

SUBSEA PUMP MONITORING

NAXYS AECM

Acoustic Electric Pump Monitoring System

By applying a 3-dimensional array of sensing elements, the Naxys AECM measures and analyses the acoustic and electric field generated by a subsea pump/compressor. The sensor operates completely independently, can be installed and replaced without interfering with the subsea machinery and does not add cost, failure modes or complexity to the pump/compressor. Information provided by the sensor ensures early warning if a failure is under development and guides the operator in tuning the operation parameters to extend remaining lifetime. Naxys AECM will also monitor the structure adjacent to the pump/compressor and detect abnormalities like pulsation and vibration in piping.



Trending



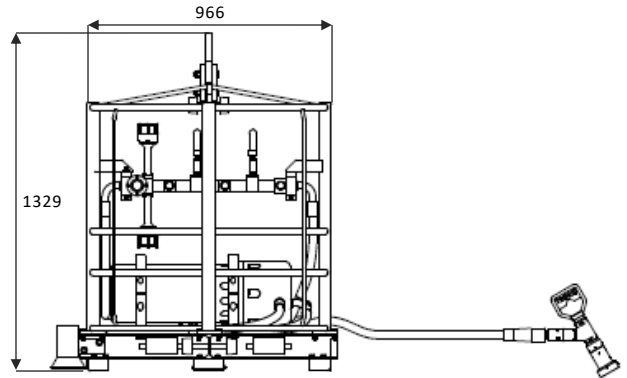
Early warning



Monitor performance

FEATURES

- Non-intrusive
- Can be placed up to 20 meters from pump
- Provides KPI's and trend analysis:
 - Actual Shaft Speed
 - Power factor (slip ratio)
 - Harmonic vibration levels (1x, 2x, 3x..)
 - Sub-synchronous vibration level
 - Electric drive unit sideband level
- Rotation start/stop confirmation
- Leak Detection (inward and outward)



Name	Naxys AECM
Design life	30 years
Operating temperature range	-5°C to +40°C
Operating pressure	Max. 300 bar
Weight	Approx. 250kg in air
Dimensions	1750x1000mm
Qualification	API 17F 4 th edition
Testing	API 17F 4 th edition
Communication interface	Ethernet (SIIS Level 3)
Power supply	24V DC nominal (18 to 34V DC) 25 W
Material canister and sensors	Titanium
Material protection frame	Steel
Method of installation	ROV installable/retrievable
Additional functionality	Valve and choke monitoring, transient detection, vibration monitoring