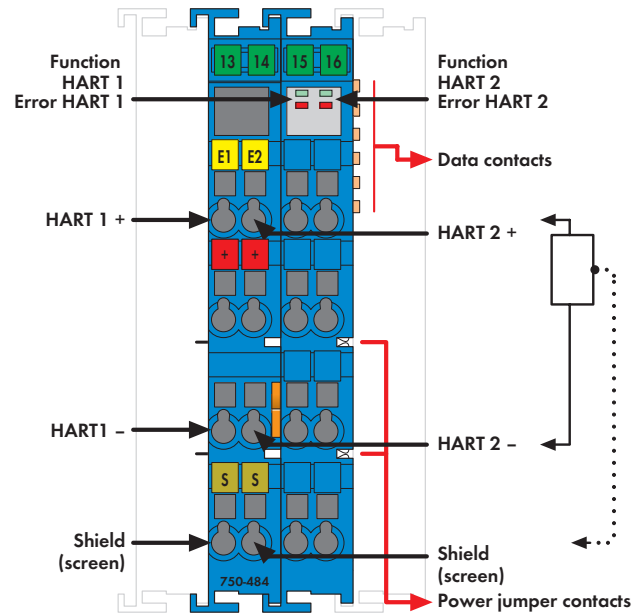


## 2-Channel Analog Input Module 4-20 mA HART, Ex i

Single-ended (S.E.)



Delivered without miniature WSB markers

The analog input module connects 2 transducers with HART interface located in the field. The 750-484 supplies the transducers, reads the process values via analog interface and enables HART communication for configuring and importing dynamic variables.

The 24V supply to the field contacts (HART +) is derived from the power jumper contacts via multipliers. The shield (screen) directly connects to DIN rail.


At approx. 25mA, the overvoltage protection switches the measurement input to a high-resistance state. Under normal operating conditions it is automatically switched back. This input module can supply the voltage for 2-wire transducers.

Up to 4 HART dynamic variables (PV, SV, TV, QV) per channel can be mapped in the cyclic process image of the coupler or controller (configurable). For HART communication with connected intelligent HART field devices, the HART protocol can be mapped in the cyclic process image of the coupler or controller (configurable).

FDT/DTM device drivers are available for select (programmable) couplers, allowing HART tool routing to the connected HART device.

**Note:**

Only use the analog input module in connection with the 24VDC Ex i Supply Module (note the power supply instructions on page 23)! General information (e.g., installation regulations) on explosion protection is available in the WAGO-I/O-SYSTEM 750 manuals!

| Description   | Item No.              | Pack. Unit |
|---|-----------------------|------------|
| 2AI 4-20 mA S.E. HART Ex i  | 750-484               | 1          |
| <b>Accessories</b>  |                       |            |
| <b>Miniature WSB Quick marking system</b>   |                       |            |
|  plain | 248-501               | 5          |
| with marking  | see pages 304 ... 305 |            |
| PROFIBUS/HART Gateway DTM   | 759-360               | 1          |
| MODBUS TCP/HART Gateway DTM   | 759-359               | 1          |

| Technical Data                      |   |
|-------------------------------------|---|
| Number of inputs                    | 2   |
| Voltage via power jumper contacts   | Supply via 24 V DC Ex i supply module   |
| Current consumption typ. (internal) | 25 mA   |
| Transmitter supply                  | $V_V = 16.5 \text{ V}$ at 20 mA   |
| Input voltage (max.)                | 24 V  |
| Signal current                      | 4 mA ... 20 mA  |
| Overvoltage protection              | 30 V, reverse polarity protected  |
| Conversion time (typ.)              | 10 ms   |
| Input filter                        | parameterizable   |
| Resolution of the A/D converter     | 12 bits   |
| Measuring error (25°C)              | 0.2 % of upper range value (non-linearity)  |
| Temperature coefficient             | $< \pm 0.01 \text{ \% / K}$ of full scale value   |
| Power consumption P (max.)          | 1.60 W (with slaves (20 mA))  |
| Power loss $P_V$                    | 0.62 W (without slaves)   |
| Isolation                           | 375 V system/supply   |
| Bit width                           | 2 x 2 bytes data 2 x 2 bytes data +<br>2n x 4 bytes data (n = number of dynamic variables) 2 x 2 bytes data + 6 bytes mailbox |
| Diagnostics                         | Wire break, measuring range overflow  |
| HART devices per channel            | 1 device (single-drop, no multi-drop)   |
| HART modems per channel             | 1 modem (no multiplex)  |

