

## Magnetic Float Switch

### Model: MDLV5

#### Applications

- Level, waste water, tank level measurement
- Brackish water and fuel tanks in shipbuilding
- Drinking water systems
- Pump and booster stations
- Oil and fuel storage tanks
- Process industry: Chemical/petro chemical, power stations, food and beverage, offshore oil rigs, pulp and paper, environmental technology, machine building and general plant construction

#### Special features

- Multiple switch points in one unit (up to 8).
- Large range of application due to the simple, proven functional principle
- Application limits:
  - T = (-50 °C to + 350 °C)
  - P = (vacuum to 100 bar)
  - S.G. ≥ 400 kg/m
- Wide variety of different electrical connections, process connections and materials
- Explosion-protected versions



Float switches are simple devices without certification according to EN 50020/5.4.

As such, they are allowed to be used in Ex-area 'Zone 1', on condition, that they work with a certified intrinsically safe circuit in protection class EEx ib or higher.

#### Description

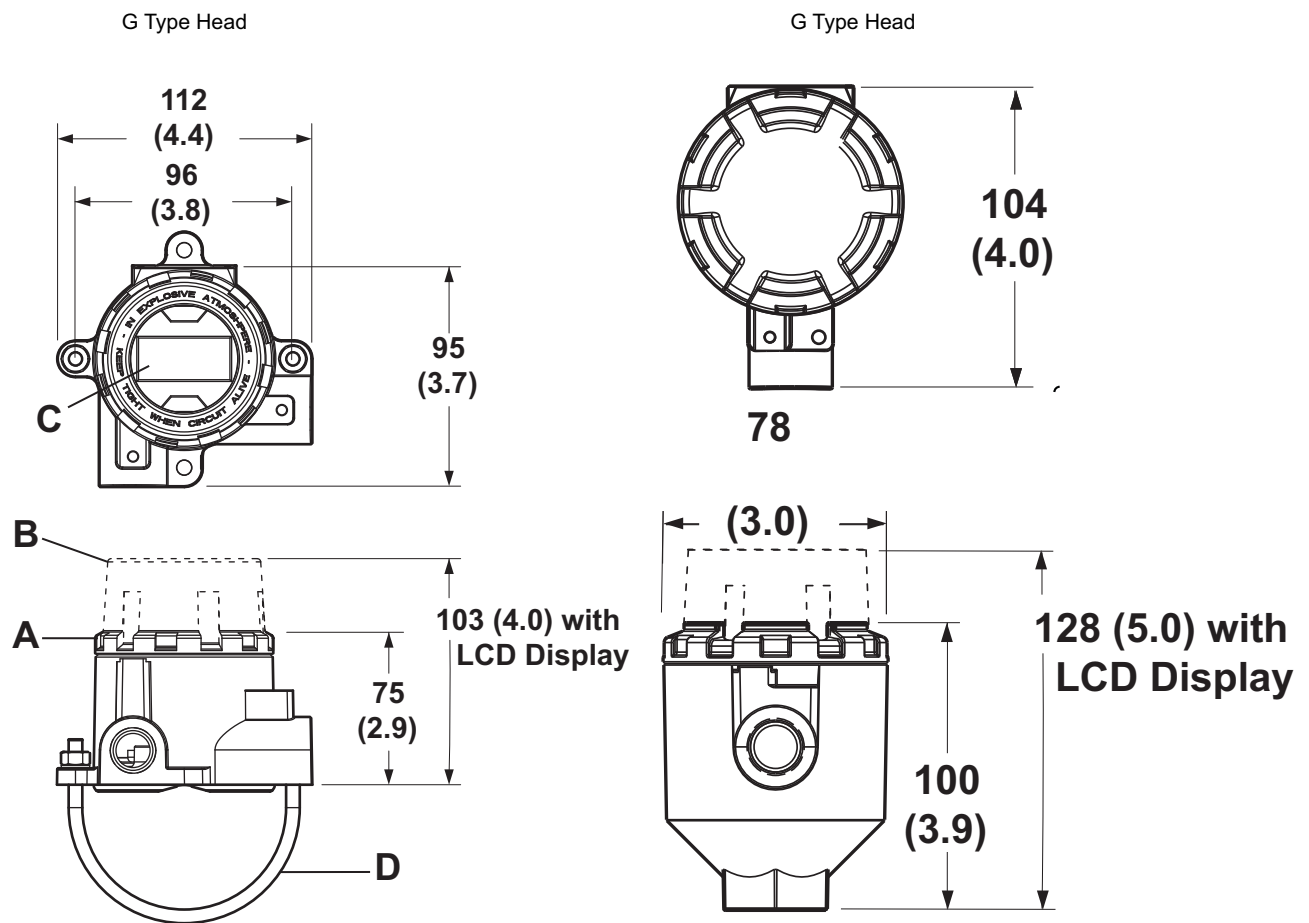
MADECO Magnetic Float Switches are used to control distinct levels of a liquid. They are based on the float principle with individual contacts for every level to be monitored.

