

Designed for the handling of New Age Extraction

Brodie BiRotor Plus for Crude Oil High accuracy meeting utmost reliability

Brodie's BiRotor Plus and its unique twin helical rotor design allows the meter to *chew through paraffin™* in an application where other metering technologies have failed to produce long-term stability.

The requirement for high-accuracy, multi-viscosity, low maintenance metering, in both ACT/LACT and Transloader applications, realized quantifiable benefits when utilizing our best-in-class positive displacement meter technology.



The Industry Standard

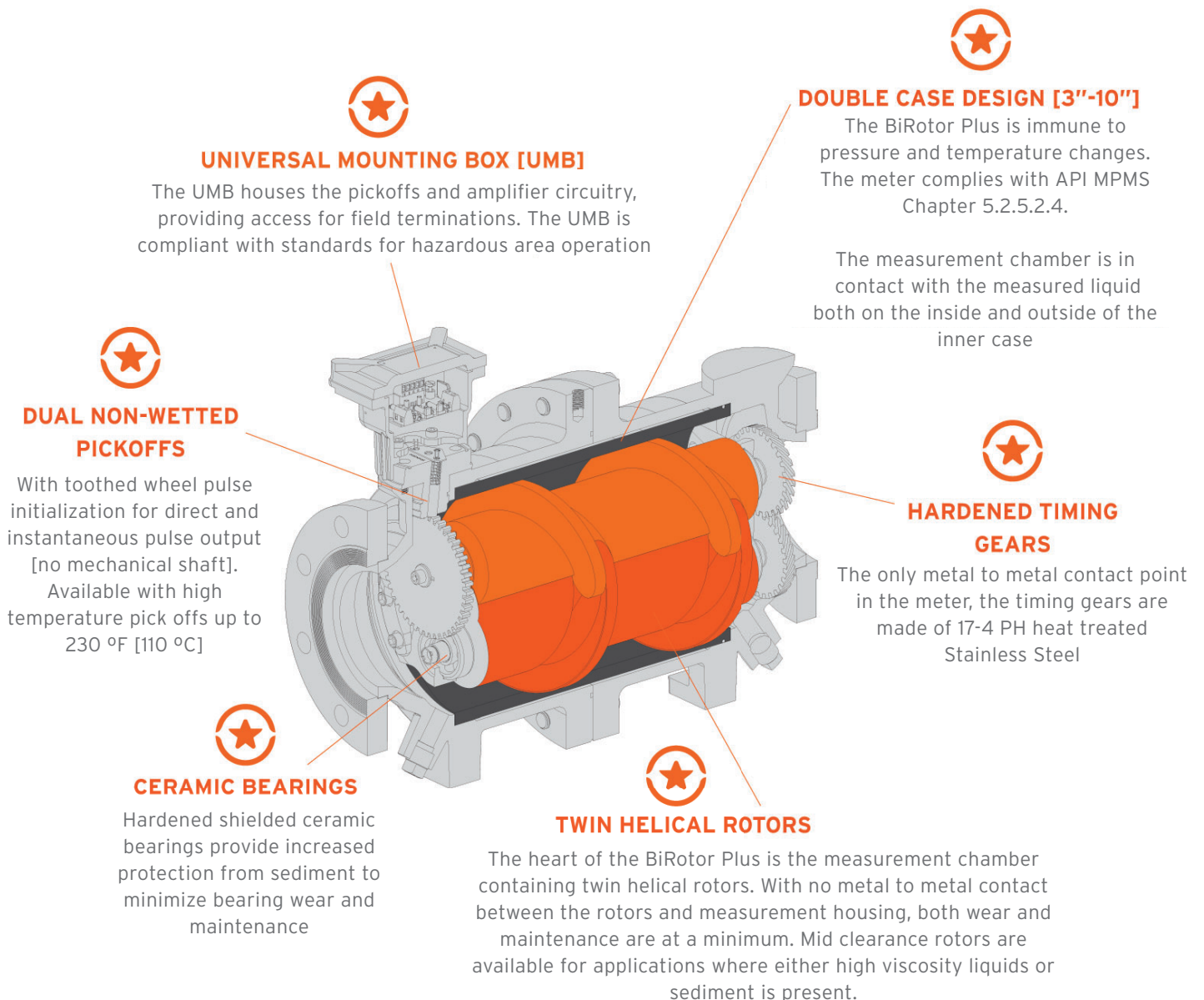
The measurement of crude oil and viscous liquids requires durable, reliable metering equipment. High viscosity flow measurement has proven to be challenging for most technologies. Brodie's BiRotor Plus positive displacement meter provides a stable industry solution for modern oil extraction processes.

Brodie International's uniquely designed positive displacement (PD) meters use twin helical rotors as the heart of its measurement chamber to provide the most accurate, lowest pressure-drop metering technology to use for high-paraffin applications.

