

VEGASOURCE 83

Version X (standard version)

Source holder for source capsules



Application area

The VEGASOURCE 83 is used for the reception of a radionuclide which is used as radiation source for the radiometric limit level, level and density measurements. The design of VEGASOURCE 83 offers an optimum shielding and protects the integrated gamma radiator reliably.

Your benefit

- Reliable shielding allows use without control areas
- Reduced space requirement and simple mounting
- Operational reliability through pneumatic ON/OFF switching (optional)

Function

The radioactive isotope inside the source holder VEGASOURCE 83 emits gamma rays. The VEGASOURCE 83 is mounted on the vessel or the pipeline, directly opposite the sensor. The source holder shields the environment against the gamma rays and protects the radioactive isotope against mechanical or chemical damage. In case of large measuring ranges, two or more source holders are used.

Technical data

Source	Cs-137
Shielding material	Lead
Outer housing	316L or steel (1.0619) with PUR textured paint RAL 1018
Number of the half-value layers	11.5 (attenuation factor F_s 2800)
Max. permissible activity of the radioactive source	Cs-137: 185 GBq (5000 mCi)
Exit angle	5°, 30°, 40°, 45° or 60°
Width of the exit channel	10° in all versions
Safety facility	Padlock
Attenuation of the useful beam	approx. 0.3 half-value layers (attenuation factor F_s 1.2)
	With open beam path
Ambient, storage and transport temperature	-50 ... +200 °C (-58 ... +392 °F)
Flame resistance	+821 °C (+1510 °F) for 30 minutes
Weight	approx. 82 kg (180 lbs)

Materials

The housing and the flange are made of steel or stainless steel, the internal parts and the source insert of stainless steel. Lead is used as shielding material.

You will find a complete overview of the available materials in the "configurator" on our homepage at www.vega.com/configurator.

Versions

The source container VEGASOURCE 83 is available in different versions that meet the special safety requirements for source handling.

The ON or OFF switch position can be secured with a lock. A version with pneumatic drive for switching on and off (remote control) is available. This version has proximity switches for remote indication of the switching status.

Shipment

Radioactive sources can only be shipped when a handling permit or an import license is available. The transport is carried out in a type A packaging in accordance with the European Agreement concerning the International Carriage of Dangerous Goods (ADR and DGR/IATA). The source holder VEGASOURCE 83 is sufficient as type A packaging (IATA regulations) for the transport of the radioactive source. The source holder is shipped in switch position OFF. The position is secured by a lock.

Approvals

Worldwide approvals are available for VEGA instruments, e.g. for use in hazardous areas.

The technical data in the respective safety instructions are valid for approved instruments (e.g. with Ex approval). In some cases, these data can differ from the data listed herein.

You can find detailed information on the existing approvals with the appropriate product on our homepage.

