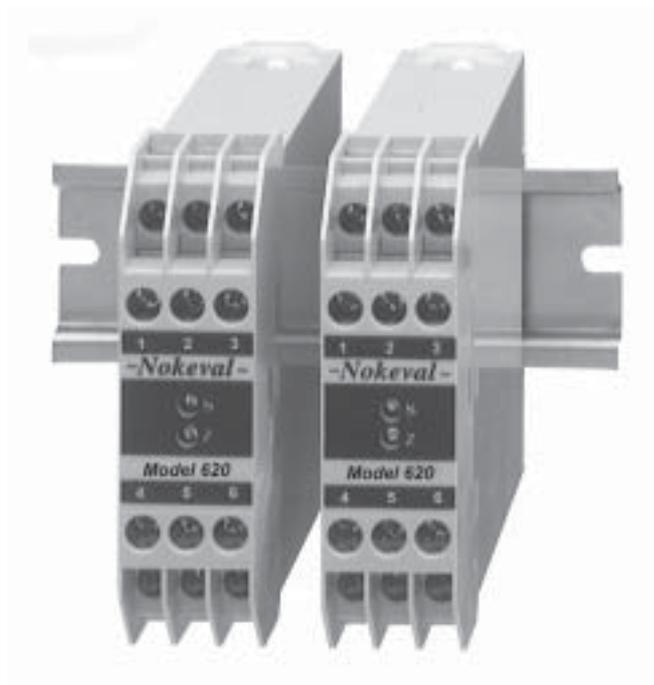


Nokeval

No 260901

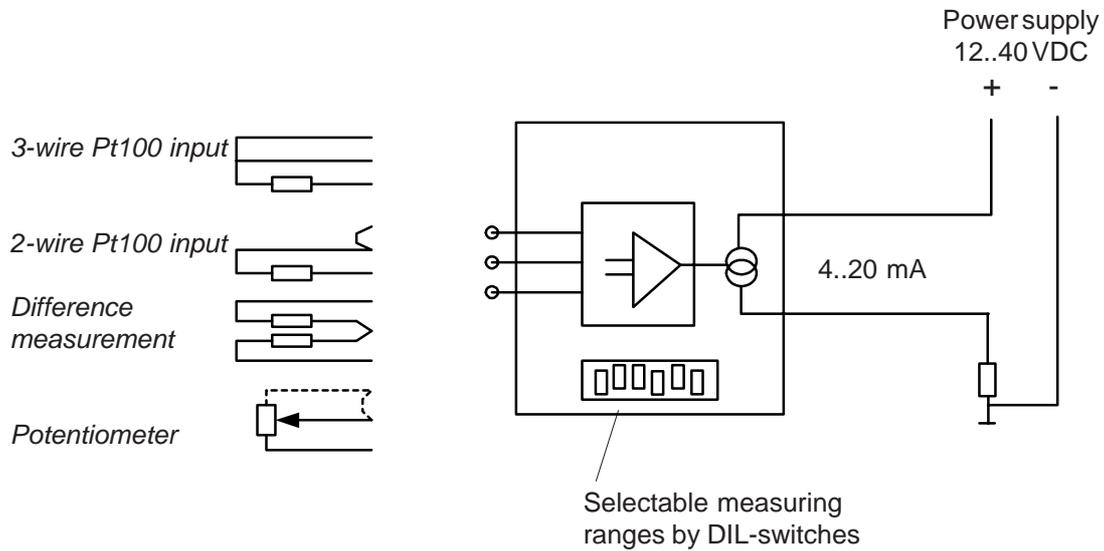
Manual 620S



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2-wire transmitter 620S



General

Temperature transmitter 620S is designed to meet the most exacting temperature measuring requirements. Extreme accuracy is obtained by linearizing the measurement signal with an accuracy of 0.05 % to the temperature. Lead wire resistance automatic compensation up to 100 ohms makes possible long transfer distances with small-crossarea signal cables.

Range can easily be varied by changing the range resistors located under the front plate. Fine adjust with Span and Zero potentiometers on transmitter front. Transmitters are delivered factory calibrated. Transmitters takes supply voltage from 4..20 mA loop.

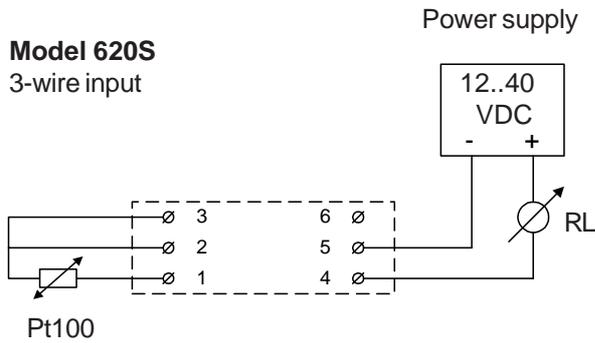
Specifications

Pt100 input (DIN 43760):

