



VEGAPULS 6X – that makes the difference

THE MOST IMPORTANT ADVANTAGES IN BRIEF

- Reliable right from the start:**
 Due to the small blocking distance, measurement is possible right up to the sensor itself. Buildup and deposits do not affect the accuracy of the measuring result. Perfect for measuring bulk solids even at close range.
- Universal applicability:**
 Unaffected by media properties and process conditions, the sensor is suitable for liquids as well as bulk solids.
- Meets all hygienic requirements:**
 Process fittings suitable for all standard hygienic versions with all important approvals and certificates.
- Full security:**
 The sensor meets the highest cybersecurity standards according to IEC 62443-4-2.
- Fast connection:**
 The electrical connection can be made without tools.
- Comprehensive protection:**
 Overvoltage protection is built into the sensor if required.
- Continuous function monitoring:**
 SIL according to IEC 61508

	VEGAPULS 6X	VEGAPULS 64	VEGAPULS 69
Applications	Liquids and bulk solids	Liquids	Bulk solids
Process pressure	-1 ... +160 bar	-1 ... +25 bar	-1 ... +20 bar
Process temperature	-196 ... +450 °C	-196 ... +200 °C	-40 ... +200 °C
Measurement frequency	W-band (80 GHz), K-band (26 GHz), C-band (6 GHz)	W-band (80 GHz)	W-band (80 GHz)
Bandwidth	2 ... 8 GHz	4 GHz	1 GHz
Customer-specific Parameter settings	✓	–	–
SIL, IEC 61508	✓ SIL can be switched off	–	–
IT security IEC 62443-4-2	✓	–	–
Analogue output Bus system	4 ... 20 mA/HART ✓	4 ... 20 mA/HART –	4 ... 20 mA/HART ✓
Without tools Operable clamp	✓	–	–
Blocking distance	short	medium	large
Overvoltage protection optionally in the device	permanently installed in 2nd chamber	plics® clamp retrofitted	plics® clamp retrofitted
Hygienic adapter	✓	–	–
Hygienic approvals	EHEDG, FDA, 3-A, EC 1935/2004	FDA, EC 1935/2004	–

TECHNICAL SPECIFICATIONS IN DETAIL:

VEGAPULS 6X

Applications	Liquids and bulk solids
Measuring range	up to 120 m (393.7 ft)
Deviation	depending on version: ≤ 1 mm
Beam angle	from: 3°
Measuring frequency	W-band (80 GHz), K-band (26 GHz), C-band (6 GHz)
Band width	2 ... 8 GHz
Process fitting	Mounting strap Collar flanges from DN 80, 3" Threads from G $\frac{3}{4}$, $\frac{3}{4}$ NPT Flanges from DN 20, $\frac{3}{4}$ " Encapsulated antenna system, flanges from DN 50, 2" Flanges with swivelling holder from DN 100, 4"
Version	Integrated antenna, horn antenna, lens antenna
Material	Ceramic, PEEK, PFA, PP, PTFE, PVDF, stainless steel 316L/Alloy
Seal	EPDM, FFKM, FKM, graphite, PEEK
Housing	Plastic, aluminium, stainless steel
Process pressure	-1 ... +160 bar (-100 ... +16000 kPa/-14.5 ... +362.6 psig)
Process temperature	-196 ... +450 °C (-321 ... +842 °F)
Ambient, storage and transport temperature	-40 ... +80 °C (-40 ... +176 °F)
Operating voltage	Two-wire sensor: 12 ... 35 V DC Four-wire sensor: 90 ... 263 V AC; 20 ... 42 V AC or 9.6 ... 48 V DC
Output signal	4 ... 20 mA/HART, APL, Profibus PA, Modbus
Bluetooth standard	Bluetooth 5.0
Bluetooth Op. range	25 m (82 ft)
Adjustment	Display and adjustment module PLICSCOM, PACTware/DTM, FDI incl. PA-DIM, VEGA Tools app, EDD
Protection class acc. to IEC 60529	IP66/IP67, IP66/IP68 (0.2 bar), IP68 (1 bar), IP69
Protection rating acc. to NEMA	Type 4X, Type 6P
Other properties	Functional safety SIL (IEC 61508) IT security (IEC 62443-4-2) Gas Ex, dust Ex Overfill protection Food/pharmaceutical certification Ship approval

