



## KTU5 Ultrasonic level transmitter

Range 0,25-6 / 0,4-10m

IP67|68 protection

Suitable for liquids and granules

MODBUS RTU comm. protocol

Power supply 12Vdc; 20÷30Vdc; 24,115,230Vac

Output: 4 ÷ 20 mA + 2 adjustable relays

Compact ultrasonic instrument for general applications in liquids and bulk solids. Range from 0,25 to 5 m or 0,4 to 8 m.

KTU5 has 3 modes of calibration:

by means of on-board buttons;

by means of VL620|621 module, "REMOTE DISPLAY";

by means of PC with s/w 010F105A MODBUS RTU.

This instrument is ideal for applications which require a compact transmitter without local display. There is a wide choice of supply voltage, 24 Vdc, 24 Vac, 115 Vac or 230 Vac. Two configurable relays allow alarm thresholds and pumps control. A complete self-diagnosis makes it suitable for remote unattended measurements. Another important feature is the body, because it's full manufactured in PP which makes suitable for applications with acids.

### Technical Features

#### Housing/sensor material

PP

#### Mechanical installation

2" GAS M (PP flange DN80 opt.)

#### Protection degree

IP67|68

#### Electrical connection

Internal push connectors

#### Working temperature

-20 ÷ +60°C

#### Pressure

from 0,5 to 1,5 bar (absolute)

#### Power supply

12Vdc; 20÷30Vdc; 24,115,230Vac

#### Power consumption

2W

#### Analog output

4...20mA, max 750ohm

#### Relays output

n°2 3A 230Vac (n.o.)

#### Digital communication

MODBUS RTU

#### Max measure range

max 0.25 ÷ 6m

max 0.40 ÷ 10m

In case of non perfectly reflecting surfaces, the maximum distance value will be reduced

#### Blind distance

0,25m (6m versions) / 0,40m (10m versions)

#### Temperature compensation

digital from -30 to 70°C

#### Accuracy

±0,5% (of the measured distance)  
not better than ±3mm.

#### Resolution

1mm.

#### Calibration

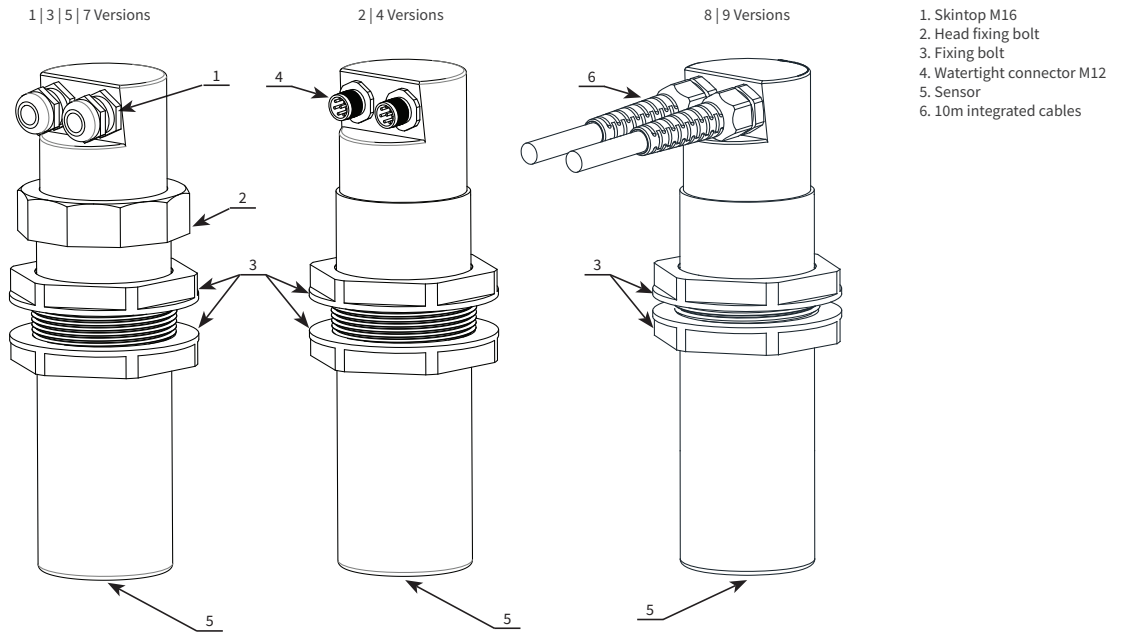
2 buttons or via MODBUS RTU

#### Warm-up

5 minutes typical

#### Display

VL620|621 programming module (opt.) with 4 keys and matrix LCD



**KTU5**

**Level control and measure unit**

Ultrasonic - G 2"/PP threaded connection + n.2 2" BSP/ PP fixing bolts  
 4÷20mA output with 2 relays for alarms or pumps control  
 Calibration by 2 push-buttons, VL620/VL621 programming display  
 or via MODBUS RTU  
 Working temperature: -20 ÷ +60°C

Version	
1	IP67, range 0,25+6m, with electrical connection by 2 internal screw terminal blocks
2	IP67, range 0,25+6m, with IP67 male connector
3	IP67, range 0,40+10m, with electrical connection by 2 internal screw terminal blocks
4	IP67, range 0,40+10m, with IP67 male connector
5	IP67, range 0,25+6m, with electrical connection by 2 internal screw terminal blocks with BIS/USC measurement units
7	IP67, range 0,40+10m, with electrical connection by 2 internal screw terminal blocks with BIS/USC measurement units
8	IP68 with 10m integrated cables - range 0,25+6m - calibration ONLY via MODBUS RTU
9	IP68 with 10m integrated cables - range 0,4+10m - calibration ONLY via MODBUS RTU
Housing material	
B	PP polypropylene
Z	Special
Power supply	
0	24Vac 50+60Hz
1	115Vac 50+60Hz
2	230Vac 50+60Hz
4	20+30Vdc
5	12Vdc Attention! Max distance 3 m (only for version 1, 2 and 5)
9	Special
Accessories	
A	None
C	DN80 PN6 UNI 1092-1 / PP flange (600J001T)
D	VL620 keyboard/display programming module with 1 m cable and USB connection (for versions 1,3,5,7)
E	Mounting bracket in PP (835B026Z)
F	VL621 keyboard/display programming module with 1 m cable (for versions 2,4)
J	Nr. 2 Junction box in PC 6 way IP65 (490B074C) - for IP68 versions
S	S/W for communication MODBUS (010F105A)
T	Couple of 5m cables with IP67 female connector (for versions 2 and 4)
U	Couple of 10m cables with IP67 female connector (for versions 2 and 4)
V	Couple of 15m cables with IP67 female connector (for versions 2 and 4)
W	Couple of 20m cables with IP67 female connector (for versions 2 and 4)
Z	Special