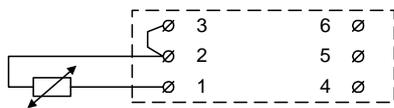
Temperature ranges:	-200..800°C	Supply voltage range	12..40 V
Smallest standard range	50°C		reverse polarity protected
Smallest optional range	10°C	Supply voltage effect	0.005%/V
Range selection	DIP-switches/potentiometer	Min output	3.8 mA
Accuracy	<± 0.05 % of span	Current limitation	27 mA
Linearity	<± 0.05 % of span	Sensor current	0.7 mA
Ambient temperature effect		Mounting	wall and DIN 46277 rail
Span < 100°C	<± 0.01%/°C	Terminal connection	2 x 1,5 mm ²
Span > 200°C	<± 0.005%/°C	Dimensions	75 x 22,5 x 97 mm
Supply voltage effect	<± 0.005%/V	Housing	Polycarbonate
Calibration accuracy	< 0.05 % of span ± 0.1°C	Protection	IP10
Repeatability	< 0.05% of span	Weight	200 g
Response time	0.25 s	Operating temperature	0..50°C
Resistance effect	0.002%/Ω typical	Storage temperature	-10..+70°C
Sensor connection	3-wire		
Output	4..20 mA		

Connection diagram

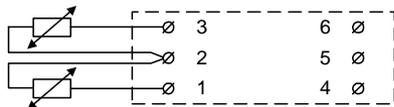
Model 620S
3-wire input



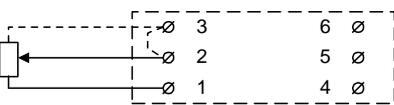
2-wire input



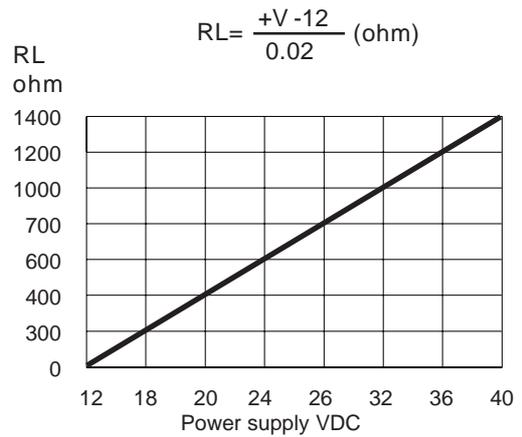
Difference measurement (special order)



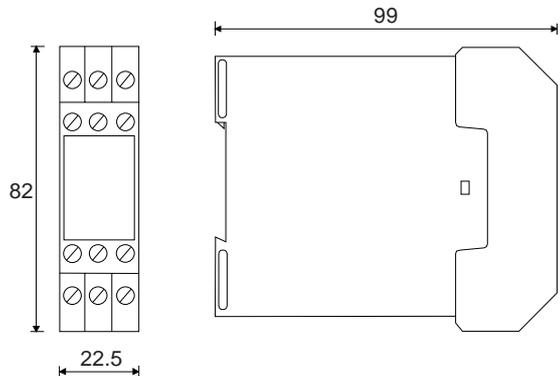
Potentiometer (special order)



Max. loop resistance RL



Dimensions



Connectors 2 x 2.5 mm
Mounting DIN 46277

620S Transmitter calibration

The model 620S transmitters are shipped from factory with range resistors for standard range (0..100°C) if special ranges are not ordered. Measuring range can be varied by changing the resistors located under the front plate.

Calibration procedure:

1. Open the front panel of the transmitter.
 2. Select jumper from table 1 according to desired temperature range.
 3. Connect Pt100 calibrator to input (3-wire connection) and 4½ digit mA-meter to output loop.
 4. Set the calibrator to the value that corresponds minimum value of selected range.
 5. Adjust output to 4,000 mA by zero trim.
 6. Set the calibrator to the maximum value of selected temperature range.
 7. Adjust output to 20,000 mA with span trim.
 8. Repeat steps 4, 5, 6 and 7
- Verify that the readings are within the limits specified. (0,05 % of span = 0,008 mA of output current.)

620S Settings

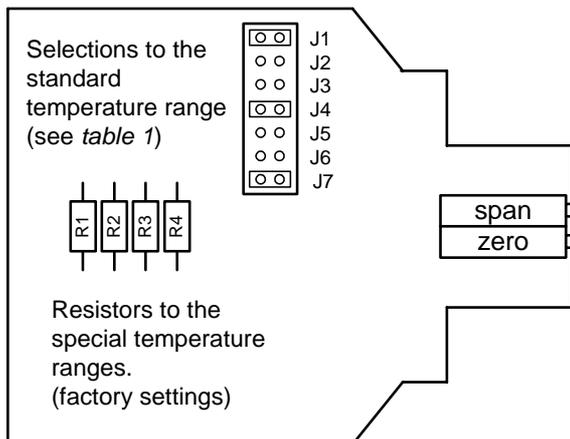


Table 1.

Temperature range	Jumper selections
0..100°C	J1, J4, J7
0..150°C	J2, J5, J7
0..200°C	J3, J6, J7

NOTE: other than table 1 in accordance with temperature ranges are being adjusted on special temperature resistor R1..R4. Resistors size are being adjusted on the factory settings.

Notes:

Notes:

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