DIGITAL PRODUCTS / SENSORS

AIQ Core

Operating instructions A6230-01en
Version 05/2024

AIQ Core.Io

flender.com

FLENDER

Original operating instructions

A6230-01
Version 05/2024

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Table of contents

List of figures

List of tables

Introduction 1

1.1 Legal information

Warning system

These instructions contain information you must observe for your own personal safety as well as to avoid damage to property and persons. The information regarding your personal safety is highlighted with a warning triangle. Information exclusively regarding property damage alone is not marked with a warning triangle. Depending on the hazard class, the warnings shall be depicted as follows, in descending order.

⚠ DANGER

means that death or severe physical injury **will** occur if the relevant precautionary measures are not taken.

⚠ WARNING

means that death or severe physical injury **may** occur if the relevant precautionary measures are not taken.

⚠ CAUTION

means that mild physical injury may occur if the relevant precautionary measures are not taken.

NOTE

means that damage to property may occur if the relevant precautionary measures are not taken.

If multiple hazard classes come into play, the warning for the highest level in question shall always be used. If a warning containing the warning triangle warns of harm to individuals, the same warning may also include a warning regarding damage to property.

Information

Information

Information offers additional notes, assistance and tips for handling the product.

Qualified personnel

The product/system associated with this documentation may only be used by **qualified personnel** trained to perform the relevant tasks, taking into account the associated documentation for the relevant tasks, particularly the safety information and warnings included therein. Due to their qualification and experience, qualified personnel are capable of detecting risks and avoiding potential hazards when dealing with these products/systems.

Intended use of Flender products

Please note the following:

⚠ WARNING

Flender products are only suitable for the uses set out in the catalogue and associated technical documentation. If third-party products and components are used, these must be recommended and/or authorised by Flender. Safe and flawless operation of the products requires proper transport, proper storage, setup, assembly, installation, commissioning, operation and maintenance. The permissible environmental conditions must be adhered to. Instructions in the associated documentation must be followed.

Trademarks

All designations marked with the trademark symbol ® are registered trademarks of Flender GmbH. Other designations in this document may be trademarks whose use by third parties for their own purposes may violate the rights of the owner.

Liability disclaimer

We have assessed the contents of these instructions for compliance with the hardware and software described. However, deviations cannot be ruled out, so we are unable to accept liability for full compliance. The details in these instructions are regularly reviewed and necessary corrections are contained in subsequent editions.

1.2 General information

1.2.1 Gender

When genders are mentioned, all known genders are implied and addressed equally.

1.2.2 Copyright

The copyright of these instructions is held by Flender.

Without the authorisation of Flender, these instructions may not be used wholly or in parts, translated into other languages or made available to third parties.

If you have any technical queries, please contact the Customer Services address.

1.2.3 Purpose of these instructions

The AIQ Core described in these instructions will be referred to below simply as the “device”.

To avoid personal injury or property damage, follow the safety information in these instructions.

Read and carefully observe the instructions supplied with the device before connecting and operating the device. The device may only be used on approved Flender gear units. You can find the complete instructions for the device on the Internet at: www.flender.com (www.flender.com)

For fault-free operation, observe the information in the instructions and adhere to the specifications.

1.2.4 Warranty

In the event of damage or consequential damage resulting from the direct or indirect use of the documentation, the product or the software, Flender GmbH shall only be liable in the event of intent or gross negligence.

Failure to observe the instructions will result in the loss of warranty claims or claims for damages.

Safety information 2

2.1 Qualified personnel

The product may only be used by qualified personnel trained to perform the relevant tasks. On the basis of their training and experience, **specialists** are capable of detecting risks and avoiding potential hazards when using this product.

Personnel	Activities	Required qualification
Mechanics specialist	• Assembly • Commissioning • Maintenance • Repairs • Decommissioning • Dismantling	Qualified specialist in mechanics
Electrics specialist	• Electrical installation • Commissioning • Maintenance • Repairs • Decommissioning	Qualified specialist in electrics
Operating personnel	• Operation	Qualified specialist in operations
Disposal specialist	• Disposal	Qualified specialist in disposal

Table 2-1: Overview: Qualified personnel

2.2 Intended use

The device is intended for use in a commercial or industrial environment as specified in these instructions. The device is supplied fully assembled with a Flender gear unit.

