

Application

Conversion of a standard voltage signal into a standard current signal.

The Type 6151 u/i module converts a DC voltage of 0 or 2 V to 10 V into a current signal of 0 or 4 mA to 20 mA. A power supply of 24 V DC is required.



The Type 6151 u/i Module is suitable for attachment to devices with an electrical connection according to DIN EN 175301-803. The standard housing connector, as shown in Fig. 1, or a special device connector for different versions can be used.

Installation

For attachment to devices with a device connector and cable socket according to DIN EN 175301-803 (e.g. Type 3372 Pneumatic Actuator or Type 6111 i/p Converter in the version with male angle connector), simply plug on the Type 6151 u/i Module. The connector is connected to the cable socket.

For devices without device connector and cable socket according to DIN EN 175301-803, the M20x1.5 cable gland is replaced by a device connector to install the u/i module.

The u/i module can be used with the following SAMSON devices:

Table 1: Application

SAMSON device	Device connector according to DIN EN ...	
	Replaces the M20x1.5 cable gland	Already exists
Positioners		
Type 3725	● ³⁾	
Types 3730-0/-1/-2	● ³⁾	
Type 3760	● ³⁾	
Type 3761	● ³⁾	
Type 3767	● ³⁾	
Type 4763	● ³⁾	
Series V2001 Valves with Type 3372 Electropneumatic Actuators		
Type 3321-IP		● ²⁾
Type 3323-IP		● ²⁾
Type 3531-IP		● ²⁾
Type 3535-IP		● ²⁾
i/p converters		
Type 6111		● ¹⁾
Type 6116	● ³⁾	

¹⁾ Type 6111 i/p Converter in version with male angle connector

²⁾ Series V2001 Valves in version with integrated positioner and plug connector

³⁾ 6151-03x version of u/i module required

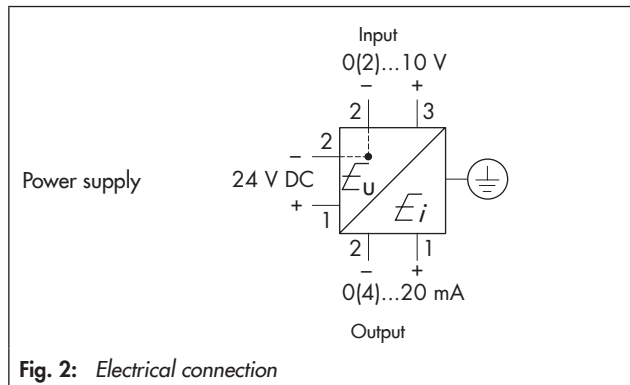


Fig. 1: Type 3372 Electropneumatic Actuator with Type 6151 u/i Module

Table 2: Technical data

Input signal	0/2 to 10 V
Maximum values	-15 V/+27 V
Static destruction limit	-20 V/+32 V (briefly ±32 V)
Input resistance	50 kΩ at U _e = 0 to 10 V · 1 kΩ at U _e = -0.3 V or U _e > 11 V
Output	0/4 to 20 mA, also available with 0 to 10 V input, 4 to 20 mA output
Maximum load	$R \text{ (k}\Omega\text{)} = \frac{U_H - 10 \text{ V}}{20 \text{ mA}}$ (e.g. 700 Ω with power supply U _H = 24 V)
Power supply	16 to 30 V DC
Permissible ripple	Within the given limits
Static destruction limit	±32 V DC
Reverse polarity protection	Down to -32 V DC
Supply current	Max. 22 mA, regardless of the power supply
Characteristic	
Characteristic	Linear, deviation from terminal-based linearity 0.2 %
Temperature influence	
Zero	<0.1 %/10 K
Span	<0.1 %/10 K
Power supply influence	<0.05 % within the given limits
Operating temperature	-25 °C to +85 °C
Degree of protection	IP 65 when installed
Electromagnetic compatibility	EN 50081 Parts 1 and 2
Housing material	Polyamide

Electrical connection

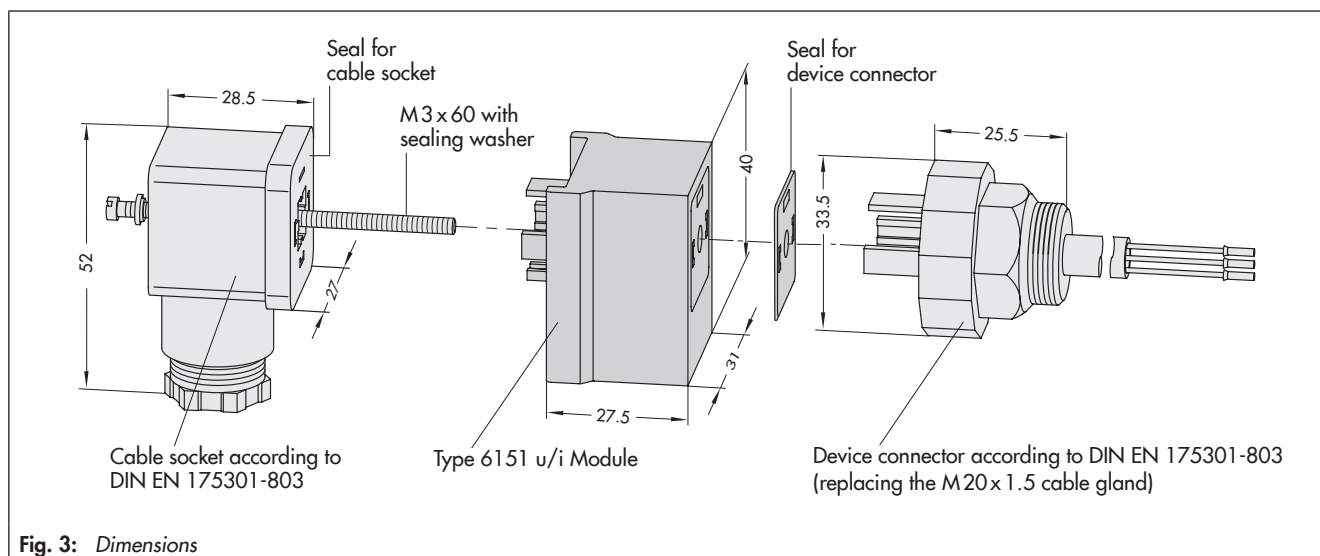


Ordering data

Complete order number as required

Order no.	Type 6151 -
Explosion protection	Without	0		
	Module only with seal and M3 x 60 screw	1		
	Module with cable socket, seal and M3 x 60 screw	2		
Version	Module with cable socket, M20x1.5 device connector, seal and M3 x 60 screw	3		
	Module with cable socket, device connector according to DIN EN 175301-803, seal and M3 x 60 screw	4		
Signal	0/2 to 10 V input, 0/4 to 20 mA output	0		
	0 to 10 V input, 4 to 20 mA output	1		

Dimensions



Specifications subject to change without notice



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