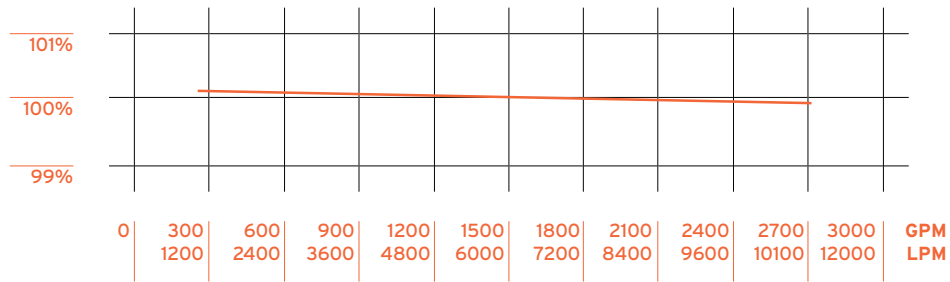
Inference meters can allow a build up of wax in paraffin-rich processes, making PD meters more suitable for these types of installations. Twin helical rotors eliminate the build-up of wax from the walls of the measuring chamber with each rotation, which makes Brodie's BiRotor Plus the best solution in high paraffin applications.

The BiRotor Plus meter is field proven in crude oil applications worldwide.

Design Features



Best Performance in the Industry



Linearity

The linearity of the BiRotor Plus under normal operating conditions is unsurpassed in the industry: linearity better than +/- 0.075% (4" - 6") and repeatability of better than 0.02%.

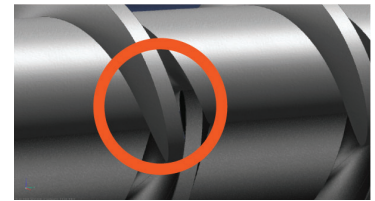
Viscosity

Viscosities from 0.2 - 1000 cSt have little effect on the accuracy of the BiRotor Plus. This is why the BiRotor plus is the master meter of choice- preferred by test labs and worldwide approval authorities.

Dependable, Easy to Operate, Flexible

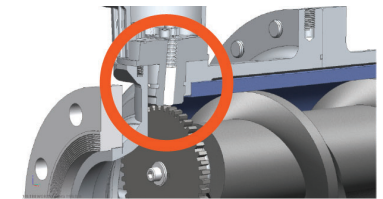
No metal to metal contact of the rotors

Machined to precise specifications, the BiRotor Plus rotors make no metal-to-metal contact with each other, nor the measuring chamber. A special mid-clearance cut provides just enough space for sediment and other small particulates found in crude oil to pass through the meter. The BiRotor Plus is self-cleaning, with the rotors removing paraffin build-up during normal operation. The result is an extremely durable, low maintenance, and highly accurate positive displacement flowmeter suited for crude oil measurement.



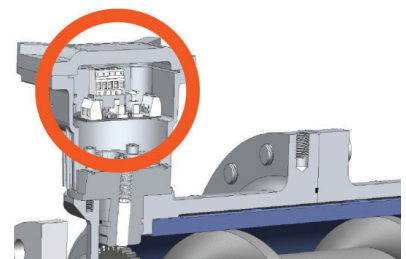
Meter Factor Stability

Due to the rugged design, the BR+ rarely requires recalibration. The hardened timing gears, shielded rotor bearings, and tight tolerances provide a reliable and consistent measurement each rotation, barrel after barrel.



Direct pulse output

Non-wetted high temperature pickoffs and dual-channel pre-amp circuitry are housed in the Universal Mounting Box, which allows ease of access to electronics for service or modification without the need to drain the line.



Ease of operation

The BiRotor Plus design allows for very simple operation and maintenance. The BiRotor technology is field proven over many decades, in the harshest operating conditions. Ease of operation does not require highly skilled operators, let alone IT experts, to handle.

Technical Specifications

		3" [Double Case]	4" [Double Case]	6" [Double Case]
Model Code		B27X	B28X	B29X
Line Size and End Connections		3" ANSI 150/300 DN 80	4" ANSI 150/300 DN 100	6" ANSI 150 DN 150
Flow Range	standard	43-425 GPM 163-1609 LPM	70-700 GPM 265-2650 LPM	100-1000 GPM 379-3785 LPM
	extended	30-500 GPM 114-1893 LPM	33-1000 GPM 125-3785 LPM	-
Maximum Working Pressure	ANSI 150# ANSI 300# DIN PN16 DIN PN40	285 PSI, 19.5 bar 740 PSI, 51 bar 232 PSI, 16 bar 580 PSI, 40 bar	285 PSI, 19.5 bar 740 PSI, 51 bar 232 PSI, 16 bar 580 PSI, 40 bar	285 PSI, 19.5 bar 740 PSI, 51 bar 232 PSI, 16 bar 580 PSI, 40 bar
Weight	ANSI 150 ANSI 300	193 lb, 88 kg 200 lb, 91 kg	293 lb, 133 lb 300 lb, 136 kg	350 lb, 159 kg
Linearity	standard	+/- 0.1 %	+/- 0.075%	+/- 0.15%
	extended	+/- 0.15%	+/- 0.15%	-
Repeatability		0.02%	0.02%	0.02%
Electrical [approximate]		160 Pul/Gal 42 Pul/L	96 Pul/Gal 25 Pul/L	96 Pul/Gal 25 Pul/L
Meter Housing Flanges Sensor housing		Carbon Steel Carbon Steel Stainless Steel	Carbon Steel Carbon Steel Stainless Steel	Carbon Steel Carbon Steel Stainless Steel



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