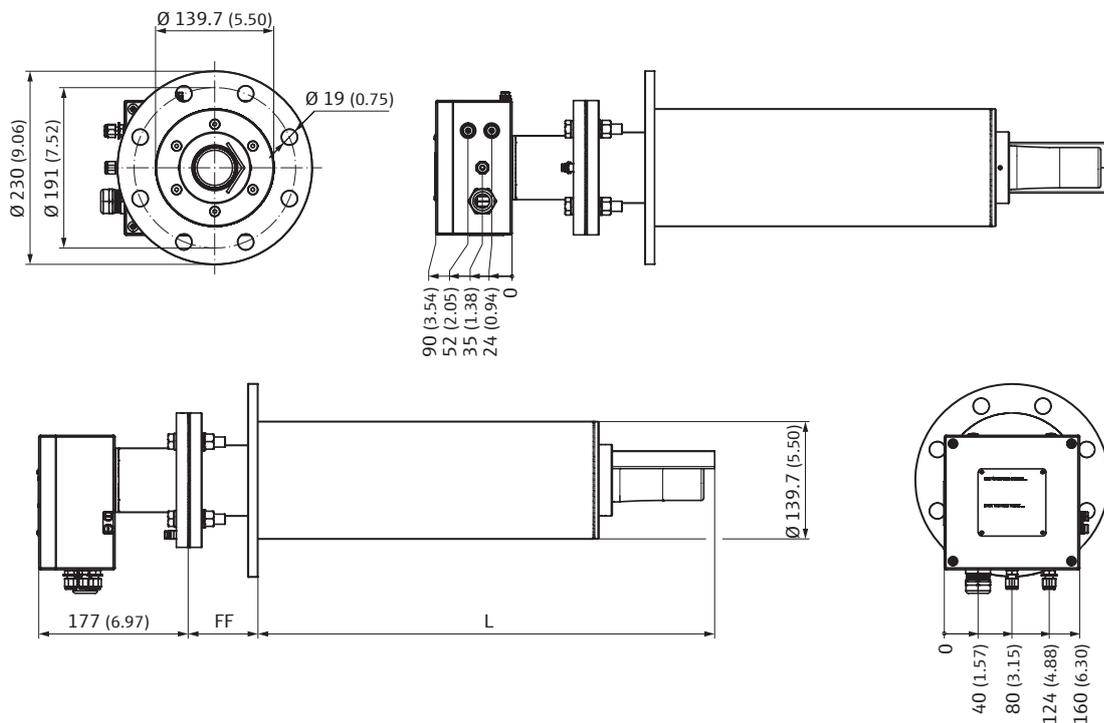
### ZIRKOR200 Ex-G analyzer unit (dimensions in mm (inch))



### ZIRKOR200 Ex-G analyzer unit with cooling protection pipe (dimensions in mm (inch))



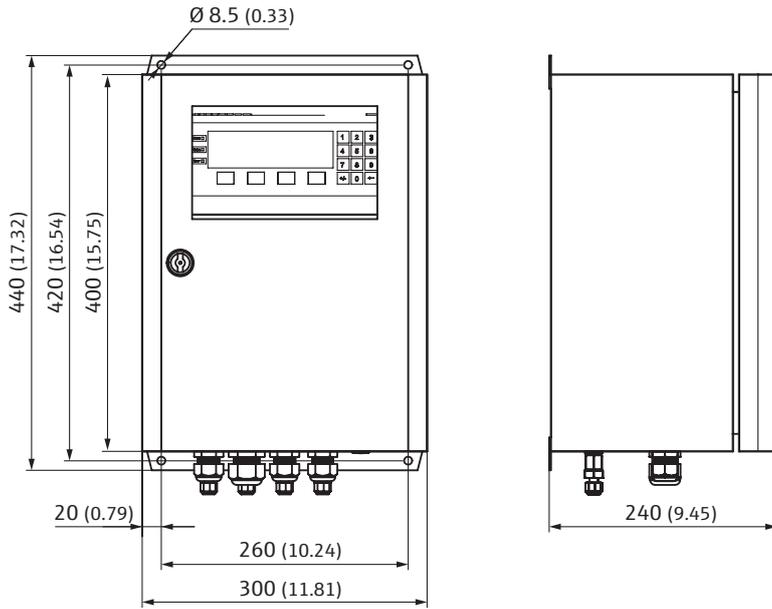
### ZIRKOR200 Ex-D analyzer unit (dimensions in mm (inch))



