MIRION TECHNOLOGIES

High Temperature. **Safety.**

M356

Retract

Nuclear Power

Homeland Security & Defense

Industrial and Manufacturing

Healthcare

Labs and Education

OVERVIEW

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 M356 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 M356 works with the IST-Quadtek Bedbug, Lynx and Spyrometer™ cameras, as well as cameras of many other manufacturers.

The M356 retraction system now includes a ruggedised safety air reservoir and additional options such as locking pistons for downward-inclined camera installations.

KEY 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
- Universal power supply
- Temperature controller option

Imaging Systems

SPECIFICATIONS AND PERFORMANCE

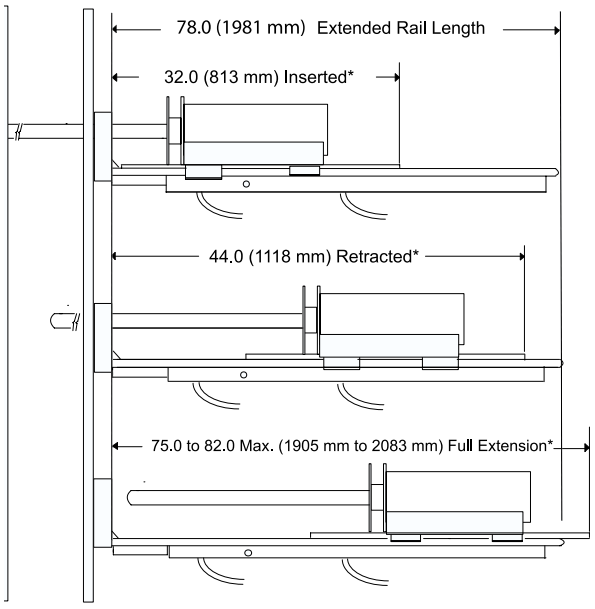
Retract	
Cylinder	50mm (2”) bore with steel rod; Standard /AL12 - 305mm (12”) stroke Optional: /AL18 - 457mm (18”) stroke /AL24 - 610mm (24”) stroke /AL30 - 767mm (30”) stroke
Power Specification	100-240 VAC, 50/60 Hz
Ambient Temperature	4°C to 71°C (-40°F to 160°F)
Retract Rail	All aluminum construction; Standard: /RL42 - 42” (1067mm) rail /RL30 - 30” (762mm) rail /RL54 - 54” (1372mm) rail /RL66 - 66” (1676mm) rail /RL78 - 78” (1981mm) rail

Reservoir	
Dimensions	Clearance envelope; 240mm W x 490mm H x 225mm D (9.4” W x 19.3” H x 8.9” D)
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 metres)
Air Requirements	Minimum 276kPa (40 psig) Maximum 690kPa (100psig)
Air Storage	Reservoir stores enough air for 1 retraction of the 762mm (30”) stroke cylinder

Reservoir	
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

Controller	
Min Water Flow Set Point	1 gpm
Controller Ambient Temp	0°C to 50°C (32°F to 122°F)
Physical Dimensions	254 W x 305mm H x127mm D (10” x 12” x 5”)
Enclosure Specifications	NEMA 4 (IP54) Sheet steel, dipcoat primed and powder coated in textured RAL 7032

Sample Representation: 12” Retract and 72” Rail	
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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Please contact your Mirion Technologies representative to advise any specific vibration or seismic qualification.

The management system governing the manufacture of this product is ISO 9001:2008 certified.

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