

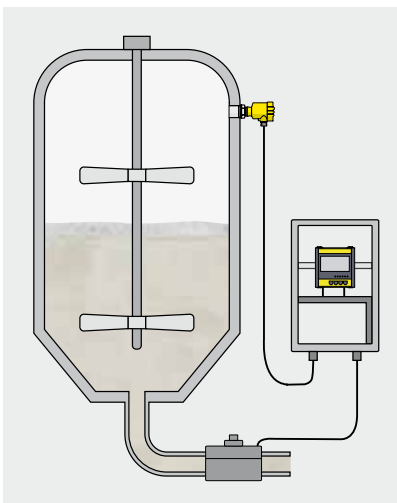
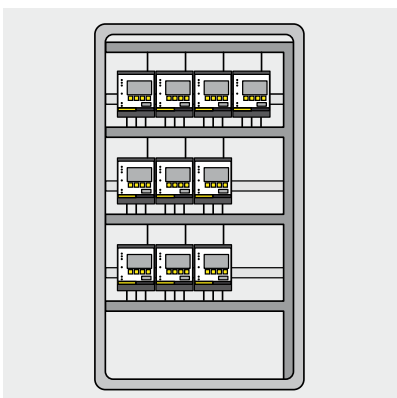


Signal conditioning instruments

- 242 Overview Signal conditioning instruments
- 248 VEGAMET 381, 391, 624, 625
- 252 VEGASCAN 693
- 253 ISO housing
- 254 VEGATOR series 100, 256C, 632
- 262 VEGASTAB 690
- 263 Communication components



Overview Signal conditioning instruments



Area of application



Together with connected sensors, signal conditioning instruments enable a variety of measuring tasks, such as e.g. level, gauge, differential pressure, process pressure, distance, interface and temperature measurement.




Principle of operation

Sensors detect physical values in a vessel and forward them to the signal conditioning instrument. Through an adjustment in the signal conditioning instrument, the readings can be adapted to the specific conditions of the measuring point. They appear in the display and can be output via the integrated current outputs that connect to external displays or higher-level controllers. In addition, point level signals can be used to control pumps or other actuators via integrated relays.



Advantages

Versatile use through scalable outputs. Simple integration into higher-level systems. Simple installation via mounting rails. Cost savings through integrated sensor supply, also in explosion protected areas.

	VEGAMET 381	VEGAMET 391
		
Application	Measured value indication and simple control functions	Measured value indication and simple control functions, remote enquiry of measured values
Input	1 x 4 ... 20 mA sensor input	1 x 4 ... 20 mA/HART sensor input
Hysteresis	Adjustable	Adjustable
Output	1 x 0/4 ... 20 mA current output 2 x relay outputs 1 x fail safe relay	1 x 0/4 ... 20 mA current output 6 x relay outputs or 5 x relay outputs and 1 x fail safe relay 1 x Ethernet (optional) 1 x RS232 (optional)
Operating voltage	20 ... 253 V AC, 50/60 Hz, 20 ... 253 V DC	20 ... 253 V AC, 50/60 Hz, 20 ... 253 V DC
Mounting	Front panel or wall mounting Carrier rail 35 x 7.5 acc. to EN 50022	Front panel or wall mounting Carrier rail 35 x 7.5 acc. to EN 50022
Display	Large digital and quasi-analogue indication	Graphic-capable clear text indication with background lighting
Approvals	ATEX, IEC, GOST, SIL2	ATEX, IEC, FM, CSA, SIL2

	VEGAMET 624	VEGAMET 625	VEGASCAN 693
			
Application	Measured value indication, simple control functions as well as remote enquiry of measured values for one 4 ... 20 mA/HART-sensor	Measured value indication, simple control functions as well as remote enquiry of measured values for two HART-sensors	Measured value indication and remote enquiry of measured value for up to 15 HART sensors
Input	1 x 4 ... 20 mA/HART sensor input	2 x HART sensor input	15 x HART sensor input
Hysteresis	Adjustable	Adjustable	–
Output	3 x 0/4 ... 20 mA current output 3 x relay outputs 1 x fail safe relay 1 x Ethernet (optional) 1 x RS232 (optional)	3 x 0/4 ... 20 mA current output 3 x relay outputs 1 x fail safe relay 1 x Ethernet (optional) 1 x RS232 (optional)	1 x fail safe relay 1 x Ethernet (optional) or 1 x RS232 (optional)
Operating voltage	20 ... 253 V AC, 50/60 Hz, 20 ... 253 V DC	20 ... 253 V AC, 50/60 Hz, 20 ... 253 V DC	20 ... 253 V AC, 50/60 Hz, 20 ... 253 V DC
Mounting	Carrier rail 35 x 7.5 acc. to EN 50022	Carrier rail 35 x 7.5 acc. to EN 50022	Carrier rail 35 x 7.5 acc. to EN 50022
Display	Graphic-capable clear text indication with background lighting	Graphic-capable clear text indication with background lighting	Graphic-capable clear text indication with background lighting
Approvals	ATEX, IEC, FM, CSA, GOST, Ship	ATEX, IEC, FM, CSA, GOST, Ship	ATEX, IEC, FM, CSA, GOST, Ship

	VEGATOR 111/112	VEGATOR 121/122	VEGATOR 141/142
			
	Transmission of NAMUR signals for level signalling	Transmission of 8/16 mA signals for level signalling	Signal conditioning instrument for 4 ... 20 mA signals for level signalling
	VEGATOR 111: single channel VEGATOR 112: double channel	VEGATOR 121: single channel VEGATOR 122: double channel	VEGATOR 141: single channel VEGATOR 142: double channel
	Fix	Fix	Adjustable
	VEGATOR 111: 1 x relay output (SPDT), optional 1 x fail safe relay output (SPDT) VEGATOR 112: 2 x relay output (SPDT)	VEGATOR 121: 1 x relay output (SPDT), optional 1 x fail safe relay output (SPDT) VEGATOR 122: 2 x relay output (SPDT)	VEGATOR 141: 1 x relay output (SPDT), optional 1 x fail safe relay output (SPDT) VEGATOR 142: 2 x relay output (SPDT)
	20 ... 253 V AC/DC, 50/60 Hz	20 ... 253 V AC/DC, 50/60 Hz	20 ... 253 V AC/DC, 50/60 Hz
	Carrier rail 35 x 7.5 acc. to EN 50022	Carrier rail 35 x 7.5 acc. to EN 50022	Carrier rail 35 x 7.5 acc. to EN 50022
	1x LED supply 1x LED switching signal per channel 1x LED false signal per channel	1x LED supply 1x LED switching signal per channel 1x LED false signal per channel	1x LED supply 1x LED switching signal per channel 1x LED false signal per channel
	ATEX, IEC, GOST, WHG, Ship, SIL2	ATEX, IEC, GOST, WHG, Ship, SIL2	ATEX, IEC, GOST, WHG, Ship, SIL2