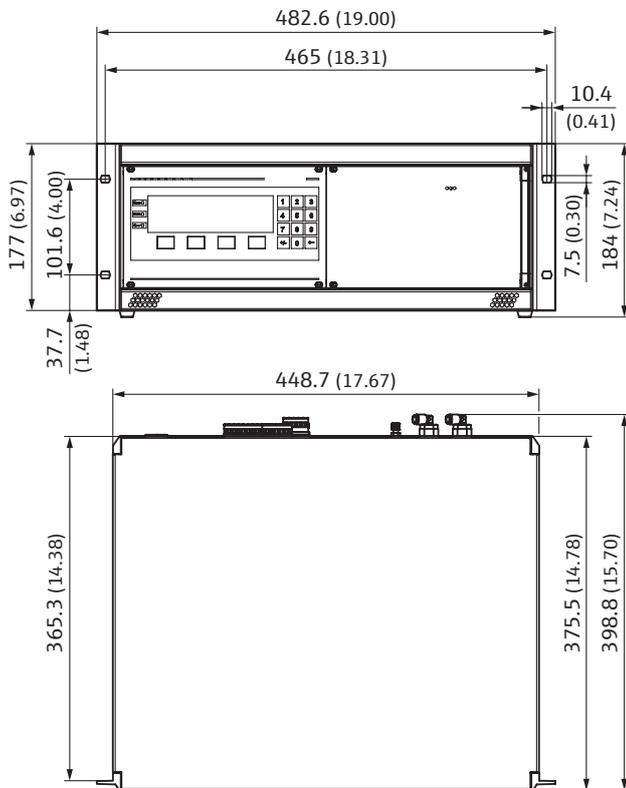
Type	Probe length L	Flange to flange distance FF	Weight
Z200EXD-xxY...	960 (37.8)	112.5 (4.4)	32.8 (72.3)
Z200EXD-xxZ...	540 (21.2)	82.5 (3.2)	24.4 (53.8)

All dimensions in mm (inch), all weights in kg (lbs)

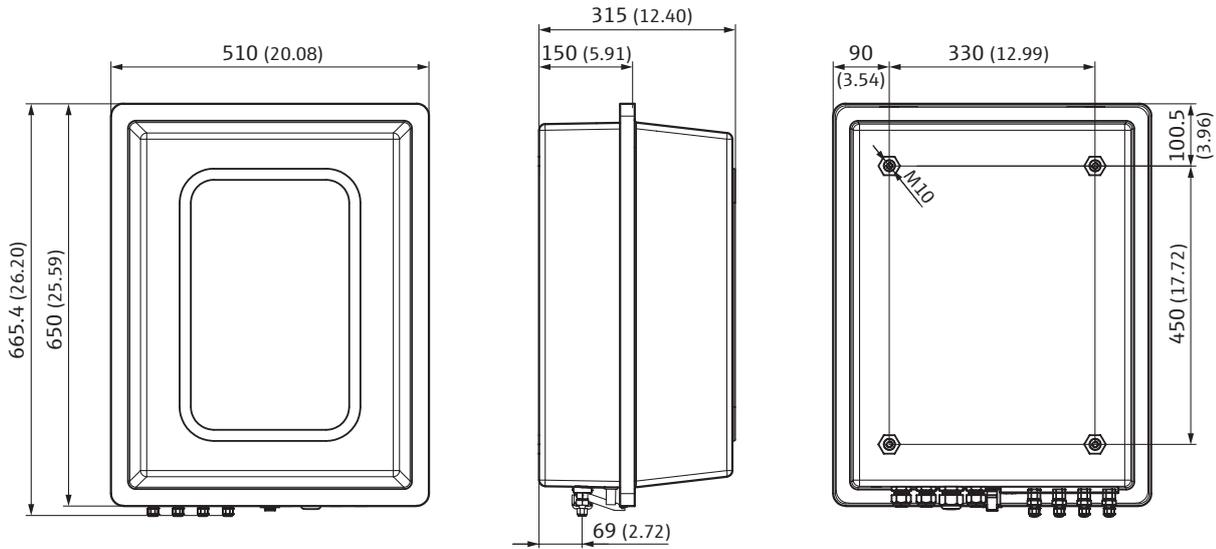
### ZIRKOR100 / ZIRKOR200 / ZIRKOR200 Ex-D control unit (dimensions in mm (inch))