For safe operation, observe the information and notes in these instructions as well as the information on the rating plate. Otherwise, the device may be permanently damaged.

If the device is not used as intended, Flender accepts no liability. The following applications are considered as intended uses:

- Use in the commercial or industrial sector
- Mounting in or on Flender gear units
- Acquiring digital and analogue data of the gear unit
- Synchronising data with the AIQ web portal

2.3 Application limits

Use, limits, areas of application

- The device complies with the relevant regulations and European directives.
- Do not use the device for safety-relevant tasks and critical switching operations!
- Only use the device within the limits and areas of application. The limits and areas of application are specified in the technical data and in the instructions.
- Improper or non-intended use can lead to malfunctions of the device or undesirable consequents when using the device.
- Using the device in a way that is prohibited may result in personal injury or death.
- The device may only be installed, configured and serviced by specialists in electrical engineering who have been trained to do so in accordance with the applicable relevant regulations.
- The external 24 V DC supply voltage for this device must be generated and supplied in accordance with the criteria for safe extra-low voltage (SELV/PELV).

2.4 Reasonably foreseeable misuse

The following applications are examples of non-intended use or suspected misuse. Applications that are not permitted:

- Operating the device outside of the specification
- Connecting sensors other than those that were supplied
- Operation on non-approved gear units
- Operation in areas other than those approved
- Connecting actuators that do not comply with the technical specification
- Non-observance of the specifications for electrical connection and mechanical mounting
- Fastening using unsuitable fastening screws and tightening torques
- Use with PG-based oils (polyglycols)

2.4.1 Prohibited application

The following applications are prohibited:

- Use in potentially explosive atmospheres as well as in Ex-protected areas
- Under water
- The use for safety-relevant tasks in the sense of personal protection or as a guard according to DIN EN 13849-1

2.5 Network and IT security

With the increased networking of machines and industrial systems, the danger of cyberattacks is also increasing. Therefore, the devices that are connected to a network via WiFi or Ethernet are at risk of unwanted or unauthorised access from the network.

- Carefully observe the basic rules for network security.

- Make provision for appropriate protective measures.
- Protect the network that the device is connected to.
- Restrict network access to the device.
- Restrict access to the device (refer to chapter PIN & device RESET (Page 29)).

Description 3

3.1 Description of the device

The device captures various information and measured values pertaining to the operating condition of the gear unit and transfers this data to the (signal) outputs of the higher-level controller (PLC).

In addition, this telemetry and diagnostic data can be transmitted to the AIQ web portal via Wi-Fi.

The device has one digital input, two digital outputs, two analogue outputs and one digital tachometer output for settings and data transfer to the higher-level controller. The device remembers the time thanks to a built-in battery. The configured settings are retained even if the battery is empty.

3.2 Device overview

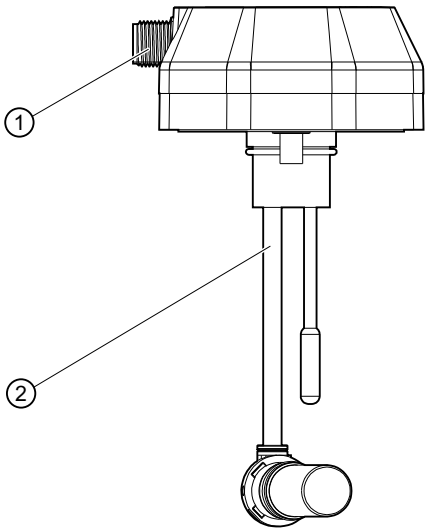


Figure 3-1: Connectors and sensors

1 Connection

2 Sensor area: Oil sump temperature sensor and tachometer sensor

Connection

Connect the device via an M12 sensor or actuator cable connection. The connector pin assignment of the device can be found in the following table.

