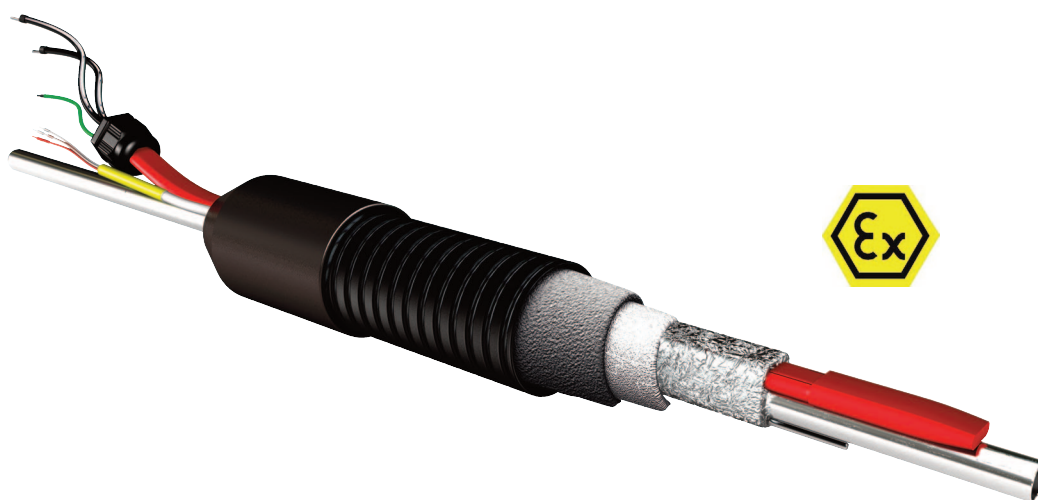




JH3BEX

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 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 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

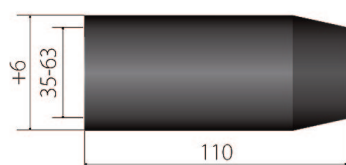
Construction

Material sample gas core	PTFE, PFA, SS316
Heating element	heating cable with protection braid, 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 length	max. 150 m
Type of protection	ATEX (230 V): 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 CSA (115 V und 230 V): 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 *Class I Div 1 on request only!
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

Order code

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Accessories

Part Number

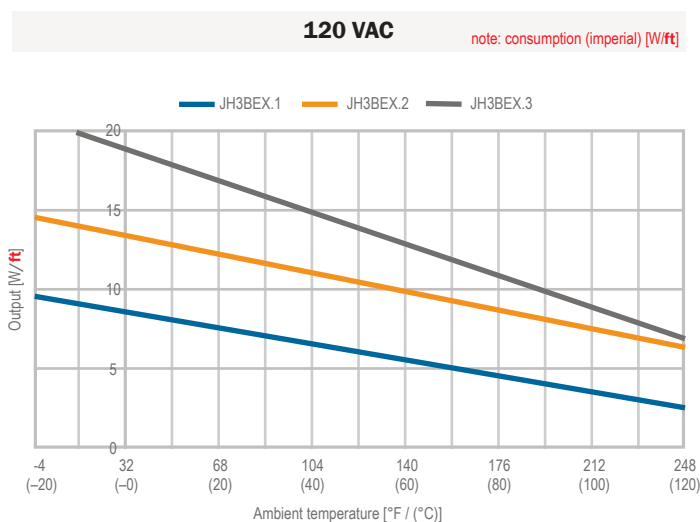
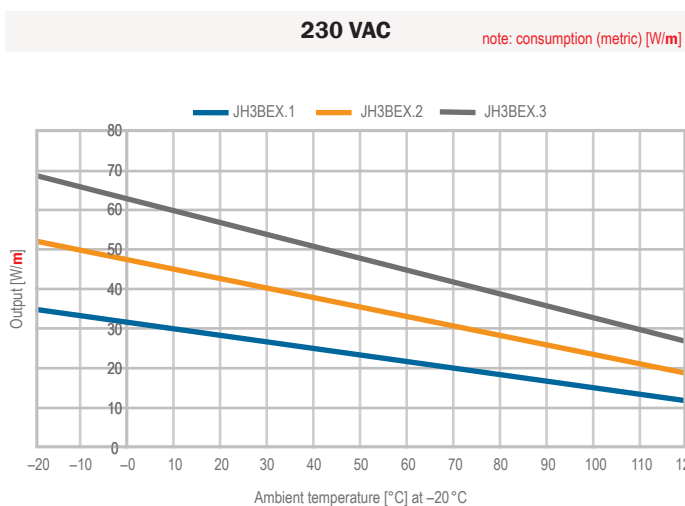
	Universal-mounting clamp for mounting at gas sampling probe series JES for line diameters 35 to 50 mm	35.00980
	Universal-mounting clamp for mounting at gas sampling probe series JES for line diameters 50 to 61 mm	35.00981
	2 x silicone cap connection, 1,5 m connection cable (silicone, 3 x 1,5 mm ²), 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 mm ²), for self assembly, operating temp. +50 °C to 100 °C	68.01010
	2 x silicone cap connection, 1,5 m connection cable (silicone, 3 x 1,5 mm ²), for self assembly, operating temperature +120 °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 length 3 m	68.01051

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

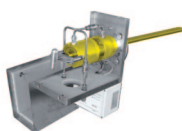
POWER CONSUMPTION



Gas Sampling Probes

Heated Sample Lines

Sample Gas Coolers



Gas Conditioning Systems

NOx Converter

and solutions for