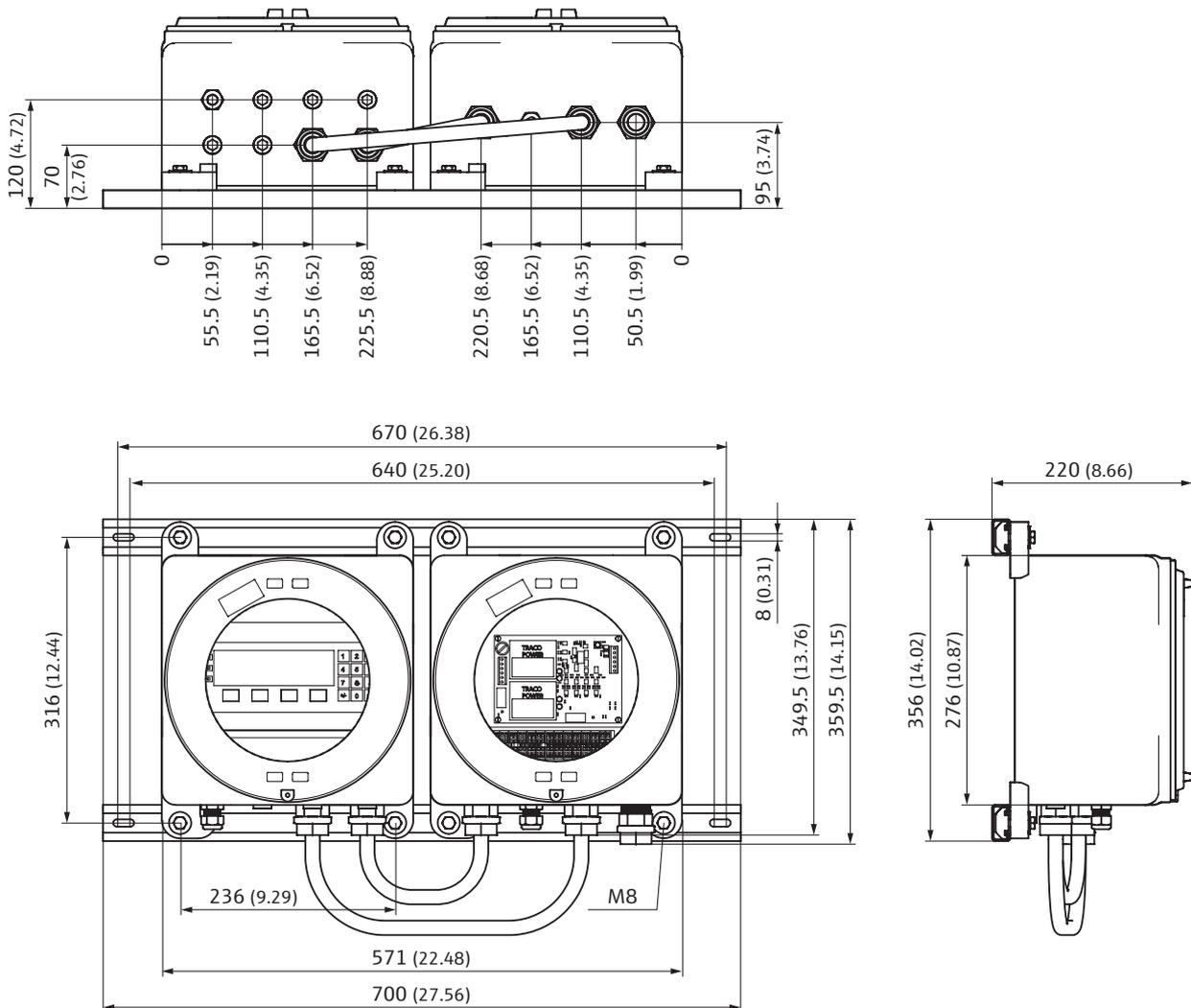
### ZIRKOR200 / ZIRKOR200 Ex-D control unit; 19" rack housing (dimensions in mm (inch))