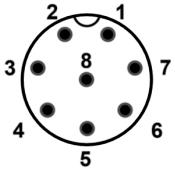
Connector pin assignment	No.	Signal
 Front view of the connector	1	Analog out 1
	2	+ 24 V DC
	3	Analog out 2
	4	Digital out 1
	5	RPM out
	6	Digital out 2
	7	GND
	8	Digital in 1

Table 3-1: Connector description

Sensor area: Oil sump temperature sensor and tachometer sensor

The sensors that are already connected are mounted inside the gear unit.

The cable lengths are pre-determined and different versions can be ordered depending on the gear unit size. Adjusting the length after this is not possible.

3.3 Operating elements and indicators

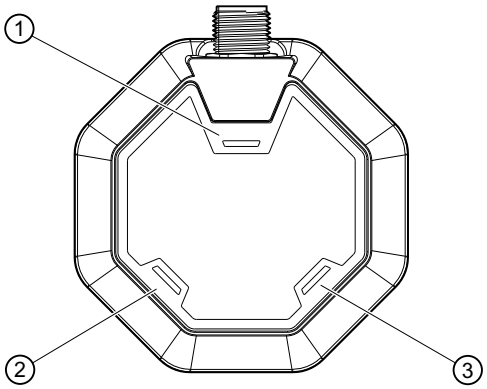


Figure 3-2: LED indicators

1 POWER LED
2 STATUS LED
3 LINK LED

POWER LED

1 Hz flashing:	Start process / Update active / Initialisation
3 Hz flashing:	RESET process active
Permanently lit up:	Device ready for operation

STATUS LED

Permanently lit up:	Error-free analyses

1 Hz flashing:	Check gear unit status, warning threshold reached
3 Hz flashing:	Alarm, vibration values outside the parameters

LINK LED

Permanently lit up:	Active WiFi network connection
1 Hz flashing:	Active Bluetooth connection with smartphone

Bluetooth pairing mode

When Bluetooth pairing mode is activated, the LEDs flash one after the other in a clockwise direction.

Application planning

4

4.1 Scope of delivery

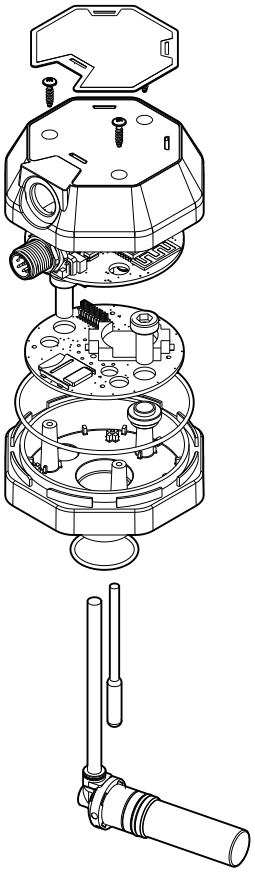


Figure 4-1: Overview of AIQ Core

The device is pre-configured for the gear unit and ready for assembly.

The components supplied are:

- Device with the associated mounting kit
  - 1x seal for sealing the sensor housing halves
  - 1x seal for sealing the sensor on the gear unit
  - 3x housing screws (2.5 x 7 mm)
  - 1x sticker for sealing the screw surfaces
  - 2x M6 x 14 cylinder-head screws with hexagon socket and low head

Optional accessories:

- M12x8 pin connection cable

Delivered state

The device is supplied configured for a specific Flender gear unit and so cannot be used on its own.

The device is used to monitor machine-related telemetry data.

Do not use this device on a Flender gear unit other than the one configured.

Use the device only in combination with the gear-unit-specific sensor mounting material.

Assembly 5

5.1 Mounting on the gear unit

1. Clean the mounting surface until there are no more machining residues or other contamination on the mounting surface.
2. Apply corrosion protection before mounting the device.
3. Check the fit of the seal on the sensor interface.
   The O-ring must be in contact with the offset. Grease the O-ring for easier assembly.

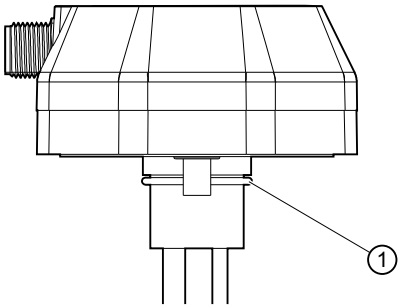


Figure 5-1: Seal seat

1 O-ring 20.3x2.4 mm

4. Insert the device sensors through the borehole.
5. Align the device using the threaded hole.

NOTE

Material damage due to incorrect fastening screws and tightening torques

Incorrect fastening screws and incorrect tightening torques can lead to material damage and failure of the device.

