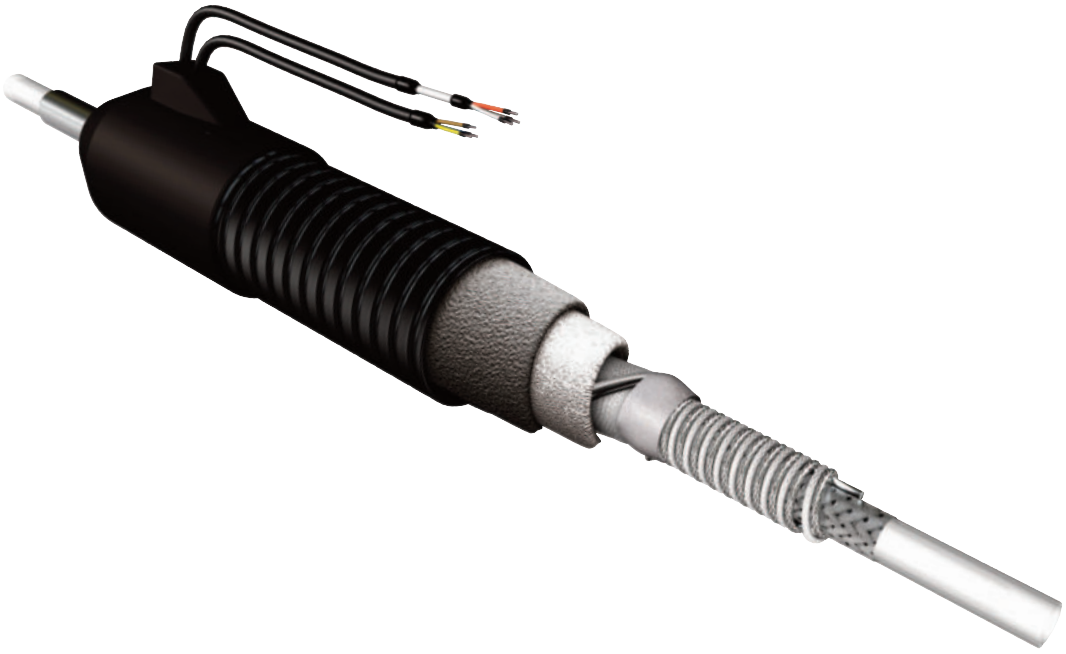
Enviro Technology Services Ltd
part of CuraTerrae

JH3E & JH3ER
Heated Sample Line



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
- Protection against measured value falsification and frost
- Indoor and outdoor use

BENEFITS
- No condensate formation, no freezing
- Resilient external protection
- Excellent insulation
- Optimal heat deployment
- Customer-specific executions
- Easy exchange of the inner core (JH3ER)
- Long lifetime
- Kink protection

FEATURES
- Operating temperature up to 180 °C with temperature controller
- External jacket of corrugate polyamide PA12
- Heat insulated by thermo fleece
- Ready to use
- Interchangeable inner core for JH3ER
- Second core for e.g. calibration gas as option
- Inner core reinforced with stainless steel braid
- Built-in control wires for JES-family sample probes (option)

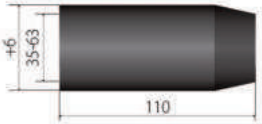
Gas Sampling Probes
Heated Sample Lines
Sample Gas Coolers
Condensate Treatment
Accessories
Gas Conditioning Systems
Sample Gas Converters

