

## Metal Detector Secus<sup>®</sup>



German Quality

### ! Benefits

- Frequency range 5 – 50 kHz
- Highly developed electronics to compensate for the product effect
- 5.7-inch color touch screen display
- Robust design
- Easy integration into existing product lines
- Searchcoil C/D optional IP66
- Memory for 200 types of products
- “Made in Germany” quality

For many years now, Minebea Intec has been active in the field of metal detection technology and is a reliable partner for companies operating in the fields of chemical engineering, rubber, timber, and coal processing, recycling, and mining.

To ensure proper integration into your production process, Secus<sup>®</sup> is available in various designs:

- **Secus<sup>®</sup>-C:**  
The standard coil which ensures maximum sensitivity.
- **Secus<sup>®</sup>-D:**  
The divisible coil which can be installed around your conveyor belts without separating them. It can also be removed without affecting the conveyor belt.
- **Secus<sup>®</sup>-U:**  
The under-belt coil which is positioned beneath the conveyor belt.

## Application

Secus<sup>®</sup> provides highly efficient and effective protection for your machines. It prevents metallic foreign bodies from entering your production process and therefore keeps downtimes for repairs to a minimum. Your employees are also reliably protected against injury from spalling metallic parts.

High-quality materials and an in-house production process marked with the quality seal "Made in Germany" combine to achieve a product of unsurpassed quality.

Specially designed for heavy industry, it is the robust design and detection sensitivity that particularly stand out, having been especially optimized for the extractive industry.

## Technology

In order to ensure the highest levels of sensitivity and safety, Secus<sup>®</sup> provides a learning function for the monitored product. This allows the system to adapt to changing ambient conditions by compensating for the product effect.

Secus<sup>®</sup> enables up to four search coils to be operated via a single control unit (human interface) and allows for centralized management of your quality assurance process. This process can also be implemented by means of an electronic system that is separated from the search coil (max. 100 m). The task of monitoring the quality of the product flow is therefore made easy, even in cases where the coils are difficult for the operator to access. In addition, Secus<sup>®</sup> provides a range of data interfaces to ensure the easy integration of data into your production system.

Secus<sup>®</sup> offers an intuitive user interface with integrated user management. Various password-protected user authorizations can be assigned on request. The log function can be used to keep a record of every change to the settings and assign each change to a user. This function, which Minebea Intec includes in its standard design, guarantees you complete transparency of your production process at all times.

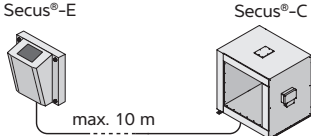
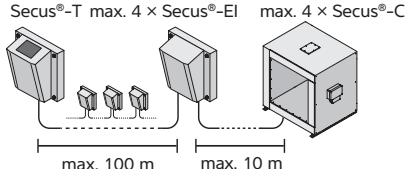
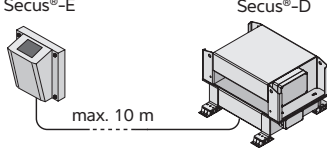
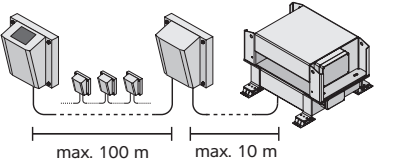
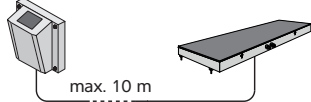
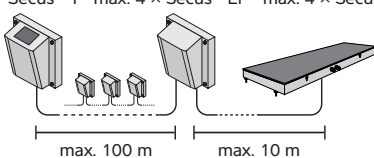
As an option, Secus<sup>®</sup> can be equipped with a reduced metal-free zone in order to rule out the possibility of interference in the direct vicinity of the search coil resulting from upstream or downstream production processes.

