



ATEX
Zone 1 and 2



SONALOK X80/81

Sonalok X 8000 series
Clamp-on Ultrasonic Flowmeter

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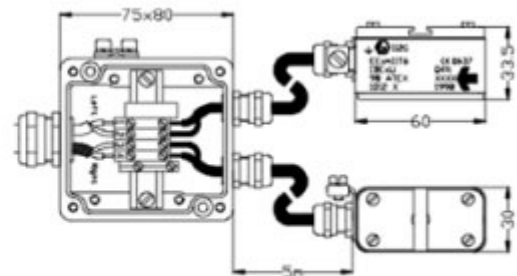
The EESIFLO Sonalok X 80 and 81 are products from the 8000 series generation of flow meters certified to ATEX Zone 1 and 2, suitable for installation on all types of sonically conductive pipes containing water, chemicals or hydrocarbons. The advantages are elimination of pressure loss, no downtime during installation coupled with high accuracy and repeatability in flow measurement. One of the most common applications for the flow meter is process flow measurement and balancing/checks in areas where it is either impossible or uneconomical to install a conventional type hazardous area flow meter. The meter can be set up within minutes using a magnetic pen and it comes with an optional second channel.



EESIFLO's Sonalok X 80/81 8000 series hazardous area clamp on flow transmitter is an excellent choice for offshore oil platforms, refineries and pharmaceutical plants.

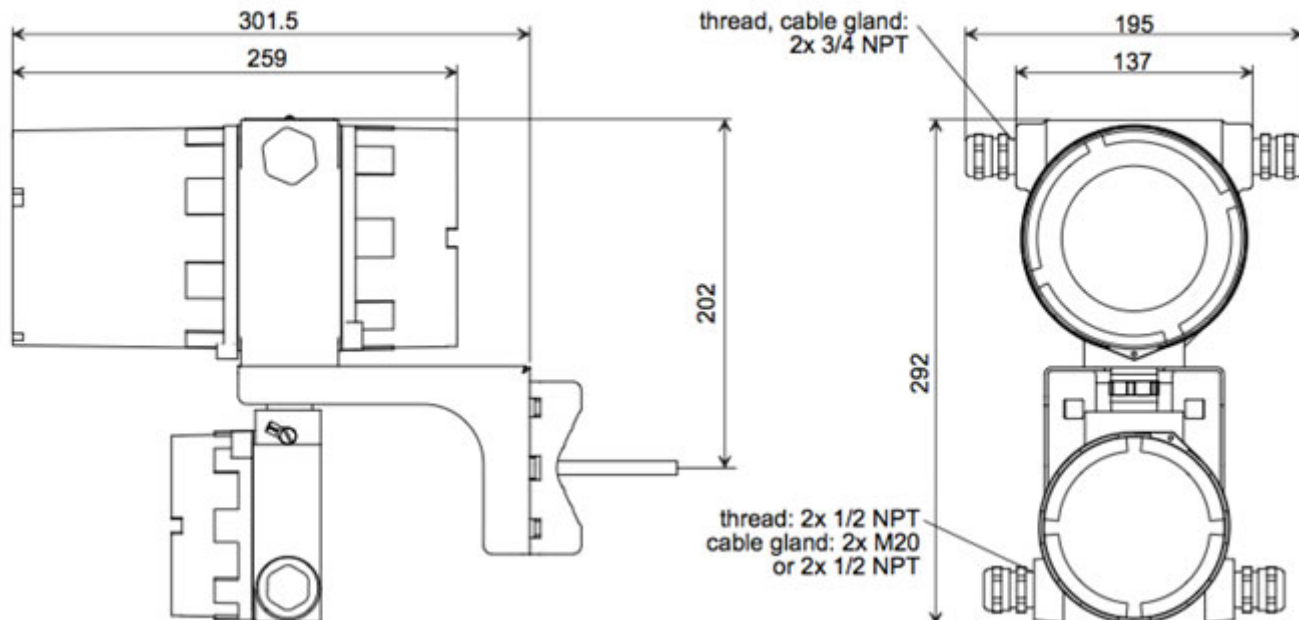
Specification

Flow Measurement principle :	Transit Time ultrasonic cross correlation
Flow Velocity Range:	0.01 to 25 m/s
Resolution:	0.025 cm/s
Repeatability:	0.15% of measured value
Accuracy:	+/- 1 to 3 % (out of box) and +/- 0.5% with calibration.
Turndown Ratio:	200 to 1
Gas and Solid Content handling:	Less than 10% of total volume
Certified Transmitter Models:	Certificate number IBExU09ATEX1151
Sonalok X 80 :	Ex II 2G Ex de IIC T6 T _a -20°C ... +60°C
Sonalok X 80L:	Ex II 2G Ex de IIB T6 T _a -20°C ... +60°C
Sonalok X 80P:	Ex II 2G Ex de IIC T4 T _a -20°C ... +60°C
Sonalok X 80LP:	Ex II 2G Ex de IIB T4 T _a -20°C ... +60°C
Sonalok X 80C24:	Ex II 2G Ex de [ib] IIC T4 T _a -20°C ... +50°C
Sonalok X 80LC24:	Ex II 2G Ex de [ib] IIB T4 T _a -20°C ... +50°C



Certified Flow Transducer Models:
Type : EES M2N41 /EES K1N41 EES H1N43 / EES G1N43

FLOW TRANSMITTER DIMENSIONS (mm)



FLOW TRANSMITTER

Enclosure :	Field transmitter housing Degree of protection : IP 66
Operating temperature:	-10 ... 55 °C (14 ... 131 °F)
Housing material:	Powder coated Aluminium or Stainless Steel for offshore environments
Flow channels :	1 / optional 2
Power Supply:	100...240V AC/9...18VDC/
Display :	LCD, dot matrix with magnetic pen programming function
Enclosure dimensions (mm):	W140 x H310 x D260
Certification:	ATEX Zones 1 and 2

FLOW TRANSDUCERS

Certified Transducers certificate number:	IBExU09ATEX1153 X
Sensor Model no:	EES M2N41 (Standard Offer)
Pipe Range:	(50) 100- 3000 mm Temperature -20 °C ... 120 °C (covers most applications)
Housing Material :	Stainless Steel /PEEK piezo sensor shoe
Degree of Protection:	IP 68 (Encapsulated) suitable for ATEX Zone 1,2
Optional:	Special application sensors: EES K1N41, EES H1N43 / EES G1N43 EES H1N43 / EES G1N43 (consult EESIFLO)

FLOW READINGS, FUNCTIONS, OUTPUTS AND DATA

Quantity and units of measurement:	
Volumetric flow rate :	Metric/Imperial/SI units e.g m ³ /h, m ³ /min, m ³ /s, l/h, l/min, l/s, USgph, USgpm, USgps, bbl/d, bbl/min, bbl/s
Flow Velocity:	m/s, inch/s
Mass:	g, kg, t
Serial Interface:	RS 485
EESIDATA (Windows software)	Instantaneous measured value, parameter set and configuration. Downloading of measured values/parameter set, graphical presentation, list format, export to third party software, on-line transfer of measured data
Process Outputs -	Galvanically isolated from main electronics
Current:	2 x 0/4 ... 20 mA; active
Frequency:	2 x 0-1 KHz or 0- 10 KHz (open collector)
Digital (pulse, status) :	2 x totaliser value 0.01 ... 1000 (open collector)