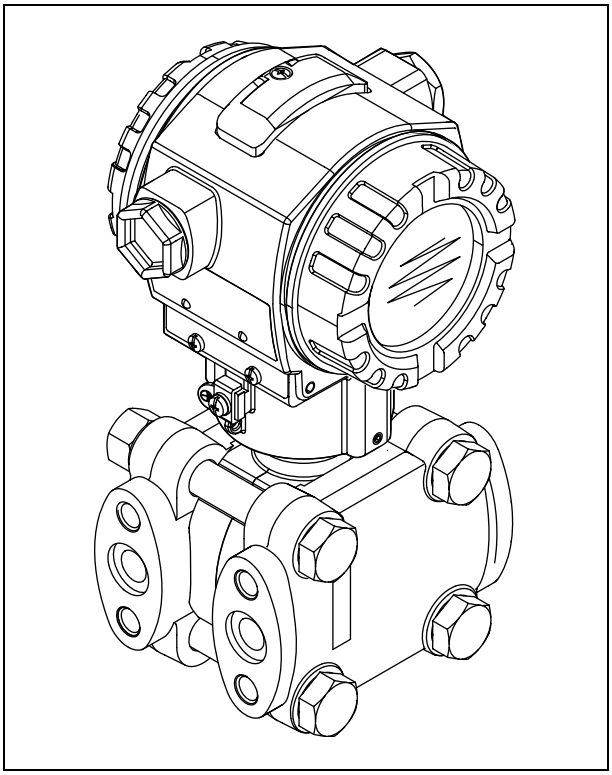
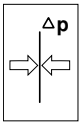
Supplementary instructions

Service instructions VEGADIF 55



Differential pressure



Content

31732-EN-080430

1 About this document

1.1 Function

This supplementary manual, together with the attached operating instructions manual, has all the information you need for quick setup and safe operation. Please read this manual before you start setup.

1.2 Target group

This operating instructions manual is directed to trained personnel. The contents of this manual should be made available to these personnel and put into practice by them.

1.3 Symbolism used

Information, tip, note
This symbol indicates helpful additional information.

Caution: If this warning is ignored, faults or malfunctions can result.
Warning: If this warning is ignored, injury to persons and/or serious damage to the instrument can result.
Danger: If this warning is ignored, serious injury to persons and/or destruction of the instrument can result.

Ex applications
This symbol indicates special instructions for Ex applications.

- **List**
  The dot set in front indicates a list with no implied sequence.

→ **Action**
This arrow indicates a single action.

1 **Sequence**
Numbers set in front indicate successive steps in a procedure.

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2 Maintenance and fault rectification

2.1 Remove interferences

Reaction of the outputs in case of failure

The instrument differentiates between two message types: Alarm, warning and error, see following chart and additional instructions manual *Service instructions VEGADIF 55*, "*Messages*".

Output	A (alarm)	W (warning)	E (error: alarm/warning)
Current output	Instrument does not continue the measurement. Current output takes on the value given via the parameter OUTPUT FAIL. MODE1, SET MAX. ALARM1 and ALT. CURR. OUTPUT1. See below"*Set current output for alarm*".	Instrument continuous measurement	For this message type, you can enter whether the instrument should react as it does in case of an alarm or warning. See corresponding column "Alarm" or "Warning".
Bar graph (local indication)	The bar graph takes on the value given via the parameter OUTPUT FAIL MODE1.	The bar graph takes on the value corresponding to the current value.	See this chart, depending on the selection column "Alarm" or "Warning"
Local indication	Measured value and message indication are shown alternately, measured value indication: alarm symbol is shown permanently. Message indication 3-digit number such as e.g. A122 and description	Measured value and message indication are shown alternately, measured value indication: symbol flashes. Message indication: 3-digit number such as e.g. W163 and description	Measured value and message indication are shown alternately, measured value indication: see corresponding column "*Alarm*" or "*Warning*" Message indication: 3-digit number such as e.g. E731 and description
Remote adjustment (HART handheld)	In case of an alarm, the parameter ALARM STATUS2 shows a 3-digit number such as e.g. 122 for "*Sensor connection error, faulty data*".	In case of a warning, the parameter ALARM STATUS2 shows a 3-digit number such as e.g. 613 for "*Simulation is active*".	In case of an error, the parameter ALARM STATUS2 shows a 3-digit number such as e.g. 731 for "*Pmax PROCESS decreased*".

Set current output for alarm

Via the parameters OUTPUT FAIL. MODE, AL. CURR. OUTPUT and SET MAX. ALARM you can set the current output for an alarm. The parameters are shown in the group OUTPUT ("**GROUP SELECTION - OPERATING MENU - OUTPUT**"). In case of an alarm, the current as well as the bar graph takes on the value entered with the parameter OUTPUT FAIL. MODE.