A float with a built-in magnetic system actuates a small reed contact through the wall of the guide tube. Thus the switching operation is without direct contact to the liquid, free of wear and tear, and does not require any power supply.

KSR Magnetic Float Switches are available with multiple switch points.

- Contact denomination always refers to rising level of the liquid:
  - S - closing on rising level
  - O - opening on rising level
  - U - change-over
- By using one float up to a maximum of 2 switch points the switching behaviour is bistable i.e. the switching state will remain the same even when the liquid moves further up or down.
- Contacts are volt-free.

**Threaded-Sensor Universal Head and DIN Style Sensor Connection Head for ship and shipbuilding and Hazardous areas.**

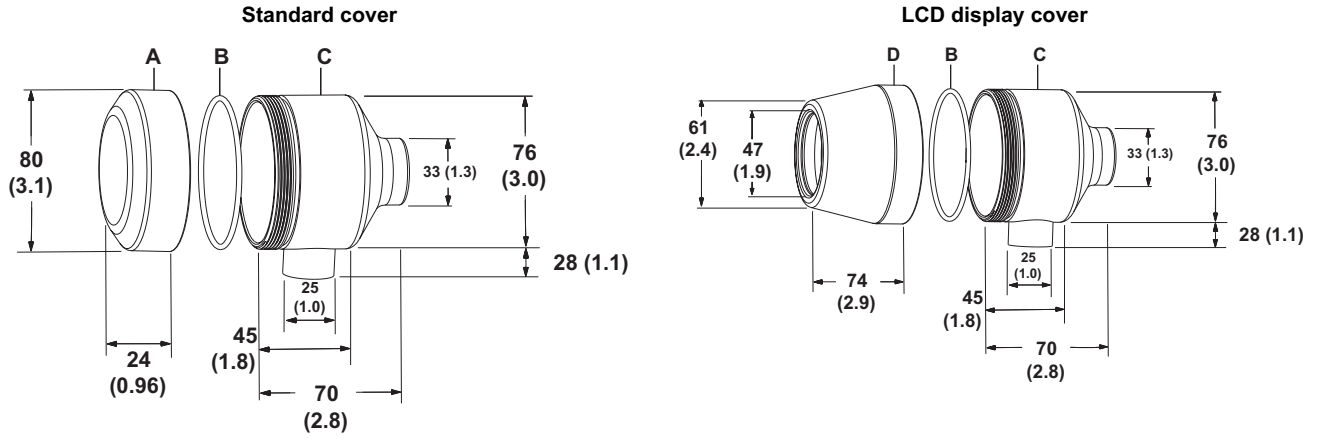


- A. Standard cover
- B. Display cover
- C. LCD display
- D. SST "U" Bolt Mounting, 2-in. pipe  
(shipped with connection heads J5-J8 when ordered without assembly option XA)

**Accessory dimensional drawings**

Stainless Steel Housing for Biotechnology, Pharmaceutical Industries, and Sanitary Applications

