## **APPLICATION TABLE**

|  | CONTINUOUS LEVEL MEASUREMENT |         |        |  |                  |                   |        |                  | LEG         | LEGEND                                      |  |  |
|--|------------------------------|---------|--------|--|------------------|-------------------|--------|------------------|-------------|---|--|--|
| PROCESS MEDIUM FEATURES<br>AND OTHER FACTORS           |                              |         |        |  |                  |                   |        | ••               | •• suitable |   |  |  |
|  | GRLM-70                      | ARLM-70 | ULM-53 | ULM-70<br>ULM-54<br>with horn<br>adapter | CLM-36<br>DLM-35 | CLM-70            | HLM-35 | HLM-25<br>HLM-16 | •           | conditionally<br>applicable                 |  |  |
|  | GRI                          | ARL     | nr     | with UL                                  | DL               | CL                |        | ± ±              | -           | not suitable                                |  |  |
|  |                              |         |        |  |                  |                   |        |                  | 1)          | dielectric constant                         |  |  |
| SOLID  |                              |         |        |  |                  |                   |        |                  | ''          | (relative permittivity)                     |  |  |
| dust - fraction up to 0.1 mm                           | ••                           | -       | -      | -  | ••               | ••                | -      | -                | 2)          | η - dynamic viscosity                       |  |  |
| loose material - fraction up to 10 mm                  | ••                           | -       | -      | •  | •                | •                 | -      | -                | /           | < 1000 [10-3 Pa.s]                          |  |  |
| piece material - fraction over 10 mm<br>(up to 60 mm)  | -                            | -       | •      | ••                                       | -                | -                 | -      | -                | 3)          | η - dynamic viscosity<br>> 1000 [10-3 Pa.s] |  |  |
| changing (DK <sup>1)</sup> , density)                  | ••                           | -       | •      | ••                                       | -                | -                 | -      | -                | 4)          | variant CLM-70-61                           |  |  |
| settled dust (up to 5 mm layer)<br>extreme dustiness - | ••                           | -       | -      | •  | ••               | ••                | -      | -                |             | certification is missing                    |  |  |
| dust permanently in the air (layer above 5 mm)         | -                            | -       | -      | -  | •                | •                 | -      | -                | 5)          | for now, otherwise yes                      |  |  |
| extremely lightweight material                         | -                            | -       | -      | •  | •                | •                 | -      | -                | 6)          | only to max. levels or                      |  |  |
| highly abrasive material (sharp stones)                | -                            | -       | •      | ••                                       | -                | -                 | -      | -                | 0)          | protect with a shield                       |  |  |
| flammable dust, explosives                             | ••                           | -       | -      |  | ••               | ••                | -      | -                | 7)          | only rope electrode                         |  |  |
| mechanical obstacles in the stack                      | •                            | -       | -      | ••                                       | •                | •                 | -      | -                | 8)          | concentration to 5 %                        |  |  |
| LIQUIDS AND SLURRIES                                   |                              |         |        |  |                  |                   |        |                  |             |   |  |  |
| liquid <sup>2)</sup>                                   | ••                           | ••      | ••     | ••                                       | ••               | ••                | ••     | ••               |             |   |  |  |
| paste-like substance <sup>3)</sup>                     | ••                           | ••      | ••     | ••                                       | •                | •                 | -      | -                |             |   |  |  |
| hygienic applications                                  | ••                           | •       | •      | •  | ••               | ••                | •      | -                |             |   |  |  |
| hygienic applications with sanitation                  | ••                           | •       | -      | -  | ••               | ••                | -      | -                |             |   |  |  |
| changing DK <sup>1)</sup>                              | ••                           | ••      | ••     | ••                                       | -                | -                 | •      | •                |             |   |  |  |
| changing density                                       | ••                           | ••      | ••     | ••                                       | •                | •                 | -      | -                |             |   |  |  |
| sticking + el. conductive (strong alkalis)             | ••                           | ••      | •      | ••                                       | -                | -                 | •      | -                |             |   |  |  |
| aggressive inorganic acids                             | •                            | ••      | •      | •  | •                | • • <sup>4)</sup> | -      | -                |             |   |  |  |
| non-fuming diluted chemicals                           | ••                           | ••      | ••     | ••                                       | •                | •• 4)             | -      | -                |             |   |  |  |
| organic solvents                                       | ••                           | ••      | -      | -  | ••               | ••                | •      | -                |             |   |  |  |
| very small tanks                                       | -                            | -       | -      | -  | ••               | •                 | •      | •                |             |   |  |  |
| very volatile  | ••                           | ••      | -      | -  | ••               | ••                | •      | -                |             |   |  |  |
| foam continuous, dense                                 | ••                           | •       | •      | ••                                       | ••               | ••                | ••     | ••               |             |   |  |  |
| foam incoherent, moulded                               | •                            | -       | -      | -  | •                | •                 | ••     | ••               |             |   |  |  |
| combustibles   | ••                           | • 5)    | •      | •  | ••               | • 5)              | • 5)   | -                |             |   |  |  |
| liquid gases   | ••                           | •       | -      | -  | •                | •                 | -      | -                |             |   |  |  |
| sludge   | •                            | •       | ••     | ••                                       | •                | •                 | -      | -                |             |   |  |  |
| barriers in the tank                                   | ••                           | •       | -      | ••                                       | ••               | ••                | ••     | ••               |             |   |  |  |
| higher pressure (above 2 bar)                          | ••                           | ••      | -      | -  | ••               | ••                | •      | •                |             |   |  |  |
| vacuum   | ••                           | ••      | -      | -  | ••               | ••                | -      | -                |             |   |  |  |

