

# INTUITY

The high-end model for best detection accuracy even for products with high product effect



THiNK

|                    |                    |  |
|--------------------|--------------------|--|
| <b>0,79<br/>mm</b> | <b>900<br/>kHz</b> | <b>Multi-<br/>simultaneous<br/>frequency</b> |
| Detection*         | Frequency          | Technology                                   |



Products with high product effect

Free advice

<https://www.sesotec.com/emea/en/contact>



## Multi-simultaneous frequency technology

INTUITY uses a combination of two frequencies depending on the product characteristics, and applies them simultaneously to the product under investigation. Every product leaves a „digital fingerprint“ (product effect). A metal trigger threshold (envelope) is calculated and stored around these points. All signals outside this threshold are automatically detected as metal. Signals within the threshold are assigned to the product effect.



## Compliance Package

Our all-inclusive food safety package guarantees compliant food production and process reliability when launching new products. In addition, the software ensures that the machines work perfectly at all times, product waste is reduced, and the machine is optimally protected against tampering thanks to paperless documentation.

## INTUITY Control Unit

- Intuitive user interface with 7" color touch display
- Quick access to important system functions through configurable start screens
- Permanent self-monitoring of all important system functions
- Simple setup process through menu-guided wizards
- Clear display of all operating messages and system states

\*Detection of stainless steel on an INTUITY 250/150

## Technical data

|  | INTUITY   | VARICON+ INTUITY   |
|--|---|--|
| <b>Detection accuracy</b>              | from Ø 0,79 mm V2A  | from Ø 0,79 mm V2A   |
| <b>Frequency bandwidth</b>             | up to 900 kHz   | up to 900 kHz  |
| <b>IP protection class</b>             | IP65, at the detection tunnel IP66/69 (optional with display cover IP66/69) | IP65 (optional with conveyor control cabinet to IP66/69K and signaling device to IP66) |
| <b>Display size</b>                    | 7" color touch display  | 7" color touch display   |
| <b>Min./Max. Tunnel size (DB x DH)</b> | 250/150 mm<br>700/350 mm  | 250/150 mm<br>600/400 mm   |
| <b>Number of available sizes</b>       | 163   | 8  |
| <b>Max. Product size</b>               |   | 500/350 mm   |
| <b>Ambient temperature</b>             | -10°C to +40°C  | -10°C to +40°C   |
| <b>Product temperature</b>             | -20°C to +80°C  | -20°C to +80°C (VARICON+D)<br>-20°C to +65°C (VARICON+W)                               |
| <b>Conveyor belt length</b>            |   | 1.300 or 1.800 mm with belt stop<br>1.800, 2.000 or 2.500 mm with rejector             |
| <b>Conveyor belt speed</b>             | 0,3 to 1,0 m/s best sensitivity<br>0,02 to 3,0 m/s max. possible            | 0,3 to 1,0 m/s best sensitivity<br>0,02 to 3,0 m/s max. possible                       |
| <b>Max. Belt loading</b>               |   | 20 kg (belt width up to 400 mm)<br>50 kg (from belt width 500 mm)                      |
| <b>Rejection systems</b>               |   | Belt stop<br>Pusher or blowing nozzle  |

## Software options

|                           |   |  |
|---------------------------|---|--|
| <b>Compliance Package</b> | Audit-Check, Compliance Mode, Sensitivity prediction in standard ICM and IVP optional | <b>Insight.NET</b><br>Sesotec memory module for data archiving |
| <b>THiNK</b>              | Artificial intelligence based software with annual or permanent license               |  |

## Accessories

- INTERLINK module**  
For connection with other networks
- Test bodies**  
In various sizes and configurations



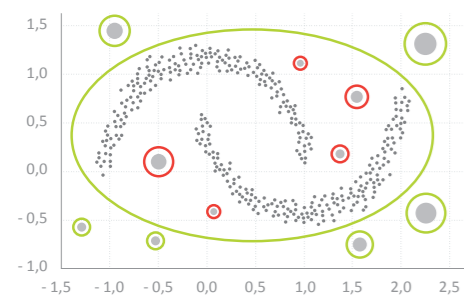
# THiNK

OPTIONS FOR INTUITY  
INTELLIGENT AI SOFTWARE FOR MAXIMUM DETECTION ACCURACY

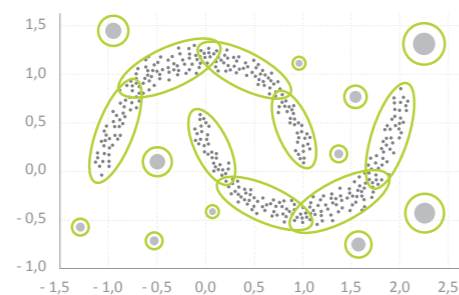
## THiNK – Metal Detection with Artificial Intelligence (AI)

The THiNK software is an additional option for products with very high product effects. THiNK is able to almost completely mask the product effect, thus increasing detection sensitivity and reducing false rejects. **Your advantage with Sesotec:** The software is based on artificial intelligence and independently draws conclusions from large amounts of data.

### Multi-simultaneous frequency



### THiNK Technology



Product effect    Detection threshold    Metal foreign body (detected)    Metal foreign body (not detected)

- Every product leaves a “digital fingerprint”
- A metal trigger threshold is calculated and stored around these points
- Inside the threshold, the signals are assigned to the product effect, outside detected as metal

- Multidimensional AI algorithms calculate the detection threshold more accurately and stably with each product
- AI models thus create multiple detection thresholds
- Detection sensitivity is thus significantly increased and false triggering reduced

### THiNK about it...

THiNK was developed specifically for the INTUITY. Different license models are possible for this intelligent software. Please feel free to contact us at any time to get started.

