# Temperature transmitter MK2, EK2

Fluidcontrol

The temperature-based change in the viscosity of hydraulic and lubricating oils requires closely monitoring and stabilising the medium temperature. Furthermore, close temperature monitoring impacts the life of the oils. The oil tank is typically accepted as the control point for the oil temperature, which generally provides an informative mean value. It may further be helpful to also monitor segments or individual devices in a system.

The values determined by the measuring points must be transmitted to the system control in a compliant manner. However, for safety reasons it is advisable to at least display the current oil temperature on the oil tank.

Bühler Technologies GmbH's comprehensive range of temperature monitoring products is specially designed for use in hydraulics and lubrication technology.

Analogue output 4-20 mA

Continuous temperature measurement

Nearly any length of cable connection between sensor and control unit

Sensor length up to 1 m

Brass or stainless steel housing





# Technical Data MK2/EK2

Model	MK2	EK2		Dimensio	ns
Version:	MS	VA			. 37
Probe material:	Brass	1.4571			
Max. operating pressure:	5 bar	10 bar			<u> </u>
Connection:	G1/2	G1/2	🕇	[8	<b>⋙</b> . L []
Medium temperature:	-20 °C to +80 °C		8	SW 36	
Ambient temperature:	-20 °C to +80 °C	-20 °C to +80 °C  280, 370, 500 (standard)  variable to max. 1000 mm  Pt100 Class B, DIN EN 60751			
Lengths:					
Sensor element:	Pt100 Class B, D			EOlasti seal NBR	
Tolerance Pt100:	± 0.8 °C 10–30 V DC				
Operating voltage (U <sub>B</sub> ):					
Measuring range*:	0 °C to +100 °C				<del>        -</del>
Output*:	4–20 mA		1000		
Max. burden Ω:	(U <sub>B</sub> - 7.5 V)/0.02	A	L = max. 1	Installation depth min. 50	
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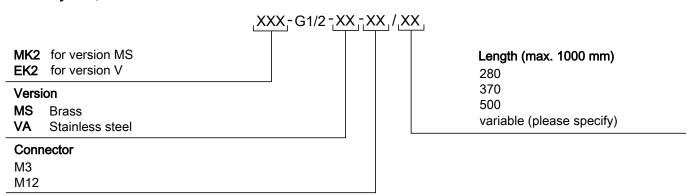
 $<sup>\</sup>ensuremath{^{*}\text{Other}}$  measuring ranges and outputs available on request.

# Standard Pin Assignment MK2/EK2

Connector:	M3 valve connector	M12 plug A coded	
Dimensions:	37	M12x1	
Number of pins:	3-pin + PE	4-pin	
DIN EN:	175301-803	61076-2-101	
Voltage max.	30 V DC	30 V DC	
IP rating:	IP65	IP67**	
Cable fitting:	PG 11		
Standard pin assignment:	+24V DC 1—(———————————————————————————————————	+24V DC 1—( Ω )—4 out 4-20mA	
** '11 106711 1	- <b>■</b> ) PE	- <b>-</b> )-3	
**with IP67 cable box screwed Other connectors available on 1			

#### MK2, EK2

## Model Key MK2/EK2



## Ordering example

You need: Temperature transmitter brass version, with M3 plug connection, output  $0-100 \,^{\circ}\text{C} = 4-20 \,\text{mA}$ , length L= 520 mm,

operating pressure 2 bar

You order: Temperature transmitter MK2-G1/2-MS-M3/520