

Float switch

Series Miniature-Float switch

Description **MSN1-NI-R1/4-O 0113**

Article number **6891172004**

Wiring diagram
(non-actuated state)

Performance diagram

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

Electrical data		
Rated voltage	U_r	250 V
max. switching current		0,5 A
max. switching capacity		10 VA
Rated insulation voltage	U_i	300 V AC
Rated impulse withstand voltage	U_{imp}	4 kV AC
Overvoltage category		II
Switching element		1 N.C., rising level
Protection class		II (totally insulated)

Mechanical data	
Bolting material	X6CrNiMoTi17-12-2 (1.4571)
Switching tube material	X6CrNiMoTi17-12-2 (1.4571)
Float material	X6CrNiMoTi17-12-2 (1.4571)
- density	about 0,7 g/cm ³ ±10 %
- depth of immersion	18 mm ± 2 mm (to a fluid-density of 1 g/cm ³)
Adjusting ring material	X6CrNiMoTi17-12-2 (1.4571)
Ambient air temperature	-5 °C to +120 °C
Liquid temperature	-5 °C to +120 °C
Connection	Cable 2 x 0,5 mm ² x 1 m ± 5 %, silicone
Protection type	IP 44 acc to IEC529 / EN 60529
Max. pressure	10 bar

Standards
DIN EN 60947-5-1

EU Conformity
acc. to directive 2014/35/EU (Low-Voltage-Directive)

General details
The measures of the switching points refer to a fluid-density of 1 g/cm ³ . 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!

Inductive loads
<div style="display: flex; justify-content: space-between;"> <div style="width: 24%;"> <p>Direct current</p> <p>Suppression of voltage peaks with a free-wheeling diode</p> </div> <div style="width: 24%;"> <p>Alternating voltage</p> <p>Suppression of voltage peaks with a VDR</p> </div> <div style="width: 24%;"> <p>Suppression of voltage peaks with an RC element</p> </div> <div style="width: 24%;"> </div> </div>

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