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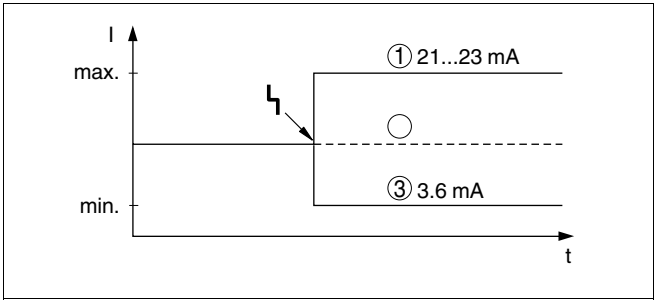

Fig. 1: Current output in case of alarm
1 Max. alarm (110 %): adjustable via the parameter SET MAX. ALARM between 21 … 23 mA
2 Hold measured value: The last measured value is held
3 Min. alarm (-10 %): 3.6 mA

Default setting: OUTPUT FAIL MODE = Max. Alarm (110 %), SET MAX. ALARM = 22 mA

With the parameter ALT. CURR. OUTPUT you set the current outut value for the error message E120 "*Sensor low pressure*" and E115 "*Sensor gauge pressure*". The following options are available:

- normal: The current output takes on the value which was set via the parameters OUTPUT FAIL. MODE and SET MAX. ALARM.
- NAMUR
  - Decreasing of the lower sensor limit (E120 "*Sensor low pressure*"): 3.6 mA
  - Exceeding of the upper sensor limit (E115 "*Sensor gauge pressure*"): Current output takes on the value set via the parameter SET MAX. ALARM.

Factory setting: ALT. CURR. OUTPUT = normal

Confirmation of messages

Depending on the settings for the parameters ALARM DISPL. TIME and ACK. ALARM MODE, the following measures must be carried out so that a messages extinguishes:

Adjustments[1)]	**Measures**
• ALARM DISPL. TIME = 0 s • ACK. ALARM MODE = off	• Remove cause of the message. See also supplementary instructions manual "*Service instructions VEGADIF 55*"
• ALARM DISPL. TIME > 0 s • ACK. ALARM MODE = off	• Remove cause of the message. See also supplementary instructions manual "*Service instructions VEGADIF 55*" • Wait for alarm display time

[1)]
1) Menu path for ALARM DISPL. TIME and ACK. ALARM MODE: GROUP SELECTION - OPERATING MENU - DIAGNOSTICS - MESSAGES.

Adjustments1)	Measures
• ALARM DISPL. TIME = 0 s • ACK. ALARM MODE = on	• Remove cause of the message. See also supplementary instructions manual "*Service instructions VEGADIF 55*" • Confirm message via the parameter ACK. ALARM
• ALARM DISPL. TIME > 0 s • ACK. ALARM MODE = on	• Remove cause of the message. See also supplementary instructions manual "*Service instructions VEGADIF 55*" • Confirm message via the parameter ACK. ALARM • Wait for alarm display time. If the alarm display time has already passed when the message appeared and was confirmed, the messages extinguishes immediately after the confirmation.

If the local indication shows a message, you can remove it with the "***E***" key.

If there are several messages, the local indication shows the message with the highest priority. See also supplementary instructions manual "*Service instructions VEGADIF 55*". After removing this message with the F key, the message with the next higher priority will appear. You can remove each message individually with the "***E***" key.

The parameter ALARM STATUS still shows all existing messages.

Error messages

The instrument distinguishes between the message types "*Alarm*", "*Warning*" and "*Error*". For the message types "Error" you can enter if the instrument should react in case of "Alarm" or "Warning" (see column "Message type/NA 64" and operating instructions manual VEGADIF 55, chapter "*Reaction of the outputs in case of failure*").

The column "Message type/NA 64" classifies the messages also according to the NAMUR recommendation NA 64:

- Failure: marked with "B" (break down)
- Requirement for maintenance: marked with "C" (check request)
- Function control: marked with "I" (in service)

Indication of the messages on the local display:

- The measured value display shows the message with the highest priority (see column "Priority")
- The parameter DIAGNOSE CODE shows all existing messages with downward priority. With the "**-**" or "**+**" key you can scroll through the existing messages, if necessary.

Indication of the messages via the HART handheld:

- The parameter DIAGNOSE CODE shows the message with the highest priority (see column "Priority")

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Fault message via the local display

In the following chart, all messages that can occur are listed.

Code	Message type/NA 64	Message/Description	Cause	Measure	Priority
101 (A101)	Alarm B	B> Checksum error in the sensor EEPROM	• Electromagnetic influences are higher than the specifications in chapter "*Technical data*" (see product information manual VEGADIF 55), in general this message is only displayed briefly • Sensor defective	• Wait several minutes • Restart the instrument. Carry out a reset (Code 62) • Block electromagnetic effects or remove the source of interference • Exchange the sensor	17
102 (W102)	Warning C	C> Checksum error in the pointer EEPROM	• Main electronics defective. As long as you do not need the pointer function, measurement is correct and can be continued	• Exchange the main electronics	53
106 (W106)	Warning C	C> Download running - please wait	• Download running	• Wait for the download	52
110 (A110)	Alarm B	B> Checksum error in the configuration EEPROM	• Power supply is interrupted during a write operation • Electromagnetic influences are higher than the specifications in chapter "*Technical data*" (see product information manual VEGADIF 55) • Main electronics defective	• Restore power supply, if necessary, carry out a reset (Code 7864) and make a fresh adjustment • Block electromagnetic effects or remove the source of interference • Exchange the main electronics	6
113 (A113)	Alarm B	B> ROM memory defective	• Main electronics defective	• Exchange the main electronics	1
115 (E115)	Error B factory setting warning	B> Sensor overpressure	• Existing overpressure • Sensor defective	• Reduce pressure until message disappears • Exchange the sensor	29
116 (W115)	Alarm B	C> Download faulty	• The file is defective • The data are not transferred correctly to the processor during a download, e.g. due to open cable connections, voltage peaks (ripple) in the voltage supply or electromagnetic effects	• Use another file • Check cable connection PC - transmitter • Block electromagnetic effects or remove the source of interference • Carry out reset (Code 7864) and make a fresh adjustment • Repeat download	36
120 (E20)	Error B factory setting warning	C> Sensor low pressure	• Pressure too low • Sensor defective	• Increase pressure until message disappears • Exchange the sensor	30

