

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)

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) | Туре | | |
|---|-------|--|------|--------------|------------------|
| Н | 93. P | | 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 | | |
| 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 | | |
| 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) | н | |
| End configuration side 1 type K (with electrical connection) | К | |
| 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) | В | |
| Connection plug 4-pole + PE plug (max. 20 A) | C | |
| Customized version (detailed description needed) | | ΧY |
| | + + + + + + + + + + | \forall |
| Order code | JH3E. | |

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

ORDER CODE

JH3ER with interchangeable inner core

| Temperature sensor PT100 | 2 | 1 | | | | | | | | | | |
|--|--------|------------|-----------|----------|----------|----------|---|-----------|----------|-----------|---|-----------|
| Temperature sensor NiCr-Ni type K | 4 | | | | | | | | | | | |
| 2 x Temperature sensor PT100 | g |) | | | | | | | | | | |
| 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) | | | Т | XXX | | | | | | | | |
| Diameter DN 4/6 mm | | | | | 4 | | | | | | | |
| Diameter DN 6/8 mm | | | | | 6 | | | | | | | |
| Outer diameter 1/4" | | | | | 5 | | | | | | | |
| PTFE core | | | | | Т | 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) | | | | | | | | Н | | | | |
| 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 | | | | | | | | | | | Α | |
| Connection plug 6-pole + PE plug (max. 10 A) | | | | | | | | | | | В | |
| Connection plug 4-pole + PE plug (max. 20 A) | | | | | | | | | | | С | |
| Customized version (detailed description needed) | | | | | | | | | | | | XY |
| | | , \bigvert | \forall | V | V | \ | V | \forall | V | \forall | V | \forall |
| Order code | JH3ER. | | | | | | | | | | | |
| | | | | | | | | | | | | |

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

Accessories Part Number



Universal mounting clamp for mounting at JES series gas sample probes for line diameters 35 to 50 mm

35.00980

