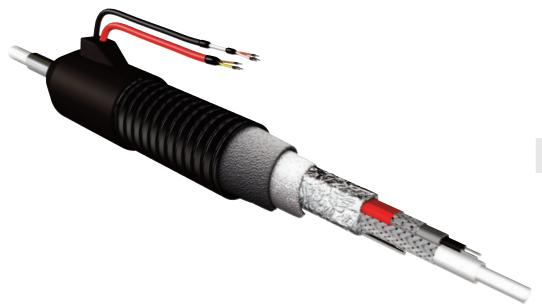
# JH3BE Heated Sample Line self-regulating cut-to-length







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
- Transport of sample gas from sample point to analysis system
- Remains steadly/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 with termination from factroy

#### **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 mounted from factroy or open end(s) for on site termination
- Second core for e.g. calibration gas as option

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## **TECHNICAL DATA**

JH3BE

Description	self-regulated heated sample line "cut-to-length on-site" or "pre-assembled" from factory
External jacket	corrugated polyamide 12 jacket, black option: with silicone layer
Sample gas core	fixed; interchangeable on request
Area of application	fixed installation indoor and outdoor

#### **Operation Data**

Operating temperature	self-regulating 30 °C / 100 °C / 120 °C (optional 5 °C / 50 °C / 80 °C) at –20 °C ambient temperature
Operating pressure (max. at 150 °C)	atmospheric option pressure hose: - PFTE / 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

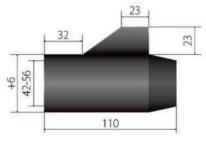
Material sample gas core	PTFE, PFA, SS316
Heating Element	heating cable
Thermal insulation	multi-layered thermal fleece
End configuration	silicone caps (mounted ex-works or on-site termination kit)
Maximum length of finished sample line	see table "rated output" / column "maximum length of heating circuit" page 4
Outer diameter heated sample line (without end caps)	for operating temperatures up to 100 °C: 43 mm for operating temperature 120 °C: 55 mm
Dimensions silicone end caps	heated sample line diameter 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	1000 g/m
Maximum production lenght	max. 150 m
Protection class	IP54 (EN60529)
Approvals / Sign	CE

#### **Electrics**

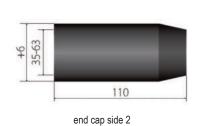
Power supply	115 VAC 50/60 Hz or 230 VAC 50/60 Hz
Power consumption	see table "power consumption" page 4
Temperature sensor	without; optional 2-wire PT100; others on request
Power supply cable (if terminated from factory)	1.5 m cable with open leads, depending on power consumption: up to 16 A = $3 \times 1.5 \text{ mm}^2$ cables up to $25 \text{ A} = 3 \times 2.5 \text{ mm}^2$ cables up to $32 \text{ A} = 3 \times 6 \text{ mm}^2$ cables with modified end cap

<sup>\*</sup> At voltages below 230 VAC the power density is reduced and at ambient temperatures below 0 °C the max. temperature is reduced. For further information please contact our **JCT** sales team.

## **Dimensions of end caps**









end cap for factroy termination type "L"

Dimensions in mm

# **ORDER CODE**

## JH3BE

Maintain temperature max. 30 °C at −20 °C	1											
Maintain temperature max. 100 °C at −20 °C	2											
Maintain temperature max. 120 °C at −20 °C	3											
Jacket made of corrugated PA 11/12		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 electr. connection): open (for self-termination)									0			
End configuration side 2 (without elect. connection): silicon cap									Н			
End configuration side 1 (with electrical connection): open (for self termination)										0		
End configuration side 1 (with electrical connection): silicone cap										L		
Without temperature sensor											T0	
With 2-wire PT100 (built in from factroy, only with end configuration "L")											T1	
Customized version (detailed description needed)												XY
Order code		4	0									XY

Accessories Part Number

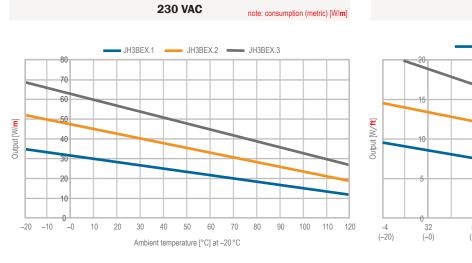
	Universal mounting clamp for mounting at gas sample probes series JES for line diameters 35 to 50 mm	35.00980
	Universal-mounting clamp for mounting at gas sample probes series JES for line diameters 50 to 61 mm	35.00981
Power connection and assembly kits	2 x silicone cap connection, 1,5 m connection cable (silicone, 3 x 1,5 mm²), for self assembly, holding temp. $5^{\circ}\text{C}$ to $30^{\circ}\text{C}$	68.00100
	2 x silicone cap connection, 1,5 m connection cable (silicone, 3 x 1,5 mm²), for self assembly, holding temp. 50 °C to 100 °C	68.00110
	2 x silicone cap connection, 1,5 m connection cable (silicone, 3 x 1,5 mm²), for self assembly, holding temp. 120 °C	68.00120
	Additional material is required for each set. Sufficient for 5 connections and terminations	68.00130
Temperature sensor	PT100 / 2-wire RTD	68.00150

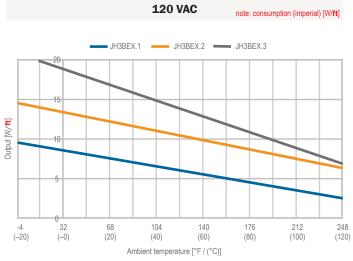
## **RATED OUTPUT**

230 VAC								
Start-up	Fuse circuit	max. length of heating circuit (m)						
temperature	breaker (A)	JH3BEX.1	JH3BEX.2	JH3BEX.3				
	16	80,0	53,0	39,0				
10°C	20	100,0	66,0	49,0				
10 0	25	109,0	83,0	62,0				
	32	109,0	89,0	77,0				
	16	75,0	50,0	37,0				
0°C	20	95,0	63,0	47,0				
0 0	25	106,0	79,0	59,0				
	32	106,0	86,5	75,0				
	16	71,0	48,0	35,0				
−10 °C	20	90,0	60,0	44,0				
	25	103,5	75,0	56,0				
	32	103,5	84,5	68,0				
	16	68,0	45,0	34,0				
−20 °C	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	Fuse circuit	max. length of heating circuit (m)						
temperature	breaker (A)	JH3BEX.1	JH3BEX.2	JH3BEX.3				
	15	49,5	31,0	22,0				
10°C	20	66,5	42,0	30,0				
10 0	25	84,0	53,0	38,0				
	30	101,0	64,0	46,0				
	15	47,0	29,5	21,0				
0°C	20	64,0	40,0	28,0				
	25	80,0	51,0	36,0				
	30	69,0	62,0	44,0				
	15	45,5	29,0	20,0				
−10 °C	20	61,0	39,0	27,0				
10 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**













NOx Converter



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