	VEGASTAB 690	GPRS/EDGE router
		
Application	Voltage supply of two analogue sensors	For connection of signal conditioning instruments to the internet (router, modem or Ethernet Port)
Input	–	Signal conditioning instruments with Ethernet interface
Hysteresis	–	–
Output	2 x 24 V DC (floating)	GPRS
Operating voltage	20 ... 253 V AC, 50/60 Hz, 20 ... 72 V DC	10 ... 30 V DC
Mounting	Carrier rail 35 x 7.5 acc. to EN 50022	Carrier rail 35 x 7.5 acc. to EN 50022
Display	1 x LED voltage supply	–
Approvals	–	–

	VEGATOR 256C	VEGATOR 632
		
Application	Signal conditioning instrument for conductive probes	Signal conditioning instrument for conductive probes
Input	1 x level detection or 1 x pump control	Double channel
Hysteresis	1 ... 200 kOhm adjustable	1 ... 200 kOhm adjustable
Output	1 x relay output	2 x relay output
Operating voltage	20 ... 250 V AC, 50/60 Hz	85 ... 253 V AC, 50/60 Hz or 20 ... 30 V AC, 50/60 Hz, 20 ... 60 V DC
Mounting	Wall mounting Carrier rail 35 x 7.5 acc. to EN 50022	Carrier rail 35 x 7.5 acc. to EN 50022
Display	LED	1x LED supply 1x LED switching signal 1x LED false signal
Approvals	–	ATEX, WHG

VEGAMET 381

Signal conditioning and display instrument for level sensors

Application area

The VEGAMET 381 signal conditioning instrument powers the connected 4 ... 20 mA/HART sensor, processes and displays the measured values. The VEGAMET 381 is ideal for simple control tasks in all industries. Comprehensive adjustment functions enable individual adaptations to the respective application.

Your benefit

- Transmitter power supply via the 4 ... 20 mA sensor input
- Versatile use through two relay outputs to control pumps and stirrers, etc.
- Easily readable LC display for digital and quasianalogue measured value indication

Technical data

Input:	1 x 4 ... 20 mA sensor input
Output:	1 x 0/4 ... 20 mA current output 2 x relay outputs 1 x fail safe relay
Operating voltage:	20 ... 253 V AC, 50/60 Hz, 20 ... 253 V DC
Mounting:	front panel, wall mounting carrier rail 35 x 7.5 acc. to EN 50022
SIL qualification:	optionally up to SIL2

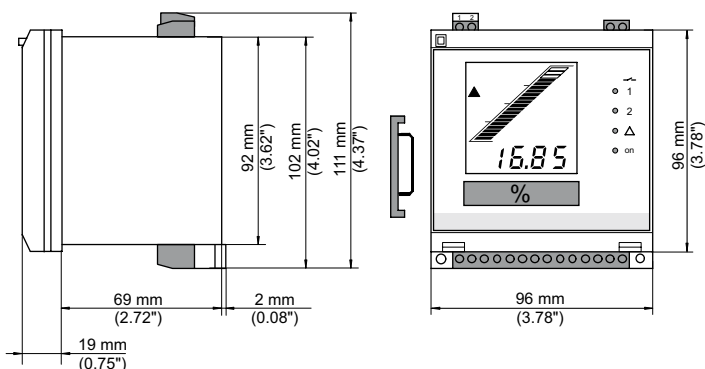
Delivery time:  **SPEED**



Approval

- XX without
- CX ATEX II (1)G [Ex ia] IIC, II (1)D [Ex ia D], I (M1)[Exia]
- CI IEC [Zone 0] [Ex ia] IIC, [Zone 20] [Ex ia D]

MET381.



VEGAMET 391

Signal conditioning and display instrument for level sensors

Application area

The VEGAMET 391 signal conditioning instrument powers any 4 ... 20 mA/HART sensor, processes and displays the measured values. The VEGAMET 391 is perfectly suitable for simple control tasks in level, gauge and process pressure measurements as well as for inventory management (VMI) and remote enquiry. Comprehensive adjustment functions allow individual adaptations to the respective application. In the water/sewage water industry, the instrument impresses with special functions such as pump switching-over, flow volume measurement, tendency functions and totalizer.

Your benefit

- Steady utilization of the pumps through integrated pump management
- Completely integrated function unit for flow volume measurement
- Simple integration in the Intranet/Extranet through integrated Web server

Technical data

Input:	1 x 4 ... 20 mA/HART sensor input with transmitter power supply 1 x 4 ... 20 mA/HART sensor input passive (not with Ex version)
Output:	1 x 0/4 ... 20 mA current output up to 6 x relay outputs 1 x fail safe relay 1 x Ethernet or 1 x RS232 optionally
Operating voltage:	20 ... 253 V AC, 50/60 Hz, 20 ... 253 V DC
Mounting:	front panel or wall mounting carrier rail 35 x 7.5 acc. to EN 50022
SIL qualification:	optionally up to SIL2

Delivery time:  **SPEED**



Approval

- XX without
- CX ATEX II (1)G [Ex ia Ga] IIC, II (1)D [Ex ia Da] IIIC, I (M1) [Ex ia Ma] I
- CX IEC [Ex ia Ma] I [Ex ia Ga] IIC [Ex ia Da] IIIC

Version

- Z 4 ... 20mA input
- H 4 ... 20 mA/HART input

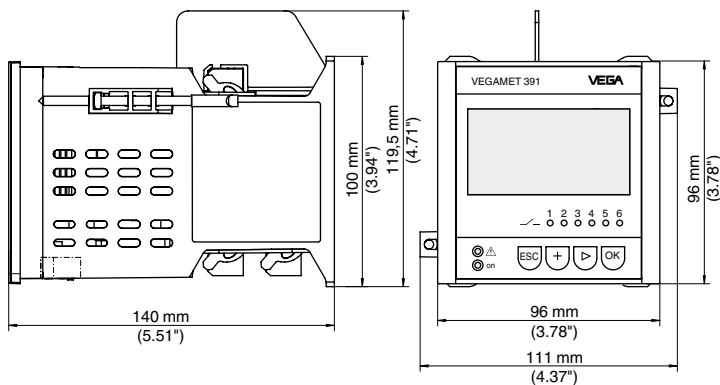
Communication interface

- X without
- R RS232 incl. connection cable
- E Ethernet

Mounting

- X Panel or wall mounting
- H Carrier rail 35x75 according to EN50022

MET391.



VEGAMET 624

Signal conditioning and display instrument for level sensors

Application area

The VEGAMET 624 signal conditioning instrument powers the connected 4 ... 20 mA/HART sensor, processes and displays the measured values. The VEGAMET 624 is ideal for simple control tasks in level, gauge and process pressure measurements. For inventory management in remote storage silos, interfaces for simple remote data transmission are integrated. Comprehensive adjustment functions enable individual adaptations to the respective application.



