



## Secus<sup>®</sup> Metal Detector



- 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
- Protection class IP55, IP66 optional
- "Made in Germany" quality



For many years now, Sartorius 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.

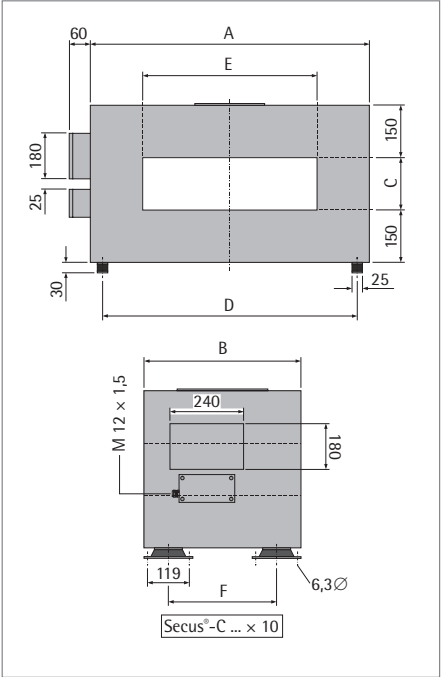
Secus<sup>®</sup> enables up to four search coils to be operated via a single control unit (human interface) and allows for centralized management of your quality assurance process. This process can also be implemented by means of an electronic system that is separated from the search coil (max. 100 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 Sartorius 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.

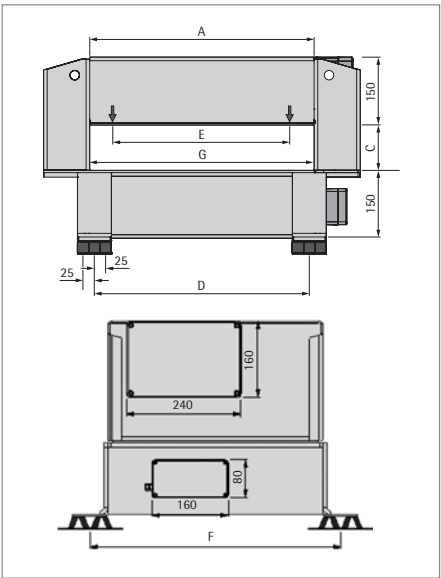
Dimensional Drawing for Secus® -C



Height dimensions

Width dimensions	C E	100	125	150	175	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	A	D
		150																			450
	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	150
	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	386	411	436	461					486						

Dimensional Drawing for Secus® -D

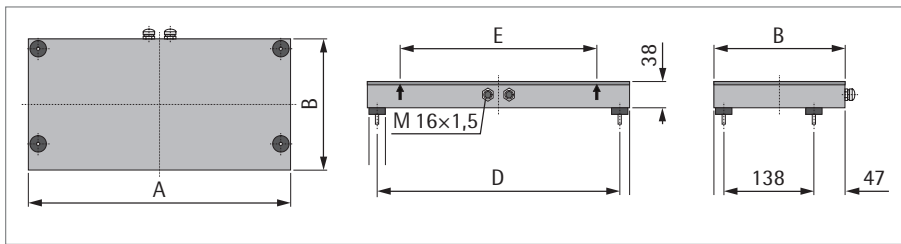


Height dimensions

Width dimensions	C E	100	150	200	250	300	350	400	450	500	550	600	650	700	800	900	1000	1100	1200	A	D	G
	200																			700	475	496
	300																			800	575	596
	400																			900	675	696
	500																			1000	775	796
	600																			1100	875	896
	700																			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																

All dimensions are given in millimeters.  
Yellow-highlighted fields indicate available sizes.

## Dimensional Drawing for Secus®-U



Dimensions

Secus®-U	A	B	D	E
30				
40				
50				
80				
120				

All dimensions are given in millimeters.  
Yellow-highlighted fields indicate available sizes.

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

## Specification

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 (1.4301) stainless steel (painted)
Data interfaces	TCP   IP, RS-232, RS-422, CAN bus, fieldbus and profibus interface
Protection class	IP55 (standard), IP66 optional
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	Log-in by means of fingerprint sensor Remote control End position monitoring Rejection monitoring USB print and much more

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