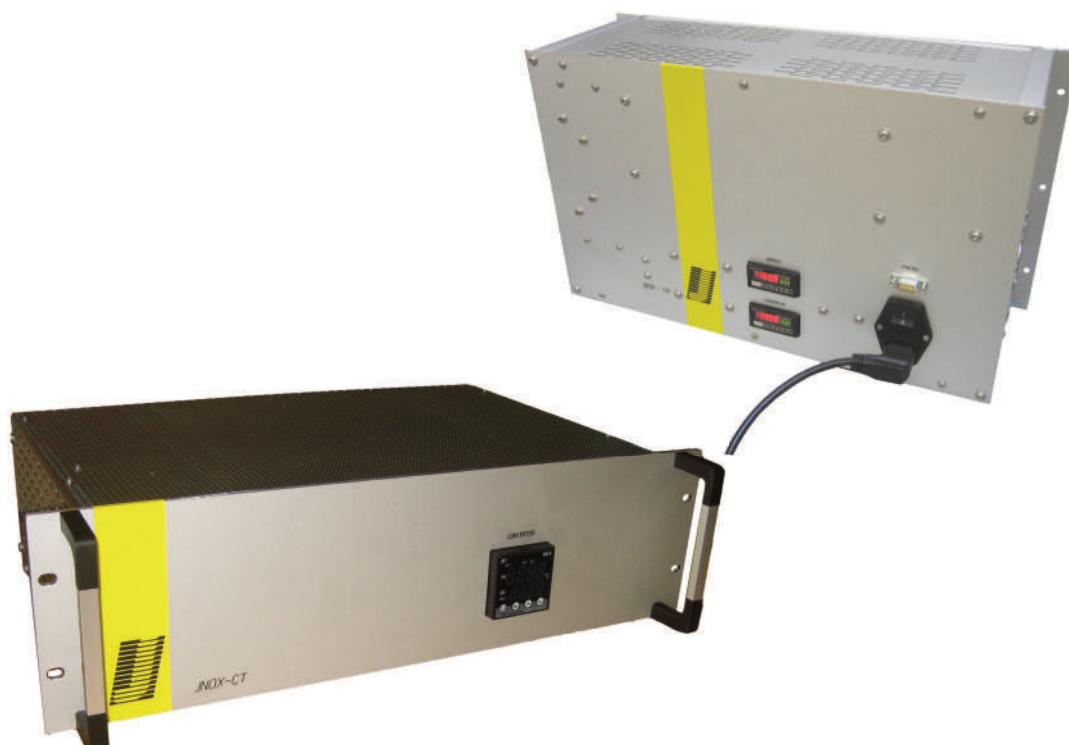




**JCT**  
Analysentechnik

# JNOX

## NO<sub>2</sub> to NO Sample Gas Converter



Gas Sampling  
Probes

Heated Sample  
Lines

Sample Gas  
Coolers

Condensate  
Treatment

Accessories

Gas Conditioning  
Systems

**Sample Gas Converters**

### APPLICATION

- Extractive gas analysis
- Emission (CEMS) and process monitoring
- Conversion of NO<sub>2</sub> to NO for NO<sub>x</sub>-measurement
- Enables the use of infrared analyzers
- For dry sample gases with unheated inlet or for hot and humid sample gas with heated inlet

### BENEFITS

- Variable applicable due to different housing and equipment versions
- Long lifetime of the converter cartridge of approx. 10<sup>6</sup> ppmh NO<sub>2</sub>
- High conversion ratio
- Fast response time due to low dead volume
- No CO-Emission with molybdenum containing converter filling material
- High flow performance
- Low cross sensitivities

### FEATURES

- In 19" wall mounting or portable housing
- Efficiency of converter > 96 %
- Digital temperature indication and status LEDs
- Status contact
- Conversion material carbon or metallic (molybdenum containing)
- Model with unheated or heated bypass connection upstream conversion for additional measurements or fast response times
- Model with local or remote controllable unheated 2/3-way solenoid valve to bypass the converter cartridge for calibration or test gas feeding

