



## Sample gas probe GAS 222.21

In many applications gas analysis is the key for safe and efficient control of process flows, environmental protection and quality assurance. In extractive gas analysis the location of the gas sampling point is crucial for the reproducibility and accuracy of the analysis results.

The specific filter capacity, corrosion resistance and functional equipment requirements for the probe arise from the composition of the sample gas.

However, operating costs are also an important criterion in the selection, as the sampling points are frequently located at hard to access points in the system. Effective particle filter backwashing options and low maintenance characterise the extensive GAS probe series.

Heated probe with shut-off valve, inlet and/or downstream filter and weather hood

The downstream filter can easily be removed by turning the handle 90°

The probe body and the area around the screw connection for the heated sample gas line are completely isolated

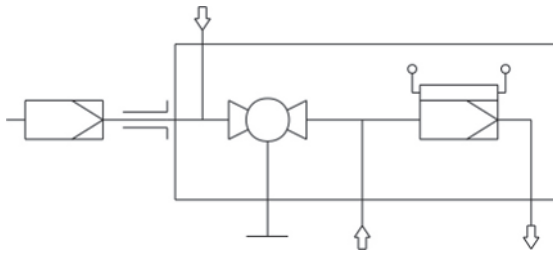
Electronic temperature controller up to 200 °C with low/high temperature alarm and display

For dust loads up to 2 g/m<sup>3</sup>  
With upstream filter 10 g/m<sup>3</sup> and up

This probe is not suitable for use in Ex areas



**Flow chart**



**Technical Data**

**Gas Probe Technical Data**

Probe operating temperature:	max. 200 °C	
Ambient temperature with accessories:	<b>Component</b>	<b>Ambient temperature range</b>
	Compressed air valve:	-10 °C < T <sub>amb</sub> < +55 °C
	Pneumatic drive:	-10 °C < T <sub>amb</sub> < +55 °C
	Limit switch:	-20 °C < T <sub>amb</sub> < +100 °C
Regulator setting range:	+50 to +200 °C	
Low/high temperature alarm:	Alarm adjustable ±5.....30 K from setpoint, factory preset to 15 K, max. switching current 1 A	
Electrical data:	230 V, 2.0 A, 50/60 Hz 115 V, 3.8 A, 50/60 Hz	
IP rating:	IP54	
Max. operating pressure:	6 bar	
Material:	Ball valve 1.4408	
Parts in contact with media:	Flange: 1.4571 Seals: PTFE/Graphit/1.4404 and see filter	

Axis Solutions Pvt Ltd is the Authorized Distributor of Bühler Technologies GmbH in India  
[www.axisindia.in](http://www.axisindia.in) | [info@axisindia.in](mailto:info@axisindia.in)

**Ordering Instructions**

The item number is a code for the configuration of your unit. Please use the following model key:

4622221	0	9	9	0	X	X	X	X	X	X	X	X	X	X	X	Product Characteristics
																<b>Flange / approval</b>
																DIN DN65 PN6
																<b>Cleaning the probe</b>
	1															115 V
	2															230 V
																<b>Calibrating gas connection</b>
	0															No calibrating gas connection
	1															6 mm
	2															6 mm + check valve
	3															1/4"
	4															1/4" + check valve
																<b>Connection heated extension</b>
	0															No
	1															Yes
																<b>Built-in temperature controller for heated extension <sup>1)</sup></b>
	0															No
	1															Yes
																<b>Blowback with air reservoir <sup>2)</sup></b>
																<b>Air reservoir heating</b>
	1															Yes
	9															No
																<b>Built-in blowback control <sup>1)</sup></b>
	1															Internal controller
	9															No
																<b>Compressed air valve / valve voltage information</b>
	0															Manual
	1															115 V
	2															230 V
	3															24 V
	9															None (if no blowback requested)
																<b>Pneumatic drive for ball valve</b>
	0															Manual
	1															Monostable pressure-free open
	2															Monostable pressure-free closed
	3															Bi-stable
																<b>Limit switch for pneumatic drive</b>
	1															Yes
	9															No
																<b>Control valve for pneumatic drive</b>
	3															3/2-way valve
	5															5/2 way valve
	9															No control valve