Code	Message type/NA 64	Message/Description	Cause	Measure	Priority
121 (A121)	Alarm B	B> Checksum error in the production EEPROM	• Main electronics defective	• Exchange the main electronics	5
122 (A122)	Alarm B	B> Checksum error in the production EEPROM	• Cable connection, sensor main electronics interrupted • Electromagnetic influences are higher than the specifications in chapter "*Technical data*" (see product information manual VEGADIF 55) • Main electronics defective • Sensor defective	• Check cable connection and repair if necessary • Block electromagnetic effects or remove the source of interference • Exchange the main electronics • Exchange the sensor	13
130 (A30)	Alarm B	B> EEPROM is defective	• Main electronics defective	• Exchange the main electronics	10
131 (A131)	Alarm B	B> Checksum error in the editing limits EEPROM	• Main electronics defective	• Exchange the main electronics	9
132 (A132)	Alarm B	B> Checksum error in the sum counter EEPROM	• Main electronics defective	• Exchange the main electronics	7
133 (A133)	Alarm B	B> Checksum error in the history EEPROM	• An error occurred during a writing operation • Main electronics defective	• Carry out reset (Code 7864) and make a fresh adjustment • Exchange the main electronics	8
602 (W602)	Warning C	C> Linearization curve not monotonically increasing	• The linearization chart is not monotonically increasing or falling	• Complete or correct linearization chart, then accept the linearization chart again	57

Code	Message type/NA 64	Message/Description	Cause	Measure	Priority
604 (W604)	Warning C	C> Linearisation too less points or points too close	• The linearization chart consists of less than two points. At least two points of the linearization chart are too close together. A min. distance of 0.5 % of the span between two points must be maintained. Spans for the option "*Pressure with characteristics*": HYDR. PRSSURE MAX. – HYDR. PRESSURE MIN.; TANK CONTENTS MAX. – TANK CONTENTS MIN. Spans for option "*Height with characteristics*": LEVEL MAX. – LEVEL MIN.; TANK CONTENTS MAX. – TANK CONTENTS MIN.	• Complete linearization chart, if necessary accept linearization chart again. Correct linearization chart and accept again.	58
613 (W613)	Warning I	I> Simulation active	• Simulation switched on, i.e. the instrument is not measuring at the moment	• Switch off simulation	60
620 (E620)	Error C factory setting warning	C> Current outside the nominal range	The current is outside the permissible range 3.8 … 20.5 mA• The existing pressure is outside the set measuring range (however within the sensor range) • Loose contact on the sensor cable	• Check the existing pressure, if necessary reset the measuring range (see operating instructions manual VEGADIF 55) • Carry out reset (Code 7864) and make a fresh adjustment • Wait a short moment and ensure a stable connection or avoid loose connection.	49
700 (W700)	Warning C	C> Last configuration not accepted	• During writing or reading of configuration data an error occurred or the voltage supply was interrupted • Main electronics defective	• Carry out reset (Code 7864) and make a fresh adjustment • Exchange the main electronics	51

Code	Message type/NA 64	Message/Description	Cause	Measure	Priority
702 (W702)	Warning C	C> Memory module data faulty	• The data were not written correctly into the memory module, e.g. if the memory module was removed during a writing operation • Data memory module contains no data	• Repeat upload • Carry out reset (Code 7864) and make a fresh adjustment • Copy suitable data into the data memory module (see operating instructions manual VEGADIF 55, chapter "*Copy configuration data*")	55
703 (W703)	Alarm B	B> Measurement transmission error	• Fault in the main electronics • Main electronics defective	• Separate instrument briefly from voltage supply • Exchange the main electronics	22
704 (W704)	Alarm B	B> Measurement transmission error	• Fault in the main electronics • Main electronics defective	• Separate instrument briefly from voltage supply • Exchange the main electronics	12
705 (W705)	Alarm B	B> Measurement transmission error	• Fault in the main electronics • Main electronics defective	• Separate instrument briefly from voltage supply • Exchange the main electronics	12