## TECHNICAL DATA

Model	JNOX-CT	JNOX-CV	JNOX-T
Description	NO <sub>2</sub> to NO sample gas converter for NO <sub>x</sub> measurements		
With heated sample gas inlet	no	no	yes
With bypass in the sample gas inlet	yes	no	yes
With bypass of converter cartridge	no	yes	no
<b>Operation</b>			
Operating temperature carbon cartridge**	400 °C		
Operating temperature metallic cartridge (molybdenum containing)	380 °C		
Gas flow carbon cartridge**	30 to 90 NI/hr (45 to 60 NI/hr recommended)		
Gas flow metallic cartridge	max. 60 NI/hr		
NO <sub>2</sub> carbon cartridge	up to 1,000 ppm application dependent		
Permitted NO <sub>2</sub> concentration metallic cartridge	application dependent		
Life time carbon cartridge*	up to 10 <sup>6</sup> ppmh NO <sub>2</sub> application dependent		
Life time metallic cartridge	application dependent		
Converter efficiency	> 96 %		
Ambient temperature	+5 °C to +40 °C		
Operating pressure	max. 2 bara		
Ready for operation	< 30 min		
Temperature heated inlet	160 °C		
<b>Construction</b>			
Mounting	19" rack		
Dimensions over all (W x H x D)	483 x 133 x 300 mm	483 x 133 x 472	
Weight	ca. 9 kg	ca. 12 kg	
Housing	19", sheet steel, 1,5 mm, galvanised		
Front plate	aluminium, natural anodised		
Connection sample gas inlet	SS316 fitting, 6 mm		
Connection converter outlet	PVDF fitting, DN 4/6 mm		
Connection sample gas outlet	PVDF fitting, DN 4/6	SS316 fitting, 6 mm	
Approvals / signs	CE		
<b>Electrics</b>			
Power supply	230 VAC 50/60 Hz or 115 VAC 50/60 Hz ±10 %		
Power consumption (depending on configuration)	260 to 425 VA		
Power connection	IEC device socket / CEE 7/7 to IEC plug, 2 m cable		
Fusing (in IEC device socket)	lead fuse T5A		
Protection class	IP 20 (EN 60529)		
On time	100 %		
Temperature alarm limits	+20 K (converter) / +10 K (heated inlet)		
Alarm delay	0,5 s		
Status relay	volt free changeover contact		
Switching capacity relay	max. 48 VAC / 0,5 A; min. 5 VADC 5 mA		
Connection status relay / external	DB9-plug		
Status contact bypass valve	make contact volt free 24 VDC / 2 A		
Status contact local / external	make contact volt free 24 VDC / 2 A		

\* ... in case of perfect sample gas conditioning

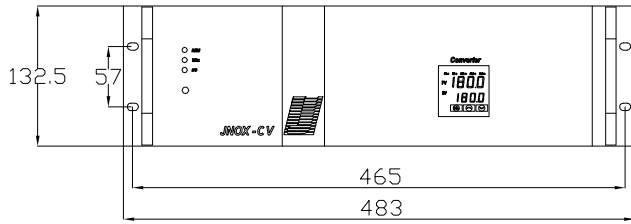
\*\* a downstream filter is recommended

The above listed converter models are also available as portable version in aluminium housing or in wall mounting housing (see also table order codes on page 4)

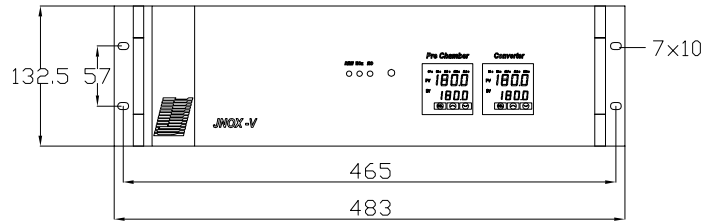
# DIMENSIONS

Dimensions in mm

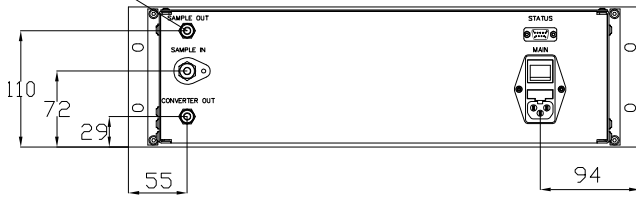
## JNOX-CT / CV



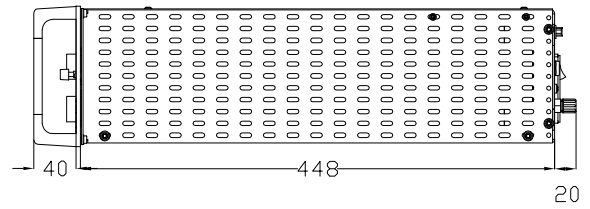
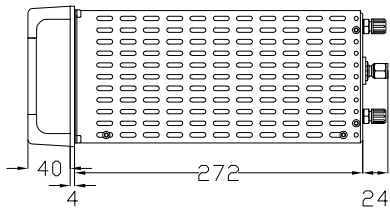
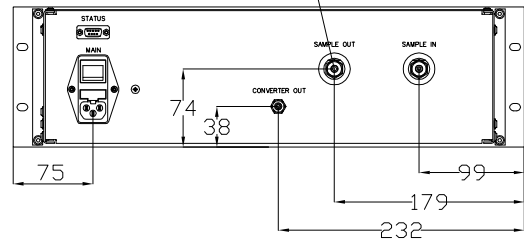
## JNOX-T



