## excom I/O System

## Output Module, Analog, HART, 4-channel AOH40-N



The output module $\mathrm{AOH} 40-\mathrm{N}$ is used for the connection of analog actuators such as control valves or process indicators.

The outputs are not galvanically isolated from each other. When connecting the field devices, care has to be taken that all outputs are on the same potential.

HART-compatible actuators that communicate directly with the HART controller can be connected to the module.

The resolution is 13 bit, i.e. the analog value of $0 \ldots 21 \mathrm{~mA}$ is represented as a number between 0 and 8191 . For easier operation, the host system operates in a value range between $0 . . .21000$. This raw value is reduced by the $\mathrm{AOH} 40-\mathrm{N}$ to a 13-bit resolution.

Parameters such as line monitoring, substitute values etc. can be adjusted for each channel separately and are initialized solely by the master.


- Output module for the connection of analog actuators
- Transmission of HART data

|  |  | Dimensions |
| :---: | :---: | :---: |
| Type | AOH40-N |  |
| ID | 6884221 |  |
| Supply voltage | Via module rack, central power supply module |  |
| Power consumption | $\leq 3 \mathrm{~W}$ |  |
| Galvanic isolation | to int. bus and supply circuit |  |
| Number of channels | 4 |  |
| Output circuits | 0/4... 20 mA | - |
| No-load voltage | 16 VDC |  |
| HART impedance | > $240 \Omega$ |  |
| External load | $\leq 600 \Omega$ |  |
| Short circuit | < $50 \Omega$ (only in live zero mode) |  |
| Wire break | > 15 V (only in live zero mode) |  |
| Reference temperature | $25^{\circ} \mathrm{C}$ |  |
| Resolution | 13 Bit |  |
| Temperature drift | $\leq 0.005 \%$ of full scale/K |  |
| Rise time/fall time | $\leq 50 \mathrm{~ms}$ (10... $90 \%$ ) |  |
| Max. measurement tolerance under EMC influence | $\leq 0.1 \%$ with shielded signal cable |  |
|  | $\leq 1 \%$ with unshielded signal cable |  |
| Displays/Operating elements |  |  |
| Operational readiness | $1 \times$ green $/$ red |  |
| State/ Fault | $4 \times \mathrm{red}$ |  |
| Housing material | Plastic |  |
| Connection mode | module, plugged on rack |  |
| Protection class | IP20 |  |
| Ambient temperature | $-20 . . .60{ }^{\circ} \mathrm{C}$ |  |
| Relative humidity | $\leq 93 \%$ at $40^{\circ} \mathrm{C}$ acc. to IEC 60068-2-78 |  |
| Vibration test | Acc. to IEC 60068-2-6 |  |
| Shock test | Acc. to IEC 60068-2-27 |  |
| EMC | Acc. to EN 61326-1 |  |
|  | Acc. to Namur NE21 |  |
| MTTF | 66 years acc. to SN 29500 (Ed. 99) $40^{\circ} \mathrm{C}$ |  |
| Dimensions | $18 \times 118 \times 106 \mathrm{~mm}$ |  |

