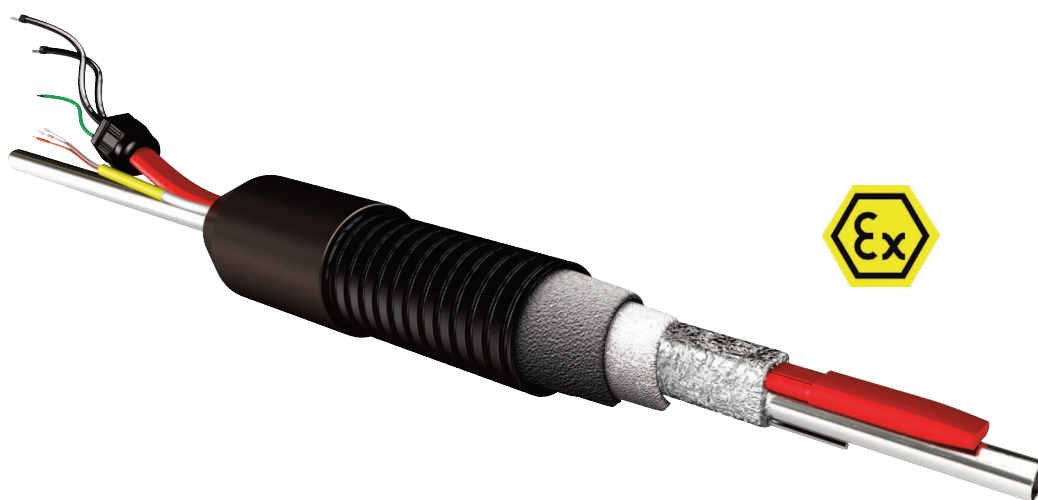




# JH3BEX

## Heated Sample Line self-regulating cut to length

**JCT**  
Analysentechnik



Gas Sampling  
Probes

**Heated Sample Lines**

Sample Gas  
Coolers

Condensate  
Treatment

Accessories

Gas Conditioning  
Systems

Sample Gas  
Converters

### APPLICATION

- Extractive gas analysis
- Emission and process monitoring
- Installation in Zone 1, 2 or 21, 22
- Transport of sample gas from sample point to analysis system
- Remains steadily/safely above acid dew point or for frost protection
- To prevent measurement faults
- Indoor and outdoor use

### BENEFITS

- No condensate formation, no freezing
- Resilient external protection
- Excellent insulation
- Optimal heat deployment
- Available for "cut to length on site" in rolls up to 150 m with additional termination kits
- Available as "ready to use" heated sample line, factory-configured

### FEATURES

- Operating temperature up to 120 °C
- External jacket of corrugated polyamide PA12
- Heat insulation with thermo fleece
- Sample gas core: PTFE, PFA or SS316, DN 4 to DN 10 mm
- Delivered with end caps, factory-mounted, or open end(s) for on-site termination
- Second core for e.g. calibration gas as option

## TECHNICAL DATA

### MODEL



**JH3BEX**

Description	self-regulated heated sample line "cut to length on site" or "preassembled" from factory
External jacket	corrugated polyamide 11/12 jacket, black, electrically conductive
Sample gas core	fixed; interchangeable on request
Area of application	fixed installation indoor and outdoor in hazardous area

### OPERATION

Operating temperature	self-regulating 30 °C / 100 °C / 120 °C (optional 5 °C / 50 °C / 80 °C) at -20 °C ambient temperature
Operating pressure at 150 °C	atmospheric option pressure hose: - PTFE / PFA core: DN 4/6 mm 6 bara; DN 6/8 mm 4 bara; DN 8/10 mm 3 bara, 1/4" OD 7 bara, 3/8" OD 5 bara - SS316 core, all diameters: 10 bara
Ambient temperature	-20 °C to +60 °C

