

# XRATE®

## LIQUID ON-OFF LOADING FLOW RATE METER

# XSENS®

## FLOW SOLUTIONS

	Item	Requirement	Range	
General	1	Line size	1.5" to 36" and higher	
	2	Line Schedule	Any	
	3	Pipe Class	Any	
	4	Pipe Material	Carbon Steel, SS316, Duplex (others)	
	5	Hazardous Area Protection	Atex, IECEx Zone 1 and 2	
	6	Explosion Group / Gas group	IIB	
	7	Temperature class	T3	
	8	Max Ambient temperature	60°C	
	9	Ingress Protection	IP 66 (higher on request)	
Process Conditions	10	Fluid	Hydrocarbon / Water / Liquid mixture	
	11	Phase	Liquid with or without gas (typically up to 20% GVF)	
	12	Corrosive / Erosive	Can handle both due to clamp-on design	
	13	<b>Case</b>	<b>Min</b>	<b>Max</b>
	14	Flowrate m/s	0.1	40
	15	Density	No limit	No limit
	16	Design pressure	No limit	No limit
	17	Design Temperature	-20 deg C	100 deg C (higher as option)
	18	Viscosity	Range from water to heavy bunker oil	
Sensor	19	Sensor Type	Ultrasonic non-intrusive (clamp-on type) Up to six pairs (redundancy)	
	20	Measurement Principle	Ultrasonic Guided Wave Transit Time & Time Of Flight and Doppler	
	21	Housing Sensor Material	SS316 / Aluminium	
	22	Cable from sensor to transmitter	Armored, flame retardant type (xx meters length)	
	23	Uncertainty	+/- 2% of flow at 0 gas and +/-5% up to 10% GVF (add +/-0,01 m/s) of actual flow	
	24	Turndown ratio	400:1	
	25	Removable Assembly	Yes	
	26	Electrical Connection	4-20mA / Modbus (WiFi, Canbus, Profibus and other on request)	
	27	Upstream Straight Length	2-5D (target)	
	28	Downstream Straight Length	2-5D (target)	
	29	Flow Straighteners	Not required	
	30	Static Mixer	Not required	
Transmitter	31	Housing Material	SS316 / Aluminium	
	32	Calibration	0 - 100%	
	33	Electrical Connection	To custom specifications	
	34	Power Supply	12-24 VDC (external power, or other). Typical 9,5Watt and 11 watt at start up	
	35	Output Signal	Modbus serial connected to flow computer via RS-485 /4-20mA (others on request)	
	36	Mounting	Integrated in sensor	
Options	37	Pressure Transmitter	NA	
	38	Temperature Transmitter	2*PT 100 elements included	
	39	Flow Computer	NA	
	40	Local Display	Optional	
	41	Mounting Kit	Included	
	42	Weight	From 25 kg to 150 kg depending on size	
	43	Dimensions	See GA drawings from Xsens	



[WWW.XSENSFLOW.COM](http://WWW.XSENSFLOW.COM)

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