

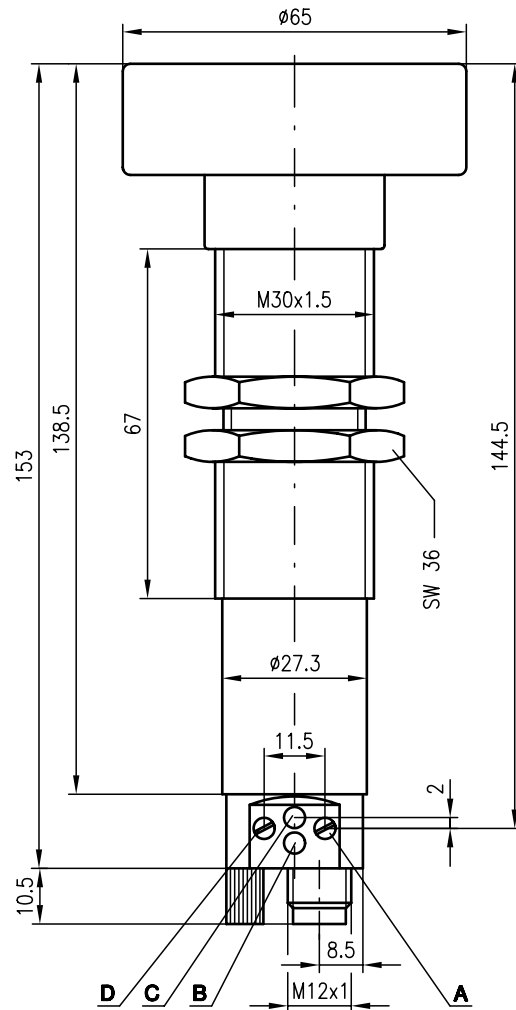


VRTU 430

Ultrasonic distance sensors



Dimensioned drawing



- A End of switching range
- B Indicator diode Q2 only for ... 430M/P ...
- C Indicator diode Q1
- D Start of switching range



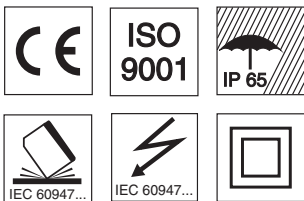
600 ... 6000mm



- Ideal for detection of levels of liquids, bulk materials, transparent media, ...
- Distance information does not depend on the surface properties
- All settings are adjustable
- Up to 10 devices can be synchronised via the SYNC input
- Start and end of switching range adjustable separately

Electrical connection

... 430M/P ...	
20-30V DC +	1 —■) br/BN
SYNC	2 —■) ws/WH
GND	3 —■) bl/BU
Q1	4 —■) sw/BK
Q2	5 —■) gr/GR



Accessories:

(available separately)

- Programming software "USDS-Config"
- PGU 01 (programming device)

We reserve the right to make changes • USDS_08e.fm



Specifications

Ultrasonic specifications

Operating range ¹⁾	600 ... 6000mm
Ultrasonic frequency	80kHz
Opening angle	6°
Resolution	≥ 1mm
Absolute measurement accuracy	± 1.5% of the measurement range
Reproducibility	± 9mm

Timing

Switching frequency	1Hz
Response time	400ms
Delay before start-up	280ms
Switching hysteresis	60mm

Electrical data

Operating voltage U _B	20 ... 30VDC (incl. ± 10% residual ripple)
Residual ripple	±10% of U _B
Bias current	≤ 50mA (without load)
Switching output	2 PNP transistors
Function characteristics	switching in case of object recognition
Output current	300mA
Switching range adjustment	potentiometer 270°

Indicators

LED yellow	output activated
LED yellow flashing	programming error

Mechanical data

Housing	metal/CuZn
Weight	380g
Connection type	M12 connector, plastic, 5-pin

Environmental data

Ambient temp. (operation/storage)	-25°C ... +70°C/-40°C ... +85°C
Protective circuit ²⁾	1, 2, 3
VDE safety class ³⁾	II, all-insulated
Protection class	IP 65
Standards applied	IEC 60947-5-2
Fitting position	any
Explosion protection	ex zone 2/zone 11/temperature class T5

1) For the complete temperature range, measured object ≥ 100x100 mm²
 2) 1=short-circuit and overload protection, 2=polarity reversal protection, 3=wire break and inductive protection
 3) Rating voltage 250VAC

Tables

Diagrams

Order guide

Designation	Part No.
VRTU 430M/P-1110-6000-S12	500 36264

Remarks

- Synchronisation: mutual interference is excluded by connecting the sensors with the SYNC input.
- Multiplex: Achieved by parameterisation of the sensors using the "USDS-Config" software.