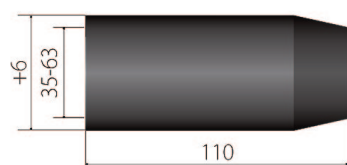
### CONSTRUCTION

Material sample gas core	PTFE, PFA, SS316
Heating element	heating cable with protection braid, <b>ATEX / IECEx or CSA / IECEx certified heating cable</b> <b>optional: TRCU or CCC</b>
Thermal insulation	multi-layered thermal fleece
End configuration	silicone caps (mounted ex-works or on-site termination kit)
Maximum length of finished sample line	see table "rated output" / column "maximum length of heating circuit" on page 4
Outer diameter heated sample line (without end caps)	for operating temperatures up to 100 °C: 43 mm for operating temperatures 120 °C: 55 mm
Dimension silicone end caps	diameter of heated sample line plus 6 mm
Minimum bending radius	DN 4/6 and DN 6/8 mm: 230 mm. DN 8/10 and DN 10/12mm: 280 mm with interchangeable inner core: DN 4/6 and DN 6/8 mm: 280 mm
Weight	1,000 g/m
Maximum production length	max. 150 m
Type of protection	<b>ATEX (230 V):</b> 5 °C to 30 °C operating temperature:  II 2G Ex 60079-30-1 eb IIC T6 Gb II 2D Ex 60079-30-1 tb IIIC T85°C Db 50 °C to 120 °C operating temperature:  II 2G Ex 60079-30-1 eb IIC T3 Gb II 2D Ex 60079-30-1 tb IIIC T200°C Db <b>CSA (115 V und 230 V):</b> Class I Div 1* Group B,C,D / Class I Div 2 Group A,B,C,D / Class II Div 2 Group E,F,G / Class III T3 Class I Zone1 Ex e II T3 <b>*Class I Div 1 on request only!</b>
Protection class	IP54 (EN60529)
Approvals / Sign	CE / IECEx / ATEX or CSA optional: TRCU or CCC

### ELECTRICS

Power supply	115 VAC 50/60 Hz or 230 VAC 50/60 Hz
Power consumption at +10 °C ambient temperature	see table "power consumption" on page 4
Temperature sensor	without; optional 3-wire Ex-Pt100 (ATEX and IECEx approved)
Connection cable	1.5 m protruded heating tape with cable gland ATEX: M25 x 1.5 EX proof cable gland CSA: 3/4" NPT EX proof cable gland

### Dimensions of the end caps



Dimensions in mm

## ORDER CODE

### JH3BEX

Operating temperature max. 30 °C at -20 °C				1
Operating temperature max. 100 °C at -20 °C				2
Operating temperature max. 120 °C at -20 °C				3
Jacket made of PA12			4	
Core 500 mm protruded			0	
Line length* without protrusion in dm (e.g.: 10 m = 0100; 4.5 m = 0045)				-XXXX-
Diameter DN 4/6 mm				4
Diameter DN 6/8 mm				6
Diameter DN 8/10 mm				8
Diameter DN 1/4"				5
Diameter DN 3/8"				7
PTFE core				PTFE
PFA core				PFA
SS316 core				SS
Power supply 230 VAC / 50/60 Hz				2
Power supply 115 VAC / 50/60 Hz				1
Without calibration gas core				-0
Calibration gas core DN 4/6 mm, PTFE				-4
End configuration side 2 (without electrical connection): open (for self-termination)				0
End configuration side 2 (without electrical connection): silicone cap				H
End configuration side 1 (with electrical connection): open (for self-termination)				0
End configuration side 1 (with electrical connection): silicone cap				L
ATEX / IECEx (230 V only)				-A
CSA / IECEx (115 V or 230 V)				-C
Without temperature sensor				T0
With 3-wire Ex-Pt100 (built in from factory, ATEX and IECEx, with end-configuration „L" only)				T1
Customized version (detailed description needed)				XY

\* The specified hose length is determined as follows:  
 1) for heated hoses with fittings - the heated hose length including the fittings  
 2) for heated hoses without fittings - the heated hose length including the end caps. The length of the protruding inside tube is not included.



Admissible deviations of dimension L<sub>1</sub> for factory mounted heating hoses. The manufacturing tolerances correspond to DIN 20066.

