



MODEL MD7100 PLUG-IN REMOTE HOT METAL DETECTOR



- **Plug-in Electronic Control Module**
- **Interchangeable remote mounted lenses: 1°, 2°, 4°, 7° F.O.V. tubular spot.**
- **The remote lens can be mounted up to 300 meters (985 Feet) from the Control Module.**
- **Adjustable I.R. threshold trip level from 300°C (572°F) to 800°C (1472°F).**
- **Relay Output, Form C DPDT, Rated 8A/250VAC**
- **110 VAC input or optional 24 VDC**
- **Excellent steam penetration**
- **Robust lens mounts available including air purged, air cooled or water cooled.**

General Description

The MD7100 Remote Hot Metal Detector consists of an plug-in Electronic Control Module, a stainless steel Remote Lens, an Interconnection Cable Assembly, a Lens Holder and an optional Mounting Bracket or Mounting Stand.. Both the Electronic Control Module and the Remote Lens are interchangeable in the field without the need for adjustment.

To accommodate site conditions the interconnection between the electronic controller and the remote lens head is extendable up to 300 meters (985 feet). via 2 conductor shielded cable and thereby enabling the Electronic Control Module to be mounted in an accessible area.

The Electronic Control Module incorporates an I.R. threshold adjustment between the range of 300°C (572°F) to 800°C (1472°F) . To assist in calibration a test point socket is provided to enable comparison between the analog signal input and the set threshold.

The Electronic Control Module operates from 110VAC-50/60 Hz power input (optional 24VDC power input is also available) and provides a volt free Form C DPDT relay output when hot product is detected. Connections are made via terminals on a plug-in relay socket that is supplied with the Electronic Control Module .

The robust remote stainless steel spot lenses are available in 1°, 2°, 4°, 7° F.O.V. The temperature rating of the lens is 55°C (131°F).

The Interconnection Cable Assemblies are available in lengths of 10, 20, 30, 40 & 50 meters. And are provided with a plug/socket to attach to the Electronic Transmitter Spot Lenses. The Interconnection cable can be extended to longer lengths in the field, the maximum overall from the Lens to the Electronic Control Module is 300 m (985 feet).

Various robust Lens Holders are available including air purged, air purged & air cooled, and air purged & water cooled. An optional Mounting Bracket or Mounting Stand is also available.

A complete MD7100 Remote Hot Metal Detector (HMD) consists of a Plug-In Electronic Control Module with plug-in base, an Interconnection Cable Assembly, an Electronic Transmitter Spot Lens, a Lens Holder and an optional Mounting Bracket or Mounting Stand.

MODULOC Technology - The Total Sensor Solution

MODULOC Control Systems Ltd.

Wheathamstead, Hertfordshire, AL4 8SB United Kingdom
Phone: +44 (0)1727 821313 FAX: +44 (0)1727 826804
E-Mail: sales@moduloc-intl.com Website: www.moduloc-intl.com

MODULOC Control Systems, Inc.

500 Garden City Drive. - Suite 2B, Monroeville, PA 15146 USA
Phone: 412-824-1260 FAX: 412-824-8890
E-Mail: sales@moduloc-usa.com Website: www.moduloc-usa.com

General Information

Electronic Control Module:

Housing Cover: Polystyrene, light-grey

Housing Rating: IEC IP40

Weight w/o Cable: 1.9 Kg

Plug-in Socket Base: ABS-gf black , 12 Screw Terminals

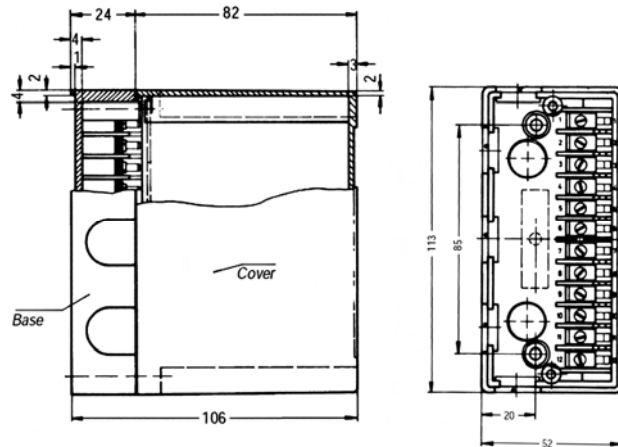
Remote Lenses:

