



KONGSBERG

# GN-11

## Temperature Transmitter

### Description

#### Application and general description

The GN-11 is a single channel transmitter which can handle signals from Pt100, Pt1000 and thermocouple 'K' type (NiCr-NiAl) and 'J' type (Fe-CuNi).

The transmitter can be configured to cover different temperature ranges and sensor types by HART. The configuration is done from the factory. The table below shows the different configurations.

The output signal is 4 to 20 mA 2-wire, and sensor connection is 2-, 3- & 4-wire. The transmitter has internal compensation for varying ambient temperature.



**Operating ambient temp. GN-11, -40 to +125 °C.**

#### ORDERING EXAMPLE: GN-11/2 U 12

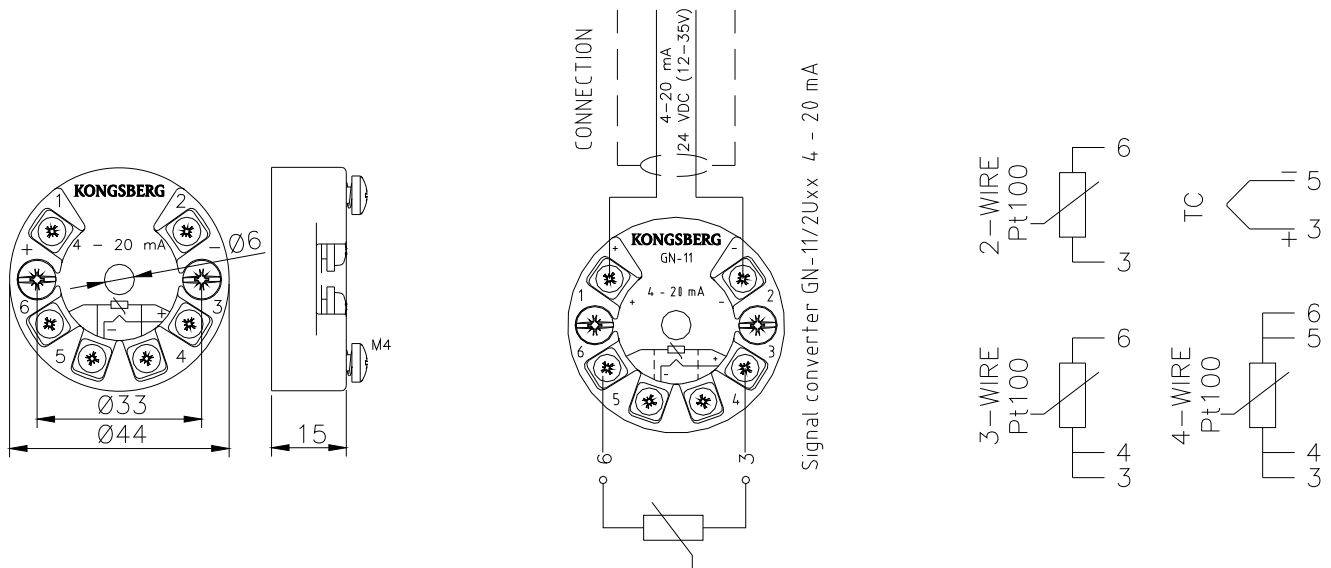
Connection 2-/3-/4-wire \_\_\_\_\_  
Sensor element type \_\_\_\_\_  
Temp. range \_\_\_\_\_

Connection	Code
Pt100 2-/3-/4-wire	2, 3, or 4
Pt1000 2-wire	2
NiCr-NiAl 2-wire	2
Fe-CuNi 2-wire	2

Sensor type	Code / Range °C
Pt100	U (-200 – 600 °C)
Pt1000	M (-200 – 300 °C)
NiCr-NiAl	K (0 – 900 °C)
Fe-CuNi	J (0 – 300 / – 600 °C)

Range °C	Code
-200 to +200	10
-50 to +50	11
0 to + 160	12
0 to + 300	13
0 to + 600	14
0 to + 100	15
-50 to +100	16
0 to + 900	17
0 to + 800	18

## Dimensions and connection



## Technical specification

	<b>GN-11</b>
Power supply	24 VDC (12 to 35 V)
Output signal	4 to 20 mA / 2-wire
Load	0 to 1000 Ohm (35 V)
Accuracy Pt100, Pt1000 at 25 °C	±0.25 % FRO
Accuracy Thermocouple at 25 °C	±2 °C (ITS-90)
Output shift by ambient temperature	±0.005 % FRO /°C Ref. at 25 °C
Operating ambient temperature	-40 to +125 °C
Humidity	97 % relative, IEC 60068-2-30
Vibration	IEC 60068-2-6. ±8 mm 3-25 Hz, 10G 25-100 Hz.
EMC standard	Cispr 16-1, 16-2 IEC 61000
Emission	EN 50081-1
Immunity	EN 50082-2
IP Grade	IP00, IEC 60529
Connection	0.5 to 2.5 mm <sup>2</sup>
Weight	Approximately 40 g
Performance degradation during immunity test	<±0.5 % FRO (1 % 1 GHz to 2 GHz)
Types	See "Order key"
Material, moulding enclosure	PPT/PET Blend
Moulding	Aretane
Terminals	M3 screws zinc-plated yellow

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