Your benefit

- Steady utilization of the pumps through integrated pump management
- Simple integration in the Intranet/Extranet through integrated Web server
- Simple data recording and history retrieval with instruments with digital interface

Technical data

Input: 1 x 4 ... 20 mA/HART sensor input with transmitter power supply

Output: 3 x 0/4 ... 20 mA current output
3 x relay outputs
1 x fail safe relay
1 x Ethernet (optional)
1 x RS232 (optional)

Operating voltage: 20 ... 253 V AC, 50/60 Hz, 20 ... 253 V DC

Mounting: carrier rail 35 x 7.5 acc. to EN 50022

Delivery time:  **SPEED**

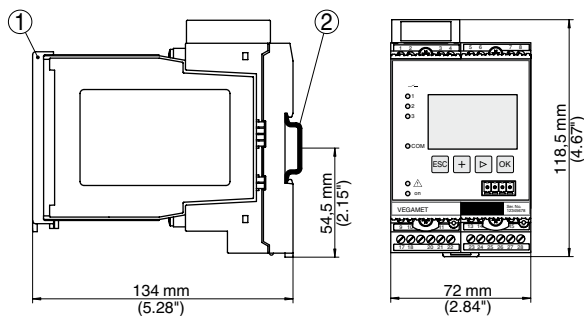
Approval

- XX without
- CX ATEX II (1)G [Ex ia] IIC, II (1)D [Ex ia D]
- CM ATEX II (1)G [Ex ia] IIC, II (1)D [Ex ia D] + Ship approval
- CI IECEx ia IIC T6

Communication interface

- X without
- R RS232 incl. connection cable
- E Ethernet

MET624.



- ① Transparent cover
- ② Carrier rail 35 x 7.5 or 35 x 15 acc. to EN 50022

VEGAMET 625

Signal conditioning and display instrument for level sensors

Application area

The VEGAMET 625 signal conditioning instrument powers the connected 4 ... 20 mA/HART sensor, processes and displays the measured values received through HART Multidrop. The VEGAMET 625 is ideal for simple control tasks in level, gauge and process pressure measurements. For inventory management in remote storage silos, interfaces for simple remote data transmission are integrated. Comprehensive adjustment functions enable individual adaptations to the respective application.

Your benefit

- Versatile use through three scalable current outputs for control of indications and connected systems such as e.g. a PLC
- Simple integration in the Intranet/Extranet through integrated Web server
- Simple data recording and history retrieval with instruments with digital interface

Technical data

Input:	2 x 4 ... 20 mA/HART sensor input with transmitter power supply (only HART capable sensors)
Output:	3 x 0/4 ... 20 mA current output 3 x relay outputs 1 x fail safe relay 1 x Ethernet (optional) 1 x RS232 (optional)
Operating voltage:	20 ... 253 V AC, 50/60 Hz, 20 ... 253 V DC
Mounting:	carrier rail 35 x 7.5 acc. to EN 50022

Delivery time:  **SPEED**



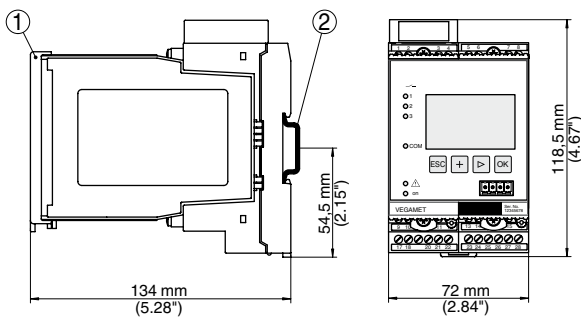
Approval

- XX without
- CX ATEX II (1)G [Ex ia] IIC, II (1)D [Ex ia D]
- CM ATEX II (1)G [Ex ia] IIC, II (1)D [Ex ia D] + Ship approval
- CI IECEx ia IIC T6

Communication interface

- X without
- R RS232 incl. connection cable
- E Ethernet

MET625.



- ① Transparent cover
- ② Carrier rail 35 x 7.5 or 35 x 15 acc. to EN 50022

VEGASCAN 693

Signal conditioning instrument for up to 15 HART sensors

Application area

The VEGASCAN 693 is a signal conditioning and display instrument for up to 15 continuously measuring 4 ... 20 mA/HART sensors. It processes the measured value received via HART multidrop and displays the values. Hence measurement results from level, gauge and process pressure measurements can be easily made available to control systems, visualizations and the remote data transmission. Interfaces and functions for the connection to networks and the remote data transmission are integrated. It is particularly suitable for applications in the local and global inventory management.



Your benefit

- Data recording of up to 200,000 measured values with instruments with digital interface
- Simple integration in the Intranet/Extranet through integrated Web server
- Measured value and message transmission via e-mail and SMS and data transmission to VEGA Inventory System

Technical data

- Input: up to 15 HART-capable sensors
up to 5 sensors with Ex applications (with transmitter power supply and passive)
- Output: 1 x fail safe relay
1 x Ethernet or
1 x RS232
- Operating voltage: 20 ... 253 V AC, 50/60 Hz
20 ... 253 V DC
- Mounting: carrier rail 35 x 7.5 acc. to EN 50022

Delivery time:  **SPEED**

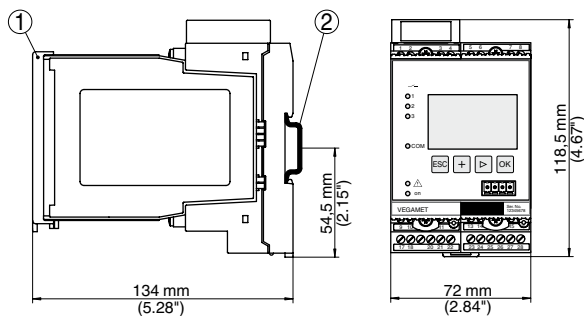
Approval

- XX without
- CX ATEX II (1)G [Ex ia] IIC, II (1)D [Ex ia D]
- CI IECEx ia IIC T6

Communication interface

- R RS232 incl. connection cable
- E Ethernet

SCAN693. [] []



- ① Transparent cover
- ② Carrier rail 35 x 7.5 or 35 x 15 acc. to EN 50022

ISO housing

Protective housing with transparent cover for surface mounting

Application area

The ISO housing is a robust field housing for wall mounting, for mounting of VEGAMET series 300 and VEGAMET series 600 signal conditioning instruments.

