VEGAPULS 69 HART

Version, available since	Description	Device Rev.
1.3.4, 11/2021	**Error corrections:** – Instrument software, in general: **Support of alternative internal memory chips**	**3**
1.3.3, 05/2021	**Error corrections:** – HART communication: – Communication problems with certain Pepperl+Fuchs Remote I/Os removed	**3**
1.3.2, 10/2019	**Error corrections:** – Instrument software, in general: – Sensor occasionally showed F040 in case of strong disturbances on the supply lines and no longer carry out measurements	**3**
1.3.1, 02/2018	**Error corrections:** – Instrument software, in general: – Correction of an error with activated echo curve memory (sensor re-started every 2.5 min. after a voltage interruption and outputted a fix measured value)	**3**
1.3.0, 09/2017	**Function extensions** **New functions and modifications:** – Measurement function: – Measurement function revised for instruments with 1½“ metal horn antenna – Instrument software, in general: – Optimization of the sensor start and reset times – HART communication: – The following additional Common Practice Commands are supported – CMD 33 ‘Read Device Variables‘ – CMD 36 ‘Set Primary Variable Upper Range Value‘ – CMD 37 ‘Set Primary Variable Lower Range Value‘ – CMD 40 ‘Enter/Exit Fixed Current Mode‘ – CMD 42 ‘Perform Device Reset‘ – CMD 45 ‘Trim Loop Current Zero‘ – CMD 46 ‘Trim Loop Current Gain‘ – CDM 47 ‘Write Primary Variable Transfer Function‘ – CMD 50 ‘Read Dynamic Variable Assignements‘ – CMD 51 ‘Write Dynamic Variable Assignements‘ – CMD 53 ‘Write Device Variable Units‘ – CMD 54 ‘Read Device Variable Information‘	**3**

Version, available since	Description	Device Rev.
1.3.4, 11/2021	**Error corrections:** – Instrument software, in general: **Support of alternative internal memory chips**	**3**
	– CMD 79 ‘Write Device Variable‘ – Additional Device Variables are now supported by the following Common Practice Commands – CMD 34 ‘Write PV Damping Value‘ – CMD 35 ‘Write PV Range Values‘ **Error corrections:** – Measurement function: – Determination of the limitation of the detection begin revised – Measured value stability improved – Gradient failure correction improved – A wrong loop current was outputted when the scaled measured value – corresponded to a distance unit – was assigned to the current output – Instrument software, in general: – When switching off the sensor directly after creating a gating out of false signals, it could happen that it was not completely saved – Software ruggedness improved to avoid potential crashes: – in case of low energy and active measured value and echo curve memory – in case of interferences on the supply cable – in case of continuous adjustment tool enquiries during the sensor start – While reading out a full measured value memory – Measured value memory could probably not be read out when the sensor time was changed after the reocrding start – To undo a software update, it was absolutely necessary to re-start the sensor between the two updates – PLICSCOM adjustment: – Switching over between Chinese and non-Chinese language caused wrong menu presentations – HART communication: – CMD 6 ‘Write Polling Address‘ return a wrong Global Status – Due to a too late recognition of the Carrier Detect signal it could happen that HART enquiries were answered too late	
1.2.0, 02/2017	**Function extensions** **New functions and modifications:** – Measurement function: – Application setting "First large echo" revised – Instrument software, in general: – Reset and sensor cycle time optimized – PLICSCOM adjustment:	**2**