### Typical fields of application for artificial intelligence (AI)

- Better, more stable detection of products with high and/or fluctuating product effects (storage in brine or water, metalized packaging, etc.)
- The smallest metal contaminants are reliably detected, whereas they remained undetected with previous systems
- Hiding of RFID tags, for example on E2 containers filled with meat and sausage products



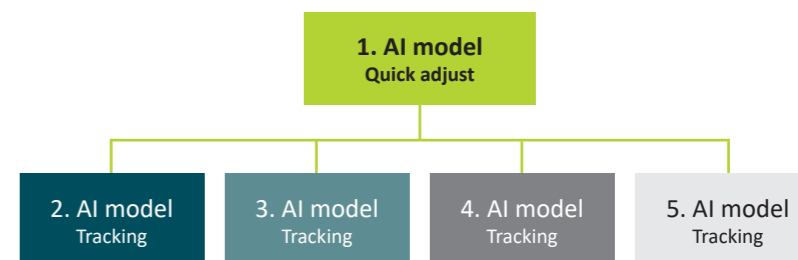
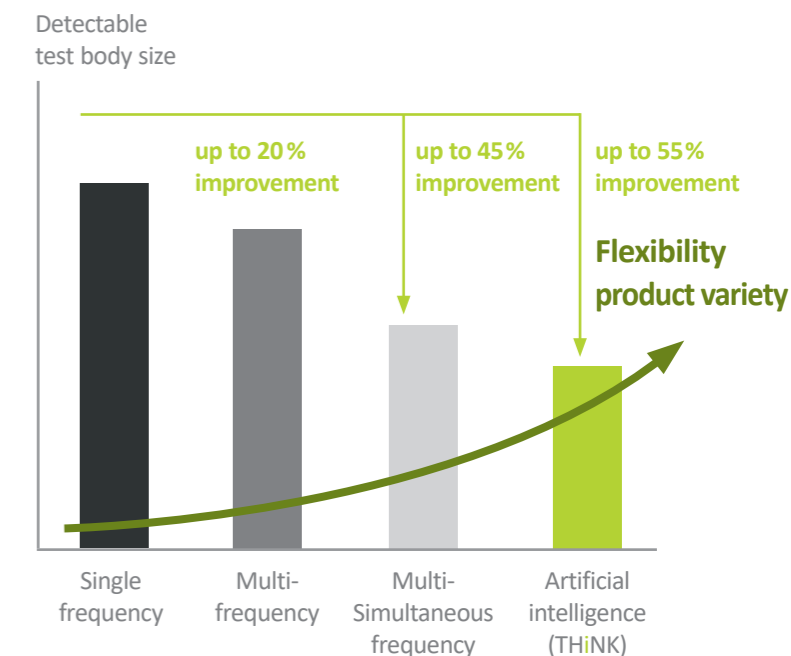
### THiNK Auto-Tracking

Production data and parameters are collected via this function, and used in AI model building. The various AI models are continuously adapted to production. This ensures reliable production with maximum detection performance.

### Advantages for the customer

- More security against product recalls
- Less food waste
- Increase in production efficiency
- Increase in product quality
- Higher profitability
- Reliable detection for products with high product effects

