JH3FG & JH3FGR Heated Sample Lines with PA-Protection Braid







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
- · To stay safely above the acid dew point
- Protection against measured value falsification and frost
- · Indoor and outdoor use
- · Applicable for portable systems

BENEFITS

- · No condensate formation, no freezing
- · Close bending radius possible
- · Excellent thermal insulation
- · Optimal heat deployment
- · Customized configurations
- · Easy exchange of the inner core (JH3FGR)
- · Long lifetime also in portable applications
- · Kink protection

FEATURES

- Regulated heatable to max. 200°C
- External jacket flexible protection braid of polyamide
- · Heat insulation with silicone foam
- · Ready for use
- · Very flexible
- · Interchangeable inner core for JH3FGR
- · Second core for e.g. calibration gas as option
- Integrated temperature controller as option
- · Inner core reinforced with stainless steel braid

TECHNICAL DATA

Model JH3FG / JH3FGR

Description	regulated heat	regulated heatable sample line					
External protection jacket	Polyamide	Polyamide braid, black					
Inner core	fixed	interchangeable					
Area of application	mobile and fixed installation indoor and outdoor						
Operation data							
Operating temperature	max 200°C						

Operating temperature	max. 200°C
Operating pressure	max. 10 bara
Ambient temperature*	-30°C to +60°C

Construction

Construction								
Material inner core	PTFE, optional PFA							
Heating element	design according to DIN moisture proof with protection braid							
Thermal insulation	close pore, waterproof Silicone hose, thermally stabilised							
End configuration	hard caps or Silicone caps (see below)							
Maximum sample line length*	50 m							
Diameter core / sample line outside	DN 4/6 mm / 42 mm +/- 3 mm DN 6/8 mm / 42 mm +/- 3 mm	DN 4/6 mm / 42 mm +/- 3 mm DN 6/8 mm / 48 mm +/- 3 mm						
Minimum bending radii JH3FG / JH3FGR	DN 4/6 mm: 50 mm / 100 mm DN 6/8 mm: 75 mm / 120 mm							
Dimensions of silicone-caps [mm]		Ø 50 (H), Ø 70 (C) Ø 50 (H), Ø 70 (C)						
Dimensions of PA hard caps [mm]	DN 4/6: L = 111, Ø 50 (F), Ø 75 (A) DN 6/8: L = 111, Ø 50 (F), Ø 75 (A)	DN 4/6: L = 111, Ø 50 (F), Ø 75 (A) DN 6/8: L = 120, Ø 54 (F), Ø 79 (A)						
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

Option integrated temperature controller HT 54

Installation site	directly on hard cap end
Power supply	230 VAC 50 to 60 Hz / 115 V 60 Hz
Switching capacity	max. 1000 W / 5 A (max. 10 m 230 V and 5 m at 115 V)
Temperature range	0°C to 254°C, adjustable in 2°C steps via DIP-switch
Temperature sensor	PT 100
Housing material	PA-reinforced glass fiber
Protection class	IP 42 optional sealed: IP 65 (fixed temperature adjustment)

^{*} 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	Without electrical connection (side 2) With electrical connection (side 1)			Туре	JH3FG	JH3FGR	
Ţ	F O O O O O O O O O O O O O O O O O O O			Handaan	р		
		Α	Hard cap	RSL	р		
			С	Ciliaana aan	р		
H	88	88		Silicone cap	RSL	р	

JH3FG with non interchangeable inner core p = PTFE core, 200 mm protruded

JH3FGR with interchangeable core RSL = Stainless steel stubs, 30 mm long

Dimensions in mm

ORDER CODE

JH3FG

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 PA braid	Т	0										
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 DN 4/6 mm					4							
Diameter DN 6/8 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 H (without electrical connection)								Н				
End configuration side 1 type A (with electrical connection)									Α			
End configuration side 1 type C (with electrical connection)									С			
Without calibration core										0		
Calibration core DN 2/3 mm										2		
Calibration core DN 4/6 mm										4		
Without integrated temperature controller											0	
With integrated temperature controller HT-54											Z2	
With integrated sealed temperature controller HT-54 with fixed temperature adjustment (please specify desired temperature with order)											Z3	
Without strain relief												0
With strain relief**												Q16
	↓	↓	↓	Ų.	↓	↓	↓	Ų.	<u></u>	↓	↓	Ų.
Order code		0										

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)

ORDER CODE

JH3FGR

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 PA braid	0	
Core 200 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	
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 H (without electrical connection)	Н	
End configuration side 1 type A (with electrical connection)	A	
End configuration side 1 type C (with electrical connection)	C	
Without calibration core	0	
Calibration core DN 2/3 mm	2	
Calibration core DN 4/6 mm	4	
Without integrated temperature controller	0	
With integrated temperature controller HT-54	Z2	
With integrated sealed temperature controller HT-54 with fixed temperature adjustment (please specify desired temperature with order)	t Z3	
Without strain relief	0	
With strain relief**	Q16	;
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Order code	0 0	

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