

JH3BEX Heated Sample Line self-regulating cut to length



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, factroy-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 "preassambled" fro			

"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 Data

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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: - 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

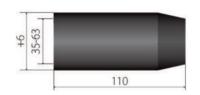
Construction

Material sample gas core	PTFE, PFA, SS316
Heating element	heating cable with protection braid, ATEX / IECEx or CSA / IECEx certified heating cable optional: TRCU or CCC
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	1000 g/m
Maximum production lenght	max. 150 m
Type of protection	ATEX (230 V): 5 °C to 30 °C operating temperature:
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





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									Н				
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
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	35.00980
	Universal-mounting clamp for mounting at gas sampling probe series JES for line diameters 50 to 61 mm	35.00981
assembly kits	2 x silicone cap connection, 1,5 m connection cable (silicone, 3 x 1,5 mm²), for self assembly, operating temp. +5 °C to 30 °C	68.01000
	2 x silicone cap connection, 1,5 m connection cable (silicone, 3 x 1,5 mm²), for self assembly, operating temp. +50 $^{\circ}\text{C}$ to 100 $^{\circ}\text{C}$	68.01010
	$2~x$ silicone cap connection, 1,5 m connection cable (silicone, 3 x 1,5 mm²), for self assembly, operating temperature +120 $^{\circ}\text{C}$	68.01020
	additional material is required for each set; sufficient for 5 connections and terminations	68.01030
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 lenght 3 m	68.01051

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			
	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			
−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	Fuse circuit	ircuit (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		
	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

