



BRSInnovations

Metcorr 117C

Reliable Tramp Metal Detection

Metcorr 117C is a metal detector, which is able to detect ferrous and non-ferrous metal objects. It is suited for mines, quarries and other industrial facilities, where unwanted metal objects in conveyed material would cause damage or excessive wear on process equipment, e.g. crushers.

Metcorr 117C comprises of one electronics set, one coil system with interconnecting cables and an optional coil mounting set. The coil system comprises of two identical coil elements, which are available in five different sizes. The material, which is to be screened for tramp metal, travels on the conveyor belt between the coils. As the coils in Metcorr 117C are identical, they are also interchangeable, which enables a quick and cost-effective repair. However, Metcorr 117C is known to be an extremely reliable metal detector that is practically maintenance free. Metcorr 117C has customers that have used it for decades without interruptions.

The two channel method, used in Metcorr 117C helps reliably detect rod and bar shaped metal objects, and can be used on steel corded belts. Unlike many other metal detectors, Metcorr 117C does not cause false alarms when used on metal reinforced belts. Metcorr 117C can detect metal in any orientation on the belt and has excellent immunity to vibration.

Metcorr 117C is easy and quick to install. When needed it can be mounted in a vertical position.



FEATURES & OPTIONS

- ▶ **Coils.** The rugged coil systems comprises of two electrically and physically identical coil sets, of which one operates as a receiver and the other as a transmitter. The coil windings are molded in a fibre glass reinforced enclosure with rubber edging.
- ▶ **Coil Mounting Set - Optional.** A coil mounting set is optionally available for protection of upper coil against damage due to overburden on the conveyor. Materials are steel and fiberglass-reinforced plastic, impact bar cushioned with rubber.
- ▶ **Reset Switch, Ready And Alarm Lamps - Feature**
- ▶ **Coast Counter Set - Optional** -counts alarms during conveyor coasting
- ▶ **Splice Detector - Optional** - prevents false alarms caused by fixed metal parts in the conveyor belt.

APPLICATIONS

- ▶ Mines
- ▶ Quarries
- ▶ Recycling Plants
- ▶ Industrial Facilities

OTHER INDUSTRIAL AND MINING PRODUCTS

Satmagan analyzer for fast and accurate measurement of the magnetite content in a sample.

ABOUT RAPISCAN SYSTEMS

Rapiscan Systems designs, manufactures and markets security and inspection systems worldwide. The company is a wholly-owned subsidiary of a Nasdaq-listed OSI Systems, Inc. and headquartered in Hawthorne, California. It has additional offices and manufacturing in Canada, Finland, India, Malaysia, Singapore, United Kingdom and the United States.



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Operating Ambient Temperature

-35 °C to +55 °C continuously

Operating Humidity

Up to 100%

Power Supply

115V ± 10%/230V ± 8%, 45 Hz to 65 Hz,
Consumption: 60 VA Max

Degree of Protection

Spray water proof, dust tight IP 55 (door closed) and IP 22 (door opened) as per IEC 529 (NEMA 4)

Mounting

Four corner wall mounting

Type of Output Relay

Socket mounted with 11 pin plug, coil voltage 110 (120) V DC

Alarm Relay Contact

Contact arrangements DPDT, Contact ratings 240V-6A-AC, 120V-10A-AC

Alarm Reset

Automatic or manual reset.

Interconnection Cable (from junction box to electronics set)

Standard cable length supplied 10m.
Maximum recommended length 30m.

Tests

Vibration and bump as per IEC 68-2-6

Net Weight

Electronics: 26 kg

| Coils | | | | | |
|----------------------|----|----|----|----|----|
| Coil Size | 08 | 12 | 16 | 20 | 26 |
| Net weight/coil (kg) | 5 | 7 | 10 | 12 | 18 |

CE Compliance

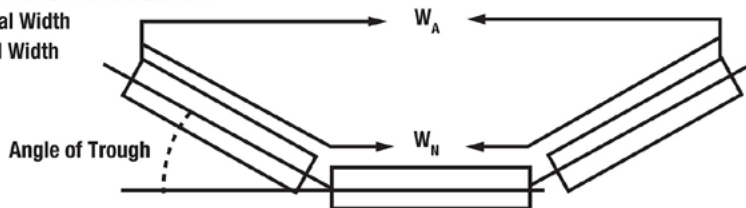
Yes

Coils Selection Guide

| Type of conveyor | Angle Deg. | Actual width W_A of screened area as function of troughing angle and nominal width W_N . (W_N in mm) | | | | | | | | | |
|----------------------------|------------|---|-----|---------|------|------|---------|------|---------|------|------|
| | | 650 | 800 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 |
| No side wall or untroughed | 0 | 650 | 800 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 |
| | 20 | 624 | 760 | 960 | 1152 | 1344 | 1536 | 1728 | 1920 | 2112 | 2304 |
| Troughed belt | 27.5 | 605 | 744 | 930 | 1116 | 1302 | 1488 | 1674 | 1860 | 2046 | 2232 |
| | 35 | 578 | 712 | 890 | 1068 | 1246 | 1424 | 1600 | 1780 | 1958 | 2136 |
| | 45 | 540 | 664 | 830 | 996 | 1328 | 1328 | 1494 | 1660 | 1926 | 1992 |
| Maximum W_A | | 800 mm | | 1200 mm | | | 1600 mm | | 2000 mm | | |
| Suitable coil size | | 08 | | 12 | | | 16 | | 20 | | |
| Coil type designation | | Size 08 | | Size 12 | | | Size 16 | | Size 20 | | |
| Typical gap between coils | | 270 mm | | 400 mm | | | 550 mm | | 750 mm | | |

TYPICAL CONVEYOR ARRANGEMENT

W_N = Nominal Width
 W_A = Actual Width



Example:

When a belt with a Nominal Width (W_N) of 1800mm is troughed at an angle of 30°, then the actual width W_A is in excess of 1600mm, and thus, coil size 20 is suitable. If coil 16 is selected, the sensitivity near the edges of the belt is somewhat impaired.

