

## Thermo Scientific Sarasota RTR900

Instrument Retractor for use with the  
Thermo Scientific Sarasota ID900  
Gas Density Meter

The Thermo Scientific Sarasota RTR900 instrument retractor allows the Thermo Scientific Sarasota ID900 gas density meter to be installed directly into the pipeline or tank under operational conditions. The Sarasota RTR900 enables the safe insertion and removal of the Sarasota ID900 without the need to isolate or depressurize the pipeline or process, avoiding the inconvenience and costs associated with downtime while contributing to plant safety.



### Features

- High pressure capability
- Enables safe insertion and removal of Sarasota ID900
- Wide operating temperature range
- Rugged construction
- Interlock vent valve for safe operation
- Integral seal housing
- Suitable for use with pipelines or vessels
- Dual vent valve option for in-situ calibration check

The Thermo Scientific Sarasota RTR900 instrument retractor enables the safe insertion or removal of a Thermo Scientific Sarasota ID900 gas density meter from a pipeline or tank without the need to shutdown the process. It is suitable for use in high pressure applications up to the maximum working pressure of the Sarasota ID900 of 150 bar (2175 psi), or flange rating.

Mounted on a standard ball or gate isolation valve, the Sarasota RTR900 is secured to the system pipeline with a flange to suit customer requirements. Designed to accommodate the Sarasota ID900 with a 1000 mm (39.4 in) stem within the retractor shaft, the Sarasota RTR900 also comprises a handwheel, seal housing and vent valve. The Sarasota ID900 is inserted or removed from the line or vessel by the rotation of the handwheel. After retracting the instrument from the line, a simple venting procedure

ensures that the meter is fully isolated and depressurized before removal. The option of a second vent valve allows the density meter to be isolated in the retractor and the isolated volume to be evacuated or purged, enabling the introduction of a sample gas for online validation of the density meter's calibration. Complete retraction requires an unobstructed headroom of 1400 mm (55 in).

A simple mechanical interlock between the vent valve and the retractor closure system minimizes the likelihood of the retractor seal housing being opened while the retractor is still pressurized.

Routine maintenance to the Sarasota RTR900 is minimal and can usually coincide with the routine maintenance of the Sarasota ID900 and other line instruments to maximize uptime.

## Thermo Scientific Sarasota RTR900

### Functional Specifications

Process Temperature Range	-50°C to +200°C (-58°F to +392°F) or -200°C to +50°C (-328°F to +122°F)
Operating Pressure Range	177 bar (2567 psi) maximum or flange pressure/temperature rating <i>Note: maximum working pressure of Sarasota ID900 is 150 bar (2175 psi)</i>
Length of Stroke	660 mm (26 in)
Leadscrew Pitch	4.23 mm (6 threads per inch)

