

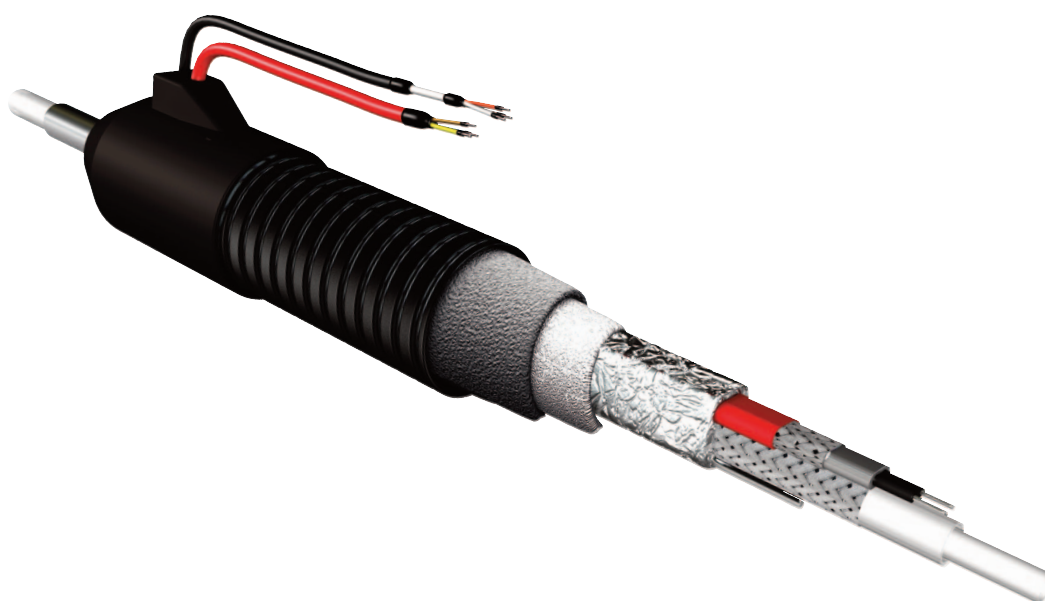


JH3BE

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
- 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 with termination from factory

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 factory 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: - 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

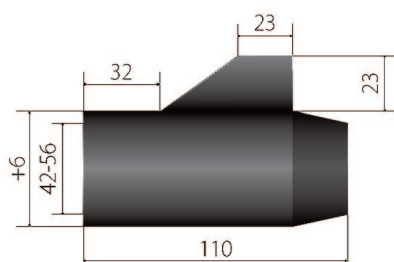
Material sample gas core	PTFE, PFA, SS316
Heating Element	heating cable
Thermal insulation	multi-layered thermal fleece
End configuration	silicone caps (mounted ex-works or on-site termination kit)
Maximum length of finished sample line	see table "rated output" / column "maximum length of heating circuit" 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 length	max. 150 m
Protection class	IP54 (EN60529)
Approvals / Sign	CE

Electrics

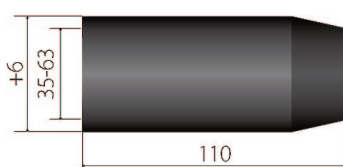
Power supply	115 VAC 50/60 Hz or 230 VAC 50/60 Hz
Power consumption	see table "power consumption" page 4
Temperature sensor	without; optional 2-wire PT100; others on request
Power supply cable (if terminated from factory)	1.5 m cable with open leads, depending on power consumption: up to 16 A = 3 x 1.5 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



end cap for self termination, included in set



end cap side 2



end cap for factory 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						H
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 factory, 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
	2 x silicone cap connection, 1,5 m connection cable (silicone, 3 x 1,5 mm ²), 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 mm ²), 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 mm ²), 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

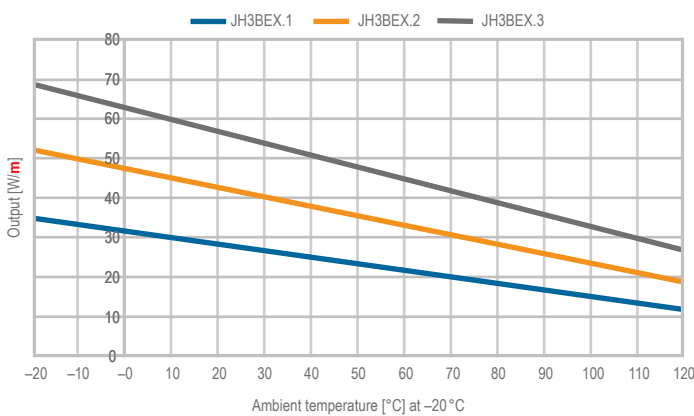
RATED OUTPUT

230 VAC				
Start-up 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

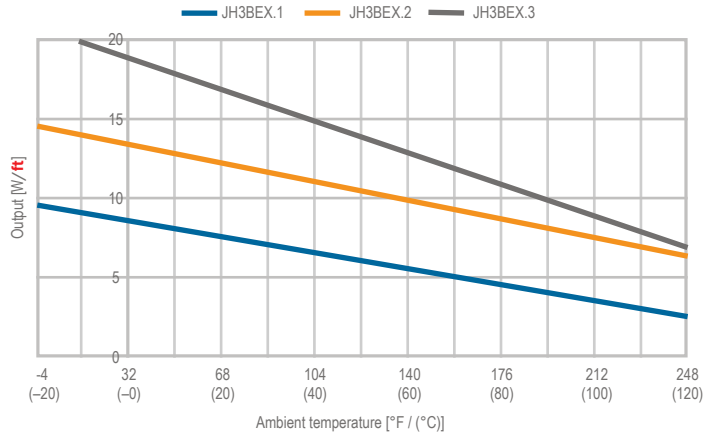
115 VAC				
Start-up temperature	Fuse circuit breaker (A)	max. length of heating circuit (m)		
		JH3BEX.1	JH3BEX.2	JH3BEX.3
10 °C	15	49,5	31,0	22,0
	20	66,5	42,0	30,0
	25	84,0	53,0	38,0
	30	101,0	64,0	46,0
0 °C	15	47,0	29,5	21,0
	20	64,0	40,0	28,0
	25	80,0	51,0	36,0
	30	69,0	62,0	44,0
-10 °C	15	45,5	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

230 VAC note: consumption (metric) [W/m]



120 VAC note: consumption (imperial) [W/ft]



Gas Sampling Probes



Heated Sample Lines



Sample Gas Coolers



Gas Conditioning Systems



NOx Converter



and solutions for