Your benefit

- Protective housing in protection IP 65
- Attached carrier rail 35 x 7.5 acc. to EN 50022
- Including mounted cable glands

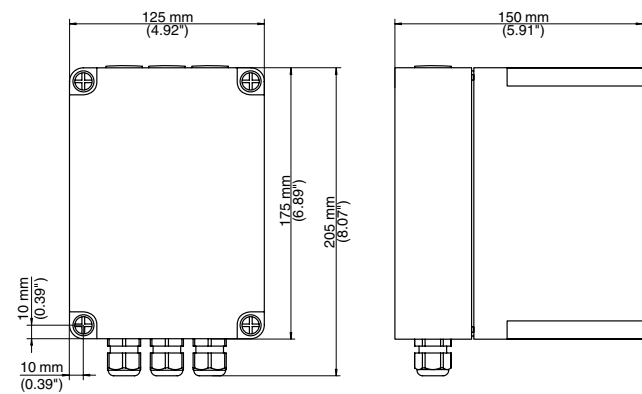
Delivery time:  **SPEED**



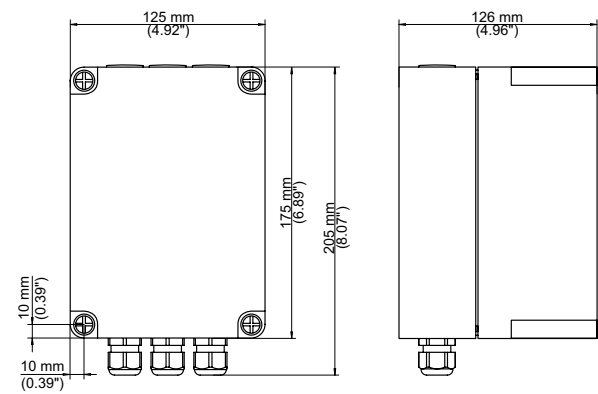
Instrument type

- AXX** suitable for one VEGAMET 391
- BXX** suitable for one VEGAMET 381
- CXX** suitable for up to three series 600 instruments

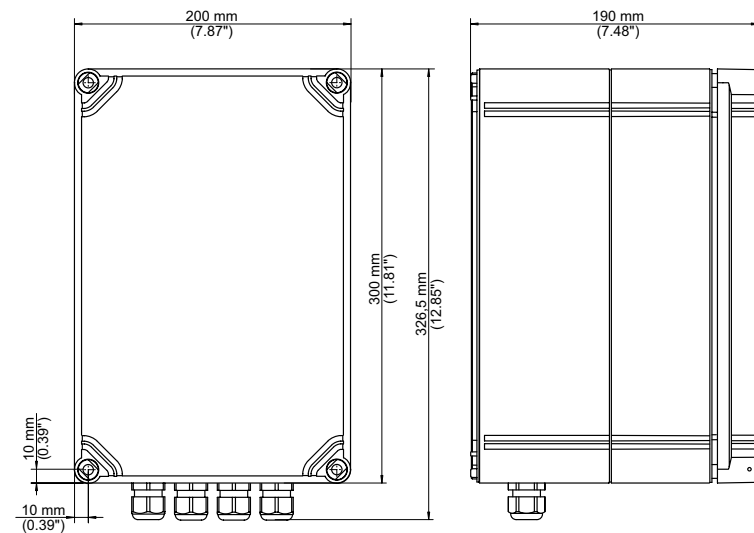
ISO-GEH.



ISO housing suitable for up to three series 600 instruments
Depending on the housing width



ISO housing suitable for VEGAMET 381



ISO housing suitable for VEGAMET 391

VEGATOR 111

Single channel signal conditioning instrument acc. to NAMUR (IEC 60947-5-6) for level detection

Application area

The VEGATOR 111 is a signal conditioning instrument for level detection for vibrating level switches VEGASWING, VEGAVIB and VEGAWAVE with electronics version according to NAMUR (IEC 60947-5-6). With this instrument, simple control tasks can be solved. Typical applications are monitoring functions such as overflow or dry run protection. Also for use as part of overfill protections. Optionally a false signal output is available.

Your benefit

- Comprehensive monitoring detects short-circuit and line break of the measuring cable and interferences in the sensor
- Simple and comfortable line monitoring by means of test key
- Simple installation through carrier rail mounting as well as detachable, coded terminals

Technical data

Input: 1 x sensor input NAMUR (IEC 60947-5-6)
 Output: 1 x relay output (SPDT)
 optionally 1 x fail safe relay output (SPDT)
 Operating voltage: 20 ... 253 V AC/DC, 50/60 Hz
 Mounting: carrier rail mounting 35 x 7.5 according to EN 50022
 SIL qualification: optionally up to SIL2



Delivery time: SPEED

Scope

- A Europe
- I Worldwide

Approval

- X for Ex-free area
- M Ship approval (DNV GL, LR)
- A ATEX II 3G Ex nA nC ic IIC T4 Gc + II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I
- C ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I
- O ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I + Ship approval (DNV GL, LR)
- A IEC Ex nA nC ic IIC T4 Gc + [Ex ia Ga/Da] IIC/IIIC, [Ex ia Ma] I
- C IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I
- O IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I + Ship approval (DNV GL, LR)

Version

- X Single channel according to NAMUR (IEC60947-5-6)
- S Single channel according to NAMUR (IEC60947-5-6), with fail safe relay

SIL qualification

- X without
- S with, incl. Safety Manual

Housing / Protection

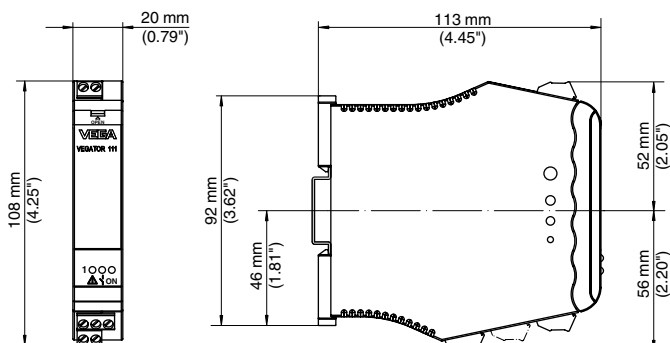
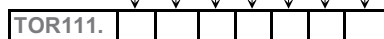
- K Plastic / IP20

Terminal blocks / Connection

- X detachable 2.5mm² / Sensor: 1 x black; output and operating voltage: 2 x black
- B detachable 2.5mm² / Ex sensor: 1 x blue; output and operating voltage: 2 x black

Certificates

- X no
- M yes, further add. prices possible



VEGATOR 112

Double channel signal conditioning instrument acc. to NAMUR
(IEC 60947-5-6) for level detection

Application area

The VEGATOR 112 is a signal conditioning instrument for level detection for vibrating level switches VEGASWING, VEGAVIB and VEGAWAVE with electronics version according to NAMUR (IEC 60947-5-6). With this instrument, simple control tasks can be solved. Typical applications are monitoring functions such as overflow or dry run protection. Also for use as part of overfill protections.

