

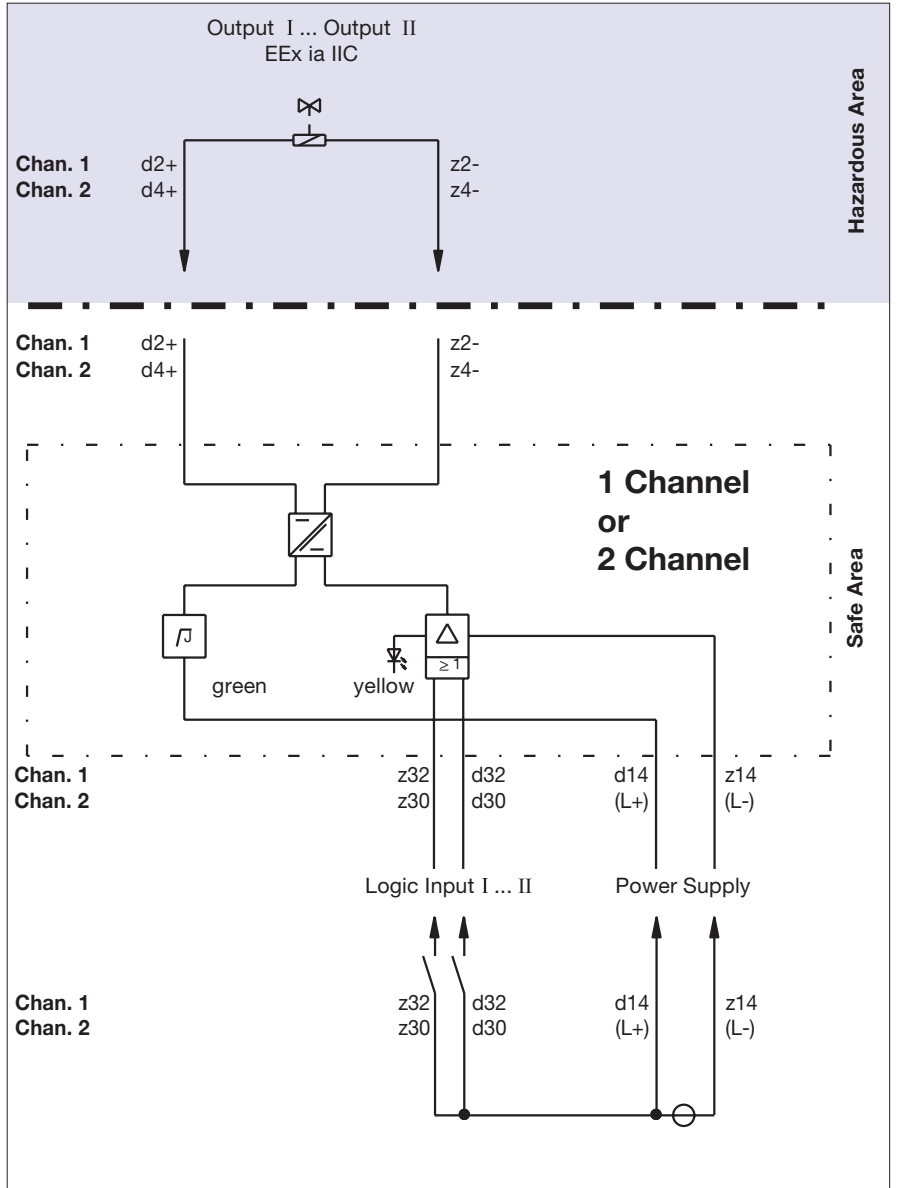
EGA-041-1
EGA-041-2

- 1-Channel, Model: EGA-041-1
- 2-Channel, Model: EGA-041-2
- Outputs EEx ia IIC
- DC 24 V supply voltage
- Switch status signal: LED yellow
- The outputs are galvanically isolated from the logic inputs and the power supply
- 2 logic inputs per channel for On / Off switching
- EMC in acc. with NAMUR NE21

The EGA-041-□ has a logic input with which the field device is controllable. Voltage signals in the range of DC 15 V ... 30 V are accepted as logic-1. Logic-0 must lie in the DC 0 V ... 5 V range. The current consumption of the logic input is about 5 mA. When the supply voltage is in the range of DC 20 V ... 30 V, internal regulators ensure that the open circuit voltage of about DC 24V is across the output. The internal resistance is about 320 Ohm and the output current is limited to 38 mA. The solenoid valve drivers are also available in 3- and 4-channel version.