- Select the fastening screws and tightening torques to match the material properties of the installation location.

6. Tighten the two M6x14 fastening screws by hand using a suitable tool.
7. Then secure the screws with a torque of 5 Nm.
8. Ensure that the device is lying flat on the mounting surface.
9. Insert the O-ring into the sealing groove and fit the upper part of the device.

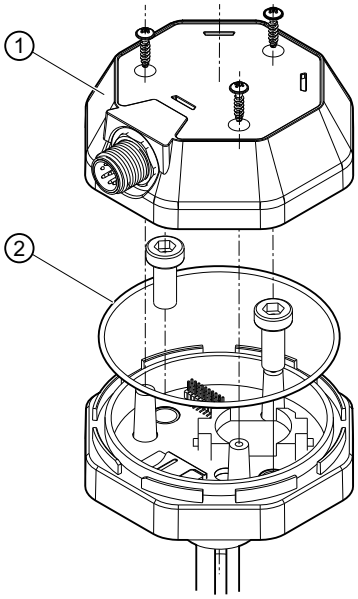


Figure 5-2: Device surface O-ring

1 Upper part of the device
2 O-ring 60x2 mm

10. Hand tighten the housing screws with a maximum of 0.8 Nm.

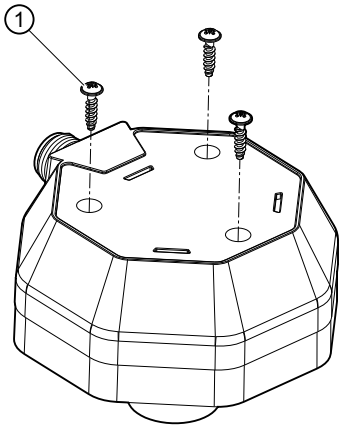


Figure 5-3: Screws for upper housing section

1 Housing screws, 2.5x7 mm
(Torx Plus® 8IP)

11. Mount the speed sensor and temperature sensor with the gear-unit-specific mounting kits.
12. Fix the cable routing according to the specifications of the mounting kit.
When using cable ties, only use materials approved by Flender.
13. Clean the screw surfaces and seal them using the sticker supplied.

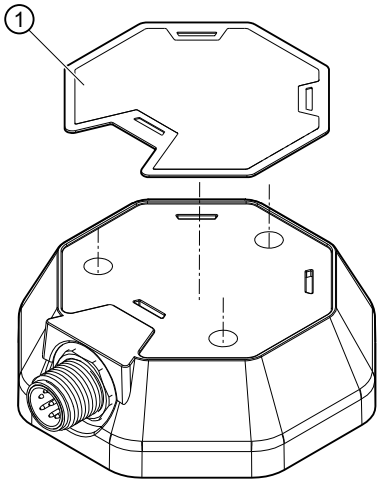


Figure 5-4: Sealing the upper section

1 Sticker

5.2 Connecting the device

5.2.1 Note on connecting the device

The device may only be connected by electrically instructed persons. Follow the national and international regulations for installing electrotechnical systems.

Connect the device to the power supply according to DIN EN 50178, SELV and PELV.

