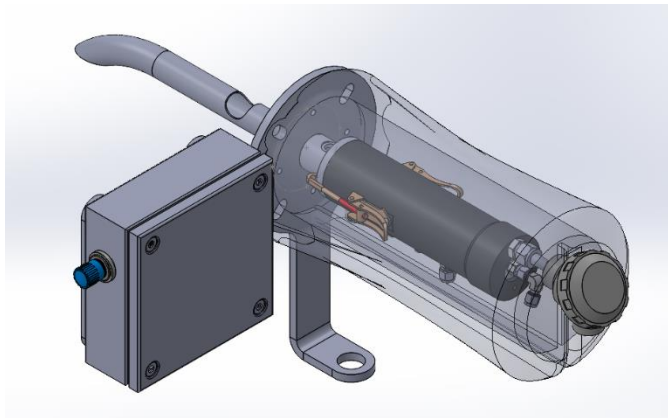




OXYDAN[®] DP7900 Smart Probe **CANopen**



OXYDAN[®]
DP7900-SP

Features and benefits

- Standalone sampling system
- CAN BUS communication
- Unheated Sample Line
- Multiplexing on multiple DP7900-SP with easiness +8
- Direct "Wet Basis" measurement makes total mass calculation easy and direct as exhaust gas flow are measured wet as well.
- Calibration gas directly to the probe
- Zero Velocity filter up to +2 years
- Fast response time
- Sample clean as the ambient air, no contamination of sensors / analyzers measuring cells.
- No moving parts

Exhaust Gas Sampler for Continuous Sampling

Applications

- CEMS
- EU – MRV/ETS GHG Marine CEMS
- Multipoint Multigas CEMS
- Process monitoring

Overview

The technique is based on extracting a small sample from the stack, removing particulates by a proprietary filter, and then accurately diluting the sample with clean, dry zero air thus, reducing the dew point to prevent condensation of water vapor and acid mist in the sample line.

The diluted sample is then forced under pressure in unheated sample line to the location where it is analyzed by gas sensors / analyzers.

The dilution probe system uses dry contamination-free air ("dilution air") and an ejector (also referred to as a venturi pump) to extract a diluted exhaust gas sample from an exhaust stack or duct.

Calibration of the system is achieved effectively by sending span or zero gas directly to the stack and directly into probe. This method ensures the complete sampling train and sensor system are compensated from probe tip to concentrations read out and provide very precise and accurate measurement results.

Once you connect instrument air from a swing absorption dryer and a power supply the probe will initiate the delivery of a diluted sample to your gas sensors when probe parameters are within limits.

Specifications:						
Model	OXYDAN® DP7900-SP					
Application	Continuous Emission Monitoring System / Process control					
Sampling Method	Dilution / extractive					
Dilution ranges *	Orifice size	Flow Nom.	3,7 bar	4,2 bar	5 bar	5,5 bar
	Sample	ml/min.	Dil. Rate	Dil. Rate	Dil. Rate	Dil. Rate
	8	50	304	318	377	413
	10	79	195	203	241	264
	12	113	135	141	168	183
	15	177	86	90	107	117
	17	227	67	70	83	91
	18	254	60	62	74	81
	20	314	48	50	60	66
	25	491	31	32	38	42
	30	707	21	22	26	29
<i>Dilution rates are approximated. Total sample flows 10 to 15 L / min.</i>						
Sample gas temperature	Max. 500 °C (optional 1200°C)					
Probe temperature **	~150 to 200 °C					
Particulate filter	Zero velocity filter, pore diameter down to 1 µm					
Ambient temperature	Probe 0 to 55 °C					
Instrument air	Min. 6 bar non-condensing, oil free (consumption 20 NLPM)					
Instrument air quality requirements	ISO8573:1 – 2001, Class 2 dirt (1 micron) and Class 2 water (-40° C/F pressure dew point)					
Probe heater supply	Voltage			Consumption		
	240V AC / 115V AC			250W		
Communication	CANopen® are registered trademark of CAN in AUTOMATION – International Users and Manufacturers Group e.V.					
Probe materials	Probe: Stainless steel 316L / Heater jacket: Aluminum Anodized					
Pneumatic connections	8 / 6 / 4 mm SS316 compression fittings					
Process connection	Combi Flange fits DN65 PN6 and DN80 PN6					
Probe size	~ 35 x Ø13 cm not including insulation jacket					
Probe weight ***	Probe with flange 13 kg					
Options	ZRDO O2 sensor / ZRDO NOx/O2 sensor					
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