

#### Reliable

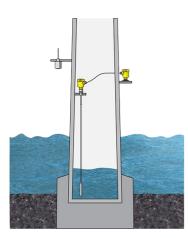
Detection of leaks, corrosion prevention and safe operation

## **Cost effective**

High-resistance materials for uninterrupted operation

#### **User friendly**

Simple mounting and setup



# Wind turbine in an offshore wind farm

# Measurement of water level

Wind turbines in offshore wind farms operate in an extremely harsh environment. Besides the buffeting of constant waves and often exceedingly strong winds, they have to withstand the corrosive effects of salt water. Due to the way the turbines are constructed and their location, it is inevitable that some seawater will enter the turbine tower. The water level inside the tower must be continuously monitored in order to detect any leaks at an early stage that can cause corrosion. To determine the mechanical loads and the generating capability of a wind power array, the tidal and wave height measurements on the outside are also required.

#### More details



## **VEGAFLEX 81**

Level measurement with guided radar inside the tower of a wind turbine

- Easy setup and commissioning thanks to factory calibration
- User-friendly operation through separate electronics
- Corrosion-resistant materials guarantee a long service life

#### **Show Product**

#### **VEGAPULS C 23**

Non-contact level measurement with radar for determining tidal and wave heights

- · Maintenance-free operation ensured through non-contact measuring method
- Fast measurement data logging guarantees high reliability
- Small sensor size and weight allow simple, one-man installation

## **Show Product**



PRO	BASIC	
VEGAFLEX 81 Show Product		VEGAPULS C 23 Show Product
		States
Measuring range - Distance 75 m	Measuring range - Distance 30 m	
Process temperature	Drococo toma	0404140
-60 200 °C	Process temperature -40 80 °C	
Process pressure -1 40 bar	Process pressure	
Accuracy	Accuracy	
± 2 mm	± 2 mm	
Version	Execution	
Version Basic version for exchangeable cable ø 2; ø 4 mm	Frequency 80 GHz	
Basic version for exchangeable rod ø 8 mm		
Basic version for exchangeable rod ø 12 mm	Beam angle	
Coax version ø 21.3 mm for ammonia application	4°	
Coax version ø 21.3 mm with single hole Coax version ø 21.3 mm with multiple hole	Materials, wet	ted parts
Coax version ø 21.0 mm with multiple hole	PVDF	
Exchangeable rod ø 8 mm	Threaded con	nantion
Exchangeable rod ø 12 mm	G1, 1 NPT, R1	mection
Exchangeable cable ø 2 mm with gravity weight		
Exchangeable cable ø 4 mm with gravity weight	Protection rat	ing
Exchangeable cable ø 2 mm with centering weight Exchangeable cable ø 4 mm with centering weight	IP66/IP68 (3 ba	ar), Type 6P
Exchangeable cable ø 4 mm without weight	Output	
exchangeable, PFA-coated cable ø4 mm with non-coated	4 20 mA/HART	
centering weight	Modbus	
Materials, wetted parts	SDI-12	
PFA		
316L		
Alloy C22 (2.4602)		
Alloy 400 (2.4360)		
Alloy C276 (2.4819)		
Duplex (1.4462) 304L		
Threaded connection ≥ G¾, ≥ ¾ NPT		
Elange connection		
Flange connection ≥ DN25, ≥ 1"		
Seal material		
EPDM		
FKM		
FFKM		
Silicone FEP coated		
Borosilicate glass		
Housing material		
Plastic		
Aluminium		
Stainless steel (precision casting)		
Stainless steel (electropolished)		

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