PULP AND PAPER

KPM KC3 Consistency Transmitter

Testing and industry-specific instruments

The KPM KC3 Consistency Transmitter provides reliable and maintenance-free measurement. With its patented, shock resistant and seal-less transfer mechanism, KPM KC3 is the only transmitter in the market with no moving parts. It also has titanium parts for the wetted areas and an unbreakable diaphragm.

Measures a wide consistency
KPM KC3 fits all applications, measuring a consistency range of 2–16 percent. Plus, the unique and highly-sensitive eddy probe accurately measures shear force.

Simple calibration
One-touch calibration sequencing makes sampling, set-up and calibration easy.

Built-in features include:
- Time-stamping of samples for later evaluation and calibration
- Remote selections for different pulp grades

Remote display unit
The large, remote display has an intuitive, menu-driven user interface, which features simple set-up, calibration and troubleshooting functions. The display can be mounted to any desirable location.

Low installation and lifetime costs
The installation is done via standard stainless steel mounting saddles, with titanium options available for upgrade. Service requirements are low because of the seal-less transfer mechanism with no moving parts or O-rings. All parts are field changeable without shutting down the process and emptying the process line.

Specifications

Sensor type	Blade consistency transmitter
Output signal	2 -wire, 4–20 mA + HART®, Foundation Fieldbus and Profibus PA with optional converter
Measuring range	2–8% with standard blade 6–16% with medium consistency blade 2–3% with low consistency blade 2–8% with recycled unscreened blade
Sensitivity	Better than 0.01% Cs
Process pressure	Max. 25 bar
Process temperature	0–120°C (32–248° F)
Ambient temperature	0–65° C (32–149° F)
Storage temperature	-50–80° C (-58–176° F)
Flow velocity	0.5–5 m/s (1.6–16 ft/s) standard blade 0.5–8 m/s (1.6–26 ft/s) medium consistency blade 0.5–5 m/s (1.6–16 ft/s) low consistency blade 0.5–5 m/s (1.6–16 ft/s) recycled unscreened blade
Weight	Transmitter 2.3 kg (5 lbs), display unit 2.2 kg (4.9 lbs)
Process connection	Clamp connection to NS70 mounting saddle. Saddle welded onto process pipe. All required hardware included with the transmitter.
Process pipe size	100 mm (4“) diameter or larger
Materials	All wetted parts titanium or stainless steel. Mounting gaskets PTFE, mounting saddle SS316L, SMO, duplex, titanium or FRP
Low voltage & emc	IEC 6100-4-3 and CISPR 11
Enclosure class	Sensor unit IP 66 (better than Nema 4x), display unit IP65 (Nema 4x)
Damping	1–99 sec
Calibration	Memory for 10 samples (FIFO): built-in calibrator
Build in curves	Seven (7) built-in calibration curves for softwood, hardwood, TMP, CTMP, groundwood, recycled, eucalyptus + one (1) user specific
Binary inputs	Three (3) to select calibration curve and one (1) for sample button

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