

Float switch

Series Miniature-Float switch

Description **MSN1-NI-R3/8-S 0060**

Article number **6891173020**

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 ⁷ to 10 ⁹ switches depending on the load
Switching element	1 x N.O., falling level
Protection class	II (totally insulated)

Mechanical data	
Bolting material	X6CrNiMoTi 17-12-2 (1.4571)
Hexagon nut material	X8CrNiS 18-9 (1.4305)
Switching tube material	X6CrNiMoTi 17-12-2 (1.4571)
Float material	X6CrNiMoTi 17-12-2 (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	X6CrNiMoTi 17-12-2 (1.4571)
Ambient air temperature	-5 °C to +60 °C
Liquid temperature	-5 °C to +60 °C
Connection	Cable 2 x 0,34 mm ² x 1 m ± 5 %; PVC
Protection type	IP 65 acc. to IEC529 / EN 60529
Max. pressure	15 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/cm³. The tolerance of the switching points is ±2 mm Maximum data must not be exceeded! Pay attention to the contact protection, when switching inductive or capacitive loads.</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
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Contact protection with resistors for limiting current</p> </div> <div style="text-align: center;"> </div> <div style="text-align: center;"> </div> </div>