TECHNICAL DATA

Model	JH3E	JH3ER
Description	regulated heated sample line (requires temperature controller)	
External jacket	corrugated polyamide 11/12 jacket, black option: with silicone layer	
Sample gas core	fixed	interchangeable
Area of application	mobile and fixed installation indoor and outdoor	
Integrated control lines (option)	control line 3 x 1 mm^2 (power supply) plus 2 x 0,75 mm^2 (status control) or control line 3 x 1,5 mm^2 (power supply) plus 2 x 1 mm^2 (status control)	
Operation data		
Operating temperature	max. 180 °C	
Operating pressure at 200 °C	atmospheric option pressure hose: - PFTE / PFA core: DN 4/6 mm 4 bara; DN 6/8 mm 3 bara; DN 8/10 mm 2 bara, 1/4" OD 5 bara, 3/8" OD 4 bara - SS316 core, all diameters: 10 bara	
Ambient temperature*	−20 °C to +60 °C (up to +80 °C with optional silicone layer)	
Construction		
Material inner core	PTFE, PFA, SS316	
Heating element	design according to DIN moisture proof with protection braid	
Thermal insulation	multi-layered thermo fleece	
End configuration	silicone caps (see table below), sample gas core 100 mm protruded	
Maximum sample line length*	**115 V:** DN 4/6 and 6/8 mm – 30 m, DN 8/10 and 10/12 mm – 25 m **230 V:** DN 4/6 and 6/8 mm – 60 m, DN 8/10 and 10/12 mm – 50 m, **400 V:** all diameters – 100 m (only for sample gas core 6/8 mm or bigger)	**115 V:** DN 4/6 and 6/8 mm – 25 m, **230 V:** DN 4/6 and 6/8 mm – 50 m, **400 V:** all diameters – 50 m
Diameter sample line outside	43 mm	
Minimum bending radius	DN 4/6 mm: 200 mm, DN 6/8 mm: 200 mm, DN 8/10 mm: 250 mm, DN 10/12 mm: 250 mm	DN 4/6 mm: 260 mm DN 6/8 mm: 260 mm
Dimensions of silicone caps	L = 110 mm, Ø 49 mm, Ø 56 mm with integrated control lines	
Protection class	IP 54 (EN60529)	
Electrics		
Power supply	115 VAC 50/60 Hz or 230 VAC 50/60 Hz or 400 VAC 50/60 Hz Y-connection (L1, L2, L3, PE)	
Power consumption	DN 4/6 mm: 90 W/m; DN 6/8 mm: 90 W/m; DN 8/10 mm: 100 W/m ; DN 10/12 mm: 100 W/m	DN 4/6 mm: 100 W/m; DN 6/8 mm: 100 W/m
Connection cable	1,5 m with open leads	
Connection plug (option)	4-pin + PE or 6-pin + PE connector	

* To achieve extended length, **JCT** offers heated lines with reduced power (W/m) or with a second heating circuit. For lower ambient temperatures versions with higher performance are available. Please consult **JCT** sales team.

End configuration of sample line

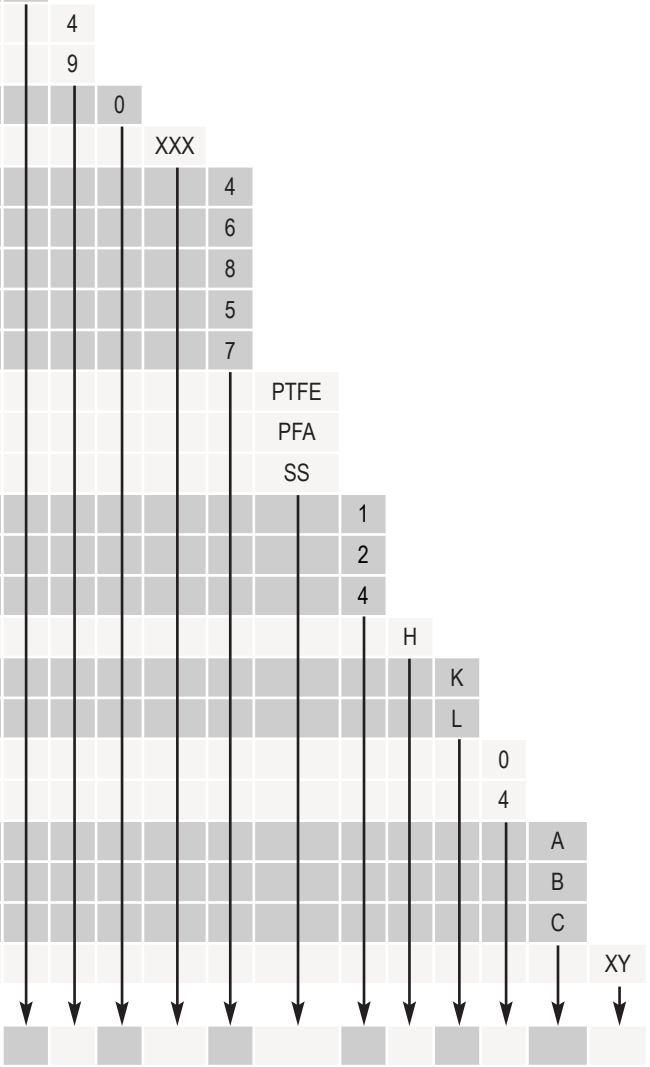
Without electrical connection (side 2 – probe side)		With electrical connection (side 1 – cabinet side)		Type
H			K	silicone cap
			L	silicone cap