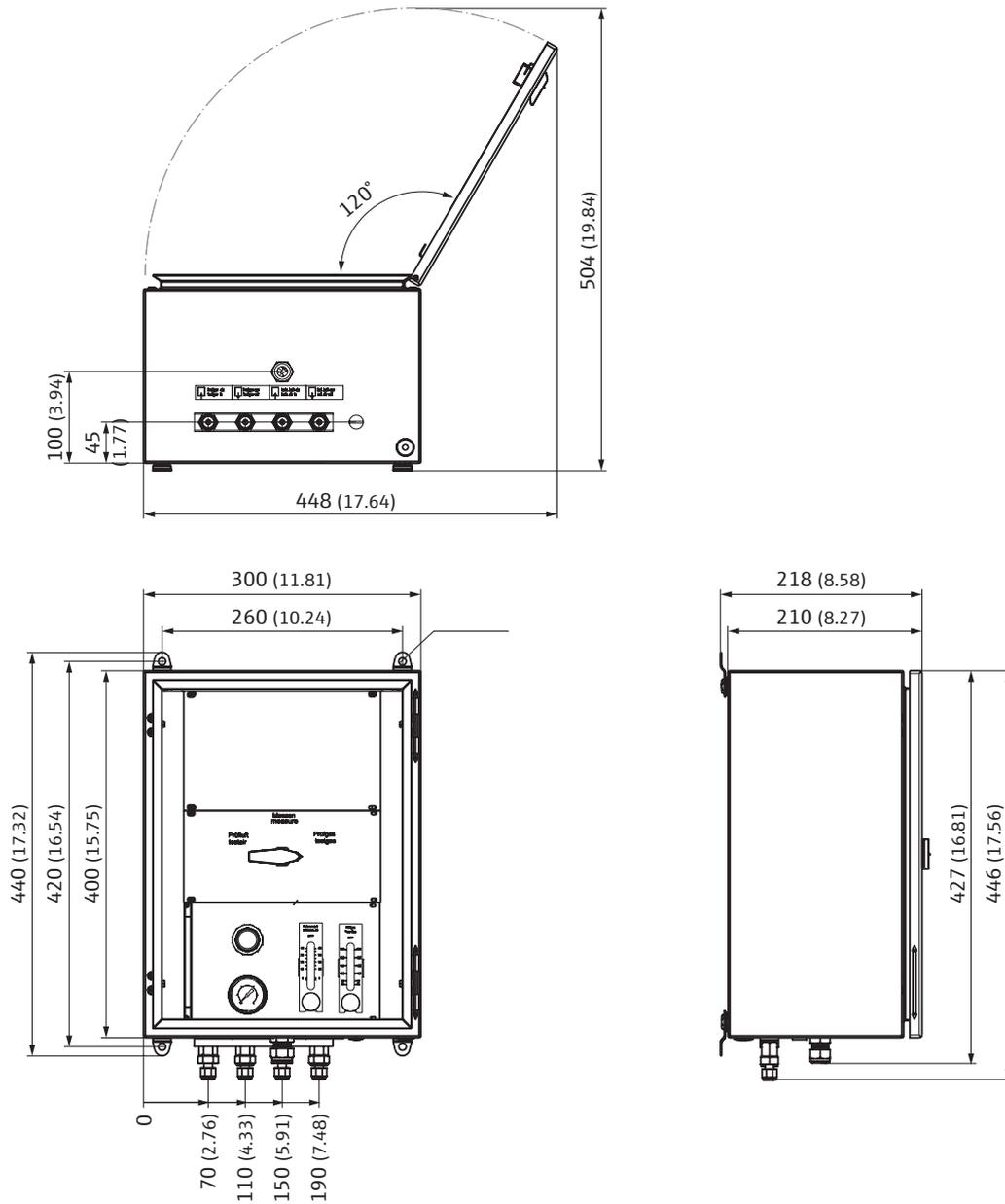
GRP housing for ZIRKOR200 / ZIRKOR200 Ex-D control unit  
(dimensions in mm (inch))



