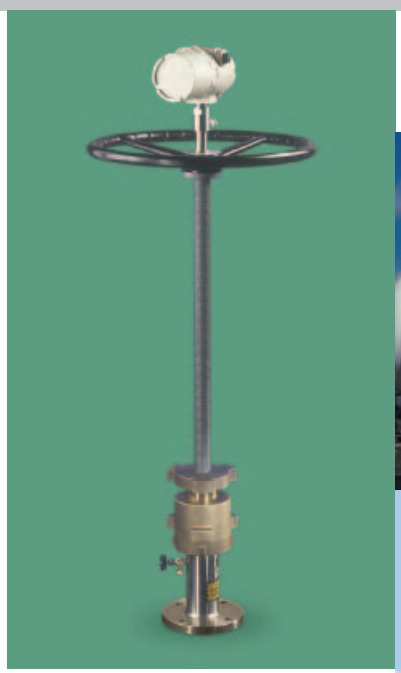
Product Specifications

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 retractor enables the safe insertion and removal of the gas density meter 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 gas density meter
- 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 gas density meter of 150 bar (2175 psi), or flange rating.

Mounted on a standard ball or gate isolation valve, the Sarasota RTR900 retractor is secured to the system pipeline with a flange to suit customer requirements. A 1000-mm (39.4-in) stem within the retractor shaft enables the gas density meter to be accommodated. The meter 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).

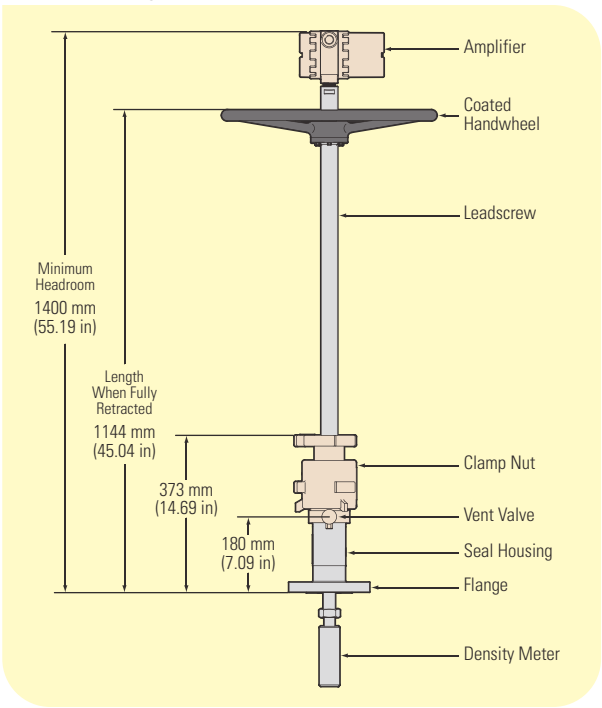
A simple mechanical interlock between the vent valve and the retractor closure system minimizes the likelihood of the retractor seal housing being opened while the retractor is still pressurized.

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

Thermo Scientific Sarasota RTR900 Instrument Retractor

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 *Note: maximum working pressure is 150 bar (2175 psi)*
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) *Note: based on 3-in ASME B16.5 RF Class 300 flange*
Shipping Weight	Typically 45 kg (100 lb) *Note: based on 3-in ASME B16.5 RF Class 300 flange*
Dimensions	See dimensional diagram; Minimum headroom required 1400 mm (55 in); For use with Sarasota ID900 gas density meter 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	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. It 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

Dimensional Diagram



Ordering Information

MODEL NUMBER
RTR900: Sarasota RTR900 Instrument Retractor

PRESSURE CLASS
B: ASME B16.5 Class 150
F: ASME B16.5 Class 300
A: ASME B16.5 Class 600
E: ASME B16.5 Class 900
H: BS EN 1092 PN40
J: BS EN 1092 PN100

FLANGE SIZE
3: 3-in ASME B16.5 / BS EN 1092 DN80

RETRACTOR FLANGE TYPE
RF: ASME B16.5 raised face / BS EN 1092 type B
RJ: ASME B16.5 ring joint

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

VENT VALVES
1: Single vent valve
2: Dual vent valve

OPTIONS
M: Wetted and pressure retaining parts traceability certification to BS EN 10204.3.1.b
N: BS EN ISO 15156 / NACE MR0175 conformance certification
S: Special documentation package including quality plan, ISO9001 certification and quality assurance manual
D: Non-destructive testing

MODEL NUMBER	PRESSURE CLASS	FLANGE SIZE	RETRACTOR FLANGE TYPE	TEMPERATURE RATING	VENT VALVES	OPTIONS
RTR 900	A	3	RF	T	1	N

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