Your benefit

- Comprehensive monitoring detects short-circuit and line break of the measuring cable and interferences in the sensor
- Simple and comfortable line monitoring by means of test keys for both channels
- Simple installation through carrier rail mounting as well as detachable, coded terminals

Technical data

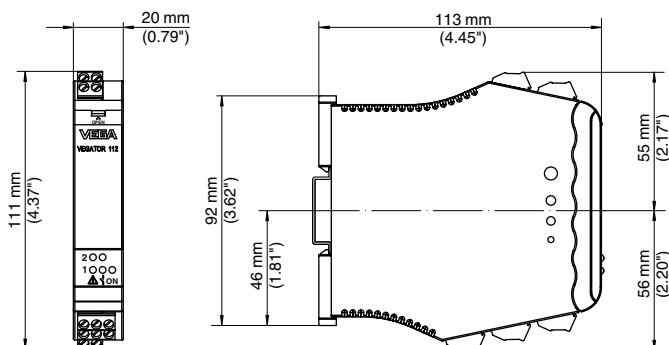
Input: 2 x sensor input NAMUR (IEC 60947-5-6)
 Output: 2 x relay output (SPDT)
 Operating voltage: 20 ... 253 V AC/DC, 50/60 Hz
 Mounting: carrier rail mounting 35 x 7.5 acc. to EN 50022
 SIL qualification: optionally up to SIL2

Delivery time:  **SPEED**



Scope

- A** Europe
- I** Worldwide
- Approval**
 - X** for Ex-free area
 - M** Ship approval (DNV GL, LR)
 - A** ATEX II 3G Ex nA nC ic IIC T4 Gc + II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I
 - C** ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I
 - O** ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I + Ship approval (DNV GL, LR)
 - A** IEC Ex nA nC ic IIC T4 Gc + [Ex ia Ga/Da] IIC/IIIC, [Ex ia Ma] I
 - C** IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I
 - O** IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I + Ship approval (DNV GL, LR)
- Version**
 - X** Double channel according to NAMUR (IEC 60947-5-6)
- SIL qualification**
 - X** without
 - S** with, incl. Safety Manual
- Housing / Protection**
 - K** Plastic / IP20
- Terminal blocks / Connection**
 - X** detachable 2.5mm² / Sensor: 2 x black; output and operating voltage: 2 x black
 - B** detachable 2.5mm² / Ex sensor: 2 x blue; output and operating voltage: 2 x black
- Certificates**
 - X** no
 - M** yes, further add. prices possible



VEGATOR 121

Single channel signal conditioning instrument for level detection

Application area

The VEGATOR 121 is a signal conditioning instrument for level detection for the vibrating level switches VEGASWING, VEGAVIB and VEGAWAVE with electronics version "Two-wire 8/16 mA". With this instrument simple control tasks can be solved. Typical applications are monitoring functions such as overflow or dry run protection. Optionally a false signal output is available.

Your benefit

- Comprehensive monitoring detects short-circuit and line break of the measuring cable and interferences in the sensor
- Simple and comfortable line monitoring by means of test key (also for SIL and WHG)
- Simple installation through carrier rail mounting as well as detachable, coded terminals

Technical data

Input:	1 x sensor input two-wire 8/16 mA
Output:	1 x relay output (SPDT) optionally 1 x fail safe relay output (SPDT)
Operating voltage:	20 ... 253 V AC/DC, 50/60 Hz
Mounting:	carrier rail 35 x 7.5 acc. to EN 50022
SIL qualification:	optionally up to SIL2



Delivery time:  **SPEED**

Scope

- A** Europe
- I** Worldwide

Approval

- X** for Ex-free area
- M** Ship approval (DNV GL, LR)
- A** ATEX II 3G Ex nA nC ic IIC T4 Gc + II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I
- C** ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I
- U** ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I + WHG
- O** ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I + Ship approval (DNV GL, LR)
- A** IEC Ex nA nC ic IIC T4 Gc + [Ex ia Ga/Da] IIC/IIIC, [Ex ia Ma] I
- C** IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I
- U** IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I + WHG
- O** IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I + Ship approval (DNV GL, LR)

Version

- X** Single-channel (8/16mA) for level detection
- S** Single channel (8/16mA), level detection with fail safe relay

SIL qualification

- X** without
- S** with, incl. Safety Manual

Housing / Protection

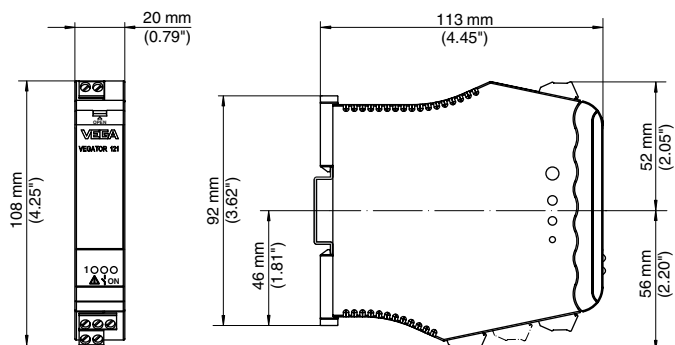
- K** Plastic / IP20

Terminal blocks / Connection

- X** detachable 2.5mm² / Sensor: 1 x black; output and operating voltage: 2 x black
- B** detachable 2.5mm² / Ex sensor: 1 x blue; output and operating voltage: 2 x black

Certificates

- X** no
- M** yes, further add. prices possible



VEGATOR 122

Double channel signal conditioning instrument for level detection

Application area

The VEGATOR 122 is a signal conditioning instrument for level detection for the vibrating level switches VEGASWING, VEGAVIB and VEGAWAVE with electronics version "Two-wire 8/16 mA". With this instrument simple control tasks can be solved. Typical applications are monitoring functions such as overflow or dry run protection.

Your benefit

- Comprehensive monitoring detects short-circuit and line break of the measuring cable and interferences in the sensor
- Simple and comfortable line monitoring by means of test keys for both channels (also for SIL and WHG)
- Simple installation through carrier rail mounting as well as detachable, coded terminals

Technical data

Input: 2 x sensor input two-wire 8/16 mA
 Output: 2 x relay output (SPDT)
 Operating voltage: 20 ... 253 V AC/DC, 50/60 Hz
 Mounting: carrier rail 35 x 7.5 acc. to EN 50022
 SIL qualification: optionally up to SIL2

Delivery time:  **SPEED**



Scope

- A Europe
- I Worldwide

Approval

- X for Ex-free area
- M Ship approval (DNV GL, LR)
- A ATEX II 3G Ex nA nC ic IIC T4 Gc + II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I
- C ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I
- U ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I + WHG
- O ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I + Ship approval (DNV GL, LR)
- A IEC Ex nA nC ic IIC T4 Gc + [Ex ia Ga/Da] IIC/IIIC, [Ex ia Ma] I
- C IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I
- U IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I + WHG
- O IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I + Ship approval (DNV GL, LR)

Version

- X Double-channel (8/16mA) for level detection

SIL qualification

- X without
- S with, incl. Safety Manual

Housing / Protection

- K Plastic / IP20

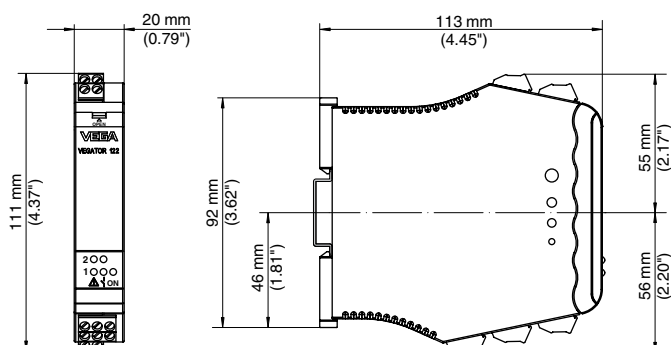
Terminal blocks / Connection

- X detachable 2.5mm² / Sensor: 2 x black; output and operating voltage: 2 x black
- B detachable 2.5mm² / Ex sensor: 2 x blue; output and operating voltage: 2 x black

Certificates

- X no
- M yes, further add. prices possible

TOR122.