Service info plics® software versions

Version, available since	Description	Device Rev.
1.3.4, 11/2021	**Error corrections:** – Instrument software, in general: **Support of alternative internal memory chips**	**3**
	– Information "First setup of PLICSCOM“ is no longer entered in the event memory **Error corrections:** – Measurement function: – The customer false signal suppression can no longer be below the factory false signal suppression – Echoes at the end of the detection range with safeties can now be detected correctly – Adjustment is now reset correctly – Instrument software, in general: – Sensor behaviour with EMC interferences improved – Sensor starts now also with wrong delivery status – Measured value memory can be also read out with active echo curve memory – PLICSCOM adjustment: – The remote PLICSCOM is no longer switched off for approx. 10 s after sensor start – Sensor name is now also displayed correctly in Russian language – Error removed in the function "Copy instrument data": it could happen that the function is never ending – Fault rectifications in the Chinese menu	
1.1.0, 12/2015	**Function extensions** **New functions and modifications:** – Measurement function: – Behaviour default false signal suppression and customer false signal suppression revised: the default false signal suppression has no effect after a customer false signal suppression was created – Instrument software, in general: – Sensor delivers useful limit values (instead -99999, +99999) for the scaled measured value – PLICSCOM adjustment: – Additional menu languages: Japanese and Chinese – The display format can be adjusted – HART communication: – Optimization of the transmission times (e.g. of echo curves) – Introdcution of additional Common Practice Commands – CMD 34 Write Primary Variable Damping Value – CMD 35 Write Primary Variable Range Values – CMD 43 Set Primary Variable Zero – CMD 44 Write Primary Variable Units – Introduction Burst Mode acc. to HART 5	**2**

Service info plics® software versions

Version, available since	Description	Device Rev.
1.3.4, 11/2021	**Error corrections:** – Instrument software, in general: **Support of alternative internal memory chips**	**3**
	Error corrections: – Measurement function: – When deleting the false signal suppression, it is also possible to enter a range [begin, end] with "Begin" larger than "End" – Change of behaviour when limiting the measurement point – Measured value correction due to echo shape revised to reduce measured value jumps with changes in the application setting – Instrument software, in general: – Error "permanent restart with active echo curve memory" removed – Error corrected when loading a corrupt delivery status – Error "Echo curve of the setup will not be deleted by a reset to basic settings or delivery status" – Start and stop condition action of the measured value and echo curve memory were recorded in the parameter change memory with the unit "ms" – Various unit conversion errors removed – PLICSCOM adjustment: – Error "X zoom of the echo curve presentation does not function correctly" corrected – HART communication: – Changes through following HART Commands are now also recorded in the parameter change memory – CMD 17 Write Message – CMD 18 Write Tag, Descriptor – CMD 22 Write Long Tag – Global modification counter is now incremented also with a change with CMD 18 "Write Tag, Descriptor, Date" – While reading out the dynamic variables via HART CMD 9 "Read Device Variables with Status“, the returned codes of the measured values did not correspond to the dynamic variables but to the device variables. With this fault rectification, the software works also with the Emerson Charm Unit. – While enquiring unsupported Device Variables via HART CMD 9 "Read Device Variables with Status" the sensor answered with error status "Invalid Selection“ instead delivering the special value "Not-A-Number“. – HART enquiries during a reset to basic adjustment will now all be answered	
1.0.1, 09/2014	**Error correction of the first production version** **New functions and modifications:** – Measurement function: – Determination of the noise level – Safeties, false signal suppression increased	**1**

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Version, available since	Description	Device Rev.
1.3.4, 11/2021	**Error corrections:** – Instrument software, in general: **Support of alternative internal memory chips**	**3**
	– Switching over point close and far range optimized and hysteresis implemented – Amplitude correction STC adapted **Error corrections:** – Measurement function: – In deleted areas of the false signal suppression this import was not accepted by the sensor – Tracking and finding of echoes below the false echo memory was not possible if there was not at least one small echo outside the focussing range visible. – HART communication: – More than 8 device variables must be enquired with the HART command #009 (only the first 8 variables are returned)	
1.0.0, 07/2014	**First version** **New functions:** – Measurement function: – Applications bulk solids – Measuring range 120 m – Frequency range 79 GHz – Instrument software, in general: – Device status according to NE 107 – Event memory – Measured value memory – Real time clock – PLICSCOM adjustment: – The following languages are available: – German – English – French – Spanish – Russian – Italian – Dutch – Portuguese – Czech – Polish – Turkish – HART communication: – HART Revision 7 – HART measured values can be configured	**1**

Service info plics® software versions

Legend:

Name	Description
Version	Compatibility version.Function extension version.Error correction version
available since	Month/Year
Device Rev.	Version number of the instrument defined by HART. Consecutive integral number Will be increased if in the "Application Layer" modifications were carried out, e.g. new commands, modifications in the data structure in a command.