Code	Message type/NA 64	Message/Description	Cause	Measure	Priority
706 (W706)	Warning C	C> Configurations, data memory module and instrument are different	• Configurations (parameter sets) in the data memory module and in the instrument unequal	• Copy data from device into the data memory module (see operating instructions manual VEGADIF 55, chapter "*Copy configuration data*") • Copy data from device into the memory module (see also operating instructions manual VEGADIF 55, chapter "*Copy configuration data*"). If the data memory module and the instrument have different software version, the message still exists. The message extinguishes when you copy data from the device into the data memory module. • Instrument reset codes such as e.g. 7864 do not influence HistoROM. I.e. if you carry out a reset, the configurations in HistoROM and in the instrument can be unequal.	59
707 (W707)	Alarm B	B> X-value of the linearization chart outside the editing limits	• At least one X-value of the linearization chart is either below the value for HYDR. PRESSURE MIN. or MIN. LEVEL or above the value for HYDR. PRESSURE MAX. or MAX. LEVEL.	• Carry out a fresh adjustment (see operating instructions manual VEGADIF 55)	38
710 (W710)	Warning C	C> Set span is smaller than permissible	• Values for adjustment (e.g. meas. start and end) are too close together • The sensor was exchanged and the customer-specific parameter settings do not fit the sensor • Unsuitable download carried out	• Adapt the adjustment according to the sensor (see operating instructions manual VEGADIF 55) • Replace the sensor with another suitable one • Check the parameter adjustment and carry out a fresh download	51

Code	Message type/NA 64	Message/Description	Cause	Measure	Priority
711 (A711)	Alarm B	B> MEAS. START or MEAS. END outside the editing limits	• Values for adjustment (e.g. meas. start and end) are too close together	• Meas. start and/or meas. end fall below or exceed the sensor range limits • The sensor was exchanged and the customer-specific parameter settings do not fit the sensor • Unsuitable download carried out • Replace the sensor with another suitable one • Check the parameter adjustment and carry out a fresh download	37
713 (A713)	Alarm B	B> 100 % POINT level outside the editing limits	• The sensor was exchanged	• Carry out a fresh adjustment	39
715 (A715)	Error C factory setting warning	C> Sensor excess temperature	• The temperature measured in the sensor is higher than the upper nominal temperature of the sensor (see operating instructions manual VEGADIF 55) • Unsuitable download carried out	• Reduce process/ambient temperature • Check the parameter adjustment and carry out a fresh download	39
716 (A716)	Error B factory setting alarm	B> Sensor diaphragm broken	• Sensor defective	• Exchange the sensor	24
717 (A717)	Error C factory setting warning	C> Electronics excess temperature	• The temperature measured in the electronics is higher than the upper nominal temperature of the electronics (88 °C) • Unsuitable download carried out	• Reduce ambient temperature • Check the parameter adjustment and carry out a fresh download	34
718 (A718)	Error C factory setting warning	C> Electronics subnormal temperature	• The temperature measured in the electronics is lower than the lower nominal temperature of the electronics (-43 °C) • Unsuitable download carried out	• Increase ambient temperature. If necessary, insulate instrument • Check the parameter adjustment and carry out a fresh download	35

Code	Message type/NA 64	Message/Description	Cause	Measure	Priority
719 (A719)	Alarm B	B> Y-value of the linearization chart outside the editing limits	• At least one Y-value of the linearization chart is below the MIN. TANK CONTENT or above the MAX. TANK CONTENT	• Carry out a fresh adjustment (see operating instructions manual VEGADIF 55) • Check the parameter adjustment and carry out a fresh download	40
720 (A720)	Error C factory setting warning	C> Sensor subnormal temperature	• The temperature measured in the sensor is lower than the lower nominal temperature of the sensor (see operating instructions manual VEGADIF 55, parameter description Tmin. SENSOR) • Unsuitable download carried out • Loose contact on the sensor cable	• Increase process/ambient temperature • Check the parameter adjustment and carry out a fresh download • Wait a short moment and ensure a stable connection or avoid loose connection.	40
721 (A721)	Alarm B	B> ZERO POINT level outside the editing limits	• LEVEL MIN. or LEVEL MAX. was changed	• Carry out reset (Code 2710) and make a fresh adjustment	41
722 (A722)	Alarm B	B> ADJUSTMENT EMPTY or ADJUSTMENT FULL outside the editing limits	• LEVEL MIN. or LEVEL MAX. was changed	• Carry out reset (Code 2710) and make a fresh adjustment	42
723 (A723)	Alarm B	B> MAX. FLOW outside its editing limits	• FLOW TYPE was changed	• Carry out a fresh adjustment	43
725 (A725)	Alarm B	B> Sensor connection error, cycle interfered	• Electromagnetic influences are higher than the specifications in chapter "*Technical data*" (see product information manual VEGADIF 55) • Sensor or main electronics defective	• Block electromagnetic effects or remove the source of interference • Exchange sensor or main electronics	25