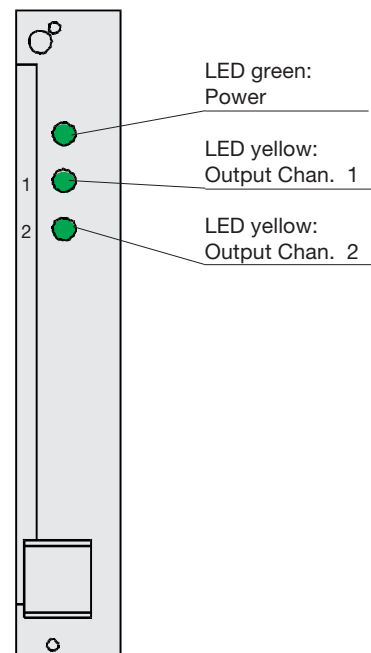
Application

Especially suited for the control of solenoid valves.
See the solenoid driver table on pages 122 to 124 (catalog "Ex-i-Interface E-System").



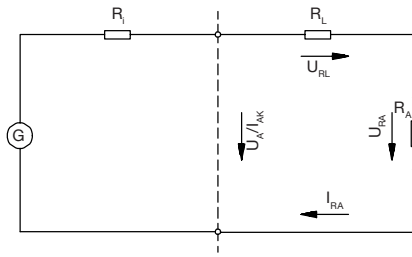
Front View

Type A
(dimensions see catalog E-System page 10)



Technical data Power supply Nominal voltage Fail safe maximum voltage U_m Ripple Nominal current Power consumption	DC 20 V ... 35 V DC 250 V or rms within about 150 mA ≤ 2 W Connections d14 (L+), z14 (L-)
Input (not intrinsically safe) Input I : Input II : Fail safe maximum voltage U_m Signal level Logic-1 Signal level Logic-0 Input current Input delay	Logic input Logic input DC 250 V or rms DC 15 V ... 30 V DC 0 V ... 5 V about 5 mA 5 ... 30 ms (typically 10 ms) Connections z32, d32 opposite to z14 (L-) Connections z30, d30 opposite to z14 (L-)
Output (intrinsically safe) Output I : Output II : Open circuit voltage Output current (short circuit) Internal resistance Curve angle point E	 Connections d2+, z2- Connections d4+, z4- about 24 V 38 mA \pm 7% about 320 Ohm 13.4 V \pm 0.3 V at 35 mA
Certificate of Conformity Peak Values Max. voltage U_0 Max. current I_0 Max. power P_0 Allowable circuit values Ignition protection method, category Explosion group Max. external capacitance Max. external inductance	BAS No. Ex 96D2518X 27.3 V 91 mA 620 mW [EEx ia] IIA / IIB / IIC 2.28 μ F / 0.683 μ F / 0.088 μ F 34.5 mH / 17.5 mH / 4.3 mH
Transfer characteristics Switch frequency	15 Hz
Galvanic isolation Input / Output Input / Power supply Output / Power supply	available available available
Conformity to standards Climatic conditions EMC	per DIN IEC 721 to EN 50 081-2 / EN 50 082-2, NAMUR NE21
Ambient temperature Connection method Coding Weight	-20°C ... +60°C (253 K ... 333 K) 32-pin plug connector per DIN 41 612, Series 2, Type F; z and d provided a23 / c15 about 200 g

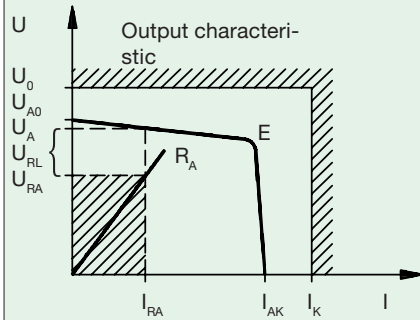
Principal circuit diagram




- G: Generator
- R_i : Internal resistance
- R_L : Lead resistance
- R_A : Load resistance
- U_{A0} : Open circuit voltage
- U_A : Output voltage
- U_{RL} : Voltage drop across lead resistance
- U_{RA} : Voltage drop across load
- U_G : Max. voltage
- I_K : Max. current
- I_{AK} : Short circuit current
- I_{RA} : Load current

Output characteristics

E: Curve angle point (U_E / I_E)



 Inadmissible range for valves