

# CLT4

capacitive level transmitter

**Contact level measurement**

**Threaded, flanged and sanitary connections**

**Suitable for measuring of liquids and powders**

**IP65 / 67 protection**

**PTFE or PVC insulation**



Capacitive instrument, rod probe suitable for general or chemical-pharmaceutical applications for level measurement of conductive, non- conductive liquids or granules. Installation on the top of metal tanks.

## TECHNICAL FEATURES

**Housing material**

aluminum / polycarbonate

**Versions**

compact; remote; high temperature

**IP rating**

IP67

**Electrical connection**

terminals

**Working temperature**

-30° to +150°C PTFE ;

-20° to +70°C PVC

**Electrodes**

rigid insulated PTFE rod; rigid PVC insulated rod

**Power supply**

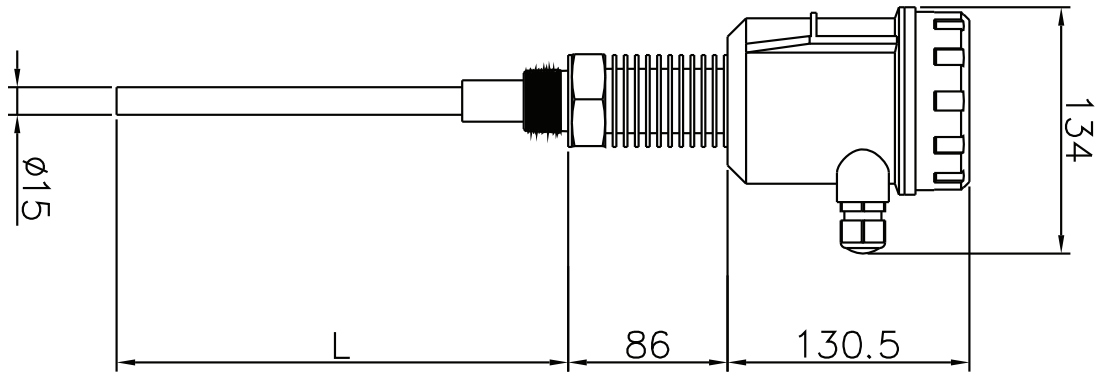
24vDC; 24/115/230vAC

**Analog output**

4-20mA

**Measure range**

max 3 mt rod



#### CLT4 Capacitive rod probe for liquids and dust

Suitable for level measurement  
Installation in the top of metallic tanks; 3m max.