Stainless Tubular Spot: FOV: 1°, 2°, 4° or 7°; rated 55°C

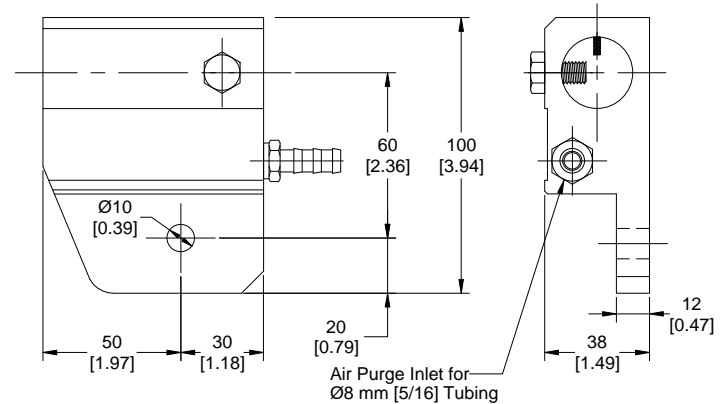
Lens Interconnection Cables:

Shielded 2-conductor silicone cable with plug/socket at both ends; rated 90°C., maximum length: 300 meters
Available lengths: 5, 10, 20, 30, 40 & 50 meters.

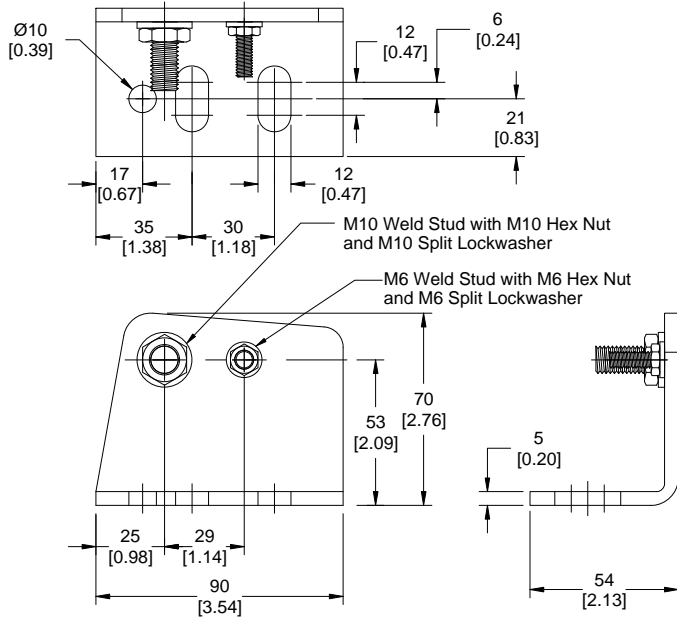
Dimensions



Model MD7100 Electronic Control Module



Dimensions are in mm's [inches]



Dimensions are in mm's [inches]

BPA-27 Lens Holder

SLB-A "L" Mounting Bracket

Please Note: Other Lens Holders and Mounting Stands are available.

Electronic Control Module General Specifications

Min/Max I.R. Threshold Adjustment	Down to 300°C and up to 800°C using external sensitivity adjustment	Supply Voltage	110 VAC ± 15% 50/60 Hz Optional: 24 VDC ± 15%
Power Indication:	Red LED	Power Consumption	5 VA
Function Indication	Green LED	Operating Temperature	-20°C to +55°C
Sensing Element	Germanium Diode	Storage Temperature	-25°C to +75°C
Response Time:	2 msec. min to 200 msec max., dip switch selectable.	Output	Relay Output, Form C, DPDT, 250 VAC, 8A 20 mSec response time

MODULOC Technology - The Total Sensor Solution

MODULOC
Control Systems

We reserve the right to alter specifications without prior notice. Specifications without tolerances are typical values.

Your Local Sales Representative:



Bulletin MD7100-09-01
October 2009