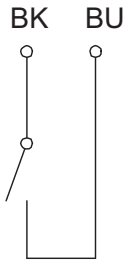
Float switch

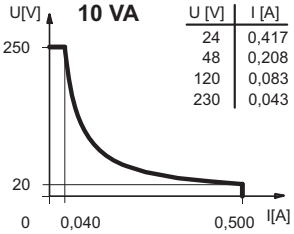
Series Miniature-Float switch

Description **MSN1-NI-R1/8-S 0045** Article number **6891171015**

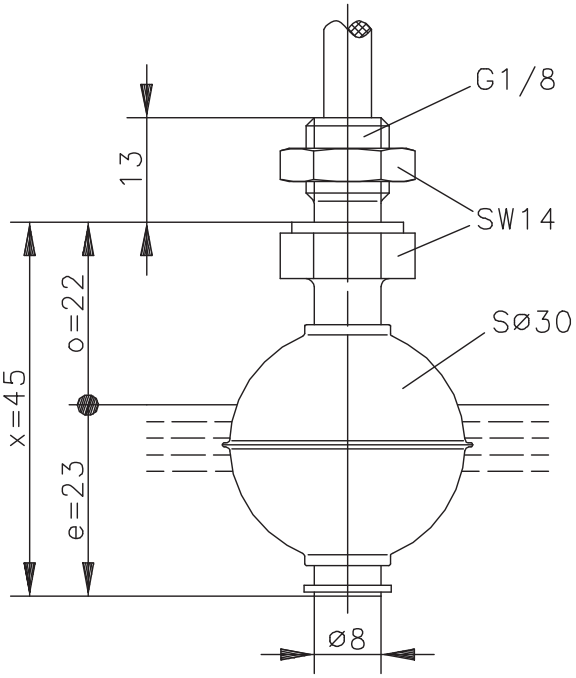
Wiring diagram



Performance diagram



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



Electrical data		
Operational voltage range	U_B	10-36 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		III (extra-low voltage)

Mechanical data	
Terminal box material	X8CrNiS18-9 (1.4305)
Hexagonal nut material	X8CrNiS18-9 (1.4305)
Float material - density - depth of immersion	X6CrNiMoTi17-12-2 (1.4571) about 0,67 g/cm³ ±10 % 19,5 mm ± 2 mm (to a fluid-density of 1 g/cm³)
Grip screw material	X35CrMo17 (1.4122)
Ambient air temperature	-30 °C to +150 °C
Connection	Cable 2 x 0,5 mm² x 0,5 m, silicone
Protection type	IP 20 acc. to IEC529 / EN 60529
Max. pressure	10 bar

General details

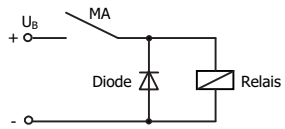
Repeatability of switching points is ±0,05 mm based on the same geometrical conditions as of a switch device.
The measures of the switching points refer to a fluid-density of 1 g/cm³.
The tolerance of the switching points is ±2 mm
Pay attention to the contact protection, when switching inductive or capacitive loads. Maximum data must not be exceeded!

Notes

If the float be turned by 180 °, it will be change the switching function N.O. in N.C

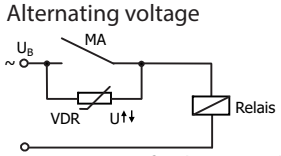
Inductive loads

Direct current

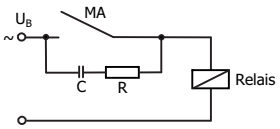


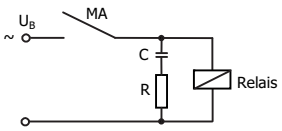
Suppression of voltage peaks with a free-wheeling diode

Alternating voltage



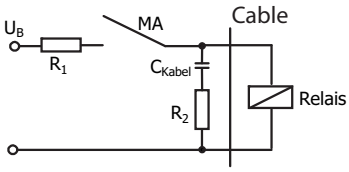
Suppression of voltage peaks with a VDR

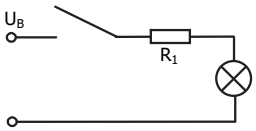


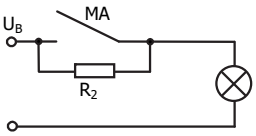


Suppression of voltage peaks with an RC element

Capacitive loads and lamp loads







Contact protection with resistors for limiting current