| Version                             |                                                                                                                                                                                                         |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b>                            | Without insert-preamplifier (only capacitive electrode with E, F or L housing)                                                                                                                          |
| <b>B</b>                            | Compact                                                                                                                                                                                                 |
| <b>D</b>                            | Spacer-cooling-fins compact in carbon-steel                                                                                                                                                             |
| <b>F</b>                            | Spacer-cooling-fins compact in stainless-steel                                                                                                                                                          |
| <b>H</b>                            | Separate with M8 female connection, 1.5m coaxcable max. 70°C (cod 525A001H).<br>Electrode with DIN B aluminum housing - IP66 (only with ½" connection)                                                  |
| <b>I</b>                            | Separate with M8 female connection, 1.5m coaxcable with double shielding max. 120°C with external sheath in EPDM (cod 525A003E). Electrode with DIN B aluminum housing - IP66 (only with ½" connection) |
| <b>L</b>                            | Separate with M8 female connection, 1.5m coaxcable max. 70°C (cod 525A001H).<br>Electrode with DIN A aluminum housing - IP66                                                                            |
| <b>M</b>                            | Separate with M8 female connection, 1.5m coaxcable with double shielding max. 120°C with external sheath in EPDM (cod 525A003E). Electrode with DIN A aluminum housing - IP66                           |
| <b>R</b>                            | Separate with AI fixing base + 2m coaxcable max. 70°C (cod 525A001H).<br>Electrode with DIN B aluminum housing - IP66 (only with ½" connection)                                                         |
| <b>S</b>                            | Separate with AI fixing base + 2m coaxcable max. 70°C (cod 525A001H).<br>Electrode with DIN A aluminum housing - IP66                                                                                   |
| <b>Z</b>                            | Special                                                                                                                                                                                                 |
| Electronic preamplifier             |                                                                                                                                                                                                         |
| <b>00</b>                           | None                                                                                                                                                                                                    |
| <b>22</b>                           | TC22, 4-20mA, calibration by 2 push-buttons or via RS485, 24vDC                                                                                                                                         |
| <b>23</b>                           | TC23, 4-20mA, calibration by 2 push-buttons or via RS485, 24vAC                                                                                                                                         |
| <b>24</b>                           | TC24, 4-20mA, calibration by 2 push-buttons or via RS485, 115vAC                                                                                                                                        |
| <b>25</b>                           | TC25, 4-20mA, calibration by 2 push-buttons or via RS485, 230vAC                                                                                                                                        |
| <b>26</b>                           | TC26, 4-20mA, calibration by 2 push-buttons or via RS485, 1 relay, 24vDC                                                                                                                                |
| <b>27</b>                           | TC27, 4-20mA, calibration by 2 push-buttons or via RS485, 1 relay, 24vAC                                                                                                                                |
| <b>28</b>                           | TC28, 4-20mA, calibration by 2 push-buttons or via RS485, 1 relay, 115vAC                                                                                                                               |
| <b>29</b>                           | TC29, 4-20mA, calibration by 2 push-buttons or via RS485, 1 relay, 230vAC                                                                                                                               |
| <b>30</b>                           | TC30, 4-20mA 2-wire, 2 push-buttons calibration, 10-30vDC                                                                                                                                               |
| <b>99</b>                           | Special                                                                                                                                                                                                 |
| Housing for electronic preamplifier |                                                                                                                                                                                                         |
| <b>E</b>                            | IP 66 DIN B aluminum housing (for electrode only)                                                                                                                                                       |
| <b>F</b>                            | PC with transparent cap and anticondensation filter - IP67                                                                                                                                              |
| <b>G</b>                            | IP66 varnished aluminum                                                                                                                                                                                 |
| <b>L</b>                            | PC with blind cap and anticondensation filter - IP67                                                                                                                                                    |
| <b>Z</b>                            | Special                                                                                                                                                                                                 |

| Process connection |                                                                     |
|--------------------|---------------------------------------------------------------------|
| 01                 | G1" / Carbon-steel                                                  |
| 02                 | G1" / Stainless-steel SS316                                         |
| 03                 | 1" NPT / Carbon-steel                                               |
| 04                 | 1" NPT / Stainless-steel SS316                                      |
| 11                 | G1½" / Carbon-steel                                                 |
| 12                 | G1½" / Stainless-steel SS316                                        |
| 19                 | G1½" / PTFE                                                         |
| 20                 | Sanitary DN25 DIN 11851 / SS304L                                    |
| 21                 | Sanitary DN40 DIN 11851 / SS304L                                    |
| 22                 | Sanitary DN50 DIN 11851 / SS304L                                    |
| 40                 | Threaded flange DN40 PN 6 UNI 1092-1 / PVC                          |
| 41                 | Threaded flange DN40 PN 6 UNI 1092-1 / PTFE                         |
| 42                 | Threaded flange DN40 PN16 / carbon steel                            |
| 45                 | Threaded flange DN50 PN6 UNI 1092-1 / PVC                           |
| 46                 | Threaded flange DN80 PN6 UNI 1092-1 / PVC                           |
| 47                 | Threaded flange DN100 PN6 UNI 1092-1 / PVC                          |
| 50                 | Threaded flange DN40 PN16 / SS304                                   |
| 51                 | Threaded flange DN40 PN16 / SS316                                   |
| 52                 | Threaded flange DN50 PN16 DIN 2527 form B (without gasket) / SS316  |
| 53                 | Threaded flange DN80 PN16 DIN 2527 form B (without gasket) / SS316  |
| 54                 | Threaded flange DN100 PN16 DIN 2527 form B (without gasket) / SS316 |
| 60                 | Threaded flange ANSI RF 2" 150 psi / SS316                          |
| 61                 | Threaded flange ANSI RF 3" 150 psi / SS316                          |
| 62                 | Threaded flange ANSI RF 4" 150 psi / SS316                          |
| 71                 | CLAMP 1" / SS316                                                    |
| 73                 | CLAMP 1 1/2" / SS316                                                |
| 75                 | CLAMP 2" / SS316                                                    |
| 83                 | G½" / Carbon-steel - not for DIN A housing                          |
| 84                 | G½" / Stainless-steel SS316 - not for DIN A housing                 |
| 99                 | Special                                                             |

