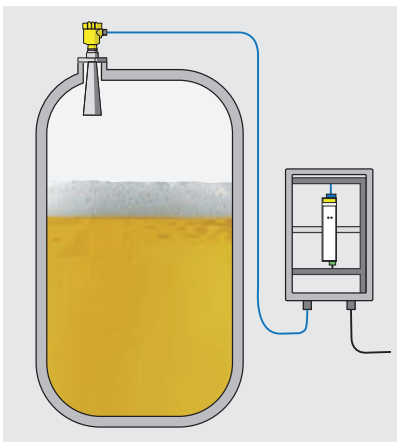


Isolation and protection devices



Area of application

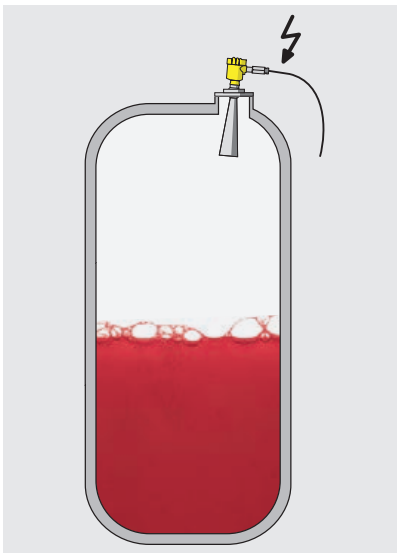
Isolation devices are used in all applications where hazardous area regulations must be observed. In addition to powering the sensors in the field, they ensure electrical isolation from the connected PLC or process control system.

Principle of operation

Isolation devices separate intrinsically safe circuits from non-intrinsically safe circuits. Distinguishing features are the type of power supply and the size of the Ex-specific characteristic values.

Advantages


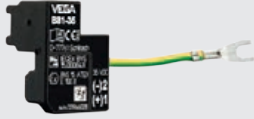
Reliable separation of intrinsically safe and non-intrinsically safe circuits. Simple installation, as no additional power supply is required. Simple installation via carrier rail mounting.



	VEGATRENN 141/142	VEGATRENN 151/152	Safety barrier 9001
			
Application	Separator for 4 ... 20 mA/HART sensors	Separator for 4 ... 20 mA/HART sensors	Single channel safety barrier for measuring current transmission
Sensors	4 ... 20 mA	4 ... 20 mA	4 ... 20 mA
Input and power supply	VEGATRENN 141: 1x 4 ... 20 mA signal circuit VEGATRENN 142: 2x 4 ... 20 mA signal circuit	VEGATRENN 151: 1x 4 ... 20 mA sensor input VEGATRENN 152: 2x 4 ... 20 mA sensor input	1x 4 ... 20 mA signal circuit
Output	VEGATRENN 141: 1x 4 ... 20 mA VEGATRENN 142: 2x 4 ... 20 mA	VEGATRENN 151: 1x 4 ... 20 mA VEGATRENN 152: 2x 4 ... 20 mA	1x 4 ... 20 mA
Operating voltage	20 ... 253 V AC/DC, 50/60 Hz	Via 4 ... 20 mA current loop	Via 4 ... 20 mA current loop
Mounting	Carrier rail 35 x 7.5 acc. to EN 50022	Carrier rail 35 x 7.5 acc. to EN 50022	Carrier rail 35 x 7.5 acc. to EN 50022
Approvals	ATEX, IEC, Ship, SIL2	ATEX, IEC, Ship, SIL2	ATEX
Benefit	<ul style="list-style-type: none"> Secure supply and reliable separation of intrinsically safe and non-intrinsically safe measuring circuits Complete HART permeability allows unrestricted access to sensor settings Easy installation via rail mounting and removable, coded terminals 	<ul style="list-style-type: none"> Reliable separation of intrinsically safe and non-intrinsically safe measuring circuits. Simple installation, as no additional power supply is required Easy installation via rail mounting and removable, coded terminals 	<ul style="list-style-type: none"> Reliable separation of intrinsically safe and non-intrinsically safe measuring circuits. Simple installation, as no additional power supply is required Simple installation via DIN rail mounting

Isolation and protection devices

	B53-19/B61-300/B61-300 FI	B62-36G/B62-30W
		
Application	<p>B53-19: Overvoltage arresters for conductive probes</p> <p>B61-300: Overvoltage arresters of supply and control cables</p> <p>B61-300FI: Overvoltage arresters of supply and control cables with FI protective circuits</p>	<p>B62-36G: Overvoltage arresters for two-wire circuits</p> <p>B62-30W: Overvoltage arresters for Profibus PA and Foundation Fieldbus circuits</p>
Mounting	Carrier rail 35 x 7.5 acc. to EN 50022 or on carrier rail 32 mm acc. to EN 50035	Carrier rail 35 x 7.5 acc. to EN 50022 or on carrier rail 32 mm acc. to EN 50035
Operating voltage	<p>B53-19: max. 19 V AC, 27 V DC</p> <p>B61-300/B61-300 FI: 110 ... 300 V AC/DC, max. 16 A</p>	<p>B62-36G: 9.6 ... 36 V DC, max. 450 mA</p> <p>B62-30W: 12 ... 36 V DC, max. 450 mA</p>
Nominal leak current	< 10 kA	< 10 kA
Protection	IP 20	IP 20
Temperature range	-40 ... +60 °C	-40 ... +60 °C
Approvals	ATEX	ATEX
Benefit	<ul style="list-style-type: none"> • High operational reliability even with impermissible voltage surges • Simple installation via carrier rail mounting 	

	B63-48/B63-32	B81-35
		
	<p>B63-48: Overvoltage arresters for two-wire circuits</p> <p>B63-32: Overvoltage arresters for Profibus PA and Foundation Fieldbus circuits</p>	<p>Pluggable overvoltage arresters for supply and signal circuits</p>
	<p>Direct mounting in the cable entry of the field device</p>	<p>Pluggable to the plics[®] mains electronics of VEGAPULS series 60, VEGAFLEX series 80, VEGABAR series 80 and VEGADIS 82</p>
	<p>B63-48: 12 ... 48 V DC</p> <p>B63-32: max. 32 V DC</p>	<p>max. 35 V DC</p>
	<p>< 10 kA</p>	<p>< 10 kA</p>
	<p>IP 66</p>	<p>-</p>
	<p>-40 ... +85 °C</p>	<p>-40 ... +85 °C</p>
	<p>ATEX</p>	<p>-</p>
	<ul style="list-style-type: none"> ▪ High operational reliability even with impermissible voltage surges ▪ Simple installation in the cable gland of the field instrument ▪ No additional, separate on-site assembly 	<ul style="list-style-type: none"> ▪ High operational reliability of the measuring point through surge protection ▪ Simple installation in the terminal compartment of the field instrument through compact design ▪ Easy retrofitting in already installed sensors