



Smith Meter[®] CT Series PD Meters

Large bore meters for crude
transportation applications



Smith Meter® CT Series PD Meters



Accurate custody transfer measurement for the harshest crude

Heavy, sour and viscous are terms that describe the kind of crude oil the petroleum industry deals with today. This thick, gummy and sometimes gritty liquid puts stress on the infrastructure and wears on the equipment. It disrupts operations with downtime, reduces throughput with maintenance and cuts profit due to increased costs. Now there is an enhanced meter that withstands operation on heavy crude: The Smith Meter CT Series Positive Displacement Meters exclusively from TechnipFMC. We call it “CT” for crude transportation because it keeps transportation channels moving. The Smith Meter CT Series PD Meter is engineered to deliver long-lasting operations ensuring accurate custody transfer measurement in the harshest crude oil applications. That means longer run times, extended maintenance intervals and maximum throughput. The bottom line on the Smith Meter CT Series is lower costs. It is sized for 10-, 12- and 16-inch transportation lines for a variety of applications, including pipeline custody transfer, marine loading and unloading, pipeline leak detection, blending, batching and inventory control.

Benefits

- ▶ Superior accuracy – The Smith Meter Rotary Vane Meter principle, combined with the meter’s uniquely designed offset inlet and outlet nozzles, minimizes pressure drop across the measuring chamber, reducing flow through the meter clearances for maximum accuracy.
- ▶ Low pressure drop – Streamlined flow path provides low pressure drop.
- ▶ Positive and accurate registration – High torque drive calibrator with adjustment in 0.05% increments ensures accurate registration.
- ▶ Long service – Low friction ball bearings, fixed cam-type timing and rugged construction provide sustained accuracy and long-service life.
- ▶ Double-case meter models

Double-case meter models

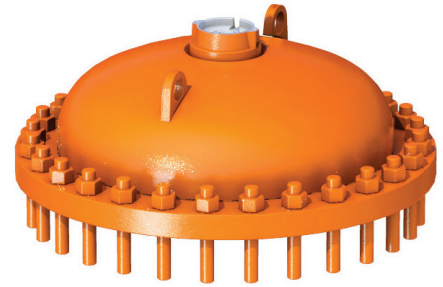
| Model | Size inches (mm) | Maximum flow rate BPH (m3/h) |
|-------|------------------|------------------------------|
| JA10 | 10 (250) | 3,500 (550) |
| JB10 | 10 (250) | 4,700 (740) |
| K12 | 12 (300) | 7,200 (1,140) |
| M16 | 16 (400) | 12,500 (2,000) |

Engineered to deliver long-lasting operations

TechnipFMC's Smith Meter CT Series Positive Displacement Meters have long been the standard for unsurpassed reliability and superior custody transfer accuracy as the most accurate custody transfer meters available. Smith Meter PD Meters use a rotary-vane principle to obtain direct measurements from the flow stream without relying on inference. Smith Meter PD Meters use a streamlined flow path to minimize pressure drop across the measuring chamber, providing inherent accuracy in design and operation.

These crude transportation PD meters incorporate updated design features including lightened blades, full-width wear strips, Armalloy coated hardened alloy steel rollers, cam and tungsten carbide roller pins to provide extended service in harsh crude applications.

The Crude Transportation Series is suitable for crude oil and refined product applications such as blending, batching and leak detection as well as traditional custody transfer applications.



| Design reinforcement | Operational benefits |
|------------------------------------|---|
| Tungsten carbide roller pins | Decreasing friction and wear between rollers and pins |
| Super-light blades | Reducing blade mass and force on blade bearings and cam |
| Wider wear strip | Lessening blade wear from gritty fluids |
| Hardened alloy steel blade rollers | Reducing wear for longer blade and roller integrity |
| Armalloy cams | Reducing friction and wear for longer integrity and proper blade extension for critical clearances. |
| Vent kit | Allowing vapor or gas trapped inside the PD meter to accumulate in the vent port |

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