## Technical specifications

Metal Detector Secus®	
Parameter	Description
Dimensions	See technical drawings. Other sizes available on request.
Ambient temperature	Operating range: -10 to +55°C
Product temperature	-30 to +55°C, up to +150°C if equipped with air cooling
Housing	AISI 304 (1.3305) Steel (painted)
Data interfaces	TCP/IP, RS-232, RS-422, CAN bus, fieldbus and profibus interface
Protection class	IP55: Secus®-C/D/U IP66: Secus®-C/D (optional) IP65: Secus®-T/E/EI/EU/EUI
Power supply	90 V – 260 V
Voltage frequency	47 Hz – 63 Hz
Outputs	3 freely programmable error outputs 1 fixed output
Weight	5 to 500 kg depending on design
Options	<ul style="list-style-type: none"><li>– Log-in by means of fingerprint sensor</li><li>– Remote control</li><li>– End position monitoring</li><li>– Rejection monitoring</li><li>– USB print</li><li>– and much more</li></ul>



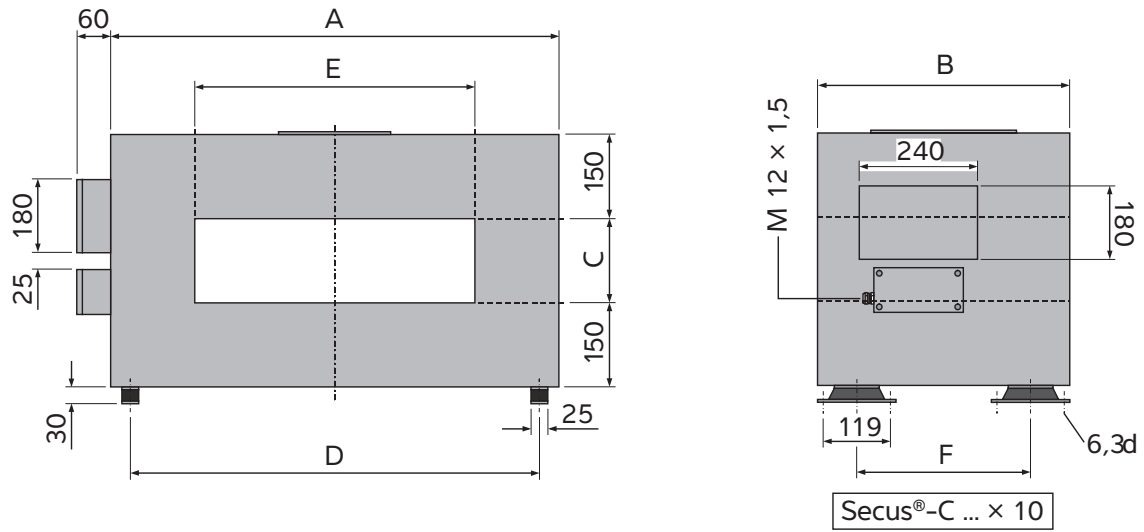
## Evaluation electronic junction

	Device	Function
 <p>Secus®-E      Secus®-C</p> <p>max. 10 m</p>	<b>Secus®-E</b> (Electronic)	Separate operator terminal with evaluation electronics
	<b>Secus®-C</b> (Compact)	Metal detector
 <p>Secus®-T max. 4 × Secus®-EI max. 4 × Secus®-C</p> <p>max. 100 m      max. 10 m</p>	<b>Secus®-T</b> (Terminal)	Separate operator terminal
	<b>Secus®-EI</b> (Electronic Interface)	Separate evaluation electronics (max. 4 × in series)
	<b>Secus®-C</b> (Compact)	Metal detector (max. 4 × in series)
 <p>Secus®-E      Secus®-D</p> <p>max. 10 m</p>	<b>Secus®-E</b> (Electronic)	Separate operator terminal with evaluation electronics
	<b>Secus®-D</b> (Divisible)	Metal detector
 <p>Secus®-T max. 4 × Secus®-EI max. 4 × Secus®-D</p> <p>max. 100 m      max. 10 m</p>	<b>Secus®-T</b> (Terminal)	Separate operator terminal
	<b>Secus®-EI</b> (Electronic Interface)	Separate evaluation electronics (max. 4 × in series)
	<b>Secus®-D</b> (Divisible)	Metal detector (max. 4 × in series)
 <p>Secus®-EU      Secus®-U</p> <p>max. 10 m</p>	<b>Secus®-EU</b> (Electronic for under-belt)	Separate operator terminal with evaluation electronics
	<b>Secus®-U</b> (Under-belt)	Under-belt metal detector
 <p>Secus®-T max. 4 × Secus®-EIU max. 4 × Secus®-U</p> <p>max. 100 m      max. 10 m</p>	<b>Secus®-T</b> (Terminal)	Separate operator terminal
	<b>Secus®-EIU</b> (EI for under-belt)	Separate evaluation electronics (max. 4 × in series)
	<b>Secus®-U</b> (Under-belt)	Under-belt metal detector (max. 4 × in series)