5.2.2 Electrical connection

1. Connect the device according to the following diagram.

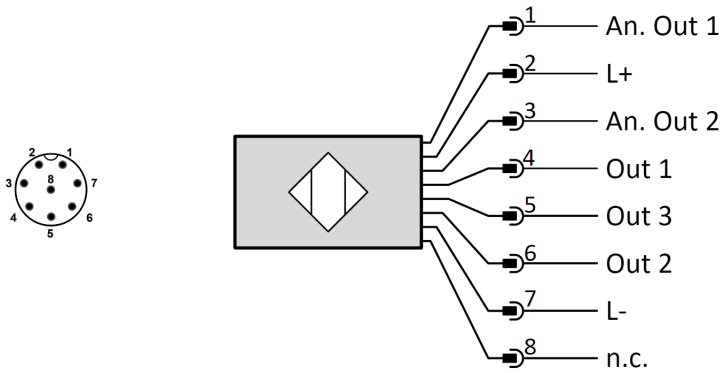


Figure 5-5: Electrical connection, connector pin assignment

Connector, pin assignment and colour coding

Pin	Labelling	Functional value	Colour code for the cable socket
1	Analogue out 1	Oil temperature* (0 to 20 mA)	white
2	L+	+ 24 V DC ± 20%	brown
3	Analogue out 2	V_{rms}* (4 to 20 mA)*	green
4	Out 1	Status*	Yellow
5	Out 3	Speed signal	grey
6	Out 2	Oil status*	pink
7	L-	0 V / GND	blue
8	In 1	Bluetooth pairing mode / RESET	Red

Table 5-1: Table for connector, pin assignment and colour coding

* This function can be configured using the AIQ-App.

Connection examples

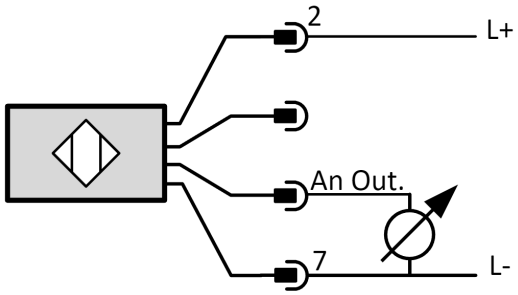


Figure 5-6: Connection example: Analogue output

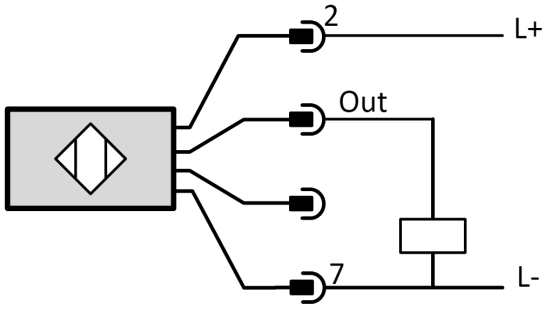


Figure 5-7: Connection example: Digital switching output

Commissioning 6

6.1 General notes on commissioning

Commissioning as well as troubleshooting are carried out by electrically instructed persons.

Read these instructions before operating the device.

6.2 Putting the device into operation

1. Connect the device to a 24 V DC power supply; see Chapter Connecting the device (Page 25).

During the start-up process, the LEDs on the top of the device flash one after the other. This may take a few seconds.

After the device has finished the start-up process, Bluetooth pairing mode is automatically activated. The LEDs on the top of the device flash clockwise one after the other. During the first 3 minutes after the start-up process, it’s possible to pair the device to a smartphone via Bluetooth.

The device is pre-configured and is ready for operation immediately after power supply without any special settings. You can use the AIQ-App (see Chapter AIQ app (Page 31)) to make app-specific settings and view gear unit information.

Operator control 7

7.1 Programming speed-dependent vibration monitoring

The device monitors changes in the vibration behaviour of the gear unit. The system behaviour is ascertained for different speed ranges and limit values are determined for the corresponding operating points.

This measurement starts automatically after 72 operating hours. In order to determine all operating situations in the best possible condition, each speed range is programmed for approx. 24 operating hours. As soon as a speed range has been completely programmed, the corresponding vibration monitoring is active.

Only after programming is complete will alarms sound if limit values are exceeded.

7.2 Switching on Bluetooth pairing mode

There are two methods for starting the Bluetooth pairing mode.

1. The device switches to Bluetooth pairing mode after the start-up process. To start, disconnect the power supply for at least 10 seconds.
2. Connect a 24 V signal to the digital input (In 1) for 2 seconds.

Bluetooth pairing mode is active for 3 minutes. Within the time window, the device LEDs flash one after the other in a clockwise direction with a frequency of 3 Hz. Bluetooth pairing mode deactivates automatically after connecting successfully.

You can retrieve current telemetry data when connected to the AIQ-App. You can protect security-relevant data using a PIN in the AIQ-App .