### Innovation leader through artificial intelligence

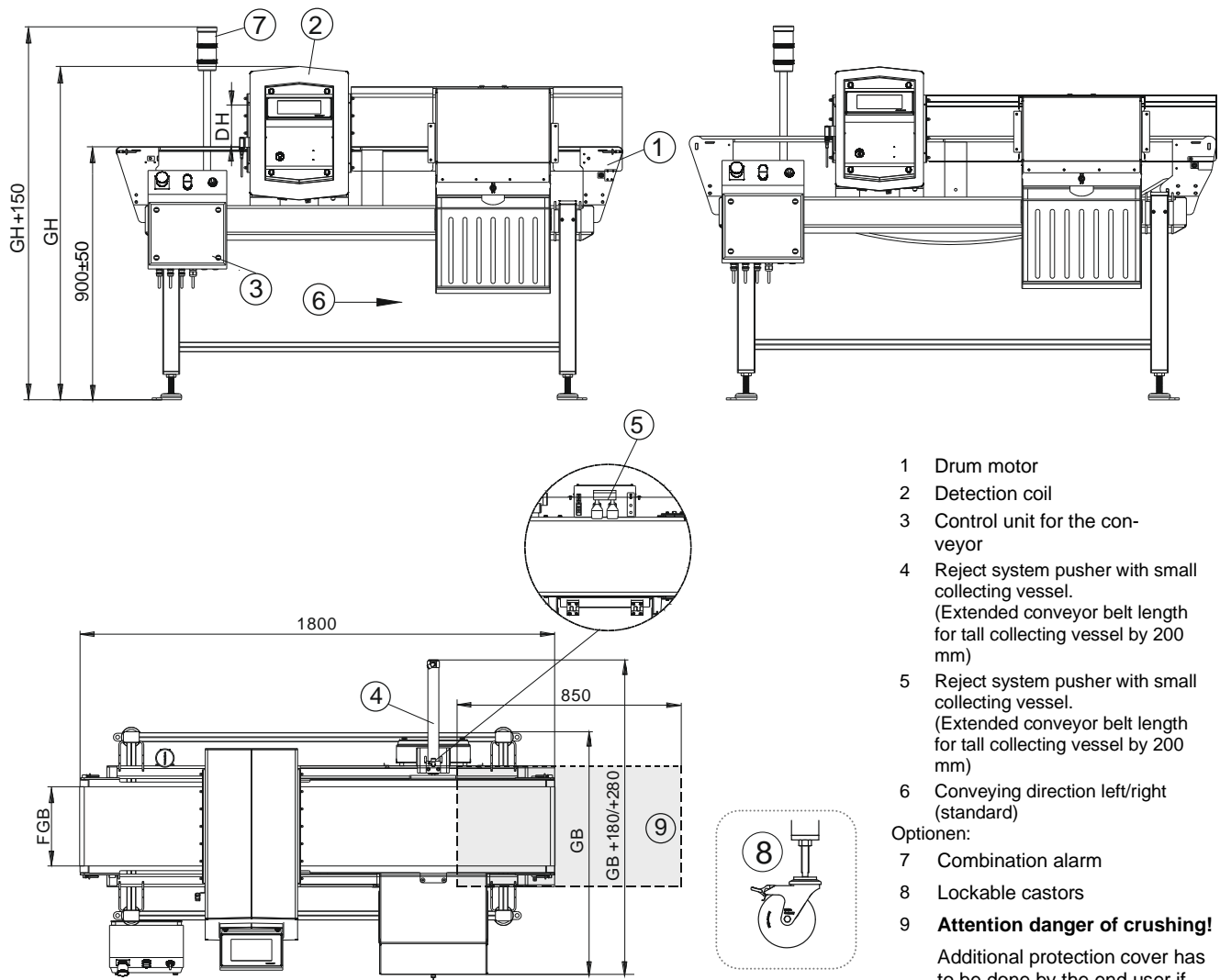


# VARICON+D/W metal detection system with reject system

## ■ Dimensions with INTUITY detection coil (Belt width 200-300 mm)

Version VARICON+D

Version VARICON+W



- 1 Drum motor
- 2 Detection coil
- 3 Control unit for the conveyor
- 4 Reject system pusher with small collecting vessel. (Extended conveyor belt length for tall collecting vessel by 200 mm)
- 5 Reject system pusher with small collecting vessel. (Extended conveyor belt length for tall collecting vessel by 200 mm)
- 6 Conveying direction left/right (standard)
- Optionen:
- 7 Combination alarm
- 8 Lockable castors
- 9 **Attention danger of crushing!**  
Additional protection cover has to be done by the end user if required.

All dimensions in mm

## ■ Technical data

| Type <sup>2)</sup>          | Con. belt length | Belt width | DB (Coil) | DH (Coil) | CU  | Max. product size FGB / DH | Conveyor belt dimensions |       | Roller diameter | Scanning sensitivity <sup>1)</sup> INTUITY |       |         |
|-----------------------------|------------------|------------|-----------|-----------|-----|----------------------------|--------------------------|-------|-----------------|--|-------|---------|
| VARICON                     |                  |            |           |           |     |                            | GB                       | GH±50 | +D/+W           | Ø Fe                                       | Ø V2A | Ø NonFe |
| VARICON+D/W INTUITY 250/150 | 1800             | 200        | 248       | 148       | -IC | 200/100                    | 920                      | 1140  | 32/50           | 0.60                                       | 0.90  | 0.60    |
| VARICON+D/W INTUITY 350/150 | 1800             | 300        | 348       | 148       | -IC | 300/100                    | 920                      | 1140  | 32/50           | 0.60                                       | 0.90  | 0.60    |
| VARICON+D/W INTUITY 350/200 | 1800             | 300        | 348       | 198       | -IC | 300/150                    | 920                      | 1190  | 32/50           | 0.70                                       | 1.00  | 0.70    |
| VARICON+D/W INTUITY 350/300 | 2000             | 300        | 348       | 298       | -IC | 300/250                    | 920                      | 1290  | 32/50           | 1.00                                       | 1.30  | 1.20    |

Units in **bold** are available on shorter delivery.

All dimensions in mm

<sup>1)</sup> The specified sensitivity (sphere Ø in mm) is related to the centre of the aperture of the detector (most unfavourable position). The achievable sensitivity within a product depends on its product effect (intrinsic conductivity caused by moisture, salt content etc.), the product temperature and environmental influences. The detectability of metal particles is also determined by their nature, shape and position. The operating range of the detection coil is 0.02 – 3.00 m/s. The stated scanning sensitivities apply to the speed range of 0.30 – 1.00 m/s. In case of a conveying speed of less than 0.30 m/s or more than 1.00 m/s please consult our back office.

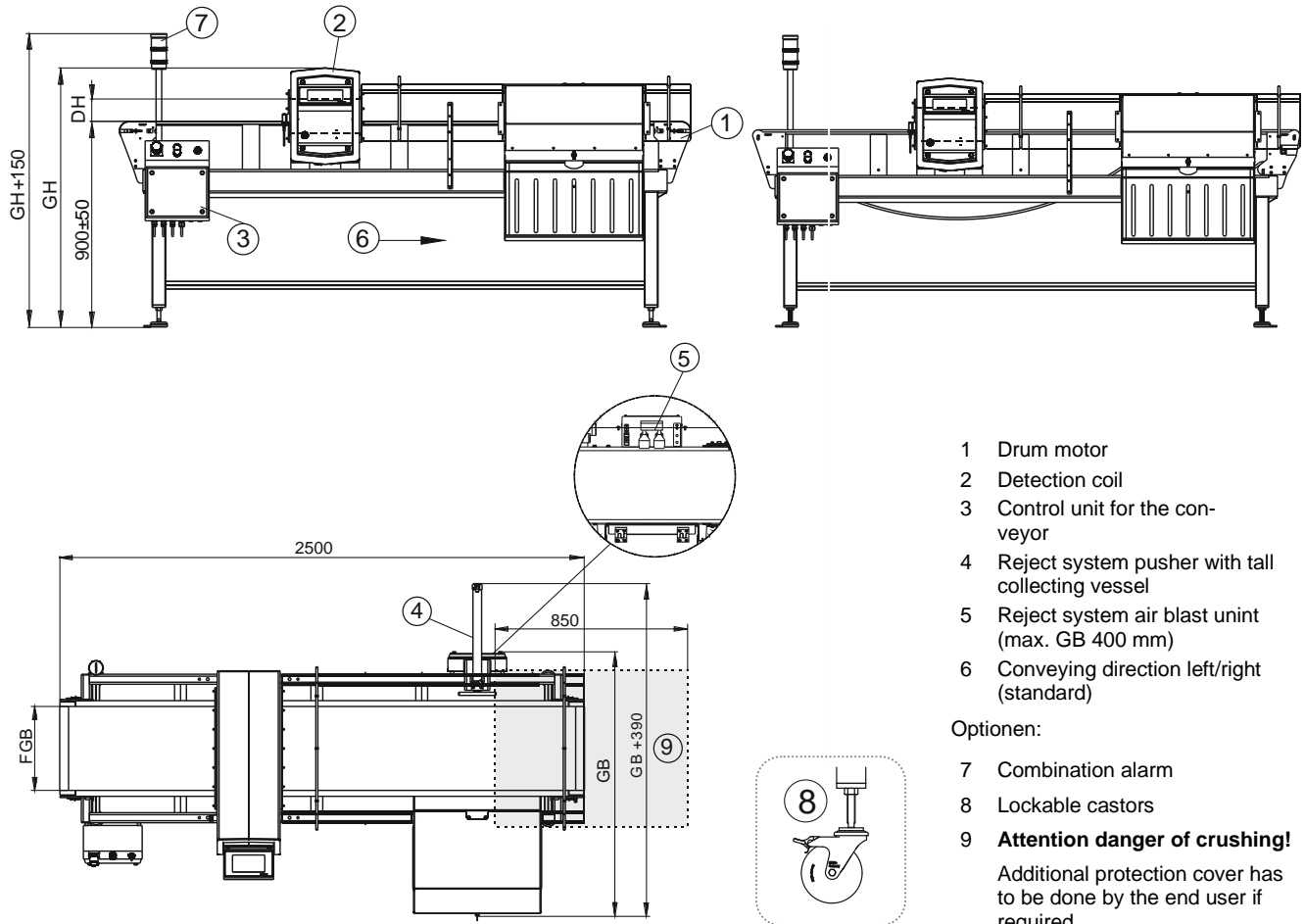
<sup>2)</sup> Example for Type-Naming: VARICON+D INTUITY 1800/200/250/150-IC.