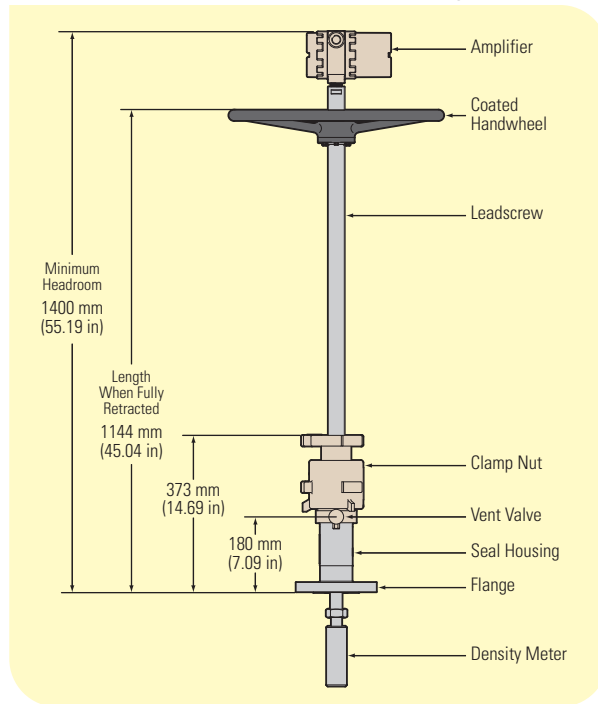
### Physical Specifications

Materials	Seal Housing: Stainless steel Leadscrew: Dry lubricant coated stainless steel Gland Nut: Aluminum bronze Seal: Silver plated Inconel® X750 Handwheel: Nylon coated aluminum alloy
Net Weight	Typically 40 kg (90 lb) <i>Note: based on 3-in ASME B16.5 RF Class 300 flange</i>
Shipping Weight	Typically 45 kg (100 lb) <i>Note: based on 3-in ASME B16.5 RF Class 300 flange</i>
Dimensions	See dimensional diagram; Minimum headroom required 1400 mm (55 in); For use with Sarasota ID900 with 1000 mm (39.4 in) stem; Handwheel diameter 510 mm (20 in)
Shipping Dimensions	1020 mm x 660 mm x 380 mm (40 in x 26 in x 15 in)
Installation Requirements	Sarasota RTR900 must be mounted on a full bore isolation valve or ball valve. The isolation valve must be mounted squarely on the nozzle attached to the system pipeline or tank, and must be clear of obstructions. The Sarasota RTR900 should be installed directly on a mating flange allowing a minimum headroom of 1400 mm (55 in) for complete retraction.
Environmental Rating	IP65 (NEMA 4X)

### Compliance/Certification

Quality Assurance	ISO 9001:2000
CE Mark	Compliant
Pressure Equipment Directive (97/23/EC)	SEP (sound engineering practice)
BS EN ISO 15156 / NACE MR0175 Conformance	Available as option
Materials Traceability	Wetted parts traceable to BS EN 10204.3.1.b; Certification available

### Sarasota RTR900 + Sarasota ID900 Dimensional Diagram



### Ordering Information

**MODEL NUMBER**  
RTR900: Sarasota RTR900 Instrument Retractor

**A. PRESSURE CLASS**  
**B:** ASME B16.5 Class 150    **H:** BS EN 1092 PN40  
**F:** ASME B16.5 Class 300    **J:** BS EN 1092 PN100  
**A:** ASME B16.5 Class 600    **X:** Other pressure class  
**E:** ASME B16.5 Class 900    *(Note: consult Thermo Fisher Scientific)*

**B. FLANGE SIZE**  
**2:** 3-in ASME B16.5 / BS EN 1092 DN80  
**3:** 4-in ASME B16.5 / BS EN 1092 DN100  
**X:** Other flange size *(Note: consult Thermo Fisher)*

**C. FLANGE FACE FINISH**  
**RF:** ASME B16.5 raised face / BS EN 1092 type B  
**RJ:** ASME B16.5 ring joint  
**X:** Other flange face finish *(Note: consult Thermo Fisher)*

**D. TEMPERATURE RATING**  
**S:** -50°C to +200°C (-58°F to +392°F)  
**T:** -200°C to +50°C (-328°F to +122°F)

**E. VENT VALVES**  
**1:** Single vent valve  
**2:** Dual vent valve

**F. OPTIONS**  
**M:** Wetted parts traceability certification to BS EN 10204.3.1.b  
**N:** BS EN ISO 15156 / NACE MR0175 conformance certification  
**D:** Non-destructive testing

MODEL NUMBER: **RTR 900**  
 PRESSURE CLASS: **A**  
 FLANGE SIZE: **B**  
 FLANGE FACE FINISH: **C**  
 TEMPERATURE RATING: **D**  
 VENT VALVES: **E**  
 OPTIONS: **F**

© 2008 Thermo Fisher Scientific Inc. All rights reserved. Inconel is a registered trademark of Special Metals Corporation. Results may vary under different operating conditions. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representatives for details. Literature Code PI.2028.0208

Room 1010 - 1019	+86 (10) 5850-3588
Ping'an Mansion No. 23 Jinrong Street	+86 (10) 6621-0847 fax
Xicheng Dist, Beijing 100032 CHINA	
A-101, ICC Trade Tower, Senapati Bapat Road	+91 (20) 6626 7000
Pune 411016 Maharashtra, INDIA	+91 (20) 6626 7001 fax
Ion Path, Road Three, Winsford	+44 (0) 1606 548700
Cheshire CW7 3GA UNITED KINGDOM	+44 (0) 1606 548711 fax
1410 Gillingham Lane	+1 (800) 437-7979
Sugar Land, TX 77478 USA	+1 (713) 272-0404
	+1 (713) 272-4573 fax