7.3 PIN & device RESET

Information

Only qualified personnel may carry out a device RESET on site.

If the security pin has been forgotten, reset the device as follows.

1. Connect a smartphone to the device via the AIQ-App .
2. Supply the digital input (In 1) with 24 V for 15 seconds.
   ⇨ The device now activates a RESET function in the AIQ-App via push notification.

⇨ The RESET function resets the security PIN and the settings made. Please be aware that the current network settings will be lost.

7.4 Warning and messages

If measured values are too high, the device generates a warning. In the default setting, the sensor indicates the warning status via the status LED (see Chapter Operating elements and indicators (Page 18)).

In addition to the LED indicator, the warning status can also be transmitted to a higher-level controller via a digital output (DO1).

Further information

The warning can be assigned to the corresponding output via the AIQ-App . Further details on connecting the outputs can be found in the user documentation or the quick-start guide in the AIQ-App .

7.5 Maintenance management

Condition monitors are configured within the device that can be used to trigger maintenance messages for the gear unit.

The intervals for changing the oil and the shaft sealing rings are preset in the device at the factory. A warning is issued if the respective time intervals are exceeded. These warnings can be reset via the AIQ-App .

In addition to the intervals preset by Flender at the factory, it is possible to create up to five own maintenance intervals per gear unit. This must be done in the AIQ-App .

When connecting to the AIQ web portal, it is possible to determine application-specific remaining service lives. The lubricant change interval is extended according to the load if there are particularly gentle operating conditions, for example.

7.6 Connectivity

7.6.1 WiFi connection

Connecting the device to a Wi-Fi network offers the advantage of moving additional processing-intensive functions to the AIQ web portal. With these functions, among other things, frequency-selective analyses can be performed, which can be evaluated via AIQ web portal. In the case of very unusual results, this reduces machine downtimes and indicates possible defects at an early stage.

Information

Evaluation via wireless connection

A connection to a network is not required to operate the device. Continuous synchronisation of measurement data in the AIQ web portal enables component-specific evaluation.

The WLAN access point required for this is not part of the delivery.

To connect the device to an existing WLAN infrastructure, it is necessary to store the connection settings of the Wi-Fi network in the device. This can be done via the AIQ-App.

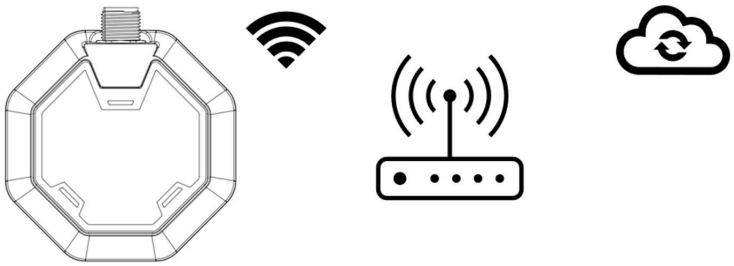


Figure 7-1: Device connection

7.6.2 AIQ app

To use the full range of functions of the device, the AIQ-App is required. Additional setting options are available in the app to carry out monitoring according to your needs.

The AIQ-App also provides detailed instructions on how to use the device.

To use the AIQ-App , download it from the App Store (iOS) or Play Store (Android) and follow the instructions.

GET IT ON Google Play

Download on the App Store

Maintenance 8

8.1 Maintenance, servicing

No maintenance and servicing measures are required if the device is operated properly. Only the manufacturer or personnel authorised by the manufacturer may repair the device.

8.2 Error detection and troubleshooting

Symptom	Possible cause	Detection	Troubleshooting
Bluetooth connection not possible	Bluetooth pairing mode not switched on	When Bluetooth pairing mode is active, the LEDs flash one after the other.	Refer to Chapter Switching on Bluetooth pairing mode (Page 29)
Digital output does not turn on	Electrical load too high	Unloaded output switches to 24 V	Reduce electrical load at the output
Speed signal drops	Electrical load too high	Unloaded output switches to 24 V	Reduce electrical load at the output
WiFi connection interrupted	Too far from access point	LINK LED is off	

Table 8-1: Troubleshooting table

Further information

Further information is available in the FAQ section of the website www.aiq-inside.com.

