

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



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

TECHNICAL DATA

Model	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 x 1.5 mm ² cables up to 25 A = 3 x 2.5 mm ² cables up to 32 A = 3 x 6 mm ² cables with modified end cap					

* 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



9+ 59-55 110

end cap side 2



end cap for factroy termination type "L"

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			
$\label{eq:end} \mbox{End configuration side 1 (with electrical connection): open (for self termination)}$										0		
End configuration side 1 (with electrical connection): silicone cap										L		
Without temperature sensor											Т0	
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	Nu	ımt	ber

	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 °C to 30 °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 $^\circ\text{C}$	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

230 VAC					115 VAC					
Start-up	Fuse circuit	max. length of heating circuit (m)		Í	Start-up	Fuse circuit	max. length of heating circuit (m)			
temperature	breaker (A)	JH3BEX.1	JH3BEX.2	JH3BEX.3		temperature	breaker (A)	JH3BEX.1	JH3BEX.2	JH3BEX.3
10 °C	16	80,0	53,0	39,0			15	49,5	31,0	22,0
	20	100,0	66,0	49,0		10°C	20	66,5	42,0	30,0
	25	109,0	83,0	62,0			25	84,0	53,0	38,0
	32	109,0	89,0	77,0		30	101,0	64,0	46,0	
0°C	16	75,0	50,0	37,0			15	47,0	29,5	21,0
	20	95,0	63,0	47,0	0°C	20	64,0	40,0	28,0	
	25	106,0	79,0	59,0			25	80,0	51,0	36,0
	32	106,0	86,5	75,0			30	69,0	62,0	44,0
-10°C	16	71,0	48,0	35,0	-10°C	–10 °C	15	45,5	29,0	20,0
	20	90,0	60,0	44,0			20	61,0	39,0	27,0
	25	103,5	75,0	56,0		25	77,0	49,0	34,0	
	32	103,5	84,5	68,0		30	93,0	59,0	41,5	
–20°C	16	68,0	45,0	34,0		–30 °C	15	68,0	26,5	18,0
	20	85,0	57,0	42,0			20	57,0	36,0	24,5
	25	101,0	72,0	54,0			25	72,0	46,0	31,0
	32	101,0	82,5	65,0			30	86,0	55,0	37,5

POWER CONSUMPTION





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