

APPROVED IN ACCORDANCE WITH THE EUROPEAN STANDARD 2014/34/EU - ATEX

These instruments, intrinsically safe certified:

CESI 03 ATEX 265 Ext.2 II 1G Exia IIC T4/T5/T6 Ga,
CESI 03 ATEX 265 Ext.2 II 1/2G Exia IIC T4/T5/T6 Ga/Gb,
 are used to control the level of liquids or fuel in tanks, both underground and outdoors, installed in hazardous areas where flammable products are treated.

GENERAL CHARACTERISTICS

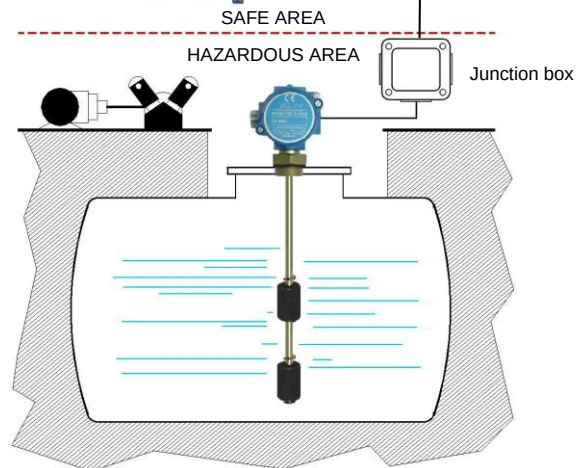
- **Brass – Spansil – Stainless steel rod**
- Up to 6 switch points.
- Up to 6 m length.
- Maximum working pressure 20 bar depending on used float.
- Standard working temperature up to 100°C.
- Executions up to 120°C on request.
- Operating ambient temperature
 -40/+40°C = T6, -40/+55°C = T5, -40/+80°C = T4
- Minimum degree of protection IP65.



Exia GOST-R Ex



Safety barrier
See SAFE SW



FLOATS

Tab.1

B13 Ø13,5x30	B22 Ø20x22	B28 Ø20x28	B15 Ø25x15	B20 Ø30x20	B45 Ø30x45	B44 Ø44x50

Material	Spansil – Butadiene - Acrylonitrile Copolymer													
Specific gravity	0,59	0,44		0,4		0,45		0,4		0,35			0,45	
Contact type	3	3	7D	3	7D	3		3	7D	3	4	7	4	7
Max N. contacts	1	4	3	4	3	6		6		6	4	3	6	
Max. bar	10	20												
Max. °C - Class	L = 100°C													
On request	M = 120°C													

ELECTRICAL CONTACTS

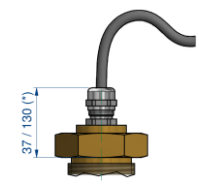
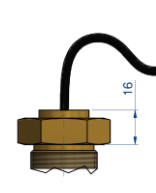
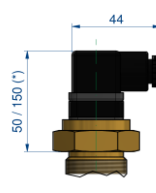
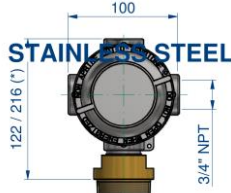
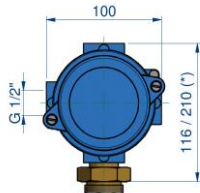
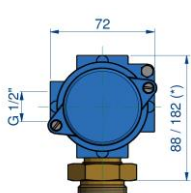
Tab.2

TYPE		POWER		VOLTAGE		CURRENT	
		VA	W	AC	DC	AC	DC
SPST	3	70	50	300	350	0,5	0,7
SPST	4	80	80	250	250	1,3	1,3
SPDT	7	60	60	230	230	1	1
SPDT	7D	20	20	150	150	0,5	0,5

USCITA ELETTRICA

Tab.3

I1	I2	I3	IS1	IC1 - IC2	IP1 - IP2
IP65 housing (2G)	IP65 housing (2G)	IP66/67 housing (1G)	DIN43650 plug IP65 (1G)	Cable IP65 (1G)	Cable-gland (1G)
5 terminals	18 terminals	18 terminals	DIN43650 29x29	IC1 Cable L = 1,5m IC2 Cable L = 3,0m	IP1 Brass IP68 IP2 Polyamide IP67



With heatsink - see dimension (★)

Temperature class **M = T5 – T6**

Note: Temperature class **M = T4** heatsink not needed

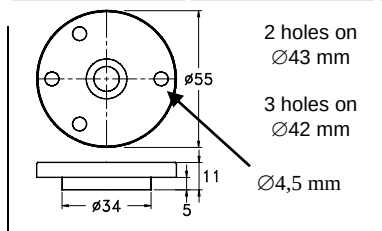
PROCESS CONNECTIONS

Tab.4

Installation from inside IC– IP output				Float type	Installation from outside – available thread and flanges								
06 1/8"	08 1/4"	10 3/8"	15 1/2"		15 1/2"	20 3/4"	25 1"	32 1 1/4"	40 1 1/2"	50 2"	FOHX Flange	FOPX Flange	DN Flange
All type of floats All type of thread				B13	G-C-N	-	-	-	-	-	-	-	-
				B15	-	-	G-C-N	-	-	-	●	●	-
				B20	-	-	G	G-C-N	-	-	●	●	●
				B22	-	G-C-N	G-C-N	-	-	-	-	-	-
				B28	-	G-C-N	G-C-N	-	-	-	-	-	-
				B44	-	-	-	-	G	G-C-N	-	-	●
				B45	-	-	G	G-C-N	G-C-N	-	●	●	●

