2-wire 4-20 mA isolator 6580

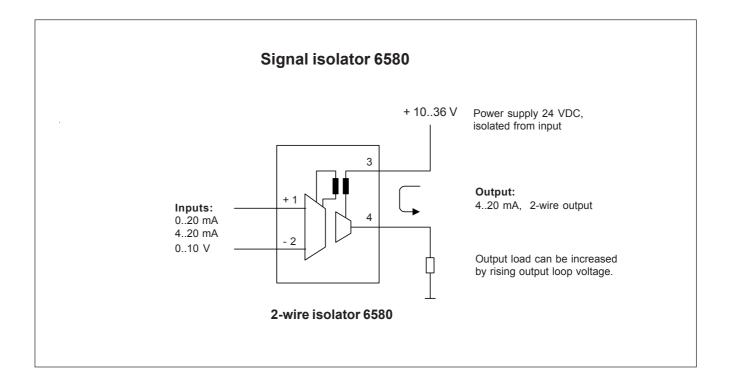
- Very slim, 9.5 mm only
- 2-wire output 4..20 mA
- Inputs 0..20 mA, 4..20 mA or 0..10 V
- Galvanic isolation 1000 V
- Power supply 10..34 VDC
- Voltage drop in input loop 1V
- Output load 700 ohm (with 24 V)
- Accuracy 0.05% of span
- Specially suited for programmable logics



Nokeval has designed a very slim, 9 mm only, 2-wire converter with calvanic isolation. Converter is powered by output 2-wire loop. It is specially suited to isolate analog inputs of programmable logics because those supply the power and wiring is simple. The idea of connecting power supply to output side eliminates typical problems of conventional isolators like small output load and high input side voltage drop.

Three input types are available: 0..20 and 4..20 mA or 0..10V, output is always 4..20 mA. Output load is 700 ohm by 24 VDC power supply. You can increase output

load by rising output loop voltage (see picture 3). Input voltage drop, 1 V only, enables connection of several devices to same input loop. Converter is delivered calibrated to 0.05 % accuracy of full scale. Front cover has zero and span potentiometers for eventually recalibration. The damping of standard 6580 is 10 ms.



Technical specification:

 $\begin{array}{lll} \text{Input} & 0..20, \, 4..20 \,\, \text{mA}, \, 0..10 \text{V} \\ \text{Output} & 2\text{-wire} \,\, 4..20 \,\, \text{mA} \\ \text{Accuracy} & < 0.05\% \,\, \text{FS} \\ \text{Repeatability} & < 0.03 \,\, \% \,\, \text{FS} \\ \text{Temperature drift} & 0.006\% / \,^{\circ}\text{C} \\ \text{Input load} & 50 \,\, \Omega \, \text{current input} \end{array}$

> 1 MΩ voltage input

Power supply 10..36 VDC

Output load $700 \Omega (24V)$ picture 3.

Isolation voltage >1000 V / 1 min

Damping: 10 ms
Frequency range 0..100 Hz
Ambient temperature -20..60°C
Case dimensions 9 x 88 x 58 mm
Installation DIN-rail, 35 mm
Terminal blocks 2 x 2.5 mm²

Order code: 6580- 4/20mA

Input: 0...20 mA 4..20 mA 0..10V

Output always 4..20 mA

For other input and output signal combinations we offer model 641 with 24 VDC power supply.