Service & Support 9

9.1 Contact

When ordering replacement parts, requesting a customer service technician or if you have any technical queries, contact our factory or one of our Customer Service addresses:

Flender GmbH

Am Industriepark 2

46562 Voerde

Germany

Tel.: +49 (0)2871 / 92-0

E-mail: support@aiq-inside.com

More information

Further information about service and support can be found on the Internet:

Service & Support (https://www.flender.com/service)

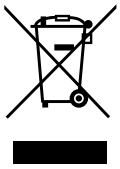
Disposal 10

10.1 Disposal instructions for electronic equipment

After use, dispose of the device including the battery in an environmentally friendly manner in accordance with the applicable national regulations.

Please note the following points:

- Do not dispose of electrical and electronic equipment in household waste when it can no longer be used. Check with your local council about this.
- Free collection points for electrical and electronic equipment are available in your area.
- Flender electrical and electronic equipment complies with the requirements of Directive 2012/19/EU – WEEE Directive.
- The separate collection of electrical and electronic equipment enables the reuse, recycling and other forms of recovery of waste equipment.
- During disposal, negative consequences for the environment and health due to the hazardous substances that may be contained in the devices should be avoided.
- The entire device does not have to be disposed of according to the WEEE Directive, but only the part that is equipped with electrical components.



Declaration of conformity

A

EU Declaration of Conformity

Product:

AIQ Core
AIQ Core.Io

Name and address of the manufacturer:
Flender GmbH
Am Industriepark 2
46562 Voerde
Germany

This Declaration of Conformity is issued under the sole responsibility of the manufacturer.

The object of the declaration described above is in conformity with the relevant EU harmonised standards:

- Directive 2014/53/EU, Radio Equipment Directive (RED)
- The health and safety objectives of Directive 2014/35/EU Low-Voltage Directive (LVD) according to Art. 3.1 (a) have been met
- The objectives for an adequate level of electromagnetic compatibility of Directive 2014/30/EU Electromagnetic Compatibility (EMC) according to Art. 3.1 (b) have been met
- Directive 2011/65/EU on the restriction of the use of certain hazardous substances
+ Delegated Directive (EU) 2015/863, (RoHS)

Conformity is declared for the following (harmonised) standards and regulations:

EN IEC 62368-1: 2020-03
Audio/video, information and communication technology equipment – Part 1: Safety requirements (IEC 62368-1:2018)

EN 301 489-1 V2.2.3: 2019-11
Electromagnetic compatibility (EMC) standard for radio equipment and services – Part 1: Common technical requirements – harmonised standard for electromagnetic compatibility

EN 301 489-17 V3.2.4:2020-09
Electromagnetic compatibility (EMC) standard for radio equipment and services – Part 17: Specific conditions for broadband data transmission systems – Harmonised standard for electromagnetic compatibility

EN 301 489-3 V2.3.2: 2023-01
Electromagnetic compatibility (EMC) standard for radio equipment and services – Part 3: Specific conditions for short-range devices (SRD) operating on frequencies between 9 kHz and 246 GHz

EN 300 328 V2.2.2:2019-07
Wideband transmission systems – Data transmission equipment operating in the 2.4 GHz ISM band – Harmonised standard for access to radio spectrum

EN IEC 61000-6-2:2019-11
Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test (IEC 61000-4-3:2020)

EN 55032: 2015-07
Electromagnetic compatibility of multimedia equipment – Emission requirements (CISPR 32:2015)

EN 61140: 2016-05
Protection against electric shock – common aspects of installation and equipment

EN IEC 63000: 2018-12
Technical documentation the assessment of electrical and electronic products with respect to the restriction of hazardous substances

A complete list of the applied standards, directives and specifications is available from the manufacturer.

Signed for and on behalf of:

Flender GmbH

Voerde, 2024-05-29

Mark Zundel, Vice President, Industrial Gears, Plant Voerde

Technical specifications

B

B.1 Rating plate

The rating plate contains the most important data.