# VARICON+D/W metal detection system with reject system

## ■ Dimensions with INTUITY detection coil (Belt width 400-500 mm)

Version VARICON+D

Version VARICON+W



- 1 Drum motor
- 2 Detection coil
- 3 Control unit for the conveyor
- 4 Reject system pusher with tall collecting vessel
- 5 Reject system air blast unit (max. GB 400 mm)
- 6 Conveying direction left/right (standard)

Options:

- 7 Combination alarm
- 8 Lockable castors
- 9 **Attention danger of crushing!**  
Additional protection cover has to be done by the end user if required.

All dimensions in mm

## ■ Technical data

| Type <sup>2)</sup>                 | VARICON         |            |            |                         |            | Max. product size<br>FGB / DH | Conveyor belt dimensions |       | Roller diameter<br>+D/+W |            | Scanning sensitivity <sup>1)</sup><br>INTUITY |       |          |
|------------------------------------|-----------------|------------|------------|-------------------------|------------|-------------------------------|--------------------------|-------|--------------------------|------------|---|-------|----------|
|                                    | Con.belt length | Belt width | DB (Coil)  | DH (Coil)               | CU         |                               | GB                       | GH±50 | Lo-ading                 | Un-loading | Ø Fe  | Ø V2A | Ø Non-Fe |
| VARICON+D/W INTUITY 500/200        | 2500            | 400        | 498        | 198                     | -IC        | 400/150                       | 1250                     | 1190  | 50/82                    |            | 0.80  | 1.10  | 0.80     |
| VARICON+D/W INTUITY 500/300        | 2500            | 400        | 498        | 298                     | -IC        | 400/250                       | 1250                     | 1290  | 50/82                    |            | 1.20  | 1.50  | 1.20     |
| <b>VARICON+D/W INTUITY 600/300</b> | <b>2500</b>     | <b>500</b> | <b>598</b> | <b>298</b>              | <b>-IC</b> | 500/250                       | 1250                     | 1290  | 110/70                   | 110/161    | 1.20  | 1.50  | 1.50     |
| <b>VARICON+D/W INTUITY 600/400</b> | <b>2500</b>     | <b>500</b> | <b>598</b> | <b>398<sup>1)</sup></b> | <b>-IC</b> | 500/350                       | 1250                     | 1450  | 110/70                   | 110/161    | 1.50  | 1.80  | 2.00     |

Units in **bold** are available on shorter delivery. All dimensions in mm

<sup>1)</sup> The specified sensitivity (sphere Ø in mm) is related to the centre of the aperture of the detector (most unfavourable position). The achievable sensitivity within a product depends on its product effect (intrinsic conductivity caused by moisture, salt content etc.), the product temperature and environmental influences. The detectability of metal particles is also determined by their nature, shape and position. The operating range of the detection coil is 0.02 – 3.00 m/s. The stated scanning sensitivities apply to the speed range of 0.30 – 1.00 m/s. In case of a conveying speed of less than 0.30 m/s or more than 1.00 m/s please consult our back office.

<sup>2)</sup> Example for Type-Naming: VARICON+D INTUITY 2500/400/500/200-IC.

## VARICON+D/W metal detection system with reject system

### ■ Conditions of use

|   |  |
|---|--|
| <b>Use:</b>                             | For the inspection of packed (non-metallic packing material), unpacked products and bulk materials in a dry environment                        |
| <b>Maximum loading:</b>                 | 20 kg (up to belt width 400 mm), respectively 50 kg (from belt width 500 mm)   |
| <b>Product data:</b>                    | Max. product weight: Reject system pusher 5 kg<br>Reject system air blast unit 0.5 kg (depending on the product shape, product test necessary) |
|   | Max. product length: 250 mm (reject system with small collecting vessel);<br>450 mm (reject system with tall connecting vessel)                |
| <b>Product temperature:</b>             | -20 °C to +80 °C (VARICON+D)<br>-20 °C to +65 °C (VARICON+W)   |
| <b>Ambient conditions:</b>              | -10 °C to +40 °C, 25 % to 85 % rF, no condensation   |
| <b>Storage and shipping conditions:</b> | -10 °C to +50 °C, 25 % to 85 % rF, no condensation   |