ZIRKOR200 Ex-G control unit (dimensions in mm (inch))



## ZIRKOR200 Ex-G pneumatic unit (dimensions in mm (inch))



## Accessories

### Hardware

Brief description	Part no.
Compressed air preparation including dryer/housing	6063322
Compressed air preparation including dryer	6063324

## Flanges

### Weld-in flange

Brief description	Hole circle diameter	Threaded size	Part no.
Blind flange, ANSI 4", stainless steel 1.4571	190.5 mm (7.50 ")	M16	4094575
Flange plate, ANSI4	191 mm (7.52 ")	M16	5335405
Flange with pipe, ANSI 4", ST37 Nominal length: 500 mm (19.69 ")	190.5 mm (7.50 ")	M16	2093590
Flange with pipe, ANSI 4", ST37 Nominal length: 250 mm (9.84 ")	190.5 mm (7.50 ")	M16	2093551
Flange with pipe, ANSI 4", stainless steel 1.4571 nominal length: 500 mm (19.69 ")	190.5 mm (7.50 ")	M16	2093591
Flange with pipe, ANSI 4", stainless steel 1.4571 nominal length: 250 mm (9.84 ")	190.5 mm (7.50 ")	M16	2093592

## Device protection (mechanical)

### Protective housing and pipes

Brief description	Part no.
Heating for control unit 115 V / 500 W, GFRP housing required for electronics	6063321
Heating for control unit 230 V / 500 W, GFRP housing required for electronics	6063320
GRP housing for analyzer unit, with heating 230 V / 500 W	6063325
GRP housing for analyzer unit, with heating 115 V / 500 W	6063326
Flange insulation for 75 mm (2.95 ") measuring probe, suitable for measuring probes < 1 m (3.28')	5335847
Flange insulation for 95 mm (3.74 ") measuring probe, suitable for measuring probes > 1 m (3.28')	5335421
Insulation for cooling protection pipe 625 mm (24.61 ")	5335830
Weather hood for analyzer unit, 1.4301, unpainted For DN65 PN6 protective pipe flange	5341512
Weather hood for control unit, 1.4301, unpainted	5335404
Weather hood for analyzer unit, 1.4301, unpainted For protective pipe ANSI4°, DN80 PN10 (16)	5335406

## Plug connectors and cables

### Cables (ready to assemble)

Brief description	Part no.
Connection cable for connecting analyzer and control unit	6065208
Connection cable [ATEX / IECEx] for connecting analyzer and control unit	6070572
Connection cable [ATEX / IECEx] for measuring probe magnet valve, 3-wire	6070579
Reinforced connection cable [ATEX / IECEx] for connecting analyzer and control unit	6070573

### Other plug connectors and cables

Brief description	Part no.
NPT screw connection 1/2" for other cables	6070582
NPT screw connection 3/4" [ATEX / IEXEx], reinforced, for connecting analyzer unit and control unit	6070581
NPT screw connection 3/4" [ATEX / IEXEx] for connecting analyzer unit and control unit	6070580

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