VEGATOR 141

Single channel signal conditioning instrument for level detection

Application area

The VEGATOR 141 is a signal conditioning instrument for level detection for continuously measuring 4 ... 20 mA sensors. It evaluates the measured values of a sensor and delivers a switching signal according to the adjusted switching threshold. Hence simple control tasks can be solved. Typical applications are monitoring functions such as overflow and dry run protection as well as gauge monitoring. Optionally a false signal output is available.

Your benefit

- Simple adjustment of the switching point through a potentiometer
- Clearly visible switching status via LED
- Simple installation through carrier rail mounting as well as detachable, coded terminals



Technical data

Input:	1 x 4 ... 20 mA sensor input active (Ex and non-Ex) alternatively 1 x 4 ... 20 mA sensor input passive (non-Ex)
Output:	1 x relay output (SPDT) optionally 1 x fail safe relay output (SPDT)
Integration time:	adjustable
Operating voltage:	20 ... 253 V AC/DC, 50/60 Hz
Mounting:	carrier rail 35 x 7.5 acc. to EN 50022
SIL qualification:	optionally up to SIL2

Delivery time: **SPEED**

Scope

- A** Europe
- I** Worldwide

Approval

- X** for Ex-free area
- M** Ship approval (DNV GL, LR)
- A** ATEX II 3G Ex nA nC ic IIC T4 Gc + II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I
- C** ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I
- O** ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I + Ship approval (DNV GL, LR)
- A** IEC Ex nA nC ic IIC T4 Gc + [Ex ia Ga/Da] IIC/IIIC, [Ex ia Ma] I
- C** IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I
- O** IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I + Ship approval (DNV GL, LR)

Version

- X** Single-channel, 4 ... 20 mA for level detection
- S** Single-channel, 4 ... 20 mA for level detection with fail safe relay

SIL qualification

- X** without
- S** with, incl. Safety Manual

Housing / Protection

- K** Plastic / IP20

Terminal blocks / Connection

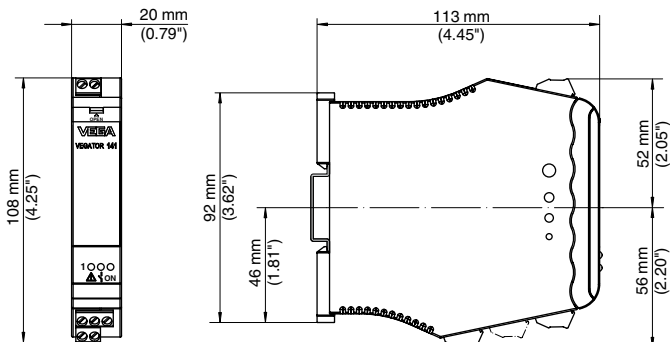
- X** detachable 2.5mm² / Sensor: 1 x black; output and operating voltage: 2 x black
- B** detachable 2.5mm² / Ex sensor: 1 x blue; output and operating voltage: 2 x black

Certificates

- X** no
- M** yes, further add. prices possible

TOR141.

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VEGATOR 142

Double channel signal conditioning instrument for level detection

Application area

The VEGATOR 142 is a signal conditioning instrument for level detection for continuously measuring 4 ... 20 mA sensors. It evaluates the measured values of a sensor and delivers a switching signal according to the adjusted switching threshold. Hence simple control tasks can be solved. Typical applications are monitoring functions such as overflow and dry run protection as well as gauge monitoring. Optionally a false signal output is available.

Your benefit

- Simple adjustment of the switching point through a potentiometer
- Clearly visible switching status via LED
- Simple installation through carrier rail mounting as well as detachable, coded terminals

Technical data

Input: 2 x 4 ... 20 mA sensor input active (Ex and non-Ex)
 alternatively 2 x 4 ... 20 mA sensor input passive (non-Ex)

Output: 2 x relay output (SPDT)

Integration time: adjustable

Operating voltage: 20 ... 253 V AC/DC, 50/60 Hz

Mounting: carrier rail 35 x 7.5 acc. to EN 50022

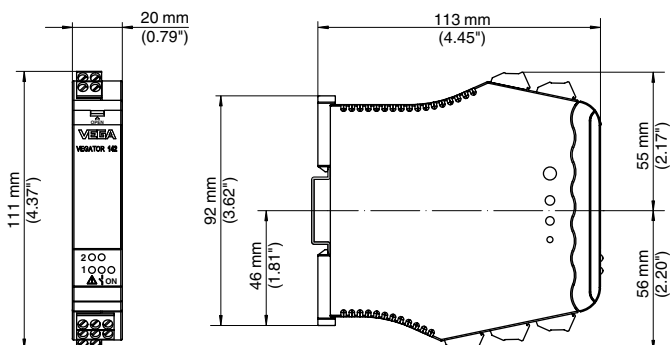
SIL qualification: optionally up to SIL2



Delivery time: **SPEED**

Scope

- A** Europe
- I** Worldwide
- Approval**
- X** for Ex-free area
- M** Ship approval (DNV GL, LR)
- A** ATEX II 3G Ex nA nC ic IIC T4 Gc + II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I
- C** ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I
- O** ATEX II (1) G/D [Ex ia Ga/Da] IIC/IIIC, I (M1) [Ex ia Ma] I + Ship approval (DNV GL, LR)
- A** IEC Ex nA nC ic IIC T4 Gc + [Ex ia Ga/Da] IIC/IIIC, [Ex ia Ma] I
- C** IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I
- O** IEC [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I + Ship approval (DNV GL, LR)
- Version**
- X** Double channel 4 ... 20 mA for level detection
- SIL qualification**
- X** without
- S** with, incl. Safety Manual
- Housing / Protection**
- K** Plastic / IP20
- Terminal blocks / Connection**
- X** detachable 2.5mm² / Sensor: 2 x black; output and operating voltage: 2 x black
- B** detachable 2.5mm² / Ex sensor: 2 x blue; output and operating voltage: 2 x black
- Certificates**
- X** no
- M** yes, further add. prices possible



VEGATOR 256C

Signal conditioning instrument for conductive electrodes

Application area

The VEGATOR 256C is a signal conditioning instrument for conductive electrodes EL 1 ... EL 8. Applications are simple level detections or pump controls.

