Thermo Scientific APEX 100 Metal Detector

Economical metal detection for conveyor applications

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 the same core technology as the other APEX models and is available for conveyor, drop through and checkweighing combination applications.

With the APEX 100 in your production line, you can quickly and completely fulfill your quality goals, protect expensive downstream production equipment and be assured your production shipments don't contain any unwanted metallic foreign objects.

Features

- Multi-coil design with high sensitivity and low false rejects
- Dual frequency/dual gain operation for application flexibility
- Intellitrack XR (IXR) advanced signal processing software
- Standard range of aperture sizes to optimize performance
- Standard epoxy-lined aperture and stainless-steel case
- IP69K washdown rated to minimize the cost of ownership
- All construction materials FDA approved
- Easy to install, with all electronics integral to the metal detector
- Unique icon-driven interface with multilingual Help and Auto Learn functions

Options:

- Mounting conversion kits to make installation easy
- Field compression flanges to minimize the metal-free zone
- Remote control panel
- Modbus serial and Ethernet communications
- Alarm and fault output packages and reject indicators/reset switches
- Washdown isolation transformers to shield the metal detector from power line problems
- Thermo Scientific™ conveyor systems designed locally to your specifications

APEX 100 combined with one of many possible regional conveyor designs.

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S C I E N T I F I C

Thermo Scientific APEX 100 Specifications

Application and metal detection specifications	
Frequency Range	50 to 460 kHz, one or two configured in the factory or by service in the field
Foot Pattern and Aperture Placement	Refer to layout drawings; varies by aperture size and orientation
Aperture Sizes*	Width: 50 to 1750 mm, Height: 50 to 600 mm
Construction	Stainless steel 304 straightlined case and ABS plastic front panel
Human Machine Interface (HMI)	Backlit display and touch panel with icons/help text
Product Speed	0.5 m/min (1.7 ft/min) to 1000 m/min (3,300 ft/min)
Output Types	6 Relay outputs; Relays: 250 volt AC 2 amp max. 50 volt DC 1 amp max
Output Allocation (Software Selectable)	Reject 1, Reject 2, Fault, Alarm, Warning, QA Lamp
Input Types	6 Inputs - Active 12VDC and auxiliary supply for input sensors, NPN sinking
Input Allocation (Software Selectable)	Speed Sensor, Keylock, Product Select 1, Product Select 2, Infeed PEC, Reject Confirmation 1 and Bin Full, External Supression, External Alarm, External Reset
Communications Options	ModBus serial or Ethernet modules
Help-Text Languages	English, Spanish, French, German, Italian, Chinese, Czech, Russian, Polish, Thai, Korean and Brazilian Portuguese

*Not all combinations possible; contact Thermo Fisher for details.

Environment, electrical and operational specifications	
Ambient Temperature	-10° to 40°C (14° to 104°F)
Product Temperature in Aperture	-10° to 55°C (14° to 131°F)
Maximum Washdown Temperature	80° C (176° 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

Conformance tests and certifications	
Protection Ratings	IP69K
Export and Safety	cCSAus, CE, ATEX zone 22
Manufacturing Quality	ISO9001 certified

Find out more at **thermofisher.com/APEX100**

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