Male thread

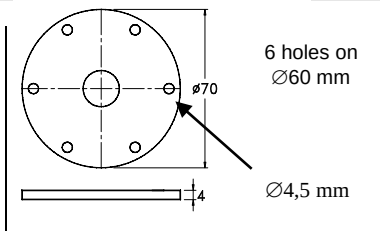
G	C	N
Parallel UNI 228/1	Conical UNI 7/1	Conical NPT



FOPX

Available materials

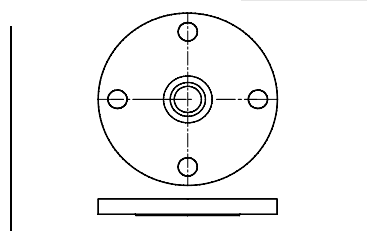
O	S
Brass	AISI-316 On request



FOHX

DN = Available materials

C	S
Steel	AISI-316 On request



DN = UNI – DIN – ANSI flanges

SAFETY BARRIERS

All Exia level controls must be electrically connected to the active or passive barriers according to the European Standard EN 50020. See technical bulletin SAFE SW.

WIRING

Tab.5

I	Independent	Separately wired contacts	1	NO	Contacts status in no level conditions
C	Common	Common wired contacts	2	NC	
S	Custom	Contacts wired on request	3	SPDT (*)	

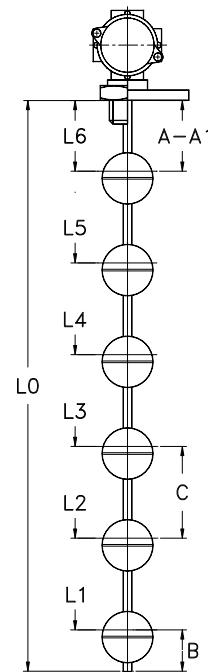
(*) Connected to barrier input just as NO or NC

SWITCH POINTS - minimum value in mm. Tab.6

Tab.6

The switch points L1 ÷ L6 are measured from the stop of the fitting or flange connection.
General tolerances on switch points ± 3 mm.

	Minimum distance in mm.														
	B13		B22		B28		B15		B20		B45			B44	
A	20		20		20		15		15		30		35		35
A1	35		35		35		30		30		45		50		55
B	25		25		25		20		20		35		40		40
C	---		45		45		35		40		65		75		75
Contact type	3		3	7D	3	7D	3		3	7D	3	4	7	4	7
Max. N. contacts	1		4	3	4	3	6		6		6	4	3	6	



NOMENCLATURE

M2	B45	4	1300	S	25	G	O	I1	L	I22	L1÷L6		
•													Number of contacts S1 / M2÷M6
	•											Tab.1	Float
		•										Tab.2	Electrical contact
			•									-	Total length = L0 in mm. (See drawing)
				•								-	Rod material
					•							Tab.4	Process connection dimension
						•						Tab.4	Process connection thread
							•					Tab.4	Process connection material
								•				Tab.3	Electrical output
									•			Tab.1	Temperature class
										•		Tab.5	Wiring and contact status
											•	Tab.6	Switch points (mm)

External mounting					Internal mounting		
I1 I2	I3		IS1 IS2	IP1 IP2	IC	IC	
Electrical housing IP 65 W1 max. 5 terminals 70mm W2 max. 18 terminals 100mm		Electrical housing IP 66/67 Stainless steel - AISI 316 Max. 18 terminals		Plug DIN 43650 29x29 or 15x15 Max 3 terminals		P1 Cable-gland IP68 P2 Cable-gland IP67 L cable.....mm	
Cable L.....mm		Cable L.....mm		Cable L.....mm		Only internal mounting Cable L.....mm	

Total length
L0 (mm)

Liquid under control:

Specific gravity:

Maximum pressure:

Maximum temperature:

Process connection:

☐ Threaded: ☐ Flanged:

Material:

☐ Brass
 ☐ AISI-316
 ☐ PVC
 ☐ PP
 ☐ PVDF

Wirings:

☐ Independent contacts NO or NC (Max. 6 contacts)

NO	NC	11	L6	12
NO	NC	9	L5	10
NO	NC	7	L4	8
NO	NC	5	L3	6
NO	NC	3	L2	4
NO	NC	1	L1	2

☐ Common wired NO or NC contacts (Max. 6 contacts)

NO	NC	7
NO	NC	6
NO	NC	5
NO	NC	4
NO	NC	3
NO	NC	2
NO	NC	1

☐ Independent SPDT contacts (Max. 4 contacts)

12	L4	11
		10
9	L3	8
		7
6	L2	5
		4
3	L1	2
		1

☐ Common wired SPDT contacts (Max. 5 contacts)

11
L5
L4
L3
L2
L1
1

Approvals:

Exia

GOST-R Ex