Smith Meter® PD Meter

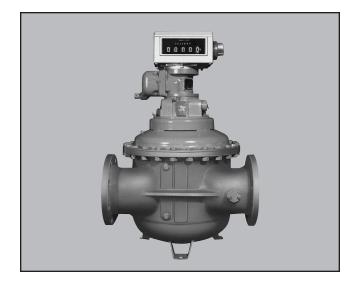


PD Rotary Vane Meter

Application Bulletin

Bulletin AB01003 Issue/Rev. 0.2 (9/07)

The process of selecting correct PD meter options for any given application is often complicated by product variables such as viscosity and temperature. The chart below has been organized to simplify the process. Please note that final selection may vary due to product compatibility.



Meter Feature Selection Guide Based Upon Fluid Viscosity and Temperature for Smith Meter® Positive Displacement Rotary Vane Meters

Temperature Range	Viscosity		
	Up to 2,000 SSU (Up to 400 mPa·s) ¹	2,000 to 10,000 SSU (400 mPa·s to 2 Pa·s) ¹	Over 10,000 SSU (Over 2 Pa•s) ¹
-20° F (-29° C) to Standard Max. Design Temperature ²	Standard Seals³ Standard Trim Standard Clearances⁵ Standard Flow Range Standard Accessory Stack-Up	Standard Seals³ Standard Trim Special Clearances Standard Flow Range Standard Accessory Stack-Up	Standard Seals³ Standard Trim Special Clearances Reduce Max. Flow per Formula⁴ Standard Accessory Stack-Up
Standard Max. Design Temperature ² to 200° F (93° C)	Standard Seals³ Standard Trim Special Clearances Standard Flow Range Standard Accessory Stack-Up	Standard Seals³ Standard Trim Special Clearances Standard Flow Range Standard Accessory Stack-Up	Standard Seals³ Standard Trim Special Clearances Reduce Max. Flow per Formula⁴ Standard Accessory Stack-Up
201°F to 300°F (94°C to 149°C)	Viton Seals³ All Iron Trim Standard Clearances Reduce Max. Flow by 25% Ventilated Extension	Viton Seals³ All Iron Trim Special Clearances Reduce Max. Flow by 25% Ventilated Extension	Viton Seals³ All Iron Trim Special Clearances Reduce Max. Flow per Formula⁴ Ventilated Extension
301°F to 400°F (150°C to 204°C)	Viton Seals All Iron Trim Standard Clearances Reduce Max. Flow by 25% Ventilated Extension with Manual Calibrator Kit	Viton Seals All Iron Trim Special Clearances Reduce Max. Flow by 25% Ventilated Extension with Manual Calibrator Kit	Viton Seals All Iron Trim Special Clearances Reduce Max. Flow per Formula4 Ventilated Extension with Manual Calibrator Kit

SSU to mPa·s relation based upon sp. gr. of 0.93.

10,000 SSU 2 Pa⋅s x Max. Flow Rating or x Max. Flow Rating Actual Product Actual Product Viscosity (SSU) Viscosity (Pa·s)

² Meters 2" through 6": 150 °F (65°C); 8" 137°F (58°C); 10": 125°F (52°C); 12": 115°F (46°C); 16": 105°F (41°C). 3 Standard seals may be used up to 225°F (107°C).

⁴ Maximum allowable flow at actual product viscosity, with High Viscosity Meter Clearances, if viscosity is over 10,000 SSU (or 2 Pa s):

⁵ Special clearances required on 10", 12", and 16" meters for applications in excess of 1,000 SSU (200 mPa·s). Note: When ordering, specify: a. Highest temperature and viscosity at that temperature.

Revisions included in AB01003 Issue/Rev. 0.2 (9/07):

Page 1: Omitted last row on chart

The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.

Headquarters:

1803 Gears Road, Houston, TX 77067 USA, Phone: 281/260-2190, Fax: 281/260-2191

Gas Measurement Products

Houston, TX USA Phone 281/260-2190

Thetford, Éngland Phone (44) 1842-82-2900 Kongsberg, Norway Phone (47) 32/286-700 Buenos Aires, Argentina Phone 54 (11) 4312-4736

Integrated Measurement Systems:
Corpus Christi, TX USA Phone 361/289-3400
Kongsberg, Norway Phone (47) 32/286-700
San Juan, Puerto Rico Phone 787/274-3760
United Arab Emirates, Dubai Phone 971 +4/331-3646

Liquid Measurement Products:

Erie, PA USA Phone 814/898-5000

Los Ángeles, CA USA Phone 310/328-1236 Slough, England Phone (44) 1753-57-1515 Ellerbek, Germany Phone (49) 4101-3040 Barcelona, Spain Phone (49) 43/0989 Moscow, Russia Phone (7) 495/564-8705 Melbourne, Australia Phone (61) 3/9807-2818 Beijing, China Phone (86) 10/6500-2251 Singapore Phone (65) 6861-3011 Chennai, India Phone (91) 44/450-4400

Visit our website at www.fmctechnologies.com

Printed in U.S.A. @ 4/07 FMC Technologies Measurement Solutions, Inc. All rights reserved. AB01003 Issue/Rev. 0.2 (9/07)