

Metcorr 117C

Rapiscan
systems

An OSI Systems Company

INDUSTRIAL AND MINING EQUIPMENT

Reliable

Excellent performance

Minimal Maintenance

Rugged Structure for Harsh Conditions



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.

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. For more information on Rapiscan Systems, please visit www.rapiscansystems.com.

FEATURES & OPTIONS

RESET SWITCH, READY AND ALARM LAMPS FEATURE

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 – For the protection of the upper coil against damage due to overburden on the conveyor. Materials are steel and fiberglass-reinforced plastic, impact bar cushioned with rubber

DYE MARKER:

OPTIONAL – marks the area with dye where tramp metal is detected

COAST COUNTER SET:

OPTIONAL – counts number of alarms between the first detection and stop of conveyor

SPLICE DETECTOR:

OPTIONAL - inhibits detection for a short period to prevent false alarms due to metal splices on the belt

APPLICATIONS

MINES

QUARRIES

RECYCLING PLANTS

INDUSTRIAL FACILITIES



ONE COMPANY - TOTAL SECURITY

INDUSTRIAL AND MINING EQUIPMENT

CANADA

125 Topflight Drive
Mississauga, Ontario
L7S 1Y1 Canada
Tel: +1 905 696 0664
Fax: +1 905 696 7324

FINLAND

Nihtisillankuja 5, P.O. Box 174
FIN-02631 Espoo
FINLAND
Tel: +358 9 32941500
Fax: +358 9 32941302

E-MAIL

industrial@rapiscansystems.com

ISO 9001:2000 Certified

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 and IP 22 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: 22,5 kg

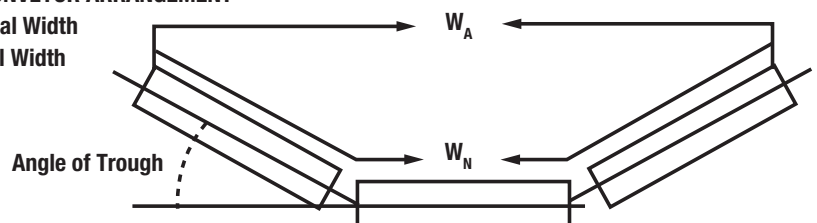
Coils:					
Coil size	08	12	16	20	26
Net weight/coil (kg)	5	7	10	12	18

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
Troughed belt	20	624	760	960	1152	1344	1536	1728	1920	2112	2304
	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 V 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.