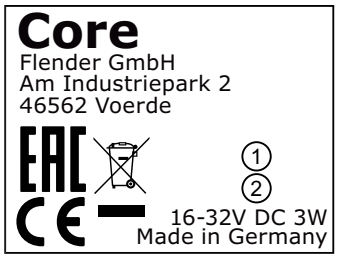


Figure B-1: Rating plate

1 Device name

2 Version / protection class

B.2 Electrical specifications

Operating voltage	DC 24 V ± 20%
Power input	500 mA
Power consumption	< 2 W
Power (all outputs ON)	< 12 W
Max. cable length	< 30 m

Table B-1: Electrical specifications

B.3 Communication interfaces

WiFi	802.11 b/g/n (802.11n ... 150 Mbps)
	2.4 GHz ~ 2.5 GHz (2412 ~ 2484 MHz)
Bluetooth	Bluetooth v4.2 BR/EDR and BLE
	NZIF receiver with – 97 dBm sensitivity
	Class 1, class 2 and class 3 transmitters

Table B-2: Communication interfaces

Frequency bands and transmission power

Frequency bands	2.4 GHz ISM band (2,400 MHz to 2,484 MHz)

Maximum radiated transmitter power	20 dBm EIRP

Table B-3: Frequency bands

B.4 Environmental data

Protection class	IP67
Operating temperature	-40 °C to 75 °C
Bearing temperature	-40 °C to 85 °C
Max. permanent oil temperature	-40 °C to 110 °C
Short-term oil temperature	125 °C
Relative humidity	0 to 98%
Location of use	Industrial environment, assembly on gear unit
Connecting cable 8 pin. M12 bushing	< 30 m

Table B-4: Environmental data

B.5 Housing

Size (W x D x H)	70 mm x 70 mm x 35 mm
Weight	60 g
Material	PA66 GF35

Table B-5: Housing

B.6 Inputs and outputs

Digital outputs (DO1/DO2)

Application	Connection to PLC, relay or contactor
Model	High-side switch
Rated voltage	24 V
Max. output current	200 mA
Max. short-circuit current	700 mA
Short-circuit proof	Yes
Integrated freewheeling diode / max. energy	Yes / 1 Ws (1.0 J)
Max. cable length	< 30 m

Function assignment of digital output 1	Parameterisable, standard: status of gear unit
Function assignment of digital output 2	Parameterisable, standard: over/under temperature detected

Table B-6: Digital outputs (DO1/DO2)

Digital output (DO3)

Application	Connection to PLC
Model	OP-AMP
Rated voltage	24 V
Max. output current	10 mA
Max. short-circuit current	25 mA
Short-circuit proof	Yes
Max. switching frequency	10 kHz
Max. cable length	< 30 m
Function assignment of digital output 3	Pulse signal of speed

Table B-7: Digital output (DO3)

Analogue outputs (AO1/AO2)

Application	Connection to PLC
Rated voltage	24 V
Max. output current	20.5 mA
Short-circuit proof	Yes
Max. load	800 Ohm
Max. cable length	< 30 m
Function assignment of analogue output 1	Parameterisable, standard: Temperature output -40 ... 135 °C
Standard parameterisation	0 ... 20 mA
Function assignment of analogue input 2	Parameterisable, standard: Vibration velocity V_{rms} (DIN 10816-3)
Standard parameterisation	4 ... 20 mA

Table B-8: Analogue outputs (AO1/AO2)

Input (IN 1)

Input voltage	24 V

Model according to IEC 61131-2	Model 1
Max. input frequency	1 kHz
Function assignment input 1	Bluetooth pairing mode, RESET

Table B-9: Input (IN 1)

B.7 Sensor technology

Temperature measurement	Measuring range -40 °C to 135 °C/PT1000
Speed sensor	Switching frequency up to 10 kHz
Vibration sensor	± 2 g/4 g/8 g/16 g Triax-MEMS / Bandwidth 1 to 6,300 Hz

Table B-10: Sensor technology

B.8 Battery

Battery type	CR2032
Required temperature range	-40 °C... 85 °C
Recommended battery	Murata CR2032X / -40 ... 85 °C
	Panasonic CR2032A / -40 ... 125 °C

Table B-11: Battery

Index

DIGITAL PRODUCTS / SENSORS

AIQ Core
Operating instructions A6230-01en
Version 05/2024

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