Code	Message type/NA 64	Message/Description	Cause	Measure	Priority
726 (A726)	Error C factory setting warning	C> Temperature measurement transmission overcontrolled	• Electromagnetic influences are higher than the specifications in chapter "*Technical data*" (see product information manual VEGADIF 55) • Process temperature outside the permissible range • Sensor defective	• Block electromagnetic effects or remove the source of interference • Check the existing temperature, if necessary, reduce or increase • If the process temperature is in the permissible range, exchange the sensor	31
727 (A727)	Error C factory setting warning	C> Pressure measurement transmission overcontrolled	• Electromagnetic influences are higher than the specifications in chapter "*Technical data*" (see product information manual VEGADIF 55) • Pressure is outside the permissible range • Sensor defective	• Block electromagnetic effects or remove the source of interference • Check the existing pressure and, if necessary, reduce or increase • If the pressure is in the permissible range, exchange the sensor	28
728 (A728)	Alarm B	B> RAM error	• Fault in the main electronics • Main electronics defective	• Separate instrument briefly from voltage supply • Exchange the main electronics	2
729 (A729)	Alarm B	B> RAM error	• Fault in the main electronics • Main electronics defective	• Separate instrument briefly from voltage supply • Exchange the main electronics	3
Error C factory setting warning	Error C	C> Pmin. PROCESS underrun	• Measured pressure value has fallen short of the value specified for parameter Pmin. PROCESS • Loose contact on the sensor cable	• Check system/measured pressure value • If necessary, change value for Pmin. PROCESS (see operating instructions manual VEGADIF 55, parameter description Pmin. PROCESS) • Wait a short moment and ensure a stable connection or avoid loose connection.	46
731 (A731)	Error C	C> Pmax. PROCESS underrun	• Measured pressure value has exceeded the value specified for parameter Pmax. PROCESS	• Check system/measured pressure value • If necessary, change value for Pmax. PROCESS (see operating instructions manual VEGADIF 55, parameter description Pmax. PROCESS)	45

Code	Message type/NA 64	Message/Description	Cause	Measure	Priority
732 (A732)	Error C	C> Tmin. PROCESS underrun	• Measured temperature value has fallen short of the value specified for parameter Tmin. PROCESS	• Check system/measured temperature value • If necessary, change value for Tmin. PROCESS (see operating instructions manual VEGADIF 55, parameter description Tmin. PROCESS)	48
733 (A733)	Error C factory setting warning	C> Tmax. PROCESS exceeded	• Measured temperature value has exceeded the value specified for parameter Tmax. PROCESS	• Check system/measured temperature value • If necessary, change value for Tmax. PROCESS (see operating instructions manual VEGADIF 55, parameter description Tmax. PROCESS)	47
736 (A736)	Alarm B	B> RAM error	• Fault in the main electronics • Main electronics defective	• Separate instrument briefly from voltage supply • Exchange the main electronics	4
737 (A737)	Alarm B	B> Measurement transmission error	• Fault in the main electronics • Main electronics defective	• Separate instrument briefly from voltage supply • Exchange the main electronics	20
738 (A738)	Alarm B	B> Measurement transmission error	• Fault in the main electronics • Main electronics defective	• Separate instrument briefly from voltage supply • Exchange the main electronics	19
738 (A738)	Alarm B	B> Measurement transmission error	• Fault in the main electronics • Main electronics defective	• Separate instrument briefly from voltage supply • Exchange the main electronics	23

Code	Message type/NA 64	Message/Description	Cause	Measure	Priority
740 (A740)	Error C factory setting warning	C> Calculation overflow, wrong configuration	• Mode level: The measured pressure has fallen short of the value for HYDR. PRESSURE MIN. or exceeded the value for HYDR. PRESSURE MAX. • Mode level: The measured level had decreased the value for LEVEL MIN. or exceeded the value for LEVEL MAX.. • Mode flow: The measured pressure has exceeded the value for MAX. PRESSURE FLOW	• Check parameter adjustment and carry out a fresh adjustment, if necessary • Select an instrument with suitable measuring range • Check parameter adjustment and carry out a new adjustment, if necessary • Check parameter adjustment and carry out a fresh adjustment, if necessary • Select an instrument with suitable measuring range	27
741 (A741)	Alarm B	B> TANK HEIGHT outside the editing limits	• LEVEL MIN. or LEVEL MAX. was changed	• Carry out reset (Code 2710) and make a fresh adjustment	44
742 (A742)	Alarm B	B> Initialisation error of the sensor	• Electromagnetic influences are bigger than the specifications in chapter "*Technical data*" (see product information manual VEGADIF 55). Normally this message is only displayed briefly. Cable connection sensor - main electronics interrupted. • Sensor defective	• Wait several minutes • Carry out reset (Code 7864) and make a fresh adjustment • Check cable connection and repair if necessary • Exchange the sensor	18
743 (A743)	Alarm B	B> Error during initialisation	• Electromagnetic influences are higher than the specifications in chapter "*Technical data*" (see product information manual VEGADIF 55), in general this message is only displayed briefly • Main electronics defective	• Wait several minutes • Restart the instrument. Carry out a reset (Code 62) • Exchange the main electronics	14

Code	Message type/NA 64	Message/Description	Cause	Measure	Priority
744 (A744)	Alarm B	B> Main electronics defective	• Electromagnetic influences are higher than the specifications in chapter "*Technical data*" (see product information manual VEGADIF 55) • Main electronics defective	• Restart the instrument. Carry out a reset (Code 62) • Block electromagnetic effects or remove the source of interference • Exchange the main electronics	11
745 (A745)	Warning C	C> Sensor information unknown	• Sensor does not fit the instrument (electronic sensor type label), instrument continues the measurement	• Replace the sensor with another suitable one	56
746 (A746)	Warning C	C> New initialisation of the sensor	• Electromagnetic influences are higher than the specifications in chapter "*Technical data*" (see product information manual VEGADIF 55), in general this message is only displayed briefly • Over or low pressure exists	• Wait several minutes • Restart the instrument. Carry out a reset (Code 7864) • Block electromagnetic effects or remove the source of interference • Reduce or increase pressure	26
747 (A747)	Alarm B	B> Sensor software and electronics not compatible	• Sensor does not fit the instrument (electronic sensor type label)	• Replace the sensor with another suitable one	16
748 (A748)	Alarm B	B> Memory error in the signal processor	• Electromagnetic influences are higher than the specifications in chapter "*Technical data*" (see product information manual VEGADIF 55) • Main electronics defective	• Block electromagnetic effects or remove the source of interference • Exchange the main electronics	15