<sup>1)</sup> The electronics can either be equipped with temperature controller for heated extension or blowback control

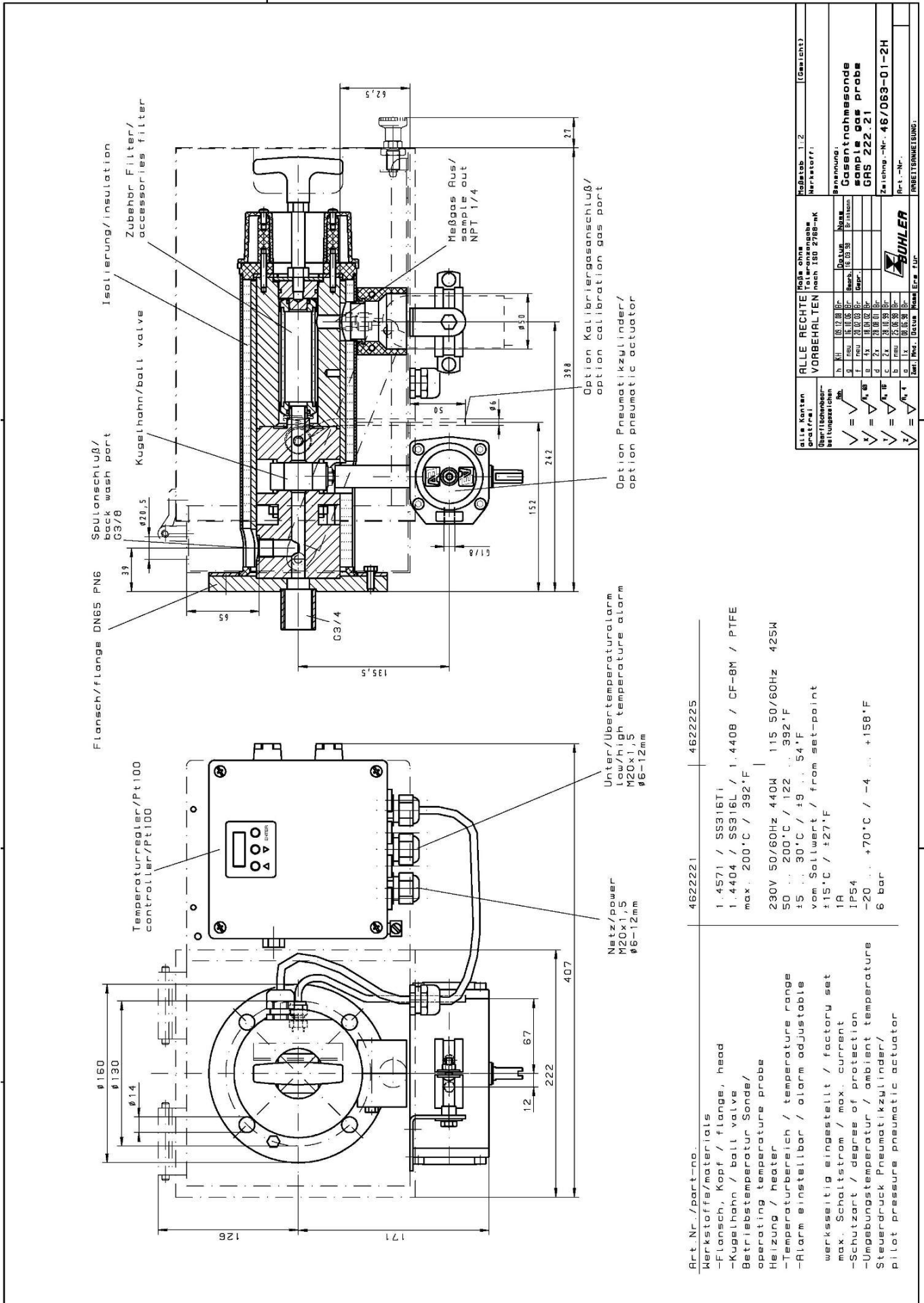
<sup>2)</sup> For flammable sample gas, always use inert gas for blowback. Probe blowback prohibited when using explosive gases!

