CAMILLE BAUER

Rely on us.

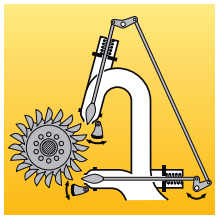
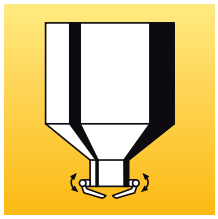
Angular position transmitters to be installed or surface mounted

Application

The angular position transmitters KINAX to be installed or for surface mounting are precision instruments and serves the acquisition of angular position and rotation, processing and the provision of measured values as electric output signals for the downstream device. They converts the angular position of a shaft into a load-independent direct current signal, proportional to the angular position.

The compact design makes the angular position transmitters particularly suited to the installation in or mounting on devices and apparatuses. The products are used in many applications, e.g. railway engineering, industrial plants, ship building, power plant construction, gate positions.




Main features

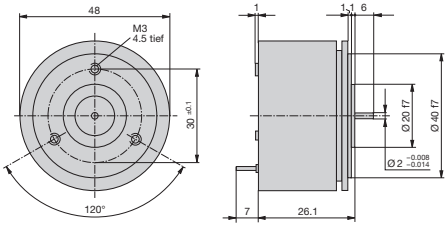
- **Compact angular position transmitters to be installed or for surface mounting**
- **Capacitive scanning system**
- **Analog output signal 4…20 mA with 2, 3 or 4-wire connection**
- **Drive shaft fully rotatable without stops**
- **Small starting torque < 0.001 Ncm**
- **Non mechanical abrasion, low annual maintenance**
- **Programmable and non-programmable versions**
- **Simulation of measured values to testing of the subsequent device chain (for programmable versions only)**
- **Measured value acquisition and display of the instantaneous value on the screen programmable**
- **Adjustment and fine adjustment of the analog output, zero position and measuring range**
- **Characteristic of the output value freely programmable (linear, V-characteristic or characteristic curve)**
- **Available in explosion protection “Intrinsic safety” EEx ia IIC T6**
- **Available as version GL (Germanisch Lloyd)**

Measuring principle

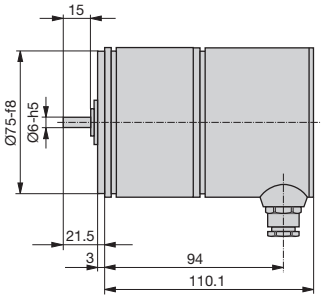
Capacitive

The capacitive scanning system consist of 2 main parts: the differential screen capacitor and the electronic circuitry. The angular deflection of the device to be measured is transferred to the rotor of the differential screen capacitor with the aid of a mechanical coupling. It is then convered into a change of capacitance proportional to the angle. All changes to the position of the rotor result in a change in the capacitance. This is transformed into a DC current signal proportional to the measured value.