24 hour service hotline

However, should these measures not be successful, call the VEGA service hotline in urgent cases under the phone no. **+49 1805 858550**.

The hotline is available to you 7 days a week round-the-clock. Since we offer this service world-wide, the support is only available in the English language. The service is free of charge, only the standard telephone costs will be charged.

2.2 Instrument repair

Repair of standard instruments

Due to the modular construction of the measuring instruments, some repairs can be carried out by the customer.

In the additional instructions manual "*Replacement parts for VEGADIF 55*" all replacement parts are listed with order numbers which you can order for repair of VEGADIF 55 from VEGA. Where required, exchange instructions are provided with the replacement parts.

Repair of Ex-approved instruments

Note the following for repair of Ex-certified instruments:

- Repair of certified instruments must only be carried out by trained, specialist personnel or by VEGA.
- The corresponding standards, national regulations for hazardous areas as well as the safety instructions and certificates must be noted.
- Only original replacement parts of VEGA must be used.
- Take note of the instrument name on the type label when ordering the replacement part. Parts must only be replaced by the same parts.
- Oscillators or sensors which were already used in a standard instrument must not be used as replacement part for a certified instrument.
- Repairs must be carried out according to the instructions. After a repair, the instrument must pass the specified routine test.
- The conversion of a certified instrument into another certified version must only be carried out by VEGA.
- Any repair and conversion must be documented.

If you require a repair of VEGADIF 55 by VEGA, proceed as follows:

You can download a return form (23 KB) from our Internet homepage www.vega.com under: "*Downloads - Forms and certificates - Repair form*".

By doing this you help us carry out the repair quickly and without having to call back for needed information.

Before sending an instrument for repair or checking:

- Remove all process substances that may still be on the instrument. Check especially seal grooves and fissures in which the measured medium can adhere. This is particularly important if the substances are dangerous to health.

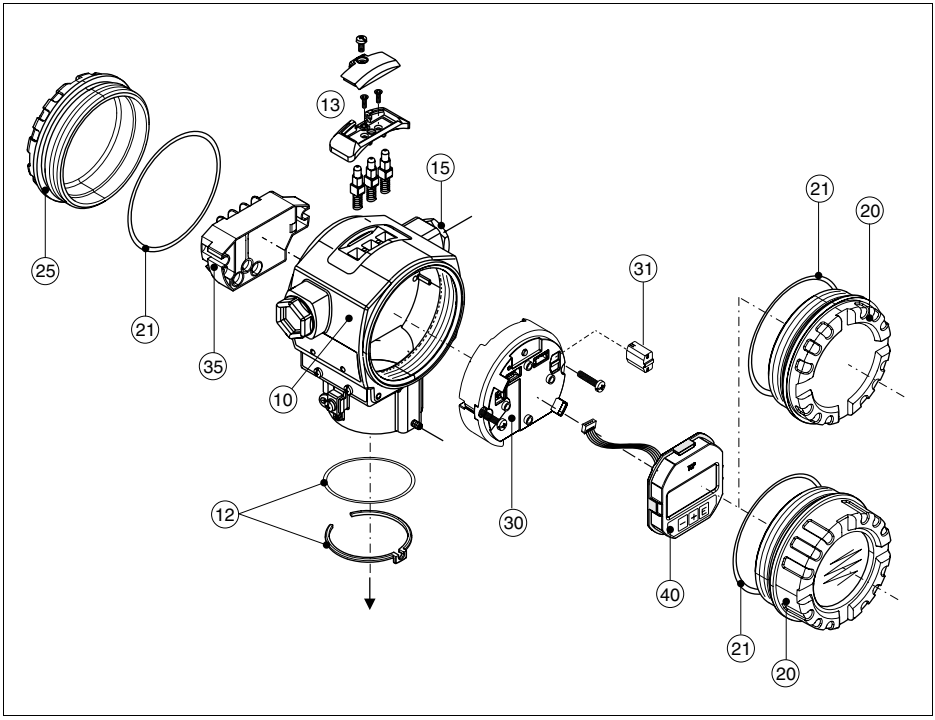
For the return shipment, proceed as follows:

- Print and fill out one form per instrument
- Clean the instrument and pack it damage-proof
- Attach the completed form and probably a safety data sheet to the instrument
- Please contact the agency serving you for the address of the return shipment

2.3 Replacement parts

On the following pages you will find all replacement parts with order numbers which you can order from VEGA for repair of VEGADIF 55. In the replacement parts order always provide the serial number stated on the type label. The replacement part number is printed on each replacement part. Where required, exchange instructions are provided with the replacement parts. You can also order a complete sensor assembly as replacement part. The correct order number for the sensor assembly can be derived from the order code on the type label.