**Options**

The base unit becomes functional by adding accessories suitable for the application. Please refer to accessory data sheet no. 461099 for information.

Please also refer to data sheet no. 461000 "GAS 222 Gas Probes" for a general description.

Dimensions



Art. Nr. / part-no.	4622221	4622225
Werkstoffe/materials	1.4571 / SS316Ti	1.4408 / CF-8M / PTFE
-Flansch, Kopf / flange, head	1.4404 / SS316L / max. 200°C / 392°F	1.4408 / CF-8M / PTFE
-Kugelhahn / ball valve	max. 200°C / 392°F	
Betriebstemperatur Sonde/operating temperature probe	230V 50/60Hz 440V	115 50/60Hz 425W
Heizung / heater	50 ... 200°C / 122 ... 392°F	
-Temperaturbereich / temperature range	±5 ... 30°C / ±9 ... 84°F	
-Alarm einstellbar / alarm adjustable	vom Sollwert / from set-point	
werkseitig eingestellt / factory set	±15°C / ±27°F	
max. Schaltstrom / max. current	1A	
-Schutzart / degree of protection	IP54	
-Umgebungstemperatur / ambient temperature	-20 ... +70°C / -4 ... +158°F	
Steuerdruck Pneumatikzylinder/ Pilot pressure pneumatic actuator	6 bar	

Modultab. 1-2	(Gewicht)																																								
Hersteller:																																									
Benennung:	Gasentnahmassonde																																								
	sample gas probe																																								
	GAS 222.21																																								
Zeichnung-Nr.:	46/069-01-2H																																								
Pr-t. -Nr.:																																									
ARBEITSEINLEITUNG:																																									
<table border="1"> <tr> <th colspan="2">ALLE RECHTE VORBEHALTEN</th> </tr> <tr> <td>alle Kosten</td> <td>alle ohne Gewähr</td> </tr> <tr> <td>übernehmen</td> <td>nach ISO 2768-mK</td> </tr> <tr> <td>h</td> <td>h</td> </tr> <tr> <td>d</td> <td>d</td> </tr> <tr> <td>f</td> <td>f</td> </tr> <tr> <td>g</td> <td>g</td> </tr> <tr> <td>h</td> <td>h</td> </tr> <tr> <td>k</td> <td>k</td> </tr> <tr> <td>m</td> <td>m</td> </tr> <tr> <td>n</td> <td>n</td> </tr> <tr> <td>p</td> <td>p</td> </tr> <tr> <td>r</td> <td>r</td> </tr> <tr> <td>s</td> <td>s</td> </tr> <tr> <td>t</td> <td>t</td> </tr> <tr> <td>v</td> <td>v</td> </tr> <tr> <td>w</td> <td>w</td> </tr> <tr> <td>x</td> <td>x</td> </tr> <tr> <td>y</td> <td>y</td> </tr> <tr> <td>z</td> <td>z</td> </tr> </table>		ALLE RECHTE VORBEHALTEN		alle Kosten	alle ohne Gewähr	übernehmen	nach ISO 2768-mK	h	h	d	d	f	f	g	g	h	h	k	k	m	m	n	n	p	p	r	r	s	s	t	t	v	v	w	w	x	x	y	y	z	z
ALLE RECHTE VORBEHALTEN																																									
alle Kosten	alle ohne Gewähr																																								
übernehmen	nach ISO 2768-mK																																								
h	h																																								
d	d																																								
f	f																																								
g	g																																								
h	h																																								
k	k																																								
m	m																																								
n	n																																								
p	p																																								
r	r																																								
s	s																																								
t	t																																								
v	v																																								
w	w																																								
x	x																																								
y	y																																								
z	z																																								