



SAD-01 – Continual Ashmeter

Certificate: ATEX, UK



SAD-01-E



SAD-01-S

Use:

The SAD-01 is intended for the continuous measuring of the ash matter contents in solid fuels. The device provides immediate information on the ash content in coal which passes along the conveyor belt, independently upon the changes of its layer, grain size, surface roughness and with the minimal influence of water content. It is intended for the environment of gaseous mines with an explosion hazard.

Description:

The SAD-01 Device consists of two boxes (SAD-01-E-The control part of the ashmeter, and SAD-01-S – The detection part of the ashmeter) and of two radioactive radiators. SAD-01-E is equipped with the electronics for establishing communication with the SAD-01-S detection part, for taking and assessment of results and transformation of the results into the required forms and extents.

SAD-01-S provides controlling of the temperature stabilization of the block, optimization and correction of inner parameters and selection of the spectre of received signals from two radioactive radiators.

Electric and electronic devices are placed in solid closures. There is an inspection hole on the side of the SAD-01-S box. Behind the inspection hole, there is a sensor for the receiving of the signals from radiators. The terminal box spaces are in the solid closure Ex d design.

The terminal box spaces Ex d of the SAD-01-E box contains 25 screwless terminals, protected design, for connection of connectors with the cross-section of 4 mm². There are 4 NV32 bushings on the terminal box.

The Ex d terminal box of the SAD-01-S contains 7 screwless terminals, secured design, for connection of connectors to the cross-section of 4 mm². There are 4 NV32 bushings placed on the terminal box.

Technical parameters:

Model	I M2 Ex d I
Supply voltage	180-260VAC, 40-440Hz
Rated consumption	1.3A
Conveyor belt width	not limited
Conveyor belt speed	not limited
Grain size of the measured coal	max. 300mm
Layer height on conveyor belt	50mm to 350mm
Measuring range	adjustable as needed
Output, analogue	four 4/20 mA (0/20 mA or 0/10 V as an option)
Output, serial	RS485 (communication with the superior system)
Outputs, relay 24 V	indication of the limit conditions of ash matter content (ABOVE, MIDDLE, UNDER)
Outputs controlled by a voltage loop	belt operation, switching of calibration curves
Radiation sources	Am ²⁴¹ , max. activity 12 GBq Cs ¹³⁷ , max. activity 0.7 GBq
Ambient temperature	0°C to +40°C
Protection	IP 54

The catalogue has only those selected important parameters for your final decision. For project designs always ask for the user's guide for this product and any engineering consultation about possible uses.