| Electrode type and insulation |                                                                         |
|-------------------------------|-------------------------------------------------------------------------|
| B                             | PTFE partially insulated SS316 rod                                      |
| D                             | PVC totally insulated SS316 rod                                         |
| H                             | PTFE totally insulated SS316 rod                                        |
| L                             | PTFE 8/12 totally insulated SS316 rod (for liquids - max length 2200mm) |
| M                             | PTFE partially insulated SS316 rod + carbon steel grounding reference   |
| N                             | PVC insulated rod + carbon steel grounding reference                    |
| P                             | PTFE insulated rod + carbon steel grounding reference                   |
| Q                             | PTFE partially insulated SS316 rod + SS316 grounding reference          |
| R                             | PVC insulated rod + SS316 grounding reference                           |
| S                             | PTFE insulated rod + SS316 grounding reference                          |
| Z                             | Special                                                                 |

| L= Electrode length, price each 100mm |                                                                       |
|---------------------------------------|-----------------------------------------------------------------------|
| 40                                    | PTFE partially insulated SS316 rod                                    |
| 42                                    | PVC totally insulated SS316 rod                                       |
| 46                                    | PTFE totally insulated SS316 rod                                      |
| 48                                    | PTFE 8/12 totally insulated SS316 rod (for liquids)                   |
| 50                                    | PTFE partially insulated SS316 rod + Carbon steel grounding reference |
| 51                                    | PVC insulated rod + Carbon steel grounding reference                  |
| 52                                    | PTFE insulated rod + Carbon steel grounding reference                 |
| 53                                    | PTFE partially insulated SS316 rod + SS316 grounding reference        |
| 54                                    | PVC insulated rod + SS316 grounding reference                         |
| 55                                    | PTFE insulated rod + SS316 grounding reference                        |
| 99                                    | Special                                                               |

| L1 = non sensitive part (rod), material and price each 10cm |              |
|-------------------------------------------------------------|--------------|
| A                                                           | None         |
| B                                                           | Carbon-steel |
| C                                                           | SS316        |
| Z                                                           | Special      |

# CLT7

capacitive level transmitter

**Contact level measurement for top installation**

**PE coated rope**

**For measurements of powders and granules**

**Maximum probe length 30 cm**



Capacitive instrument, rope probe for continuous level measuring. Suitable for general use or level measurement of granules and powders. Installation on the top of silos.

## TECHNICAL FEATURES

**Housing material**

polycarbonate

**Versions**

compact; remote

**IP rating**

IP67

**Electrical connection**

terminals

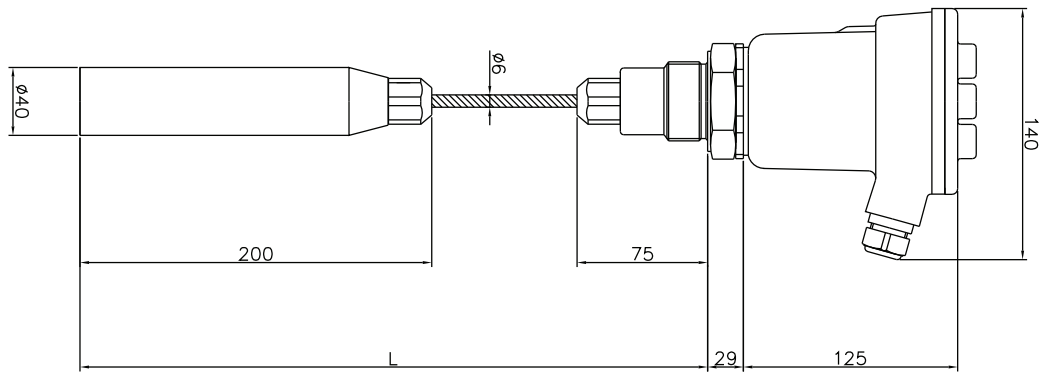
**Electrodes**

insulated PE rope

**Power supply**

24vDC; 24/115/230vAC

**Analog output** 4-20mA



### CLT7 Capacitive rope probe for granulates and powders

Continuous capacitive level measurement  
Installation on the top of metallic tanks