**M Type Head**

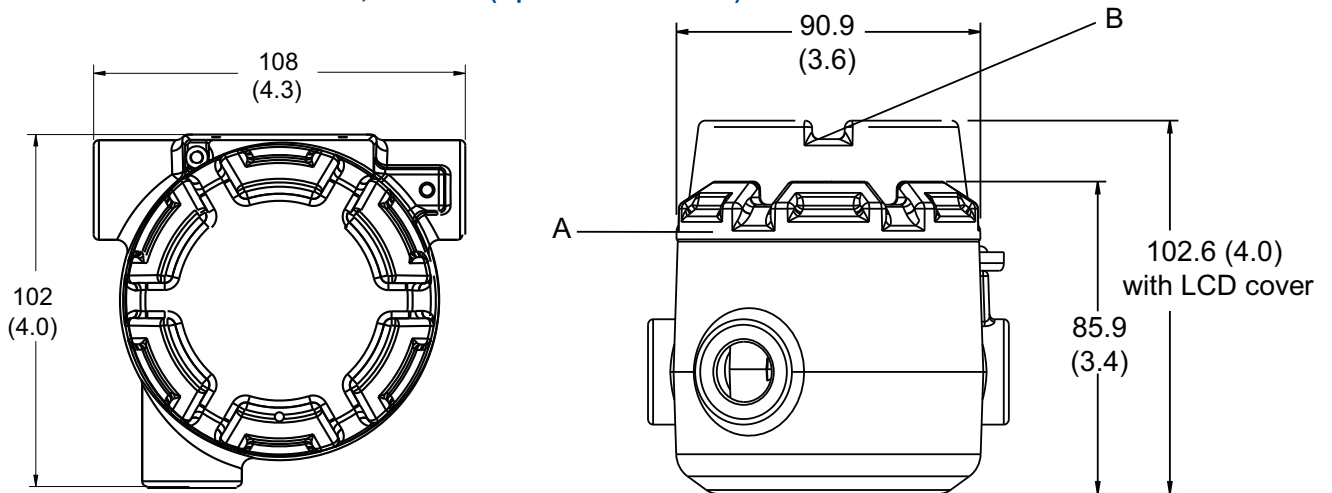


- A. Standard cover
- B. O-ring
- C. Housing
- D. LCD display cover

**Note**

Dimensions are in millimeters (inches).

**Threaded Sensor Universal Head, 3-conduit (Option code J1 or J2)**



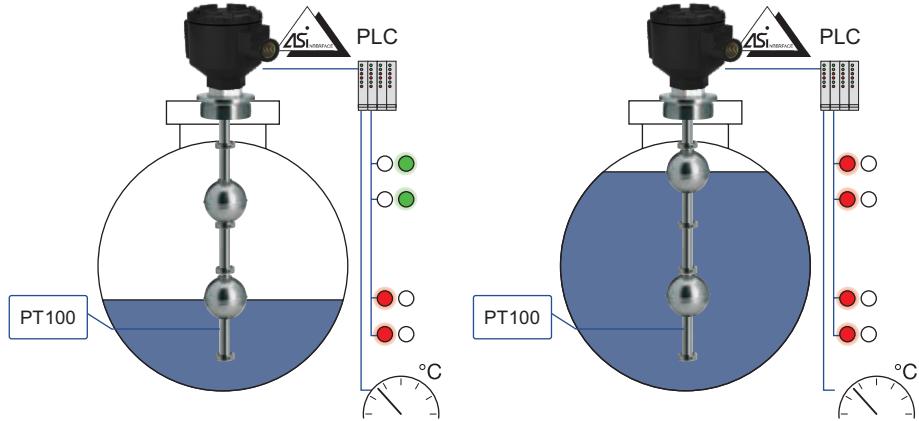
- A. Standard cover
- B. Display cover

**Note**

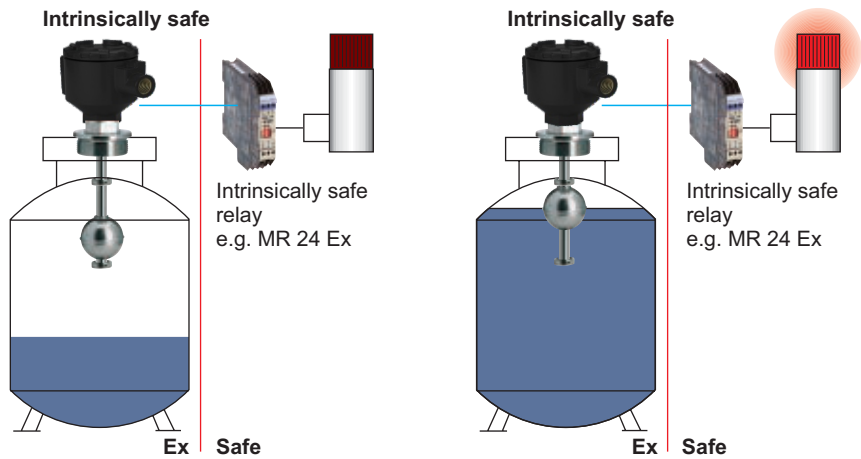
Dimensions are in millimeters (inches).

## Application

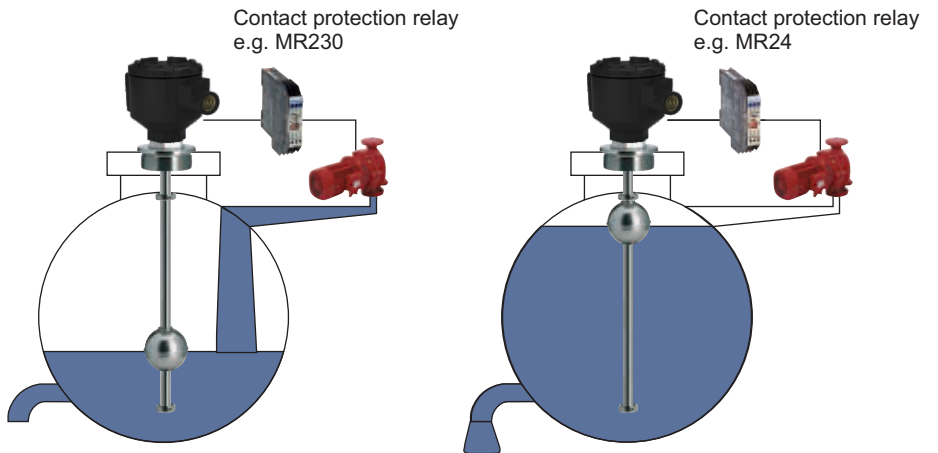
MADECO Magnetic Float Switches with multiple switch points



MADECO Magnetic Float Switches for high alarm (EEx i)



MADECO Magnetic Float Switches for 2-point control (min/max.)





