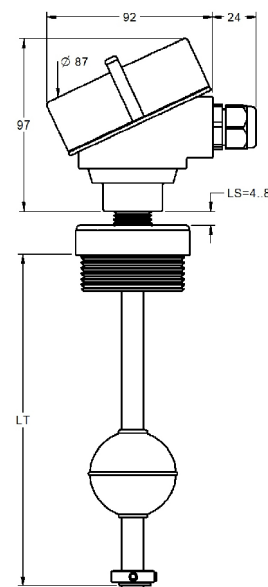
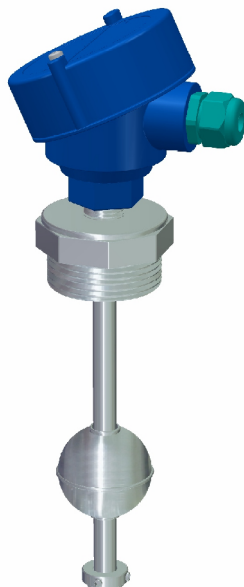


IMN TBEX INOX

MAGNETIC LEVEL SWITCH FOR INTRINSIC SAFETY INSTALLATIONS



Process connection	By top screw. SS AISI316 (1.4401). See table 1
Guide tube	SS AISI316 (1.4401), Ø 12 mm
Length	100..3500 mm.
Float	FEI601M13 (FEI-1), Ø 52x52 mm. SS AISI316 (1.4401). Other options to float table
Number of contacts	1..3
Type of contact	NO: 120 WVA / 250 VAC-3A · NC-NO/NC: 60 WVA / 230 VAC-1A
Distance between contacts	> 40 mm.
Electrical connection	By aluminium connection housing (Ø 64,5x100 mm).
Altitude separation	When required, a higher altitude separation than the standard one can be ordered.
Temperature	-40..+125°C
Mounting position	Vertical, ±30°
Protection	IP 65. Insulated filled with epoxy resin, flexible.

ATEX certification

The sensor IMN TBEX INOX is considered a "Simple Electrical Apparatus" and it is not necessary neither to be marked nor to be certified according to the ATEX directive. It can be used in classified areas as intrinsic safety, whenever be connected with an associated device such as a zener barrier or a galvanic isolator (see next page). The category and installation zone corresponds to ones specified in the barrier/isolator. These characteristics are defined in the standards EN60079-11, EN60079-14 and EN60079-25.

Applicable to: **Zone 0, 1, 2, 20, 21 and 22.**

Nevertheless, the following elements are certified ATEX:

- Housing: FM08ATEX0010U - II 2 G Ex d IIC Gb / II 2 D Ex tb IIIC Db
- Terminals: SIRA02ATEX3001U - Exell 2GD
- Cable gland: LCIE 97 ATEX 6006 X - II 2 G-D EExell/EEExdIIC

Table 1: Process connection

Gas screw	2"	2"1/2	3"	
E (mm)	36	85		
H (mm)	20	21		
h (mm)	15	14		
			CONSULT	

Model	FCI602M13	FEI601M13	FEI602M13
Material	SS AISI316L (1.4404)		
Dimension (mm)	Ø 44x63	Ø 52	Ø 95
Pressure (kg/cm²)	15	30	30
Density (g/cm³)	e > 0,75	e > 0,76	e > 0,36
FS / FH (mm)	15,8 / 47,2	12,5 / 39,5	60,8 / 34,2

