


Buoyancy Level Switch



8181

STAINLESS STEEL

- ✓ **Easy LINK for direct control of valves**
- ✓ **Easy NET for AS-Interface connectivity** 
- ✓ **One level switch for normally open or closed connection**
- ✓ **LED in junction box**

Level - ON/OFF Control

8181

The level switch is designed to detect high and low level of a liquid and to switch pumps, valves, PLCs relays and alarms.

Process Specifications

Materials

Stem and float vertical	Stainless steel 304
Stem and float horizontal	Stainless steel 304
Housing and cover	Polycarbonate (PC)
Connectors	Polyamide (PA)

Max. pressure

Vertical	10 bar
Horizontal	5 bar

Float density

Approx. 0.7 g/cm³

Process temperature

-40°C up to +120°C

Environment Specifications

Max. pressure

Atmospheric

Ambient temperature

-10°C up to +80°C

Rating

IP65

Electrical Specifications

Relay

Voltage supply	24 V/DC ±20%
Current consumption	30 mA max.
Nominal voltage	250 V/AC / 30 V/DC (with AS-Interface 48 V/AC / 30 V/DC)

Nominal current	3 A
Contact type	NO / NC

Electrical Connections

Relay

5 pin, multipin plug M12
+ cable plug 2508
DIN 43 650 A

AS-Interface

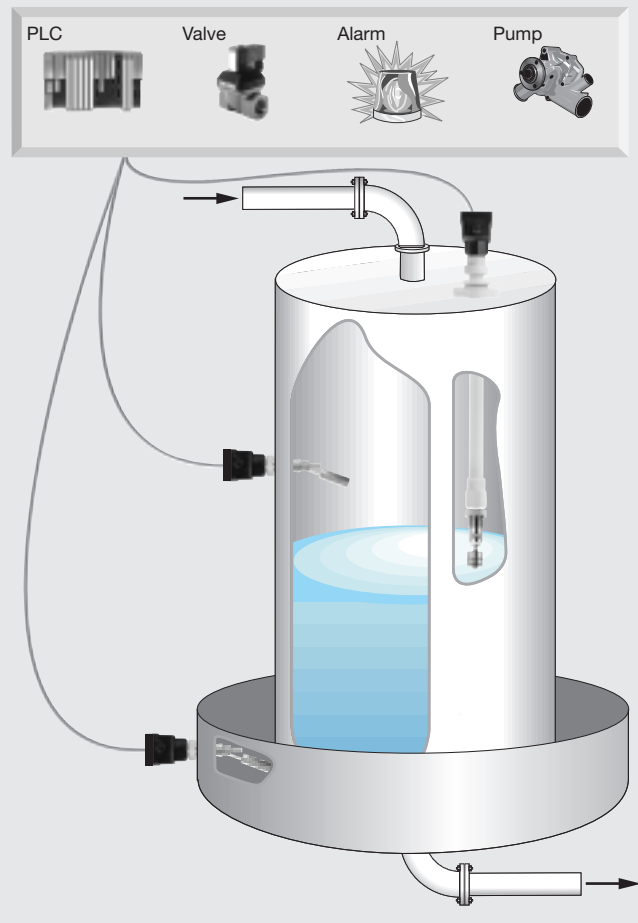
4 pin, multipin plug M12
+ cable plug 2508
DIN 43 650 A

Standards

EMI	EN 50081-1 EN 50082-2
Safety	EN 61010

Applications:

- Level control
- Min./Max. level monitoring
- Leak detection
- Pump protection
- Overfill protection



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Specifications - Ordering Chart for Type 8181

Description for Switch with Relay	Voltage Supply	Process Connection [Inch]	Electrical Connection	Item No. Vertical	Item No. Horizontal
Stainless Steel (304) Body and Floater World Wide Sensor type	24 V/DC	G 3/4	M12 plug + cable plug 2508*	438 506 V	438 500 B
Stainless Steel (304) Body and Floater Asia Sensor type	24 V/DC	Rc 3/4	M12 plug + cable plug 2508*	438 530 Y	438 524 N
Stainless Steel (304) Body and Floater North America Sensor type	24 V/DC	NPT 3/4	M12 plug + cable plug 2508*	438 518 Y	438 512 J

