



IS interfaces

2. Analog inputs – HART compatible




Principle of a galvanic insulation and reminders concerning I.S.

General specifications for galvanic insulation interfaces

Selection guide

Use of galvanic insulation

Table of equivalent references according to type of assembly

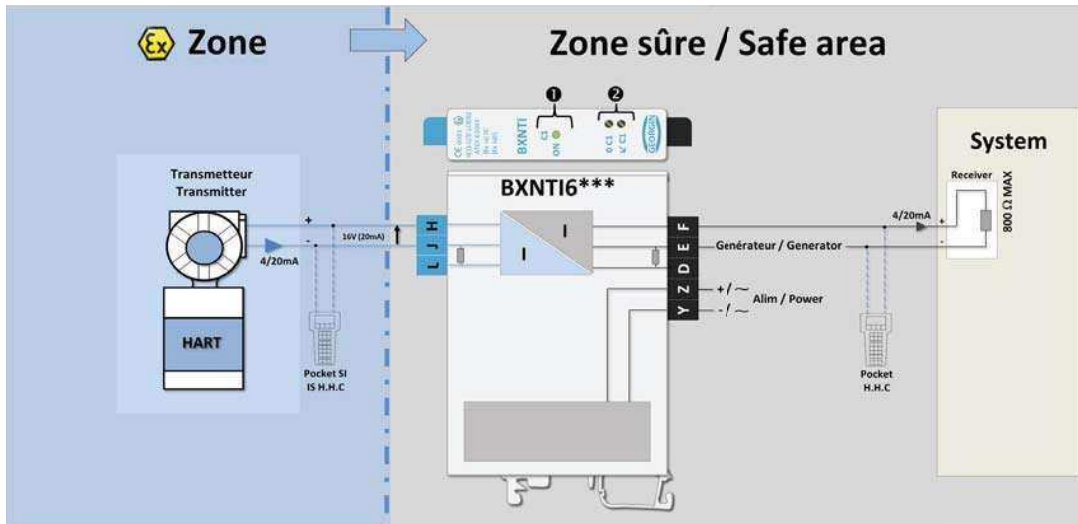
Ref.	Description (see technical data sheet for further information)	IS parameters ATEX marking													
BXNT16	<p>The most common application using analog inputs is the interface with a 4/20 mA transmitter: The device represented is an intrinsically safe, galvanic-insulated power supply for transmitters. For the 2-wire transmitter (connection between H+ and J- terminals) the device powers the 4/20mA sensor (16.5 V at 20 mA). The 4/20 mA output on the BXNT16 (F+E-) may only be active (the module supplies power to the loop) as the 4/20 mA must be modulated to retranscribe the HART protocol frames read on input. The input signal (HJ) is read and transmitted to the safe zone through precise analog processing. This device is a triple galvanic insulation (Input / Output / Module power supply).</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Option</th> <th colspan="2">Power supply</th> </tr> </thead> <tbody> <tr> <td rowspan="2">BXNT16</td> <td>00</td> <td>No option</td> <td>E</td> <td>110/230 V AC</td> </tr> <tr> <td>B0</td> <td>Screw terminals</td> <td>2</td> <td>24/48 V DC</td> </tr> </tbody> </table> <p> <ol style="list-style-type: none"> Presence of voltage indicated by a green LED Adjustment potentiometers for the source and the curve of the 4/20 mA output. </p>	Type	Option	Power supply		BXNT16	00	No option	E	110/230 V AC	B0	Screw terminals	2	24/48 V DC	<p>HJ terminals: U_o: 27.5 V I_o: 80.1 mA P_o: 550.72 mW Co, IIC: 86 nF Lo, IIC: 2.8 mH</p> <p>Marking: II(1)G [Ex ia] IIC II(1)D [Ex iaD] IIC Certificate: 02ATEX6104X</p> 
Type	Option	Power supply													
BXNT16	00	No option	E	110/230 V AC											
	B0	Screw terminals	2	24/48 V DC											
BXMT12	<p>When space savings are necessary, it is possible to use the two-channel version. The two channels are independent and each have separate insulation.</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Option</th> <th colspan="2">Power supply</th> </tr> </thead> <tbody> <tr> <td rowspan="2">BXMT12</td> <td>00</td> <td>No option</td> <td>E</td> <td>110/230 V AC</td> </tr> <tr> <td>B0</td> <td>Screw terminals</td> <td>2</td> <td>24/48 V DC</td> </tr> </tbody> </table> <p> <ol style="list-style-type: none"> Presence of voltage indicated by a green LED. (1 LED per output channel) Adjustment potentiometers for the source and the curve of the 4/20 mA output. (1 set of potentiometers per channel) </p>	Type	Option	Power supply		BXMT12	00	No option	E	110/230 V AC	B0	Screw terminals	2	24/48 V DC	<p>HJ terminals: U_o: 27.5 V I_o: 80.1 mA P_o: 550.72 mW Co, IIC: 86 nF Lo, IIC: 2.8 mH</p> <p>Marking: II(1)G [Ex ia] IIC II(1)D [Ex iaD] IIC Certificate: 02ATEX6104X</p> 
Type	Option	Power supply													
BXMT12	00	No option	E	110/230 V AC											
	B0	Screw terminals	2	24/48 V DC											
BXLT12	<p>To duplicate the 4/20 mA output, it is possible to use this 1-input / 2-output version. For this version, the two outputs are insulated from each other and from the input.</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Option</th> <th colspan="2">Power supply</th> </tr> </thead> <tbody> <tr> <td rowspan="2">BXLT12</td> <td>00</td> <td>No option</td> <td>E</td> <td>110/230 V AC</td> </tr> <tr> <td>B0</td> <td>Screw terminals</td> <td>2</td> <td>24/48 V DC</td> </tr> </tbody> </table> <p> <ol style="list-style-type: none"> Presence of voltage indicated by a green LED. (1 LED per output channel) Adjustment potentiometers for the source and the curve of the 4/20 mA output. (1 set of potentiometers per channel) </p>	Type	Option	Power supply		BXLT12	00	No option	E	110/230 V AC	B0	Screw terminals	2	24/48 V DC	<p>HJ terminals: U_o: 27.5 V I_o: 80.1 mA P_o: 550.72 mW Co, IIC: 86 nF Lo, IIC: 2.8 mH</p> <p>Marking: II(1)G [Ex ia] IIC II(1)D [Ex iaD] IIC Certificate: 02ATEX6104X</p> 
Type	Option	Power supply													
BXLT12	00	No option	E	110/230 V AC											
	B0	Screw terminals	2	24/48 V DC											