| Version  |                                                                                                                               |
|----------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | Without insert-pre amplifier (only capacitive electrode with B, F or L housing)                                               |
| <b>B</b> | Compact version                                                                                                               |
| <b>L</b> | Separate with M8 female connection, 1.5m coax cable max. 70°C (cod 525A001H).<br>Electrode with DIN A aluminum housing - IP66 |
| <b>P</b> | Separate with Al fixing base + 1.7 m coax cable max. 70°C (cod 525A001H).<br>Electrode with DIN A aluminum housing - IP66     |
| <b>Z</b> | Special                                                                                                                       |

| Electronic preamplifier |                                                                            |
|-------------------------|----------------------------------------------------------------------------|
| <b>00</b>               | None                                                                       |
| <b>22</b>               | TC22, 4 -20mA, calibration by 2 push-buttons or via RS485, 24 vDC          |
| <b>23</b>               | TC23, 4 -20mA, calibration by 2 push-buttons or via RS485, 24 vAC          |
| <b>24</b>               | TC24, 4 -20mA, calibration by 2 push-buttons or via RS485, 115 vAC         |
| <b>25</b>               | TC25, 4 -20mA, calibration by 2 push-buttons or via RS485, 230 vAC         |
| <b>26</b>               | TC26, 4 -20mA, calibration by 2 push-buttons or via RS485, 1relay, 24 vDC  |
| <b>27</b>               | TC27, 4 -20mA, calibration by 2 push-buttons or via RS485, 1relay, 24 vAC  |
| <b>28</b>               | TC28, 4 -20mA, calibration by 2 push-buttons or via RS485, 1relay, 115 vAC |
| <b>29</b>               | TC29, 4 -20mA, calibration by 2 push-buttons or via RS485, 1relay, 230 vAC |
| <b>30</b>               | TC30, 4-20mA, 2wires, 2 push buttons for calibration, 10-30 vDC            |
| <b>99</b>               | Special                                                                    |

| Housing for electronic preamplifier |                                                           |
|-------------------------------------|-----------------------------------------------------------|
| <b>F</b>                            | PC with transparent cap and anticondensation filter, IP67 |
| <b>L</b>                            | PC with blind cap and anticondensation filter, IP67       |
| <b>Z</b>                            | Special                                                   |

| Process connection |                                                                  |
|--------------------|------------------------------------------------------------------|
| <b>11</b>          | G1"½ / Carbon-steel                                              |
| <b>12</b>          | G1"½ / SS316                                                     |
| <b>42</b>          | Threaded flange DN40 PN16 Carbon-steel                           |
| <b>50</b>          | Threaded flange DN40 PN16 SS304                                  |
| <b>51</b>          | Threaded flange DN40 PN16 SS316                                  |
| <b>52</b>          | Threaded flange DN50 PN16 DIN2527 form B (without gasket) SS316  |
| <b>53</b>          | Threaded flange DN80 PN16 DIN2527 form B (without gasket) SS316  |
| <b>54</b>          | Threaded flange DN100 PN16 DIN2527 form B (without gasket) SS316 |
| <b>60</b>          | Threaded flange ANSI RF 2" 150 psi SS316                         |
| <b>61</b>          | Threaded flange ANSI RF 3" 150 psi SS316                         |
| <b>62</b>          | Threaded flange ANSI RF 4" 150 psi SS316                         |
| <b>99</b>          | Special                                                          |

| Electrode type and insulation |                                                            |
|-------------------------------|------------------------------------------------------------|
| <b>L</b>                      | Ø8mm carbon steel, counterweight in carbon steel           |
| <b>M</b>                      | Ø8mm carbon steel, counterweight in SS316                  |
| <b>N</b>                      | Ø8mm carbon steel PE coated, counterweight in carbon steel |
| <b>P</b>                      | Ø8mm carbon steel PE coated, counterweight in SS316        |
| <b>Z</b>                      | Special                                                    |

| L = Electrode length, price each meter |                             |
|----------------------------------------|-----------------------------|
| <b>73</b>                              | Ø8mm carbon steel           |
| <b>74</b>                              | Ø8mm carbon steel PE coated |
| <b>99</b>                              | Special                     |

| L1 = non sensitive part (rod), material and price each 10cm |                 |
|-------------------------------------------------------------|-----------------|
| <b>A</b>                                                    | Standard (50mm) |
| <b>B</b>                                                    | Carbon-steel    |
| <b>C</b>                                                    | SS316           |
| <b>Z</b>                                                    | Special         |

