

# Float switch

## Series Miniature-Float switch

Description **MSN2-MS-R1,0-2S 0108**

Article number **6891289003**

**Wiring diagram**  
(non-actuated state)

**Performance diagram**

U [V]	I [A]
24	0,417
48	0,208
120	0,083
230	0,043

**Characteristic features in accordance with EN 60947-5-1**

Electrical data	
max. switching voltage	250 V
max. switching current	0,5 A
max. switching capacity	10 VA
mechanical life	10 <sup>7</sup> to 10 <sup>9</sup> switches depending on the load
Switching element	1 N.O., rising level 1 N.O., falling level
Protection class	II (totally insulated)

Mechanical data	
Bolting material	CuZn39Pb3 (CW614N)
Switching tube material	CuZn37 (CW508L)
Float material	X6CrNiMoTi17-12-2 (1.4571)
- density	about 0,6 g/cm <sup>3</sup> ±10 %
- depth of immersion	18 mm ± 2 mm ( to a fluid-density of 1 g/cm <sup>3</sup> )
Grip screw material	CuSn8 (CW453K)
Ambient air temperature	-10 °C to +105 °C
Liquid temperature	-10 °C to +110 °C
Connection	Cable 3 x 0,5 mm <sup>2</sup> x 5 m ± 5 %, silicone with pin cable shoe 12 mm (partly insulated)
Protection type	IP 65 acc to IEC529 / EN 60529
Max. pressure	5 bar

EU Conformity
acc. to directive 2006/95/EC

General details
<p>Repeatability of switching points is ±0,05 mm based on the same geometrical conditions as of a switch device.                      The measures of the switching points refer to a fluid-density of 1 g/cm<sup>3</sup>.                      The tolerance of the switching points is ±2 mm                      Pay attention to the contact protection, when switching inductive or capacitive loads. Maximum data must not be exceeded!</p>

Inductive loads
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Direct current</p> <p>Suppression of voltage peaks with a free-wheeling diode</p> </div> <div style="text-align: center;"> <p>Alternating voltage</p> <p>Suppression of voltage peaks with a VDR</p> </div> <div style="text-align: center;"> <p>Suppression of voltage peaks with an RC element</p> </div> </div>

Capacitive loads and lamp loads
<p>Contact protection with resistors for limiting current</p>