Your benefit

- Compact unit of voltage supply and processing of a conductive probe
- Simple adjustment of the switching point via a potentiometer
- Simple installation through carrier rail mounting



Technical data

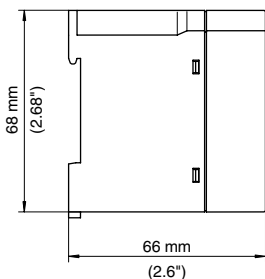
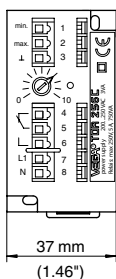
Input:	1 x level detection or 1 x pump control
Output:	1 x relay output
Response sensitivity:	1 ... 200 kOhm adjustable
Switching hysteresis:	approx. 20 %
Operating voltage:	20 ... 250 V AC, 50/60 Hz
Mounting:	wall mounting carrier rail 35 x 7.5 acc. to EN 50022

Delivery time:  **SPEED**

Operating voltage

- E** 24V AC
- B** 100...130V AC
- A** 200...250V AC

TOR256C.X



VEGATOR 632

Signal conditioning instrument for conductive electrodes

Application area

The VEGATOR 632 is a double channel signal conditioning instrument for conductive electrodes type EL. Applications are level detections and pump controls. In conjunction with multiple rod or cable electrodes several VEGATOR 632 can be combined with the probe.

Your benefit

- Two independent level detections or one min./max. control (two-point control)
- Integrated fault monitoring with LED indication detects shortcircuit and line break
- Simple mounting through carrier rail

Technical data

Input: double channel
 Output: 2 x relay output
 Response sensitivity: 1 ... 200 kOhm adjustable
 Operating voltage: 85 ... 253 V AC, 50/60 Hz or
 20 ... 30 V AC, 50/60 Hz, 20 ... 60 V DC
 Mounting: carrier rail 35 x 7.5 acc. to EN 50022

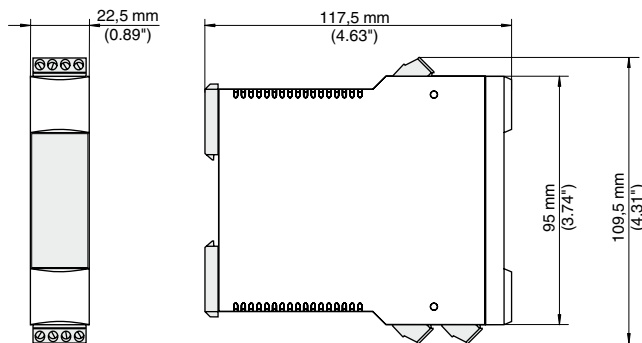
Delivery time:  **SPEED**



Approval

- XX without
 - CX ATEX II (1) G [Ex ia] IIC/IIB + II (1) D [Ex iaD]
 - CA ATEX II (1) G [Ex ia] IIC/IIB + II (1) D [Ex iaD] + WHG
- Version**
- D 20...30V AC / 20...60V DC
 - A 85...253V AC

TOR632.



VEGASTAB 690

Power supply unit for power supply of two analogue sensors

Application area

VEGASTAB 690 is a power supply unit for independent power supply of two 4 ... 20 mA sensors/circuits.

Your benefit

- Interference-free operation through two galvanically separated supply current circuits
- High reliability through permanently shortcircuit-proof circuits
- Integrated interlock diode for interruption-free connection of a measuring instrument

Technical data

Operating voltage:	20 ... 253 V AC, 50/60 Hz 20 ... 72 V DC
Output:	2 x 24 V DC (floating)
Current limitation:	approx. 26 mA
Mounting:	carrier rail 35 x 7.5 acc. to EN 50022

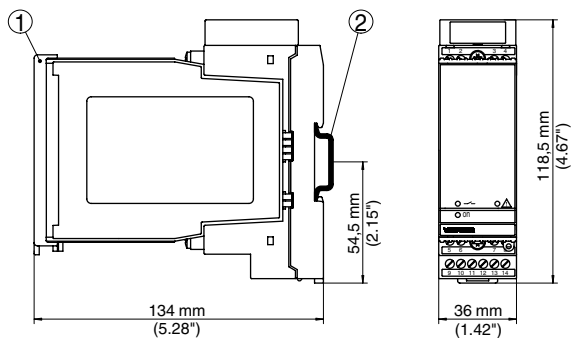
Delivery time:  **SPEED**



Plug-in socket

K Inclusive plug-in socket

STAB690.X



- ① Transparent cover
- ② Carrier rail 35 x 7.5 or 35 x 15 acc. to EN 50022

Wireless router

Wireless router for wireless measured value transmission

Application area

The wireless router ER75i is suitable for wireless measured value transmission and for remote parameter adjustment of communication-capable VEGA instruments, especially with VEGA Inventory System and PACTware. It is used when the wiring of a cable is too complex or not possible. Suitable for connection to signal conditioning instruments with Ethernet interface such as for example VEGAMET 391, VEGAMET 624, VEGAMET 625 or VEGASCAN 693.



Your benefit

- Universal use through use of GPRS
- Simple parameter adjustment on site via standard interfaces
- Combination of router, modem and single or also multiple Ethernet Port

Technical data

Supply voltage:	10 ... 30 V DC
Power consumption:	during reception: 1 W during emission: 5.5 W
Ambient temperature:	-30 ... +60 °C
Dimensions W x H x D:	42 x 76 x 113 mm (DIN 35 mm)
Weight:	150 g
Standards:	EN 301 511, V9.0.2 EN ETSI 301 489-1 V1.9.1 EN 60950-1:06 ed.2 + A11:09
Frequency bands:	EGSM850, EGSM900, GSM1800 and GSM1900

Version

- LXX** GPRS/EDGE modem ER75i v2B LUCOM for 1 signal conditioning instrument
- EXX** GPRS/EDGE modem ER75 v2F LUCOM for several signal conditioning instruments

ROUTER.

Modem antenna

Antenna for connection to GPRS/EDGE Router

Application area

For use in conjunction with the GPRS/EDGE Router. Suitable antennas are available for different applications.

Your benefit

- Alternative, optimized solutions possible through use of different antenna versions
- Time saving on installation due to attached, adapted connection cable
- Universal use in- and outdoors

Technical data

Versions:	outer wall antenna patch antenna magnetic foot antenna
Frequency band:	GSM/GPRS
Connection cable:	attached, dependent on the version 2.5 ... 5 m



Version

- 1 Outer wall antenna Triband with mounting bracket, 5 m cable
- 2 GSM patch antenna quad-band with 3 m cable

SMA adapter

- A with



Ethernet-Profibus interface

Ethernet Profibus interface ensures access from parameter software (PACTware) to field device

Application area

The TH-LINK.X is an Ethernet Profibus Interface providing the connection between the higher-level network and the field level. Hence the access of the parameter software PACTware from the Ethernet to the Profibus network is ensured. A separate PCMCIA card for the PC is not required. Furthermore diagnosis possibilities are available to ensure the network stability. Hence the Profibus systems can be operated economically.

