VEGAMET 391

Signal conditioning instrument for continuous measurement

Application area

VEGAMET 391 is a universal signal conditioning instrument for a number of control tasks such as level, gauge and process pressure measurement as well as pump controls. Inventory management, VMI (Vendor Managed Inventory) and remote enquiry are further application possibilities. Comprehensive adjustment functions allow individual adaptation to the respective application.

Advantages

- 4 … 20 mA/HART sensor input with transmitter power supply
- Six relay outputs, one scalable current output
- Comprehensive pump control functions
- Lighted, graphic-capable LC display
- High protection rating IP 65 with front panel mounting
- Comprehensive adjustment functions, e.g. scaling, linearisation
- Integrated webserver
- Measured value and message transmission via e-mail
- Suitable for data exchange with WEB-VV

Function

The VEGAMET 391 signal conditioning instrument powers any individual 4 … 20 mA/HART sensor and processes its measured value. Through an adjustment on VEGAMET, this measured value can be individually scaled/linearised and transferred to connected instruments via the current output. Six operating relays are available as limit alarms.
Optional interfaces offer the possibility of remote enquiry of measured values. With the built-in webserver, the measured values can be made available in a network.

Technical data

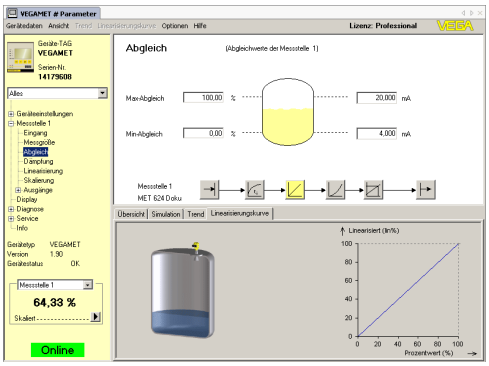
Series	Built-in device for mounting in front panel or housing
Connection terminals	
– Type of terminal	Spring-loaded terminal pluggable with coding
– Max. wire cross-section	2.5 mm² (AWG 14)
Operating voltage	20 … 253 V AC, 50/60 Hz, 20 … 253 V DC
Max. power consumption	7 VA; 3 W
Sensor input	
Number of sensors	1 x 4 … 20 mA (HART)
Type of input (selectable)	
– Active input	Sensor power supply by VEGAMET 391
– Passive input	Sensor has own power supply
Measured value transmission (switchable)	
– HART protocol	digital for VEGA HART sensors
– 4 … 20 mA	analogue for 4 … 20 mA sensors
Relay outputs	
Quantity	6 x operating relay
Turn-on voltage	min. 10 mV DC, max. 250 V AC/60 DC
Switching current	min. 10 µA DC, max. 3 A AC, 1 A DC
Breaking capacity	min. 50 mW, max. 500 VA, max. 54 W DC (with U less than 40 V)
Current output	
Range	0/4 … 20 mA, 20 … 0/4 mA
Max. load	500 Ω
USB interface	
Plug connection	Mini-B (4-pole)
USB specification	2.0 (Fullspeed)
Ethernet interface (optional)	
Quantity	1 x, cannot be combined with RS232
Data transmission	10/100 MBit
RS232 interface (optional)	
Quantity	1 x, cannot be combined with Ethernet
Measured value indication	
– Graphic-capable LC display (65 x 32 mm), lighting	digital and quasianalogue indication
– Max. indicating range	-99999 … 99999
LED displays	
– Status operating voltage	1 x LED green
– Status fault signal	1 x LED red
– Status operating relay 1 … 6	6 x LED yellow
Ambient temperature	-20 … +60 °C (-4 … +140 °F)
Protection rating	
– Front	IP 65
– Instrument	IP 20

Approvals

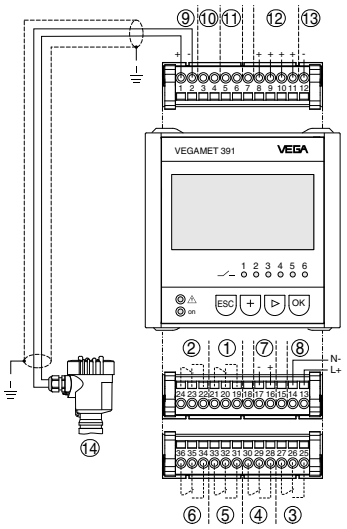
You can find detailed information on the existing approvals in the "*configurator*" on our homepage under www.vega.com/configurator.

Operation

The adjustment of VEGAMET 391 is menu-driven via four keys in the front and a clear, graphic-capable LC display with background lighting. As an alternative, parameter adjustment of the instrument is also possible via the adjustment software PACTware and the respective DTM.



Electrical connection

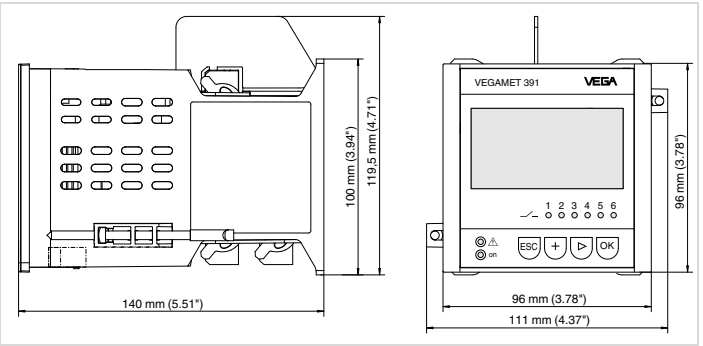


Connection VEGAMET 391 with two-wire sensor

1 *Internal operating relay 1*
2 *Internal operating relay 2*
3 *Internal operating relay 3*
4 *Internal operating relay 4*
5 *Internal operating relay 5*
6 *Internal operating relay 6*
7 *Internal current output*
8 *Voltage supply of VEGAMET 391*
9 *Measurement data input with sensor supply (active input)*
10 *Connection for VEGACONNECT for sensor parameter adjustment*
11 *Measurement data input (passive input), not with Ex-ia version*
12 *Digital input 1 … 4*
13 *Common ground for digital input 1 … 4*
14 *4 … 20 mA/HART sensor (two-wire version)*

You can find details on the electrical connection in the operating instructions of the instruments on our homepage under www.vega.com/downloads.

Dimensions



Information

You can find further information about the VEGA product line on our homepage www.vega.com.
You can find free-of-charge operating instructions, product information, brochures, approval documents, instrument drawings, etc. in the download section under www.vega.com/downloads.

Contact

You can find the VEGA agency serving your area on our homepage www.vega.com.

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