## MDLV 5 Magnetic Float Switch

ORDERING CODE	Example:	MDLV	5	G	F	S	50	25	150	C
<b>Enclosure connection</b>										
A - none) - connection cable										
T - Terminal box Aluminium										
B - Terminal box Polypropylene										
C - Terminal box Polyester										
J - Terminal box, with screw cap										
M - Stainless steel SS 316 Ti Exd II2G Ex dII Ct6 Gb - Exd II2D Ex tb IIIC-T80 C Db										
F - Terminal box, flameproof										
G - Aluminum Exd II2G Ex dII Ct6 Gb - Exd II2D Ex tb IIIC-T80 C Db				G						
D - Coupler plug C 164-232-F-4P										
E - Coupler plug C 164-332-F-5P										
H - Coupler plug C 164-4337-F-7P										
F - Coupler plug Harting HAN 7 D										
P - Coupler plug QUICKON max.4-pin										
<b>Process connection</b>										
A - Mounting thread upwards (BSP)										
D - Mounting thread downwards (BSP)										
U - Mounting thread upwards (NPT)										
B - Mounting thread downwards (NPT)										
T - Dairy fitting acc. to DIN 11851										
F - Flange (DIN, ANSI, JIS )					F					
G - Clamp-connection acc. to DIN 32676										
S - Sanitary nozzle (Ingoldstutzen)										
C - Customize										
<b>Material process connection</b>										
A - Stainless steel SS 316 Ti material										
P - Stainless steel polished										
E - Stainless steel ECTFE-coated						S				
S - Stainless steel PTFE-lined										
T - Titanium										
H - Hastelloy B										
L - Hastelloy C										
P - PVC										
E - Polypropylene										
G - PVDF										
D - Brass flange OD 74 mm										
F - Oval flange, Polyamide										
C - Customize										
<b>process connection Size</b>										
A - DN(50-150) please specify							50			
<b>Flange nominal size</b>										
B - DN(25-200) please specify only for connection								25		
<b>Flange pressure rating</b>										
D - (PN-class-K) please specify the rating									Class 150	
<b>Guide tube material</b>										
A - Stainless steel SS 316 Ti										
S - Stainless steel electropolished										
E - Stainless steel ECTFE-coated										
B - Stainless steel PTFE-lined										
H - Hastelloy B										
E - Hastelloy C										
V - PVC										
O - Polypropylene										
F - PVDF										
N - Angular design (V,P,PP)										
C - Customize										C



## MDLV 5 Magnetic Float Switch

ORDERING CODE	Example: MDLV5	C	B	H	F	M	G	5	P	NOTE
<b>Contact function</b>										
A - Closing										
B - Opening										
C - Change over		C								
<b>Optional code adder</b>										
S - High temperature +150°C...+300°C										
L - Low temperature -30°C...-196°C										
H - Increased hysteresis										
I - Temperature probe PT 100 (2-,3- or 4-core)										
B - Temperature switch ...°C - closing or opening			B							
U - Current limitation using resistor .. Ohm										
N - acc. to NAMUR DIN EN 60947-5-6										
D - DNV - GL(ships, shipbulding)										
A - ABS - GL(ships, shipbulding)										
<b>Guide tube length</b>										
H - length in mm				H						
<b>Guide tube OD</b>										
F - OD in mm					F					
<b>Connection cable</b>										
M - length in Meter						M				
<b>Cable material</b>										
G - PVC grey							G			
B - PVC blue										
S - Silicone										
E - Ölflex										
<b>Temperature range (process)</b>										
1 - (-30 ... +180 °C)										
2 - (-50 ... +350 °C)										
3 - (-50 ... +180 °C)										
4 - (-10 ... +120 °C)										
5 - (-10 ... +100 °C)								5		
6 - (-40 ... +200 °C)										
<b>Optional adder</b>										
P - Earth connection									P	
I - IP65										
B - IP66-68										
Other										



Address: 7191 Yonge street, Toronto, Canada

Tel: +16472221281(5 line)

Web: [www.madecotech.com](http://www.madecotech.com)

Email: [Info@madecotech.com](mailto:Info@madecotech.com)