

OPTISWIRL Vortex Flowmeter

Application Information Sheet

Company name			Contact nam	ne					
Address			Phone numb	ber					
City, State, Zip			Email addre	SS					
End user (destination)									
General Information									
Equipment tag#									
Piping information	Pino sizo	Schedule	Material						
Meter orientation	Horizontal								
Agency approvals,	Without			4000					
			FM XP Class 1, Div 1 G	roups ABCD	FM NI Class 1, D	IV 2 Groups ABCD			
		I DIV I Group EFG				_			
Process conditions									
Medium name,			🗌 liquid state 🛛 🗌 gas	state	saturated steam	superheated steam			
Type of measurement,	☐ Volume flow	Volume (stand	ard conditions) 🗌 Volu	ume (operati	ng conditions)	Mass flow			
Flow rate,	Normal	Minimum	Maximum		units:	_			
System pressure,	Normal	Minimum	Maximum		🗌 psig 🛛 psia	🗌 barg 🗌 bara			
Medium temperature,	Normal	Minimum	Maximum		□°F □°C				
Medium properties,	Density	Sp. gravity	Viscosity						
	Concentration % Compressa		pressability factor:	bility factor:					
Power supply									
Converter type,	Compact-mounte	d 📋 Remote/ fiel	d-mounted (remote signal	cable length					
Converter housing,	🗌 Aluminum	with Sun roo	f 🗌						
	Without display	With display							
Cable connection,	Without	🗌 1 x 1/2" NPT	2 x 1/2" NPT	🗌 3 x 1/2	2" NPT				
Software version,	Standard version	: Uncompensated	for Gases, Steam and Liqui	ids + Saturat	ed Steam compensa	tion			
	Standard + Gross/Net heat for Saturated Steam and Water								
	Standard + Steam + Gross/Net heat for Saturated Steam and Superheated Steam								
	Standard + Gas + Steam + FAD (Gases, Wet-Gases, Gas mixtures + Free Air Delivery for compressors)								
IO communications,	HART (Pactware)	Foundation F	Fieldbus 🔲 Profibus PA						
Signal outputs.	4-20mA + pulse								
	4-20mA + Binary	output (pulse/ freq	uency + status output, limit	switch)					

Process connections,	Size:	C ASME 150#	C ASME 300#	C ASME 600#	C ASME 900#	C ASME 1500#		
	Sandwich	Raised face	Flat face	Smooth finish	Clamp-on	🗌 125 AARH - 250) AARH	
Sensor element size,	Size:							
Sensor material,	🗌 316L SST	Hastelloy C22	2					
Sensor gasket,	316L SST Hastelloy C276							
Pressure sensor,	U Without							
Pressure sensor gasket,	U Without	🗌 FPM gasket	🗌 FFKM gaske	t				
Calibration,	2-point	3-point	5-point					
ocumentation (QA/QC)								
KROHNE standard (I	ert.) 🔲 Pressur	e test + inspection	certificate 🗌 Ce	rtificate of complia	nce 🗌 Hardness	Hardness test		
🗌 General arrangemen	Materia	l test/ certificate	🗌 Ra	diographic examin	ation 🗌 Cleaning	exam.		
Construction drawing	I Dositve	material identificat	ion (PMI) 🛛 🗍 Dy	e penetrant test	NACE-de	esign		

OPTISWIRL 4200 series The all-in-one solution

KROHNE OPTISWIRL Vortex Flowmeters

- · Measurement of conductive and non-conductive liquids, gases and steam
- · Direct measurement of mass, nominal flow rate and/or energy
- Advanced signal filter technology AVFD for high accurate stable measurement
- Integrated temperature compensation as a standard
- Temperature compensation for satutated steam
- Integral nominal diameter reduction up to 2-nominal sizes for best results in accuracy and optimal measuring ranges
- 2-wire technology
- SIL2 compliant
- HART, Foundation Fieldbus, Profibus PA

KROHNE

· Pressure sensor as an option



Basic version (flanged)

 Temperature compensation for saturated steam



Remote/ field-mounted version • up to 50 meters / 164 feet



Basic version (sandwich)

 Optimised centering rings eliminating any offset during installation



Intgrated pressure & temperature compensation version

- · Gases, wet gases, gas mixtures or vapours
- Integrated denisty compensation which allows for exact measurement of gases and superheated steam



Shut-off version

 Integral 2-way shut-off valve to allow the pressure sensor to be exchanged without interupting the process - for pressure or leak testing of the pipeline



Dual version

 Redundant system with 2-independant meausring sensors, and 2-signal converters for multi-product pipelines.