### ■ Standard design

|                                   |   |
|-----------------------------------|---|
| <b>Scope of delivery:</b>         | Flat belt conveyor equipped (VARICON+D) / interlinked conveyor equipped (VARICON+W) with metal detector INTUITY, INTUITY CONTROL and electronic conveyor control, pneumatic reject system, lockable reject box and transparent belt cover   |
| <b>Mechanical design:</b>         | Conveyor and metal detector made of stainless steel 1.4301 (AISI 304), glass bead blasted<br>Open static frame construction with height adjustable base and fastening bore holes, made of stainless steel 1.4301 (AISI 304), glass bead blasted<br>Pneumatic cylinder partly made of aluminium<br>Drive, deflection and stretching rollers made of stainless steel 1.4301 (AISI 304)<br>Deflection and stretching rollers made of polyamide 6 (PA 6) natural (VARICON+W)<br>Drive motor with thermo monitor<br>TPU-belt made of white FDA quality (VARICON+D)<br>PE-link belt (discretely exchangeable) white FDA quality, washable (VARICON+W)<br>Aperture height (DH) of the metal detector adjustable by replacing the head mount brackets (±20 mm)<br>Pneumatic reject unit with lockable reject box made of stainless steel and transparent belt cover |
| <b>Electrical design:</b>         | Combined control unit for conveyor and metal detector<br>Accessible wiring within the open static conveyor frame<br>Main switch for the system, on / off switch for the belt conveyor, emergency switch, USB, Ethernet Interface (TCP/IP 100 Mbit/s, IP67, RJ45)  |
| <b>Mains cable:</b>               | 1.8 m with 3-pole CEE plug blue (1L+N+PE)   |
| <b>Operating voltage:</b>         | 230V AC (± 10 %), 50/60 Hz, single phase  |
| <b>Current consumption:</b>       | VARICON+D: Max. 2.0 A (up to belt 400 mm), respectivel max. 4.5 A (from belt width 500 mm)<br>VARICON+W: Max. 2.0 A (up to belt 300 mm), respectivel. max. 4.5 A (from belt width 400 mm)   |
| <b>Motor power:</b>               | VARICON+D: 120 W (up to belt 400 mm), respectivel 150 – 370 W (from belt width 500 mm)<br>VARICON+W: 120 W (up to belt 300mm), respectivel 150 – 370 W (from belt width 400 mm)   |
| <b>Metal detector:</b>            | 100 W   |
| <b>Type of protection:</b>        | Designed conform to IP 65, NEMA 4   |
| <b>Conveyor belt speeds:</b>      | 0.2 m/sec, 0.4 m/sec, 0.6 m/sec, 1.0 m/sec (factory preset range -60% to +30%)<br>*) max. 1.0 m/s; Starting from 0.8 m/s increased abrasive wear and noise (VARICON+W)  |
| <b>Reject system:</b>             | Pusher or air blast unit (depending on application)<br>Photo eye for accurate separation of all discrete products   |
| <b>Compressed-air connection:</b> | 6-8 bar, plug nipple NW 7.2   |

### ■ Conveying direction

- Left/right (standard)       right/left (option)

## VARICON+D/W metal detection system with reject system

### ■ Versions

- Construction VARICON+W (not in connection with construction VARICON+D)
  - Air blast unit with small collecting vessel, cover and light barrier at the metal detector entrance (only in combination with belt width 200 and 300)
  - Air blast unit with tall collecting vessel, cover and light barrier at the metal detector entrance (only in combination with belt width 200, 300 and 400)
  - Pusher with small collecting vessel, cover and light barrier at the metal detector entrance and safety units (only in combination with conveyor belt width 200 and 300)
  - Pusher with tall collecting vessel, cover and light barrier at the metal detector entrance and safety units
- Conveyor
  - mobile version with lock-type rolls Ø 125 mm (detectable)
  - mobile version with lock-type rolls Ø 125 mm with rubber-coated surface (detectable)
- Different conveyor heights
  - fixed version: 700, 800, 1000 mm +/-50 mm
  - mobile version with lock-type rolls: 750 (only for belt width 400 and 500), 800 or 1000 mm +/-50 mm (only in combination with mobile version of conveyor with lock-type rolls)
- Conveyor belt extension
  - at the inlet (in 100 mm steps up to max. 500 mm)

### ■ Options

- Higher Level Security Package - Software and sensors setup for "higher level compliant fail safe system"
 

Package includes:

  - Sensors (among others compressed-air monitor, reject monitor, level indicator for container)
  - Combination alarm (4 visual/audible) (only in combination with reject system air blast unit or reject system pusher)
- Signal device
  - Combination alarm (visual/audible); failure and metal indication - mounted on signal tower (not in combination with Higher Level Security Package)
  - Combination alarm (4 visual/audible); failure, metal, audit check and system ready indication - mounted on signal tower (not in combination with Higher Level Security Package - already included in Package price)
- Signal device according to IP66 protection rating (not in combination with Design VARICON+W and combination alarm)
- COMGateway-Embedded (not in combination with PROFINET)
- PROFINET (not in combination with COMGateway. Embedded)
- Variable speed drive
- Closed linked belt (only in combination with Design VARICON+W)
- Blue colored belt, FDA compliant
- Compressed-air monitor (not in combination with Higher Level Security Package - already included in Package price)
- Reject monitor (not in combination with Higher Level Security Package - already included in Package price)
- Level indicator for container (not in combination with Higher Level Security Package - already included in Package price)
- Protection cover for display of the control unit (according to IP66/69K protection rating) for water jet cleaning
- Conveyor control cabinet according to IP66/69K protection rating (only in combination with Design VARICON+W and signal device according to IP66)