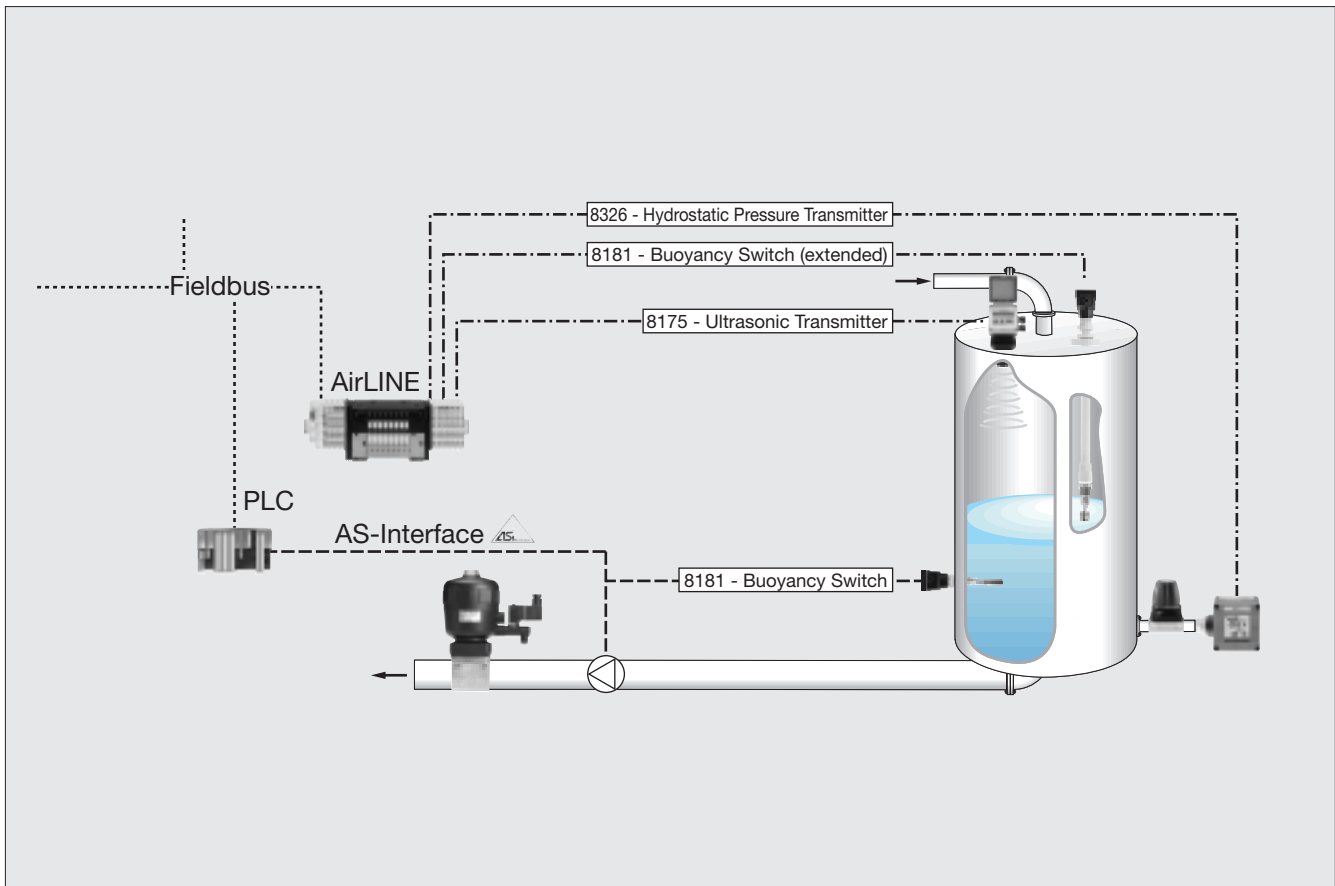
Description for Switch with AS-Interface and Relay	Voltage Supply	Process Connection [Inch]	Electrical Connection	Item No. Vertical	Item No. Horizontal
Stainless Steel (304) Body and Floater World Wide Sensor type	ASi-bus	G 3/4	M12 plug + cable plug 2508*	440 310 R	440 308 U
Stainless Steel (304) Body and Floater Asia Sensor type	ASi-bus	Rc 3/4	M12 plug + cable plug 2508*	440 318 M	440 316 B
Stainless Steel (304) Body and Floater North America Sensor type	ASi-bus	NPT 3/4	M12 plug + cable plug 2508*	440 314 H	440 312 F

