

Reliable

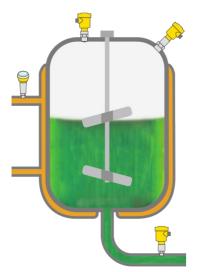
Unaffected by extreme process conditions

Cost effective

Reliable, continuous operation with absolute hygiene

User friendly

Easy adjustment and setup, as internals do not interfere



Bioreactor

Level and pressure measurement in the production of enzymes, proteins and antibodies

Some pharmaceutical companies use bioreactor vessels to cultivate particular cells or microorganisms required for certain treatments. The very high level of hygiene required means the vessels and all associated parts must be easy to thoroughly clean, because even the slightest contamination with other organisms can lead to an aborted production run. These reactors are mainly "batch-fed", where they are completely filled at the start and not emptied again until the process is completed. The pressure and level in the reactor have to be monitored continuously during process in order to obtain a high-quality yield.

More details



VEGAPULS 6X

Radar sensor for continuous level measurement in the bioreactor

- The front-flush, encapsulated antenna is easy to clean and resistant to the extreme conditions of the SIP and CIP processes
- Maximum utilization of the reactor, measurement is unaffected by changing products and process conditions
- The small beam angle and good focusing of the sensor allows easy alignment

Show Product

VEGABAR 83

Pressure transmitter for continuous pressure monitoring in the bioreactor and in the pipeline

- The welded, 50 µm-thick Alloy diaphragm with aseptic process fitting is a hygienically optimal and reliable solution
- Neither the chemical cleaning cycles nor the thermal shocks after sterilization can affect the diaphragm
- Pressure measurement in the pipeline for monitoring CIP cleaning processes

Show Product

VEGABAR 38

Pressure monitoring with IO-Link connection in the supply line of the heating medium

- Reliable measurement thanks to fast response time
- Robust ceramic CERTEC® measuring cell guarantees a long service life
- Simple operation thanks to VDMA menu structure and integrated display

Show Product



Measuring range - Distance Measuring range - Distance 120 m - Process temperature - -196 450 °C - Process pressure - -1 100 bar - Process pressure - -1 100 bar - Accuracy - ± 1 mm - Frequency 6 GHz 26 GHz 26 GHz 26 GHz 0.075 % 26 GHz 316L 26 GHz 316L 26 GHz 316L 27 Materials, wetted parts 316L PTFE PVDF 97DF 316L 29P - PEEK - Threaded connection ≥ DN20, ≥ 1° Plange connection ≥ DN20, ≥ 1° Pygenic fittings Slotted nut ≥ DN25 - DIN 11851 Varivent ≥ DN25 SMS 1143 E DN51 SMS 1143 E DN51 SMS DN38 Hygienic fittings SMS 1143 E DN51 Solted nut ≥ DN25 = TN 111861 A, A, DN50 F Swagelok VCR screwing Swagelok VCR screwing Yarivent ≥ DN25 Swagelok VCR screwing Yarivent ≥ DN26 Hygienic fittings 40 with compression nut Hygienic fitting X-A, DN50 F Swagelok VCR sc	VEGAPULS 6X Show Product	VEGABAR 83 Show Product
120 m-Process temperature -196 450 °CMeasuring range - Pressure -1 1000 barProcess pressure -1 100 bar-Process pressure $\pm 1 \text{ mm}$ Process temperature $\pm 0 \dots 200 ^{\circ}C$ Accuracy $\pm 1 \text{ mm}$ Process pressure 		
-196 450 °C-1 1000 barProcess pressure -1 160 barProcess temperature -40 200 °CAccuracy \pm 1 mmProcess pressure -1 1000 barFrequency 6 GHz 26 GHz 80 GHzAccuracy 0.075 %Materials, wetted parts 316LBeam angle \geq 3° 1000 barMaterials, wetted parts 316LBeam angle \geq 3° 1000 barMaterials, wetted parts 316LPTFE PVDF 316L PP PEEKThreaded connection \geq DN25, \geq 1"Threaded connection \geq DN25, \geq 1"Flange connection \geq G%, \geq ½" NPTSlotted nut \geq DN25 - DIN 11851 Varivent \geq DN25 Slotted nut \geq 2", DN50 - DIN 11851 Varivent \geq DN25 Slotted nut \geq 2", DN50 - DIN 11851 Varivent \geq DN25 Slotted nut \geq 2", DN50 - DIN 11851 Varivent \geq DN25 hygienic fitting S Slotted nut \geq 2", DN50 - DIN 11851 Varivent \geq DN25 hygienic fitting S \geq DN33 - DIN11864-1-A Hyg. collar damp adapter DN40PN40 DIN118 Hyg. Collar damp adapte		Measuring range - Distance
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hygienic fitting F40 with compression nut Varivent G125		
	lygienic screw connections ≥ DN50 tube $ø53$ -	
DIN11864-1-A Seal material	JIN11864-1-A	Seal material
Hygienice flange connection ≥ DN50 DIN11864-2 no media contact	lygienice flange connection ≥ DN50 DIN11864-2	no media contact
Hygienic clamp connection ≥ DN50 pipe Ø53 - DIN11864-	łygienic clamp connection ≥ DN50 pipe Ø53 - DIN11864-	L
3-A		
DRD connection ø 65 mm SMS 1145 DN51	RD connection ø 65 mm	

BASIC	
	VEGABAR 38
	Show Product
Measuring ra -1 60 bar	nge - Pressure
Process temp	erature
-40 130 °C	
Accuracy	
0.3 %	
Materials, wet	ted parts
PVDF	
316L Duplex (1.4462))
Ceramic	7
Threaded con	nection
≥ G½, ≥ ½ NPT	
Hygenic fitting	as
	50 - DIN32676, ISO2852
	IN32676, ISO2852
	DIN32676, ISO2852 ⁄₂", ≥ DN40 - DIN 11851
	N25 - DIN 11851
SMS DN38	
	s ≥ DN25 - DIN11864-1-A
Hygienic fitting: Varivent N50-4	s ≥ DN40 - DIN11864-1-A 0
SMS DN25	
Ingold connecti Varivent F25	on PN10
-	
Seal material EPDM	
FKM	
FFKM	
Housing mate	rial
Plastic	
Protection rat	ing
IP66/IP67	
IP65	
Output	
4 20 mA	IP/NPN, 4 … 20 mA)