The technical data given are intended solely as a product description and should not be conceived as guaranteed properties in the legal sense.

# Technical diagrams

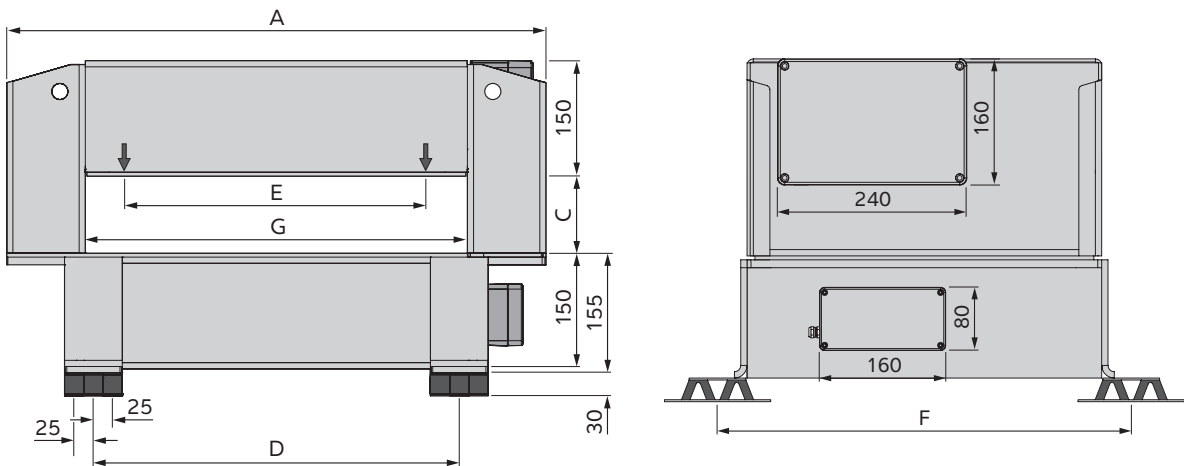
Secus®-C



Height dimensions

Width dimensions	C		E																A	D			
	100	125	150	175	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200					
150																					450	400	
200																						500	450
250																						550	500
300																						600	550
350																						650	600
400																						700	650
500																						800	750
600																						900	850
700																						1000	950
800																						1100	1000
900																						1200	1100
1000																						1300	1200
1100																						1400	1300
1200																						1500	1400
1300																						1600	1500
1400																						1700	1600
1500																						1800	1700
1600																						1900	1800
B	400	425	450	475	500	550	600	650	680						900								
F	260	285	310	335	360	336	154	170	280						900								

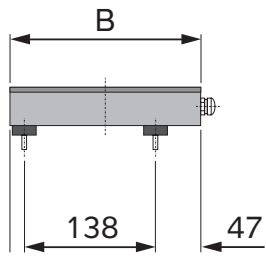
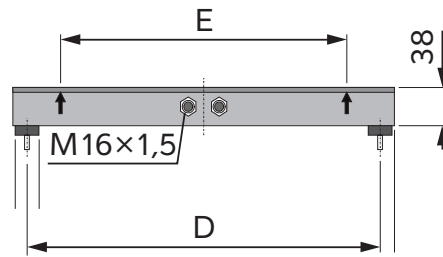
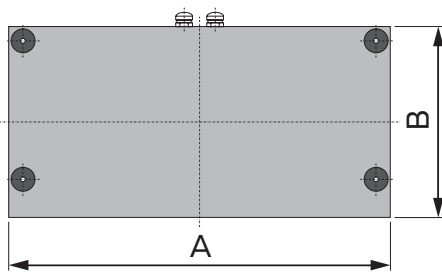
Fields highlighted in light grey indicate the available sizes.