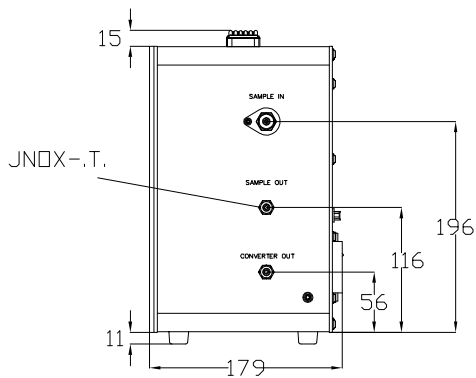
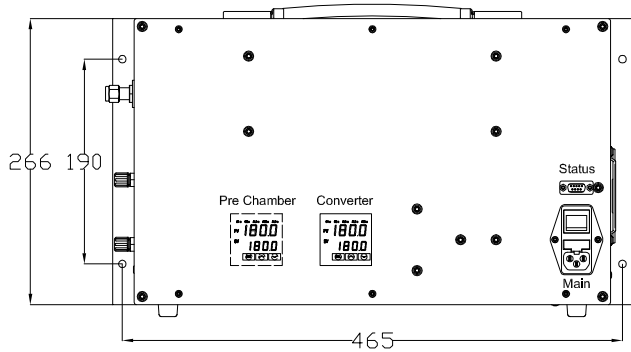
## JNOX-CT



## JNOX-T

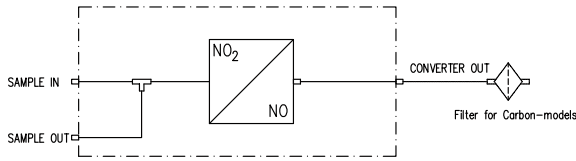


## JNOX-CTW / CVW / TW / CTP / CVP / TP in portable (P) or wall mounting housing (W)

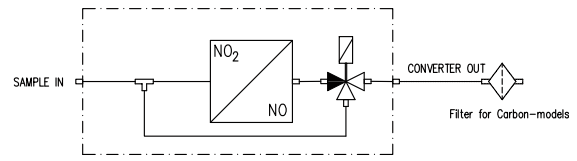


## GAS FLOW DIAGRAMS

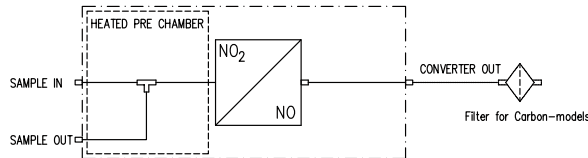
### JNOX-CT



### JNOX-CV



### JNOX-T



## ORDER CODE

### JNOX-

Model	-CT/C	-CT/M	-CV/C	-CV/M	-T/C	-T/M	-CTW/C	-CTW/M	-CVW/C	-CVW/M	-TW/C	-TW/M	-CTP/C	-CTP/M	-CVP/C	-CVP/M	-TP/C	-TP/M
Unheated sample gas inlet	X	X	X	X			X	X	X	X			X	X	X	X		
Heated sample gas inlet					X	X					X	X					X	X
Bypass (T)	X	X			X	X	X	X			X	X	X	X			X	X
Solenoid valve (V)			X	X					X	X					X	X		
Converter material carbon (/C)	X		X		X		X		X		X		X		X		X	
Converter material metallic (/M)		X		X		X		X		X		X		X		X		X
19" housing	X	X	X	X	X	X												
Wall mounting housing (W)							X	X	X	X	X	X						
Portable housing (P)													X	X	X	X	X	X
Order code x = 0 : 230 VAC x = 1 : 115 VAC	17.20x40	17.20x42	17.20x50	17.20x52	17.30x00	17.30x01	17.21x40	17.21x42	17.21x50	17.21x52	17.31x00	17.31x01	17.22x40	17.22x42	17.22x50	17.22x52	17.32x00	17.32x01

Gas Sampling Probes



Heated Sample Lines



Sample Gas Coolers



Gas Conditioning Systems



NOx Converter



and solutions for

