

# KC/5 ROTATING CONSISTENCY TRANSMITTER







## Revolutionary Direct Drive Servo Motor

The KC/5 is a rotary transmitter that requires no compromises. Excellent consistency measurement performance, light weight construction, simple installation and dramatically reduced maintenance make the KC/5 the new standard for rotary consistency transmitters.

#### Fast and accurate measurement

Through KPMs "state of the art" torque measurement technology the KC/5 provides an accurate consistency measurement - instantly! Our sensitive, wide-range measurement sensor is applicable to all consistencies between 1.5-16 %. Built-in temperature compensation assures performance in all process conditions.

#### Low installation costs

KC/5 is easy to install. Replace your existing model rotary transmitter with KC/5 using our special adapter to fit your current rotary installation. For new installations use KPMs installation cone that is provided with the transmitter. All required hardware is included. KC/5 requires 85 - 254 VAC single phase power supply, 320W.

### Remove transmitter while process is running

Built-in gate valve assembly allows you to extract transmitter "on the fly", at full process pressure, without having to shut down or drain the line. As an alternative also flange installation available.

## **Dramatically reduced maintenance**

With no drive belt to change, KPMs Direct Drive Servo Motor never needs maintenance. Unique Mechanical Seal System makes seal maintenance low cost and infrequent. Replace the seals, on site, in one hour or less!

#### Powerful self diagnostics

Automatic maintenance features include reverse direction rotation to automatically loosen foreign objects. Calibration verification is possible while the KC/5 is operating in the line.

<b>SPECIFICATIONS</b>	
SENSOR TYPE	Rotating Consistency Transmitter
OUTPUT SIGNAL	Analog output 4 - 20 mA + HART <sup>®</sup> , FDT/DTM generic, Foundation Fieldbus and Profibus PA with converter
BINARY INPUTS	24 VDC (supplied from DCS), three for built-in calibration curves, one for process stop, one for sample button
BINARY OUTPUT	Alarm output; 24 VDC, 2A; Opening or closing dry contact
POWER REQUIREMENTS	85 - 264 VAC, 47 - 63 Hz, 320W, Single phase.
MOTOR	Integrated Direct Drive Servo Motor
MEASURING RANGE	KC/5-S: 2 % - 16 % consistency KC/5-100: 1,5 – 5%
SENSITIVITY	Better than 0.003 % Cs
PRESSURE RATING	Sensor PN25 Gate Valve DN80 for KC/5-S: PN10, PN16 or PN25, Gate Valve DN125 for KC/5-100: PN16
PROCESS TEMPERATURE	0 - 120 °C
AMBIENT TEMPERATURE	Sensor 0 - 60 °C, Display unit 0 - 50 °C
FLOW VELOCITY	0 - 5 m/s
SEAL WATER	Mill seal water, 6-8mm hose connection (1/4")
HOUSING	IP66 (better than NEMA 4X) enclosure.
CABLING	10 m interconnect cable from Sensor to Display Unit; 20m and 30 m optional
GATE VALVE	DN80 (3") AISI 316L standard, 254SMO and Titanium available. PN10, PN16 or PN25 DN125 (5") AISI 316L, PN16
PROCESS CONNECTION	Measurement Chamber fits pipe diameters of 150 mm (6") and larger (KC/5-100, 200mm or larger), AISI 316L standard, SAF2205, Titanium. Adapter available for other manufacturer's measuring vessels. All required installation hardware included in the delivery.
SENSOR MATERIAL	Wetted parts AISI 316L or Titanium.
DIMENSIONS (L*H*W) AND WEIGHTS	Sensor: 520 x 140 x 180 mm, 14,8 kg; KC/5-100, 19kg Display Unit: 200 x 300 x 150 mm, 6 kg Installation assembly: 430 x 560 x 200 mm, 19 kg; KC/5-100, 28kg

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