

FEATURES

- Thermal Isolation
- Chemical Isolation
- Sanitary Cleaning

TYPICAL APPLICATIONS

- Tank Level
- Chemical Processing
- Pharmaceutical
- Food Processing
- Pulp & Paper
- Flow

What is a Remote Seal System?

Viatran's "33" Series remote seal systems are the ideal solution for industry's most demanding pressure measurement problems. Applications include those involving high temperature, corrosive media, viscous media, and sanitary cleaning. The systems consist of a pressure sensing diaphragm, or "remote seal", that is hydraulically coupled to a

pressure transmitter, dial gage, or pressure switch. The remote seal can be supplied in an almost limitless variety of configurations, covering most customer process connection and wetted material requirements.

Why use a Remote Seal System?

Remote seal systems are commonly used with differential pressure transmitters for level and density measurement in storage tanks, as

well as flow measurement across orifice plates. They are often used in hostile environments that would otherwise preclude the use of a pressure transmitter. Because remote seals can be constructed from a wide spectrum of materials (Teflon, Titanium, gold plate, etc.), Viatran pressure transmitters can be made compatible with virtually any process media.

The "33" Series provides both chemical compatibility and thermal isolation. With careful system design, remote seal systems can be used on processes with temperatures far beyond the operating limits of most commercially available pressure transmitters.

Call Viatran today for more information.



“33” Series Specifications

Performance

When a remote seal is coupled to a pressure transmitter, there may be some impact on the transmitter performance specifications, usually time response and thermal effects. Typical system accuracy is about 0.5% or better, but because so many system variables influence performance each individual configuration should be evaluated on an as-ordered basis.

As a rule, thermal effects are minimized by increasing remote seal diameter, decreasing capillary length, and decreasing fill fluid volume. Response times are optimized by lower fill fluid viscosity, decreasing capillary length, and increasing capillary inside diameter.

System performance can also be optimized by limiting ambient temperature variations at the final installation. This is frequently done by insulating or heat tracing the capillaries.

Viatran application engineers can provide estimated performance effects for any remote seal system configuration, however actual performance can be verified only by testing completed systems.

Instrumentation

“33” Series remote seals can be attached to a variety of pressure instruments including pressure transmitters, pressure switches, and dial gages. While Viatran pressure transmitters insure optimum system performance, we also offer an oil filling and assembly service to attach customer supplied instruments to “33” Series remote seals.

Approvals

Sanitary Remote Seals are manufactured in accordance with 3-A Sanitary Standards. Incorporation into a remote seal system does not affect the approval rating of individual transmitters. Refer to Transmitter Data Sheet for approval status.

Remote Seals

Sanitary	Tri-Clamp - 1-1/2", 2", 3", 4" Cherry Burrell - 2", 3" Aseptic (APC) - 1-1/2", 2" Bevel Seat - 2", 3"
Threaded	1/4" NPT 1/2" NPT
Flanged	Extended - 3", ANSI 150#, 300#, 600# Flush - 3", ANSI 150#, 300#, 600# Pancake - 3", ANSI 150#, 300#, 600# Taylor wedge / chemical tee

Connections

Direct mount nipple
Armored capillary, lengths 1 ft – 50 ft

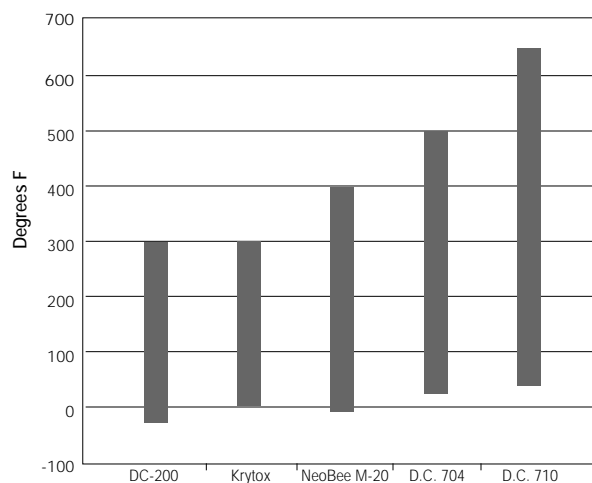
Wetted Materials

Standard on all seals: Threaded style remote seal wetted material options:	316 Stainless Steel Hastelloy C276 Monel Titanium Inconel 600 Teflon Tantalum Gold Plate
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Oil Fill

D.C. 200
Krytox
NeoBee M-20
D.C. 704
D.C. 710

Temperature Range
Isolator Fill Fluids



This information is accurate to the best of the manufacturer's knowledge, however, we reserve the right to change product specifications at any time. Please contact your sales representative for specific order inquiries.