

APPROVED IN ACCORDANCE WITH THE EUROPEAN STANDARD 94/9/EC - ATEX

These instruments, intrinsically safe certified:

CESI 03 ATEX 265 Ext.2 II 1G Exia IIC IIB T4/T5/T6 Ga, 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.

A wide range of standard units available with connection cable in lengths of 1.5 m and 3,0 m, other lengths are available on request.

The cable is sealed inside the rod with epoxy resin and curing is performed in an oven at controlled temperature.

The only moving element is the float that moves for buoyancy; this ensures a high strength and a limited need for maintenance.



Safety barrier
See SAFE SW

SAFE AREA
HAZARDOUS AREA

Junction box



• Brass — AISI-316 — PVC — Polypropylene — PVDF

- Maximum working pressure 50 bar depending on used float.
- Standard working temperature up to 100°C.
- Executions up to 150°C on request.
- Operating ambient temperature
-40/+40°C = T6, -40/+55°C = T5, -40/+80°C = T4
- Minimum degree of protection IP65.

BRASS / SPANSIL SERIES

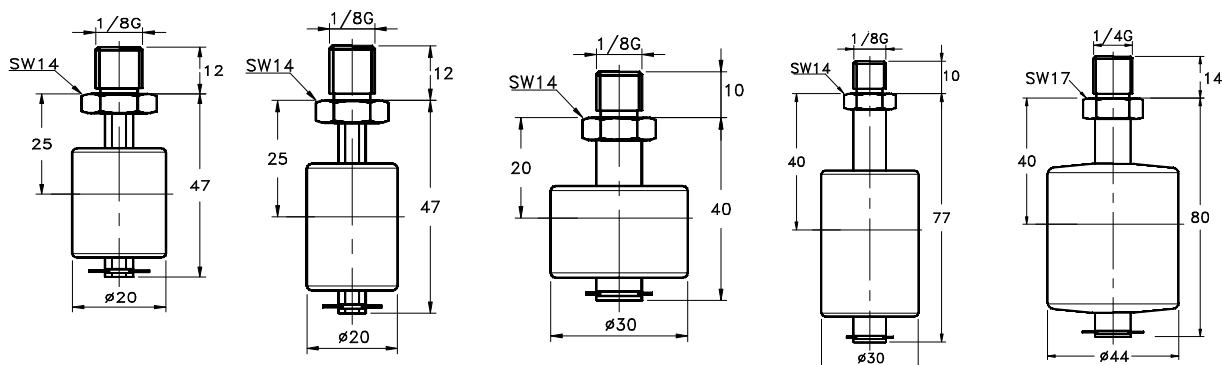
Tab.1

<II 1G Exia IIC T4/T5/T6 Ga>

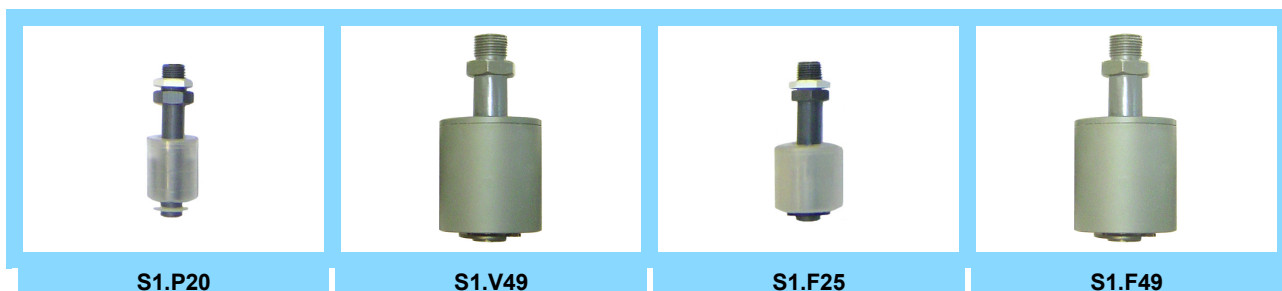
<II 1G Exia IIB T4/T5/T6 Ga>

				
S1.B22	S1.B28	S1.B20	S1.B45	S1.B44

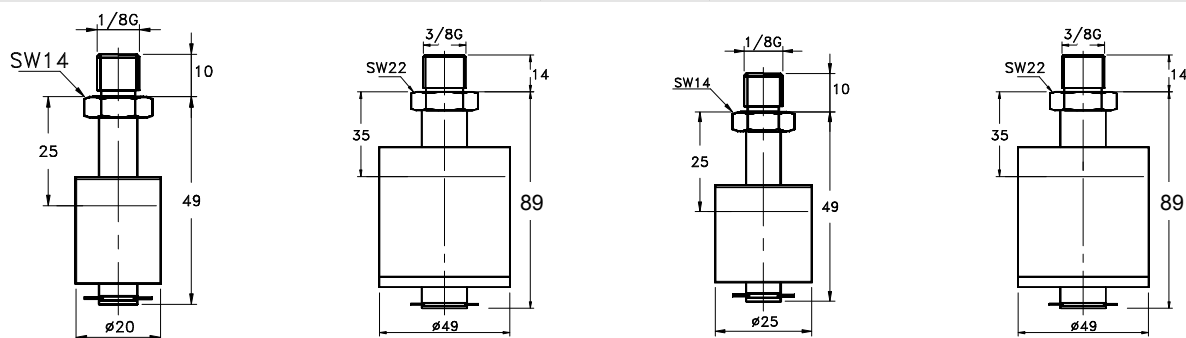
Float	Butadiene - Acrylonitrile Copolymer				
S.G.	0,44	0,4	0,4	0,35	0,45
Rod	Nickel plated brass	Brass	Nickel plated brass		Brass
Bar max	20 bar				
°C max	100 °C = Class L — 120°C = Class M				
Contact	3 – 7D	3	3 – 7D	4 – 7	
Cable	IC1 = 1.5 m — IC2 = 3.0 m				



