MIRION TECHNOLOGIES

# IST-QUADTEK® M353 RETRACT

## Pneumatic Automatic Retract System

The IST-Quadtek high temperature imaging camera systems are cooled by air or water. If the plant supply of air pressure, water or electricity is interrupted the M353 Pneumatic Automatic Retract System will retract the camera from the most severe heat, protecting it from serious damage. With the camera retracted from the intense heat the operator has time to arrive at the location and manually pull the lens clear of the viewport. Then they can track the coolant problem and re-install the camera. The M353 works with the IST-Quadtek Bedbug, Lynx and Spyrometer cameras, as well as cameras of many other manufacturers.

### FEATURES

- Retract monitors pressure and flow for camera lens cooling. Pulls camera out of high heat if levels fall below preset values.
- Operator override allows manual retraction for inspection and cleaning.
- Multiple retraction lengths allow complete removal from boiler, kiln or furnace.
- Remote control/monitoring versions available.

imaging systems

A Mirion Technologies Division

Featuring:

ist-quadtek

## SPECIFICATIONS AND PERFORMANCE

### RETRACT

| | |
|---|---|
| Cylinder | 2” (51mm) bore with steel rod;<br>Standard<br>/AL12 - 12” (305mm) stroke<br>Optiona:<br>/AL18 - 18” (457mm) stroke<br>/AL24 - 24” (610mm) stroke<br>/AL30 - 30” (767mm) stroke |
| Air Requirements | Minimum 30 psig (207 kPa); maximum inlet presssure 160 psig (1103 kPa) |
| Power Specification | 115/230 VAC, 50/60 Hz |
| Ambient Temperature | -40°F to 160°F (4°C to 71°C) |
| Retract Rail | All aluminum construction;<br>Standard:<br>/RL42 - 42” (1067mm) rail<br>/RL30 - 30” (762mm) rail<br>/RL54 - 54” (1372mm) rail<br>/RL66 - 66” (1676mm) rail<br>/RL78 - 78” (1981mm) rail |

### RESERVOIR

| | |
|---|---|
| Dimensions | Clearance envelope;<br>16.5”W x 13.65”H x 5”D<br>(419mm x 347mm x 127mm) |
| Mechanical | 1/2” NPT female threaded inlet, five micron filter, check valve at inlet to allow one-way air flow |
| Air Hose | Aeroquip SH925 (5 meters) |
| Air Storage | Reservoir stores enough air for 1 retraction of the 30” (762mm) stroke cylinder @ 40 psi (276 kPa) |

### CONTROLLER

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|---|---|
| Operation Modes | Automatic retract when air pressure drops below a set level or if power fails. For water cooled lens: Retracts when cooling flow drops below a set level. Camera can also be manually retracted and inserted by the operator. |
| Min. Air Pressure Set Point | Factory preset to 2.5 psig (17 kPa) min. lens pressure |
| Min. Water Flow Set Point | 1 gpm |

### CONTROLLER

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|---|---|
| Controller Ambient Temp. | 32°F to 130°F (0° to 54°C) |
| Physical Dimensions | 10”W x 12”H x 5”D<br>(254mm x 305mm x 127mm) |
| Enclosure Specifications | IP66 (prior to modification) to EN 60 529/10.91<br>Sheet steel, dipcoat primed and powder coated in textured RAL 7032 |

### SAMPLE REPRESENTATION: 12” RETRACT AND 72” RAIL

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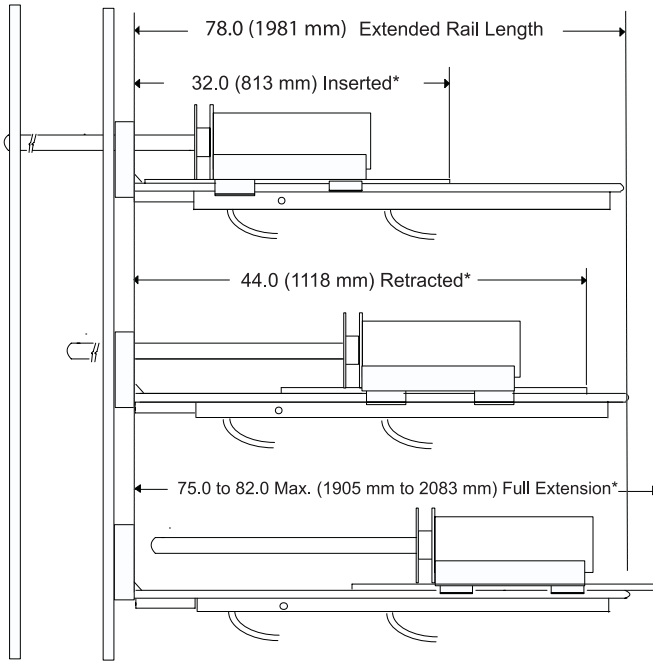
|---|---|
| Top Figure | The pneumatic retract is fully inserted into the process. |
| Middle Figure | The pneumatic retract has retracted the lens 12 inches (305mm) from the heat of the process to the end of the cylinder stroke. |
| Bottom Figure | The lens and camera have been manually pulled back to the length of the extended rail. |




*Variable length, dependent on placement of camera on Retract Mechanism

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