Your benefit

- Unique platform for network diagnosis and parameter adjustment
- Simple installation and setup through WEB server and DTM
- Central access to all parameters of the Profibus sensors in the network

Technical data

Supply voltage:	19.2 ... 28.8 V DC
Current consumption:	190 mA
Temperature range:	0 ... +50 °C
Profibus baud rate:	max. 12 Mbit/s
Profibus interface:	RS485
Ethernet interface:	RJ 45
Mounting:	carrier rail 35 x 7.5 according to EN 50022
Dimensions W x H x D:	22.5 x 99 x 114.5 mm
Weight:	120 g
Communication DTM:	available

Delivery time:  **SPEED**



Version

43060 TH-Link Ethernet-Profibus DP coupler

KOMZUB-

Profibus PA/DP segment coupler

Segment coupler from Profibus DP to Profibus PA

Application area

For use in conjunction with Profibus DP/PA bus systems. The segment coupler is suitable for coupling and power supply of Profibus PA networks. The Ex version ensures Ex intrinsic safety in conjunction with Ex circuits.

Your benefit

- Simple setup because no own GSD, DTM or EDD file or Profibus address must be used
- Reliable connection to Ex circuits by standardized FISCO procedure
- Economical, compact version with up to 10 Ex or 32 non-Ex field devices

Technical data

Profibus PA power supply: 24 V with 400 mA or 13 V with 100 mA (Ex)
 Profibus DP baud rate: 93.75 kbit/s
 Galvanic separation: between power supply, Profibus DP and Profibus PA
 Ambient temperature: -20 ... +60 °C
 Protection: IP 20
 Mounting: carrier rail 35 x 7.5 acc. to EN 50022

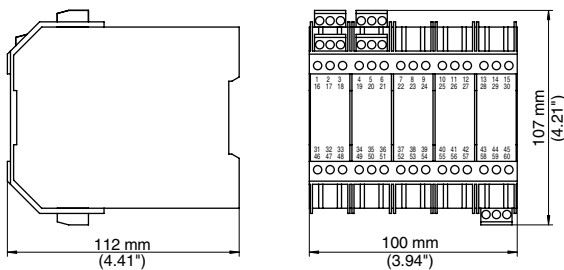
Delivery time:  **SPEED**



Approval

.X without
 EX.X ATEX II (1) G D [Ex ia] IIC

PA-KOPPLER



PA coupler SK-3

Segment coupler from Profibus DP to Profibus PA

Application area

The segment coupler is used for coupling and power supply of Profibus PA networks. The coupler combines two different networks for data transmission and delivers the current for the Profibus DP segment. Data are transmitted from the Profibus DP master via the segment coupler to the PA field device. In conjunction with Profibus DP, the segment coupler supports a baud rate of up to 12 Mbit/s.

Your benefit

- Simple setup because no own GSD, DTM or EDD file or Profibus address must be used
- Flexible through support of baud rates of up to 12 Mbit/s on the Profibus DP side
- Economical solution through power supply of up to two different PA segments

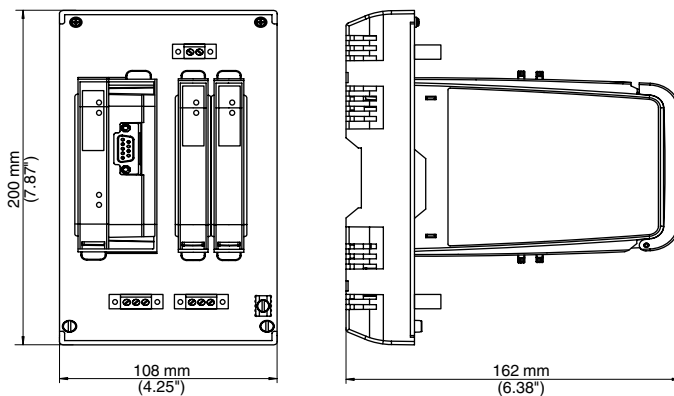
Technical data

Profibus PA power supply:	25 V with 360 mA
Profibus DP baud rate:	12 Mbit/s
Galvanic separation:	between power supply, Profibus DP and Profibus PA
Ambient temperature:	-40 ... +60 °C
Protection:	IP 20
Mounting:	carrier rail 35 x 7.5 acc. to EN 50022

Delivery time:  **SPEED**



PA-KOPPLERSK3



Profibus PA T-distributor

Distributor for Profibus PA bus systems

Application area

Profibus PA T-distributors are used for coupling of Profibus PA transmitters to the Profibus PA bus cable

Your benefit

- Simple connection possibilities through star distributor via M12 plug connector or distribution terminal
- Optimized cable glands allow an EMC-compatible wiring
- Simple bus configuration through integrated bus termination with non-Ex versions

Technical data

Connection: 1, 2, 4 and 8-fold star distributor
 Screening: through the EMC cable gland to the housing
 Sensor connection: M12 plug connection or directly on the distributor

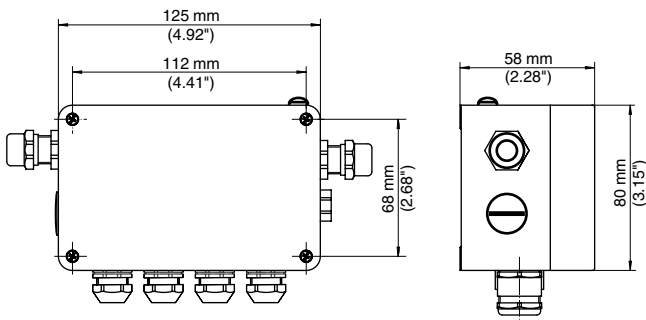
Delivery time:  **SPEED**



Version

29322	1-way Profibus PA T-distributor EMC cable gland
29323	2-way Profibus PA T-distributor EMC cable gland
29324	4-way Profibus PA T-distributor EMC cable gland
29326	1-way Profibus PA T-Connector M12 plug connection
27372	2-way Profibus PA T-distributor M12 plug connection
27371	4-way Profibus PA T-distributor M12 plug connection
25061	1-way EEx Profibus PA T-distributor EMC cable gland
29314	2-way EEx Profibus PA T-distributor EMC cable gland
29316	4-way EEx Profibus PA T-distributor EMC cable gland
29318	1-way EEx Profibus PA T-distributor M12 plug connection
29319	2-way EEx Profibus PA T-distributor M12 plug connection
29320	4-way EEx Profibus PA T-distributor M12 plug connection
25062	FBC on EEx BUS termin. w.o stopper/w.o ground connect.

2.



Ethernet switch

8-fold Ethernet switch

Application area

Suitable for connection of signal conditioning instruments VEGAMET 391, VEGAMET 624/625 and VEGASCAN 693 with Ethernet interface to an Ethernet or PC network.

Your benefit

- Robust version for use under arduous ambient conditions
- Ideal housing design for use in the switching cabinet and terminal box
- No differentiation between crossover cables and 1 : 1 cables required through integrated autocrossing function

Technical data

Operating voltage:	24 V DC
Ethernet connection:	8 ports on the front side
Data transmission rate:	10/100 MBit/s
Mounting:	carrier rail 35 x 7.5 acc. to EN 50022



SWITCH.8X

