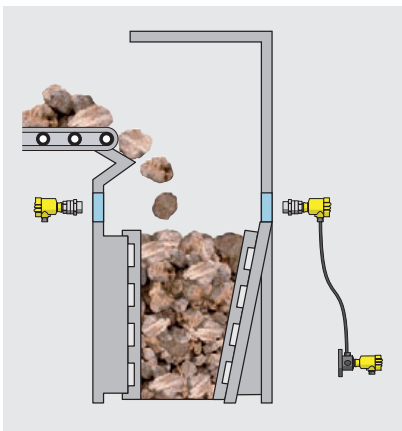




Point level detection | Radar

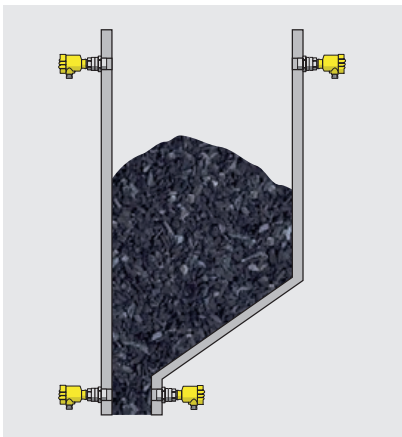


Area of application

The microwave barriers of the VEGAMIP series are suitable for non-contact point level detection of liquids and bulk solids of any kind. Even point level detection of high-purity liquids through the container wall is possible. When it comes to bulk solids, the microwave barrier lends itself well for heavy and dust-generating media or for blockage detection in conveying systems.




Measuring principle

The microwave barrier works like a light barrier: if the microwave beam between transmitter and receiver is blocked by the rising medium, the measuring signal is damped. This change is detected by the receiver and converted into a switching signal.



Advantages

This method allows point level detection without direct contact with the measured product. Dirt, buildup and abrasion on the sensor are eliminated, allowing a wear and maintenance-free operation.

| | VEGAMIP T61 | VEGAMIP R61 | VEGAMIP R62 |
|---------------------|---|---|---|
| |  |  |  |
| Application | Bulk solids, liquids | Bulk solids, liquids | Bulk solids, liquids in dangerous mounting locations or locations difficult to access |
| Version | Emitter | Receiver | Receiver with separate version |
| Measuring range | up to 100 m | up to 100 m | up to 100 m |
| Antenna | Inside horn antenna with PTFE cover, plastic horn antenna with PP cover | Inside horn antenna with PTFE cover, plastic horn antenna with PP cover | Inside horn antenna with PTFE cover, plastic horn antenna with PP cover |
| Process fitting | Thread G1½, 1½ NPT, flanges, clamp, mounting strap | Thread G1½, 1½ NPT, flanges, clamp, mounting strap | Thread G1½, 1½ NPT, flanges, clamp, mounting strap |
| Process temperature | -40 ... +80 °C +450 °C with mounting adapter | -40 ... +80 °C +450 °C with mounting adapter | -40 ... +80 °C +450 °C with mounting adapter |
| Process pressure | -1 ... +4 bar (-100 ... +400 kPa) | -1 ... +4 bar (-100 ... +400 kPa) | -1 ... +4 bar (-100 ... +400 kPa) |
| Frequency range | K-band | K-band | K-band |
| Signal output | – | Relay, transistor | Relay, transistor |
| Approvals | ATEX, IEC, FM, CSA, EAC (GOST), UKR Sepro | ATEX, IEC, FM, CSA, EAC (GOST), UKR Sepro | ATEX, IEC, CSA |
| Benefit | <ul style="list-style-type: none"> • Simple installation and mounting, as transmitter requires no parameterization • Universal transmitter for VEGAMIP R61 and VEGAMIP R62 saves time during planning and reduces costs of stockkeeping | <ul style="list-style-type: none"> • Compact instrument saves time and money when installing and connecting, as no separate signal conditioning instrument is required | <ul style="list-style-type: none"> • Separate instrument version allows installation in hard-to-reach or dangerous locations • Simple adjustment procedure saves time and money when setting up and commissioning |