### ■ Accessories

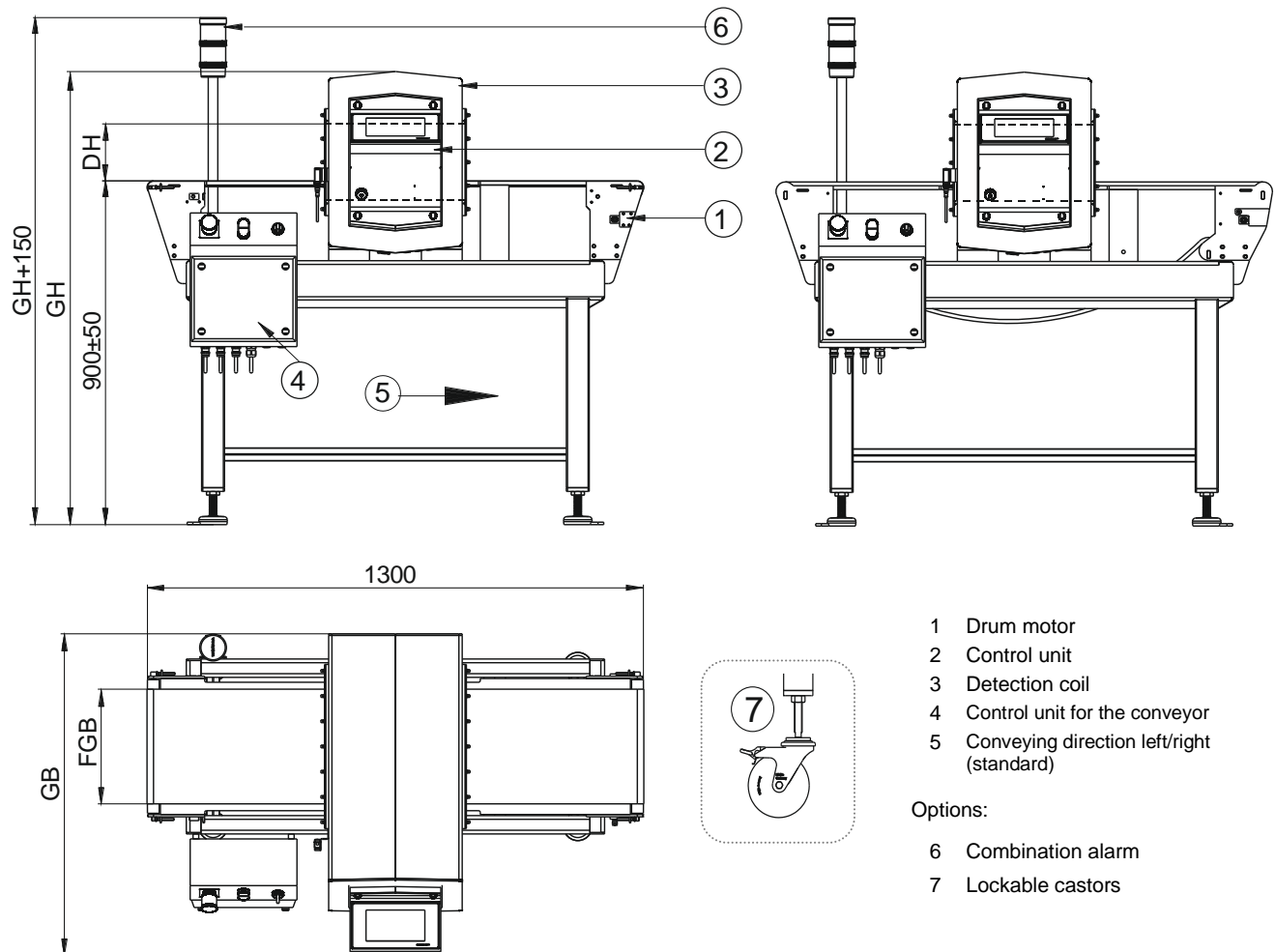
- Test samples
- Insight.NET (visualization, data saving and remote maintenance)
- INTERLINK
- License THINK
  - 1 Year license (please refer to separate data sheet)
  - Permanent license (please refer to separate data sheet)
- License Integrated Compliance Monitoring (ICM) inclusive hardware (Permanent licence; A permanent licence could be purchased per every single device. The usage period in unlimited).
- License Integrated Validation (IVP) (Permanent licence; A permanent licence could be purchased per every single device. The usage period in unlimited).

# VARICON+D/W metal detection system standard version

## Standard version with INTUITY detection coil (Belt width 200-300 mm)

Version VARICON+D

Version VARICON+W



- 1 Drum motor
  - 2 Control unit
  - 3 Detection coil
  - 4 Control unit for the conveyor
  - 5 Conveying direction left/right (standard)
- Options:
- 6 Combination alarm
  - 7 Lockable castors

All dimensions in mm

## Technical data

| Type <sup>4)</sup>          |                  |            |           |           |     | Max. product size | Conveyor belt dimensions |                  |         | Roller diameter | Scanning sensitivity <sup>1)</sup> |      |      |
|-----------------------------|------------------|------------|-----------|-----------|-----|-------------------|--------------------------|------------------|---------|-----------------|------------------------------------|------|------|
| VARICON                     | Con. belt length | Belt width | DB (Coil) | DH (Coil) | CU  | FGB/DH            | GB <sup>2)</sup>         | GB <sup>3)</sup> | GH±50   | +D/+W           | INTUITY                            |      |      |
|                             |                  |            |           |           |     |                   | Ø Fe                     | Ø V2A            | Ø NonFe |                 |                                    |      |      |
| VARICON+D/W INTUITY 250/150 | 1300             | 200        | 248       | 148       | -IC | 200/100           | 750                      | 930              | 1140    | 32/50           | 0.60                               | 0.90 | 0.60 |
| VARICON+D/W INTUITY 350/150 | 1300             | 300        | 348       | 148       | -IC | 300/100           | 850                      | 930              | 1140    | 32/50           | 0.60                               | 0.90 | 0.60 |
| VARICON+D/W INTUITY 350/200 | 1300             | 300        | 348       | 198       | -IC | 300/150           | 850                      | 930              | 1190    | 32/50           | 0.70                               | 1.00 | 0.70 |
| VARICON+D/W INTUITY 350/300 | 1300             | 300        | 348       | 298       | -IC | 300/250           | 855                      | 930              | 1290    | 32/50           | 1.00                               | 1.30 | 1.20 |

Units in **bold** are available on shorter delivery. All dimensions in mm

<sup>1)</sup> The specified sensitivity (sphere Ø in mm) is related to the centre of the aperture of the detector (most unfavourable position). The achievable sensitivity within a product depends on its product effect (intrinsic conductivity caused by moisture, salt content etc.), the product temperature and environmental influences. The detectability of metal particles is also determined by their nature, shape and position. The operating range of the detection coil is 0.02 – 3.00 m/s. The stated scanning sensitivities apply to the speed range of 0.30 – 1.00 m/s. In case of a conveying speed of less than 0.30 m/s or more than 1.00 m/s please consult our back office.

<sup>2)</sup> Fixed belt conveyor (standard).

<sup>3)</sup> Dimension with option mobile belt conveyor.