# CLT8

capacitive level transmitter

**Contact level measurement for top installation**

**Threaded, flanged and sanitary connections**

**Suitable for liquid level measurement**

**IP66 / 67 protection**

**PTFE or PVC insulation**



Capacitive instruments, rope probe for measuring of liquid levels, installation on top of metal tanks.

## TECHNICAL FEATURES

**Housing material**

polycarbonate

**Versions**

compact; remote

**IP rating**

IP67

**Electrical connection**

terminals

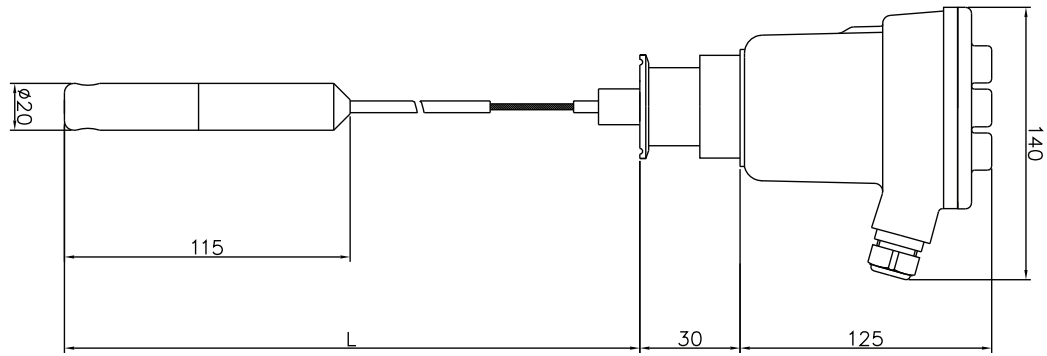
**Electrodes**

insulated PTFE rope

**Power supply**

24vDC; 24/115/230vAC

**Analog output** 4-20mA

**CLT8****Capacitive rope probe for liquids**

Continuous capacitive level measurement  
 Suitable for conductive and not conductive liquids, paste  
 Installation on the top of metallic tanks

