# Sample Gas Conditioning You Can Trust





# **JES-301LM**

# **Gas Sampling Probe for Marine**



#### **APPLICATION**

- Marine applications compliant to MARPOL standards
- Representative continuous gas sampling in processes containing dust and humidity
- · Extractive gas analysis
- Emission (CEMS) and process monitoring
- Removal of dust from the sample gas

#### **BENEFITS**

- No condensation or chemical reactions of sample gas
- · Convenient filter replacement
- · Low maintenance
- Easy start-up
- Reliable protection of the analyzer system

#### **FEATURES**

- Homogeneous heating without cold spots
- · Filtration from outside to inside
- · Filter element change without tools
- Self-limiting PTC heater
- · Temperature status contact
- · Weather protection housing
- · Wide range of accessories
- Calibration port (option)
- Back purge port (option)
- Field and factory tested

















**JCT** Analysentechnik

# **TECHNICAL DATA**

MODEL JES-301LM

Description gas sampling probe for marine applications	
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# **OPERATION**

Operating temperature	approx. 180 °C [356 °F]
Low temperature threshold / contact	145°C [293°F]
Operating pressure	max. 2 bara
Mounting position	5° to 15° incline (recommended), torsion angle max. 45°
Heating-up time	30 min
Ambient temperature	-20 °C to 60 °C [-4° to 140 °F]
Dust load	max. 1 g/m³, flow dependent

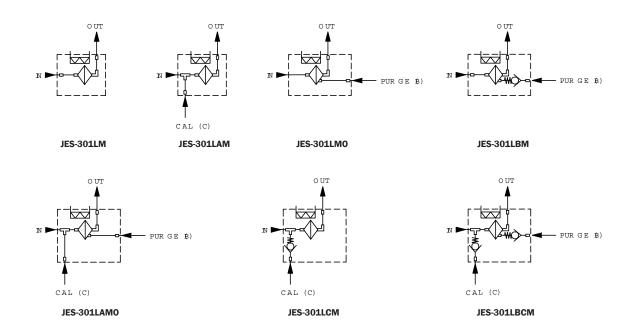
#### CONSTRUCTION

Dimensions overall (W x H x D)	168 x 331 x 249 mm [6.6 x 13 x 9.8 in]
Filter element / Pore size	ceramic / 0.2 $\mu$ m or 2 $\mu$ m, optional: PTFE or pyrex wool
Active filter surface	84 cm <sup>2</sup> [13 in <sup>2</sup> ]
Mounting flange	DN 65, PN6; form A according to EN 1092-1; SS316L or 2" ANSI 150 lbs; according to ASME B16.5
Sample gas inlet	G 3/4" female thread
Sample gas outlet	1/8" NPT female thread
Calibration and backpurge gas connection (options)	6 mm [0.24 in] bulkhead fitting
Sample gas wetted materials	SS316L, ceramic, Viton®
Dead volume	62 cm³ [0.06 in³]
Protection class	IP43 according to EN60529
Weight	9 kg [20 lbs]
Weather protection housing	SS304, thermal insulated, colour stainless steel natural
Approvals / Signs	CE, compliant to MARPOL standards

# **ELECTRICS**

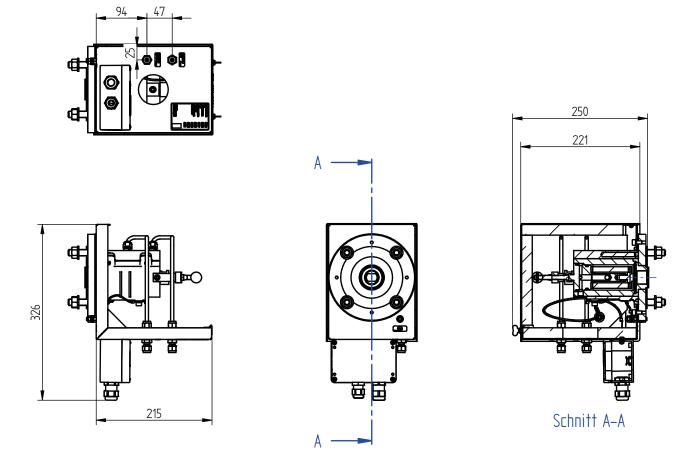
Power supply	115 to 230 VAC 50/60 Hz
Power consumption	415 W @ 25 °C [77 °F]
Heater element	PTC self-limited
Electrical connection	spring type terminals, clamping range 0.08 to 2.5 mm <sup>2</sup>
Fusing	external on installation site, fuse characteristic C: 230 VAC 6 A; 115 VAC 10 A
Protection class junction box	IP65 according to EN60529
Switching capacity status contact (volt-free)	min. 24 VDAC / 50 mA, max. 230 VAC / 5A cosP 0.95
Status contact function	normally open contact, failsafe operation

# **GAS FLOW DIAGRAM**



## **DIMENSIONS**

dimensions in mm



## **ORDER CODES**

	Fil	ter	Options				Flange			
Model	0.2 µm ceramic surface coated	2 µm ceramic	Calibration port with non-return valve	Calibration port without non-return valve	Back purge port with non-return valve	Back purge port without non-return valve	Weather protection housing	Power supply 115 VAC to 230 VAC 50/60 Hz	DN65/PN6	2" ANSI (Z)
JES-301LM		Х					Х	Х	35.03070	35.03080
JES-301LBM	Х				Х		Х	Х	35.03073	35.03083
JES-301LCM		Х	х				Х	Х	35.03072	35.03082
JES-301LBCM	Х		х		Х		Х	Х	35.03071	35.03081
JES-301LMO		Х				Х	Х	Х	35.03074	35.03084
JES-301LAM		Х		Х			Х	Х	35.03075	35.03085
JES-301LAMO		Х		Х		Х	Х	Х	35.03076	35.03086

## **ACCESSORIES**

#### **Sampling Pipes**

35.03060	Sampling pipe for JES-301L, SS316, length 1,000 mm, 12 x 1.5 mm, temp. max. 600 °C, G 3/4"o
35.03061	Sampling pipe for JES-301L, SS316, length 2,000 mm, 12 x 1.5 mm, temp. max. 600 °C, G 3/4"o
35.03062	Sampling pipe for JES-301LM, Hastelloy® C, length 1,000 mm, 12 x 1 mm, temperature max. 425 °C, G 3/4"m, MARPOL configuration, including vibrations damper, connector and damper cone made of SS316Ti
35.03063	Sampling pipe for JES-301LM, SS316Ti, length 1,000 mm, 12 x 1.5 mm, temperature max. 600 °C, G 3/4"m SS316Ti, marine configuration, including vibrations damper

**JCT** Analysentechnik GmbH offers a wide range of accessories. Please refer to seperate data sheets for further information:

#### **JES-301** Accessories

Flange adapters
Accessories for gas connections
JBPRV Back Purge Reduction Valve (sample gas outlet isolation valve)

#### Filter Upgrades

35.93100	JES-301L & JBF with ceramic 2 $\mu$ filter element
35.93101	JES-301L & JBF with ceramic 0.2 $\mu$ filter element
35.93103	JES-301L with PTFE filter element
35.93105	JES-301L with pyrex wool filter element