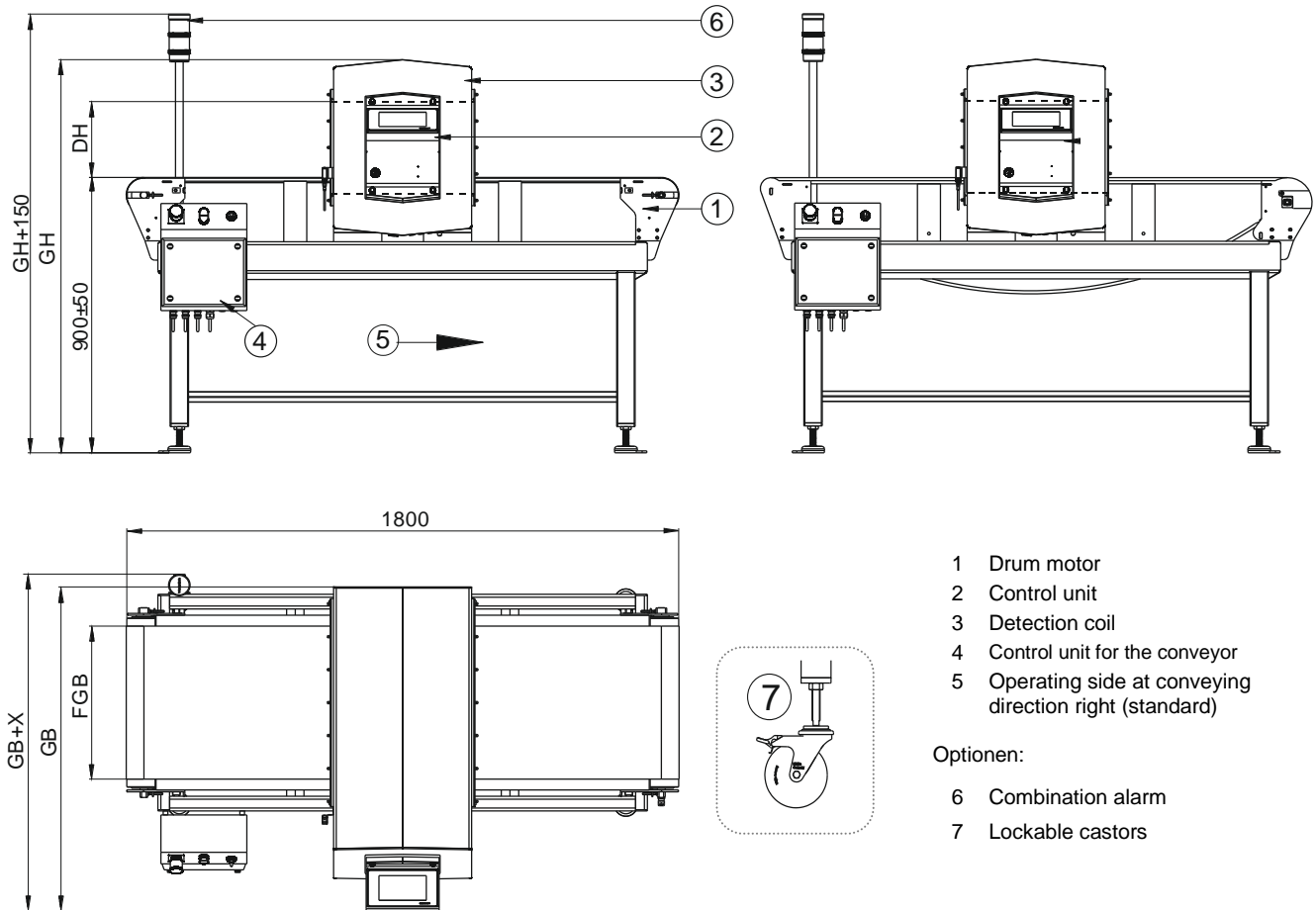
<sup>4)</sup> Example for Type-Naming: VARICON+D INTUITY 1300/200/250/150-IC.

# VARICON+D/W metal detection system standard version

## Standard version with INTUITY detection coil (Belt width 400-500 mm)

Version VARICON+D

Version VARICON+W



All dimensions in mm

## Technical data

| Type <sup>2)</sup>                 |                 |            |            |                         |            | Max. product size<br>FGB/DH | Conveyor belt dimensions |       | Roller-diameter +D/+W |            | Scanning sensitivity <sup>1)</sup> INTUITY |       |         | GB+X |
|------------------------------------|-----------------|------------|------------|-------------------------|------------|-----------------------------|--------------------------|-------|-----------------------|------------|--|-------|---------|------|
| VARICON                            | Con.belt length | Belt width | DB (Coil)  | DH (Coil)               | CU         |                             | GB                       | GH±50 | Lo-ading              | Unlo-ading | Ø Fe                                       | Ø V2A | Ø NonFe |      |
| VARICON+D/W INTUITY 500/200        | 1800            | 400        | 498        | 198                     | -IC        | 400/150                     | 990                      | 1190  | 82/50                 |            | 0.70                                       | 1.00  | 0.70    | X=50 |
| VARICON+D/W INTUITY 500/300        | 1800            | 400        | 498        | 298                     | -IC        | 400/250                     | 1005                     | 1290  | 82/50                 |            | 1.20                                       | 1.50  | 1.20    | X=50 |
| <b>VARICON+D/W INTUITY 600/300</b> | <b>1800</b>     | <b>500</b> | <b>598</b> | <b>298</b>              | <b>-IC</b> | 500/250                     | 1105                     | 1290  | 110/70                | 110/161    | 1.20                                       | 1.50  | 1.50    | X=10 |
| <b>VARICON+D/W INTUITY 600/400</b> | <b>1800</b>     | <b>500</b> | <b>598</b> | <b>398<sup>3)</sup></b> | <b>-IC</b> | 500/350                     | 1165                     | 1450  | 110/70                | 110/161    | 1.50                                       | 1.80  | 2.00    | X= 0 |

Units in **bold** are available on shorter delivery.

All dimensions in mm

<sup>1)</sup> The specified sensitivity (sphere Ø in mm) is related to the centre of the aperture of the detector (most unfavourable position). The achievable sensitivity within a product depends on its product effect (intrinsic conductivity caused by moisture, salt content etc.), the product temperature and environmental influences. The detectability of metal particles is also determined by their nature, shape and position. The operating range of the detection coil is 0.02 – 3.00 m/s. The stated scanning sensitivities apply to the speed range of 0.30 – 1.00 m/s. In case of a conveying speed of less than 0.30 m/s or more than 1.00 m/s please consult our back office