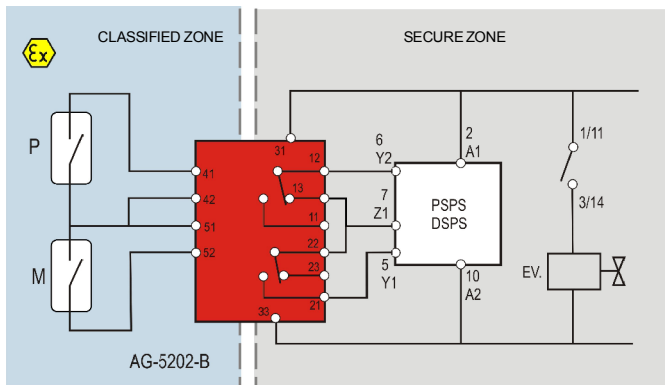
Ordering code

IMN TBEX INOX V ☐ P ☐ F ☐ S ☐ L ☐ C ☐ N ☐

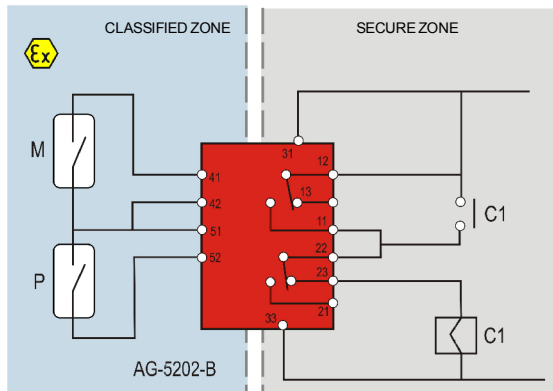
Version	Insulated	3
Connect. process	2" G	10
	2" 1/2 G	11
	3" G	12
Float	FCI602M13	14
	FEI601M13	25
	FEI602M13	29
(*) Separation (LS)	(mm)	
Total length (LT)	(mm)	
Number of contacts	1-3	
Number of floats	1-3	

To compose the reference, choose one option of each cell.
Example: **IMN TBEX INOX V3 P11 F14 L500 C2 N1**

Application example

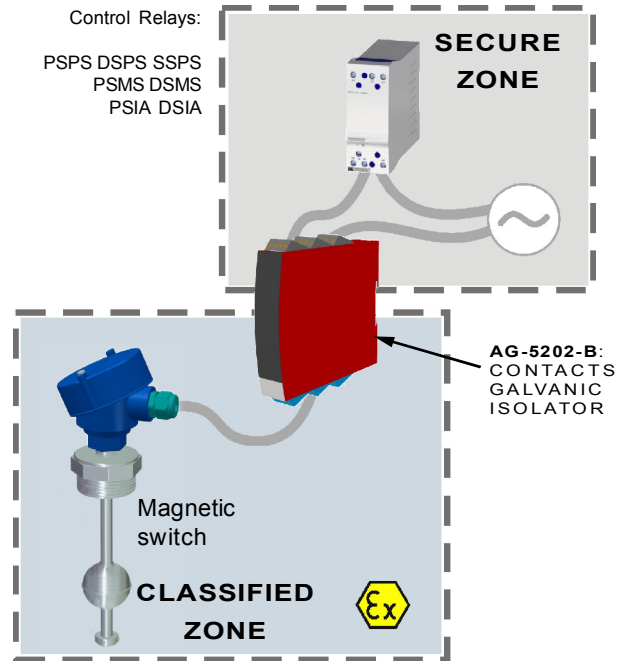


Sensor in classified zone, galvanic isolation and start-stop operation by contacts protector PSPS / DSPS.



Sensor in classified zone, galvanic isolation and start-stop operation by contactor.

Assembly for intrinsic safety



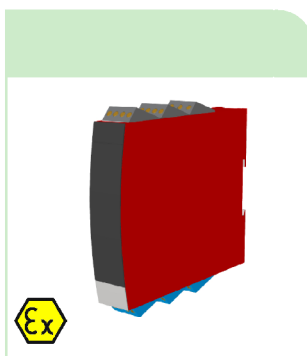
Safety instructions

For a safe installation of the sensor IMN in hazardous areas, the following instructions must be accomplished:

- The sensor must be installed only by a qualified personnel, who are familiar with national and international laws and standards and guidelines for implementing this type of environments.

For further information, consult the standard EN 60 079-14 for electrical installations in hazardous areas.

Accessories



Function	Galvanic insulation for contacts. ATEX classifying.
Assembly dims. (mm)	109 x 23,5 x 130 (DIN rail)
Approvals	Ex II (1) G D [EEx ia] IIC
Applicable to zones	0, 1, 2, 20, 21 or 22
Input	2 Contacts
Output	AG-5202-B2: 1 SPDT, 2A/250VAC AG-5202-B4: 2 SPST NO, 2A/250VAC
Supply	24..230 VDC $\pm 10\%$ 50/60 Hz 24..250 VDC $\pm 20\%$

PSPS DSPS SSPS



Protection of weak contacts in analog instruments.

PSMS DSMS



Contact amplifier with two independent inputs.

PSIA DSIA



Control of the level detection in liquids with turbulences. Delay on level detection. Differential control of the maximum and minimum level through time interval.