DATA SHEET

float switches
Champ 1 GS-L 03 m
for pumps used for filling or drainage

Article number 09921001

Function

Float switches are switching devices used to detect the fixed point levels of liquids. The devices trigger switching commands at a predefined fill level and can therefore control fill and drainage pumps, for example, depending on the fill level or trigger an alarm when certain fill levels are reached. The devices from the Champ series are equipped with either a NO or changeover contact and can monitor up to two different fixed point levels. If the fill level in the tank rises or falls, the position of the float switch changes, so that the contacts open or close at a definable fill level. An optional movable weight on the float switch cable can be used to set a corresponding float switch position for each fill level. The switching hysteresis, e.g. between "pump on" and "pump off" is fixed. The switching contact is installed in a robust, durable plastic housing. The float switch forms a hermetically sealed unit with the connection cable. The "L" breaker design has the "drain" function. The connection cable for devices of the "GS" variant is made of rubber and provided with a protective earthing conductor (PE). Devices of the standard variant are suited for use in standard environments, e. g. for water tanks.

Features

high switching reliability thanks to low-wear ball guide, easy to set the float switch using a counterweight that is available as an option, Housing material made of non-toxic PP, highly flexible neoprene connection cable

Applications

The most important application areas are pumps and drainage systems, wastewater or the chemicals industry, and anywhere where reliable fixed point detection in liquids is required.

Notes

not suitable for DC and low voltage, not suitable for use in potable water

Accessories

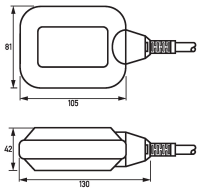
counterweights GGW

Technical Data

Technical Data	Champ 1 GS-L 03 m
Series	Champ 1
Number of (n.o, n.c.,change-over)	1|0|0
suitable for	Rainwater, Cooling water, Condensate, Glycol
min. Switching angle	45 °
max. Switching angle	45 °
no influence by	acetic acid, seawater, soap solution 5 %, water
low influence by	phosphoric acid 85 %, ethyl alcohol, methyl alcohol, phenol, glucose, ammonium nitrate, zinc sulphate
high influence by	hydrochloric acid 38 %, sulphuric acid 98 %, nitric acid 50 %, petrol, benzene, chloroform, sodium hypochlorite, mineral oil, sodium hydroxide, trichloroethylene, xylene, Vaseline
Operating voltage (AC)	230 V (207 V ... 253 V)
Operating frequency	50 Hz, 60 Hz
	load circuit
Specification	switching contact
Rated voltage (AC)	250 V
Rated current (AC)	10 A
Cable type	H07RN-F 3G1

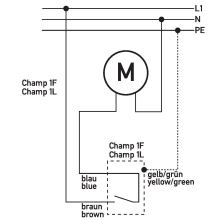
Technical Data	Champ 1 GS-L 03 m
max. Connection C1 cable length	3 m
	General data
Operating position	horizontal
Storage temperature	-20 °C ... 80 °C
Ambient temperature	max. 50 °C
Housing type	closed
Housing material	non-toxic PP
Protection class	IP68
sealable	false
Width	105 mm
Height	81 mm
Depth	42 mm
Weight	0.472 kg

Dimensions

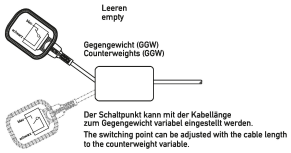


Dimensional drawing Group view

Wiring example



Wiring diagram



Wiring diagram with switching status