PLASTIC SERIES <II 1G Exia IIB T4/T5/T6 Ga> Tab.2



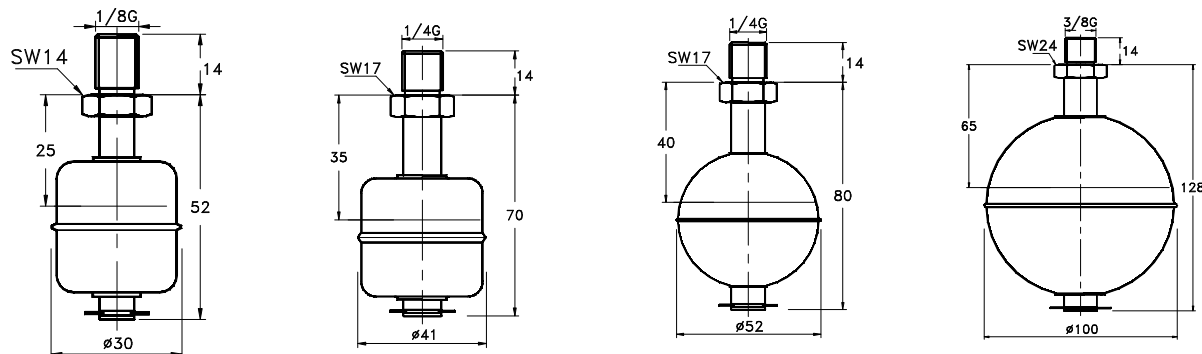
Float	Polypropylene	PVC	PVDF
S.G.	0,5	0,7	0,65 0,8
Rod	PVC		PVDF
Max. bar	3 bar	6 bar	6 bar
Max. °C-Class	90 °C = Class D	60 °C = Class B	130 °C = Class N
Contact	3	4 - 7	3 4 - 7
Cable	IC1 = 1,5 m - IC2 = 3,0 m		



INOX SERIES <II 1G Exia IIC T4/T5/T6 Ga> Tab.3



Float	AISI - 316		
S.G.	0,75	0,65	0,7 0,6
Rod	AISI - 316		
Max. bar	30	10 bar	50 bar 15 bar
Max. °C-Class	100 °C = Class L - 150°C = Class R		
Contact	3 - 7D	4 - 7	7
Cable	IC1 = 1,5 m - IC2 = 3,0 m		



ELECTRICAL CONTACTS

Tab.4

TYPE		POWER		VOLTAGE		CURRENT	
		VA	W	AC	DC	AC	DC
3	SPST	70	50	300	350	0,5	0,7
4	SPST	80	80	250	250	1,3	1.3
7	SPDT	60	60	230	230	1	1
7D	SPDT	20	20	150	150	0,5	0,5

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 contact	1	NO	Contact status in no level condition
			2	NC	
			3	SPDT (*)	

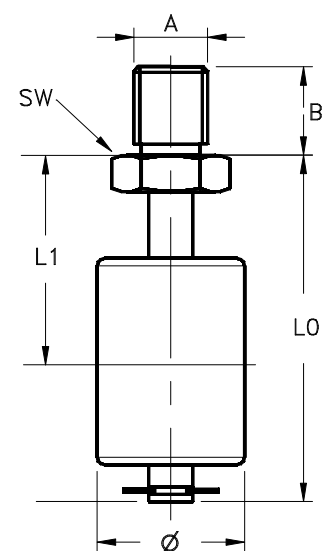
(*) Connected to barrier input just as NO or NC

DIMENSIONAL SUMMARY TABLE mm

Tab.6

S1	B20	B22	B28	B44	B45	F25	P20	V49	F49	S29	S41	S52	S100
L0	40	43	47	80	77	49	49	82	82	52	70	80	128
L1	20	20	25	40	40	25	25	40	35	25	35	40	65
Ø	30	20	20	44	30	25	20	49	49	30	41	52	100
Sw	14	14	14	17	14	14	14	22	22	14	17	17	24
B	10	12	12	14	10	10	10	14	14	14	14	14	14
A	1/8"			1/4"	1/8"			3/8"		1/8"	1/4"		3/8"
	06			08	06			10		06	08		10

L1 = switch-point with liquids of specific gravity = 1
Tolerance on the switch-point ± 3 mm.



Male threads

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

Rod and process connection materials

B	O	S	V	F
Nickel plated brass	Brass	AISI-316	PVC	PVDF

NOMENCLATURE

S1 • S52	4	0080	S	08	G	S	IC1	L	I2	L1		
•											Tab.1÷3	Series and type
	•										Tab.1÷3	Electrical contact
		•									Tab.6	Total length = L0
			•								Tab.1÷3	Rod material
				•							Tab.6	Process connection dimension
					•						Tab.6	Process connection thread
						•					Tab.6	Process connection material
							•				Tab.1÷3	Electrical output – Cable length
								•			Tab.1÷3	Temperature class
									•		Tab.5	Wiring and contact status
										•	Tab.6	Switch-point