Replacement parts for electronics and housing



Serial no.	Order no.	Description
10	52020430	Aluminium housing, M20 x 1,5; not for EEx-d/XP
10	52020488	Aluminium housing, M20 x 1,5; HART, with 3 keys for adjustment from outside, not for EEx-d/XP
10	52020489	Aluminium housing, M20 x 1,5; Profibus PA/Foundation Fieldbus, with key for adjustment from outside, not for EEx-d/XP

Serial no.	Order no.	Description
10	52020431	Aluminium housing, ½ NPT, not for EEx-d/XP
10	52020490	Aluminium housing, ½ NPT, HART, with 3 keys for adjustment from outside, not for EEx-d/XP
10	52020491	Aluminium housing, ½ NPT, Profibus PA/Foundation Fieldbus, with key for adjustment from outside, not for EEx-d/XP
12	52020440	Mounting set housing/sensor consisting of: 2 O-rings 45.69 x 2.62 EPDM + locking piston
13	52024110	Adjustment keys for adjustment from outside, consisting of: keys, covers and screws (version 2.0)
15	52020760	Cable gland M20 x 1.5; seal
15	52020761	Cable gland G½, seal, adapter
15	52020762	Plug 2/7-pole, Han7D, seal
15	52020763	Plug 3-pole, M12, seal
20	52020432	Cover for Aluminium housing incl. seal, not for EEx-d/XP
20	52020433	Cover for Aluminium housing incl. seal, for EEx-d/XP
20	52020494	Cover for Aluminium housing with inspection glass incl. seal, for Ex-free area
20	52020492	Cover for Aluminium housing with inspection glass incl. seal, not for EEx-d/XP
20	52020493	Cover for Aluminium housing with inspection glass incl. seal, for EEx-d/XP
21	52020429	Seal set EPDM for cover Aluminium housing (5 pcs.)
25	52020432	Cover for Aluminium housing incl. seal, not for EEx-d/XP
30	52024400	Electronics 4 … 20 mA, HART, Ex, version 2.0x, adjustment keys on electronics
30	52024111	Electronics 4 … 20 mA, HART, Ex, version 2.0x, adjustment keys on the housing
31	52027785	Data memory module
35	52020434	Terminal 3-pole, RFI filter 4 … 20 mA/HART
40	71002865	Indicating module with 3 adjustment keys, incl. holder