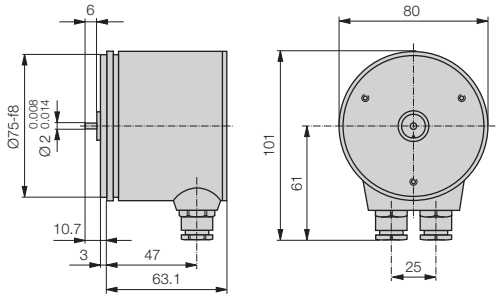
Dimensions



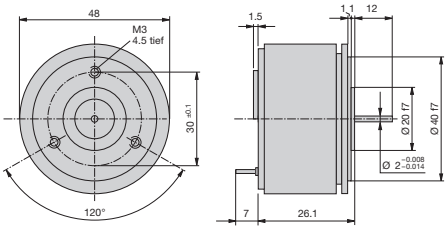
KINAX 3W2 with shaft dia. 2 mm



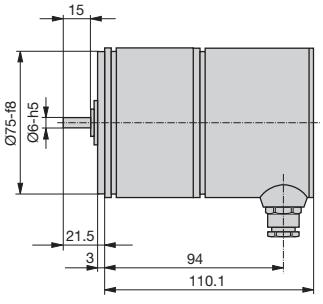
KINAX WT710 mit Getriebe



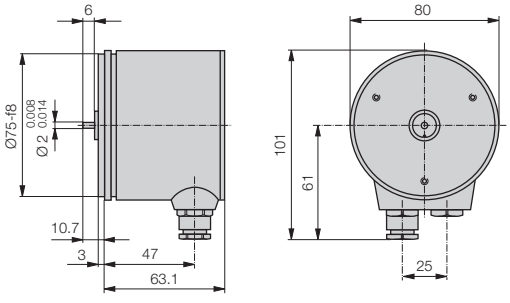
KINAX WT710 with shaft dia. 2 mm



KINAX 2W2 with shaft dia. 2 mm



KINAX WT711 mit Getriebe



KINAX WT711 with shaft dia. 2 mm

	KINAX 3W2	KINAX 2W2	KINAX WT710	KINAX WT711
				
Version	to be installed	to be installed	for surface mounting	for surface mounting
Version EEx ia IIC T6	yes	yes	yes	yes
Version GL	yes	no	no	no
General data				
Measured quantity	angular position			
Measuring principle	capacitive			
Basic accuracy	0.5 % 1.5 % (> 150°)	0.5 %	0.5 % 1.5 % (> 150°)	0.5 %
Reproducibility	< 0.2 %			
Starting torque	< 0.001 Ncm at 2 mm shaft < 0.03 Ncm at 6 mm resp. 1/4 inch shaft			
Drive shaft	dia. 2. 6 mm or 1/4 inch			
Housing protection	IP 50 (acc. to EN 60529)		IP 43 (acc. to EN 60529)	
Housing	Aluminium		Aluminium / Plastic	
Electrical connection	Soldering pins or screw terminals	Soldering pins or screw terminals	Cable gland / screw terminal	Cable gland / screw terminal
Weight	approx. 0.1 kg		approx. 0.55 kg	
Measuring input				
Measuring ranges	0…270°	0…350°	0…270°	0…350°
Programmable	no	yes	no	yes
Measuring output				
Output signal	0 ... 1 to 0/4 ... 20 mA	4 ... 20 mA	0 ... 1 to 0/4 ... 20 mA	4 ... 20 mA
Power supply				
Operating voltage	12…33 V DC 12…30 V DC (Ex)		12…33 V DC 12…30 V DC (Ex) 24…60 / 85...230 V DC/AC	12…33 V 12…30 V DC (Ex)
Environmental conditions and regulations				
Temperature / relative humidity	−25°C ... +70°C / ≤90% −40°C ... +70°C / ≤95%	−25°C ... +75°C / ≤90% −40°C ... +75°C / ≤95%	−25°C ... +70°C / ≤90% −40°C ... +70°C / ≤95%	−25°C ... +75°C / ≤90% −40°C ... +75°C / ≤95%
Permissible vibration	≤ 50 m/s² 2h / 0 ... 200 Hz			
Shock	3 x ≤ 500 m/s² each 10 pulses			
Test voltage	all connections against housing 500 Veff., 50 Hz, 1 min.			
Electromagnetic compatibility	The standards EN 61 000-6-4 and EN 61 000-6-2 are observed			

Product ranges of Camille Bauer

Heavy-current: State, Allocation, Quality.

Angular position: Angle, Inclination, Position, Volume.

Process control: Temperature, Signal conversion, Process management.

Printed in Switzerland • Subject to change without notice • DM-1018-000-00-EN-10.09

CAMILLE BAUER

Rely on us.

Camille Bauer AG
Aargauerstrasse 7
CH-5610 Wohlen / Switzerland
Phone: +41 56 618 21 11
Fax: +41 56 618 35 35
info@camillebauer.com
www.camillebauer.com