Sample gas probe GAS 222.11 Ex2

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.

- Versions with Atex and IECEx approval
- Unheated probe with shut-off valve and/or upstream filter
- The filter element can easily be removed by turning the handle 90°
- For dust loads up to 2 g/m³, non-condensable gases. Combined with upstream filter up to 10 g/m³ and higher
- The probe is suitable for use in explosive areas

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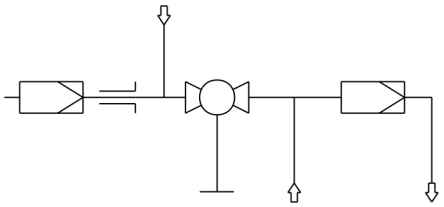
Flow chart



Technical Data

Gas Probe Technical Data

Ambient temperature without accessories:	-20 to +80 °C	
Ambient temperature for accessories:	**Component**	**Ambient temperature range**
	Compressed air valve:	-30 °C < T_{amb} < +60 °C
	Solenoid valve for pneumatic drive:	-10 °C < T_{amb} < +55 °C
	Pneumatic drive:	-20 °C < T_{amb} < +80 °C
	Limit switch:	-25 °C < T_{amb} < +60 °C
	Terminal box:	-20 °C < T_{amb} < +70 °C
Max. gas inlet temperature:	+195 °C (T3)/+130 °C (T4)	
Medium temperature (blowback):	**Component**	**Medium temperature range**
	Compressed air valve:	-10 °C to +80 °C
	Solenoid valve for pneumatic drive:	-10 °C to +100 °C
Max. operating pressure	6 bar	
Material:	1.4571; ball valve 1.4408	
Parts in contact with media:	Seals: Graphite/1.4404 and see filter	
Markings:	ATEX: Ⓔx II 3G Ex ec mb IIC T3/T4 Gc IECEx: Ex ec mb IIC T3/T4 Gc	

Ordering instructions