<sup>2)</sup> Example for Type-Naming: VARICON+D INTUITY 1800/400/500/200-IC

<sup>3)</sup> No product reduction possible

## VARICON+D/W metal detection system standard version

### ■ Conditions of use

|   |  |
|---|--|
| <b>Use:</b>                             | For the inspection of packed (non-metallic packing material), unpacked products and bulk materials |
| <b>Maximum loading:</b>                 | 20 kg (up to belt width 400 mm), respectively 50 kg (from belt width 500 mm)                       |
| <b>Product temperature:</b>             | -20 °C to +80 °C (VARICON+D)<br>-20 °C to +65 °C (VARICON+W)                                       |
| <b>Ambient conditions:</b>              | -10 °C to +40 °C, 25 % bis 85 % rF, no condensation  |
| <b>Storage and shipping conditions:</b> | -10 °C to +50 °C, 25 % bis 85 % rF, no condensation  |

### ■ Standard design

|                              |   |
|------------------------------|---|
| <b>Scope of delivery:</b>    | Flat belt conveyor equipped (VARICON+D) / Interlinked conveyor equipped (VARICON+W) with metal detector INTUITY, INTUITY CONTROL and integrated electronic conveyor control.  |
| <b>Mechanical design:</b>    | Conveyor belt and metal detector made of stainless steel 1.4301 (AISI 304), glass bead blasted<br>Open static frame construction with height adjustable base and fastening bore holes, made of stainless steel 1.4301 (AISI 304), glass bead blasted<br>Drive, deflection and stretching rollers made of stainless steel 1.4301 (AISI 304) (VARICON+D)<br>Drive rollers made of stainless steel 1.4301 (AISI 304), deflection and stretching rollers made of polyamide 6 (PA 6) natural (VARICON+W)<br>Drive motor with thermo monitor<br>TPU-belt made of white FDA quality (VARICON+D)<br>PE-link belt (discretely exchangeable) white FDA quality, washable (VARICON+W)<br>Aperture height (DH) of the metal detector adjustable by replacing the head mount brackets (+ or - 20 mm) |
| <b>Electrical design:</b>    | Combined controller and control panel for conveyor and metal detector<br>Factory set stop on detect<br>Accessible wiring within the open static conveyor frame<br>Main switch for the system, on / off switch for the belt conveyor, emergency switch, USB, Ethernet Interface (TCP/IP 100 Mbit/s, IP67, RJ45)  |
| <b>Mains cable:</b>          | 1.8 m with 3-pole CEE plug blue (1L+N+PE)   |
| <b>Operating voltage:</b>    | 230V AC (± 10%), 50/60 Hz, single phase   |
| <b>Current consumption:</b>  | VARICON+D: Max. 2.0 A (up to belt 400 mm), respectively maximum 4.5 A (from belt width 500 mm)<br>VARICON+W: Max. 2.0 A (up to belt 300 mm), respectively maximum 4.5 A (from belt width 400 mm)  |
| <b>Motor power:</b>          | VARICON+D: 120 W (up to belt width 400 mm), respectively 150 – 370 W (from belt width 500 mm)<br>VARICON+W: 120 W (up to belt width 300 mm), respectively 150 – 370 W (from belt width 500 mm)  |
| <b>Metal detector:</b>       | 100 W   |
| <b>Type of protection:</b>   | Designed conform to IP 65, NEMA 4   |
| <b>Conveyor belt speeds:</b> | 0.2 m/s, 0.4 m/s, 0.6 m/s, 1.0 m/s*) (factory preset range -60% to +30%)<br>*) max. 1.0 m/s; Starting from 0.8 m/s increased abrasive wear and noise (VARICON+W)  |

### ■ Conveying direction

- Left/right (standard)       right/left (option)

### ■ Versions

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> Reject system                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Conveyor belt stop in case of metal detection, without reject system</li> </ul> </li> <li><input type="checkbox"/> Conveyor                             <ul style="list-style-type: none"> <li><input type="checkbox"/> mobile version with lock-type rolls Ø 125 mm (detectable)</li> <li><input type="checkbox"/> mobile version with lock-type rolls Ø 125 mm with rubber coated surface (detectable)</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Different conveyor heights                             <ul style="list-style-type: none"> <li><input type="checkbox"/> fixed version: 700, 800, 1000 mm +/-50 mm</li> <li><input type="checkbox"/> mobile version with lock-type rolls: 750, 800 oder 1000 mm +/-50 mm (only in combination with mobile version of conveyor with lock-type rolls)</li> </ul> </li> <li><input type="checkbox"/> Conveyor belt extension                             <ul style="list-style-type: none"> <li><input type="checkbox"/> at the inlet (in 100 mm steps up to max. 500 mm)</li> <li><input type="checkbox"/> at the outlet (in 100 mm steps up to max. 500 mm - not in combination with Reject system air blast or pusher)</li> <li><input type="checkbox"/> at the in- and outlet (in 100 mm steps up to max. 500 mm on each side - not in combination with Reject system air blast or pusher)</li> </ul> </li> </ul> |
|---|--|

## VARICON+D/W metal detection system standard version

### Options

- Signal device
  - Combination alarm (visual/audible); failure and metal indication - mounted on signal tower
  - Combination alarm (4 visual/audible); failure, metal, audit check and system ready indication - mounted on signal tower
- Signal device according to IP66 protection rating (not in combination with Design VARICON+W and Combination alarm)
- COMGateway.Embedded (not in combination with PROFINET)
- PROFINET (not in combination with COMGateway.Embedded)
- Variable speed drive
- Guide beads (height = 50 mm)
  - continuous (only in combination with Conveyor belt length up to 1300 mm)
  - continuous (only in combination with Conveyor belt length up to 1800 mm)
  - continuous (only in combination with Conveyor belt length up to 2800 mm)
- Closed linked belt (only in combination with Design VARICON+W)
- Blue colored belt, FDA compliant
- Light barrier at the metal detector entrance (not in combination with Reject system air blast or pusher - already included)
- Protection cover for display of the control unit (according to IP66/69K protection rating) for water jet cleaning
- Conveyor control cabinet according to IP66/69K protection rating (only in combination with Design VARICON+W and signal device according to IP66)

### Accessories

- Test samples
- Insight.NET (visualization, data saving and remote maintenance)
- INTERLINK
- License THiNK
  - 1 Year license (please refer to separate data sheet)
  - Permanent license (please refer to separate data sheet)
- License Integrated Compliance Monitoring (ICM) inclusive hardware (Permanent licence; A permanent licence could be purchased per every single device. The usage period in unlimited)
- License Integrated Validation (IVP) (Permanent licence; A permanent licence could be purchased per every single device. The usage period in unlimited)