|   | LIMIT LEVEL SENSING           |                                |                      |                      |                                   |                                    |                          |  |  |  |
|---|-------------------------------|--------------------------------|----------------------|----------------------|-----------------------------------|------------------------------------|--------------------------|--|--|--|
| PROCESS MEDIUM FEATURES<br>AND OTHER FACTORS                          | DLS-35<br>DLS-27<br>from side | DLS-35<br>DLS-27<br>from above | RFLS-53<br>from side | ULS-53<br>from above | GPLS-25<br>FLD-32<br>through wall | RFLS-35<br>RFLS-28-F_<br>from side | RFLS-28-R_<br>from above |  |  |  |
| SOLID   |                               |                                |                      |                      |                                   |                                    |                          |  |  |  |
| dust - fraction up to 0.1 mm  | ••                            | ••                             | •                    | -                    | -                                 | -                                  | -                        |  |  |  |
| loose material - fraction up to 10 mm                                 | •• <sup>6)</sup>              | ••                             | ••                   | •                    | •                                 | -                                  | -                        |  |  |  |
| piece material - fraction over 10 mm<br>(up to 60 mm)                 | -                             | • 7)                           | •                    | ••                   | -                                 | -                                  | -                        |  |  |  |
| changing (DK <sup>1)</sup> , density)                                 | •                             | •                              | •                    | ••                   | -                                 | -                                  | -                        |  |  |  |
| settled dust (up to 5 mm layer)                                       | ••                            | ••                             | ••                   | -                    | -                                 | -                                  | -                        |  |  |  |
| extreme dustiness -<br>dust permanently in the air (layer above 5 mm) | •                             | •                              | •                    | -                    | -                                 | -                                  | -                        |  |  |  |
| extremely lightweight material  | •                             | •                              | -                    | -                    | -                                 | -                                  | -                        |  |  |  |
| highly abrasive material (sharp stones)                               | -                             | •                              | -                    | ••                   | -                                 | -                                  | -                        |  |  |  |
| flammable dust, explosives  | ••                            | ••                             | -                    | -                    | -                                 | -                                  | -                        |  |  |  |
| LIQUIDS AND SLURRIES  |                               |                                |                      |                      |                                   |                                    |                          |  |  |  |
| liquid <sup>2)</sup>  | •                             | ••                             | -                    | ••                   | ••                                | ••                                 | ••                       |  |  |  |
| paste-like substance <sup>3)</sup>                                    | -                             | ••                             | -                    | ••                   | •                                 | ••                                 | ••                       |  |  |  |
| hygienic applications   | •                             | ••                             | -                    | •                    | ••                                | ••                                 | ••                       |  |  |  |
| hygienic applications with sanitation                                 | •                             | •                              | -                    | -                    | ••                                | •                                  | •                        |  |  |  |
| changing DK <sup>1)</sup>   | •                             | •                              | -                    | ••                   | -                                 | •                                  | •                        |  |  |  |
| changing density  | •                             | •                              | -                    | ••                   | ••                                | ••                                 | ••                       |  |  |  |
| sticking + el. conductive (strong alkalis)                            | -                             | •                              | -                    | •                    | ••                                | ••                                 | ••                       |  |  |  |
| aggressive inorganic acids  | -                             | •                              | -                    | •                    | ••                                | •                                  | •                        |  |  |  |
| non-fuming diluted chemicals  | •                             | ••                             | -                    | ••                   | ••                                | ••                                 | ••                       |  |  |  |
| organic solvents  | ••                            | ••                             | -                    | -                    | ••                                | ••                                 | ••                       |  |  |  |
| very small tanks  | ••                            | •                              | -                    | -                    | ••                                | ••                                 | ••                       |  |  |  |
| very volatile   | ••                            | ••                             | -                    | -                    | ••                                | ••                                 | -                        |  |  |  |
| foam on the surface   | •                             | •                              | -                    | •                    | ••                                | ••                                 | ••                       |  |  |  |
| combustibles  | ••                            | ••                             | -                    | •                    | •                                 | ••                                 | -                        |  |  |  |
| liquid gases  | •                             | •                              | -                    | -                    | -                                 | •                                  | •                        |  |  |  |

## LEGEND



(i

Interesting fact / unique product

Additional information to the product



The conformity mark



The explosion-proof equipment mark



HART

HART Communication protocol, HART communication protocol interface

Modbus, an open protocol for the mutual communication between various devices



CAN, the bus employed for the internal communication network and units in cars



SIL, Safety Integrity Level standard



Continuous level meters



Limit level sensors



Pressure sensors



Flow meters



Evaluation and power supply units



Display units



Other products and accessories