Replacement parts for process component

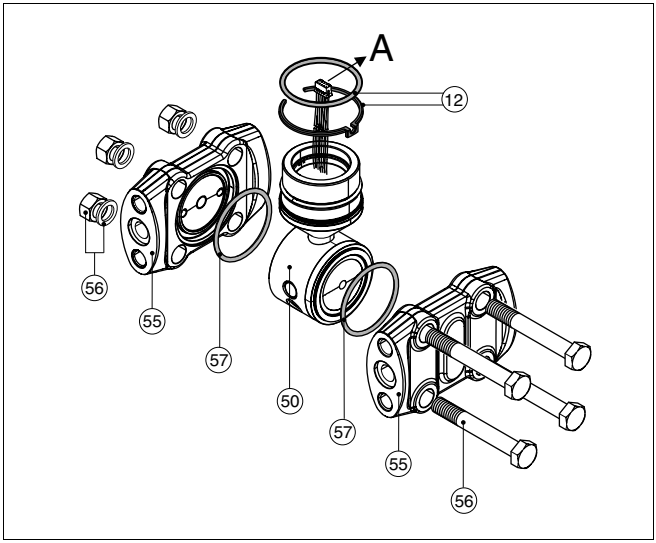


Fig. 2: Measuring ranges 100 mbar, 500 mbar, 3 bar, 16 bar, 40 bar

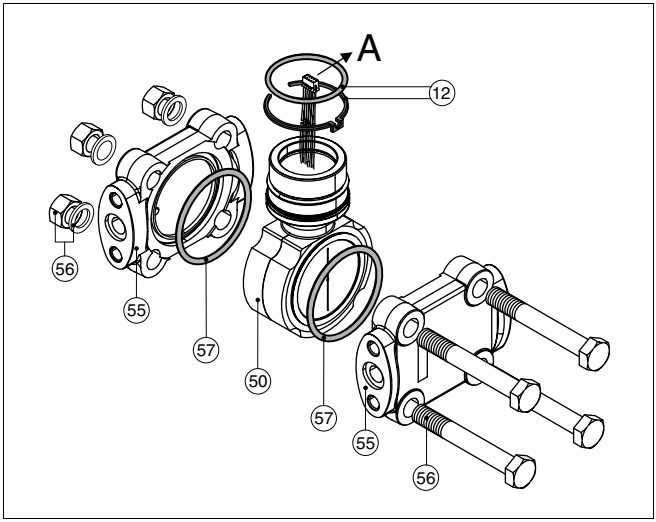


Fig. 3: Measuring ranges 10 mbar, 30 mbar

Serial no.	Order no.	Description
55	52020667	Flange 1/4-18 NPT IEC 61518, fastening: 7/16-20 UNF, C22.8 (2 pcs.)
55	52020668	Flange 1/4-18 NPT IEC 61518, fastening: 7/16-20 UNF, 316L (2 pcs.)
55	52020669	Flange 1/4-18 NPT IEC 61518, fastening: 7/16-20 UNF, 316L (2 pcs.), with PTFE seal (2 pcs.)
55	52020670	Flange 1/4-18 NPT IEC 61518, fastening: 7/16-20 UNF, 316L, lateral ventilation (2 pcs.) incl. 4 closing screws, with PTFE seal (2 pcs.)
55	52020671	Flange 1/4-18 NPT, IEC 61518, fastening: 7/16-20 UNF, C22.8, lateral ventilation (2 pcs.) incl. 4 closing screws
55	52020672	Flange 1/4-18 NPT, IEC 61518, fastening: 7/16-20 UNF, 316L, lateral ventilation (2 pcs.) incl. 4 closing screws
55	52020673	Flange 1/4-18 NPT, PN 160, fastening: M10, 316L (2 pcs.), with PTFE seal (2 pcs.)
55	2020674	Flange 1/4-18 NPT, PN 160, fastening: M10, C22.8 (2 pcs.)
55	52020675	Flange 1/4-18 NPT, PN 160, fastening: M10, 316L (2 pcs.)
55	52020676	Flange 1/4-18 NPT, PN 420, fastening: M12, 316L (2 pcs.)
55	52020677	Flange 1/4-18 NPT, PN 420, fastening: M12, 316L (2 pcs.), with PTFE seal (2 pcs.)
55	52020678	Flange 1/4-18 NPT, PN 420, fastening: M12, C22.8 (2 pcs.)
55	52020679	Flange RC 1/4, fastening: 7/16-20 UNF, 316L (2 pcs.), with PTFE seal (2 pcs.)
55	52020680	Flange RC 1/4, fastening: 7/16-20 UNF, 316L (2 pcs.)
55	52020681	Flange RC 1/4, fastening: 7/16-20 UNF, 316L, lateral ventilation (2 pcs.) incl. 4 screws, with PTFE seal (2 pcs.)
55	52020682	Flange RC 1/4, fastening: 7/16-20 UNF, 316L, lateral ventilation (2 pcs.) incl. 4 closing screws
55	52020430	Aluminium housing, M20 x 1,5; not for EEx-d/XP
55	52020488	Aluminium housing, M20 x 1,5; HART, with 3 keys for adjustment from outside, not for EEx-d/XP
55	52020489	Aluminium housing, M20 x 1,5; Profibus PA/Foundation Fieldbus, with key for adjustment from outside, not for EEx-d/XP
55	52020431	Aluminium housing, ½ NPT, not for EEx-d/XP
55	52020430	Aluminium housing, M20 x 1,5; not for EEx-d/XP
55	52020488	Aluminium housing, M20 x 1,5; HART, with 3 keys for adjustment from outside, not for EEx-d/XP
55	52020489	Aluminium housing, M20 x 1,5; Profibus PA/Foundation Fieldbus, with key for adjustment from outside, not for EEx-d/XP
55	52020431	Aluminium housing, ½ NPT, not for EEx-d/XP
55	52020430	Aluminium housing, M20 x 1,5; not for EEx-d/XP
55	52020488	Aluminium housing, M20 x 1,5; HART, with 3 keys for adjustment from outside, not for EEx-d/XP

Serial no.	Order no.	Description
55	52020489	Aluminium housing, M20 x 1,5; Profibus PA/Foundation Fieldbus, with key for adjustment from outside, not for EEx-d/XP
55	52020431	Aluminium housing, ½ NPT, not for EEx-d/XP
12	52020440	Mounting set housing/sensor consisting of: 2 O-rings 45.69 x 2.62 EPDM + locking piston
13	52024110	Adjustment keys for adjustment from outside, consisting of: keys, covers and screws (version 2.0)
15	52020760	Cable gland M20 x 1.5; seal
15	52020761	Cable gland G½, seal, adapter
15	52020762	Plug 2/7-pole, Han7D, seal
15	52020763	Plug 3-pole, M12, seal
20	52020432	Cover for Aluminium housing incl. seal, not for EEx-d/XP
20	52020433	Cover for Aluminium housing incl. seal, for EEx-d/XP
20	52020494	Cover for Aluminium housing with inspection glass incl. seal, for Ex-free area
20	52020492	Cover for Aluminium housing with inspection glass incl. seal, not for EEx-d/XP
20	52020493	Cover for Aluminium housing with inspection glass incl. seal, for EEx-d/XP
21	52020429	Seal set EPDM for cover Aluminium housing (5 pcs.)
25	52020432	Cover for Aluminium housing incl. seal, not for EEx-d/XP
25	52020433	Cover for Aluminium housing incl. seal, for EEx-d/XP
30	52024400	Electronics 4 … 20 mA, HART, Ex, version 2.0x, adjustment keys on electronics
30	52024111	Electronics 4 … 20 mA, HART, Ex, version 2.0x, adjustment keys on the housing
31	52027785	Data memory module
35	52020434	Terminal 3-pole, RFI filter 4 … 20 mA/HART
40	71002865	Indicating module HART with 3 adjustment keys, incl. holder

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