Height dimensions

Width dimensions	Height dimensions																A	D	G					
	E	C	100	150	200	250	300	350	400	450	500	550	600	650	700	800				900	1000	1100	1200	
200																						700	475	496
300																						800	575	596
400																						900	675	696
500																						1000	775	796
600																						1100	875	896
650																						1150	925	946
800																						1300	1075	1096
900																						1400	1175	1196
1000																						1500	1275	1296
1200																						1700	1475	1496
1400																						1900	1675	1696
1600																						2100	1875	1896
1800																						2300	2075	2096
2000																						2500	2275	2296
2200																						2700	2475	2496
F			525					675																

Fields highlighted in light grey indicate the available sizes.

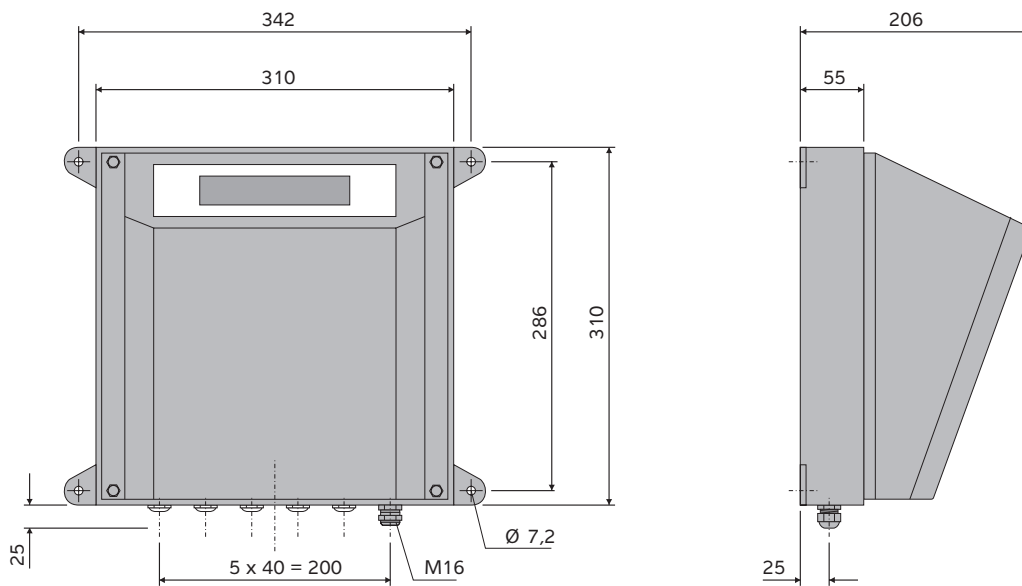


Dimensions

Secus®-U	A	B	D	E	
30	400	200	370	300	
40	500	200	470	400	
50	600	200	570	500	
80	1000	400	970	800	
120	1400	400	1370	1200	

Fields highlighted in light grey indicate the available sizes.





All dimensions in mm

The products and solutions presented in this data sheet make major contributions in the following sectors:



Food and beverages



Pharmaceutical



Chemical



Agribusiness



Cosmetics



Building materials



Recycling



Machinery (OEM)

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Specifications subject to change without notice.  
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Minebea Intec Aachen GmbH & Co. KG  
Am Gut Wolf 11  
52070 Aachen, Germany  
Phone +49.241.1827.0  
sales.ac@minebea-intec.com  
www.minebea-intec.com