### Order code

4 0 - - - - - T

### Accessories

### Part Number

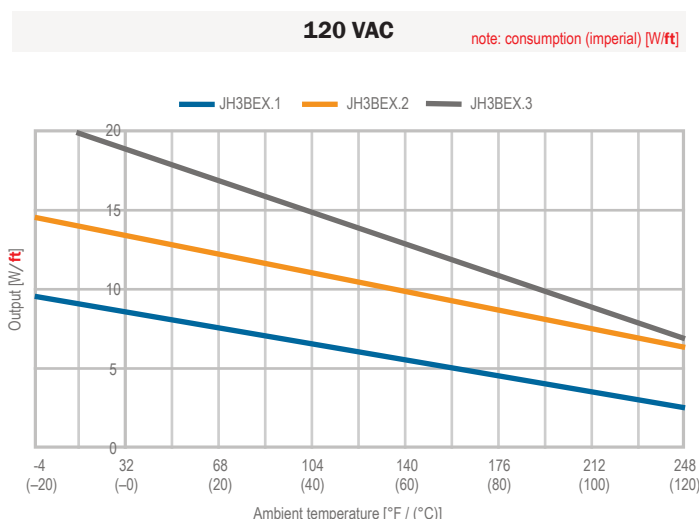
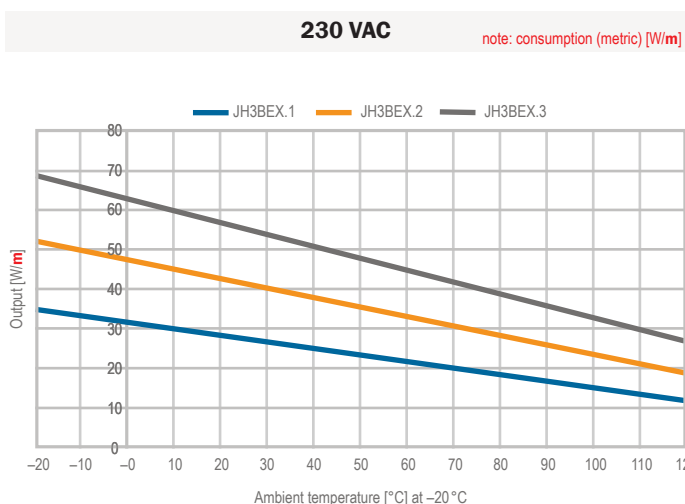
	Universal-mounting clamp for mounting at gas sampling probe series JES for line diameters 35 to 50 mm	<b>35.00980</b>
	Universal-mounting clamp for mounting at gas sampling probe series JES for line diameters 50 to 61 mm	<b>35.00981</b>
	2 x silicone cap connection, 1.5 m connection cable (silicone, 3 x 1.5 mm <sup>2</sup> ), for self assembly, operating temp. +5 °C to 30 °C	<b>68.01000</b>
	2 x silicone cap connection, 1.5 m connection cable (silicone, 3 x 1.5 mm <sup>2</sup> ), for self assembly, operating temp. +50 °C to 100 °C	<b>68.01010</b>
	2 x silicone cap connection, 1.5 m connection cable (silicone, 3 x 1.5 mm <sup>2</sup> ), for self assembly, operating temperature +120 °C	<b>68.01020</b>
	additional material is required for each set; sufficient for 5 connections and terminations	<b>68.01030</b>
Temperature sensor	Ex-Pt100 3-wire, ATEX-Pt100 3-wire, ATEX and IECEx approved (II 2G Ex e IIC T6 ... T2 Gb II 2D Ex tb IIIC TX Db), cable length 3 m	<b>68.01051</b>

## RATED OUTPUT

230 VAC				
Start-up temperature	Fuse circuit breaker (A)	max. length of heating circuit (m)		
		JH3BEX.1	JH3BEX.2	JH3BEX.3
10 °C	16	80.0	53.0	39.0
	20	100.0	66.0	49.0
	25	109.0	83.0	62.0
	32	109.0	89.0	77.0
0 °C	16	75.0	50.0	37.0
	20	95.0	63.0	47.0
	25	106.0	79.0	59.0
	32	106.0	86.5	75.0
-10 °C	16	71.0	48.0	35.0
	20	90.0	60.0	44.0
	25	103.5	75.0	56.0
	32	103.5	84.5	68.0
-20 °C	16	68.0	45.0	34.0
	20	85.0	57.0	42.0
	25	101.0	72.0	54.0
	32	101.0	82.5	65.0

115 VAC				
Start-up temperature	Fuse circuit breaker (A)	max. length of heating circuit (m)		
		JH3BEX.1	JH3BEX.2	JH3BEX.3
10 °C	15	49.5	31.0	22.0
	20	66.5	42.0	30.0
	25	84.0	53.0	38.0
	30	101.0	64.0	46.0
0 °C	15	47.0	29.5	21.0
	20	64.0	40.0	28.0
	25	80.0	51.0	36.0
	30	69.0	62.0	44.0
-10 °C	15	45.5	29.0	20.0
	20	61.0	39.0	27.0
	25	77.0	49.0	34.0
	30	93.0	59.0	41.5
-30 °C	15	68.0	26.5	18.0
	20	57.0	36.0	24.5
	25	72.0	46.0	31.0
	30	86.0	55.0	37.5

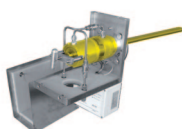
## POWER CONSUMPTION



Gas Sampling Probes

Heated Sample Lines

Sample Gas Coolers



Gas Conditioning Systems

NOx Converter

and solutions for

