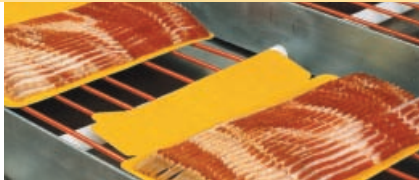The Thermo Scientific APEX 100 metal detector provides basic, cost-effective protection from the most common metal contaminants found in food production today. It is designed and built using using the same core technology as the industry-leading, high performance APEX 500.

APEX™ 100 Metal Detector

Economical protection from metal contamination in package and process applications

Features and Benefits

- Sensitivity matching the Thermo Scientific DSP 3 and Metal Eliminator detectors
- Compact and robust mechanical design makes installation easy and provides for years of reliable operation
- Unique icon driven interface with multilingual Help and Autocalibrate functions
- Dual frequency operation for application flexibility
- Available with Thermo Scientific conveyor systems designed to your specifications

The Thermo Scientific APEX 100 metal detector provides protection from many types of metal contaminants encountered in food production today. It offers basic magnetics, electronics and software technology developed for the high-performance APEX 500 metal detector. By offering only the most commonly required metal detection capabilities, the APEX 100 delivers outstanding value and brings Thermo Fisher Scientific capability to even the most cost sensitive applications.

Supported by the Thermo Scientific global service network, the APEX 100 meets the reliability, environmental and hygienic needs of the food industry. It has been designed for failsafe operation and has been fully tested to meet IP65/NEMA4/ATEX requirements. Only food grade materials are employed in construction including the stainless steel case and ABS control panel.

Available APEX 100 options include mounting kits to convert from a DSP metal detector to an APEX, field compression flanges, certified test pieces, reject verification/bin full sensors and a wide variety of customized conveyor systems.
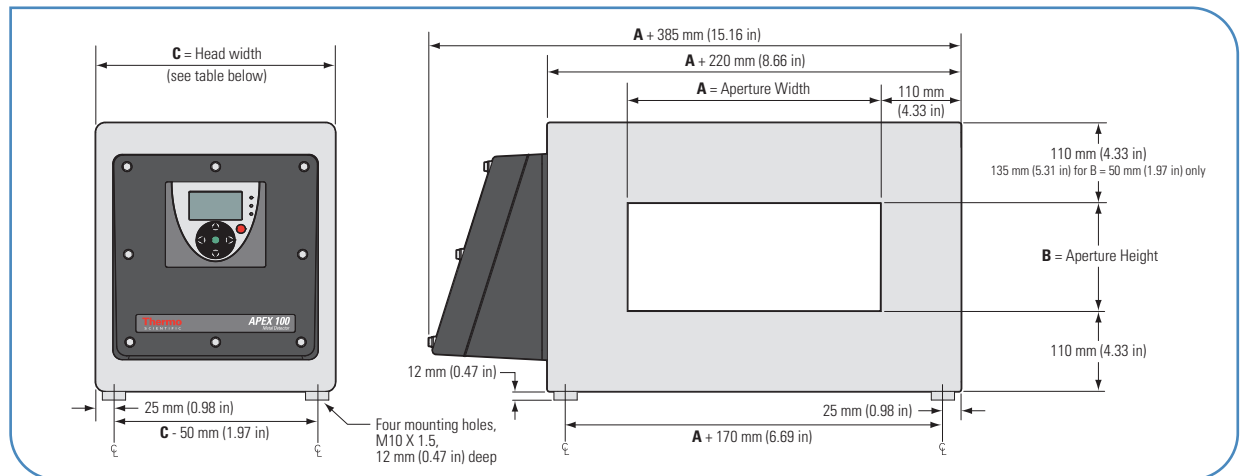
Thermo Fisher Scientific provides advanced analytical instruments for the food, pharmaceutical and beverage industries in the lab and on the production line. With over 50 years of experience providing high-quality, cost-effective contaminant detection systems, we are recognized as a world leader. Our solutions include many models of metal detectors for a variety of applications, as well as a full line of X-ray inspection systems.

Thermo SCIENTIFIC

APEX™ 100 Metal Detector

General Specifications

Construction	Stainless steel 304 straightlined case, ABS plastic control panel
Protection Ratings	IP 65, NEMA 4, ATEX zone 22, hazardous location Class II Division 2 Groups F&G
Operating Temperature	-10°C to +40°C (+14°F to +104°F)
Relative Humidity	20% to 80% non-condensing
Electrical Supply	85 volts to 260 volts AC single phase plus earth ground; 47 Hz to 65 Hz, 100 watts maximum
Product Speed	0.5 m/min (1.7 ft/min) to 1000 m/min (3,300 ft/min)
Outputs	6 Relays outputs; Relays: 250 volt AC 2 amp max. 50 volt DC 1 amp max.
Output Allocation (selectable via menu)	Reject 1, Reject 2, Fault, Alarm, Warning, QA lamp
Inputs	6 Inputs - Active 12v DC+12 volt auxiliary supply for input sensors
Input Allocation (selectable via menu)	Speed Sensor, Keylock, Product Select 1, Product Select 2, Infeed PEC, Reject Confirmation 1 (bin full), Reject Confirmation 2, External Suppression
Safety and Export Approvals	cCSAus, CE, ATEX zone 22
Manufacturing Quality	ISO9001 certified
Help-Text, Users Manual Languages	English, Spanish, French, German, Italian, Dutch, Chinese

APEX 100 Metal Detector dimensional diagram

APEX 100 case width (C) dimension in millimeters

mm (in)	Aperture Width (A)										
	150 (5.9)	200 (7.9)	250 (9.8)	300 (11.8)	350 (13.8)	400 (15.7)	450 (17.7)	500 (19.7)	550 (21.6)	600 (23.6)	650 (25.6)
Aperture Height (B) 100 (3.9)	295	295	295	295	295	295	295	295	295	295	295
125 (4.9)	295	295	295	295	295	295	295	295	295	295	295
150 (5.9)	295	295	295	295	295	295	295	295	295	295	295
175 (6.9)		295	295	295	295	295	295	295	295	295	295
200 (7.9)		295	295	295	295	295	295	295	295	295	295
250 (9.8)			330	330	330	330	330	330	330	330	330
300 (11.8)				330	330	330	330	330	330	330	330
350 (13.8)					380	380	380	380	380	380	380
400 (15.7)						380	380	380	380	380	380
450 (17.7)							380	380	380	380	380

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