| Version                             |                                                                                                                              |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b>                            | Without insert-preamplifier (only capacitive electrode with B, F or L housing)                                               |
| <b>B</b>                            | Compact                                                                                                                      |
| <b>D</b>                            | Spacer-cooling-fins compact in carbon-steel                                                                                  |
| <b>F</b>                            | Spacer-cooling-fins compact in stainless-steel                                                                               |
| <b>L</b>                            | Separate with M8 female connection, 1,5m coaxcable max. 70°C (cod 525A001H).<br>Electrode with DIN A aluminum housing - IP66 |
| <b>P</b>                            | Separate with Al fixing base + 1,5 m coaxcable max. 70°C (cod 525A001H).<br>Electrode with DIN A aluminum housing - IP66     |
| <b>Z</b>                            | Special                                                                                                                      |
| Electronic preamplifier             |                                                                                                                              |
| <b>00</b>                           | None                                                                                                                         |
| <b>22</b>                           | TC22, 4-20mA, calibration by 2 push-buttons or via RS485, 24vDC                                                              |
| <b>23</b>                           | TC23, 4-20mA, calibration by 2 push-buttons or via RS485, 24vAC                                                              |
| <b>24</b>                           | TC24, 4-20mA, calibration by 2 push-buttons or via RS485, 115vAC                                                             |
| <b>25</b>                           | TC25, 4-20mA, calibration by 2 push-buttons or via RS485, 230vAC                                                             |
| <b>26</b>                           | TC26, 4-20mA, calibration by 2 push-buttons or via RS485, 1relay, 24vDC                                                      |
| <b>27</b>                           | TC27, 4-20mA, calibration by 2 push-buttons or via RS485, 1relay, 24vAC                                                      |
| <b>28</b>                           | TC28, 4-20mA, calibration by 2 push-buttons or via RS485, 1relay, 115vAC                                                     |
| <b>29</b>                           | TC29, 4-20mA, calibration by 2 push-buttons or via RS485, 1relay, 230vAC                                                     |
| <b>30</b>                           | TC30, 4-20mA, 2wires, 2 push buttons for calibration, 10-30vDC                                                               |
| <b>99</b>                           | Special                                                                                                                      |
| Housing for electronic preamplifier |                                                                                                                              |
| <b>B</b>                            | IP66 loaded PC, white polycarbonate cap                                                                                      |
| <b>F</b>                            | PC with transparent cap and anticondensation filter, IP67                                                                    |
| <b>L</b>                            | PC with blind cap and anticondensation filter, IP67                                                                          |
| <b>Z</b>                            | Special                                                                                                                      |
| Process connection                  |                                                                                                                              |
| <b>01</b>                           | G1" / Carbon steel                                                                                                           |
| <b>02</b>                           | G1" / Stainless-steel SS316                                                                                                  |
| <b>04</b>                           | 1" NPT / Stainless-steel SS 316                                                                                              |
| <b>11</b>                           | G1"½ / Carbon-steel                                                                                                          |
| <b>12</b>                           | G1"½ / Stainless-steel SS316                                                                                                 |
| <b>19</b>                           | G1"½ / PTFE                                                                                                                  |
| <b>20</b>                           | Sanitary DN 25 DIN 11851, SS 304L                                                                                            |
| <b>21</b>                           | Sanitary DN 40 DIN 11851, SS 304L                                                                                            |
| <b>22</b>                           | Sanitary DN 50 DIN 11851, SS 304L                                                                                            |
| <b>42</b>                           | Threaded flange DN 40 PN16 material Carbon-steel                                                                             |
| <b>50</b>                           | Threaded flange DN 40 PN16 material SS 304                                                                                   |
| <b>51</b>                           | Threaded flange DN 40 - PN16 material SS 316                                                                                 |
| <b>52</b>                           | Threaded flange DN 50 - PN16 DIN 2527 form B (without gasket) SS 316                                                         |
| <b>53</b>                           | Threaded flange DN 80 PN16 DIN 2527 form B (without gasket) SS 316                                                           |
| <b>54</b>                           | Threaded flange DN 100 PN16 DIN 2527 form B (without gasket) SS 316                                                          |
| <b>60</b>                           | Threaded flange ANSI RF 2" 150 psi SS 316                                                                                    |
| <b>61</b>                           | Threaded flange ANSI RF 3" 150 psi SS 316                                                                                    |
| <b>62</b>                           | Threaded flange ANSI RF 4" 150 psi SS 316                                                                                    |
| <b>71</b>                           | CLAMP 1" SS 316                                                                                                              |
| <b>73</b>                           | CLAMP 1 1/2" SS 316                                                                                                          |
| <b>75</b>                           | CLAMP 2" SS 316                                                                                                              |
| <b>99</b>                           | Special                                                                                                                      |

| <b>Electrode type and insulation</b>                               |                                              |
|--------------------------------------------------------------------|----------------------------------------------|
| <b>B</b>                                                           | 2,5mm PVC insulated, counterweight in SS316  |
| <b>C</b>                                                           | 2,5mm PTFE insulated, counterweight in SS316 |
| <b>L</b>                                                           | 2,5mm PVC insulated, counterweight in PVC    |
| <b>M</b>                                                           | 2,5mm PTFE insulated, counterweight in PTFE  |
| <b>Z</b>                                                           | Special                                      |
| <b>L= Electrode length, price each meter</b>                       |                                              |
| <b>81</b>                                                          | 2,5mm PVC insulated                          |
| <b>82</b>                                                          | 2,5mm PTFE insulated                         |
| <b>99</b>                                                          | Special                                      |
| <b>L1 = non sensitive part (rod), material and price each 10cm</b> |                                              |
| <b>A</b>                                                           | None                                         |
| <b>C</b>                                                           | SS316                                        |
| <b>Z</b>                                                           | Special                                      |