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

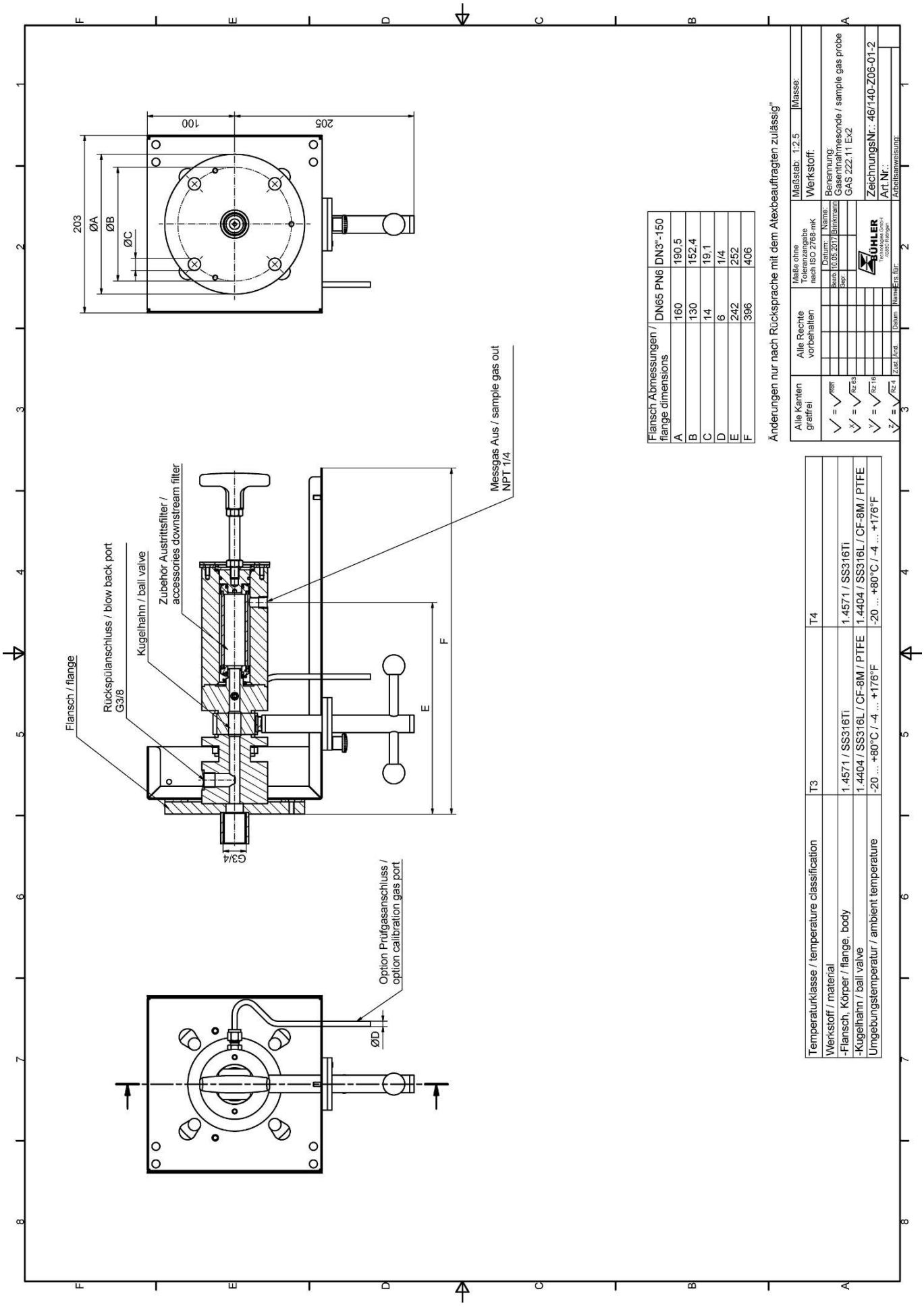
4622211	X	X	X	X	X	X	0	0	X	X	X	X	X	X	Product Characteristics
															Junction Box
	0														No
	1														Yes
															Flange
		0	1												Flange DN65 PN6
		0	2												Flange DN3"-150
															Hazardous area Outside and Inside
				2	9										Ex-Zone 2 outside
				2	2										Ex-Zone 2 outside and inside
															Temperature class
						3									T3
						4									T4
															Power supply sample probe
							0								None
															Calibration gas port
									0						No
									1						6 mm
									2						6 mm with check valve
									3						1/4"
									4						1/4" with check valve
															Capacitive vessel
										0					No
										1					Yes (not for Zone 2 inside)
															Valve for pressurized air
											0				Ball valve
											1				Solenoid valve 115 V (marked "mb")
											2				Solenoid valve 230 V (marked "mb")
											3				Solenoid valve 24 V (marked "mb")
											9				none
															Pneumatic actuator for internal ball valve
												0			No
												1			Mono stable depressurized open
												2			Mono stable depressurized closed
															Limit switch for pneumatic actuator
													0		No
													1		Yes
															Solenoid valve for pneumatic actuator
														0	No
														1	Yes (marked "mb")