* Europe / Asia (G / Rc): PG9 connection on cable plug
 * USA / CDN (NPT): G 1/2 connection on cable plug

Specifications - Ordering Chart Accessories for Type 8181 (to be ordered separately)

Description	Item No.
Extension	see data sheet type 8130
Cable connector M12 female with plastic threaded locking ring	917 116 D
Cable connector 5 pin M12 female with moulded-in cable (2 m, shielded)	438 680 F

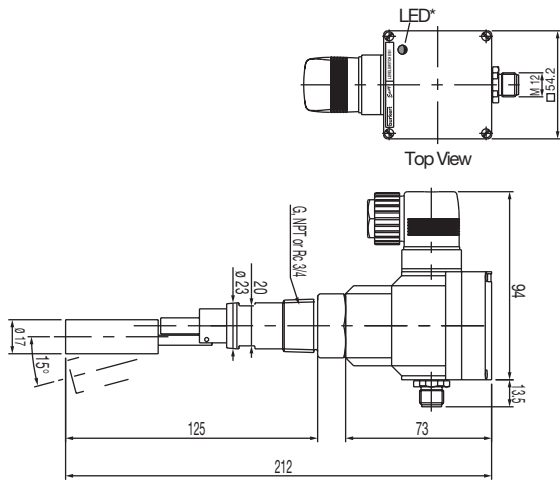
Picture of our Total Offering in Level Control



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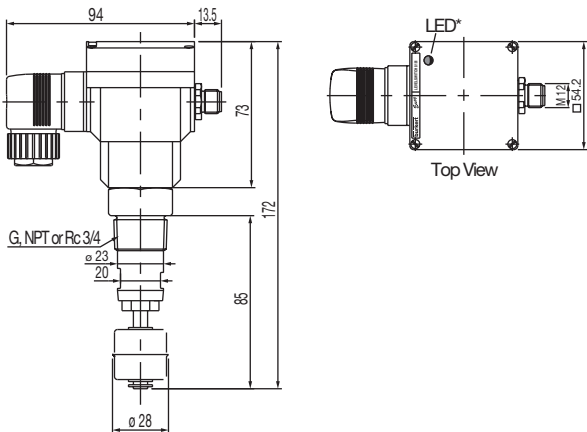
Dimensions [mm] and Electrical Connections for Type 8181 with Junction Box

Horizontal Version with Relay or AS-Interface and Relay



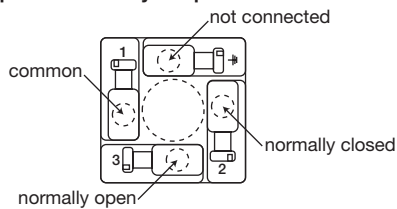
* LED only visible if relay is switched on

Vertical Version with Relay or AS-Interface and Relay

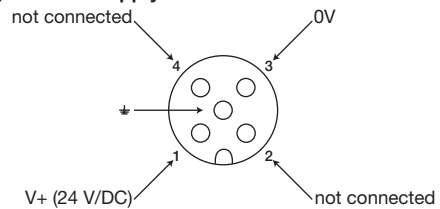


* LED only visible if relay is switched on

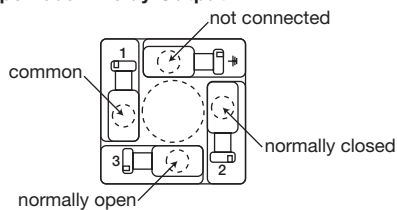
Electrical Connection Relay Version Cable Plug Type 2508 - Relay Output



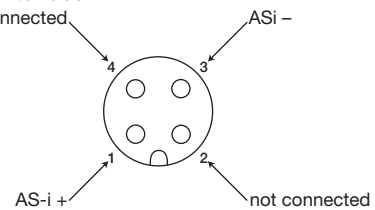
M12 Plug - Power Supply



Electrical Connection AS-Interface and Relay Version Cable Plug Type 2508 - Relay Output



M12 Plug - AS-Interface



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