ELECTRO-PNEUMATIC INTERSYSTEM TRANSMITER type A201

ELECTRO-PNEUMATIC INTERSYSTEM TRANSMITTER type A201 IS USED FOR CONVERSION THE STANDARD ANALOGUE ELECTRIC SIGNAL ON STANDARD PNEUMATIC SIGANL AT RANGE 20...kPa OR 60..300kPa IN AUTOMATIC REGULATION SYSTEMS OR CONTROL INDUSTRY SYSTEMS.
THIS TRANSMITTER POSSESES COOPERATION THE ELECTRONIC AUTOMATION SYSTEMS WITH EXECUTIVE ELEMENTS.
THE TRANSMITTER'S WORKING IS BASED ON COMPARISON MOMENT RULE OF FORCE MADE BY COIL WHICH WAS PUT IN CONSTANT MAGNETIC FIELD PROPORTIONAL FOR INPUT SIGNAL, WITH MOMENT OF FORCE MADE BY METALIC PRESSURE CAPSULE OF FEEDBACK, WHERE THE PNEUMATIC OUTPUT SIGNAL IS SUPPLIED.
CHANGE OF DIRECT OF TRANSMITTER WORKING ("DIRECTLY" OR "INVERSELY" WORKING) MIGHT BE REALIZED BY CHANGE CURRENT FLOW DIRECTION BY COIL AND CORRECTION OF TRANSMITTER REGULATION.

*** pressure voltage 140±14 kPa**
*** protection degree IP 54**
*** spark-safety version acc. to ATEX directive**

TECHNICAL DETAILS

- input standard signal	4...20 mA; 0...20 mA
- input inversion signal	20...4 mA; 20...0 mA
- output signal	20...100 kPa; 60...300 kPa
- pressure supply	140 ±14 kPa; 400 ±40 kPa
- input resistance	≤250Ω
- basic error	0,6%
- hysteresis	0,25%
- additional errors:	
from changes of pressure supply by 10%	max 0,5%
from change of ambient temperature	max 0,8% on each 10°C
form vibrations in range:	
10 ... 60 Hz, amplitude<0,35 mm 60 ... 500 Hz, acceleration 5g	max 1%
form reaction the magnetic constant and commutative field at intensity 100 A/m, 50 Hz (acc. to PN-EN 6100-4-8:1998)	max 0,5 permissible basic error
form disturbances radiated magnetic field at radio frequency 10 V/m., at frequency in range 80 MHz do 1 GHz (acc. to PN-EN 6100-4-3:2002)	max 0,5 permissible basic error
from series of quick transient states made by voltage at peak value 2 KV (acc. To PN-EN 6100-4-4:2002)	max 0,5 permissible basic error
from surge at voltage 0,5 KV (acc. to PN-EN 6100-4-5:1998)	max 0,5 permissible basic error
- working position	optionally, subject to 0 correction in choosed position
- own air consumption	max 0,35 kg/h at p_z= 140 kPa
- max rate	7,5 kg/h at p_z= 140 kPa
- intrinsic-safety characteristic	Ex II 2 G EExi_a IICT6/T5/T4
- certificate	KDB 04 ATEX 026X
- conditions of using in explosion-risk zone:	

1. Electro-pneumatic system transmitter type A201-A2XX-XX-XX, ... may cooperate only with intrinsic-safety circuit at parameters: U_1 = 28 V DC, I_1 = 100 mA, P_1 = 0,7 W
2. Transmitter connection with cooperating devices should be made by separate conductors pair or by cable, which only spark-safety circuits will be connected. L and C parameters of external circuit should be the same like for device cooperates with transmitter.
3. Acceptable ambient temperature - depending on temperature class

Temperature class of gases and steam	T6	T5	T4
Acceptable ambient temperature(T_a)	-40°C ... +50°C	-40°C ... +65°C	-40°C ... +70°C

- housing protection degree	IP54 acc. to PN-EN 60529:2002
- mass	1,1 kg
- connectors:	
Electric	screw clamps for transmitter at diameter to 2,5 mm²
Pneumatic	threaded holes St. B1/8" or connectors