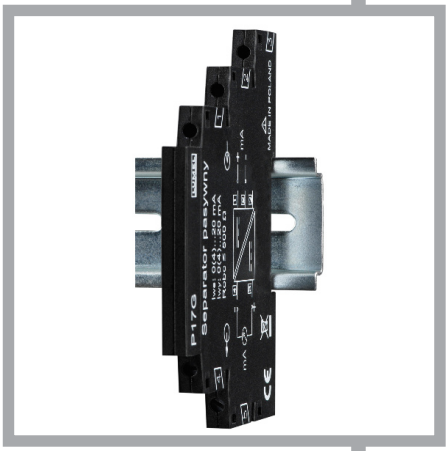
sifam tinsley
PRECISION INSTRUMENTATION

PASSIVE SEPARATOR SUPPLIED BY A CURRENT LOOP P17G TYPE



USER'S MANUAL

CE

Contents

1. Application

The P17G passive separator in a housing of 6.2 mm width and supplied from a current loop, serves to the electric isolation and filtration of the 0(4)...20 mA standard signal value without an additional supply voltage.

2. Operational safety

In the security scope, the separator meets the requirements of the EN 61010-1 standard.

Remarks concerning the safety:

- All operations concerning transport, installation, and commissioning as well as maintenance must be carried out by qualified, skilled personnel and national regulations for the prevention of accidents must be observed.
  According to this basic safety information, qualified, skilled personnel are persons who are familiar with the installation, assembly, commissioning, and operation of the product and who have qualifications necessary for their occupation.
- **The removal of the separator housing during the guarantee period may cause its cancellation.**

3. Separator set

The set of the P17G separator is composed of:
1. P17G separator (see p.13)
2. user's manual
3. guarantee card

When unpacking the instrument, please check whether the type and execution code on the data plate correspond to the order.

4. Installation

4.1. Assembly (see p.13)

4.2. Principle of operation (see p.14)

The input signal of the passive separator, after converting into a signal of high frequency, is separated by means of a transformer and next, after rectifying and filtration, is directed to the output system.
The required energy for separation needs is collected from the current loop of the input signal.

4.3. Electrical connections (see p.14)

The connection diagram of the passive separator is presented on the fig.4.
In case of separator operation in a environment with high interference, one must apply shielded wires.

5. Technical data

Basic parameters:

- conversion error	± 0.2%
- limit frequency (-3 dB)	70 Hz
- response time (10...90%), R_o=500 Ω	5 ms
- voltage fastness (testing) inp/out	1.5 kV, 50 Hz, 1 min.
- preheating time of the separator	not occurs
- ambient temperature	-20...23...65°C
- storage temperature	-40...+85°C
- relative air humidity	<95% (condensation inadmissible)
- operating position	any
- guaranteed protection class	IP50 (housing) IP20 (electrical connections)
- dimensions	(6.2 x 77.5 x 100) mm
- kind of terminals	screw terminals
- diameter of connecting wires	0.2...2.5 mm^2 (AWG24-12)
- length of wire without isolation	6 mm
- housing material	polyester PBT, black
- weight	80 g
- fixing	acc. to EN 60715

Input:

- range of the input signal	0...20 mA, (4...20 mA)
- voltage drop at 20 mA	ca. 1.7 V (at Ro=0 Ω)
- response current	ca. 150 μA
- maximal input current/overload	40 mA
- maximal voltage current/overload	30 V

Output:

- range of the output signal	0...20 mA, (4...20 mA)
- load resistance R_o	0...100...500 Ω
- ripples	≤ 10 mV

Additional errors:

- from load resistance changes	≤ 0.15% / 100 Ω
- from ambient temperature changes	≤ 0.05% / 10 °C

Electromagnetic compatibility:

- noise immunity, acc. to EN 61000-6-2
- noise emissions, acc. to EN 61000-6-4

Safety requirements acc. to EN 61010-1

- installation category	III
- pollution grade	2
- phase-to-earth working voltage:	50 V

Order Codes

Passive separator P17G	XX	X

Version

Standard 00
On order* XX

Acceptance Tests:

Without additional requirements 8

With an extra quality inspection certificate 7

* After agreeing with manufacturer

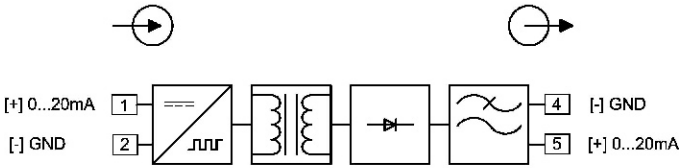


Fig.4. Principle of the P17G separator operation

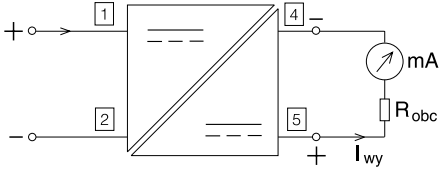


Fig.5. Electrical connections of the P17G separator

Sifam TInsley Instrumentation Inc.
3105 Creekside Village Drive,Suit No 801,
Kennesaw,GA 30144, USA