Dimensions in mm

ORDER CODE

JH3E with fixed inner core

Temperature sensor PT100	2
Temperature sensor NiCr-Ni type K	4
2 x Temperature sensor PT100	9
Jacket made of corrugated PA 11/12	4
Jacket made of corrugated PA 11/12 with silicone layer	9
Core 100 mm protruded	0
Line length without protrusion in dm (e.g.: 10 m = 100; 4,5 m = 045)	XXX
Diameter DN 4/6 mm	4
Diameter DN 6/8 mm	6
Diameter DN 8/10 mm	8
Outer diameter 1/4”	5
Outer diameter 3/8”	7
PTFE core	PTFE
PFA core	PFA
SS316 core	SS
Power supply 115 VAC 50/60 Hz	1
Power supply 230 VAC 50/60 Hz	2
Power supply 400 VAC 50/60 Hz Y-connection	4
End configuration side 2 type H (without electrical connection)	H
End configuration side 1 type K (with electrical connection)	K
End configuration side 1 type L (with electrical connection)	L
Without calibration core	0
Calibration core DN4/6 mm, PTFE	4
No connection plug, wire open end	A
Connection plug 6-pole + PE plug (max. 10 A)	B
Connection plug 4-pole + PE plug (max. 20 A)	C
Customized version (detailed description needed)	XY



Order code **JH3E.**

Suitable temperature controller can be found at www.jct.at

ORDER CODE

JH3ER with interchangeable inner core

Temperature sensor PT100	2												
Temperature sensor NiCr-Ni type K	4												
2 x Temperature sensor PT100	9												
Jacket made of corrugated PA 11/12		4											
Jacket made of corrugated PA 11/12 with silicone layer		9											
Core 100 mm protruded			0										
Line length without protrusion in dm (e.g.: 10 m = 100; 4,5 m = 045)				XXX									
Diameter DN 4/6 mm					4								
Diameter DN 6/8 mm					6								
Outer diameter 1/4”					5								
PTFE core						PTFE							
PFA core						PFA							
Power supply 115 VAC 50/60 Hz							1						
Power supply 230 VAC 50/60 Hz							2						
Power supply 400 VAC 50/60 Hz Y-connection							4						
End configuration side 2 type H (without electrical connection)								H					
End configuration side 1 type K (with electrical connection)									K				
End configuration side 1 type L (with electrical connection)									L				
Without calibration core										0			
Calibration core DN4/6 mm										4			
No connection plug, wire open end											A		
Connection plug 6-pole + PE plug (max. 10 A)											B		
Connection plug 4-pole + PE plug (max. 20 A)											C		
Customized version (detailed description needed)												XY	
Order code	**JH3ER.**												

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Accessories		**Part Number**
	Universal mounting clamp for mounting at JES series gas sample probes for line diameters 35 to 50 mm	**35.00980**