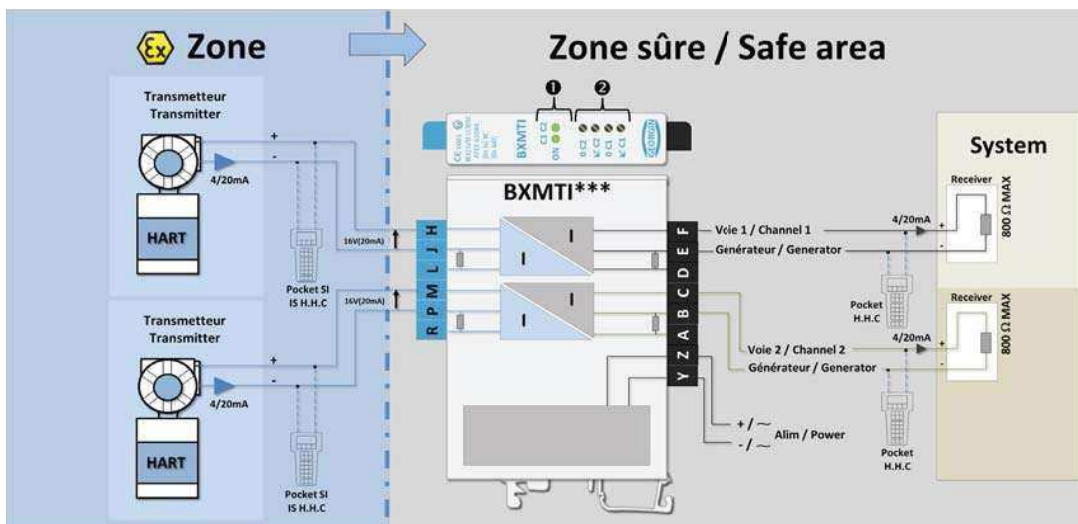


Explanatory diagram

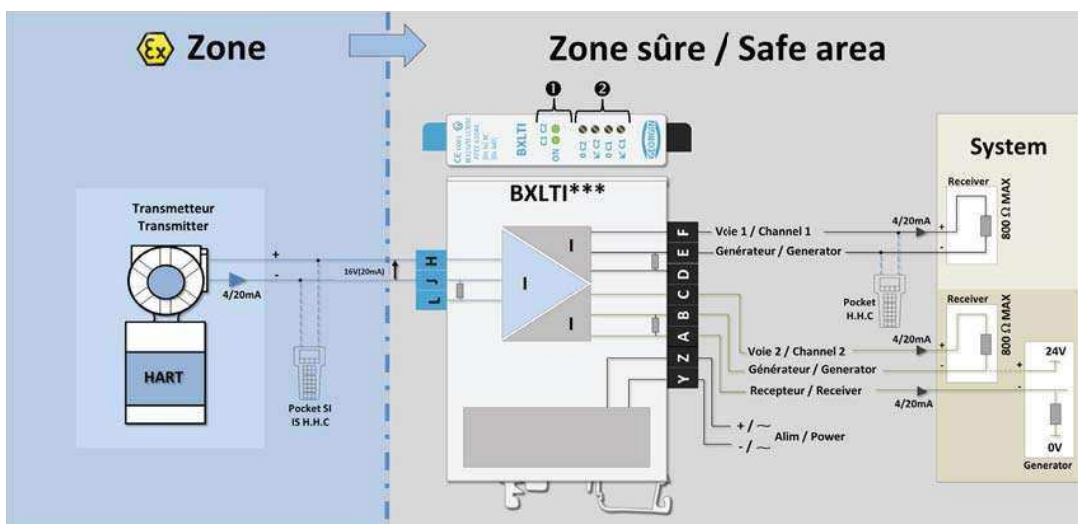
I/O



1 Input / 1 Output



2 Inputs / 2 Outputs



1 Input / 2 Output

Principle of a galvanic insulation and reminders concerning I.S.

General specifications for galvanic insulation interfaces

Selection guide

Use of galvanic insulation

Table of equivalent references according to type of assembly