Type FAA-25 Analogue Amplifier

IP20

Product Description

The Analogue Amplifier Type FAA-25 is an accurate and economic amplifier, easy to integrate into process control systems.

By its “digital heart” the FAA-25 allows a comfortable calibration and set up with a combination of LED’s and push buttons or optionally by PC.

The signal output is programmable 0 – 10 V and 4 – 20 mA.

Further interfaces are optionally available: 3 opto-isolated digital outputs (2 setpoints, 1 error output), 1 opto-isolated digital input (for zeroing by external command) and 1 serial interface RS232.

The Analogue Amplifier Type FAA-25 is available in 2 versions:

- basic version, no options
- version including interface option (see option)

Available Accessory

- Setup software running under MS Windows (only for version including interface option)

Key Features

- Load cell excitation 5 V DC for up to 4 load cells à 350 Ω
- 6 Wire load cell connection
- Analogue output 4...20 mA or 0...10 V, selectable
- Digital filter, switchable
- No potentiometer, set up and calibration via LED’s and push buttons
- Power supply 18...30 V DC
- Din-rail mounting

Option

- Interface option:
  2 setpoints and 1 error output, 1 input for zeroing and 1 serial interface RS232 for setup and eCal (electronic calibration without test weights)

Specifications

INPUT & A/D CONVERTER	
Linearity	0.01 % or better
Analogue input range	0 mV to 20 mV
Min. input range	< 1 mV
A/D converter	24 bit Delta-Sigma ratiometric with integral analog and digital filters
Conversion rate	Up to 400 measurement values per second
SCALE CALIBRATION & ANALOGUE OUTPUT	
Calibration	Calibration is performed by test weights using the keys on the front panel. There is no switch or potentiometer for adjustment in the instrument. Option for electronic calibration without test weights using a PC (interface option required)
Digital filter	2 step adjustable digital adaptive filter
Weighing functions	Zeroing via opto-isolated digital input (interface option required)
D/A converter	16 bit
Analogue output	Current output 4-20 mA (at max. 500 Ω load) or voltage output 0-10 V (at min. 10 kΩ load)
Set point	2 programmable free setpoints (interface option required)
LOAD CELLS	
Excitation	5 V DC at 58...1 200 Ω, max. 100 mA
Number of load cells	Up to 4 units of 350 Ω or 12 units of 1100 Ω
Connection	4 or 6 wire technique. Cable length 274 m/mm² for 6 wire connection.
SETUP & COMMUNICATION	
Front panel	Membrane keypad including 3x programming keys and 2x LED (Run and Error)
PC software	For electronic calibration without test weights (interface option required)
POWER SUPPLY	
DC Power supply	18...30 V DC, < 200 mA
ENVIRONMENT AND ENCLOSURE	
Operation temperature	Between -10 °C and +40 °C at 85% RH max, non-condensing.
Enclosure	Polyamide, for DIN-rail mount, protection class IP20
Dimensions	45 x 99 x 114 mm; weighs appr. 300 g
OPTION	
Digital inputs and outputs	2 opto-isolated outputs for setpoints, 1 opto-isolated error output (NPN open collector, 18...30 V DC, max. 50 mA), 1 opto-isolated input for zeroing and 1 serial interface RS232

Dimensions (in mm)