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.

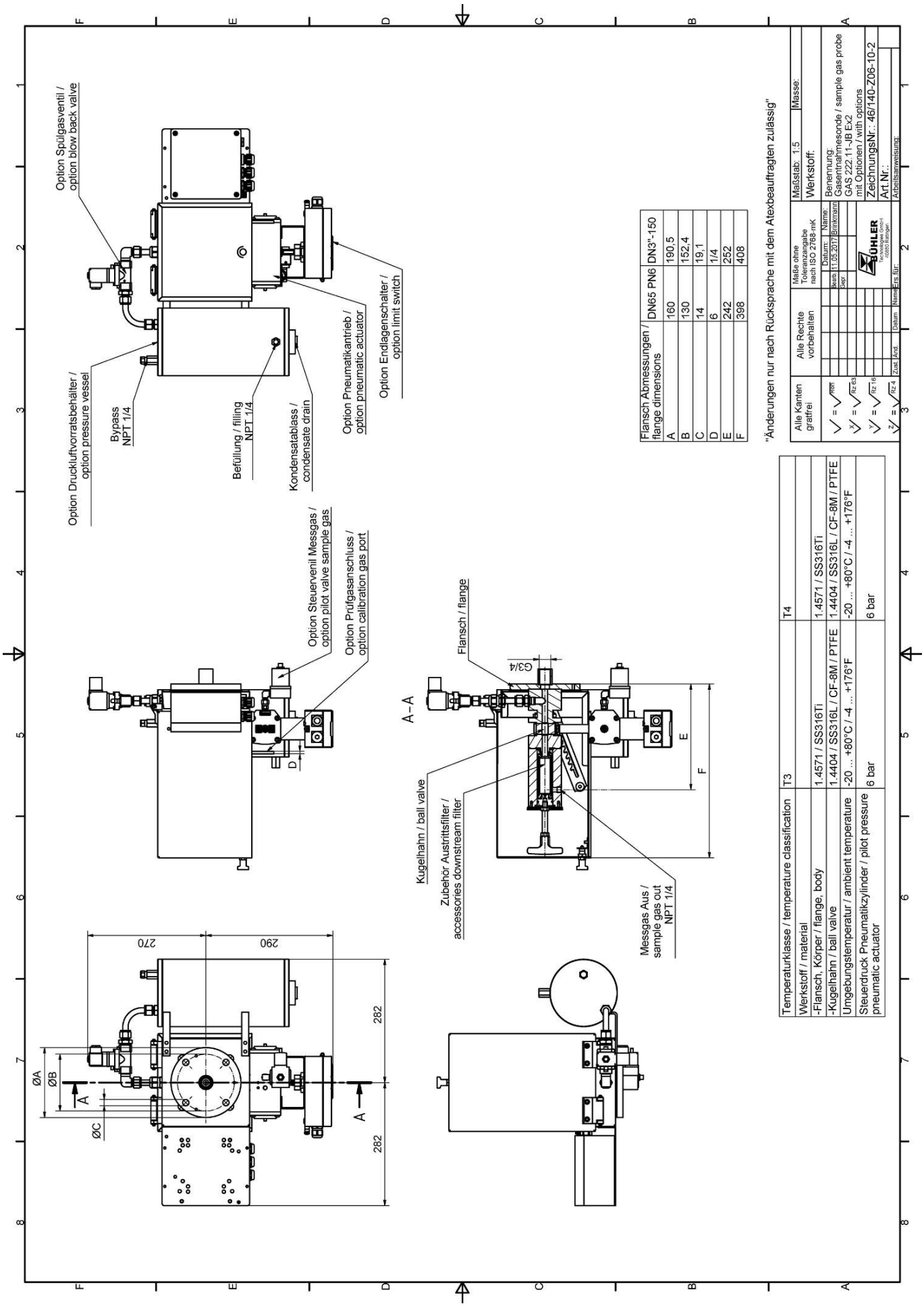
Dimensions



Flansch Abmessungen / flange dimensions	DN65 PN6	DN3"-150
A	160	190,5
B	130	152,4
C	14	19,1
D	6	1/4
E	242	252
F	396	406

Änderungen nur nach Rücksprache mit dem Atexbeauftragten zulässig"

Temperaturklasse / temperature classification	T3	T4
Werkstoff / material		
-Flansch, Körper / flange, body	1.4571 / SS316Ti	1.4571 / SS316Ti
-Kugelhahn / ball valve	1.4404 / SS316L / CF-8M / PTFE	1.4404 / SS316L / CF-8M / PTFE
Umgebungstemperatur / ambient temperature	-20 ... +80°C / -4 ... +176°F	-20 ... +80°C / -4 ... +176°F


Option Spülgasventil / option blow back valve
Option Druckluftvorratsbehälter / option pressure vessel
Bypass NPT 1/4
Befüllung / filling NPT 1/4
Kondensatablass / condensate drain
Option Pneumatikantrieb / option pneumatic actuator
Option Endlagenschalter / option limit switch
Option Steuerventil Messgas / option pilot valve sample gas
Option Prüfgasanschluss / option calibration gas port
Flansch / flange
G3/4
A–A
Kugelhahn / ball valve
Zubehör Austrittsfilter / accessories downstream filter
Messgas Aus / sample gas out NPT 1/4
ØA
ØB
ØC
270
290
282
282
D
E
F
Flansch Abmessungen / flange dimensions
DN65 PN6
DN3"-150
A 160 190,5
B 130 152,4
C 14 19,1
D 6 1/4
E 242 252
F 398 408
"Änderungen nur nach Rücksprache mit dem Atexbeauftragten zulässig"
Alle Kanten gratfrei
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Maße ohne Toleranzangabe nach ISO 2768-mK
Maßstab: 1:5
Masse:
Werkstoff:
Benennung: Gasentnahmesonde / sample gas probe GAS 222.11-JB Ex2 mit Optionen / with options
ZeichnungsNr.: 46/140-Z06-10-2
Art.Nr.:
Arbeitsanweisung:
Name
Datum
Bearb. 11.05.2017 Brinkmann
Ers. für:
Zust. Änd.
Temperaturklasse / temperature classification | T3 | T4
Werkstoff / material | 1.4571 / SS316Ti | 1.4571 / SS316Ti
-Flansch, Körper / flange, body | 1.4404 / SS316L / CF-8M / PTFE | 1.4404 / SS316L / CF-8M / PTFE
-Kugelhahn / ball valve | -20 ... +80°C / -4 ... +176°F | -20 ... +80°C / -4 ... +176°F
Umgebungstemperatur / ambient temperature | 6 bar | 6 bar
Steuerdruck Pneumatikzylinder / pilot pressure pneumatic actuator