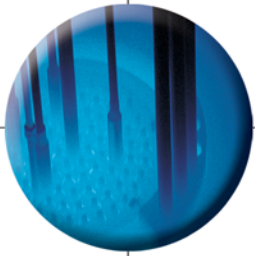


# QUADTEK M353 Retract



## *Pneumatic Automatic Retract System*



### **Features / Benefits**

- 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.

IST's 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 Bedbug, Lynx and Spyrometer cameras, as well as cameras of many other manufacturers..

# QUADTEK M353 Retract

## Specifications and Performance

### Retract

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

### Reservoir

Dimensions .....	Clearance envelope; 16.5"W x 13.65"H x 5"D (419mm x 347mm x 127mm)
Mechanical .....	1/2 in. 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

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 .....	1gpm
Controller Ambient Temp. ....	32° to 130°F (0° to 54°C)
Physical Dimensions .....	10"W x 12"H x 5"D (254mm x 305mm x 127mm)
Enclosure Specifications .....	IP66 (prior to modification) to EN 60 529/10.91  Sheet steel, dipcoat primed and powder coated in textured RAL 7032.

### Sample Representation: 12" Retract and 72" Rail

#### Figure 1.

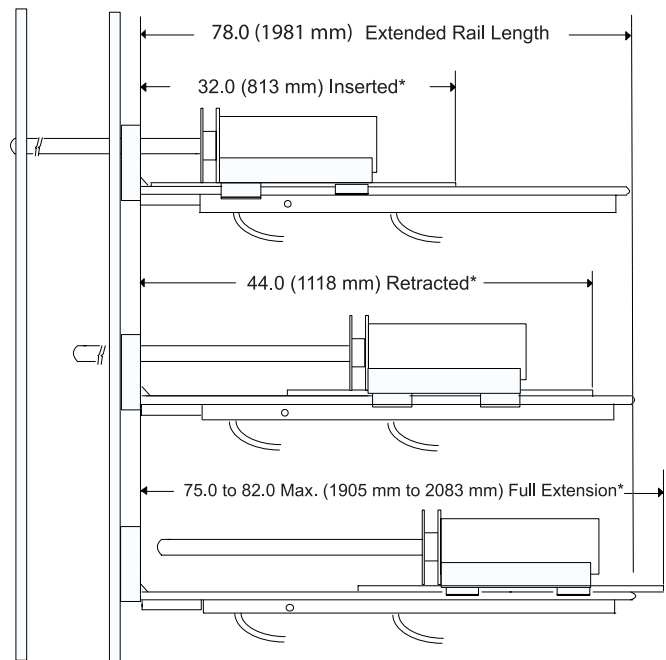
The Pneumatic Retract is fully inserted into the process.

#### Figure 2.

The Pneumatic Retract has retracted the lens 12 inches from the heat of the process to the end of the cylinder stroke.

#### Figure 3.

The lens and camera have been manually pulled back to the full length of the extended rail.



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

## Imaging and Sensing Technology Corporation

204 IST Center  
Horseheads, NY 14845 USA  
Tel: 607-562-4300  
800-432-1478  
Fax: 607-562-4392  
E-mail: istrees@istcorp.com

19501 144th Avenue NE, Suite F1100  
Woodinville, WA 98072 USA  
Tel: 425-881-0778  
Fax: 425-869-0667  
E-mail: sales@quadtek.com

12954 Stonecreek Drive, Suite C  
Pickerington, OH 43147 USA  
Tel: 614-367-2050  
Fax: 614-367-2464  
E-mail: sales@quadtek.com

Station Road  
Alton, Hampshire  
GU34 2PZ, UK  
Tel: 01420 541600  
Fax: 01420 541700  
E-mail: info@istcorp.co.uk