# Sample Gas Conditioning You Can Trust

# JH3F & JH3FR **Heated Sample Lines with PA-Corrugated Hose**





**Gas Conditioning Systems Sample Gas Converters** 



# **APPLICATION**

- · Extractive gas analysis
- · Emission and process monitoring
- Transport of sample gas from sample point to analysis system
- · To stay safely above the acid dew point
- Protection against measured value falsification and frost
- · Indoor and outdoor use

#### **BENEFITS**

- · No condensate formation, no freezing
- · Robust external protection
- · Excellent insulation
- · Optimal heat deployment
- · Customer-specific executions
- Easy exchange of the inner core (JH3FR)
- · Long lifetime
- · Kink protection

#### **FEATURES**

- Regulated heatable to max. 200°C
- External protection corrugated jacket of Polyamide
- Heat insulation with thermo fleece
- Ready for use ٠
- Interchangeable inner core for JH3FR •
- Second core for e.g. calibration gas as option .
- Inner core reinforced with stainless steel braid

## **TECHNICAL DATA**

Model	JH3F	JH3FR						
Description	regulated heated sample line							
External protection jacket	corrugated polyamide jacket, black							
Inner core	fixed interchangeable							
Area of application	mobile and fixed installation indoor and outdoor							
	<b>Operation data</b>							
Operating temperature	max. 200°C							
Operating pressure	max. 10 bara							
Ambient temperature*	-30°C to +60°C							
	Construction							
Material inner core	PTFE, optional PFA							
Heating element	design according to DIN moisture proof with protection braid							
Thermal insulation	thermo fleece							
End configuration	PA hard caps, silicone caps, PG 36 or PG 42 (see table below)							
Maximum sample line length*	50 m							
Diameter core / sample line outside	DN 4/6 mm / 42 mm DN 6/8 mm / 42 mm							
Minimum bending radius JH3F / JH3FR	DN 4/6 mm: 100 mm / 150 mm DN 6/8 mm: 150 mm / 200 mm							
Dimensions of silicone caps	DN 4/6: L = 88 mm, Ø 50 mm (H), Ø 70 mm (C) DN 6/8: L = 88 mm, Ø 50 mm (H), Ø 70 mm (C)							
Dimensions of PA hard caps	DN4/6: L = 111, Ø 50 (F), Ø 75 (A/B) DN6/8: L = 111, Ø 50 (F), Ø 75 (A/B)	DN4/6: L = 111, Ø 50 (F), Ø 75 (A/B) DN6/8: L = 120, Ø 54 (F), Ø 79 (A/B)						
Protection class	IP 44 (EN60529)							
	Electrics							
Power supply	230 VAC 50/60 Hz or 115 VAC 50/60 Hz							
Power consumption	100 W/m							
Connection cable	3 m							
Connection plug	7-pole plug for connection of temperature controller HT-43 and HT-55 HANQ8-plug for connection of temperature controller HT-41							

\* 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

With	out electrical connection (side 2)	With electrical connection (side 1)	_	Туре	JH3F	JH3FR
F				Hard cap	р	р
	<sup>15</sup> 0		A		RSL	P
G			В	Hard cap	р	р
				(stepped)	RSL	Ρ
Н			С	Silicono con	р	2
			C	Silicone cap	RSL	р
			D	PG36	р	n
		·····		1 000	RSL	р
J			E	movable PG42	р	n
					RSL	р

DH3F with non interchangeable inner core JH3FR with interchangeable core p = PTFE core, 200 mm protruded RSL = Stainless steel stubs, 30 mm long

Subject to change without notice

### **ORDER CODE**

JH3F	
Temperature sensor PT100*	2
Temperature sensor PT100* + limiter (thermo switch in connection housing)	3
Temperature sensor NiCr-Ni type K*	4
2 x Temperature sensor PT100*	9
Outer protection corrugated PA jacket	3
Core 200 mm protruded	0
Stainless steel stubs 30 mm long	6
Line length without protrusion in dm (e.g. 10 m = 100; 4,5 m = 045)	XXX
Diameter DN4/6 mm	4
Diameter DN6/8 mm	6
PTFE core	PTFE
PFA core	PFA
Power supply 230 VAC / 50/60 Hz	2
Power supply 115 VAC / 50/60 Hz	1
End configuration side 2 type F (without electrical connection)	F
End configuration side 2 type G (without electrical connection)	G
End configuration side 2 type H (without electrical connection)	н
End configuration side 2 type I (without electrical connection)	
End configuration side 2 type J (without electrical connection)	J
End configuration side 1 type A (with electrical connection)	A
End configuration side 1 type B (with electrical connection)	B
End configuration side 1 type C (with electrical connection)	C
End configuration side 1 type D (with electrical connection)	D
End configuration side 1 type E (with electrical connection)	E
Without calibration core	0
Calibration core DN2/3 mm	2
Calibration core DN4/6 mm	4
Without strain relief	0
With strain relief**	Q16
Order code	3

\* Temperature sensor position at line length up to 10 m = 0,3 m from electrical connection, at line length > 10 m = 3 m from electrical connection, others on request

\*\* For sample line length > 10 m and vertical installation a strain relief is recommended

Suitable temperature controllers series HT and JPXR4 can be found in this chapter (2)

The standard external (outer) jacket is made of corrugated PA6. For harsh ambient conditions we strongly recommend to use PA12 outer protection. The PA12 material has a higher resistance against UV radiation, influence from acid rain and high temperatures. Please consult **JCT** sales team.

JH3FR												
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End configuration side 2 type H (without electrical connection)									Н			
End configuration side 2 type I (without electrical connection)									Ι			
End configuration side 2 type J (without electrical connection)									J			
End configuration side 1 type A (with electrical connection)										А		
End configuration side 1 type B (with electrical connection)										В		
End configuration side 1 type C (with electrical connection)										С		
End configuration side 1 type D (with electrical connection)										D		
End configuration side 1 type E (with electrical connection)										Е		
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